

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>60+91, 6' LT.</u>	EXPLORATION ID <u>B-001-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>828.9 (ft)</u> EOB: <u>7.5 ft.</u>	
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087924, -83.668597</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT (8")	828.9																	
VERY STIFF, BROWN, SILTY CLAY , LITTLE GRAVEL AND STONE FRAGMENTS, TRACE SAND, DAMP	828.3	1																
		2	8															
		3	7	21	100	SS-1	3.50	12	3	2	36	47	34	18	16	17	A-6b (10)	550
@3.0'; HARD		4	7															
		5	8	25	100	SS-2	4.50	16	3	3	34	44	34	18	16	16	A-6b (10)	670
	824.4	6	10															
VERY STIFF, BROWN, SANDY SILT , SOME CLAY, LITTLE GRAVEL AND STONE FRAGMENTS, MOIST		7	6	14	100	SS-3	2.50	15	11	22	27	25	22	14	8	18	A-4a (3)	-
@6.0'; HARD		8	4															
		9	5	15	100	SS-4	4.50	-	-	-	-	-	-	-	-	17	A-4a (V)	-
	821.4	10	4															
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PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>63+99, 33' RT.</u>	EXPLORATION ID <u>B-002-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>829.1 (ft)</u> EOB: <u>7.5 ft.</u>	
START: <u>2/4/21</u> END: <u>2/4/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087816, -83.667478</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (10")	829.1																		
VERY STIFF, GRAY, SILT AND CLAY, SOME GRAVEL AND STONE FRAGMENTS, LITTLE SAND, MOIST	828.2	1																	
		2	4	5	13	33	SS-1	3.25	21	6	11	27	35	29	15	14	17	A-6a (7)	630
@3.0'; "AND" GRAVEL AND STONE FRAGMENTS		3	3	4	11	89	SS-2	3.75	37	6	9	22	26	27	14	13	15	A-6a (4)	430
		4	3	4	8	11	SS-3	-	-	-	-	-	-	-	-	-	16	A-6a (V)	-
		5	3	3	6	44	SS-4	2.75	-	-	-	-	-	-	-	-	16	A-6a (V)	-
	821.6	6	3	2															
		7	2	2															
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>67+44, 5' LT.</u>	EXPLORATION ID <u>B-003-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>829.8 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087919, -83.666228</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (8")	829.8																		
HARD, GRAY MOTTLED WITH BROWN, SILTY CLAY , SOME STONE FRAGMENTS, LITTLE SAND, DAMP	829.1	1																	
		2	20	15	100	SS-1	4.50	32	6	5	26	31	40	18	22	16	A-6b (9)	980	
	826.8	3	3	13	83	SS-2	1.50	28	2	3	26	41	47	18	29	25	A-7-6 (15)	510	
STIFF, MOTTLED BROWN AND GRAY, CLAY , SOME SILT, SOME STONE FRAGMENTS, TRACE SAND, MOIST		4	4	10	89	SS-3	2.00	-	-	-	-	-	-	-	-	25	A-7-6 (V)	-	
	823.8	5	4	13	100	SS-4	1.00	26	9	15	24	26	30	15	15	21	A-6a (5)	-	
STIFF, MOTTLED BROWN GRAY, SILT AND CLAY , SOME STONE FRAGMENTS, SOME SAND, MOIST	822.3	6	3																
		7	3																
		EOB	6																

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NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>70+99, 33' RT.</u>	EXPLORATION ID <u>B-004-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>828.8 (ft)</u> EOB: <u>7.5 ft.</u>	
START: <u>2/4/21</u> END: <u>2/4/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087813, -83.664939</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (9")	828.8																		
MEDIUM DENSE, GRAY, GRAVEL AND STONE FRAGMENTS WITH SAND, SILT, AND CLAY, DAMP	828.0	1																	
		2	6	5	14	61	SS-1	-	54	12	7	15	12	24	13	11	10	A-2-6 (0)	930
STIFF, GRAY, SILT AND CLAY, "AND" GRAVEL AND STONE FRAGMENTS, LITTLE SAND, MOIST	825.8	3	4	3	11	94	SS-2	2.00	39	8	8	19	26	28	14	14	14	A-6a (3)	850
	824.3	4	3	3	13	89	SS-3	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	-
HARD, BROWN, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, DAMP		5	3	6															
		6	7	8															
	821.3	7	8	10	25	100	SS-4	4.50	9	5	11	30	45	31	17	14	17	A-6a (10)	-
		EOB																	

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NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>74+71, 6' LT.</u>	EXPLORATION ID <u>B-005-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>830.1 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087917, -83.663590</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (8")	830.1																		
VERY STIFF, GRAY, SILT AND CLAY , "AND" STONE FRAGMENTS, LITTLE SAND, DAMP	829.5	1																	
		2	23	6	-	100	SS-1	2.25	40	7	5	22	26	38	24	14	16	A-6a (4)	980
	827.1	3	4	4	14	89	SS-2	1.75	5	2	5	34	54	50	19	31	25	A-7-6 (18)	460
STIFF, MOTTLED BROWN AND GRAY, CLAY , SOME SILT, TRACE SAND, TRACE STONE FRAGMENTS, MOIST @4.5'; VERY STIFF		4	4	6															
		5	4	5	13	100	SS-3	3.00	-	-	-	-	-	-	-	-	23	A-7-6 (V)	-
@6.0'; MEDIUM STIFF, BROWN MOTTLED WITH GRAY		6	3	4															
	822.6	7	4	4	11	100	SS-4	0.50	-	-	-	-	-	-	-	-	22	A-7-6 (V)	-
		EOB																	

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NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>78+24, 32' RT.</u>	EXPLORATION ID <u>B-006-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>830.2 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087813, -83.662309</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (8")	830.2																		
VERY STIFF, DARK GRAY, SILT AND CLAY , "AND" STONE FRAGMENTS, LITTLE SAND, DAMP	829.5	1																	
		2	18	17	100	SS-1	3.00	43	10	7	20	20	30	17	13	11	A-6a (2)	480	
	827.2	3	5	13	83	SS-2	1.50	22	5	11	27	35	41	19	22	23	A-7-6 (10)	260	
STIFF, DARK GRAY, CLAY , SOME SILT SOME STONE FRAGMENTS, LITTLE SAND, MOIST		4	4	5															
		5	4	3	10	SS-3	1.75	-	-	-	-	-	-	-	-	22	A-7-6 (V)	-	
	824.2	6	5	4															
STIFF, MOTTLED BROWN AND GRAY, SILTY CLAY , LITTLE SAND, TRACE STONE FRAGMENTS, MOIST	822.7	7	4	15	100	SS-4	2.00	5	4	15	28	48	39	19	20	22	A-6b (12)	-	
		EOB																	

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NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>81+36, 18' LT.</u>	EXPLORATION ID <u>B-007-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>841.1 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087946, -83.661179</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (8")	841.1																		
MEDIUM DENSE, GRAY, STONE FRAGMENTS WITH SAND, SILT, AND CLAY , DAMP	840.5	1																	
		2	10																
	838.1	3	5	13	61	SS-1	-	54	8	6	16	16	33	17	16	15	A-2-6 (1)	830	
VERY STIFF, MOTTLED BROWN AND GRAY, SILTY CLAY , LITTLE SAND, TRACE STONE FRAGMENTS, MOIST		4	5	4	14	SS-2	2.25	2	4	10	37	47	34	18	16	19	A-6b (10)	160	
@4.5'; STIFF		5	4	5	15	SS-3	1.75	-	-	-	-	-	-	-	-	21	A-6b (V)	-	
@6.0'; VERY STIFF, GRAY MOTTLED WITH BROWN		6	3	6	17	SS-4	4.00	-	-	-	-	-	-	-	-	20	A-6b (V)	-	
	833.6	7	5	7															
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>81+22, 78' RT.</u>	EXPLORATION ID: <u>B-007-2-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>828.9 (ft)</u> EOB: <u>20.0 ft.</u>	PAGE: <u>1 OF 1</u>
START: <u>2/22/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.087683, -83.661229</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (6")	828.9																		
VERY STIFF, MOTTLED BROWN AND GRAY, CLAY , "AND" SILT, TRACE SAND, TRACE GRAVEL, CONTAINS TRACE ROOTS, MOIST	828.4	1																	
		2	2																
		3	4	13	44	SS-1	2.50	4	1	5	36	54	51	22	29	28	A-7-6 (18)	-	
		4	2																
		5	4	10	56	SS-2	2.50	-	-	-	-	-	-	-	-	29	A-7-6 (V)	-	
	822.9	6																	
VERY STIFF, BROWN, SILT AND CLAY , LITTLE SAND, LITTLE GRAVEL, MOIST @7.3'; QU = 4,709 PSF @ 8.3% STRAIN; $\gamma_d = 111.28$ PCF @8.5'; HARD		7																	
		8			92	ST-3	3.00	8	6	12	31	43	31	18	13	18	A-6a (9)	-	
		9	7																
		10	9	34	78	SS-4	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
		11	6																
@11.0'; GRAY		12	13	34	78	SS-5	4.5+	7	6	14	31	42	26	14	12	14	A-6a (8)	-	
		13																	
		14	5																
		15	8	28	89	SS-6	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
		16	5																
@16.0'; VERY STIFF		17	8	25	100	SS-7	3.00	-	-	-	-	-	-	-	16	A-6a (V)	-		
		18																	
		19	3																
		20	6	19	89	SS-8	2.50	-	-	-	-	-	-	-	-	18	A-6a (V)	-	
		808.9	EOB																

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>88+68, 16' LT.</u>	EXPLORATION ID <u>B-008-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>840.2 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/17/21</u> END: <u>2/17/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087938, -83.658521</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (10")	840.2																		
VERY STIFF, GRAY AND BROWN, SILTY CLAY , "AND" GRAVEL, LITTLE SAND, MOIST	839.4	1																	
		2	11	11	89	SS-1	3.00	41	8	8	21	22	37	17	20	17	A-6b (4)	290	
	836.7	3	3	11	100	SS-2	4.50	8	4	10	33	45	39	18	21	26	A-6b (12)	320	
HARD, GRAYISH BROWN, SILTY CLAY , LITTLE SAND, TRACE GRAVEL, MOIST		4	3	14	89	SS-3	4.50	-	-	-	-	-	-	-	-	21	A-6b (V)	-	
		5	4	5															
		6	5	5															
@6.0'; VERY STIFF, MOTTLED BROWN AND GRAY		7	6	7	24	SS-4	2.50	-	-	-	-	-	-	-	-	19	A-6b (V)	-	
	832.7	7	7	10															
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>89+96, 51' LT.</u>	EXPLORATION ID: <u>B-008-1-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>826.9 (ft)</u> EOB: <u>20.0 ft.</u>	PAGE: <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.088032, -83.658058</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (6")	826.9																		
VERY STIFF, MOTTLED BROWN AND GRAY, CLAY , SOME SILT, TRACE SAND, CONTAINS TRACE ROOTS, MOIST	826.4	1																	
		2	1	18	56	SS-1	2.50	0	2	4	35	59	47	20	27	23	A-7-6 (16)	-	
		3	7																
@3.5'; STIFF		4	1	9	67	SS-2	2.00	-	-	-	-	-	-	-	-	26	A-7-6 (V)	-	
		5	3																
	820.9	6				ST-3A	0.50	1	6	28	32	33	28	14	14	26	A-6a (8)	-	
SOFT, MOTTLED BROWN AND GRAY, SILT AND CLAY , SOME SAND, TRACE GRAVEL, WET	820.4	7			92	ST-3B	-	23	22	33	14	8	NP	NP	NP	19	A-3a (0)	-	
VERY LOOSE, BROWN, COARSE AND FINE SAND , SOME GRAVEL, LITTLE SILT, TRACE CLAY, WET	819.4	8				ST-3C	2.00	12	16	29	21	22	19	12	7	14	A-4a (2)	-	
	819.1	8				ST-3D	-	0	6	78	9	7	NP	NP	NP	21	A-3a (0)	-	
	818.4	8																	
STIFF, BROWN, SANDY SILT , SOME CLAY, LITTLE GRAVEL, MOIST		9	6	22	67	SS-4	4.50	6	7	13	31	43	27	16	11	16	A-6a (8)	-	
VERY LOOSE, BROWN, COARSE AND FINE SAND , TRACE SILT, TRACE CLAY, WET		10	9																
HARD, GRAY, SILT AND CLAY , LITTLE SAND, TRACE GRAVEL, MOIST		11	5	33	78	SS-5	4.00	-	-	-	-	-	-	-	-	16	A-6a (V)	-	
		12	11																
		13																	
		14	6	33	78	SS-6	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
		15	10																
		16	12																
@16.0'; LITTLE GRAVEL		17	5	40	100	SS-7	4.50	11	5	11	28	45	29	16	13	16	A-6a (9)	-	
		18	11																
		19	16																
		20	5	31	100	SS-8	4.00	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
	806.9	20	9																
		EOB	12																

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>189+67, 57' RT.</u>	EXPLORATION ID: <u>B-008-2-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99EB</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>826.7 (ft)</u> EOB: <u>20.0 ft.</u>	PAGE: <u>1 OF 1</u>
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.087561, -83.658256</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (6") VERY STIFF, MOTTLED BROWN AND GRAY, CLAY, SOME SILT, TRACE SAND, MOIST	826.7	1																	
@3.5'; STIFF	826.2	2	2																
		3	5	16	61	SS-1	2.50	0	1	3	33	63	57	23	34	28	A-7-6 (19)	-	
		4	2																
		5	3	10	61	SS-2	2.00	-	-	-	-	-	-	-	-	27	A-7-6 (V)	-	
@6.0'; SOFT, BROWN, "AND" SILT @6.25'; QU = 778 PSF @ 6.8% STRAIN; $\gamma_d = 95.61$ PCF	819.5	6																	
		7			100	ST-3A	4.5+	0	1	2	38	59	46	20	26	23	A-7-6 (16)	-	
LOOSE, BROWN, GRAVEL WITH SAND AND SILT, LITTLE CLAY, DAMP	818.2	8				ST-3B	-	27	13	30	19	11	NP	NP	NP	13	A-2-4 (0)	-	
HARD, GRAY, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL, MOIST		9	6	28	89	SS-4	4.5+	-	-	-	-	-	-	-	-	18	A-6a (V)	-	
@13.5'; VERY STIFF		10	6	13															
		11	6																
		12	9	30	78	SS-5	4.50	9	5	12	33	41	26	14	12	15	A-6a (9)	-	
		13																	
		14	5	24	83	SS-6	4.00	-	-	-	-	-	-	-	-	16	A-6a (V)	-	
		15	7																
		16	6																
		17	7	25	100	SS-7	2.00	-	-	-	-	-	-	-	-	17	A-6a (V)	-	
		18																	
		19	4	22	100	SS-8	2.00	-	-	-	-	-	-	-	-	19	A-6a (V)	-	
	806.7	20	7	8															
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT. & LONG. FROM OGE HAND HELD GPS. ELEV. FROM PROJECT TERRAIN MODEL. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>191+99, 0' LT.</u>	EXPLORATION ID <u>B-009-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99EB</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>829.6 (ft)</u> EOB: <u>6.0 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.087789, -83.657397</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (5")	829.6																		
VERY STIFF, BROWN, SILTY CLAY , LITTLE SAND, LITTLE GRAVEL, DAMP	829.2	1	1																
		2	2	7	44	SS-1	2.50	17	9	11	30	33	39	19	20	18	A-6b (10)	190	
@3.0'; STIFF, MOIST		3	3																
		4	3	10	61	SS-2	2.00	20	10	10	29	31	40	21	19	23	A-6b (9)	110	
@4.5'; VERY STIFF, MOTTLED BROWN AND GRAY		5	4																
	823.6	6	4	13	67	SS-3	3.00	-	-	-	-	-	-	-	-	25	A-6b (V)	-	
		EOB	5																

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 20 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>95+76, 18' LT.</u>	EXPLORATION ID <u>B-010-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>827.1 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/17/21</u> END: <u>2/17/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087935, -83.655954</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT (12")	827.1																	
VERY STIFF, BROWN AND GRAY, SILTY CLAY , SOME GRAVEL, LITTLE SAND, DAMP	826.1	1																
		2	18															
		3	5	15	100	SS-1	3.75	30	10	7	23	30	34	17	17	15	A-6b (6)	710
HARD, MOTTLED BROWN AND GRAY, SILT , SOME CLAY, LITTLE SAND, TRACE GRAVEL, MOIST	824.1	4	6															
		5	10	29	100	SS-2	4.25	3	3	11	55	28	25	16	9	17	A-4b (8)	200
HARD, MOTTLED BROWN AND GRAY, SILT AND CLAY , SOME SAND, LITTLE GRAVEL, TRACE ORGANICS, MOIST	822.6	6	6															
		7	6	20	100	SS-3	4.50	12	8	13	32	35	27	16	11	16	A-6a (7)	-
		8	8															
		9	8	27	100	SS-4	4.50	-	-	-	-	-	-	-	-	17	A-6a (V)	-
	819.6	EOB	11															

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>99+59, 34' RT.</u>	EXPLORATION ID <u>B-011-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>825.2 (ft)</u> EOB: <u>6.0 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>3/2/21</u> END: <u>3/2/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.087785, -83.654567</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (5") VERY STIFF, BROWN, SANDY SILT , SOME CLAY, SOME STONE FRAGMENTS, MOIST	825.2 824.8	1																↖ ↗	
VERY STIFF, BROWN, SILT AND CLAY , SOME STONE FRAGMENTS, LITTLE SAND, MOIST	822.2	2 3	5 3	16	67	SS-1	2.50	21	4	10	40	25	29	19	10	19	A-4a (6)	<100	↖ ↗
HARD, BROWN MOTTLED WITH GRAY, SILT AND CLAY , LITTLE SAND, LITTLE STONE FRAGMENTS, DAMP	820.7 819.2	4 5 6	3 3 9	9	67	SS-2	2.50	23	8	10	30	29	32	18	14	22	A-6a (6)	<100	↖ ↗
				28	61	SS-3	4.5+	14	6	12	24	44	31	18	13	16	A-6a (8)	-	↖ ↗
		EOB		10														↖ ↗	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: NOT RECORDED

