



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B4-2
Structure Bridge
Station
Offset

District Dallas
Date 09/11/19
Grnd. Elev. 694.31 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
693.3			CONCRETE, 12 inches							
691.3			FILL, SILTY SAND with GRAVEL, brown and tan			20				
	5	7 (6) 7 (6)	FILL, FAT CLAY, soft (TCP), dark brown, brown, and light brown, with gravel (CH)			17				HP:4.50
				0	41.5	18	50	33	136	HP:4.00; UC:2.99 tsf
	10	8 (6) 6 (6)				17				#200:81.1% HP:4.50
683.3			CLAY, fat, soft (TCP), dark brown, with trace gravel (CH)			25	59	40		HP:4.50; #200:76.9%
	15	6 (6) 5 (6)		0	31.4	24			120.4	HP:4.50; UC:2.26 tsf
677.3			CLAY, lean, sandy, soft (TAT), brown and gray, with limestone nodules (CL)			30				HP:2.00
674.3	20	35 (6) 31 (6)				25				HP:0.50; #200:68.2%
672.3			CLAY, lean, very stiff (TCP), tan, with limestone fragments (CL)			15				HP:1.50
			LIMESTONE, weathered, soft (TCP), tan							
669.3	25	45 (6) 25 (6)								
			CLAY, fat, hard (TAT), light brown and gray, shaley, with tan cemented sand lenses (CH)			20				HP:4.50
666.3			CLAY, lean, hard (TAT), dark gray, shaley (CL)			18				HP:4.50
664.3	30	50 (0.5) 50 (0.3)								
			SHALE, clay-shale, hard to very hard (TCP), incompetent to continuous recovery, very poor to fair quality, dark gray, with limestone seams							30-35: REC: 5.8% RQD: 0%
	35	50 (1) 50 (0.8)		0	52.6				140.2	UC:3.79 tsf
										35-40: REC: 62.5% RQD: 62.5%
	40	50 (1) 50 (0.5)								
										40-45: REC: 90.8% RQD: 65%
649.3	45	50 (1) 50 (1)		0	50.1				134.4	UC:3.61 tsf

Remarks: Groundwater was not noted during drilling. Boring depth 45 feet. As surveyed coordinates: E-2376159.27, N-7128629.927

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B4-3
Structure Bridge
Station
Offset

District Dallas
Date 08/27/19
Grnd. Elev. 673.29 ft
GW Elev. 662.29 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
672.5			CONCRETE, 9 inches							
670.3			CLAY, fat, very stiff (TAT), dark brown (CH)			28				HP:2.50
	5	5 (6) 7 (6)	CLAY, fat, soft (TCP), brown, with limestone fragments and limestone nodules (CH)	0	22.2	26	67	49	132.8	HP:2.50; UC:1.6 tsf #200:85.4%
						20				HP:4.00
						26	57	37		HP:2.50; #200:90%
663.3	10	4 (6) 8 (6)	CLAY, lean, soft to stiff (TCP), light brown and gray, shaley, with light gray and tan sand lenses (CL)	0	16	28			124	HP:1.50; UC:1.15 tsf
						22				HP:3.00
	15	13 (6) 13 (6)				24				HP:3.50
655.3	20	26 (6) 40 (6)	CLAY, lean, very stiff (TCP), dark gray, shaley (CL)			25				HP:4.50
						16				HP:4.50
						14				HP:4.50
649.3	25	50 (0.5) 50 (0.3)	SHALE, clay-shale, hard to very hard (TCP), fairly continuous to continuous recovery, poor to fair quality, dark gray, with limestone seams	0	81.7				139.7	25-30: REC: 97.9% RQD: 68.8% UC:5.88 tsf
	30	50 (1) 50 (1)								30-35: REC: 77.5% RQD: 73.8%
	35	50 (1) 50 (0.5)								35-40: REC: 83.8% RQD: 41.7%
										UC:6.58 tsf
633.3	40	50 (0.5) 50 (0.3)		0	91.4				138.4	

Remarks: Groundwater was noted at a depth of 11 feet. Boring depth 40 feet. As surveyed coordinates: E-2375811.577, N-7128737.567

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B4-4
Structure Bridge
Station
Offset

District Dallas
Date 08/27/19
Grnd. Elev. 673.65 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
672.7			CONCRETE, 12 inches			21				HP:4.50
670.7			CLAY, fat, hard (TAT), dark brown, with gravel (CH)			17	52	35		HP:1.00; #200:60.1%
667.7	5		CLAY, fat, stiff (TCP), light brown and gray, with calcareous nodules (CH)							
663.7	10	20 (6) 15 (6)	CLAY, lean, stiff (TCP), gray and tan, with intermittent and discontinuous seams of unweathered limestone fragments (CL)			11	49	31		%Gv:59.0; %Sa:11.6; %Fines:29.4
658.7	15	50 (3) 50 (3)	CLAY, lean, soft (TAT), gray and light brown, with tan sand lenses and limestone nodules (CL)			14	44	29		HP:0.50; #200:39.2%
654.7	20	50 (1) 50 (0.5)	CLAY, lean, hard (TCP), dark gray, shaley (CL)			15				HP:0.50
	25	50 (0.8) 50 (0.5)	SHALE, clay-shale, hard to very hard (TCP), fairly continuous to continuous recovery, very poor to good recovery, dark gray	0	87.1	17			138.3	HP:4.50
	30	50 (0.8) 50 (1)		0	111.1	16			136.8	UC:6.27 tsf 20-25: REC: 86.7% RQD: 68.3%
	35	50 (0.5) 50 (0.5)								25-30: REC: 76.7% RQD: 56.7%
	40	50 (0.5) 50 (1)								UC:8 tsf 30-35: REC: 93.3% RQD: 35%
633.7										35-40: REC: 76.7% RQD: 24.2%

Remarks: Groundwater was not noted during drilling. Boring depth 40 feet. As surveyed coordinates: E-2375977.658, N-7128766.271

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: eScreenLogic

Logger: Preston

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B4-5
Structure Bridge
Station
Offset

District Dallas
Date 08/22/19
Grnd. Elev. 675.62 ft
GW Elev. 670.62 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
674.6			CONCRETE, 12 inches							
672.6			FILL, GRAVEL, clayey, dark brown (GC)			18	55	28		HP:4.50; -#200:20.8%
670.6	5	15 (6) 17 (6)	CLAY, lean, hard (TAT), light brown and tan, with limestone fragments (CL)			12				HP:4.50
			CLAY, fat, stiff to very stiff (TCP), gray and tan, with frequent light gray and tan silty sand lenses (CH)			20	52	37		HP:3.50; -#200:72.2%
	10	37 (6) 16 (6)		0	7.6	21			123	HP:3.50; UC:0.55 tsf
663.6			CLAY, lean, very stiff (TCP), dark gray, shaley (CL)			22				HP:4.50
	15	28 (6) 31 (6)								
656.6	20	50 (2) 50 (2)	SHALE, clay-shale, hard to very hard (TCP), competent to fairly continuous recovery, poor to fair quality, dark gray, with occasional sandstone and limestone seams	0	15.7	20			130.4	HP:4.50; UC:1.13 tsf
	25	50 (1) 50 (0.8)		0	78.6					20-25: REC: 56.7% RQD: 30% UC:5.66 tsf
	30	50 (0.8) 50 (0.8)								25-30: REC: 55% RQD: 26.7%
	35	50 (0.5) 50 (1)								30-35: REC: 85.8% RQD: 53.3%
	40	50 (0.5) 50 (0.5)		0	107.8					UC:7.76 tsf 35-40: REC: 85% RQD: 67.5%
635.6										
	45									
	50									
	55									
	60									

Remarks: Groundwater was noted at a depth of 5 feet. Boring depth 40 feet. As surveyed coordinates: E-2375713.852, N-7128880.232



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B4-6
Structure Bridge
Station
Offset

District Dallas
Date 09/12/19
Grnd. Elev. 694.92 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
693.9			ASPHALT, 11 inches							
691.9			FILL, SILTY SAND with GRAVEL, brown and tan			13				-#200:17.6%
	5	4 (6) 5 (6)	FILL, FAT CLAY, soft (TCP), dark brown, tan, and gray, with trace sand and gravel (CH)			15	51	32		HP:3.00; -#200:78.1%
				0	17.2	18	52	35	130.6	HP:0.50; UC:1.24 tsf
	10	4 (6) 7 (6)				19				-#200:80.4% HP:3.50
681.9			CLAY, lean, soft to stiff (TCP), dark brown, with limestone nodules and occasional sand seams (CL)	0	36.3	17	48	28	130.2	HP:3.00; UC:2.61 tsf
	15	8 (6) 10 (6)								
	20	12 (6) 24 (6)				14				HP:4.00
671.9			CLAY, fat, stiff (TCP), light brown, tan, and gray, shaley, with light gray and tan sand lenses (CH)	0	27.8	23			129.7	HP:3.50; UC:2 tsf; SO4:1860 ppm
	25	12 (6) 24 (6)								
	30	11 (6) 18 (6)				23				HP:2.50; SO4:420 ppm
661.9			CLAY, lean, hard (TCP), dark gray, shaley (CL)			18				HP:4.50
	35	45 (6) 50 (6)								
	40	50 (3) 50 (3)				16				HP:4.50
654.9			SHALE, clay-shale, hard to very hard (TCP), incompetent to competent recovery, very poor to poor quality, dark gray							40-45: REC: 25.8% RQD: 15.8%
	45	50 (1) 50 (0.8)								45-50: REC: 40% RQD: 25%
	50	50 (1) 50 (1)		0	61.8				140.9	UC:4.45 tsf
	55	50 (1) 50 (0.8)								50-55: REC: 30% RQD: 8.3%
	60	50 (0.8) 50 (0.8)								55-60: REC: 40.4% RQD: 28.3%

