



# Boring ID: DP105

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/12/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: Jason Tarbert

Ground Elevation AMSL (ft): 5343.4  
 Y Coordinate: 1541418.72  
 X Coordinate: 1473470.27

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0583 FFOR0583-MS FFOR0583-MSD	0.0		SILT with Sand (ML); reddish brown (5YR 5/3); dry; soft; nonplastic; 80% silt; 20% fine to coarse sand; subrounded; no odor.	ML	Began drilling @ 1115 on 7/13/11.
5		FFOR0584	0.0		Same as above (0 ft).		
10					Reinforced concrete that housed pipeline @ 6.5 ft.		Hit refusal @ 6.5 ft. Total depth = 6.5 ft. Reached total depth @ 1120 on 7/13/11.
10		FFOR0585	0.0		SILT with Sand (ML); brown (7.5YR 5/4); moist; soft; low plasticity; 85% silt; 15% very fine to coarse sand to 4mm; rounded.	ML	Concrete coring subcontractor brought on to complete borehole. Began drilling @ 1441 on 4/12/12.
15					Clay (CL); lense.	CL	
20		FFOR0586	0.0		SILT (ML); strong brown (7.5YR 5/6); moist; firm; low plasticity; 90% silt; 10% very fine to fine sand to 0.5mm; rounded.	ML	
20		FFOR0587 FFOR0588	0.0		Same as above (15 ft); 10% very fine to coarse sand.		Total depth = 21 ft. Reached total depth @ 1500 on 4/12/12.
25							
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 08:01 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP107

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/12/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: Jason Tarbert

Ground Elevation AMSL (ft): 5343.9  
 Y Coordinate: 1541423.88  
 X Coordinate: 1473460.21

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0594	NR		SILT with Sand (ML); reddish brown (5YR 4/4); moist; soft; nonplastic; 80% silt; 20% fine to coarse sand; subrounded; trace gravel to 1cm; no odor.	ML	Began drilling @ 0840 on 7/14/11.
		FFOR0595	0.0		Same as above (0 ft).		
10					Reinforced concrete that housed pipeline @ 6.5 ft.		Hit refusal @ 6.5 ft. Total depth = 6.5 ft. Reached total depth @ 0845 on 7/14/11.
15		FFOR0596 FFOR0597	0.0		SILT with Sand (ML); strong brown (7.5YR 5/6); moist; soft; non to low plasticity; 75% silt; 25% very fine to coarse sand; trace fine gravel to 1cm; rounded.		Concrete coring subcontractor brought on to complete borehole. Began drilling @ 1225 on 4/12/12.
		FFOR0598	0.0		SILT (ML); 100% silt. Same as above (10 ft).	ML	
20		FFOR0599	0.0		Same as above (10 ft); low plasticity; trace clay.		
25							Total depth = 21 ft. Reached total depth @ 1255 on 4/12/12.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/1/12 10:28 - N:\KAFB BFF\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP108

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/12/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: Jason Tarbert

Ground Elevation AMSL (ft): 5343.9  
 Y Coordinate: 1541418.89  
 X Coordinate: 1473460.05

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 08:03 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0600	0.0		SILT with Sand (ML); reddish brown (5YR 5/3); moist; soft; nonplastic; 80% silt; 20% fine to coarse sand; subrounded; trace gravel to 1cm; no odor.	ML	Began drilling @ 0902 on 7/14/11.
5					Same as above (0 ft).		
		FFOR0601	0.0		Reinforced concrete that housed pipeline @ 6.5 ft.		Hit refusal @ 6.5 ft. Total depth = 6.5 ft. Reached total depth @ 0908 on 7/14/11.
10					Sandy SILT (ML); brown (7.5YR 5/4); moist; soft; nonplastic; 70% silt; 30% very fine to coarse sand; trace coarse gravel to 1cm; rounded.	ML	Concrete coring subcontractor brought on to complete borehole. Began drilling @ 1324 on 4/12/12.
		FFOR0602	0.0				
15					Lean CLAY (CL); strong brown (7.5YR 4/6); moist; hard; medium plasticity; 80% clay; 20% silt.	CL	
		FFOR0603	0.0				
20					SILT with Sand (ML); strong brown (7.5YR 5/8); moist; firm; low plasticity; 85% silt; 15% very fine to fine sand to 0.5mm; trace gravel to 7mm.	ML	
		FFOR0604	0.0		Same as above (16 ft).		
25							Total depth = 21 ft. Reached total depth @ 1346 on 4/12/12.
30							



# Boring ID: DP111

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/12/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: Jason Tarbert

Ground Elevation AMSL (ft): 5344.1  
 Y Coordinate: 1541418.96  
 X Coordinate: 1473450.14