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>103+37, 19' LT.</u>	EXPLORATION ID <u>B-012-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>823.7 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/17/21</u> END: <u>2/17/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087927, -83.653193</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (12")	823.7																		
MEDIUM DENSE, GRAY AND BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, SILT, AND CLAY, DAMP	822.7	1																	
		2	12	14	100	SS-1	2.50	37	18	10	20	15	30	16	14	14	A-2-6 (1)	2100	
	820.7	3	4	4															
VERY STIFF, MOTTLED BROWN AND GRAY, CLAY , SOME SILT, LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, MOIST		4	6	20	100	SS-2	3.25	8	4	8	35	45	42	18	24	22	A-7-6 (14)	1500	
		5	4	8															
		6	5	4	13	89	SS-3	4.00	-	-	-	-	-	-	-	20	A-7-6 (V)	-	
@6.0'; HARD		7	5	5															
	816.2	EOB	5	20	83	SS-4	4.50	-	-	-	-	-	-	-	-	23	A-7-6 (V)	-	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>107+19, 19' LT.</u>	EXPLORATION ID <u>B-013-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>821.2 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/17/21</u> END: <u>2/17/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.087922, -83.651809</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (12")	821.2																		
HARD, GRAY AND BROWN, SILT AND CLAY, SOME SAND, SOME GRAVEL, DAMP	820.2	1																	
VERY STIFF, MOTTLED BROWN AND GRAY, SILTY CLAY, SOME GRAVEL AND STONE FRAGMENTS, LITTLE SAND, MOIST @4.5' - 6.0'; STIFF	818.2	2	10	18	83	SS-1	4.25	29	20	10	20	21	31	17	14	14	A-6a (2)	1200	
		3	4	5	14	72	SS-2	2.75	27	6	8	25	34	38	18	20	21	A-6b (9)	1300
		4	4	5	10	100	SS-3	1.50	-	-	-	-	-	-	-	-	24	A-6b (V)	-
		5	4	3	10	100	SS-3	1.50	-	-	-	-	-	-	-	-	24	A-6b (V)	-
		6	4	4	13	61	SS-4	3.75	-	-	-	-	-	-	-	-	21	A-6b (V)	-
	813.7	7	4	5															

EOB

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>110+98, 44' RT.</u>	EXPLORATION ID <u>B-014-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CR 99</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>819.3 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>3/2/21</u> END: <u>3/2/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.087744, -83.650436</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO ₄ ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (6") ----- VERY STIFF, BROWN, SILTY CLAY , SOME STONE FRAGMENTS, LITTLE SAND, SLIGHTLY ORGANIC (LOI = 3.1%), MOIST	819.3 818.8	1																↖ ↗	
		2	3	16	67	SS-1	2.50	23	6	12	28	31	38	20	18	20	A-6b (8)	<100	↖ ↗
	816.3	3	2	13	67	SS-2	2.00	21	3	11	30	35	43	19	24	24	A-7-6 (12)	<100	↖ ↗
STIFF, MOTTLED BROWN AND GRAY, CLAY , SOME SILT, SOME STONE FRAGMENTS, LITTLE SAND, CONTAINS TRACE ROOTS, MOIST		4	4	5														↖ ↗	
		5	3	10	78	SS-3	2.00	-	-	-	-	-	-	-	-	24	A-7-6 (V)	-	↖ ↗
@6.0'; HARD		6	2	4														↖ ↗	
	811.8	7	5	19	67	SS-4	4.5+	-	-	-	-	-	-	-	-	19	A-7-6 (V)	-	↖ ↗
		EOB	8	8														↖ ↗	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: NOT RECORDED

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI					
TOPSOIL (6")	831.3	1																		
VERY STIFF, BROWN, CLAY, SOME SILT, LITTLE SAND, LITTLE GRAVEL, TRACE ROOTS, MOIST		2	3	6	19	17	SS-1	2.00	-	-	-	-	-	-	-	-	-	21	A-7-6 (V)	-
@3.0'; MOTTLED GRAY AND BROWN		3	2	4	16	78	SS-2	3.00	12	3	11	30	44	45	21	24	27	A-7-6 (14)	110	
	827.3	4	2	4	15	56	SS-3	2.50	2	4	14	32	48	38	18	20	23	A-6b (12)	200	
VERY STIFF, MOTTLED GRAY AND BROWN, SILTY CLAY, LITTLE SAND, TRACE GRAVEL, MOIST		5	2	4	15	56	SS-3	2.50	2	4	14	32	48	38	18	20	23	A-6b (12)	200	
		6	4	5	18	61	SS-4	3.50	-	-	-	-	-	-	-	-	-	18	A-6b (V)	-
	823.3	7	4	5	18	61	SS-4	3.50	-	-	-	-	-	-	-	-	-	18	A-6b (V)	-
	823.3	8																		
HARD, MOTTLED BROWN AND GRAY, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL, MOIST		9	8	13	43	100	SS-5	4.50	4	7	13	29	47	31	17	14	17	A-6a (10)	-	
		10																		
		11	12	25	67	89	SS-6	4.5+	-	-	-	-	-	-	-	-	-	17	A-6a (V)	-
	818.3	12	12	25	67	89	SS-6	4.5+	-	-	-	-	-	-	-	-	-	17	A-6a (V)	-
VERY STIFF, GRAY, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL, MOIST		13																		
		14	5	6	21	67	SS-7	3.00	-	-	-	-	-	-	-	-	-	17	A-6a (V)	-
		15																		
		16	5	7	24	78	SS-8	2.50	2	7	11	31	49	29	16	13	18	A-6a (9)	-	
@18.5' - 20.0'; STIFF		17	5	7	24	78	SS-8	2.50	2	7	11	31	49	29	16	13	18	A-6a (9)	-	
		18																		
		19	2	4	15	78	SS-9	2.00	-	-	-	-	-	-	-	-	-	18	A-6a (V)	-
		20																		
		21																		
@22.0'; QU = 5,184 PSF @ 14.7% STRAIN; γ_d = 112.55PCF		22																		
		23																		
		24	1	5	16	100	SS-11	2.50	-	-	-	-	-	-	-	-	-	17	A-6a (V)	-
		25																		
		26	4	8	24	100	SS-12	2.50	-	-	-	-	-	-	-	-	-	17	A-6a (V)	-
		27																		
		28																		
		29																		
@29.5'; QU = 5,342 PSF @ 14.5% STRAIN; γ_d = 113.07PCF		29																		
		30																		
		31																		
		32																		
		33																		
		34	4	6	24	100	SS-14	2.50	-	-	-	-	-	-	-	-	-	18	A-6a (V)	-
		35																		
		36																		
		37																		
		38																		
		39	5	9	33	100	SS-15	2.75	-	-	-	-	-	-	-	-	-	18	A-6a (V)	-
		40																		
		41																		
		42																		
		43																		
		44	3	8	27	100	SS-16	2.50	7	5	11	30	47	28	15	13	19	A-6a (9)	-	
		45																		
		46																		
		47																		
		48																		
		49	5	8	28	100	SS-17	2.50	-	-	-	-	-	-	-	-	-	19	A-6a (V)	-
		50																		
		51																		
		52																		
		53																		
		54	2	8	27	100	SS-18	2.50	-	-	-	-	-	-	-	-	-	19	A-6a (V)	-
		55																		
		56																		
		57																		
		58																		
VERY DENSE, GRAY, SILT, TRACE SAND, TRACE CLAY, WET	773.3	59	18	25	77	78	SS-19	1.00	0	3	4	88	5	NP	NP	NP	22	A-4b (8)	-	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (G)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
VERY DENSE, GRAY, SILT, TRACE SAND, TRACE CLAY, WET (continued)	771.8	61																	
@63.5'; LITTLE CLAY, MOIST	763.3	62																	
		63																	
		64	14 24 22	68	89	SS-20	4.00	0	0	0	80	20	NP	NP	NP	17	A-4b (8)	-	
		65																	
		66																	
		67																	
		68																	
VERY STIFF, GRAY, CLAY, "AND" SILT, TRACE SAND, MOIST	763.3	69	4 8 12	30	100	SS-21	2.50	0	0	1	56	43	42	19	23	22	A-7-6 (14)	-	
		70																	
		71																	
		72																	
		73																	
HARD, GRAY, SANDY SILT, SOME CLAY, TRACE GRAVEL, DAMP	758.3	74	13 18 28	68	100	SS-22	4.5+	9	9	20	38	24	17	12	5	11	A-4a (5)	-	
		75																	
		76																	
		77																	
		78																	
HARD, GRAY, SILT, SOME SAND, LITTLE CLAY, DAMP	753.3	79	20 29 35	95	100	SS-23	4.00	0	3	27	52	18	16	14	2	13	A-4b (7)	-	
		80																	
		81																	
		82																	
		83																	
HARD, GRAY, SANDY SILT, "AND" CLAY, MOIST	748.3	84	23 26 32	86	100	SS-24	4.5+	0	0	1	45	54	25	16	9	20	A-4a (8)	-	
		85																	
		86																	
		87																	
		88																	
@88.5'; LITTLE GRAVEL, LITTLE CLAY, DAMP	742.9	EOB	63/5"	-	80	SS-25	4.5+	20	16	22	31	11	15	12	3	8	A-4a (1)	-	

STANDARD ODOT LOG W/ SULFATE (11 X 17) - OH DOT GDT - 4/30/21 09:57 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED 75 LB. BENTONITE GROUT; 150 GAL. WATER

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED		
								GR	CS	FS	SI	CL	LL	PL	PI						
TOPSOIL (6")	829.7	1																			
VERY STIFF, BROWN, SILTY CLAY, LITTLE STONE FRAGMENTS, TRACE SAND, MOIST	829.7	2	3	6	19	61	SS-1	3.00	12	2	8	41	37	35	19	16	20	A-6b (10)	<100		
		3	3	4	15	56	SS-2	2.50	13	1	8	40	38	36	17	19	20	A-6b (12)	<100		
		4	3	6	21	72	SS-3	2.00	-	-	-	-	-	-	-	-	18	A-6b (V)	-		
VERY STIFF, MOTTLED BROWN AND GRAY, SANDY SILT, SOME CLAY, LITTLE STONE FRAGMENTS, MOIST	824.2	5	3	6	21	72	SS-3	2.00	-	-	-	-	-	-	-	-	18	A-6b (V)	-		
		6	7	9	30	78	SS-4	2.00	-	-	-	-	-	-	-	-	17	A-4a (V)	-		
		7	7	11																	
HARD, GRAYISH BROWN, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL, MOIST	819.2	8																			
		9	2	4	19	89	SS-5	2.50	12	8	21	32	27	20	14	6	15	A-4a (5)	-		
		10																			
		11	6	11	34	100	SS-6	4.50	8	6	13	35	38	26	15	11	17	A-6a (8)	-		
		12																			
		13																			
		14	5	9	31	100	SS-7	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	-		
		15																			
		16	9	17	53	100	SS-8	4.50	13	5	10	28	44	28	16	12	16	A-6a (8)	-		
		17																			
@13.5'; GRAY	819.2	18																			
		19	5	8	28	89	SS-9	4.00	-	-	-	-	-	-	-	17	A-6a (V)	-			
		20																			
		21	6	9	31	100	SS-10	4.50	-	-	-	-	-	-	-	17	A-6a (V)	-			
		22																			
		23																			
		24	6	8	27	100	SS-11	2.50	12	5	10	24	49	30	17	13	19	A-6a (9)	-		
		25																			
		26	5	10	40	100	SS-12	2.50	-	-	-	-	-	-	-	-	18	A-6a (V)	-		
		27																			
@16.0'; LITTLE GRAVEL	819.2	28																			
		29																			
		30																			
		31																			
		32																			
		33																			
		34	4	7	25	89	SS-14	1.50	-	-	-	-	-	-	-	-	19	A-6a (V)	-		
		35																			
		36																			
		37																			
@23.5'; VERY STIFF, MOIST	819.2	38																			
		39	5	12	40	100	SS-16	3.00	-	-	-	-	-	-	-	15	A-6a (V)	-			
		40																			
		41																			
		42																			
		43																			
		44	5	7	24	100	SS-17	2.50	-	-	-	-	-	-	-	-	19	A-6a (V)	-		
		45																			
		46																			
		@28.5'; STIFF, TRACE GRAVEL	819.2	47																	
48																					
49	5			8	25	100	SS-18	2.50	12	4	8	28	48	28	16	12	30	A-6a (9)	-		
50																					
51																					
52																					
53																					
54	3			7	24	100	SS-19	2.50	-	-	-	-	-	-	-	-	19	A-6a (V)	-		
55																					
@30.0'; QU = 2,830 PSF @ 15.0% STRAIN; γ _d = 116.10 PCF	819.2			56																	
		57																			
		58																			
		59	11	19	59	89	SS-20	-	1	0	5	86	8	NP	NP	NP	22	A-4b (8)	-		
		60																			
		61																			
		62																			
		63																			
		64																			
		@35.5'; LITTLE GRAVEL	819.2	65																	
66																					
67																					
68																					
69																					
70																					
71																					
72																					
73																					
@36.8'; QU = 2,448 PSF @ 15.0% STRAIN; γ _d = 113.60 PCF	819.2			74																	
		75																			
		76																			
		77																			
		78																			
		79																			
		80																			
		81																			
		82																			
		@38.5'; VERY STIFF, WITH TRACE SAND SEAM	819.2	83																	
84																					
85																					
86																					
87																					
88																					
89																					
90																					
91																					
@771.7	771.7			92																	
		93																			
		94																			
		95																			
		96																			
		97																			
		98																			
		99																			
		100																			

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (G)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
VERY DENSE, GRAY, SILT, TRACE CLAY, TRACE SAND, TRACE GRAVEL, MOIST (continued) @63.5'; DENSE	770.2	61																	
		62																	
		63																	
		64	4	8	34	100	SS-21	-	-	-	-	-	-	-	23	A-4b (V)	-		
		65																	
		66																	
		67																	
		68																	
		69	6	10	34	100	SS-22	-	-	-	-	-	-	-	25	A-4b (V)	-		
		70																	
HARD, GRAY, SANDY SILT, SOME CLAY, TRACE GRAVEL, DAMP @78.5'; MOIST	756.7	71																	
		72																	
		73																	
		74	18	19	61	100	SS-23	4.5+	7	11	19	39	24	18	13	5	11	A-4a (6)	-
		75																	
		76																	
		77																	
		78																	
		79	26	36	120	83	SS-24	4.5+	-	-	-	-	-	-	-	14	A-4a (V)	-	
		80																	
@88.5'; DAMP	740.2	81																	
		82																	
		83																	
		84	21	35	122	100	SS-25	4.50	-	-	-	-	-	-	15	A-4a (V)	-		
		85																	
		86																	
		87																	
		88																	
		89	40	30	101	100	SS-26	4.5+	10	11	16	41	22	18	13	5	11	A-4a (6)	-
		90																	

▽ 743.1

EOB

STANDARD ODOT LOG W/ SULFATE (11 X 17) - OH DOT.GDT - 4/30/21 09:57 - X:\GINT\PROJECTS\600827.GPJ

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>405+54, 8' LT.</u>	EXPLORATION ID <u>B-018-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP A</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>831.0 (ft)</u> EOB: <u>7.5 ft.</u>	
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.085538, -83.660197</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	SO4 ppm	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				WC
ASPHALT (16.5")	831.0																		
HARD, GRAYISH BROWN, SILTY CLAY , SOME STONE FRAGMENTS, LITTLE SAND, DAMP	829.7	1																	
@3.0'; MEDIUM STIFF, GRAY AND BROWN, LITTLE GRAVEL AND STONE FRAGMENTS, MOIST	826.5	2	10	22	89	SS-1	4.50	32	8	12	27	21	39	23	16	22	A-6b (5)	1900	
VERY STIFF, GRAY, CLAY , SOME SILT, LITTLE GRAVEL AND STONE FRAGMENTS, TRACE SAND, MOIST		3	6	8	100	SS-2	0.50	19	7	11	29	34	39	20	19	27	A-6b (9)	1200	
@6.0'; STIFF, GRAY AND DARK GRAY, MODERATELY ORGANIC (LOI = 9.1%)	823.5	4	3	3															
		5	2	3	11	94	SS-3	2.25	10	3	5	31	51	45	23	22	30	A-7-6 (14)	-
		6	4	5															
		7	5	6	15	100	SS-4	2.00	13	3	6	29	49	54	27	27	36	A-7-6 (18)	-
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>408+79, 8' LT.</u>	EXPLORATION ID <u>B-019-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP A</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>830.0 (ft)</u> EOB: <u>6.0 ft.</u>	
START: <u>2/22/21</u> END: <u>2/22/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.086397, -83.660482</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (6") VERY STIFF, BROWN, CLAY , "AND" SILT, TRACE GRAVEL, TRACE SAND, MOIST	830.0 829.5	1																	
		2	1																
	827.0	3	4	16	67	SS-1	2.50	6	1	2	36	55	47	20	27	23	A-7-6 (16)	<100	
VERY STIFF, BROWN, SILTY CLAY , TRACE SAND, TRACE GRAVEL, MOIST		4	2																
		5	4	19	72	SS-2	3.00	1	1	2	42	54	37	19	18	22	A-6b (11)	<100	
		6	5																
	824.0	EOB	9	25	78	SS-3	3.50	-	-	-	-	-	-	-	-	20	A-6b (V)	-	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: NOT RECORDED

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>412+47, 19' RT.</u>	EXPLORATION ID <u>B-020-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP A</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>828.5 (ft)</u> EOB: <u>25.0 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/22/21</u> END: <u>2/22/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.087383, -83.660785</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (6")	828.5																		
STIFF, MOTTLED BROWN AND GRAY, CLAY , "AND" SILT, TRACE SAND, MOIST	828.0	1	1																
		2	3	10	67	SS-1	1.50	0	2	6	36	56	49	20	29	28	A-7-6 (17)	-	
		3	4																
@3.5'; VERY STIFF		4	3																
		5	4	12	67	SS-2	2.50	-	-	-	-	-	-	-	-	28	A-7-6 (V)	-	
	822.5	6	3																
MEDIUM STIFF, MOTTLED BROWN AND GRAY, SANDY SILT , SOME CLAY, TRACE GRAVEL, MOIST	820.0	7	2	7	72	SS-3	0.50	8	8	22	39	23	23	15	8	20	A-4a (5)	-	
		8	3																
	820.0	9																	
VERY STIFF, GRAY, SILT AND CLAY , LITTLE SAND, TRACE GRAVEL, WET		10			83	P4	2.00	4	6	12	32	46	28	16	12	28	A-6a (9)	-	
@9.7'; QU = 4,932 PSF @ 15.0% STRAIN; $\gamma_d =$ 114.48PCF		11																	
@11.0'; HARD, MOIST		12	3	19	78	SS-5	4.50	-	-	-	-	-	-	-	-	17	A-6a (V)	-	
		13	5																
@13.5'; VERY STIFF		14	8	28	72	SS-6	3.50	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
		15	11																
@16.0'; HARD		16	7																
		17	11	39	89	SS-7	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
		18	15																
@18.5'; VERY STIFF		19	5	30	94	SS-8	3.50	6	6	11	30	47	28	16	12	18	A-6a (9)	-	
		20	9																
		21	11																
		22	6	30	100	SS-9	2.50	-	-	-	-	-	-	-	-	19	A-6a (V)	-	
		23	9																
		24	11																
	803.5	25	3	21	100	SS-10	2.00	-	-	-	-	-	-	-	-	18	A-6a (V)	-	
		EOB	6	8															