Remarks: Groundwater was not noted during drilling. Boring depth 60 feet. As surveyed coordinates: E-2375978.095, N-7128923.302

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Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



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Version 3.0

DRILLING LOG

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B4-6
Structure Bridge
Station
Offset

District Dallas
Date 09/12/19
Grnd. Elev. 694.92 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
634.9										
65										
70										
75										
80										
85										
90										
95										
100										
105										
110										
115										
120										

Remarks: Groundwater was not noted during drilling. Boring depth 60 feet. As surveyed coordinates: E-2375978.095, N-7128923.302

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B5-1
Structure Bridge
Station
Offset

District Dallas
Date 06/27/19
Grnd. Elev. 697.60 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
694.6		9 (6) 10 (6)	CLAY, fat, soft (TCP), dark brown, with calcareous nodules (CH)			28	57	40		HP:2.50; #200:74.4% SO4:100 ppm HP:2.00 HP:2.25; UC:2.2 tsf #200:65.8%
		19 (6) 25 (6)	CLAY, lean, very stiff (TCP), tan, with limestone fragments (CL)	0	30.6	13	39	27	134.1	
691.6	5		LIMESTONE, severely weathered, very hard (TCP), tan, with clay seams							
		50 (0.5) 50 (0.5)								
684.6	15	50 (1) 50 (0.5)	LIMESTONE, hard to very hard (TCP), gray, with shale seams							
679.6	20	50 (3.5) 50 (2)	SHALE, clay-shale, soft to hard (TCP), dark gray							
672.6	25	50 (3.5) 50 (1)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375044.989, N-7131974.113

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rasheek

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B5-2
Structure Bridge
Station
Offset

District Dallas
Date 07/10/19
Grnd. Elev. 696.41 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties			Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	
695.4			FILL, GRAVEL, clayey, light brown (GC)			17	39	24	HP:2.25
693.4		17 (6) 16 (6)	CLAY, lean, stiff (TCP), brown and tan, with frequent limestone fragments (CL)						
	5	50 (3) 50 (0.5)	LIMESTONE, weathered, hard (TCP), competent recovery, very poor quality, tan, with clay seams						5-10: REC: 55% RQD: 0%
687.4	10	50 (0.5) 50 (0.3)	LIMESTONE, weathered, very hard (TCP), competent recovery, very poor quality, gray, with clay seams						10-15: REC: 46.7% RQD: 0%
681.4	15	50 (4.5) 50 (2)	CLAY, lean, hard (TCP), dark gray, shaley (CL)			22			15-20: REC: 20% RQD: 0%
676.4	20	50 (1.5) 50 (1.3)	SHALE, clay-shale, hard to very hard (TCP), incompetent to continuous recovery, very poor to fair quality, dark gray						20-25: REC: 28.3% RQD: 21.7%
	25	50 (1) 50 (1)		0	67.4	15		142.5	UC:4.85 tsf
	30	50 (1) 50 (0.5)							25-30: REC: 28.3% RQD: 0%
	35	50 (1) 50 (0.8)							30-35: REC: 38.3% RQD: 13.3%
	40	50 (1) 50 (0.5)		0	73.3	13		139.9	UC:5.28 tsf
	45	50 (0.5) 50 (0.3)							35-40: REC: 50% RQD: 28.3%
	50	50 (0.5) 50 (0.5)		0	144.2	13		139.7	UC:10.38 tsf
646.4									45-50: REC: 91.7% RQD: 58.3%

Remarks: Groundwater was not noted during drilling. Boring depth 50 feet. As surveyed coordinates: E-2375097.686, N-7131821.787

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Kraatz

Logger: Eddie Kraatz

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B5-3
Structure Bridge
Station
Offset

District Dallas
Date 07/25/19
Grnd. Elev. 694.74 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
693.7			FILL, LEAN CLAY, hard (TAT), brown (CL)			16	47	28		HP:4.50; #200:73.7%
			CLAY, lean, hard (TCP), tan, with frequent calcareous nodules and occasional limestone lenses (CL)	0	20.7	13			134.1	HP:4.50; UC:1.49 tsf
689.7	5	50 (0.5) 50 (0.5)	LIMESTONE, weathered, very hard (TCP), with clay seams			8	35	18		SPT-N:61; #200:66.8%
684.7	10	50 (1.3) 50 (1)	LIMESTONE, weathered, hard (TCP), with clay seams			6				
682.7			CLAY, lean, hard (TCP), dark gray, shaley (CL)			13				HP:4.50
	15	35 (6) 50 (1.5)		0	68.8	16	48	29	135.7	HP:4.50; UC:4.95 tsf
						7				HP:4.50
						10				
674.7	20	50 (2.5) 50 (2)	SHALE, clay-shale, hard to very hard (TCP), incompetent to continuous recovery, very poor to fair quality, dark gray, with occasional sandstone and limestone seams	0	53.2	16			137.4	UC:3.83 tsf
	25	50 (2.5) 50 (2)				13				20-25: REC: 90% RQD: 70%
	30	50 (1) 50 (1)								25-30: REC: 38.3% RQD: 20%
	35	50 (1) 50 (0.5)								30-35: REC: 96.7% RQD: 61.7%
	40	50 (0.8) 50 (0.8)		0	96.7				139.5	35-40: REC: 90% RQD: 35%
	45	50 (0.5) 50 (0.3)								40-45: REC: 96.7% RQD: 45%
644.7	50	50 (0.8) 50 (0.5)		0	163.3				141.5	UC:11.76 tsf

Remarks: Groundwater was not noted during drilling. Boring depth 50 feet. As surveyed coordinates: E-2375146.125, N-7131865.175

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Jennifer Larvin

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B5-4
Structure Bridge
Station
Offset

District Dallas
Date 07/24/19
Grnd. Elev. 694.39 ft
GW Elev. 679.39 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks			
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)				
692.4	/	50 (1.3) 50 (0.8)	CLAY, fat, hard (TAT), dark brown (CH)			20	55	38		HP:4.50; #200:80.9%			
689.9			5	CLAY, lean, hard (TAT), tan, with intermittent and discontinuous weathered limestone seams (CL)	0	13.6	13	49	30	132.6	UC:0.98 tsf HP:4.50; #200:46.1%		
684.4		50 (6) 15 (6)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams										
			10	CLAY, lean, hard (TCP), dark gray, shaley, with thin cemented sand lenses (CL)	14.1	14	18			131.6	HP:4.50 HP:4.50; UU:1.01 tsf		
			15					21			HP:4.00		
674.4		50 (5) 50 (3)	SHALE, clay-shale, soft to very hard (TCP), fairly continuous recovery, poor to good quality, dark gray, with occasional sandstone and limestone seams										
				20		0	92.9	16			134.6	20-25: REC: 75% RQD: 51.7% UC:6.69 tsf	
				25	50 (3) 50 (3)							25-30: REC: 86.7% RQD: 76.7%	
				30	50 (1.3) 50 (1)							30-35: REC: 93.3% RQD: 48.3% UC:10.53 tsf	
				35	50 (1.3) 50 (1)							35-40: REC: 86.7% RQD: 25%	
				40	50 (0.8) 50 (0.8)							40-45: REC: 95% RQD: 28.3%	
				45	50 (0.8) 50 (0.8)							45-50: REC: 83.3% RQD: 63.3% UC:9.7 tsf	
				50	50 (0.8) 50 (0.5)		0	134.7	13			124.7	50-55: REC: 95% RQD: 58.3%
				55	50 (0.8) 50 (0.8)				21				
639.4													

Remarks: Groundwater was noted at a depth of 15 feet. Boring depth 55 feet. As surveyed coordinates: E-2375185.506, N-7131746.715

Driller: Total Depth

Logger: Todd Wheatley

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B6-1
Structure Bridge
Station
Offset

District Dallas
Date 08/16/19
Grnd. Elev. 701.22 ft
GW Elev. 686.22 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties			Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	
698.2		50 (4.5) 50 (1.5)	FILL, LEAN CLAY, hard (TAT), dark brown and brown, with sand and limestone fragments (CL)			13			HP:4.50
		12 (6) 19 (6)	LIMESTONE, weathered, soft (TCP), tan, with clay seams			15	47	29	HP:4.50; #200:68.4% SO4:300 ppm
696.2	5					9			
		19 (6) 20 (6)	CLAY, lean, stiff to hard (TCP), light brown, gray, and tan, shaley, with gypsum lenses and light gray and tan sand lenses (CL)	0	23.5	23		128	HP:2.00; UC:1.69 tsf SO4:9600 ppm HP:3.50; #200:84.3%
	10					21	47	32	
	15	30 (6) 50 (2.8)				22			HP:3.50
683.2									
681.2	20	50 (2) 50 (1)	CLAY, lean, hard (TCP), dark gray, shaley (CL)			18			HP:4.50
	25	50 (1) 50 (1)	SHALE, clay-shale, hard to very hard (TCP), incompetent to competent recovery, very poor quality, dark gray						20-25: REC: 0% RQD: 0%
	30	50 (0.8) 50 (0.5)							25-30: REC: 68.3% RQD: 0%
	35	50 (1) 50 (0.8)		0	55.3	15		142.6	UC:3.98 tsf 30-35: REC: 66.7% RQD: 21.7%
661.2	40	50 (1) 50 (1)							35-40: REC: 36.7% RQD: 0%
	45								
	50								
	55								
	60								

Remarks: Groundwater was noted at a depth of 15 feet. Boring depth 40 feet. As surveyed coordinates: E-2374228.936, N-7133874.654

Driller: Kraatz

Logger: Garrett

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B6-2
Structure Bridge
Station
Offset