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 08:04 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0617	0.0		SILT with Sand (ML); reddish brown (5YR 5/3); dry; soft; nonplastic; 80% silt; 20% fine to coarse sand; subrounded.	ML	Began drilling @ 1100 on 7/14/11.
5							
5		FFOR0618	0.0		Reinforced concrete that housed pipeline @ 5.0 ft.		Hit refusal @ 5 ft. Total depth = 5 ft. Reached total depth @ 1105 on 7/14/11.
10							
10		FFOR0620 FFOR0620-MS FFOR0620-MSD	0.0		SILT with Sand (ML); brown (7.5YR 5/4); moist; soft; low plasticity; 75% silt; 25% very fine to coarse sand; trace fine gravel to 1cm; subrounded.	ML	Concrete coring subcontractor brought on to complete borehole. Began drilling @ 0931 on 4/12/12.
15							
15		FFOR0621	0.0		Lean CLAY (CL); reddish brown (5YR 4/4); moist; hard; medium plasticity; 80% clay; 20% silt.	CL	
20							
20					SILT with Sand (ML); brown (7.5YR 5/4); moist; firm; nonplastic; 75% silt; 25% very fine to medium sand; trace fine gravel to 6mm; rounded.	ML	
25		FFOR0622	0.0		Same as above (16 ft); low plasticity; no gravel.		Total depth = 21 ft. Reached total depth @ 1000 on 4/12/12.
30							



# Boring ID: DP114

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/12/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: Jason Tarbert

Ground Elevation AMSL (ft): 5344.2  
 Y Coordinate: 1541419.11  
 X Coordinate: 1473440.18

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:44 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0634	0.0		SILT with Sand (ML); strong brown (7.5YR 5/6); moist; low plasticity; 85% silt; 15% fine sand; trace gravel to 10mm; no odor.	ML	Began drilling @ 0925 on 7/18/11.
10		FFOR0635	0.0		Reinforced concrete that housed pipeline @ 5.5 ft.		Hit refusal @ 5.5 ft. Total depth = 5.5 ft. Reached total depth @ 0930 on 7/18/11.
15		FFOR0636	0.0		SILT with Sand (ML); brown (7.5YR 5/4); moist; soft; low plasticity; 75% silt; 25% fine to coarse sand; trace fine gravel to 4cm; subrounded.		Concrete coring subcontractor brought on to complete borehole. Began drilling @ 0820 on 4/12/12.
20		FFOR0637	0.0		SILT with Sand (ML); strong brown (7.5YR 4/6); moist; firm; low to medium plasticity; 85% silt; trace clay; 15% very fine to fine sand to 0.5mm.		Trace gravel at 16 ft.
25		FFOR0638	0.0		Same as above (15 ft).		Total depth = 21 ft. Reached total depth @ 0910 on 4/12/12.
30							



# Boring ID: DP132

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/9/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.0  
 Y Coordinate: 1541434.47  
 X Coordinate: 1473400.08

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0735	1.4		Sandy SILT with Gravel (ML); reddish yellow (7.5YR 6/6); moist; soft; low plasticity; 50% silt; 35% sand; 15% gravel to 4cm; rounded; no odor.  Same as above (0 ft); pink (7.5YR 7/4); no odor.		Began drilling @ 0750 on 4/9/12.
10		FFOR0736	0.4		Sandy SILT (ML); reddish yellow (5YR 6/6); dry to slightly moist; 70% silt; 30% sand; trace gravel to 3cm; subangular.	ML	
15		FFOR0737	0.2		SILT with Sand (ML); reddish brown (5YR 4/4); moist; firm; low plasticity; 85% silt; 15% sand; trace coarse sand.		
20		FFOR0738	0.2		Lean CLAY (CL); reddish brown (5YR 4/4); moist; hard; medium plasticity; 70% clay; 30% silt; trace fine sand.	CL	
25		FFOR0739	0.2		SILT with Sand (ML); yellowish red (5YR 5/6); moist; firm; low plasticity; 75% silt; 25% sand. Sandy SILT (ML); yellowish red (5YR 5/6); slightly moist; firm; low plasticity; 60% silt; 40% fine to medium sand; trace coarse; no odor.	ML	
30							Total depth = 21 ft. Reached total depth @ 0845 on 4/9/12.

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:47 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP133

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/9/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.1  
 Y Coordinate: 1541434.43  
 X Coordinate: 1473395.18

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0740	0.4		Sandy SILT (ML); brown (7.5YR 5/4); dry to slightly moist; firm; low plasticity; 60% silt; 35% sand; 5% gravel to 3cm; subangular; no odor.	ML	Began drilling @ 0915 on 4/9/12.
10		FFOR0741	0.2		Same as above (0 ft); pink (7.5YR 7/4); 70% silt; 30% sand; trace gravel to 3cm; subangular.		
15		FFOR0742 FFOR0743	0.4		SILT with Sand (ML); strong brown (7.5YR 4/6); slightly moist; firm; low plasticity; 80% silt; 20% fine sand; trace coarse sand; no odor.		
15					Lean CLAY (CL); brown (7.5YR 4/4); moist; firm; medium plasticity; 50% clay; 40% silt; 10% sand; no odor.	CL	
20		FFOR0744	0.2		Sandy SILT (ML); strong brown (7.5YR 5/6); dry to slightly moist; firm; low plasticity; 60% silt; 40% sand; no odor.	ML	
25		FFOR0745	0.2		Same as above (15 ft).		
30							Total depth = 21 ft. Reached total depth @ 0940 on 4/9/12.