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>505+45, 19' RT.</u>	EXPLORATION ID <u>B-021-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP B</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>830.3 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.085788, -83.659569</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (17")	830.3																		
MEDIUM DENSE, GRAY, STONE FRAGMENTS , SOME SAND, TRACE SILT, TRACE CLAY, MOIST	828.9	1																	
		2	9	15	33	SS-1	-	71	15	5	7	2	NP	NP	NP	5	A-1-a (0)	840	
	827.0	3	3			SS-2A	-	-	-	-	-	-	-	-	-	5	A-1-a (V)	-	
SOFT, GRAY, CLAY , SOME GRAVEL, SOME SILT, LITTLE SAND, MOIST	825.8	4	2	7	56	SS-2B	0.25	27	6	8	25	34	42	18	24	26	A-7-6 (11)	490	
MEDIUM STIFF, BROWN AND GRAY, SILT AND CLAY , "AND" SAND, TRACE GRAVEL, MOIST	824.3	5	3	8	100	SS-3	1.00	7	12	30	23	28	30	15	15	22	A-6a (5)	-	
MEDIUM STIFF, BROWN AND GRAY, SANDY SILT , LITTLE CLAY, LITTLE GRAVEL, WET	822.8	6	3																
		7	4	17	100	SS-4	0.50	13	16	32	20	19	21	15	6	21	A-4a (1)	-	
		EOB	8																

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>508+47, 4' LT.</u>	EXPLORATION ID <u>B-022-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP B</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>833.8 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.086591, -83.659328</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (5") STIFF, BROWN, SILT AND CLAY , SOME SAND, TRACE GRAVEL, MOIST	833.8	1																	
	830.8	2	5	21	56	SS-1	1.50	7	8	15	32	38	33	18	15	18	A-6a (9)	110	
VERY STIFF, BROWN, SILTY CLAY , LITTLE SAND, TRACE GRAVEL, MOIST		3	4	7	22	SS-2	3.50	2	3	10	36	49	34	17	17	18	A-6b (11)	170	
		4	4	6	21	SS-3	3.50	-	-	-	-	-	-	-	-	24	A-6b (V)	-	
@6.0'; GRAY		5	5	6	21	SS-3	3.50	-	-	-	-	-	-	-	-	24	A-6b (V)	-	
	826.3	6	5	6	21	SS-3	3.50	-	-	-	-	-	-	-	-	24	A-6b (V)	-	
		7	9	9	27	SS-4	2.00	1	3	11	36	49	39	19	20	24	A-6b (12)	-	
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 20 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>511+92, 23' RT.</u>	EXPLORATION ID <u>B-023-0-21</u>
TYPE: <u>SUBGRADE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP B</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>827.7 (ft)</u> EOB: <u>20.0 ft.</u>	
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.087443, -83.658805</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (6") VERY STIFF, MOTTLED BROWN AND GRAY, SILTY CLAY , LITTLE SAND, TRACE GRAVEL, MOIST	827.7																		
	827.2	1																	
		2	4	13	44	SS-1	2.50	7	5	11	30	47	33	16	17	17	A-6b (11)	-	
@3.5'; STIFF		3	5																
		4	2	10	56	SS-2	1.50	-	-	-	-	-	-	-	-	24	A-6b (V)	-	
		5	3	4															
	821.7	6																	
MEDIUM STIFF, GRAYISH BROWN, SILT AND CLAY , SOME SAND, TRACE GRAVEL, MOIST @6.9'; QU = 1,656 PSF @ 6.0% STRAIN; $\gamma_d = 106.19$ PCF		7			92	ST-3	4.00	1	7	25	38	29	26	14	12	18	A-6a (7)	-	
@8.5'; HARD		8																	
		9	4	21	83	SS-4	4.50	-	-	-	-	-	-	-	-	16	A-6a (V)	-	
@11.0'; GRAY		10	5	9															
		11	5	30	67	SS-5	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	-	
		12	10	10															
		13																	
		14	5	25	83	SS-6	4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)	-	
		15	7	10															
@16.0'; VERY STIFF, LITTLE SAND		16	5	30	89	SS-7	3.50	5	6	11	32	46	28	15	13	17	A-6a (9)	-	
		17	8	12															
		18																	
		19	3	18	72	SS-8	3.00	-	-	-	-	-	-	-	-	17	A-6a (V)	-	
	807.7	20	5	7															
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:20 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>603+51, 21' RT.</u>	EXPLORATION ID <u>B-024-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP C</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>840.3 (ft)</u> EOB: <u>7.5 ft.</u>	
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.088546, -83.660529</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (8")	840.3																		
LOOSE, GRAY, STONE FRAGMENTS , SOME SAND, TRACE SILT, TRACE CLAY, MOIST	839.7	1																	
VERY STIFF, MOTTLED BROWN AND GRAY, SILTY CLAY , LITTLE SAND, LITTLE GRAVEL, MOIST	838.3	2	4			SS-1A	-	68	16	6	8	2	NP	NP	NP	5	A-1-a (0)	150	
		3	4	10	72	SS-1B	3.50	17	7	10	29	37	35	16	19	24	A-6b (10)	<100	
@4.5'; VERY STIFF		4	5	15	100	SS-2	1.75	14	6	12	30	38	33	16	17	21	A-6b (9)	<100	
		5	3	14	72	SS-3	3.00	-	-	-	-	-	-	-	-	23	A-6b (V)	-	
@6.0'; NO RECOVERY; AUGER CUTTINGS TAKEN		6	4	17	0	SS-4	0.00	-	-	-	-	-	-	-	-	28	A-6b (V)	-	
		7	5	17	0	SS-4	0.00	-	-	-	-	-	-	-	-	28	A-6b (V)	-	
	832.8	EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:21 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / LEWIS</u>	DRILL RIG: <u>CME 850R TRACKED</u>	STATION / OFFSET: <u>603+50, 43' LT.</u>	EXPLORATION ID <u>B-024-1-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCINTOSH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP C</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>3.75" HSA</u>	CALIBRATION DATE: <u>5/1/19</u>	ELEVATION: <u>825.2 (ft)</u> EOB: <u>15.0 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>41.088587, -83.660755</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
TOPSOIL (5") VERY STIFF, BROWN, SANDY SILT , SOME CLAY, LITTLE GRAVEL, MOIST	825.2 824.7	1																	
		2	1																
		3	3 6	13	83	SS-1	2.50	13	9	22	26	30	24	14	10	19	A-4a (4)	-	
	821.7	4	5																
HARD, BROWN AND GRAY, SILT AND CLAY , LITTLE SAND, TRACE GRAVEL, DAMP		5	9 12	31	89	SS-2	4.50	6	7	13	31	43	29	16	13	15	A-6a (9)	-	
		6	6																
		7	11 12	34	78	SS-3	4.00	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
		8																	
@8.5'; VERY STIFF		9	5 6	25	94	SS-4	4.00	-	-	-	-	-	-	-	-	15	A-6a (V)	-	
		10	11																
@11.0'; MOIST		11	5																
		12	11 9	30	89	SS-5	3.50	4	5	11	31	49	28	15	13	16	A-6a (9)	-	
		13																	
		14	4																
	810.2	15	7 11	27	100	SS-6	3.50	-	-	-	-	-	-	-	-	17	A-6a (V)	-	
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:21 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 20 LB. BENTONITE CHIPS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>606+51, 2' LT.</u>	EXPLORATION ID <u>B-025-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP C</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>830.4 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/23/21</u> END: <u>2/23/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.089361, -83.660347</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (17")	830.4																		
LOOSE, BROWN, STONE FRAGMENTS , SOME SAND, LITTLE SILT, TRACE CLAY, WET	829.0	1																	
	827.4	2	7	8	33	SS-1	-	59	19	8	11	3	NP	NP	NP	9	A-1-a (0)	480	
VERY STIFF, DARK GRAY, SILTY CLAY , SOME STONE FRAGMENTS, LITTLE SAND, MODERATELY ORGANIC (LOI = 7.1%), MOIST	825.9	3	4	18	83	SS-2	3.75	32	5	9	24	30	40	21	19	29	A-6b (7)	330	
STIFF, MOTTLED BROWN AND GRAY, CLAY , SOME STONE FRAGMENTS, SOME SILT, TRACE SAND, MOIST		4	5	13	83	SS-3	1.75	29	2	6	23	40	46	20	26	30	A-7-6 (13)	140	
@6.0'; VERY STIFF, CONTAINS WOOD FRAGMENTS	822.9	5	3	17	100	SS-4	2.00	-	-	-	-	-	-	-	-	27	A-7-6 (V)	-	
		6	4																
		7	5																
		EOB	7																

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:21 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>609+51, 5' RT.</u>	EXPLORATION ID <u>B-026-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP C</u>	PAGE 1 OF 1
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>827.6 (ft)</u> EOB: <u>7.5 ft.</u>	
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.090161, -83.660083</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (16")	827.6																		
	826.2	1																	
HARD, BROWN, SILT AND CLAY , SOME GRAVEL AND STONE FRAGMENTS, SOME SAND, DAMP @3.0'; LITTLE GRAVEL AND STONE FRAGMENTS		2	12	62	94	SS-1	4.50	27	15	11	27	20	37	23	14	17	A-6a (4)	2000	
		3	11																
	823.1	4	12	32	100	SS-2	4.50	18	10	17	27	28	28	17	11	16	A-6a (4)	670	
HARD, BROWN, SILTY CLAY , LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, DAMP @6.0'; BROWN AND GRAY, MOIST		5	9	24	100	SS-3	4.50	-	-	-	-	-	-	-	-	15	A-6b (V)	-	
		6	8																
		7	7																
	820.1	7	10	32	100	SS-4	4.50	4	6	11	29	50	34	18	16	18	A-6b (10)	-	
			13																

EOB

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:21 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>703+47, 20' LT.</u>	EXPLORATION ID <u>B-028-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP D</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>839.3 (ft)</u> EOB: <u>9.0 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.088521, -83.659218</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (13.5")	839.3																		
LOOSE, BROWN, GRAVEL AND STONE FRAGMENTS , SOME SAND, TRACE SILT, TRACE CLAY, WET	838.1	1	8																
LOOSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, SILT, AND CLAY , MOIST	836.3	2	3	7	50	SS-1	-	64	21	6	6	3	NP	NP	NP	11	A-1-a (0)	740	
	834.8	3	5	2															
HARD, BROWN AND GRAY, SILTY CLAY , SOME STONE FRAGMENTS, LITTLE SAND, MOIST	834.8	4	3	10	100	SS-2	-	55	4	6	16	19	35	18	17	19	A-2-6 (1)	<100	
		5	3	4	15	94	SS-3	4.25	34	4	7	25	30	37	19	18	22	A-6b (7)	-
		6	5	7															
		7	7	11	25	100	SS-4	4.50	-	-	-	-	-	-	-	-	19	A-6b (V)	-
@7.5'; VERY STIFF, DAMP		8	5	7															
	830.3	9	7	8	21	100	SS-5	3.50	-	-	-	-	-	-	-	-	17	A-6b (V)	-
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:21 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

PROJECT: <u>HAN-75/CR99</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>709+49, 7' RT.</u>	EXPLORATION ID <u>B-030-0-21</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>ODOT / WILLIAMS</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>RAMP D</u>	
PID: <u>102375</u> SFN: _____	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>4/15/20</u>	ELEVATION: <u>827.2 (ft)</u> EOB: <u>7.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>2/24/21</u> END: <u>2/24/21</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>84</u>	LAT / LONG: <u>41.090142, -83.659586</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT (16")	827.2																		
DENSE, BROWN, STONE FRAGMENTS WITH SAND AND SILT , TRACE CLAY, MOIST	825.8	1																	
MEDIUM DENSE, BROWN, STONE FRAGMENTS WITH SAND, SILT, AND CLAY , MOIST	824.2	2	10	50	100	SS-1	-	57	9	10	15	9	42	32	10	18	A-2-5 (0)	3700	
@4.5'; CONTAINS BRICK/PIPE FRAGMENTS		3	13	22	100	SS-2	-	61	11	6	13	9	37	26	11	14	A-2-6 (0)	1500	
		4	9	7															
		5	2	3	13	67	SS-3	-	-	-	-	-	-	-	-	13	A-2-6 (V)	-	
VERY STIFF, BROWN, SILT AND CLAY , LITTLE SAND, TRACE GRAVEL, MOIST	821.2	6	9	6															
	819.7	7	12	19	43	100	SS-4	3.75	10	6	12	32	40	29	17	12	17	A-6a (8)	-
		EOB																	

STANDARD ODOT LOG W/ SULFATE (8.5 X 11) - OH DOT.GDT - 4/30/21 10:21 - X:\GINT\PROJECTS\600827.GPJ

NOTES: LAT./LONG. AND ELEV. FROM CONSULTANT SURVEY. HOLE DRY UPON COMPLETION.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH SOIL CUTTINGS

CONE PENETRATION TEST SOUNDINGS REPORT

Office of Geotechnical Engineering Division of Engineering

Project: HAN-IR75-CR99

PID: 102375

Date: April 29, 2021

Number of Soundings: 4

Equipment: A.P. van den Berg, 23 Ton Crawler, Hyson 200kN

Sounding ID	Completion Date	Probe SN	Calibration Date	Elevation	Latitude	Longitude	Surface Material	Depth (ft.)
C-007-1-21	3/9/2021	090304	8/19/2020	826.13	41.088093	-83.661145	Off road	63.87
C-015-1-21	3/9/2021	200723	10/12/2020	830.11	41.087679	-83.660307	Off road	57.71
C-016-0-21	3/10/2021	130510	11/26/2019	828.02	41.087694	-83.659868	Asphalt (18")	74.95
C-017-1-21	3/9/2021	130510	11/26/2019	830.37	41.087665	-83.659431	Off road	71.92

Project Information

Four soundings were completed for this project. Sounding C-016-0-21 was completed within IR75 on the inside shoulder through a pre-cored hole. The other soundings were completed off road and started at ground surface. The static water levels reported on the attached logs were determined by dissipation tests. The latitude, longitude, and elevation values for C-007-1-21 and C-016-1-21 are from consultant survey grade instruments. The latitude and longitude values for C-015-1-21 and C-017-1-21 are from a Trimble Geo7X handheld GPS with an external Trimble Tornado antenna. The elevation values for C-015-1-21 and C-017-1-21 are from the consultant project digital elevation model.

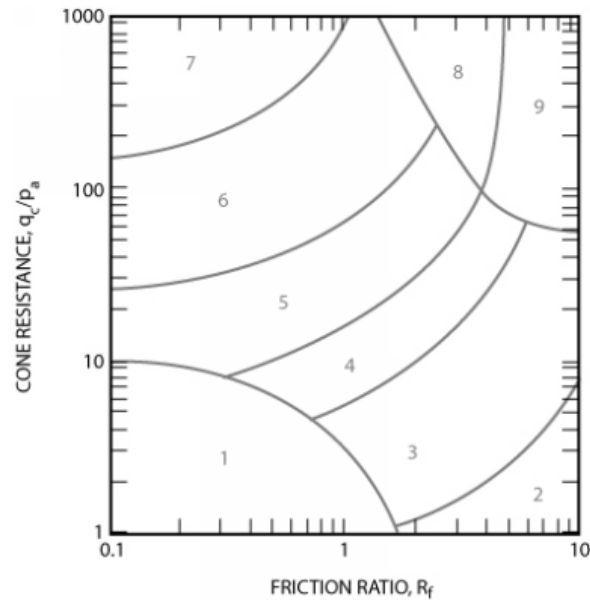
The raw CPT data is available upon request. The included CPT logs are for informational purposes only. The CPT logs have been filtered for negative values, corrected for inclination at depth, and filtered for data spikes. Additionally, for each sounding, the measured values of q_c and f_s were shifted relative to one another with a cross correlation function.

Cone Penetration Test Data and Interpretation

These Cone Penetration Test (CPT) Soundings follow ASTM D 5778 and were made by ordinary and conventional methods and with care deemed adequate for the Department's design purposes. Since subsurface conditions outside each CPT sounding are unknown, and soil, rock, and water conditions cannot be relied upon to be consistent or uniform, no warrant is made that conditions adjacent to this sounding will necessarily be the same as or similar to those shown in this report.

The CPT data collected are presented as graphical plots in the report, generated by CPeT-IT software. The plots include interpreted Soil Behavior Type (SBT) based on the method described by Robertson (2010). The interpretations are presented only as a guide for geotechnical use and should be carefully reviewed.

The department does not warrant the correctness or the applicability of any of the geotechnical parameters interpreted by the software and does not assume any liability for use of the results in any design or review. The user should be fully aware of the techniques and limitations of any method used in the software. Furthermore, the Department will not be responsible for an interpretations, assumptions, projections, or interpolations made by the contractor, or other users of this report. While the Department believes that the information as to the condition and materials reported is accurate, it does not warrant that the information is necessarily complete. Water pressure measurements and subsequent interpreted water levels shown in this report should be used with discretion since they represent dynamic conditions. Dynamic pore water pressure measurements may deviate substantially from hydrostatic conditions, especially in cohesive soils.



<i>Zone</i>	<i>Soil Behavior Type</i>
1	<i>Sensitive, fine grained</i>
2	<i>Organic soils - clay</i>
3	<i>Clay - silty clay to clay</i>
4	<i>Silt mixtures - clayey silt to silty clay</i>
5	<i>Sand mixtures - silty sand to sandy silt</i>
6	<i>Sands - clean sand to silty sand</i>
7	<i>Gravelly sand to dense sand</i>
8	<i>Very stiff sand to clayey sand*</i>
9	<i>Very stiff fine grained*</i>

** Heavily overconsolidated or cemented*

Non-normalized CPT Soil Behavior Type (SBT) chart

Robertson, P.K. and Cabal, K.L, 2016. *Guide to Cone Penetration Testing for Geotechnical Engineering, 6th Edition*. Signal Hill, California: 34.

