


LOG OF SOIL BORING

Date Completed: 10/23/00
Logged By: Thomas W. Smith
Total Depth: 26.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: In field on south side of County Road 23
GPS Coordinates: Latitude: N 39° 42' 45.5" Longitude: W 121° 57' 32.6"


Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 131.0 ft	
5								
		SPT 5.0-6.5	2-4-3	7			Silty fine SAND (SM), light brown, moist	
							Sandy SILT layer (ML)	
10								
		SPT 10.0-11.5	7-10-8	18			Silty fine SAND (SM), light brown, moist	
						Groundwater at 11.9 ft on 10/23/00	Gravelly SAND (SP), medium brown, moist	
15								
		SPT 15.0-16.5	26*-6-3	9	Sample SB1-1 15.0-20.0 ft Small Bag	No tests	15.0 ft Increasing sand size with depth	
20								
		SPT 20.0-21.5	10-12-6	18				
						? ? ?	? ? ?	
25								
		SPT 25.0-26.5	7-5-3	8			Sandy GRAVEL (GP), saturated, multicolored (black, gray, white, tan, red) rounded to sub-rounded	
30							Bottom of Boring at 26.5 ft	
35								
40								
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* Rock in sampler, disregard value
 ? Estimated break in material type

LOG OF SOIL BORING

Date Completed: 10/23/00
Logged By: Thomas W. Smith
Total Depth: 31.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: In field on South Side of County Road 23.
 Approx. 1/2 mile West of SB-1 along County Road 23
GPS Coordinates: Latitude: N 39° 42' 45.3" Longitude: W 121° 58' 11.8"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 132.0 ft	
5		SPT 5.0-6.5	3-3-3	6	Sample SB2-1 0-4.0 ft Small Bag	No tests	Silty CLAY (CL), medium brown, moist	
10		SPT 10.0-11.5	5-5-5	10				Fine SAND with 10% silt (SP-SM), medium brown, moist
Groundwater at 13.9 ft on 10/23/00							Fine Sandy SILT (ML), medium brown, moist	
15		SPT 15.0-16.5	3-2-7	9	Sample SB2-2 15.5-16.5 ft Small Bag	No tests	Silty Fine SAND (SM), medium brown, saturated	
20		SPT 17.5-19.0	2-5-5	10				
25		SPT 20.0-21.5	8-8-6	14				Clean Gravelly SAND (SP), saturated, multicolored (black, gray, white, tan, red) rounded to sub-rounded
30		SPT 25.0-26.5	6-8-7	15	Sample SB2-3 21.0-27.5 ft Small Bag	No tests	Increasing gravel content with depth	
35		SPT 30.0-31.5	15-24-21	45				Bottom of Boring at 31.5 ft
40								
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LOG OF SOIL BORING

Date Completed: 10/23/00
Logged By: Thomas W. Smith
Total Depth: 26.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: County Road 23. Boring is 43' South from edge of pavement
GPS Coordinates: Latitude: N 39° 42' 45.6" Longitude: W 121° 58' 13.5"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description
							Approximate Ground Surface Elevation: 134.0 ft
5					Sample SB3-1 1.0-3.0 ft Small Bag	G,H,A CL	Silty CLAY (CL), light brown, low moisture
		SPT 5.0-6.5	5-7-5	12			
10							Fine SAND (SP), light brown, moist Clayey SILT (ML), medium brown, moist
		SPT 10.0-11.5	7-10-9	19			
15					Sample SB3-2	G, H, A	Fine Sandy SILT (ML), medium brown, moist
		SPT 15.0-16.5	3-4-7	11			
20					15.0-15.5 ft Small Bag	ML	Groundwater at 15.8 ft on 10/23/00
		SPT 17.5-19.0	4-4-7	11			
		SPT 20.0-21.5	3-2-5	7			
25					Sample SB3-3 21.0 - 26.5 ft Small Bag	G SP	Gravelly, Medium to Coarse SAND (SP), saturated, multicolored (black, gray, white, tan, red) rounded to sub-rounded 24.0 ft Increasing gravel content
		SPT 25.0-26.5	11-12-12	24			Bottom of Boring at 26.5 ft
30							
35							
40							