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:44 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\GINT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP134

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/9/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.2  
 Y Coordinate: 1541434.45  
 X Coordinate: 1473389.89

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0746	0.4		Sandy SILT (ML); brown (7.5YR 4/4); slightly moist; firm; low plasticity; 60% silt; 35% sand; 5% gravel to 4cm; rounded.	ML	Began drilling @ 1015 on 4/9/12.
10		FFOR0747	0.2		Silty SAND (SM); yellowish red (5YR 5/6); dry; loose; 65% fine to medium sand; trace coarse sand; 35% silt; no odor.	SM	
15		FFOR0748	0.0		Sandy SILT (ML); reddish yellow (5YR 6/6); slightly moist; firm; low plasticity; 60% silt; 40% sand; no odor. SILT with Sand (ML); brown (7.5YR 5/4); slightly moist; soft; low plasticity; 75% silt; 25% sand; no odor.	ML	
20		FFOR0749	0.1		Same as above (9 ft); firm.		
25		FFOR0750	0.0		Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; firm; low plasticity; 60% silt; 40% medium to coarse sand; subrounded; no odor.		
30					Same as above (16 ft).		Total depth = 21 ft. Reached total depth @ 1100 on 4/9/12.

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/1/12 10:28 - N:\KAFB BFF\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP135

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/9/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.3  
 Y Coordinate: 1541434.33  
 X Coordinate: 1473384.65

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0751 FFOR0751-MS FFOR0751-MSD	0.0		Sandy SILT (ML); strong brown (7.5YR 4/6); slightly moist; firm; low plasticity; 60% silt; 40% medium to coarse sand; subrounded; no odor.		Began drilling @ 1125 on 4/9/12.
5		FFOR0752	0.0		Same as above (0 ft).		
10		FFOR0753	0.0		SILT with Sand (ML); brown (7.5YR 4/4); slightly moist; firm; low plasticity; 75% silt; 25% fine to medium sand; trace coarse sand; no odor. Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; soft; non to low plasticity; 60% silt; 40% fine sand; trace coarse sand.	ML	
15		FFOR0754	0.0		SILT with Sand (ML); strong brown (7.5YR 4/6); dry to slightly moist; firm; low plasticity; 75% silt; 25% sand; no odor.		
20		FFOR0755 FFOR0756	0.0		Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; soft; low plasticity; 60% silt; 40% medium to coarse sand; subrounded; no odor.		
25							
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:43 - N:\KAFB BFF\FFOR\_PUSH\GINT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP136

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/9/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.2  
 Y Coordinate: 1541434.30  
 X Coordinate: 1473379.64

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0757	NR		Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; firm; low plasticity; 60% silt; 40% fine sand; trace coarse sand; no odor.	ML	Began drilling @ 1240 on 4/9/12.
5		FFOR0758	0.0		Same as above (0 ft).		
10		FFOR0759	0.0		SILT with Sand (ML); strong brown (7.5YR 4/6); slightly moist; firm; low plasticity; 75% silt; 25% fine sand; trace medium sand; no odor.	ML	
15		FFOR0760	0.0		Sandy SILT (ML); yellowish red (5YR 5/6); dry; firm; non to low plasticity; 55% silt; 45% fine to medium sand.		
15					Lean CLAY (CL); reddish brown (5YR 4/4); slightly moist; firm; low plasticity; 60% clay; 40% silt; no odor.	CL	
20		FFOR0761	0.0		Same as above (14 ft); strong brown (7.5YR 5/6); dry to slightly moist; soft; non to low plasticity; 55% silt; 45% fine sand; no odor.	ML	
25							Total depth = 21 ft. Reached total depth @ 1310 on 4/9/12.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:43 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP137

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/10/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5342.7  
 Y Coordinate: 1541444.51  
 X Coordinate: 1473400.03

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/1/12 10:29 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\GINT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0762	0.0		Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; soft; low plasticity; 60% silt; 40% fine to medium sand; trace coarse sand; no odor.	ML	Began drilling @ 1210 on 4/10/12.
5		FFOR0763	0.0		Same as above (0 ft); strong brown (7.5YR 5/6); no odor.		
10		FFOR0764 FFOR0765	0.0		Silty SAND (SM); strong brown (7.5YR 5/6); slightly moist; loose; 60% fine to medium sand; rounded; 40% silt; no odor.	SM	
15		FFOR0766	0.0		SILT (ML); strong brown (7.5YR 4/6); slightly moist; firm; low plasticity; 85% silt; 5% clay; 10% fine sand; no odor. Sandy SILT (ML); strong brown (7.5YR 5/6); dry to slightly moist; soft; low plasticity; 55% silt; 45% fine sand; trace medium sand; no odor.	ML	
20		FFOR0767	NR				
25							Total depth = 21 ft. Reached total depth @1240 on 4/10/12.
30							