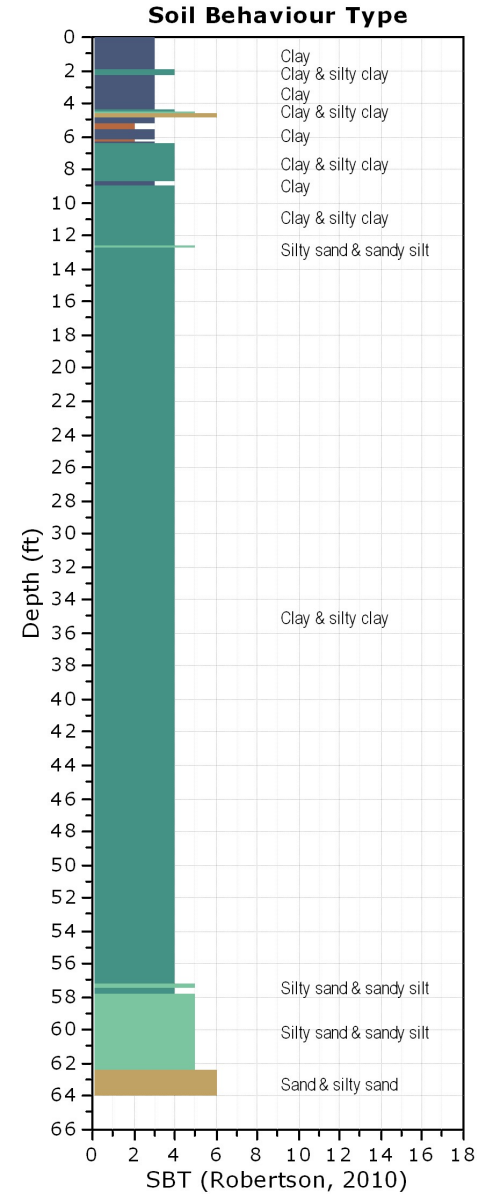
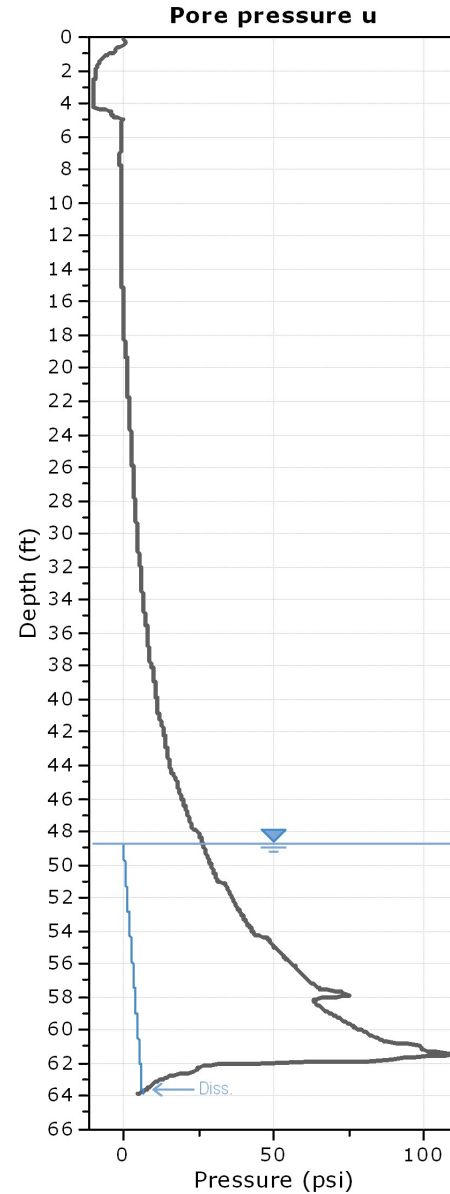
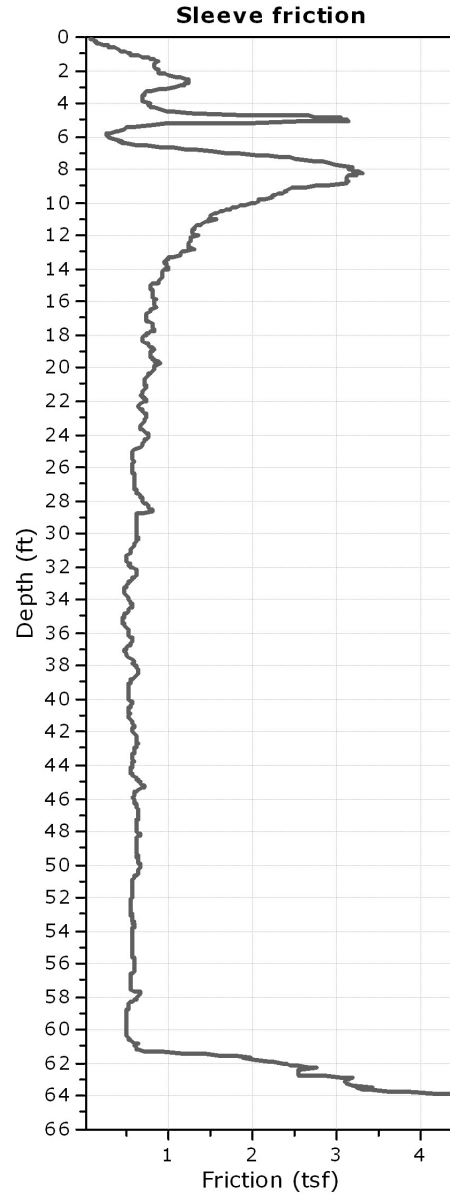
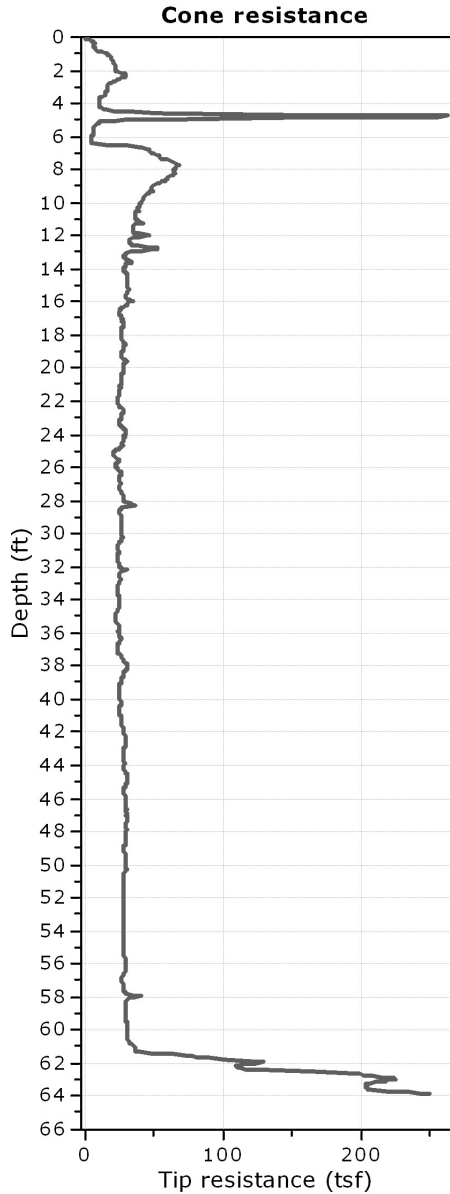
<http://www.greggdrilling.com/wp-content/uploads/2017/07/CPT-Guide-6th-Edition-2016.pdf>

Accessed May 21, 2019.



Project: HAN-IR75-CR99

Location: Hancock County



Dissipation Tests Results

Dissipation tests

Dissipation tests consists of stopping the piezocone penetration and observing porepressures (u) with elapsed time (t). The data are automatic recorded by the field computer and should take place until a minimum of 50% dissipation.

The porepressures are plotted as a function of square root of (t). The graphical technique suggested by Robertson and Campanella (1989), yields a value for t_{50} , which corresponds to the time for 50% consolidation.

The value of the coefficient of consolidation in the radial or horizontal direction c_h was then calculated by Houlsby and Teh's (1988) theory using the following equation:

$$c_h = \frac{T \times r^2 \times I_r^{0.5}}{t_{50}}$$

where:

T: time factor given by Houlsby and Teh's (1988) theory corresponding to the porepressure position
r: piezocone radius
 I_r : stiffness index, equal to shear modulus G divided by the undrained strength of clay (S_u).
 t_{50} : time corresponding to 50% consolidation

Permeability estimates based on dissipation test

The dissipation of pore pressures during a CPTu dissipation test is controlled by the coefficient of consolidation in the horizontal direction (c_h) which is influenced by a combination of the soil permeability (k_h) and compressibility (M), as defined by the following:

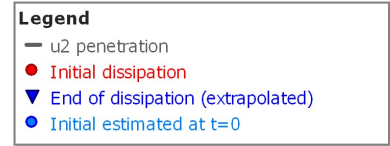
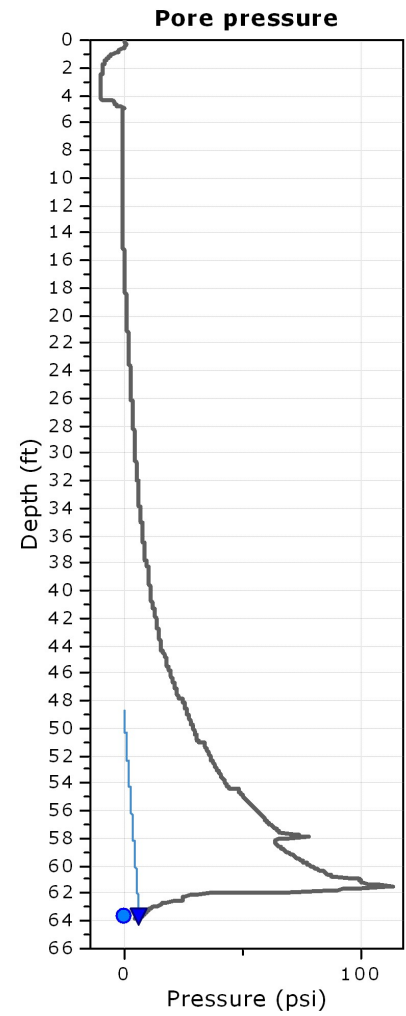
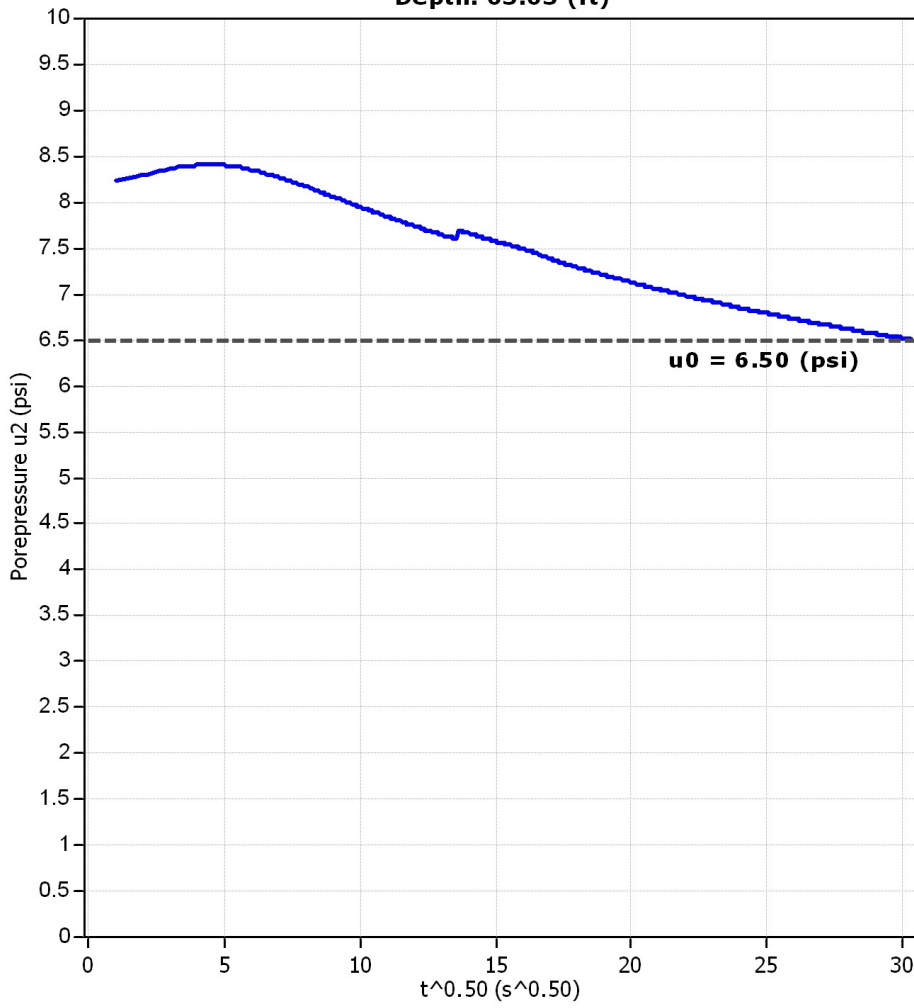
$$k_h = c_h \times \gamma_w / M$$

where: M is the 1-D constrained modulus and γ_w is the unit weight of water, in compatible units.

Tabular results

CPTU Borehole	Depth (ft)	$(t_{50})^{0.50}$	t_{50} (s)	t_{50} (years)	G/ S_u	c_h (ft ² /s)	c_h (ft ² /year)	M (tsf)	k_h (ft/s)
C-007-1-21	63.63	0.0	0	0.00E+000	100.00	0.00E+000	0	2212.15	-1.00E+004

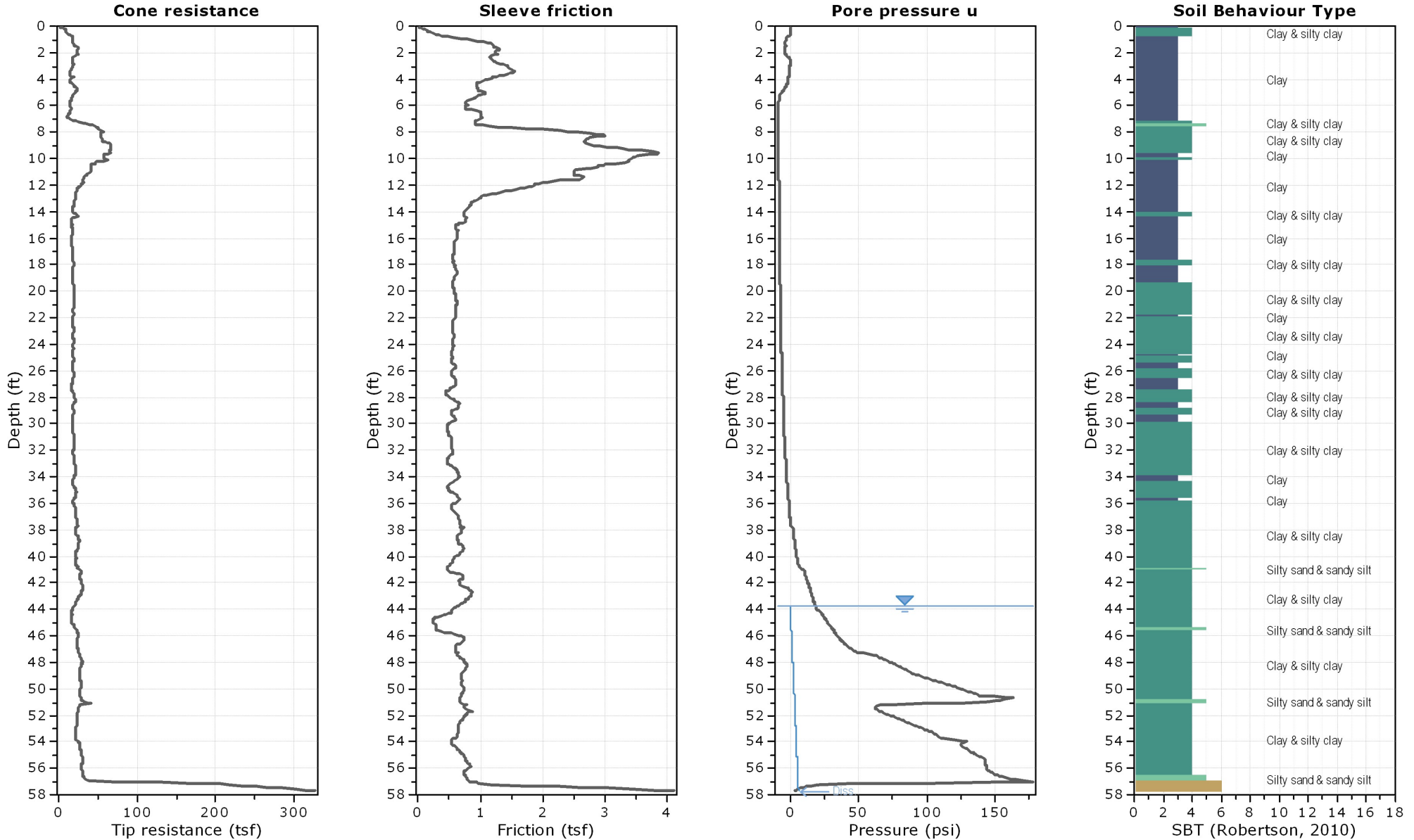
Piezocone Dissipation Test: C-007-1-21
Depth: 63.63 (ft)





Project: HAN-IR75-CR99

Location: Hancock County



Dissipation Tests Results

Dissipation tests

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The value of the coefficient of consolidation in the radial or horizontal direction c_h was then calculated by Houlsby and Teh's (1988) theory using the following equation:

$$c_h = \frac{T \times r^2 \times I_r^{0.5}}{t_{50}}$$

where:

T: time factor given by Houlsby and Teh's (1988) theory corresponding to the porepressure position
r: piezocone radius
 I_r : stiffness index, equal to shear modulus G divided by the undrained strength of clay (S_u).
 t_{50} : time corresponding to 50% consolidation