District Dallas
Date 08/19/19
Grnd. Elev. 704.08 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
703.1			CONCRETE, 8 inches							
701.1			CLAY, fat, hard (TAT), dark brown, with gravel (CH)	0	41.8	21	65	43	131.6	HP:3.50; UC:3.01 tsf
699.1	5	50 (3.5) 50 (0.5)	CLAY, lean, very stiff (TAT), brown and tan, with limestone seams (CL)	0	615.7				150.3	#200:85.3% SPT-N:23 UC:44.33 tsf
697.1			LIMESTONE, weathered, hard (TCP), incompetent recovery, very poor quality, tan, with clay seams							5-10: REC: 25% RQD: 20%
	10	9 (6) 12 (6)	CLAY, lean, stiff (TCP), gray and tan, shaley, with weathered limestone layers (CL)							10-15: REC: 33.3% RQD: 10%
691.1			CLAY, lean, hard (TCP), dark gray, shaley (CL)	0	48.8	22			139.5	UC:3.51 tsf
	15	43 (6) 50 (4)								15-20: REC: 68.3% RQD: 33.3%
684.1	20	50 (2) 50 (2.5)	SHALE, clay-shale, hard to very hard (TCP), incompetent to fairly continuous recovery, very poor to good quality, dark gray, with limestone lenses							20-25: REC: 36.7% RQD: 0%
	25	50 (0.8) 50 (0.5)								25-30: REC: 88.3% RQD: 78.3%
	30	50 (0.8) 50 (0.8)		0	92.9				139.2	UC:6.69 tsf
										30-35: REC: 76.7% RQD: 71.7%
	35	50 (1) 50 (0.8)								
	40	50 (1) 50 (0.3)		0	117.4				138	UC:8.45 tsf 35-40: REC: 78.3% RQD: 40%
664.1										
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 40 feet. As surveyed coordinates: E-2374466.001, N-7133853.986

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: eScreenLogic

Logger: Preston

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B6-5
Structure Bridge
Station
Offset

District Dallas
Date 08/21/19
Grnd. Elev. 696.73 ft
GW Elev. 681.73 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
690.7	5	7 (6) 13 (6)	CLAY, fat, soft to stiff (TCP), brown and tan, with calcareous nodules and tan sand lenses (CH)			17	59	42		HP:2.50; SO4:100 ppm #200:80.8% HP:2.50
							17			
682.7	10	12 (6) 14 (6)	CLAY, fat, stiff (TCP), light brown an gray, shaley, with light gray and tan sand lenses (CH)	0	16.3	19			127.4	HP:4.00; UC:1.17 tsf
							23			HP:3.50
671.7	15	25 (6) 42 (6)	CLAY, lean, very stiff to hard (TCP), dark gray, shaley (CL)	0	16	21	52	33	127	HP:4.00; UC:1.15 tsf #200:97.9%
671.7	20	50 (4) 50 (2)				21				SPT-N:90(10)
671.7	25	50 (1) 50 (1)	SHALE, clay-shale, hard to very hard (TCP), incompetent to continuous recovery, very poor to good quality, dark gray,with limestone and sandstone seams	0	56				142.8	UC:4.03 tsf
646.7	30	50 (0.5) 50 (0.5)								25-30: REC: 41.7% RQD: 23.3%
646.7	35	50 (0.5) 50 (0.3)								35-40: REC: 31.7% RQD: 0%
646.7	40	50 (0.3) 50 (0.3)								
646.7	45	50 (0.8) 50 (0.5)								
646.7	50	50 (1.3) 50 (0.8)		0	142.4				137.4	45-50: REC: 90% RQD: 78.3% UC:10.25 tsf

Remarks: Groundwater was noted at a depth of 15 feet. Boring depth 50 feet. As surveyed coordinates: E-2374090.737, N-7134256.759



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole B6-6
Structure Bridge
Station
Offset

District Dallas
Date 08/20/19
Grnd. Elev. 704.20 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties			Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	
703.2		50 (1) 50 (0.8)	CLAY, lean, hard (TAT), dark brown, with gravel (CL)			9			HP:4.50
						6			HP:4.50
		50 (1) 50 (1)	LIMESTONE, severely weathered, hard to very hard (TCP), tan, with brown Fat Clay (CH) seams			7	59	39	HP:4.50; #200:40.7%
	5			0	43.9	9		136.9	HP:4.50; UC:3.16 tsf
698.2			CLAY, lean, stiff (TCP), gray and tan, shaley, with limestone seams (CL)			24	38	23	HP:4.00; #200:94.6%
						21			HP:4.50
694.2	10	11 (6) 13 (6)	CLAY, lean, hard (TCP), dark gray, shaley (CL)						
				13.5	84.6	14		137.3	HP:4.50; UU:6.09 tsf
	15	48 (6) 36 (6)				17			HP:4.50
									15-20: REC: 11.7% RQD: 0%
684.2	20	50 (3) 50 (3)	SHALE, clay-shale, hard to very hard (TCP), incompetent to continuous recovery, very poor to fair quality, dark gray, with limestone seams	0	89.2			139.8	UC:6.42 tsf
	25	50 (1.3) 50 (2)							20-25: REC: 65.4% RQD: 62.1%
	30	50 (1.3) 50 (0.8)							25-30: REC: 61.7% RQD: 26.3%
	35	50 (1) 50 (0.5)							30-35: REC: 78.8% RQD: 50.8%
	40	50 (0.3) 50 (0.3)		0	68.1			139.9	35-40: REC: 91.7% RQD: 58.3% UC:4.9 tsf
	45	50 (0.5) 50 (0.3)							40-45: REC: 91.3% RQD: 44.6%
659.2									
	50								
	55								
	60								

Remarks: Groundwater was not noted during drilling. Boring depth 45 feet. As surveyed coordinates: E-2374361.353, N-7134238.48

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole FR1-2
Structure Bridge
Station
Offset

District Dallas
Date 07/12/19
Grnd. Elev. 687.16 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
686.7			ASPHALT, 5 inches of asphalt over 6 inches of gravel and fill base			11				HP:4.50
683.2			CLAY, fat, very stiff (TAT), dark brown, with occasional limestone nodules (CH)	0	20.6	22	58	37	125.4	HP:2.50; UC:1.48 tsf -#200:80.6%; SO4:1760 ppm HP:2.50; SO4:2500 ppm
681.2	5		CLAY, fat, very stiff (TAT), brown, with limestone fragments (CH)	0	7.6	18	38	16	132.5	HP:3.00; UC:0.55 tsf -#200:44.7% HP:3.00
678.2	10		CLAY, lean, very stiff (TAT), brown and tan, with calcareous nodules, ferrous deposits, and limestone nodules (CL)			13				HP:3.00
674.2			CLAY, fat, very stiff (TAT), light brown and gray, with calcareous nodules (CH)							
672.2	15		CLAY, fat, very stiff (TAT), brown and gray, shaley, with tan sand lenses (CH)			23				HP:3.00
	20									
	25									
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 15 feet. As surveyed coordinates: E-2375248.209, N-7130373.33

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole ML1-2
Structure Bridge
Station
Offset

District Dallas
Date 09/25/19
Grnd. Elev. 689.45 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
688.4			ASPHALT, 4 inches ASPHALT over 8 inches CONCRETE			15				-#200:29.8% HP:4.50; -#200:83.4% SO4:100 ppm HP:4.00; UC:2.04 tsf -#200:78.1%; SO4:1500 ppm HP:2.00 HP:3.00 HP:3.00
686.4			FILL, CLAYEY GRAVEL, dark brown, silty, with sand			28	61	40		
	5		FILL, FAT CLAY, stiff to hard (TAT), dark brown, with gravel	0	28.3	23	64	42	126.4	
						28				
680.4	10		CLAY, fat, very stiff (TAT), light brown and gray, with silty silty sand lenses (CH)			30				
674.4	15					26				
	20									
	25									
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 15 feet. As surveyed coordinates: E-2375378.886, N-7130536.068

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW10-1
Structure Bridge
Station
Offset

District Dallas
Date 08/22/19
Grnd. Elev. 690.76 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
687.8		50 (1.8) 50 (1)	CLAY, fat, hard (TAT), dark brown, with intermittent and discontinuous weathered limestone layers (CH)	0	44.2	21	52	32	119.8	HP:3.00; UC:3.18 tsf #200:80.5% HP:4.00; #200:33.9%
		50 (1) 50 (0.5)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams			21	71	46		
682.8	5		LIMESTONE, very hard (TCP), gray							5-10: REC: 65% RQD: 0%
679.8	10	50 (1.3) 50 (0.8)	CLAY, lean, dark gray, shaley (CL)							10-15: REC: 15% RQD: 0%
675.8	15	50 (3) 50 (1)	SHALE, clay-shale, soft to hard (TCP), dark gray	0	48.1				137.6	UC:3.46 tsf 15-20: REC: 66.7% RQD: 60%
	20	50 (3) 50 (2.5)								20-25: REC: 65% RQD: 48.3%
665.8	25	50 (1.5) 50 (1.5)		0	67.6	19			137.5	UC:4.87 tsf

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375301.559, N-7131268.85

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: eScreenLogic

Logger: Preston

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW10-2
Structure Bridge
Station
Offset

District Dallas
Date 06/28/19
Grnd. Elev. 694.67 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
691.7		8 (6) 8 (6)	FILL, FAT CLAY, soft (TCP), dark brown, with limestone fragments							
689.7	5	5 (6) 50 (5)	CLAY, fat, soft (TCP), dark brown, with limestone fragments and calcareous nodules (CH)							
			LIMESTONE, weathered, soft to very hard (TCP), tan, with clay seams							
	10	50 (1) 50 (0.3)								
681.7	15	20 (60) 24 (6)	SHALE, clay-shale, soft to hard (TCP), dark gray							
	20	50 (3) 50 (2.5)								
669.7	25	50 (3) 50 (2)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375063.911, N-7132175.011