# Boring ID: DP138

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/10/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5342.8  
 Y Coordinate: 1541444.40  
 X Coordinate: 1473394.97

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0768	78.1		Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; soft; low plasticity; 60% silt; 40% fine to medium sand; no odor.	ML	Began drilling @ 1120 on 4/10/12.
					Same as above (0 ft).		
10		FFOR0769	193.0		Silty SAND (SM); strong brown (7.5YR 5/6); slightly moist; loose; nonplastic; 70% fine sand; trace coarse sand; 30% silt; no odor.	SM	
15		FFOR0770	0.6		Sandy SILT (ML); strong brown (7.5YR 4/6); slightly moist; soft; low plasticity; 65% silt; 35% fine to medium sand; no odor.	ML	
20		FFOR0771	5.8		Same as above (9 ft).		
					Same as above (9 ft); strong brown (7.5YR 5/6); dry to slightly moist; 60% silt; 40% fine to medium sand; no odor.		
25		FFOR0772	6.1				Total depth = 21 ft. Reached total depth @ 1140 on 4/10/12.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:43 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP139

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/11/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5342.9  
 Y Coordinate: 1541444.37  
 X Coordinate: 1473389.69

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/11/12 10:29 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\GINT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0773	0.0		Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; soft; low plasticity; 60% silt; 40% fine to medium sand; trace coarse sand; no odor.  Same as above (0 ft); pink (7.5YR 7/4).	ML	Began drilling @ 0800 on 4/11/12.
10		FFOR0774	0.0		Same as above (0 ft); strong brown (7.5YR 5/6).  SILT with Sand (ML); strong brown (7.5YR 5/6); slightly moist; firm; low plasticity; 75% silt; 25% fine sand; no odor.		
15		FFOR0775 FFOR0775-MS FFOR0775-MSD	0.0		Same as above (9 ft); brown (7.5YR 4/4); 85% silt; 15% fine sand; no odor.		
20		FFOR0776	0.0		Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; soft; low plasticity; 65% silt; 35% medium sand; trace coarse sand.		
25		FFOR0777 FFOR0778	NR		Poorly Graded SAND with Silt (SP-SM); strong brown (7.5YR 5/6); slightly moist; very loose; 90% medium to coarse sand; trace gravel to 2cm; 10% silt; no odor.	SP-SM	Total depth = 21 ft. Reached total depth @ 0920 on 4/11/12.
30							



# Boring ID: DP140

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/10/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.0  
 Y Coordinate: 1541444.30  
 X Coordinate: 1473384.57

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0779 FFOR0780	124.0		Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; soft; non to low plasticity; 60% silt; 40% fine to medium sand; trace coarse sand; trace gravel to 3cm.	ML	Began drilling @ 1020 on 4/10/12.
		FFOR0781	339.0		Same as above (0 ft); pink (7.5YR 7/4); 70% silt; 30% sand; no odor.		
10					Silty SAND (SM); strong brown (7.5YR 5/6); dry to slightly moist; loose; 65% fine to medium sand; 35% silt; no odor.	SM	
15		FFOR0782	0.4		Sandy SILT (ML); strong brown (7.5YR 5/6); dry to slightly moist; soft; low plasticity; 60% silt; 40% fine to medium sand; no odor.	ML	
20		FFOR0783	0.8		Same as above (10 ft); light brown (7.5YR 6/4); no odor.	ML	
25		FFOR0784	0.1				Total depth = 21 ft. Reached total depth @ 1045 on 4/10/12.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/1/12 10:30 - N:\KAFB BFF\FFOR\_PROJECT\FOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP141

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/11/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.1  
 Y Coordinate: 1541444.27  
 X Coordinate: 1473379.48

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:42 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\GINT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0785	0.0		Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; soft; low plasticity; 60% silt; 40% fine to medium sand; trace coarse sand; no odor.  Same as above (0 ft); pink (7.5YR 7/4).	ML	Began drilling @ 0905 on 4/11/12.
		FFOR0786 FFOR0787	0.0		Same as above (0 ft); strong brown (7.5YR 5/6).		
10		FFOR0788 FFOR0788-MS FFOR0788-MSD	0.0		SILT with Sand (ML); strong brown (7.5YR 4/6); slightly moist; firm; medium plasticity; 85% silt; 15% fine sand; no odor.		
15					Same as above (9 ft); yellowish red (5YR 4/6).		
20		FFOR0789	NR		Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; soft; medium plasticity; 65% silt; 35% fine to medium sand; trace coarse sand.		
25		FFOR0790	0.0				Total depth = 21 ft. Reached total depth @ 0935 on 4/11/12.
30							



# Boring ID: DP142

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/10/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5342.8  
 Y Coordinate: 1541454.49  
 X Coordinate: 1473399.87