Permeability estimates based on dissipation test

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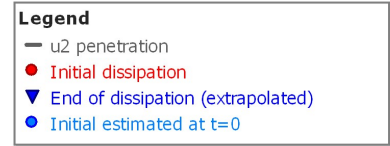
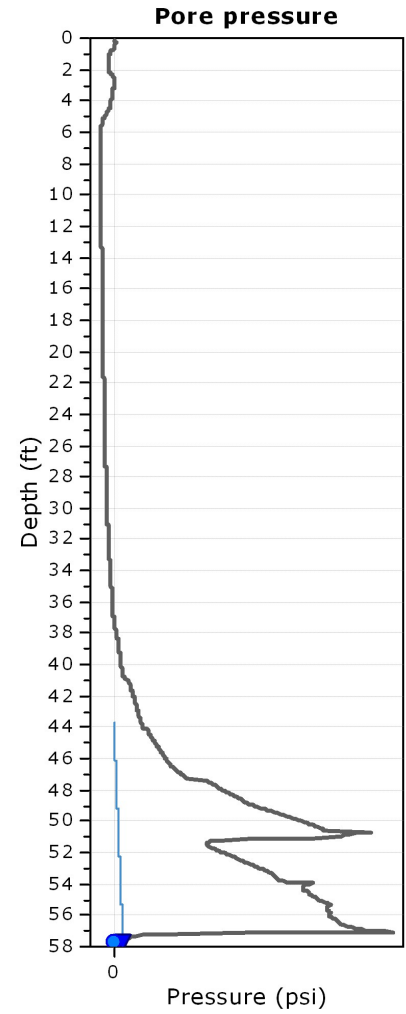
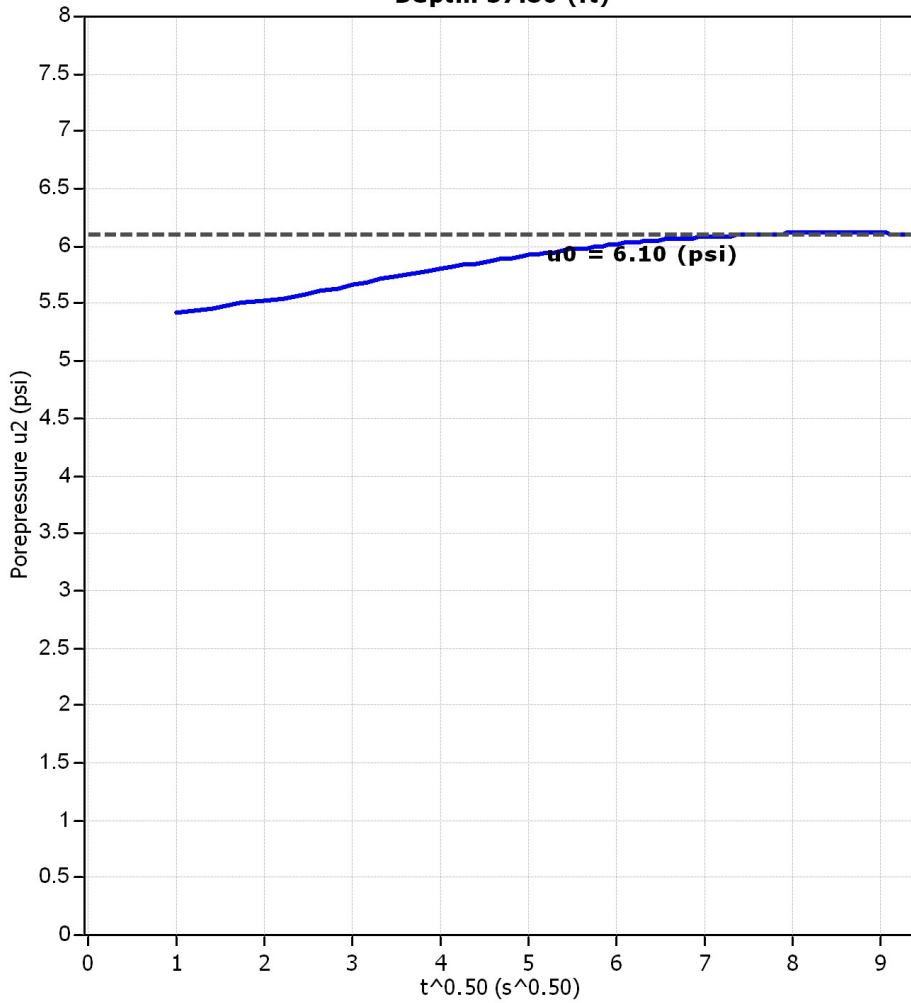
$$k_h = c_h \times \gamma_w / M$$

where: M is the 1-D constrained modulus and γ_w is the unit weight of water, in compatible units.

Tabular results

CPTU Borehole	Depth (ft)	$(t_{50})^{0.50}$	t_{50} (s)	t_{50} (years)	G/ S_u	c_h (ft ² /s)	c_h (ft ² /year)	M (tsf)	k_h (ft/s)
C-015-1-21	57.80	0.0	0	0.00E+000	100.00	0.00E+000	0	2420.88	-1.00E+004

Piezocone Dissipation Test: C-015-1-21
Depth: 57.80 (ft)





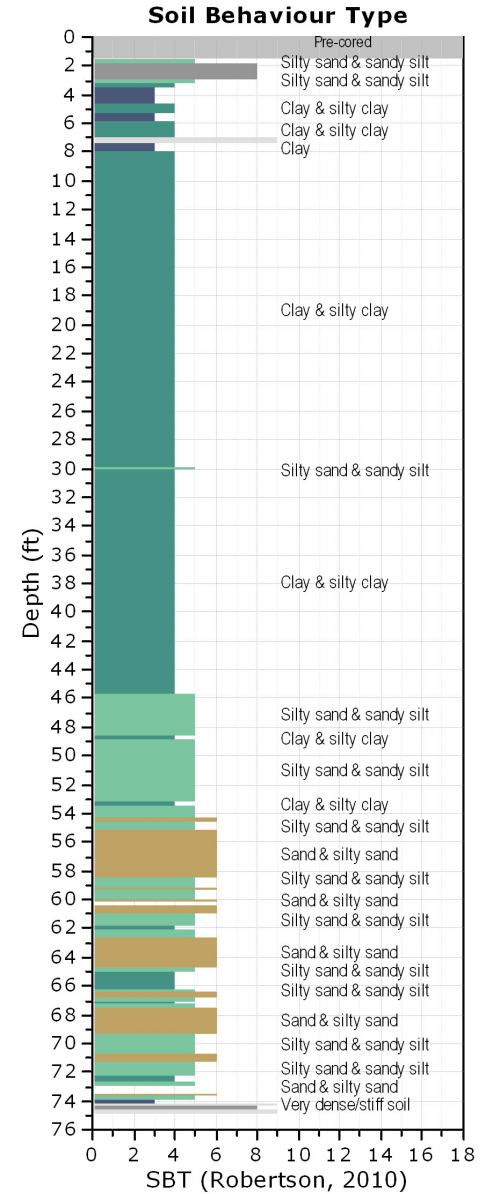
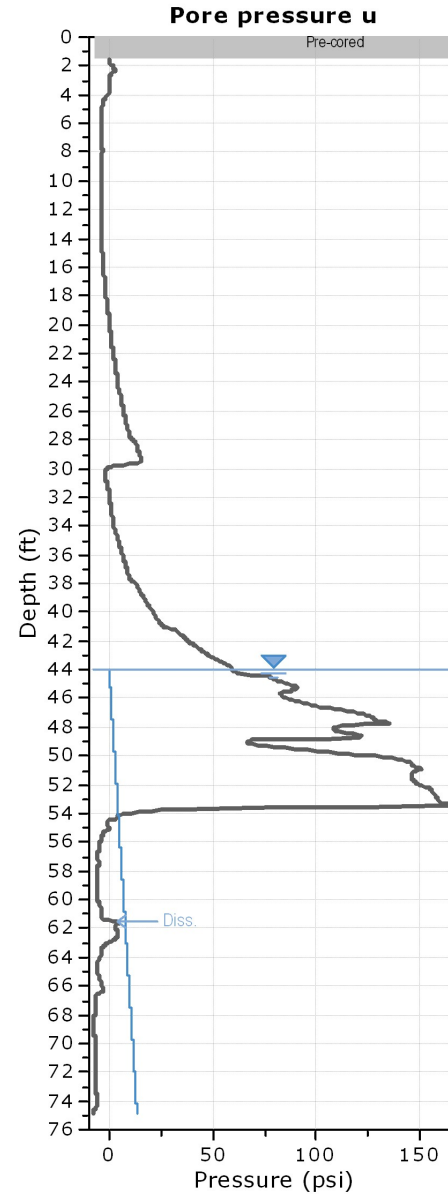
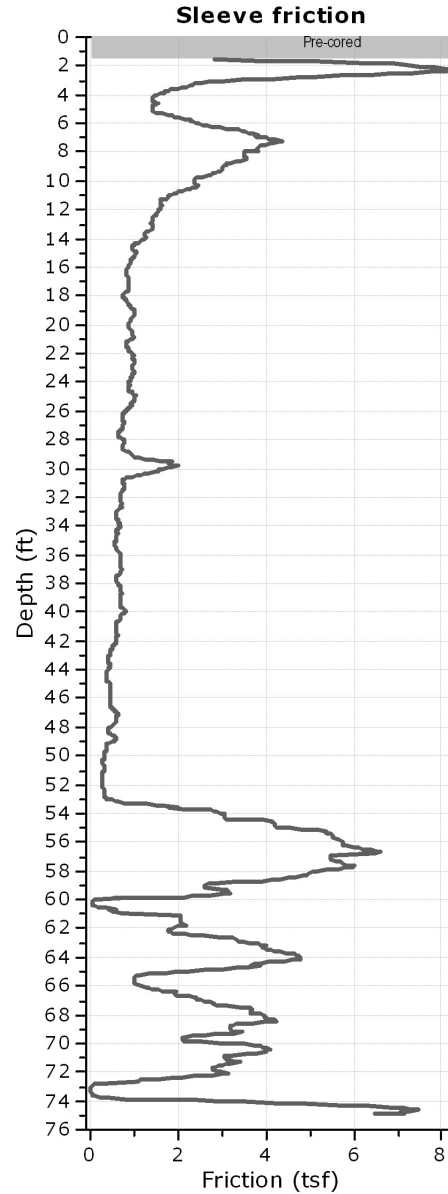
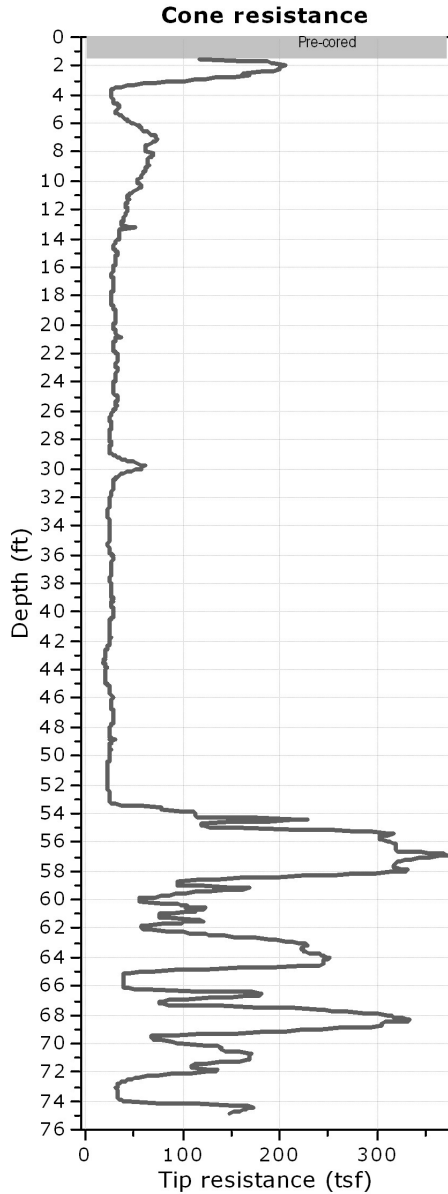
Project: HAN-IR75-CR99

Location: Hancock County

Total depth: 74.95 ft, Date: 3/10/2021

Surface Elevation: 828.02 ft

Coords: lat 41.087694° lon -83.659868°



Dissipation Tests Results

Dissipation tests

Dissipation tests consists of stopping the piezocone penetration and observing porepressures (u) with elapsed time (t). The data are automatic recorded by the field computer and should take place until a minimum of 50% dissipation.

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$$c_h = \frac{T \times r^2 \times I_r^{0.5}}{t_{50}}$$

where:

T: time factor given by Houlsby and Teh's (1988) theory corresponding to the porepressure position
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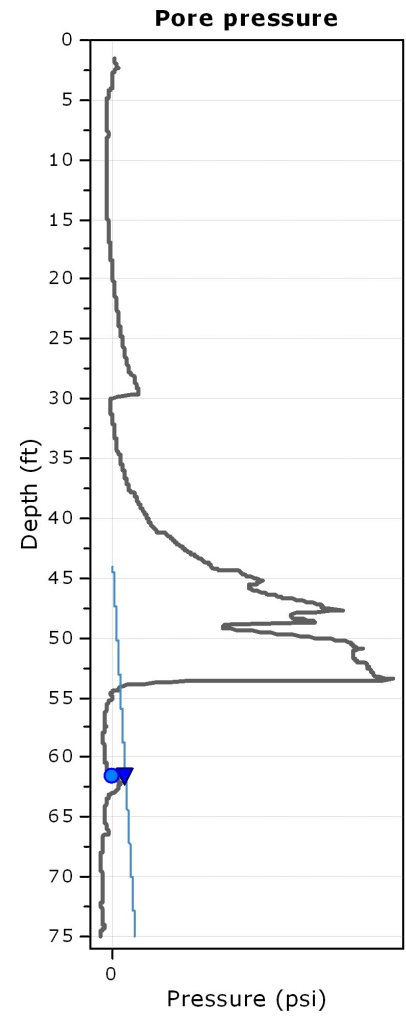
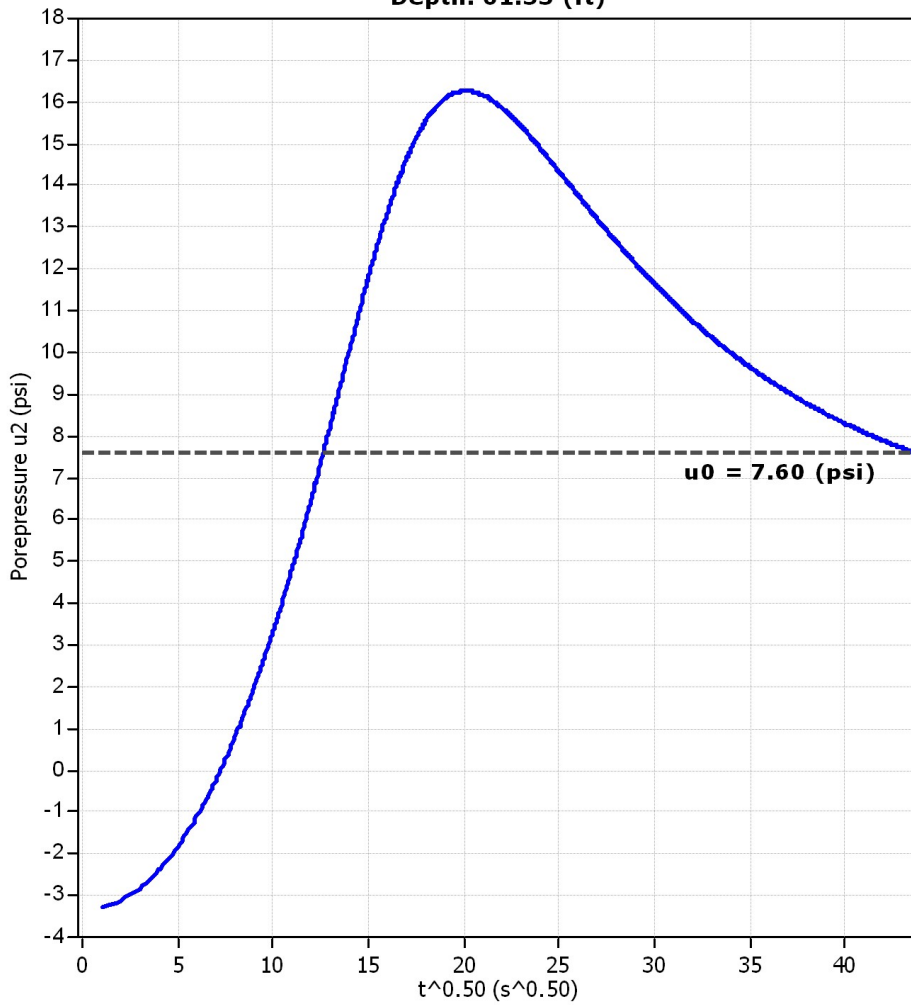
$$k_h = c_h \times \gamma_w / M$$

where: M is the 1-D constrained modulus and γ_w is the unit weight of water, in compatible units.