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 Project No. 33.0127.00

SB-3

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LOG OF SOIL BORING

Date Completed: 10/23/00
Logged By: Thomas W. Smith
Total Depth: 36.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: County Road 23. Approx. 1 Mile East of Road 23 and Hwy 45 Intersection
GPS Coordinates: Latitude: N 39° 42' 46.0" Longitude: W 121° 59' 28.2"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description
							Approximate Ground Surface Elevation: 139.0 ft
5		SPT 5.0-6.5	5-7-7	14			Silty CLAY (CL), light brown, slight moisture
10		SPT 10.0-11.5	4-4-5	9			
15		SPT 15.0-16.5	3-7-8	15	Sample SB4-1 10.5-11.5 ft Small Bag	No tests	Fine SAND (SP), light brown, moist
Groundwater at 16.3 ft on 10/23/00							Silty SAND (SM), medium brown, saturated
20		SPT 20.0-21.5	6-5-5	10			Medium grained SAND (SP) with up to 2 inch Gravel saturated, multicolored (black, gray, white, tan, red) rounded to sub-rounded
25		SPT 25.0-26.5	9-9-9	18	Sample SB4-2 25.0-26.5 ft Small Bag	No tests	Increasing sand size with depth
30		SPT 30.0-31.5	No Test		Sampler wedged with inflowing sand against the inside of the flight auger		
35		SPT 35.0-36.5	23-25-20	45	Sample SB4-3 35.0-36.5 ft Small Bag	No tests	Bottom of Boring at 36.5 ft



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 Project No. 33.0127.00


SB-4

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LOG OF SOIL BORING

Date Completed: 10/24/00
Logged By: Thomas W. Smith
Total Depth: 41.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Intersection of field roads approx. 0.5 mi due North of SB-4
GPS Coordinates: Latitude: N 39° 43' 15.7" Longitude: W 121° 59' 27.3"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 139.5 ft	
5		SPT 5.0-6.5	6-4-3	7			Silty CLAY (CL), medium brown, moist	
10		SPT 10.0-11.5	2-3-4	7				
15		SPT 15.0-16.5	2-2-4	6				
Groundwater at 19.1 ft on 10/24/00								
20		SPT 20.0-21.5	6-10-10	20	Sample SB5-1 20.0-21.0 ft Small Bag	G, H, A ML	Silty Fine SAND (SM), medium brown, saturated	
25		SPT 25.0-26.5	18-23-28	51	Sample SB5-2 25.0-25.5 ft Small Bag	No tests		
30		SPT 30.0-31.5	25-13-12	25	Sample SB5-3 25.5-26.5 ft Small Bag	No tests	Sandy GRAVEL (GW), saturated, multicolored (black, gray, white, tan, red) angular to rounded Gravel 2 inch size	
35		SPT 35.0-36.5	26-29-19	48	Sample SB5-4 30.0-31.5 ft Small Bag	G GW		
40		SPT 40.0-41.5	34-29-31	60	Sample SB5-5 35.5-41.5 ft Small Bag	G GW		
Bottom of Boring at 41.5 ft								
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LOG OF SOIL BORING

Date Completed: 10/24/00
Logged By: Thomas W. Smith
Total Depth: 36.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Off Dirt Road Edge, 0.3 miles East of SB-5 on south side of road
GPS Coordinates: Latitude: N 39° 43' 15.2" Longitude: W 121° 59' 13.2"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 139.0 ft	
5					Sample SB6-1 1.0-10.0 ft Small Bag	G, H, A CL	Silty CLAY (CL) , light brown, dry	
		SPT 5.0-6.5	12-11-7	18				
10								
		SPT 10.0-11.5	3-3-5	8				
15								
		SPT 12.0-13.5	2-3-3	6			Clayey SILT (ML) , medium brown, moist	
		SPT 15.0-16.5	1-2-3	5			Silty CLAY (CL) , medium brown, moist	
20					Groundwater at 19.7 ft on 10/24/00			
		SPT 20.0-21.5	3-2-3	5			Silty Fine SAND (SM) , medium brown, saturated	
25							25.25 - 26.0 ft Color change from brown to gray	
		SPT 25.0-26.5	5-8-11	19			Gravelly SAND (SP/GP) , saturated	
30								
		SPT 30.0-31.5	35-24-24	N.A.	Low recovery most likely hit large gravel			
35								
		SPT 35.0-36.5	15-14-8	22			Bottom of Boring at 36.5 ft	
40								
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LOG OF SOIL BORING