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0791	3.6		Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; firm; low plasticity; 60% silt; 40% fine to medium sand; no odor.	ML	Began drilling @ 0925 on 4/10/12.
5					Same as above (0 ft).		
5		FFOR0792	2.1			SM	
10					Silty SAND (SM); reddish yellow (7.5YR 6/6); slightly moist; loose; 65% fine to medium sand; subrounded; 35% silt; no odor.		
10		FFOR0793	0.1		Sandy SILT (ML); strong brown (7.5YR 5/6); dry to slightly moist; soft; low plasticity; 60% silt; 40% fine sand; no odor. Same as above (10 ft); firm; 70% silt; 30% fine to coarse sand; no odor.	ML	
15					Same as above (10 ft); firm; 70% silt; 30% fine to coarse sand; no odor.		
20		FFOR0794	3.0				
20		FFOR0795	0.5		Same as above (10 ft); firm; 70% silt; 30% fine to coarse sand; no odor.		Total depth = 21 ft. Reached total depth @ 0945 on 4/10/12.
25							
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 07:42 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP143

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/11/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.0  
 Y Coordinate: 1541454.40  
 X Coordinate: 1473394.87

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/1/12 10:30 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\GINT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5		FFOR0796	0.0		Sandy SILT (ML); brown (7.5YR 4/4); slightly moist; soft; low plasticity; 60% silt; 40% fine to medium sand; trace coarse sand; no odor.  Same as above (0 ft); pink (7.5YR 7/4).  Same as above (0 ft); strong brown (7.5YR 5/6); trace gravel to 2cm.	ML	Began drilling @ 1015 on 4/11/12.
10		FFOR0797	0.0				
15		FFOR0798 FFOR0799	0.0		SILT with Sand (ML); strong brown (7.5YR 4/6); slightly moist; firm; medium plasticity; 85% silt; 15% fine sand; no odor.  Silty SAND (SM); strong brown (7.5YR 4/6); dry; very loose; 85% fine to coarse sand; trace gravel to 2cm; rounded; 15% silt.	SW-SM	
20		FFOR0800	0.0		SILT (ML); yellowish red (5YR 4/6); slightly moist; firm; medium plasticity; 90% silt; 10% fine sand; no odor.  Sandy SILT (ML); light brown (7.5YR 6/4); slightly moist; soft; low plasticity; 65% silt; 35% fine sand.	ML	
25		FFOR0801	0.0				
30							Total depth = 21 ft. Reached total depth @ 1045 on 4/11/12.



# Boring ID: DP144

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/10/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.2  
 Y Coordinate: 1541454.36  
 X Coordinate: 1473389.76

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/1/12 10:31 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\GINT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
0		FFOR0802	0.0		Sandy SILT (ML); strong brown (7.5YR 4/6); slightly moist; firm; low plasticity; 65% silt; 35% fine to medium sand; trace coarse sand; no odor.	ML	Began drilling @ 0830 on 4/10/12.
5		FFOR0803	0.0		Same as above (0 ft); strong brown (7.5YR 5/6).		
10		FFOR0804	0.0		SILT with Sand (ML); yellowish red (5YR 4/6); slightly moist; soft; low plasticity; 75% silt; 25% fine sand; no odor.		
15		FFOR0805	0.0		Silty SAND (SM); strong brown (7.5YR 5/6); slightly moist; medium dense; 65% fine to medium sand; subrounded; 35% silt; no odor.	SM	
20					Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; soft; low plasticity; 60% silt; 40% fine to medium sand; no odor.	ML	
20		FFOR0806	0.2				
25							Total depth = 21 ft. Reached total depth @ 0900 on 4/10/12.
30							



# Boring ID: DP320

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/2/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.7  
 Y Coordinate: 1541194.97  
 X Coordinate: 1473509.62

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0		FFOR1787	0.8		SILT with Sand (ML); strong brown (7.5YR 4/6); dry to moist; soft; nonplastic; 85% silt; 14% sand; 1% gravel; subangular; no odor.	ML	Began drilling @ 0900 on 4/2/12. Total depth = 1 ft. Reached total depth @ 0910 on 4/2/12.
5							Step-out sampling location.
10							
15							
20							
25							
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:55 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP321

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/2/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.3  
 Y Coordinate: 1541215.04  
 X Coordinate: 1473509.69

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					SILT with Sand (ML); reddish brown (5YR 5/4); slightly moist; firm; nonplastic; 80% silt; 19% sand; 1% gravel; no odor.  Same as above (0 ft); pink (5YR 7/4); dry to slightly moist; low plasticity; 85% silt; 14% sand; 1% gravel; no odor.	ML	Began drilling @ 0920 on 4/2/12.
10					Lean CLAY with Sand (CL); reddish brown (5YR 4/4); firm; medium plasticity; 50% clay; 25% silt; 23% sand; 2% gravel; slight odor.	CL	
15				Lean CLAY with Sand (CL); reddish brown (5YR 4/3); slightly moist; firm; medium plasticity; 50% clay; 35% silt; 14% sand; 1% gravel; odor.			
		FFOR1788	651.0				Total depth = 16 ft. Reached total depth @ 0930 on 4/2/12.
20							Step-out sampling location.
25							
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:48 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP322

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/2/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.5  
 Y Coordinate: 1541225.00  
 X Coordinate: 1473528.75