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW10-3
Structure Bridge
Station
Offset

District Dallas
Date 08/19/19
Grnd. Elev. 692.41 ft
GW Elev. 683.41 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
689.4		18 (6) 21 (6)	FILL, FAT CLAY, hard (TAT), brown and tan, with calcareous nodules	0	36.8	21	51	35	128.5	HP:1.75; #200:69% HP:3.25; UC:2.65 tsf
686.9	5	50 (14) 50 (1.5)	CLAY, fat, stiff (TCP), dark brown, with limestone fragments and calcareous nodules (CH)			21	55	39		HP:2.50; #200:67.5% SO4:1220 ppm
683.4	10	50 (0.5) 50 (0.3)	LIMESTONE, weathered, soft (TCP), tan, with clay seams	0	821.4				153.1	5-10: REC: 68.3% RQD: 6.7% UC:59.14 tsf
679.4	15	50 (3) 50 (2.5)	LIMESTONE, very hard (TCP), competent recovery, very poor quality, gray, with shale seams							10-15: REC: 48.3% RQD: 0%
	20	50 (1.5) 50 (1.5)	SHALE, clay-shale, soft to hard (TCP), incompetent to competent recovery, very poor to poor quality, dark gray, with clay seams							15-20: REC: 28.3% RQD: 0%
667.4	25	50 (1.5) 50 (1.5)		0	83.6					20-25: REC: 43.3% RQD: 30% UC:6.02 tsf

Remarks: Groundwater was noted at a depth of 9 feet. Boring depth 25 feet. As surveyed coordinates: E-2375246.656, N-7131461.727

Driller: Kraatz

Logger: Eddie Kraatz

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW10-5
Structure Bridge
Station
Offset

District Dallas
Date 08/19/19
Grnd. Elev. 698.78 ft
GW Elev. 678.78 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
696.8		30 (6) 50 (3)	CLAY, lean, hard (TAT), brown, with calceous nodules (CL)			50.5	49	32		#200:58.6%
	5	50 (1) 50 (1)	LIMESTONE, weathered, soft to very hard (TCP), tan, with clay seams							
690.8		50 (0.3) 50 (0.3)	LIMESTONE, very hard (TCP), gray, with shale seams							
684.8		50 (5) 50 (4)	SHALE, clay-shale, soft to hard (TCP), dark gray, with occasional limestone seams							
	20	50 (2) 50 (2)								
673.8		50 (2) 50 (1.8)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was noted at a depth of 20 feet. Boring depth 25 feet. As surveyed coordinates: E-2375026.135, N-7132318.383

Driller: Kraatz

Logger: Garrett

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW10-6
Structure Bridge
Station
Offset

District Dallas
Date 07/24/19
Grnd. Elev. 696.05 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
694.0		50 (1.3) 50 (0.3)	FILL, FAT CLAY, very stiff (TAT), brown, with gravel and calcareous nodules (CH)	0	72.6	15	53	31	136.7	HP:4.50
693.0		50 (1) 50 (0.5)	CLAY, lean, hard (TAT), light brown and tan, with frequent limestone fragments and calcareous nodules (CL)							HP:4.50; UC:5.23 tsf #200:47.3%
689.0	5	50 (0.3) 50 (0.3)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams	0	2145.8					5-10: REC: 91.7% RQD: 41.7%
685.0	10	50 (5.5) 50 (4)	LIMESTONE, very hard (TCP), continuous recovery, poor quality, gray CLAY, lean, hard (TCP), dark gray, shaley, with shale seams (CL)							10-15: REC: 35% RQD: 0%
679.0	15	50 (5) 50 (1.5)	SHALE, clay-shale, soft (TCP), competent to fairly continuous, very poor to poor quality, dark gray, with trace sandstone seams and weathered layers	0	60.6	13			135.8	15-20: REC: 60% RQD: 23.3%
671.0	20	50 (3) 50 (3)								UC:4.36 tsf 20-25: REC: 78.3% RQD: 48.3%
	25									
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375254.5, N-7131625.793

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Jennifer Larvin

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW12-1
Structure Bridge
Station
Offset

District Dallas
Date 06/27/19
Grnd. Elev. 693.71 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
688.7	5	4 (6) 5 (6)	CLAY, fat, soft (TCP), dark brown, with limestone fragments (CH)	0	43.1	20	52	35	119.6	HP:4.50; UC:3.1 tsf #200:74.5% HP:4.00; UC:1.83 tsf SO4:100 ppm HP:2.50; #200:76.6%
		50 (0.3) 50 (0.3)		0	25.4	12			116.1	
680.7	15	50 (0.3) 50 (0.3)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams							
		32 (6) 44 (6)								
675.7	20	50 (0.8) 50 (3)	CLAY, lean, very stiff (TCP), dark gray, shaley (CL)							
		50 (3) 50 (2)								
668.7	25		SHALE, clay-shale, soft to hard (TCP), dark gray, with clay seams							
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375242.927, N-7131301.8

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW12-2
Structure Bridge
Station
Offset

District Dallas
Date 06/27/19
Grnd. Elev. 694.88 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
692.9		50 (25) 50 (0.3)	CLAY, fat, very stiff to hard (TAT), dark brown (CH)	0	33.2	23	55	36	119.3	HP:4.00; UC:2.39 tsf -#200:82.6% HP:4.25; UC:2 tsf
690.9	5	50 (0.3) 50 (0.3)	CLAY, lean, hard (TAT), brown and tan, with calcareous nodules and limestone seams (CL)	0	27.8	16			122.7	
		50 (1) 50 (0.5)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams							
681.9	15	19 (6) 35 (6)	CLAY, lean, very stiff (TCP), dark gray, shaley (CL)							
675.9	20	45 (6) 50 (5.3)	SHALE, clay-shale, soft to hard (TCP), dark gray, with clay seams							
669.9	25	50 (1) 50 (3)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375184.225, N-7131499.19

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW12-3
Structure Bridge
Station
Offset

District Dallas
Date 07/9/19
Grnd. Elev. 695.62 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
694.6			ASPHALT, 2 inches ASPHALT over clayey gravel with sand BASE	0	18.1	29	76	55	119.1	HP:2.25; UC:1.3 tsf #200:69.8%
692.6		14 (6) 18 (6)	CLAY, fat, very stiff (TAT), dark brown, with calcareous nodules (CH)							
690.6	5	50 (0.8) 50 (0.3)	CLAY, lean, stiff (TCP), tan, with calcareous nodules and limestone fragments (CL)							5-10: REC: 83.3% RQD: 0%
687.6		50 (0.5) 50 (0.3)	LIMESTONE, weathered, fractured, very hard (TCP), fairly continuous recovery, very poor quality, tan, with clay seams							
684.6	10		LIMESTONE, very hard (TCP), gray, with shale seams							10-15: REC: 23.3% RQD: 0%
680.6		50 (3) 50 (1)	CLAY, lean, very hard (TCP), dark gray, shaley (CL)							
	15		SHALE, clay-shale, hard to very hard (TCP), incompetent to fairly continuous recovery, very poor quality, dark gray, with occasional limestone seams							15-20: REC: 0% RQD: 0%
		50 (1.5) 50 (1.5)				28				
	20									20-25: REC: 38.3% RQD: 0%
		50 (1.5) 50 (1.5)				18				
	25									25-30: REC: 65% RQD: 23.3%
		50 (1) 50 (1)		0	55.8	15			140.7	
	30									30-35: REC: 78.3% RQD: 0%
		50 (0.8) 50 (0.5)		0	118.1	16			139.7	
	35									35-40: REC: 56.7% RQD: 20%
		50 (0.5) 50 (0.5)		0	158.9	16			140	
650.6	45	50 (1) 50 (1)								40-45: REC: 73.3% RQD: 36.7%
	50									UC:11.44 tsf
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 45 feet. As surveyed coordinates: E-2375134.684, N-7131699.452

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Kraatz (45)

Logger: Eddie Kraatz

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW12-6
Structure Bridge
Station
Offset

District Dallas
Date 06/27/19
Grnd. Elev. 699.04 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
697.0		19 (6) 50 (2)	FILL, LEAN CLAY, very stiff (TAT), brown, with limestone fragments (CL)			19	49	30		HP:3.25
695.0	5	50 (2) 50 (0.5)	CLAY, lean, hard (TAT), light brown and tan, with limestone fragments (CL)	0	29.9	12	43	25	125.3	HP:4.50; #200:51%; UC:2.15 tsf
			LIMESTONE, weathered, hard to very hard (TCP), tan, with clay seams							
	10	50 (0.5) 50 (0.3)								
686.0	15	40 (6) 50 (5)	CLAY, lean, hard (TCP), dark gray, shaley (CL)							
681.0	20	50 (3) 50 (2)	SHALE, clay-shale, soft to hard (TCP), dark gray							
674.0	25	50 (3) 50 (2.5)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374989.083, N-7132161.979

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW12-7
Structure Bridge
Station
Offset

District Dallas
Date 06/28/19
Grnd. Elev. 700.40 ft
GW Elev. 693.40 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
699.4			FILL, CLAYEY GRAVEL, reddish brown (GC)	0	25	17	48	31	120	HP:2.75; UC:1.8 tsf #200:74.6%; SO4:100 ppm
		5 (6) 11 (6)	CLAY, lean, soft (TCP), dark brown (CL)							
695.4	5	9 (6) 20 (6)	CLAY, lean, light brown and tan, with limestone fragments (CL)			20				HP:2.00
693.4			LIMESTONE, weathered, fractured, soft (TCP), tan, with clay seams							
	10	50 (4) 50 (0.5)								
688.4			CLAY, very stiff to very hard (TCP), dark gray, shaley (CH)			21				HP:4.00
	15	18 (6) 37 (6)								
	20	50 (3) 50 (3.5)				16	50	33		HP:4.50
	25	50 (4) 50 (3.5)				26				HP:0.50
675.4										
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was noted at a depth of 7 feet. Boring depth 25 feet. As surveyed coordinates: E-2374940.492, N-7132336.981