Tabular results

CPTU Borehole	Depth (ft)	$(t_{50})^{0.50}$	t_{50} (s)	t_{50} (years)	G/ S_u	c_h (ft ² /s)	c_h (ft ² /year)	M (tsf)	k_h (ft/s)
C-016-0-21	61.53	0.0	0	0.00E+000	100.00	0.00E+000	0	1527.18	-1.00E+004

Piezocone Dissipation Test: C-016-0-21
Depth: 61.53 (ft)



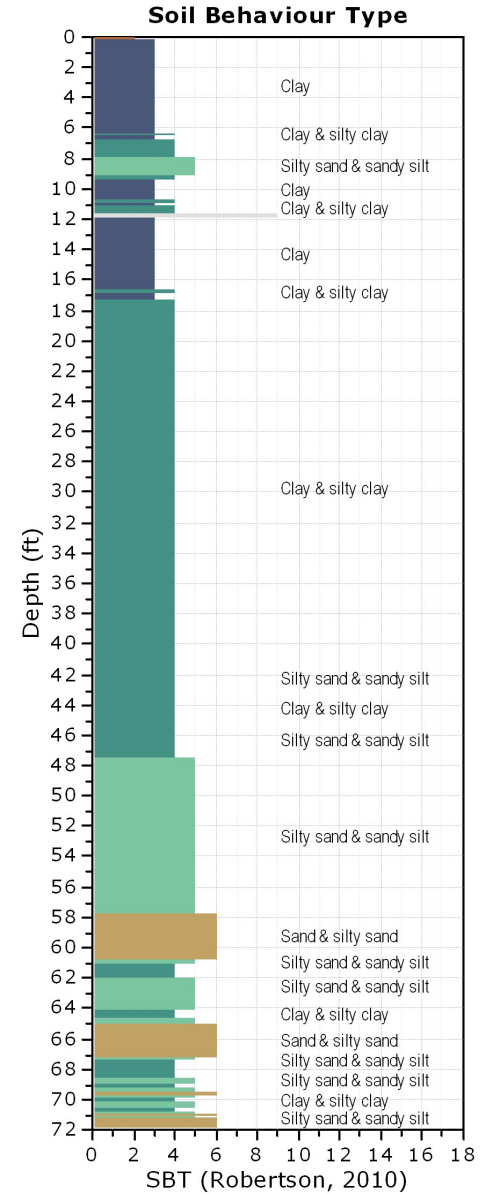
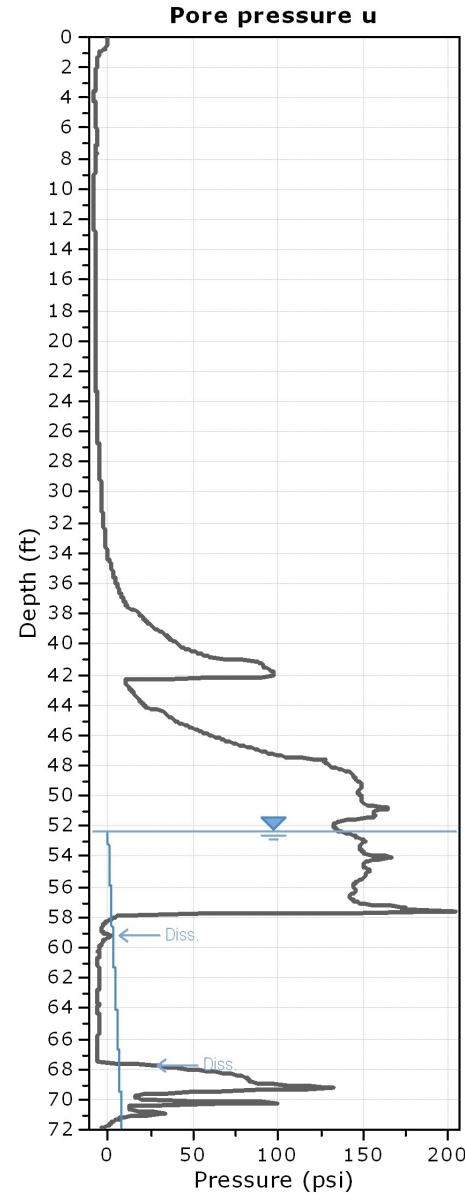
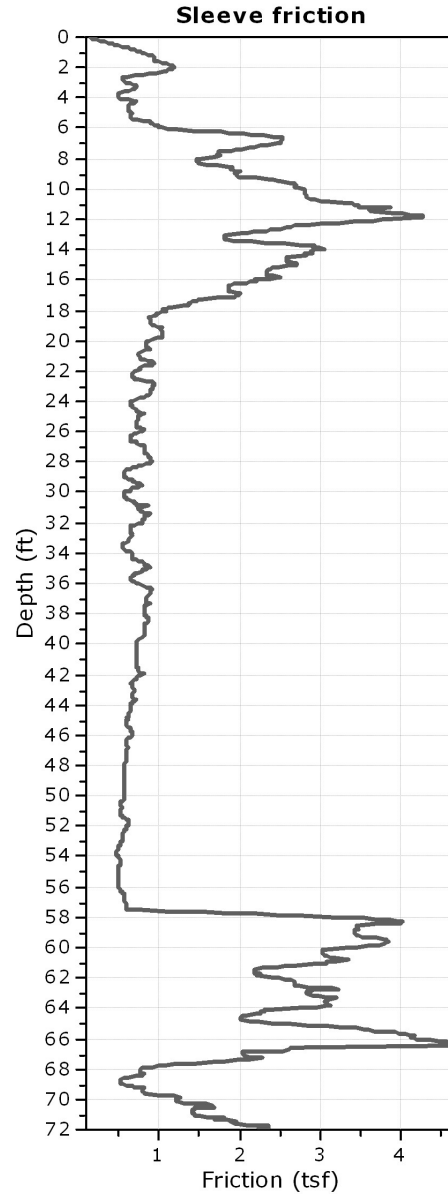
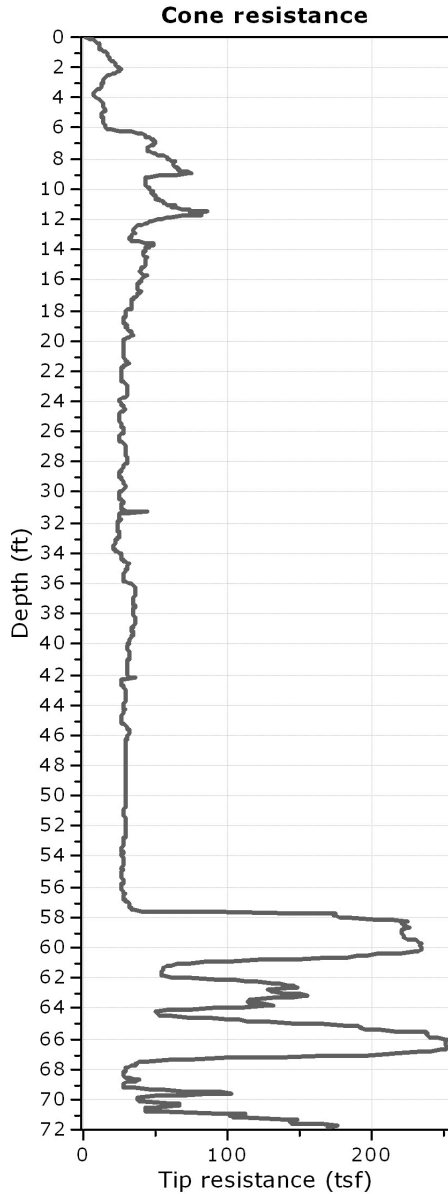
Legend

- u_2 penetration
- Initial dissipation
- ▼ End of dissipation (extrapolated)
- Initial estimated at $t=0$



Project: HAN-IR75-CR99

Location: Hancock County



Dissipation Tests Results

Dissipation tests

Dissipation tests consists of stopping the piezocone penetration and observing porepressures (u) with elapsed time (t). The data are automatic recorded by the field computer and should take place until a minimum of 50% dissipation.

The porepressures are plotted as a function of square root of (t). The graphical technique suggested by Robertson and Campanella (1989), yields a value for t_{50} , which corresponds to the time for 50% consolidation.

The value of the coefficient of consolidation in the radial or horizontal direction c_h was then calculated by Houlsby and Teh's (1988) theory using the following equation:

$$c_h = \frac{T \times r^2 \times I_r^{0.5}}{t_{50}}$$

where:

T: time factor given by Houlsby and Teh's (1988) theory corresponding to the porepressure position
r: piezocone radius
 I_r : stiffness index, equal to shear modulus G divided by the undrained strength of clay (S_u).
 t_{50} : time corresponding to 50% consolidation

Permeability estimates based on dissipation test

The dissipation of pore pressures during a CPTu dissipation test is controlled by the coefficient of consolidation in the horizontal direction (c_h) which is influenced by a combination of the soil permeability (k_h) and compressibility (M), as defined by the following:

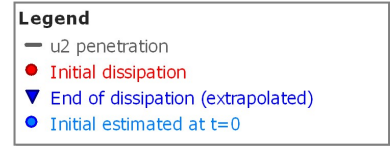
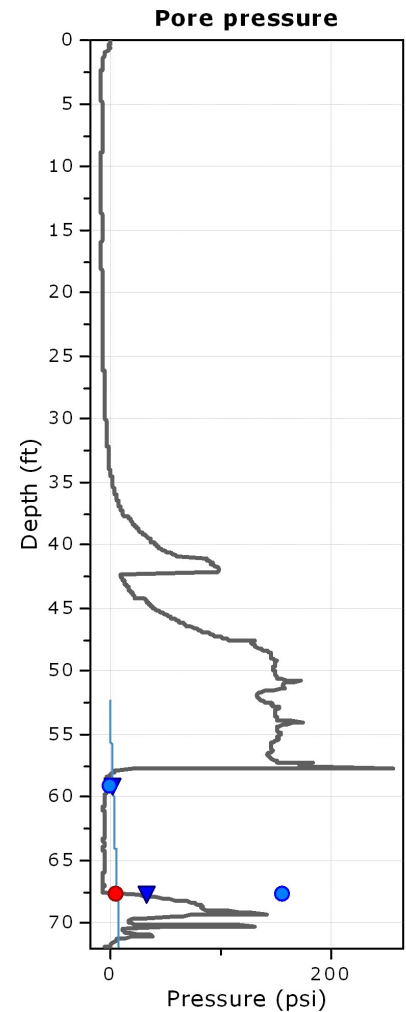
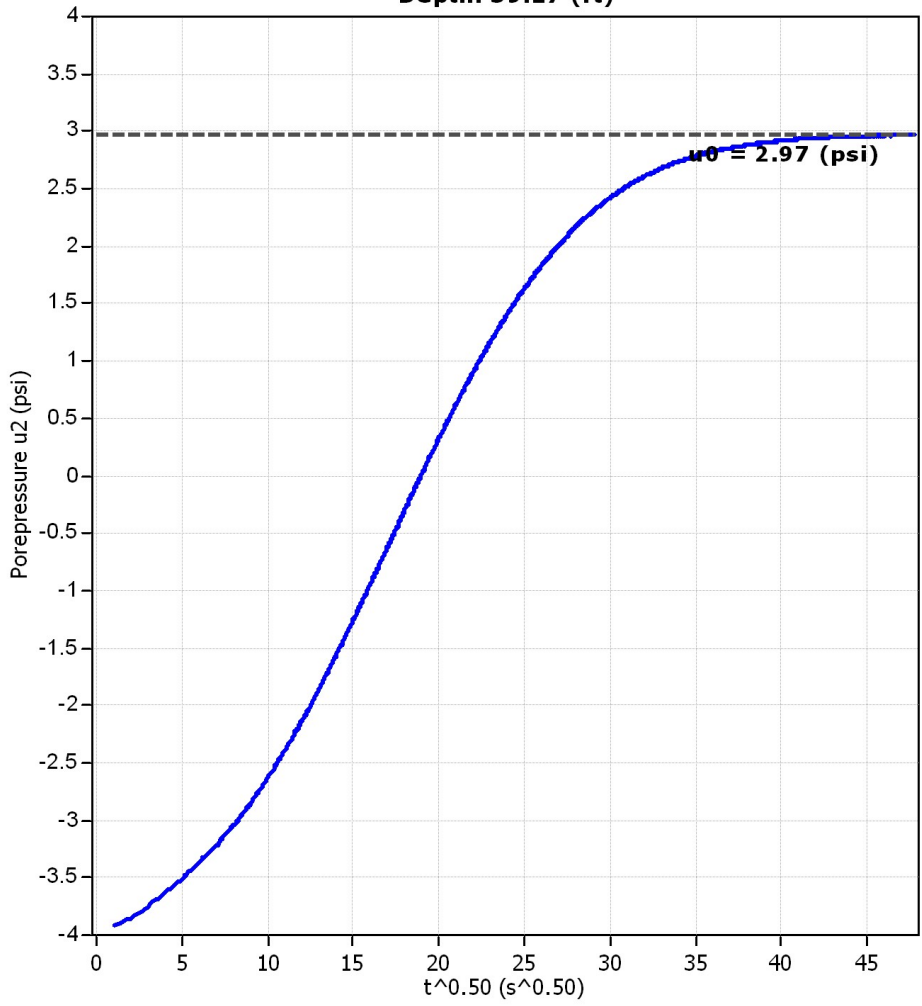
$$k_h = c_h \times \gamma_w / M$$

where: M is the 1-D constrained modulus and γ_w is the unit weight of water, in compatible units.

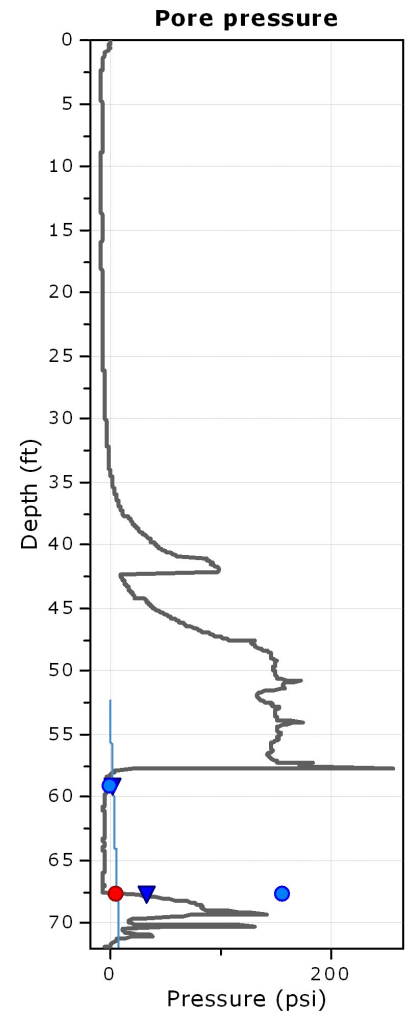
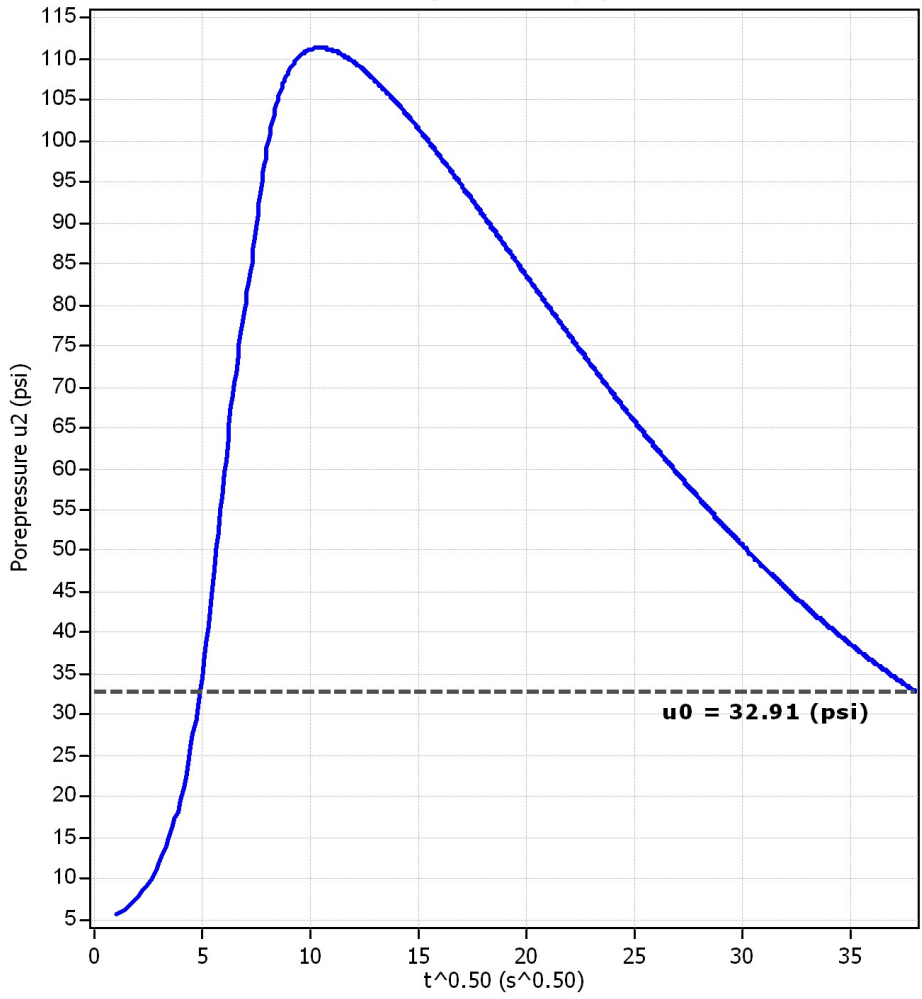
Tabular results

CPTU Borehole	Depth (ft)	$(t_{50})^{0.50}$	t_{50} (s)	t_{50} (years)	G/ S_u	c_h (ft ² /s)	c_h (ft ² /year)	M (tsf)	k_h (ft/s)
C-017-1-21	59.17	0.0	0	0.00E+000	100.00	0.00E+000	0	2207.69	-1.00E+004
C-017-1-21	67.76	17.0	288	9.12E-006	471583.56	3.01E-003	94797	441.95	2.12E-007

Piezcone Dissipation Test: C-017-1-21
Depth: 59.17 (ft)



Piezcone Dissipation Test: C-017-1-21
Depth: 67.76 (ft)



Legend

- u_2 penetration
- Initial dissipation
- ▼ End of dissipation (extrapolated)
- Initial estimated at $t=0$



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

UNCONFINED COMPRESSION TEST AASHTO T - 208

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

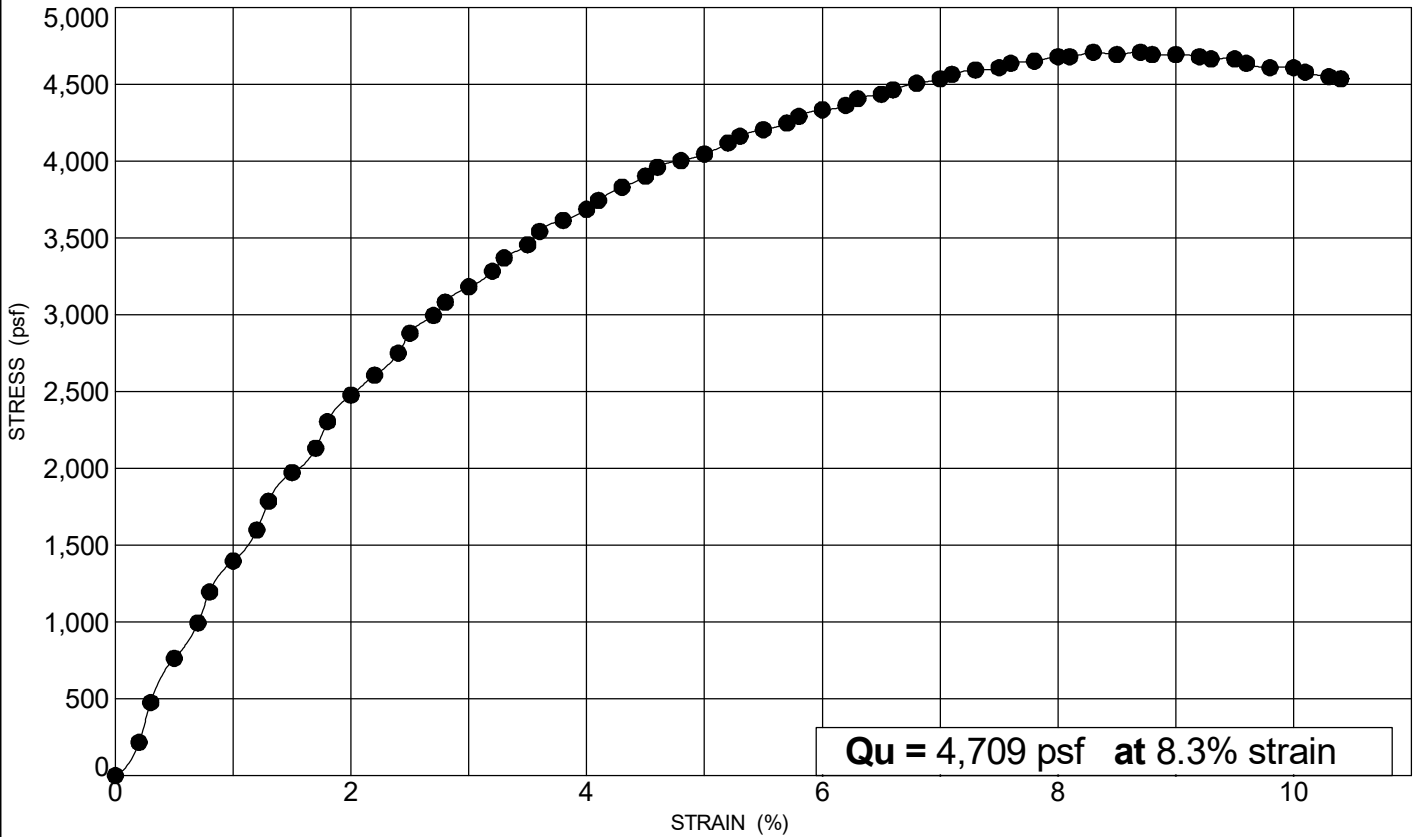
SAMPLE IDENTIFICATION

BORING ID: B-007-2-21

SAMPLE ID: ST-3

STATION: 81+22, 78' RT.