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					Sandy SILT (ML); yellowish red (5YR 4/6); dry to slightly moist; soft; 70% silt; 20% sand; 10% gravel; rounded; no odor.		Began drilling @ 0940 on 4/2/12.
					SILT with Sand (ML); pink (5YR 7/3); dry to slightly moist; soft; 85% silt; 14% sand; 1% gravel; rounded; no odor.	ML	
					Same as above (4 ft); reddish brown (5YR 5/4); low plasticity; 85% silt; 15% sand; no odor.		
10					Sandy SILT (ML); brown (7.5YR 5/4); dry to slightly moist; soft; low plasticity; 70% silt; 25% sand; 5% gravel; slight odor.		
					Lean CLAY (CL); reddish brown (5YR 4/4); moist; firm; medium plasticity; 70% clay; 30% silt; slight odor.	CL	
					Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; soft; nonplastic; 70% silt; 25% sand; 5% gravel; no odor.	ML	
15					Lean CLAY (CL); reddish brown (5YR 4/4); moist; firm; medium plasticity; 70% clay; 30% silt; slight odor.		
					Same as above (14 ft); yellowish red (5YR 5/6).	CL	
20		FFOR1789	1090.0				Total depth = 21 ft. Reached total depth @ 1015 on 4/2/12.
25							Step-out sampling location.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:48 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP323

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/2/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.3  
 Y Coordinate: 1541225.09  
 X Coordinate: 1473509.75

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0		FFOR1790	2.3		Sandy SILT (ML); brown (7.5YR 4/4); dry to slightly moist; soft; low plasticity; 65% silt; 30% sand; 5% gravel to 1cm; subrounded; no odor.	ML	Began drilling @ 1100 on 4/2/12. Total depth = 1 ft. Reached total depth @ 1103 on 4/2/12.
5							Step-out sampling location.
10							
15							
20							
25							
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:55 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP324

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/2/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.5  
 Y Coordinate: 1541235.03  
 X Coordinate: 1473509.67

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					SILT with Sand (ML); brown (7.5YR 5/4); dry to slightly moist; soft; low plasticity; 75% silt; 24% sand; 1% gravel; no odor.  Same as above (0 ft); light brown (7.5YR 6/4).  Same as above (0 ft); reddish yellow (7.5YR 6/6).	ML	Began drilling @ 1103 on 4/2/12.
10				Silty SAND with Gravel (ML); reddish yellow (5YR 6/6); dry to slightly moist; soft; nonplastic; 60% silt; 25% sand; 15% gravel to 3cm; subangular; no odor. SILT with Sand (ML); reddish brown (5YR 4/4); slightly moist; firm; medium plasticity; 85% silt; 15% sand; slight odor.	ML		
15				 Lean CLAY (CL); reddish brown (5YR 4/4); moist; firm; medium plasticity; 60% clay; 40% silt; no odor.	CL		
20		FFOR1791	884.0		Silty SAND with Gravel (ML); strong brown (7.5YR 4/6); dry to slightly moist; soft; low plasticity; 60% silt; 25% sand; 15% gravel to 3cm; subangular; no odor.	ML	
25							Total depth = 21 ft. Reached total depth @ 1155 on 4/2/12.  Step-out sampling location.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:49 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP325

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/2/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.3  
 Y Coordinate: 1541335.12  
 X Coordinate: 1473509.90

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					Sandy SILT (ML); brown (7.5YR 4/4); dry to slightly moist; soft; low plasticity; 70% silt; 30% sand.  Same as above (0 ft); pink (7.5YR 7/4).	ML	Began drilling @ 1212 on 4/2/12.
10					Poorly graded SAND with Silt (SW-SM); pink (7.5YR 7/4); medium dense; 90% fine to medium sand; trace coarse sand; 10% silt; no odor.	SW-SM	
10		FFOR1792	1.5		Sandy SILT (ML); yellowish red (5YR 5/6); dry to slightly moist; soft; low plasticity; 70% silt; 30% sand.	ML	
15					Lean CLAY (CL); yellowish red (5YR 4/6); slightly moist; firm; medium plasticity; 60% clay; 40% silt; no odor.	CL	Total depth = 12 ft. Reached total depth @ 1233 on 4/2/12.
20							Step-out sampling location.
25							
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:50 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP326

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/2/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.6  
 Y Coordinate: 1541355.05  
 X Coordinate: 1473510.00