Date Completed: 10/24/00
Logged By: Thomas W. Smith
Total Depth: 26.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Top of Existing J Levee
GPS Coordinates: Latitude: N 39° 43' 22.1" Longitude: W 121° 58' 9.1"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 144.0 ft	
5					Sample SB7-1 1.0-3.0 ft Small Bag	No tests	0-4 inch Road gravel surfacing	
		SPT 5.0-6.5	22-13-17	30	Sample SB7-2 3.0-5.0 ft Small Bag	No tests	Alternating 1 inch layers of ML and CL Silty Fine Sandy CLAY (CL) , medium brown, moist Clayey Fine Sandy SILT (ML) , gray-brown, moist Sampler showed layers of brown and gray-brown	
10								
		SPT 10.0-11.5	3-2-2	4			Silty Fine Sandy CLAY (CL) , medium brown, moist	
15								
		SPT 15.0-16.5	6-8-10	18			Fine SAND (SP) , light brown, moist	
20							Sandy GRAVEL (GP) , moist, gravel to 1 1/2 inch	
		SPT 17.5-19.0	6-9-10	19				
25								
		SPT 20.0-21.5	3-4-10	14			Fine SAND (SP) , medium brown, moist	
					Groundwater at 25.1 ft on 10/24/00			
30								
		SPT 25.0-26.5	3-5-5	10			Bottom of Boring at 26.5 ft	
35								
40								
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LOG OF SOIL BORING

Date Completed: 10/24/00
Logged By: Thomas W. Smith
Total Depth: 21.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Top of Existing J Levee
GPS Coordinates: Latitude: N 39° 43' 41.0" Longitude: W 121° 58' 49.6"


Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 145.0 ft	
5								
	5.0-6.5	SPT	5-5-6	11	Sample SB8-1 5.0-6.5 ft Small Bag	G, H, A CL	Silty CLAY (CL), medium brown, moist	
10								
	10.0-11.5	SPT	3-2-4	6			Increasing silt content at 11.0 ft	
15								
	15.0-16.5	SPT	5-4-4	8			Fine SAND (SP), medium brown, moist	
20						? ? ?	Silty Fine SAND (SM) ? ?	
	20.0-21.5	SPT	6-10-14	24				
25							Bottom of Boring at 21.5 ft No Groundwater Encountered	
30								
35								
40								
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? Estimated material type change

LOG OF SOIL BORING

Date Completed: 10/24/00
Logged By: Thomas W. Smith
Total Depth: 41.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Top of Existing J Levee
GPS Coordinates: Latitude: N 39° 43' 54.8" Longitude: W 121° 59' 47.3"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 148.0 ft	
5							0-4 inch Road Gravel	
	5.0-6.5	SPT	4-4-3	7			Silty CLAY (CL) , medium brown, moist	
10							Color increases in darkness 10.0-11.5 ft	
	10.0-11.5	SPT	7-8-12	20				
15								
	15.0-16.5	SPT	3-3-4	7	SB9-1 15.5-16.5 ft Small Bag	No tests	Increasing silt content, Silty CLAY (CL)	
20								
	20.0-21.5	SPT	2-4-4	8				
25					Groundwater at 22.3 ft on 10/24/00			
	25.0-26.5	SPT	2-2-3	5				
30								
	30.0-31.5	SPT	13-15-16	31			Gravelly, Fine to Medium SAND (SP) , saturated	
35								
	35.0-36.5	SPT	10-25-37	62			Sandy GRAVEL (SP/GP) , saturated	
40								
	40.0-41.5	SPT					Bottom of Boring at 41.5 ft	
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LOG OF SOIL BORING