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW14-1
Structure Bridge
Station
Offset

District Dallas
Date 07/12/19
Grnd. Elev. 694.35 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
693.3			ASPHALT, 5 inches ASPHALT over gravel BASE	0	24	29	60	38	122	HP:4.50; UC:1.73 tsf #200:93.8%; SO4:100 ppm HP:4.00; SO4:100 ppm
692.3		25 (6) 18 (6)	CLAY, fat, hard (TAT), dark brown, with limestone nodules (CH)			14				
689.8	5	35 (6) 34 (6)	CLAY, lean, very stiff (TCP), light brown and tan, with limestone fragments (CL)							
688.3			LIMESTONE, weathered, tan	0	15.7	23	58	42	127.4	HP:2.50; UC:1.13 tsf #200:98.5% HP:2.50; UU:2.63 tsf
	10	6 (6) 9 (6)	CLAY, fat, soft (TCP), light brown and gray, shaley, with silty sand seams and planar ferrous lenses (CH)	10.2	36.5	26	55	38	129.4	
681.3		40 (6) 40 (6)	CLAY, lean, very stiff to hard (TCP), dark gray, shaley (CL)							
	20	44 (6) 48 (6)								
671.3			SHALE, clay-shale, soft (TCP), dark gray							
669.3	25	50 (3) 50 (2)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374993.18, N-7131242.994

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW14-2
Structure Bridge
Station
Offset

District Dallas
Date 07/11/19
Grnd. Elev. 695.66 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
694.7			ASPHALT, 5 inches asphalt over gravel base	0	28.1	27	65	45	116.5	HP:3.50; UC:2.02 tsf SO4:240 ppm HP:3.50; UC:1.14 tsf #200:73.4%
692.7		19 (6) 50 (2)	CLAY, fat, very stiff (TCP), dark brown, with limestone nodules (CH)	0	15.8	23	62	43	121.3	
691.7	5	50 (0.3) 50 (0.3)	CLAY, lean, brown and tan, with limestone fragments (CL)							
687.7	10	8 (6) 12 (6)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams CLAY, fat, soft to stiff (TCP), brown and gray, shaley (CH)							
682.2	15	36 (6) 27 (6)	CLAY, lean, very stiff (TCP), dark gray, shaley (CL)							
675.7	20	50 (2.5) 50 (3.5)	SHALE, clay-shale, soft to hard (TCP), dark gray							
670.7	25	50 (2.5) 50 (2.5)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374935.566, N-7131437.177

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW14-3
Structure Bridge
Station
Offset

District Dallas
Date 07/11/19
Grnd. Elev. 696.74 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
695.7		50 (2.5) 5 (0.5)	ASPHALT, 5 inches ASPHALT over gravel BASE	0	27.5	28	64	45	119.6	HP:4.00; UC:1.98 tsf -#200:89.3% HP:2.50; UC:1.28 tsf -#200:73.8%; SO4:100 ppm
692.7	5	50 (0.3) 50 (0.3)	CLAY, fat, very stiff (TAT), dark brown (CH)	0	17.8	24	61	41	122.3	
688.2	10	50 (0.3) 50 (0.3)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams							
683.7	15	50 (5) 50 (5)	LIMESTONE, very hard (TCP), gray							
676.7	20	50 (4) 50 (2.5)	CLAY, lean, hard (TAT), dark gray, shaley (CL)							
671.7	25	50 (3) 50 (2.5)	SHALE, clay-shale, soft (TCP), dark gray							
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374884.018, N-7131609.303

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW14-6
Structure Bridge
Station
Offset

District Dallas
Date 07/10/19
Grnd. Elev. 697.72 ft
GW Elev. 687.72 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
694.7		21 (6) 27 (6)	CLAY, fat, stiff to very stiff (TAT), dark brown (CH)			15				HP:2.25
691.7	5	24 (6) 11 (6)	CLAY, lean, stiff to very stiff (TCP), light brown and tan, with limestone fragments (CL)	0	17.6	32	68	48	112.4	HP:2.00; UC:1.27 tsf
684.7	10	6 (6) 7 (6)	CLAY, fat, hard (TAT), tan, with limestone fragments (CH)			20	56	33		HP:2.25; -#200:85.3% SO4:100 ppm HP:2.00
679.7	15	5 (6) 8 (6)	CLAY, lean, soft (TCP), brown and gray, with tan silty sand lenses (CL)			21	45	26		HP:2.50; -#200:88.7%
674.7	20	17 (6) 30 (6)	CLAY, lean, very stiff (TCP), dark gray, shaley (CL)			20				HP:4.50
672.7	25	50 (4) 50 (2.5)	SHALE, clay-shale, soft (TCP), dark gray							

Remarks: Groundwater was noted at a depth of 10 feet. Boring depth 25 feet. As surveyed coordinates: E-2374729.501, N-7132138.636

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW14-7
Structure Bridge
Station
Offset

District Dallas
Date 07/10/19
Grnd. Elev. 697.27 ft
GW Elev. 679.27 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
696.3			ASPHALT, 5 inches of ASPHALT over gravel BASE							
694.3		5 (6) 6 (6)	FILL, FAT CLAY, soft (TCP), dark brown, with trace gravel (CH)			14	54	33		HP:2.50; #200:46.9%
	5	3 (6) 4 (6)	CLAY, fat, very soft (TCP), dark brown, with trace gravel (CL)			23				HP:2.50
691.3			CLAY, fat, stiff (TAT), brown (CH)	0	22.1	24	63	44	120.5	HP:1.50; UC:1.59 tsf
689.3		5 (6) 6 (6)	CLAY, fat, soft (TCP), light brown, gray, and tan, shaley (CH)			25	67	44		HP:1.75; #200:75.5%
	10									
	15	8 (6) 6 (6)		15.2	23.6	22			124.4	HP:3.00; UU:1.7 tsf
679.3		10 (6) 13 (6)	CLAY, lean, stiff (TCP), brown and gray, shaley, with tan silty sand lenses (CL)			20				-w/ sand seam at 18.5 feet HP:4.00
673.3		28 (6) 50 (2.5)	SHALE, clay-shale, soft (TCP), dark gray			21				HP:1.75
672.3										
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was noted at a depth of 18 feet. Boring depth 25 feet. As surveyed coordinates: E-2374670.325, N-7132316.387

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW15-1
Structure Bridge
Station
Offset

District Dallas
Date 06/28/19
Grnd. Elev. 700.98 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks	
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)		
698.0		6 (6) 7 (6)	FILL, FAT CLAY, very stiff (TAT), reddish brown and dark brown, with calcareous nodules and gravel (CH)	0	14.3	9	16	50	30	131.6	HP:3.25
696.0	5	50 (0.5) 50 (0.3)	CLAY, LEAN CLAY, silty, soft (TCP), dark brown, with tan limestone fragments (CL)			16					HP:4.50; UC:1.03 tsf -#200:57.2%; SO4:200 ppm
		50 (0.5) 50 (0.3)	LIMESTONE, weathered, very hard (TCP), tan, with clay seams								HP:4.50; -#200:53.8%
688.0	10	50 (0.5) 50 (0.3)					17	51	31		HP:4.50
	15	25 (6) 24 (6)	CLAY, fat, very stiff (TCP), dark gray, shaley, with gray sand lenses (CH)								
683.0	20	50 (3.5) 50 (2.5)	SHALE, clay-shale, soft to hard (TCP), dark gray	20.2	77.5	16				129.6	HP:4.50; UU:5.58 tsf
676.0	25	50 (3.5) 50 (2.5)									
	30										
	35										
	40										
	45										
	50										
	55										
	60										

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374755.907, N-7132975.479

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW15-2
Structure Bridge
Station
Offset

District Dallas
Date 06/28/19
Grnd. Elev. 702.26 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
700.3		5 (6) 4 (6)	FILL, LEAN CLAY, hard (TAT), dark brown and brown, with gravel (CH)			13				HP:4.50
698.3	5	17 (6) 27 (6)	CLAY, lean, soft (TCP), brown, with limestone nodules (CL)			18	38	20		HP:2.50; #200:64%
693.3	10	50 (2) 50 (1)	CLAY, lean, very stiff (TCP), tan, with limestone fragments and calcareous deposits (CL)			13	47	30		HP:4.50; #200:47.5% SO4:100 ppm
689.3	15	50 (2) 50 (1)	LIMESTONE, weathered, hard (TCP), tan, with clay seams							
684.3	20	50 (3) 50 (2)	LIMESTONE, hard (TCP), light gray, with shale seams							
677.3	25	50 (2) 50 (1)	SHALE, clay-shale, soft to hard (TCP), dark gray							
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374704.437, N-7133155.689

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW15-3
Structure Bridge
Station
Offset