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					Poorly graded SAND with Silt (SW-SM); strong brown (7.5YR 5/6); medium dense; 90% fine to medium sand; trace coarse sand; 10% silt; no odor.	SW-SM	Began drilling @ 1240 on 4/2/12.
					Same as above (0 ft).		
10					Sandy SILT (ML); light brown (7.5YR 6/4); dry to slightly moist; firm; low plasticity; 70% silt; 30% sand; trace coarse sand; no odor.	ML	
15					Lean CLAY (CL); brown (7.5YR 4/4); slightly moist; firm; medium plasticity; 70% clay; 30% silt; no odor.	CL	
					Sandy SILT (ML); yellowish red (5YR 4/6); dry to slightly moist; soft; low plasticity; 65% silt; 35% sand; no odor.	ML	
					Lean CLAY (CL); yellowish red (5YR 4/6); dry to slightly moist; firm; medium plasticity; 60% clay; 40% silt; no odor.	CL	
20					Same as above (14 ft); reddish brown (5YR 4/4); moist; 70% clay; 30% silt; no odor.	ML	
		FFOR1793 FFOR1794	7381.0		SILT with Sand (ML); yellowish red (5YR 5/6); dry to slightly moist; firm; low plasticity; 85% silt; 15% sand; odor.		
25							Total depth = 21 ft. Reached total depth @ 1318 on 4/2/12.
							Step-out sampling location.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:50 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP327

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/5/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.6  
 Y Coordinate: 1541360.12  
 X Coordinate: 1473509.96

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					Silty SAND (SM); strong brown (7.5YR 5/6); moist; loose; 85% fine to medium sand; rounded; trace coarse sand; 15% silt; no odor.	SM	Began drilling @ 0745 on 4/5/12.
10		FFOR1795	3.5		Same as above (0 ft); yellowish red (5YR 5/6); medium dense.	ML	
15					Sandy SILT (ML); yellowish red (5YR 5/6); slightly moist; firm; low plasticity; 60% silt; 40% sand; no odor.	ML	
20					Same as above (9.5 ft); strong brown (7.5YR 4/6); 70% silt; 30% fine to medium sand; no odor.	CL	
20		FFOR1796	6296.0		Sandy lean CLAY (CL); reddish brown (5YR 4/4); firm; medium plasticity; 40% clay; 25% silt; 35% sand; no odor.	ML	
25					Sandy SILT (ML); yellowish red (5YR 5/6); slightly moist; firm; low plasticity; 70% silt; 30% sand; odor.		Total depth = 21 ft. Reached total depth @ 0820 on 4/5/12.
30							Step-out sampling location.

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 6/1/12 10:34 - N:\KAFB BFF\FFOR\_PROJECT\FOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP328

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/5/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.6  
 Y Coordinate: 1541360.08  
 X Coordinate: 1473529.96

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					Poorly graded SAND with Silt (SP-SM); strong brown (7.5YR 4/6); moist; medium dense; 90% fine to medium sand; rounded; 10% silt; no odor.	SP-SM	Began drilling @ 0830 on 4/5/12.
10		FFOR1797	44.6		Sandy SILT (ML); pink (7.5YR 7/4); slightly moist; firm; low plasticity; 60% silt; 40% sand; trace coarse sand; no odor.  Same as above (4 ft); yellowish red (5YR 4/6); 70% silt; 30% sand; no odor.	ML	
15					Silty SAND (SM); yellowish red (5YR 5/6); slightly moist; medium dense; 85% fine sand; rounded; 15% silt.	SM	
20					Sandy SILT (ML); strong brown (7.5YR 4/6); slightly moist; firm; low plasticity; 60% silt; 40% fine to medium sand; slight odor. SILT with Sand (ML); strong brown (7.5YR 5/6); slightly moist; firm; medium plasticity; 80% silt; 20% sand; odor.  Same as above (13 ft); strong odor.	ML	
25		FFOR1798	3842.0				Total depth = 21 ft. Reached total depth @ 0920 on 4/5/12.  Step-out sampling location.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 4/30/12 14:51 - N:\KAFB BFF\FFOR\_DIRECT\_PUSH\INT\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ





# Boring ID: DP330

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/5/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.2  
 Y Coordinate: 1541385.03  
 X Coordinate: 1473530.02

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					SILT with Sand (ML); strong brown (7.5YR 4/6); moist; firm; low plasticity; 80% silt; 20% sand; trace coarse sand; trace gravel; slight odor.  Same as above (0 ft); light brown (7.5YR 6/4).	ML	Began drilling on 4/5/12.
10					Silty SAND (SM); strong brown (7.5YR 5/6); dry to slightly moist; medium dense; 65% fine sand; rounded; 35% silt; no odor.	SM	
15					SILT with Sand (ML); strong brown (7.5YR 4/6); slightly moist; firm; low plasticity; 65% silt; 15% clay; 20% fine sand; odor.	ML	
15		FFOR1800	889.0		Same as above (10 ft).		
20							Total depth = 16 ft. Reached total depth @ 1035 on 4/5/12.
25							Step-out sampling location.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 5/1/12 07:14 - N:\KAFB BFF\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP331

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/5/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.1  
 Y Coordinate: 1541395.06  
 X Coordinate: 1473510.07