Date Completed: 10/24/00
Logged By: Thomas W. Smith
Total Depth: 41.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Holly Sugar property just east of the J levee on Sugarwell Road
GPS Coordinates: Latitude: N 39° 44' 2.6" Longitude: W 122° 00' 4.7"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 140.0 ft	
							0-2 feet Road Base Gravel (GW)	
5	[Hatched]	SPT 5.0-6.5	3-3-3	6			Silty CLAY (CL) , dark brown, moist Color change to medium brown at 5.0 ft	
10	[Hatched]	SPT 10.0-11.5	3-5-8	13				
15	[Hatched]	SPT 15.0-16.5	1-2-2	4				
20	[Hatched]	SPT 20.0-21.5	2-4-4	8				
Groundwater at 21.7 ft on 10/24/00							Fine Sandy Clayey SILT (ML) , light brown, saturated	
25	[Hatched]	SPT 25.0-26.5	2-2-3	5			Sandy SILT (ML) , medium brown, saturated	
30	[Hatched]	SPT 30.0-31.5	2-3-18	21	Sample SB10-1 26.0-26.5 ft Small Bag	G, H, A ML		
35	[Hatched]	SPT 35.0-36.5	17-18-23	41			Gravelly, Fine to Medium SAND (SP) , saturated light brown	
40	[Hatched]	SPT 40.0-41.5	26-22-21	43	Sample SB 10-2 41.0-41.5 ft Small bag	No tests	Bottom of Boring at 41.0 ft	
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LOG OF SOIL BORING

Date Completed: 10/24/00
Logged By: Thomas W. Smith
Total Depth: 41.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: 0.4 mi North of SB-10 on Sugarwell Road (Holly Sugar Property)
GPS Coordinates: Latitude: N 39° 44' 22.1" Longitude: W 122° 00' 11.7"


Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 139.5 ft	
5							Clayey SILT (ML) , dark brown with occasional small gravel pieces to about 5 ft. <hr style="border-top: 1px dashed black;"/> Silty CLAY (CL) , medium brown, moist ? ? ?	
	5.0-6.5	SPT	4-4-4	8		? ? ?		
10								
	10.0-11.5	SPT	3-4-5	9				
15							<hr style="border-top: 1px dashed black;"/> Very Fine Sandy Clayey SILT (ML) , medium brown, moist <hr style="border-top: 1px dashed black;"/> Groundwater at 22.3 ft on 10/24/00 <hr style="border-top: 1px dashed black;"/> Very Fine Sandy SILT (ML) , medium brown, saturated decreasing clay and increasing sand <hr style="border-top: 1px dashed black;"/> Increasing Sand (SM) <hr style="border-top: 1px dashed black;"/> Sandy GRAVEL (GW) , saturated, multicolored (black, gray, white, tan, red) angular to rounded <hr style="border-top: 1px dashed black;"/> Silty SAND (SP-SM) , medium brown, saturated Bottom of Boring at 41.5 ft	
	15.0-16.5	SPT	4-4-6	10				
20								
	20.0-21.5	SPT	3-4-7	11				
25							<hr style="border-top: 1px dashed black;"/> Very Fine Sandy SILT (ML) , medium brown, saturated decreasing clay and increasing sand <hr style="border-top: 1px dashed black;"/> Increasing Sand (SM) <hr style="border-top: 1px dashed black;"/> Sandy GRAVEL (GW) , saturated, multicolored (black, gray, white, tan, red) angular to rounded <hr style="border-top: 1px dashed black;"/> Silty SAND (SP-SM) , medium brown, saturated Bottom of Boring at 41.5 ft	
	25.0-26.5	SPT	1-1-2	3				
30								
	30.0-31.5	SPT	2-5-7	12				
35							<hr style="border-top: 1px dashed black;"/> Sandy GRAVEL (GW) , saturated, multicolored (black, gray, white, tan, red) angular to rounded <hr style="border-top: 1px dashed black;"/> Silty SAND (SP-SM) , medium brown, saturated Bottom of Boring at 41.5 ft	
	35.0-36.5	SPT	18-16-12	28	Sample SB11-1 35.0-36.5 ft Small Bag Sample SB11-2	G GW		
40								
	40.0-41.5	SPT			40.0-41.5 ft Small Bag	No tests		
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? Estimated break in material type

LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 21.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Top of Existing J Levee, Due East of Sewer Ponds
GPS Coordinates: Latitude: N 39° 44' 26.0" Longitude: W 121° 59' 53.0"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 149.0 ft	
5								
	5.0-6.5	SPT	3-3-3	6			Silty CLAY (CL), medium brown, moist	
10							Increasing darkness with depth	
	10.0-11.5	SPT	4-4-4	8			Clayey SILT (ML), medium brown, moist	
15						? ? ?	? ?	
	15.0-16.5	SPT	3-4-7	11			Silty CLAY (CL), medium brown, moist	
20							Fine SAND (SP), light to medium brown, moist	
	20.0-21.5	SPT	4-5-5	10	Sample SB12-1 20.0-21.5 ft Small Bag	No tests		
25							Bottom of Boring at 21.5 ft No Groundwater Encountered	
30								
35								
40								
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? Estimated break in material type

LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 16.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Top of Existing J levee Between Hwy 32 and Sewer Ponds
GPS Coordinates: Latitude: N 39° 44' 40.3" Longitude: W 121° 59' 42.9"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description
							Approximate Ground Surface Elevation: 148.0 ft
5							Clayey, Fine Sandy SILT (ML), medium brown, moist
10	SPT 5.0-6.5		2-3-3	6			Silty SAND (SM), medium brown, moist
							Increasing darkness with depth
15	SPT 10.0-11.5		4-3-5	8			Fine SAND (SP), moist
20	SPT 15.0-16.5		5-8-10	18			16.0 ft, Some medium to coarse sand with small gravel pieces.
25							Bottom of Boring at 16.5 ft No Groundwater Encountered
30							
35							
40							

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 Project No. 33.0127.00

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LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 16.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Top of Existing J levee near Hwy 32
GPS Coordinates: Latitude: N 39° 44' 55.9" Longitude: W 121° 59' 46.6"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 150.0 ft	
5							Clayey, Fine, Sandy SILT (ML) , medium brown, moist	
	5.0-6.5	SPT	1-1-2	3	Sample SB14-1 5.0-6.5 ft Small Bag	G, H, A ML		
10							Silty Fine SAND (SM) , medium brown, moist	
	10.0-11.5	SPT	2-3-5	8				
15							Moist Fine SAND (SP) , medium brown, moist	
	15.0-16.5	SPT	4-6-7	13				
20							Bottom of Boring at 16.5 ft No Groundwater Encountered	
25								
30								
35								
40								
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LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 41.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Westermann Farms North of Hwy 32
GPS Coordinates: Latitude: N 39° 44' 54.2" Longitude: W 122° 00' 25.0"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 141.0 ft	
5		SPT 5.0-6.5	4-5-6	11			Silty CLAY (CL) , dark brown, moist Color change to light brown at 5.0 ft	
10		SPT 10.0-11.5	3-3-6	9				
15		SPT 15.0-16.5	5-6-8	14	SB15-1 15.0-16.5 ft Small Bag	G, H, A CL		
20		SPT 20.0-21.5	3-4-4	8	Groundwater at 17.5 ft on 10/25/00			
25		SPT 25.0-26.5	1-1-2	3			----- Sandy Clayey SILT (ML) , dark brown, saturated	
30		SPT 30.0-31.5	4-5-4	9			----- Fine SAND (SP) with 2-3 inch layers of Silty SAND (ML) , Light brown	
35		SPT 35.0-36.5	17-18-23	41			----- At 36.0 ft Includes small gravel	
40		SPT 40.0-41.5	18-14-13	27			----- Bottom of Boring at 41.5 ft	
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LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 41.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Westermann Farms North of Hwy 32
GPS Coordinates: Latitude: N 39° 44' 52.0" Longitude: W 122° 00' 31.8"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description
							Approximate Ground Surface Elevation: 142.0 ft
5		SPT 5.0-6.5	6-5-4	9			Silty CLAY (CL) , dark brown, moist Color change to Medium brown at 4.0 ft
10		SPT 10.0-11.5	3-4-6	10			
15		SPT 15.0-16.5	\23,50+	50+			
20		SPT 20.0-21.5			Sample SB16-1 20.0-21.5 ft Small Bag	G SP	Gravelly, fine to medium SAND (SP) , moist, multicolored (black, gray, white, tan, red) rounded to sub-rounded Gravel up to 2 inches
25		SPT 25.0-26.5	20-26-19	45			Groundwater at 23.4 ft on 10/25/00
30		SPT 30.0-31.5	22-17-16	33	Sample SB16-2 25.5-26.5 ft Small Bag	G GW	Sandy GRAVEL (GW) , saturated, multicolored (black, gray, white, tan, red) rounded to sub-rounded
35		SPT 35.0-36.5	14-11-8	19	Sample SB16-3 35.0-36.5 ft Small Bag	No tests	
40		SPT 40.0-41.5	24-26-29	55			Bottom of Boring at 41.5 ft