District Dallas
Date 07/1/19
Grnd. Elev. 703.82 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
701.8		12 (6) 8 (6)	FILL, FAT CLAY, hard (TAT), dark brown and brown, with gravel (CH)	0	28.2	13	58	39	124.8	HP:4.50; UC:2.03 tsf -#200:65.5% HP:4.50
699.8	5	27 (6) 16 (6)	CLAY, lean, soft to stiff (TCP), brown, with limestone nodules (CL)			10				
			CLAY, lean, very stiff (TCP), brown and tan, with limestone fragments (CL)	0	22.1	13	30	17	133.8	HP:3.00; UC:1.59 tsf HP:4.50
						14				
693.8	10	50 (2.5) 50 (0.3)	LIMESTONE, weathered, hard to very hard (TCP), tan to gray	10.2	47.1	12	41	26	133.7	HP:4.50; UU:3.39 tsf -#200:63.4%
	15	50 (0.5) 50 (0.3)								
685.8	20	50 (3.5) 50 (2)	SHALE, clay-shale, soft (TCP), dark gray							
678.8	25	50 (3) 50 (2)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374647.075, N-7133344.025

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW15-4
Structure Bridge
Station
Offset

District Dallas
Date 07/1/19
Grnd. Elev. 704.24 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
702.2	/	7 (6) 10 (6)	CLAY, fat, very stiff (TAT), brown, with limestone nodules (CH)	0	37.1	16	52	33	122.4	HP:3.50; UC:2.67 tsf
701.2			CLAY, lean, very stiff to hard (TAT), brown, with limestone nodules (CL)	0	30.3	15	46	31	130.5	HP:4.00; UC:2.18 tsf
699.2	5	50 (5) 50 (1)	CLAY, lean, soft (TCP), tan, with limestone fragments (CL)			14	33	21		HP:4.50; #200:57.5% #200:60.5%
			LIMESTONE, weathered, very hard (TCP), tan to gray, with clay seams							
	10	50 (1.3) 50 (1)								
689.2	15	16 (6) 22 (6)	CLAY, lean, stiff to very stiff (TCP), dark gray, shaley (CL)							
	20	27 (6) 32 (6)								
681.2			SHALE, clay-shale, very hard (TCP), dark gray							
679.2	25	50 (1) 50 (0.8)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374589.196, N-7133537.788

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW15-5
Structure Bridge
Station
Offset

District Dallas
Date 07/2/19
Grnd. Elev. 704.96 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties			Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	
703.0		8 (6) 8 (6)	FILL, FAT CLAY, hard (TAT), dark brown, with gravel and calcareous nodules (CH)			19	53	32	HP:4.50; #200:46.3%
701.0		15 (6) 20 (6)	CLAY, fat, soft (TCP), brown, with limestone nodules (CH)			20	66	45	HP:3.50; #200:69.7%
	5		CLAY, lean, stiff (TCP), tan, with limestone fragments (CL)			17	35	19	HP:4.50; #200:41.4%
695.0	10	50 (0.5) 50 (0.3)	LIMESTONE, weathered, very hard (TCP), tan to gray, with clay seams			11			HP:2.50
	15	50 (0.3) 50 (0.3)							
687.0	20	49 (6) 50 (4)	CLAY, lean, hard (TCP), dark gray, shaley (CL)						
682.0	25	50 (2) 50 (1.5)	SHALE, clay-shale, hard to very hard (TCP), dark gray						
680.0									
	30								
	35								
	40								
	45								
	50								
	55								
	60								

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374562.138, N-7133710.409

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW16-1
Structure Bridge
Station
Offset

District Dallas
Date 07/10/19
Grnd. Elev. 697.44 ft
GW Elev. 692.44 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
693.4	5	13 (6) 9 (6)	CLAY, LEAN CLAY, stiff (TCP), dark brown (CL)				48	27		HP:4.50
							22			HP:1.50
		14 (6) 50 (1)	CLAY, fat, soft to hard (TCP), light brown and tan, with hard intermittent and discontinuous weathered limestone layers from 5 to 10 feet (CH)				17	51	24	
683.4	15	7 (6) 7 (6)	CLAY, fat, hard (TCP), dark gray, shaley (CH)							-w/ limestone seams
		50 (6) 50 (2.5)						22		
677.4	20	50 (5) 50 (3.5)	SHALE, clay-shale, soft to hard (TCP), dark gray							
672.4	25	50 (2) 50 (2)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was noted at a depth of 5 feet. Boring depth 25 feet. As surveyed coordinates: E-2374580.204, N-7132633.084

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW16-2
Structure Bridge
Station
Offset

District Dallas
Date 07/9/19
Grnd. Elev. 698.29 ft
GW Elev. 693.29 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
697.3			FILL, LEAN CLAY, gravelly, stiff (TAT), reddish brown (CL)			5	44	29		HP:4.50; #200:65.6% HP:3.50; UC:2.13 tsf #200:81.6%; SO4:100 ppm HP:4.50
		12 (6) 11 (6)	CLAY, FAT CLAY, stiff (TCP), dark brown (CH) (CH)	0	29.6	29	59	42	122.7	
693.8	5	50 (3) 50 (2)	CLAY, lean, soft to very hard (TCP), tan, with hard intermittent and discontinuous weathered limestone layers (CL)			10				
	10	6 (6) 7 (6)								
685.3			CLAY, fat, very stiff (TCP), dark gray, shaley (CH)	0	78.1	22			135.8	HP:4.50; UC:5.62 tsf
	15	25 (6) 47 (6)								
	20	35 (6) 44 (6)								
675.3			SHALE, clay-shale, soft to hard (TCP), dark gray							
673.3	25	50 (3) 50 (2)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was noted at a depth of 5 feet. Boring depth 25 feet. As surveyed coordinates: E-2374528.43, N-7132808.631

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW16-3
Structure Bridge
Station
Offset

District Dallas
Date 07/9/19
Grnd. Elev. 699.87 ft
GW Elev. 678.87 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
698.9			ASPHALT, 2.5 inches ASPHALT over gravel BASE	0	16	30	66	46	115.5	HP:1.50; UC:1.15 tsf -#200:70.8% HP:2.50; UC:1.78 tsf -#200:76.7%
696.9		45 (6) 50 (5)	CLAY, fat, stiff to very stiff (TAT), dark brown, with limestone fragments (CH)	0	24.7	19	67	45	123.4	
694.9	5	50 (1.8) 50 (0.5)	CLAY, lean, hard (TAT), brown and tan, with limestone fragments (CL)							
	10	50 (0.5) 50 (0.3)	LIMESTONE, weathered, hard to very hard (TCP), tan, with clay seams							
686.9	15	50 (6) 50 (4.3)	CLAY, fat, hard (CP), dark gray, shaley (CH)							
679.9	20	50 (2) 50 (3)	SHALE, clay-shale, soft to hard (TCP), dark gray, with occasional limestone seams							
674.9	25	50 (4.5) 50 (1.5)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was noted at a depth of 21 feet. Boring depth 25 feet. As surveyed coordinates: E-2374457.641, N-7133008.22

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW16-4
Structure Bridge
Station
Offset

District Dallas
Date 07/9/19
Grnd. Elev. 700.63 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
700.1			ASPHALT, 2 inches ASPHALT over gravel base			15	33	19		HP:4.50; SO4:100 ppm #200:38.1% HP:4.50
697.6		50 (6) 50 (6)	CLAY, lean, hard (TCP), tan, with frequent limestone fragments (CL)			7	31	16		
	5	50 (1.5) 50 (1)	LIMESTONE, weathered, hard (TCP), tan, with clay seams			11				
690.6	10	50 (0.3) 50 (0.3)	LIMESTONE, weathered, hard (TCP), gray, with shale seams							
686.6	15	50 (4) 50 (4)	CLAY, fat, hard to very hard (TCP), dark gray, shaley (CH)							
680.6	20	50 (4) 50 (3.5)	SHALE, clay-shale, soft to hard (TCP), dark gray							
675.6	25	50 (3) 50 (2.5)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374391.752, N-7133185.454

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW16-5
Structure Bridge
Station
Offset

District Dallas
Date 07/9/19
Grnd. Elev. 699.80 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
698.8			ASPHALT, 1.5 inches ASPHALT over gravel base							
697.8		50 (1.5) 50 (1.5)	CLAY, lean, brown and tan, with limestone fragments (CL)			9				
	5	50 (1) 50 (1)	LIMESTONE, weathered, soft to very hard (TCP), tan, with clay seams							
690.8	10	15 (6) 23 (6)	CLAY, lean, stiff (TCP), dark gray, shaley (CL)							
		50 (5) 50 (2)				18				
684.8	15		SHALE, clay-shale, soft to hard (TCP), dark gray, with occasional limestone seams							
	20	50 (1.5) 50 (1)								
		50 (4) 50 (4.5)								20-25: REC: 15% RQD: 0%
674.8	25									
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374322.503, N-7133354.425

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW16-6
Structure Bridge
Station
Offset

District Dallas
Date 08/21/19
Grnd. Elev. 699.92 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
698.9			CONCRETE, 7.5 inches CONCRETE							
696.9		22 (6) 24 (6)	CLAY, fat, very stiff (TAT), dark brown, with trace gravel (CH)	0	33.5	26	62	41	119.6	HP:3.75; UC:2.41 tsf
694.9	5	10 (6) 12 (6)	CLAY, lean, very stiff (TCP), brown, with tan limestone fragments (CL)							
691.9			CLAY, lean, stiff (TCP), brown, tan, and gray, with limestone fragments (CL)			19	36	24		HP:4.50; -#200:35.6%
			CLAY, lean, soft to stiff (TCP), light brown and gray, shaley, with tan sand lenses (CL)			26				HP:3.00
686.9	10	7 (6) 13 (6)		0	68.3	19	47	23	129.8	HP:4.50; UC:4.92 tsf -#200:97.1%
			CLAY, lean, hard (TCP), dark gray, shaley (CL)			19				HP:4.50
										15-20: REC: 16.7% RQD: 11.7%
679.9	20	50 (6) 50 (5.5)								
			SHALE, clay-shale, soft to hard (TCP), incompetent recovery, very poor quality, dark gray							
674.9	25	50 (1.8) 50 (2)								