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							Began drilling on 4/5/12.
5					Sandy SILT (ML); brown (7.5YR 5/4); moist; firm; low plasticity; 65% silt; 35% sand; trace gravel to 2cm; rounded.	ML	
					Same as above (0 ft); pink (7.5YR 7/4).		
10					Same as above (0 ft); strong brown (7.5YR 5/6); 70% silt; 30% sand.		
15					SILT with Sand (ML); yellowish red (5YR 4/6); slightly moist; soft; low plasticity; 85% silt; 15% fine sand; odor.	SM	
					Silty SAND (SM); yellowish red (5YR 4/6); slightly moist; dense; 60% fine to medium sand; trace gravel to 2cm; rounded; 40% silt; no odor.		
20					Sandy SILT (ML); strong brown (7.5YR 5/6); slightly moist; soft; low plasticity; 65% silt; 35% sand; trace gravel to 2cm; subrounded; no odor.	ML	
		FFOR1801 FFOR1801-MS FFOR1801-MSD FFOR1802	NR				Total depth = 21 ft. Reached total depth @ 1115 on 4/5/12.
25							Step-out sampling location.
30							

FFOR\_BOREHOLE\_LOG - SHAW\_DRILLING.GDT - 5/1/12 07:14 - N:\KAFB BFF\FFOR\_PROJECT\FFOR\_DIRECT\_PUSH.GPJ



# Boring ID: DP332

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/5/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.5  
 Y Coordinate: 1451405.06  
 X Coordinate: 1473510.06

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							
5					Sandy SILT (ML); brown (7.5YR 5/4); slightly moist; firm; low plasticity; 60% silt; 35% fine to medium sand; trace coarse sand; 5% gravel to 3cm; subrounded; no odor.  SILT with Sand (ML); light brown (7.5YR 6/4); dry to slightly moist; soft; low plasticity; 75% silt; 25% sand; trace coarse sand; no odor.	ML	Began drilling @ 1130 on 4/5/12.
10				 Silty SAND (SM); light reddish brown (5YR 6/4); dry to slightly moist; medium dense; 70% fine to medium sand; rounded; 30% silt; no odor.	SM		
15					SILT with Sand (ML); reddish yellow (7.5YR 7/6); slightly moist; soft; low plasticity; 75% silt; 25% sand.  SILT (ML); brown (7.5YR 4/4); slightly moist; firm; low plasticity; 85% silt; 5% clay; 10% sand; strong odor.	ML	
20	FFOR1803	1602.0		 Lean CLAY (CL); lense; dark brown (7.5YR 3/3); 80% clay; 15% silt; 5% sand. SILT (ML); brown (7.5YR 4/4); slightly moist; firm; low plasticity; 85% silt; 5% clay; 10% sand; strong odor.	CL ML		
25	FFOR1804	1783.0					Total depth = 21 ft. Reached total depth @ 1205 on 4/5/12.  Step-out sampling location.
30							

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# Boring ID: DP333

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/5/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.5  
 Y Coordinate: 1541413.46  
 X Coordinate: 1473500.20

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0							Began drilling @ 1230 on 4/5/12.
5					Silty SAND with Gravel (SM); reddish brown (5YR 5/4); slightly moist; loose; 65% fine to coarse sand; 15% gravel; 20% silt; no odor.	SM	
					Sandy SILT (ML); brown (7.5YR 5/4); moist; firm; low plasticity; 65% silt; 30% sand; 5% gravel to 3cm; subrounded; no odor.	ML	
					Same as above (3 ft); pink (7.5YR 7/4).		
10					Silty SAND (SM); reddish yellow (7.5YR 6/6); dry; loose; 70% fine to medium sand; trace coarse sand; 30% silt; no odor.	SM	
					SILT with Sand (ML); brown (7.5YR 4/4); moist; firm; low plasticity; 80% silt; 20% sand; no odor.	ML	
15					Lean CLAY (CL); reddish brown (5YR 4/4); slightly moist; firm; medium plasticity; 65% clay; 30% silt; 5% sand; slight odor.	CL	
20					Sandy SILT (ML); yellowish red (5YR 4/6); slightly moist; firm; low plasticity; 70% silt; 30% sand; slight odor.	ML	
		FFOR1805 FFOR1806	NR				Total depth = 21 ft. Reached total depth @ 1250 on 4/5/12.
25							Step-out sampling location.
30							

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# Boring ID: DP334

**Client:** US Army Corps of Engineers  
**Project Location:** KAFB, Albuquerque, NM  
**Project Name:** KAFB BFF SWMU ST-106 and SS-11  
**Project Number:** 140705

Boring Diameter (in.): 3  
 Date Completed: 4/5/2012  
 Drilling Contractor: JR Drilling  
 Drilling Method: Direct Push  
 Logged By: John Nance

Ground Elevation AMSL (ft): 5343.1  
 Y Coordinate: 1541434.40  
 X Coordinate: 1473410.30

Depth (ft)	Sample Type	Number	Headspace PID	Lithologic Log	Material Description	U.S.C.S.	Remarks
0		FFOR1807	1.4		Silty SAND with Gravel (SM); yellowish red (5YR 4/6); moist; loose; 45% medium to coarse sand; 20% gravel to 3cm; rounded; 35% silt.	SM	Began drilling @ 1310 on 4/5/12. Total depth = 1 ft. Reached total depth @ 1312 on 4/5/12.
5							Step-out sampling location.
10							
15							
20							
25							
30							

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