AYRES ASSOCIATES
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 SACRAMENTO RIVER AT HAMILTON CITY, CA
 Project No. 33.0127.00

SB-16

LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 41.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Westermann Farms on Top of Existing J Levee
GPS Coordinates: Latitude: N 39° 45' 33.0" Longitude: W 122° 00' 45.6"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 152.0 ft	
							0-1.0 ft Road Base 3 inch angular Gravel (GP)	
5							Silty CLAY (CL) , medium brown, moist	
		SPT 5.0-6.5	6-5-4	9				
10								
		SPT 10.0-11.5	3-4-6	10	Sample SB17-1 10.0-11.5 ft Small Bag	G, H, A CL		
15							Clayey, Silty, Very Fine SAND (SM) , light brown, moist	
		SPT 15.0-16.5	23, 50+	50+				
20								
		SPT 20.0-21.5						
25							Interbedded layers of fine SAND and and Silty Fine SAND (SP-SM)	
		SPT 25.0-26.5	20-26-19	45				
30							Silty Fine SAND (SM) , gray / green with 1/4 inch root piece saturated	
		SPT 30.0-31.5	22-17-16	33				
35								
		SPT 35.0-36.5	14-11-8	19				
40							Bottom of Boring at 41.5 ft	
		SPT 40.0-41.5	24-26-29	55				
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LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 46.5 ft


Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Westermann Farms on Top of Existing J Levee
GPS Coordinates: Latitude: N 39° 45' 40.6" Longitude: W 122° 01' 14.3"

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 152.0 ft	
							0-1.0 ft Road Base 3 inch angular Gravel (GP)	
5							Silty CLAY (CL) , dark brown, moist	
		SPT 5.0-6.5	4-5-4	9	no recovery			
10								
		SPT 10.0-11.5	3-3-5	8	Sample SB18-1 10.0-11.5 ft Small Bag	G, H, A CL		
15							Color change to medium brown, increase in silt content	
		SPT 15.0-16.5	4-6-8	14				
20								
		SPT 20.0-21.5	3-3-4	7				
25							Sandy Silty CLAY (CL) , medium brown, moist to saturated	
		SPT 25.0-26.5	3-5-6	11				
30					Groundwater at 27.0 ft on 10/25/00			
		SPT 30.0-31.5	4-6-8	14				
35							Layers of Silty CLAY (CL) , medium brown and light olive 30.5-31.0 ft Medium Brown 31.0-31.5 ft Light Olive	
		SPT 35.0-36.5	7-9-9	18	Sample SB18-2 35.0-36.5 ft Small Bag	No tests		
40								
		SPT 40.0-41.5	27-29-42	71	Sample SB18-3 41.0-41.5 ft	No tests		
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LOG OF SOIL BORING

Date Completed: 10/25/00
Logged By: Thomas W. Smith
Total Depth: 46.5 ft

Sampler: Standard Penetration Test (SPT)
Driller: Taber Consultants
Rig: CME-45
Location: Westermann Farms on Top of Existing J Levee

Depth (ft)	Sample	Sample Type	SPT - blows per 0.5 ft	SPT N Value	Sample Number, Description and Depth (ft)	Laboratory Test and U.S.C.S. Classification	Field Description	
							Approximate Ground Surface Elevation: 152.0 ft	
							41.0 ft, Color changes to reddish, same coarse sand	
45	█	SPT 5.0-6.5	23-30-38	68			Interbedded 6 inch layers	
50	█						Sandy, Silty, CLAY (CL), reddish brown silty and	
55	█						Sandy, Gravelly, CLAY (CL), yellow clay	
60	█						Bottom of Boring 46.5 ft	
65	█							
70	█							
75	█							
80	█							
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