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374289.15, N-7133535.32

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW16-7
Structure Bridge
Station
Offset

District Dallas
Date 08/21/19
Grnd. Elev. 700.98 ft
GW Elev. 689.98 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
698.0	5	9 (6) 10 (6)	CLAY, lean, hard (TAT), dark brown, with limestone fragments and calcareous nodules (CH) (CL)	0	97.9	11	48	35	119.6	HP:4.50 HP:4.50; #200:67%; UC:7.05 tsf
		14 (6) 5 (6)	CLAY, lean, soft (TCP), brown, with limestone nodules (CL)			16				HP:4.50
695.0			CLAY, lean, firm to stiff (TAT), tan, with intermittent and discontinuous weathered limestone layers (CL)			13	28	15		HP:1.00; #200:46.4%
693.0			CLAY, lean, very soft to soft (TCP), light brown and gray, shaley, with tan silty sand seams (CL)			24				HP:3.00
685.0	10	6 (6) 7 (6)				25				HP:2.50
		3 (6) 5 (6)			20					HP:1.00
			CLAY, lean, hard (TAT), dark gray, shaley (CL)	18	33.1	21			125.1	HP:4.50; UU:2.38 tsf
681.0		50 (3) 50 (3.5)			24				HP:2.00	
676.0	20	50 (1.3) 50 (0.8)	SHALE, clay-shale, soft to very hard (TCP), incompetent recovery, very poor quality, dark gray, with clay seams	0	68.8	20				UC:4.95 tsf 20-25: REC: 33.8% RQD: 21.3%

Remarks: Groundwater was noted at a depth of 11 feet. Boring depth 25 feet. As surveyed coordinates: E-2374247.968, N-7133749.476

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW18-3
Structure Bridge
Station
Offset

District Dallas
Date 08/21/19
Grnd. Elev. 696.96 ft
GW Elev. 688.96 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
696.0			CONCRETE, 10 inches concrete with gravel base			24	44	29		HP:4.50; -#200:66.9%
		5 (6) 6 (6)	CLAY, lean, soft (TCP), dark brown, with gravel (CL)							
		5 (6) 7 (6)								
691.0			CLAY, fat, very stiff (TAT), brown and tan, with limestone fragments (CH)			23	57	42		HP:3.00; -#200:58.4%
689.0			CLAY, lean, firm to stiff (TAT), tan, with intermittent and discontinuous weathered limestone layers (CL)			22	44	29		
		8 (6) 8 (6)								HP:0.50; -#200:40.5%
			CLAY, fat, very stiff (TCP), light brown and gray, shaley, with tan silty sand lenses (CH)	15	32.9	24		128.9		
685.0										HP:2.00; UU:2.37 tsf
		27 (6) 39 (6)								
679.0			CLAY, fat, very hard (TCP), dark gray, shaley (CH)	20.3	20.6	18		136.1		HP:4.00; UU:1.48 tsf
		50 (4) 50 (2.5)								
674.0			SHALE, clay-shale, very hard (TCP), dark gray			26				HP:0.50
672.0		50 (1.5) 50 (0.8)								

Remarks: Groundwater was noted at a depth of 8 feet. Boring depth 25 feet. As surveyed coordinates: E-2374003.858, N-7134508.238



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW21-2
Structure Bridge
Station
Offset

District Dallas
Date 07/1/19
Grnd. Elev. 708.03 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
706.0		15 (6) 12 (6)	FILL, LEAN CLAY, stiff (TCP), brown and reddish brown, with gravel (CL)	0	43.6	27			118.3	HP:4.50; UC:3.14 tsf
704.0		50 (0.8) 50 (0.8)	CLAY, lean, stiff (TCP), brown, with limestone fragments (CL)			12	43	25		HP:4.50; #200:54%
	5		LIMESTONE, severely weathered, very hard (TCP), tan, with brown clay seams			11	45	29		HP:4.50; #200:39.8%
699.0		11 (6) 15 (6)	CLAY, fat, stiff (TCP), light brown and gray (CH)							
695.0		48 (6) 50 (4)	CLAY, fat, hard (TCP), dark gray, shaley (CH)			19	50	33		HP:4.50
690.0		50 (1) 50 (2)	SHALE, clay-shale, soft to hard (TCP), dark gray							
683.0		50 (3) 50 (2)								

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374301.246, N-7134421.895

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW21-3
Structure Bridge
Station
Offset

District Dallas
Date 07/1/19
Grnd. Elev. 707.24 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
704.2		48 (6) 21 (6)	FILL, FAT CLAY, very stiff (TCP), brown and reddish brown (CH)	0	34.4	30	74	51	123.4	HP:2.25; UC:2.48 tsf -#200:73.9% HP:3.00
703.2	5	50 (1) 50 (0.5)	CLAY, lean, very stiff (TCP), brown, with tan limestone fragments (CL)			38	83	59		
			LIMESTONE, severely weathered, very hard (TCP), tan, with frequent clay seams							
698.2	10	12 (6) 13 (6)	CLAY, fat, stiff (TCP), light brown and gray (CH)							
694.2	15	49 (6) 50 (3)	CLAY, fat, hard (TCP), dark gray, shaley (CH)							
689.2	20	50 (3) 50 (2.5)	SHALE, clay-shale, soft to hard (TCP), dark gray							
682.2	25	50 (2.5) 50 (2)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2374259.315, N-7134579.036

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Rishik Puppala

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW8-2
Structure Bridge
Station
Offset

District Dallas
Date 10/10/19
Grnd. Elev. 678.13 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
677.1			CONCRETE, 8 inches CONCRETE over 4 inches BASE			20				HP:4.50
676.1		9 (6) 12 (6)	FILL, FAT CLAY, hard (TAT), brown and tan, with angular gravel and sand (CH)			12	33	21		HP:4.50; #200:41.7%
673.1	5	7 (6) 4 (6)	CLAY, lean, stiff (TCP), tan, with limestone seams and fragments (CL)			26	42	24		HP:3.00; #200:95.6%
670.1			CLAY, lean, soft (TCP), light brown and gray, with sand seams (CL)	0	20.8	28	56	43	127.3	HP:2.00; UC:1.5 tsf #200:98.6%
666.1	10	5 (6) 7 (6)	CLAY, fat, soft (TCP), brown and gray, with sand lenses (CH)							
			CLAY, lean, very stiff (TCP), dark gray, shaley (CL)	0	53.6	21			132.2	HP:4.50; UC:3.86 tsf
	15	20 (6) 20 (6)								
						18				HP:4.50
658.1	20	50 (4.5) 50 (4)	SHALE, clay-shale, soft to hard (TCP), competent recovery, poor to fair quality, dark gray, with clay seams							20-25: REC: 65.8% RQD: 50%
				0	68.5				136.2	UC:4.93 tsf
653.1	25	50 (2) 5 (1.3)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375637.653, N-7129042.772

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW8-3
Structure Bridge
Station
Offset

District Dallas
Date 07/15/19
Grnd. Elev. 677.73 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
676.7		50 (2) 36 (6)	ASPHALT, 2 inches asphalt over clayey gravel with sand BASE			13	43	29		HP:4.50; -#200:82.2%
						13				
673.7	5	6 (6) 7 (6)	CLAY, lean, hard (TCP), tan and brown, with intermittent and discontinuous weathered limestone layers (CL)			21	61	37		HP:4.50; -#200:85.4%
			CLAY, fat, soft (TCP), light brown and gray, with silty sand lenses (CH)	0	24.4	24			127.7	HP:4.50; UC:1.76 tsf
							26	51	36	
665.7		12 (6) 50 (6)	CLAY, fat, very stiff (TCP), brown and gray, shaley (CH)	0	22.2	22			127.1	HP:4.50; UC:1.6 tsf
660.2	20	50 (5) 50 (4)	SHALE, clay-shale, soft (TCP), dark gray							
652.7	25	50 (3) 50 (2)								

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375582.48, N-7129232.416

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Todd Wheatley

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW8-4
Structure Bridge
Station
Offset

District Dallas
Date 07/15/19
Grnd. Elev. 677.43 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
675.4		5 (6) 9 (6)	FILL, SANDY LEAN CLAY, brown, with gravel (CL)			4	28	15		HP:4.50
			CLAY, fat, soft (TCP), dark brown (CH)			7				
673.4	5	8 (6) 7 (6)	CLAY, lean, soft (TCP), gray and tan, with tan silty sand seams (CL)	0	16.5	19	45	28	129.1	HP:3.50; UC:1.19 tsf #200:81.3% HP:4.50
						18				
667.4	10	6 (6) 8 (6)	CLAY, fat, soft to stiff (TCP), brown and gray, shaley (CH)	0	15.8	22	59	39	125.1	HP:4.50; UC:1.14 tsf
	15	9 (6) 14 (6)								
	20	6 (6) 9 (6)		20	35.3	21			127.8	HP:4.50; UU:2.54 tsf
654.4			SHALE, clay-shale, hard (TCP), dark gray							
652.4	25	50 (2) 50 (2)								
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375532.889, N-7129400.701

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Todd Wheatley

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW8-5
Structure Bridge
Station
Offset

District Dallas
Date 07/15/19
Grnd. Elev. 676.78 ft
GW Elev. 670.78 ft

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
675.8			ASPHALT, 2 inches asphalt over gravel and clay BASE	0	33.6	22			126.5	HP:4.50; UC:2.42 tsf HP:2.50; #200:83.9%
		7 (6) 4 (6)	CLAY, fat, soft (TCP), dark brown, with gravel (CH)			24	66	45		
		4 (6) 5 (6)								
670.8			CLAY, fat, soft (TCP), gray and tan, with limestone fragments (CH)			27				HP:1.00
		4 (6) 6 (6)		0	16.7	26	63	45	131.7	HP:2.00; UC:1.2 tsf #200:96.7%
664.8			CLAY, fat, stiff (TCP), brown and gray, shaley, with tan silty sand lenses (CH)			21				HP:4.50
		9 (6) 14 (6)								
658.8			SHALE, clay-shale, soft to hard (TCP), dark gray							
		50 (3) 50 (2.5)								
651.8										
		50 (3) 50 (2)								