DEPTH: 7.3 - 7.8 feet



Qu = 4,709 psf at 8.3% strain

OH-DOT UNCONFINED COMPRESSION - OH DOT.GDT - 4/27/21 14:02 - X:\GINT\PROJECTS\600827.GPJ

SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

HEIGHT: 5.74 inches

DIAMETER: 2.86 inches

WET UNIT WT: 132.46 pcf

DRY UNIT WT: 111.29 pcf

TESTED BY: AW 3/5/2021

CLASSIFICATION RESULTS

GR	GRADATION (%)			
	CS	FS	SI	CL
8	6	12	31	43
ATTERBERG LIMITS			MOISTURE	
LL	PL	PI	WC	
31	18	13	18	

ODOT CLASS: A-6a HP (tsf): 3.00

DESCRIPTION: Very Stiff, Brown, SILT AND CLAY, Little Sand, Trace Gravel, Moist



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

**UNCONFINED COMPRESSION TEST
AASHTO T - 208**

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

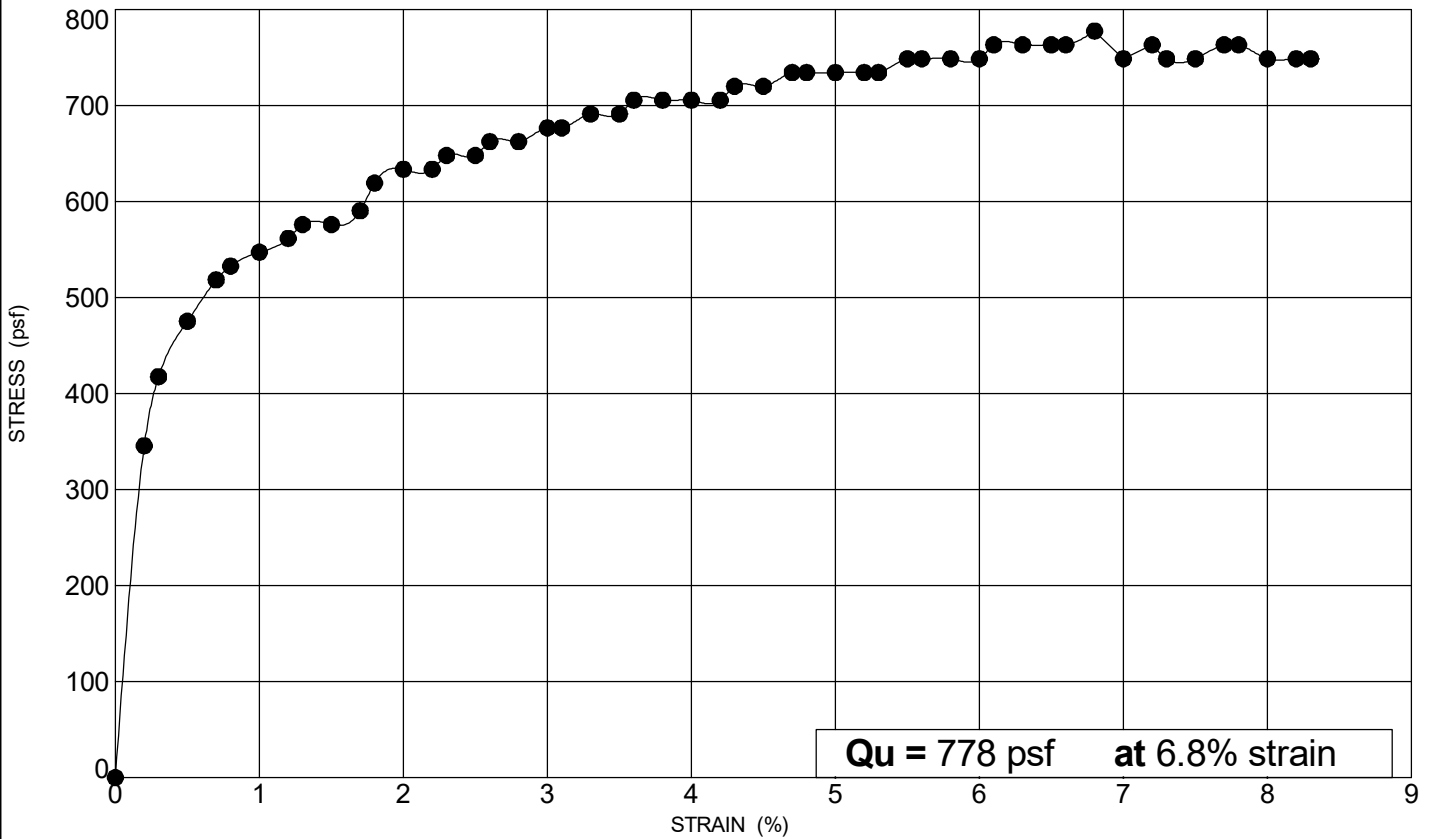
SAMPLE IDENTIFICATION

BORING ID: B-008-2-21

SAMPLE ID: ST-3a

STATION: 189+67, 57' RT.

DEPTH: 6.25 - 6.75 feet



SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

HEIGHT: 5.75 inches

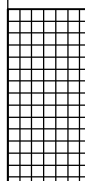
DIAMETER: 2.87 inches

WET UNIT WT: 122.19 pcf

DRY UNIT WT: 95.61 pcf

TESTED BY: AW 3/5/2021

CLASSIFICATION RESULTS



GRADATION (%)				
GR	CS	FS	SI	CL
0	1	2	38	59
ATTERBERG LIMITS			MOISTURE	
LL	PL	PI	WC	
46	20	26	23	

ODOT CLASS: A-7-6 HP (tsf): 4.5+

DESCRIPTION: Soft, Brown, CLAY, "and" Silt, Trace Sand, Damp



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

UNCONFINED COMPRESSION TEST AASHTO T - 208

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

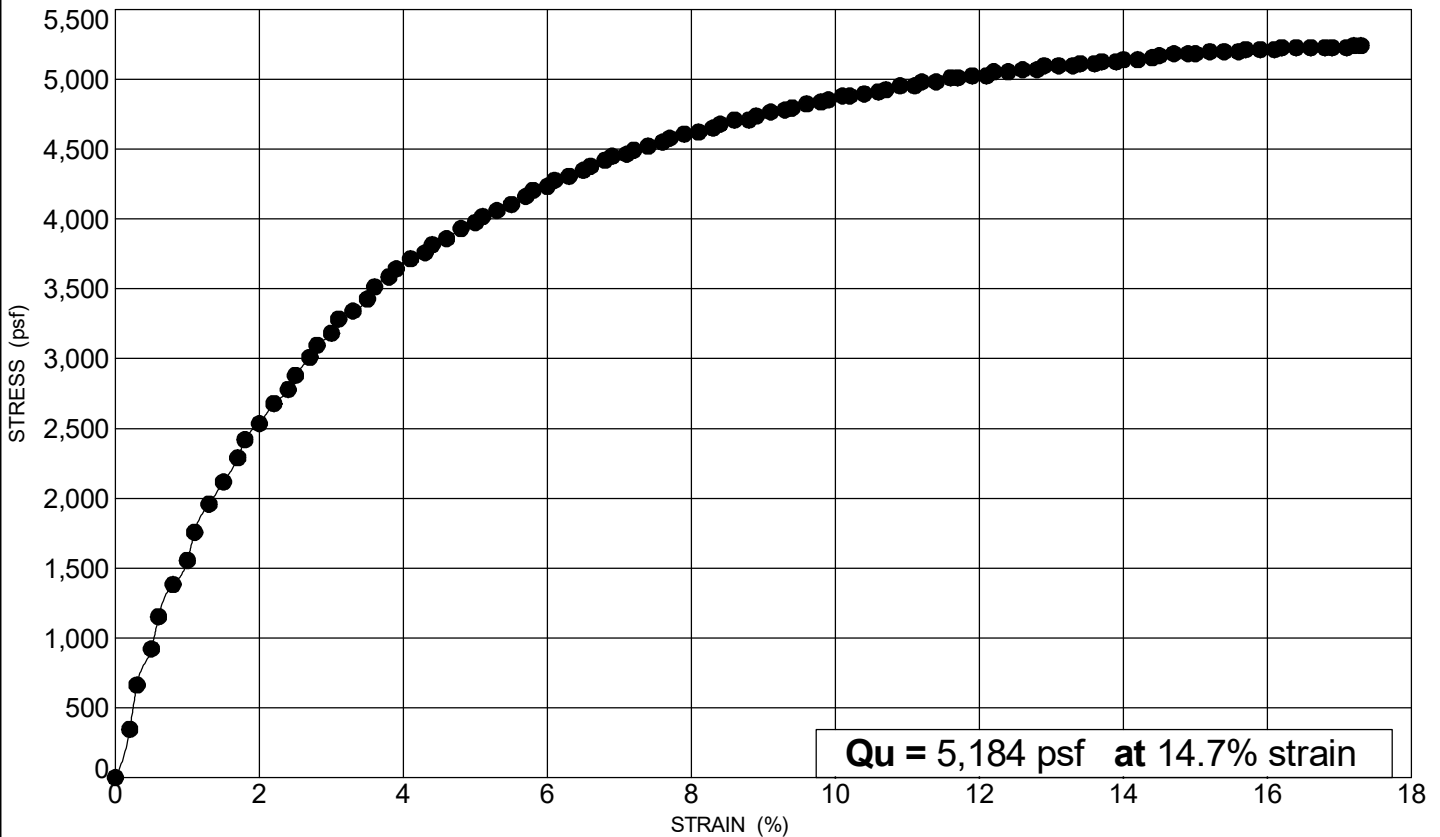
SAMPLE IDENTIFICATION

BORING ID: B-015-0-21

SAMPLE ID: ST-10

STATION: 283+82, 4' RT.

DEPTH: 22.0 - 22.5 feet



OH DOT UNCONFINED COMPRESSION - OH DOT.GDT - 4/27/21 14:06 - X:\GINT\PROJECTS\600827.GPJ

SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

HEIGHT: 5.77 inches

DIAMETER: 2.86 inches

WET UNIT WT: 133.15 pcf

DRY UNIT WT: 112.55 pcf

TESTED BY: AW 2/22/2021

CLASSIFICATION RESULTS

GR	GRADATION (%)			
	CS	FS	SI	CL
5	5	11	31	48
LL		PI		WC
ATTERBERG LIMITS		MOISTURE		
29	15	14		19

ODOT CLASS: A-6a HP (tsf): 2.75

DESCRIPTION: Very Stiff, Gray, SILT AND CLAY, Little Sand, Trace Gravel, Moist



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

UNCONFINED COMPRESSION TEST AASHTO T - 208

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

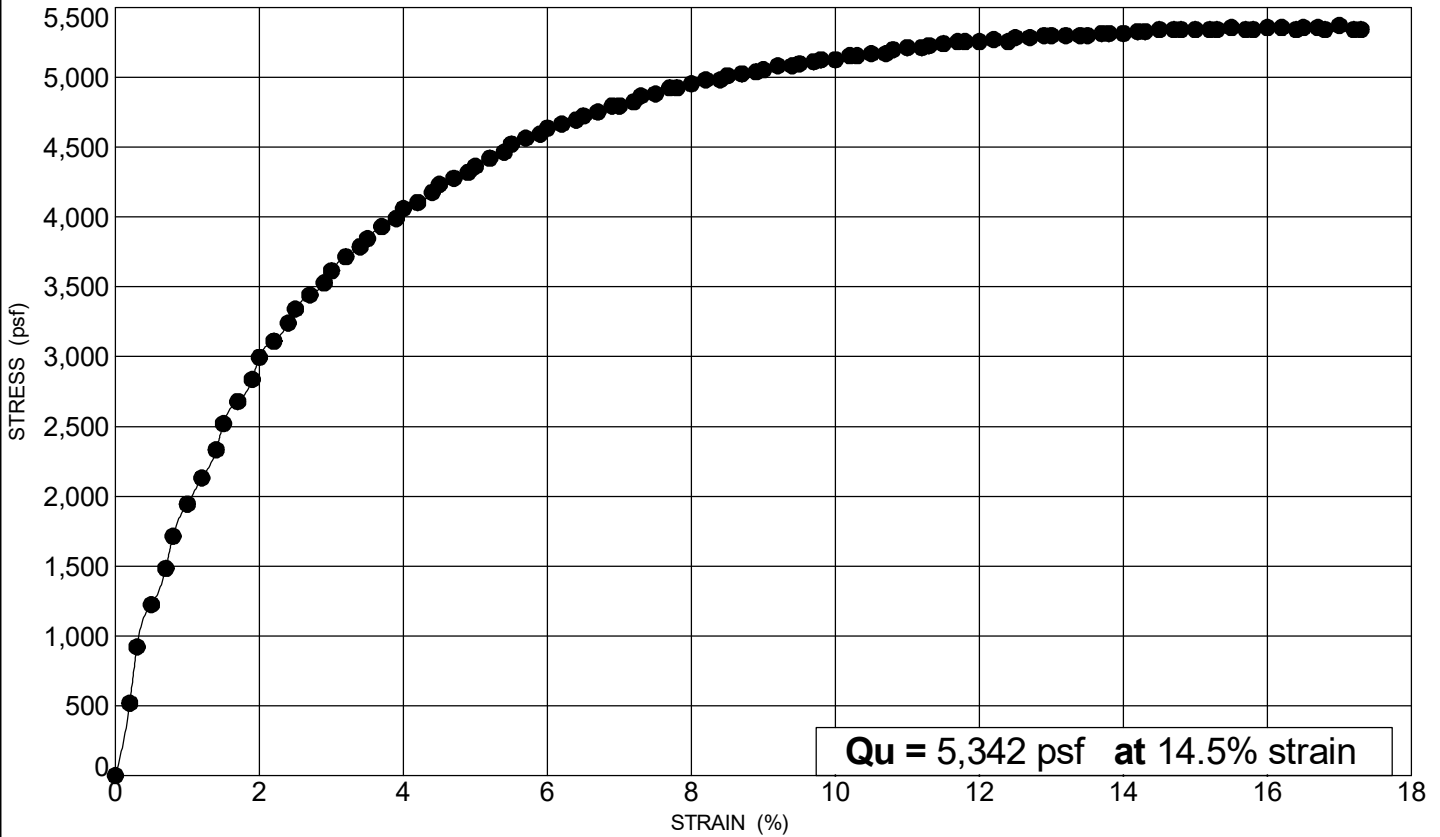
SAMPLE IDENTIFICATION

BORING ID: B-015-0-21

SAMPLE ID: ST-13

STATION: 283+82, 4' RT.

DEPTH: 29.5 - 30.0 feet



OHDOT UNCONFINED COMPRESSION - OH DOT.GDT - 4/27/21 14:07 - X:\GINT\PROJECTS\600827.GPJ

SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

HEIGHT: 5.75 inches

DIAMETER: 2.85 inches

WET UNIT WT: 134.19 pcf

DRY UNIT WT: 113.07 pcf

TESTED BY: AW 2/22/2021

CLASSIFICATION RESULTS

GR	GRADATION (%)			
	CS	FS	SI	CL
6	5	10	30	49
LL		PI		WC
ATTERBERG LIMITS		MOISTURE		
28	16	12		19

ODOT CLASS: A-6a HP (tsf): 2.50

DESCRIPTION: Very Stiff, Gray, SILT AND CLAY, Little Sand, Trace Gravel, Moist



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

UNCONFINED COMPRESSION TEST
AASHTO T - 208

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

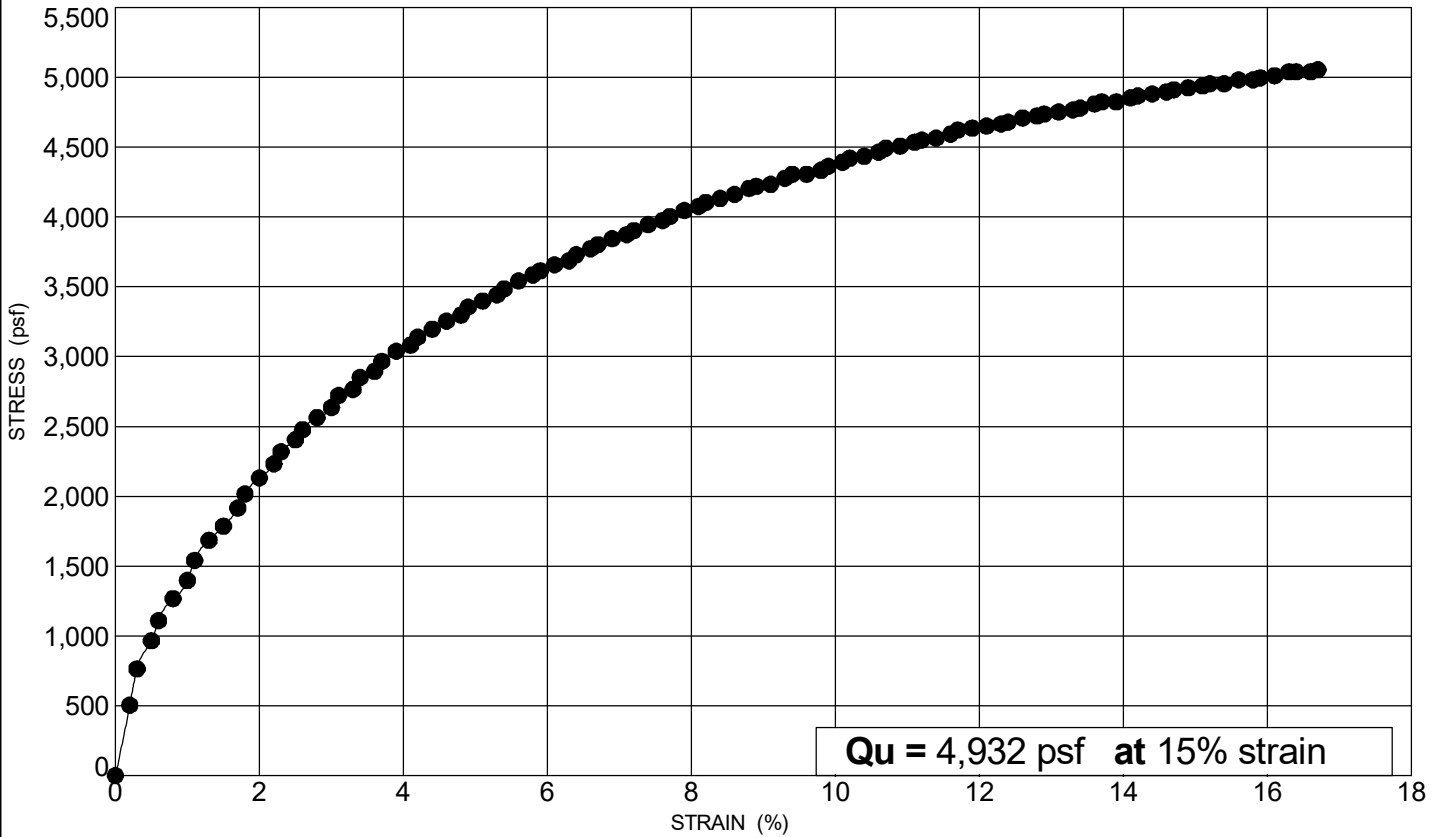
SAMPLE IDENTIFICATION

BORING ID: B-020-0-21

SAMPLE ID: ST-4

STATION: 412+47, 19' RT.