Remarks: Groundwater was noted at a depth of 6 feet. Boring depth 25 feet. As surveyed coordinates: E-2375473.114, N-7129610.008

Driller: Total Depth

Logger: Todd Wheatley

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW8-6
Structure Bridge
Station
Offset

District Dallas
Date 07/15/19
Grnd. Elev. 677.47 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
676.5			FILL, CLAYEY GRAVEL, reddish brown (GC)			24	57	38		HP:3.00; #200:85.6% SO4:1840 ppm HP:3.00
		4 (6) 5 (6)	CLAY, soft (TCP), gray and brown, with calcareous nodules (CH)						27	
673.0	5	5 (6) 5 (6)	CLAY, lean, soft (TCP), light brown, gray, and tan, with calcareous nodules and silty sand lenses (CL)	0	14.2	19	48	30	132.1	HP:4.00; UC:1.02 tsf #200:89.6% HP:4.50
		4 (6) 7 (6)							17	
665.5			CLAY, fat, soft (TCP), brown and gray, shaley (CH)	0	19.4	25			126.6	HP:4.50; UC:1.4 tsf
		8 (6) 11 (6)								
660.5			SHALE, clay-shale, soft (TCP), dark gray							
		50 (5) 50 (5)								
652.5		50 (3) 50 (3)								

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375423.153, N-7129779.178

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Todd Wheatley

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW8-7
Structure Bridge
Station
Offset

District Dallas
Date 07/12/19
Grnd. Elev. 680.49 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
680.0			ASPHALT, 5 inches ASPHALT			19	65	49		HP:3.00; #200:82.1% SO4:100 ppm HP:3.00; UC:1.31 tsf SO4:100 ppm
		4 (6) 4 (6)	CLAY, fat, very soft to soft (TCP), dark brown (CH)	0	18.2	24	63	46	124.6	
		4 (6) 5 (6)								
674.5			CLAY, fat, stiff (TAT), brown and tan, with calcareous nodules and limestone fragments, lignite nodules, and calcareous nodules (CH)			28	57	40		HP:1.50; #200:81.6% HP:4.50; UC:2.1 tsf #200:35.7%
672.5		11 (6) 12 (6)		0	29.2	15			142	
667.5			CLAY, lean, stiff (TCP), light brown, gray, and tan, with limestone fragments, lignite nodules, and calcareous nodules (CL)	15.8	38.9	22			128.1	HP:4.50; UU:2.8 tsf
		7 (6) 12 (6)	CLAY, fat, soft (TCP), light brown and gray, shaley, with silty sand lenses (CH)							
662.5			CLAY, lean, very stiff to hard (TCP), dark gray, shaley (CL)							
		32 (6) 48 (6)								
657.5			SHALE, clay-shale, soft (TCP), dark gray							
655.5		50 (4.5) 50 (2.5)								

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375375.581, N-7129942.086

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW8-8
Structure Bridge
Station
Offset

District Dallas
Date 07/12/19
Grnd. Elev. 684.31 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties			Additional Remarks	
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI		Wet Den. (pcf)
683.3			FILL, CLAYEY GRAVEL, reddish brown (GC)			6			HP:4.50	
681.3		5 (6) 4 (6)	CLAY, fat, very stiff to hard (TAT), dark brown (CH)			28	66	49	HP:4.00; #200:87.3%	
	5	5 (6) 5 (6)	CLAY, fat, very stiff (TAT), brown (CH)	0	15.7	26		119.9	HP:2.50; UC:1.13 tsf	
678.3			CLAY, fat, soft (TCP), brown and tan, with limestone nodules (CH)			25	62	45	HP:3.00; #200:85%	
	10	3 (6) 8 (6)				24			HP:4.00	
671.3		6 (6) 9 (6)	CLAY, fat, soft (TCP), light brown and gray, shaley, with silty sand lenses (CH)	0	9	16	52	38	56.7	HP:4.50; UC:0.65 tsf #200:96.5%
666.3		30 (6) 50 (6)	CLAY, lean, very stiff to hard (TCP), dark gray, shaley, with tan sand lenses (CL)	20.2	39.3	24		124.4	HP:4.50; UU:2.83 tsf	
660.8		50 (3.3) 50 (2)	SHALE, clay-shale, soft (TCP), dark gray							
659.3										
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375331.776, N-7130090.506

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Daniel

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW9-2
Structure Bridge
Station
Offset

District Dallas
Date 10/10/19
Grnd. Elev. 678.99 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
678.0		50 (4.5) 50 (0.5)	CONCRETE, 8 inches CONCRETE over 4 inches gravel BASE			14				HP:4.50; -#200:50%
675.0	5	50 (2.3) 50 (0.5)	CLAY, lean, very hard (TCP), brown and tan, with limestone fragments (CL)							
673.0			LIMESTONE, weathered, soft to hard (TCP), tan, with clay seams	0	37.2	24	54	33	137.3	HP:4.50; UC:2.68 tsf
670.0	10	14 (6) 18 (6)	CLAY, fat, hard (TCP), light brown, shaley, with planar ferrous lenses (CH)			20	50	28		-#200:94.1% HP:4.50
	15	50 (3) 50 (4)				11				HP:4.50
	20	50 (4) 50 (3.8)				17				HP:4.50 -w/ limestone seam at 20 ft
654.0	25	50 (1.5) 50 (2.5)		0	103.9	15			139	HP:4.50; UC:7.48 tsf
			SHALE, clay-shale, hard to very hard (TCP), fairly continuous, fair quality, dark gray	0	107.9				137.6	25-30: REC: 76.7% RQD: 68.3% UC:7.77 tsf
649.0	30	50 (1.3) 50 (1)								

Remarks: Groundwater was not noted during drilling. Boring depth 30 feet. As surveyed coordinates: E-2375931.486, N-7129175.81

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW9-3
Structure Bridge
Station
Offset

District Dallas
Date 07/16/19
Grnd. Elev. 681.34 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
677.3	5	25 (6) 19 (6)	CLAY, lean, very stiff (TCP), tan, with calcareous nodules (CL)			5	48	33		HP:4.50; #200:71.7%
		50 (3) 50 (0.8)	LIMESTONE, weathered, hard to very hard (TCP), tan, with clay seams			14	44	31		HP:4.50; #200:74.3%
669.8	10	50 (1.8) 50 (0.5)	CLAY, lean, hard to very hard (TCP), dark gray, shaley, with clay seams (CL)							
		50 (6) 50 (2)								
658.3	15	45 (6) 42 (6)	SHALE, clay-shale, hard (TCP), dark gray							
		50 (2) 50 (0.5)								
656.3	25									
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375836.901, N-7129341.239

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Todd Wheatley

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW9-4
Structure Bridge
Station
Offset

District Dallas
Date 07/16/19
Grnd. Elev. 682.56 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
678.6	5	32 (6) 21 (6)	CLAY, lean, hard (TAT), tan, with limestone fragments (CL) LIMESTONE, weathered, very hard (TCP), tan, with thick clay seams			8	34	22		HP:4.50; #200:52.8% SO4:100 ppm HP:4.50
		50 (0.8) 50 (0.5)				8				
669.6	10	50 (1.5) 50 (0.5)	CLAY, lean, hard to very hard (TCP), dark gray, shaley, with shale seams (CL)							
		40 (6) 50 (4)								
657.6	20	50 (4.5) 50 (3)								
		50 (4) 50 (2)								
30										
35										
40										
45										
50										
55										
60										

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375761.034, N-7129526.947

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI



DRILLING LOG

WinCore
Version 3.0

County Denton
Highway IH-35
CSJ 0195-03-090

Hole RW9-5
Structure Bridge
Station
Offset

District Dallas
Date 10/10/19
Grnd. Elev. 681.50 ft
GW Elev. N/A

Elev. (ft)	LOG	Texas Cone Penetrometer	Strata Description	Triaxial Test		Properties				Additional Remarks
				Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	
680.5			CONCRETE, 8 inches CONCRETE over 4 inches GRAVEL base			18				HP:4.50
678.0		7 (6) 50 (1.5)	CLAY, lean, hard (TAT), brown and tan, with limestone fragments (CL)			7	24	13		#200:31.3%
	5	50 (4.3) 50 (4.8)	LIMESTONE, weathered, soft (TCP), tan, with thick clay seams							
671.5	10	13 (6) 18 (6)	CLAY, lean, stiff (TCP), dark gray, shaley (CL)							
666.5	15	50 (1.5) 50 (0.5)	SHALE, clay-shale, soft to very hard (TCP), fairly continuous recovery, poor to fair quality, dark gray	0	85.1	19	60	39	138.1	HP:4.50; UC:6.13 tsf #200:97.7%
	20	50 (3.5) 50 (2.5)		0	63.1	19			139.5	15-20: REC: 79.2% RQD: 45% UC:4.54 tsf
656.5	25	50 (2) 50 (2)		0	80.3	17			135.6	UC:5.78 tsf 20-25: REC: 71.7% RQD: 60%
	30									
	35									
	40									
	45									
	50									
	55									
	60									

Remarks: Groundwater was not noted during drilling. Boring depth 25 feet. As surveyed coordinates: E-2375707.697, N-7129697.398

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected.

Driller: Total Depth

Logger: Julian

Organization: Intertek-PSI