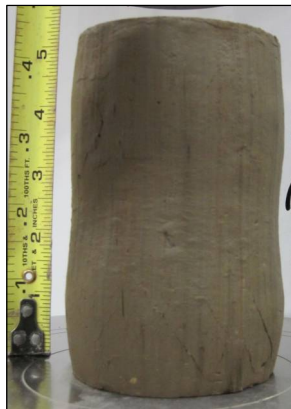
DEPTH: 9.7 - 10.2 feet



SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

HEIGHT: 5.75 inches

DIAMETER: 2.86 inches

WET UNIT WT: 134.79 pcf

DRY UNIT WT: 114.48 pcf

TESTED BY: AW 3/5/2021

CLASSIFICATION RESULTS

GRADATION (%)				
GR	CS	FS	SI	CL
4	6	12	32	46
ATTERBERG LIMITS			MOISTURE	
LL	PL	PI	WC	
28	16	12	28	

ODOT CLASS: A-6a HP (tsf): 2.00

DESCRIPTION: Very Stiff, Gray, SILT AND CLAY, Little Sand, Trace Gravel, Wet



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

UNCONFINED COMPRESSION TEST AASHTO T - 208

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

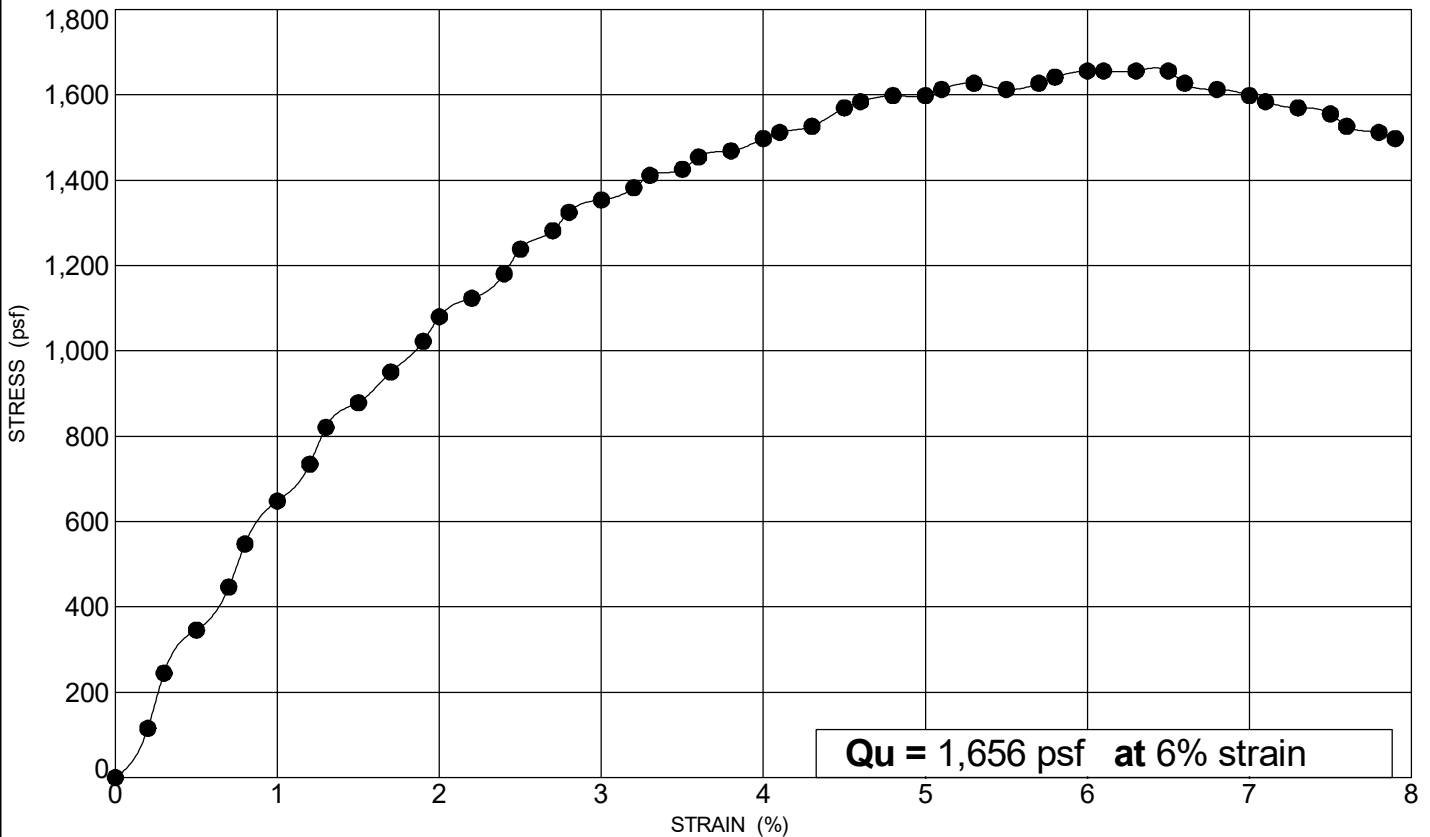
SAMPLE IDENTIFICATION

BORING ID: B-023-0-21

SAMPLE ID: ST-3

STATION: 511+92, 23' RT.

DEPTH: 6.9 - 7.4 feet



OH-DOT UNCONFINED COMPRESSION - OH DOT.GDT - 4/27/21 14:10 - X:\GINT\PROJECTS\600827.GPJ

SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

HEIGHT: 5.75 inches

DIAMETER: 2.85 inches

WET UNIT WT: 129.06 pcf

DRY UNIT WT: 106.19 pcf

TESTED BY: AW 3/5/2021

CLASSIFICATION RESULTS

GR	GRADATION (%)			
	CS	FS	SI	CL
1	7	25	38	29
ATTERBERG LIMITS		MOISTURE		
LL	PL	PI	WC	
26	14	12	18	

ODOT CLASS: A-6a HP (tsf): 4.00

DESCRIPTION: Medium Stiff, Grayish Brown, SILT AND CLAY, Some Sand, Trace Gravel, Moist



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST AASHTO T - 296

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

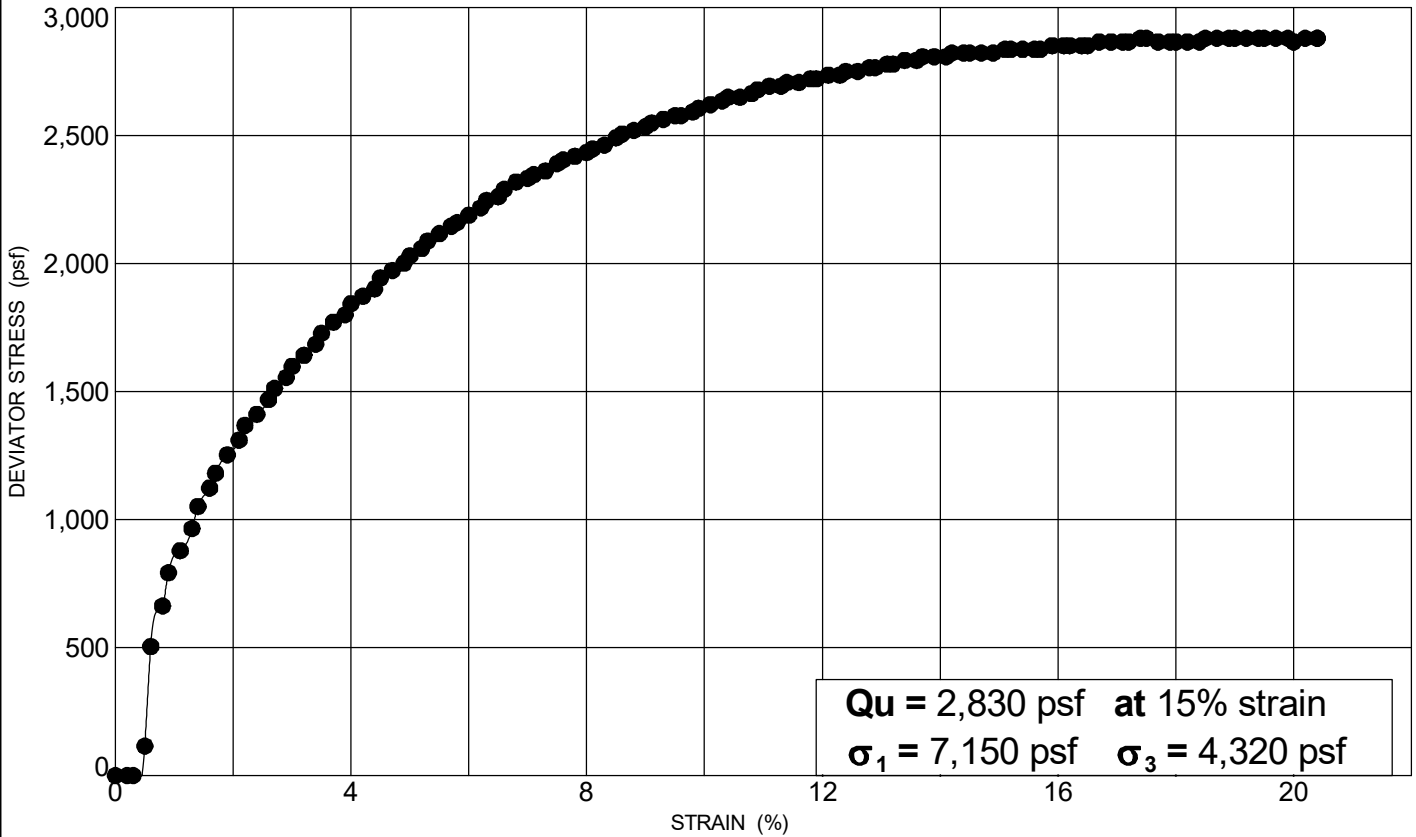
SAMPLE IDENTIFICATION

BORING ID: B-017-0-21

SAMPLE ID: ST-13

STATION: 286+34, 5' RT.

DEPTH: 30.0 - 30.4 feet



SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

TYPE: Undisturbed

HEIGHT: 5.786 inches

DIAMETER: 2.858 inches

WET UNIT WT: 134.80 pcf

DRY UNIT WT: 116.10 pcf

SPECIFIC GRAVITY: 2.67 (Assumed)

NOTES: _____

TESTED BY: AW 3/16/2021

CLASSIFICATION RESULTS

GRADATION (%)				
GR	CS	FS	SI	CL
6	5	10	29	50
ATTERBERG LIMITS			MOISTURE	
LL	PL	PI	WC	
29	15	14	16	

ODOT CLASS: A-6a

HP (tsf): 2.50

DESCRIPTION: Stiff, Gray, SILT AND CLAY, Little Sand, Trace Gravel, Moist



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST AASHTO T - 296

PROJECT HAN-75/CR99

PID 102375

OGE NUMBER 600827

PROJECT TYPE ROADWAY

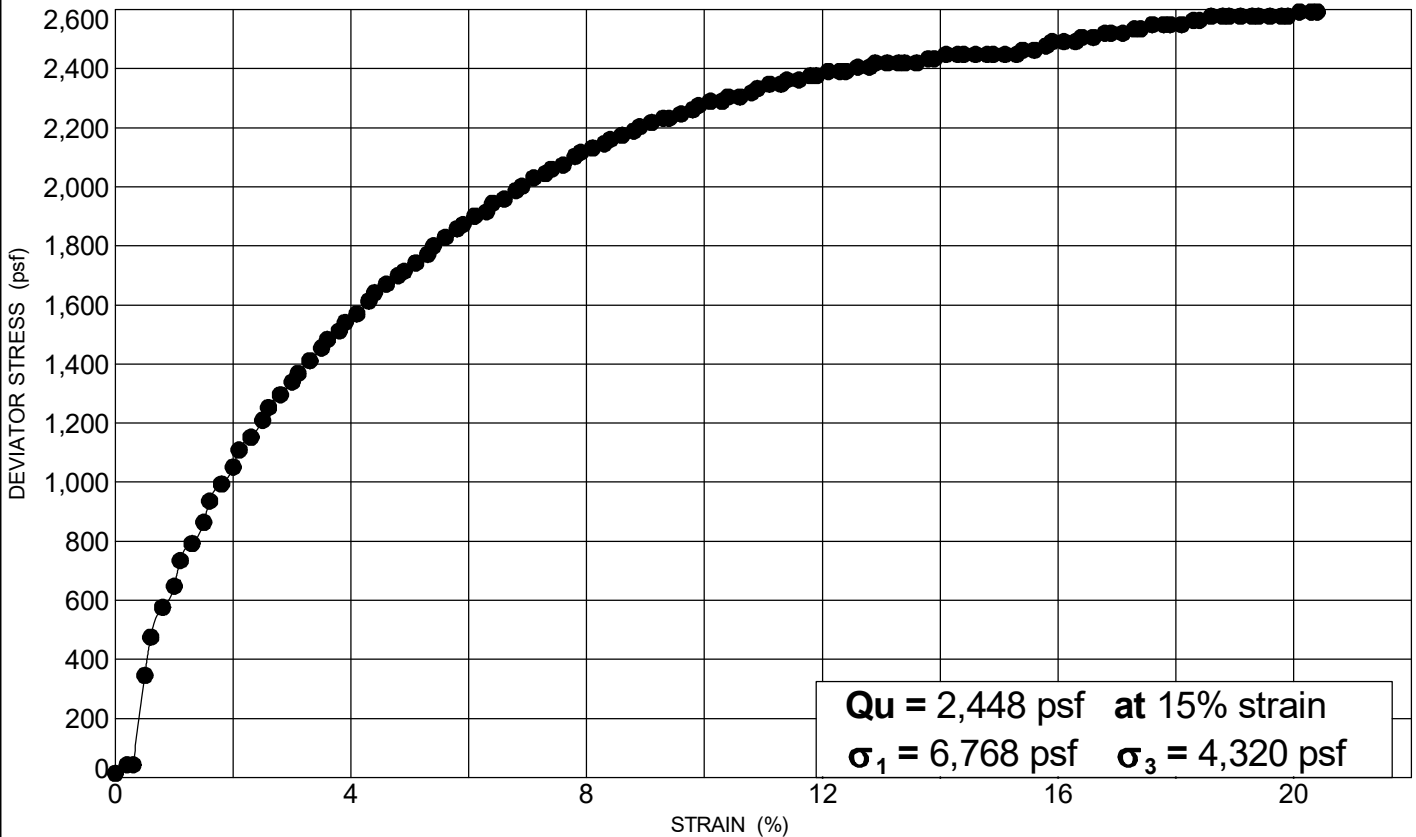
SAMPLE IDENTIFICATION

BORING ID: B-017-0-21

SAMPLE ID: ST-15

STATION: 286+34, 5' RT.

DEPTH: 36.8 - 37.3 feet



Qu = 2,448 psf at 15% strain
σ₁ = 6,768 psf σ₃ = 4,320 psf

SPECIMEN FAILURE SKETCHES OR PHOTOGRAPHS



FRONT VIEW



SIDE VIEW

SPECIMEN DETAILS

TYPE: Undisturbed

HEIGHT: 5.747 inches

DIAMETER: 2.866 inches

WET UNIT WT: 133.90 pcf

DRY UNIT WT: 113.60 pcf

SPECIFIC GRAVITY: 2.67 (Assumed)

NOTES: _____

TESTED BY: AW 3/16/2021

CLASSIFICATION RESULTS





GRADATION (%)				
GR	CS	FS	SI	CL
13	4	10	26	47
ATTERBERG LIMITS			MOISTURE	
LL	PL	PI	WC	
28	15	13	18	

ODOT CLASS: A-6a





HP (tsf): 3.00

DESCRIPTION: Stiff, Gray, SILT AND CLAY, Little Sand, Little Gravel, Moist





HAN-75/CR-99 Interchange Project PID 102375
PAVEMENT CORE REPORT

Location	Position	Lat/Long	Pavement Thickness (in)	Core Photo	Comments
B-001-0-21	Driving Lane EB CR 99	41.087924, -83.668597	Asphalt 8.0		
B-002-0-21	Driving Lane WB CR 99	41.087816, -83.667478	Asphalt 10.0		
B-003-0-21	Passing Lane EB CR 99	41.087919, -83.666228	Asphalt 8.0		
B-004-0-21	Driving Lane WB CR 99	41.087813, -83.664939	Asphalt 9.0	No Photo	
B-005-0-20	Driving Lane EB CR 99	41.087917, -83.663590	Asphalt 8.0		





HAN-75/CR-99 Interchange Project PID 102375
PAVEMENT CORE REPORT

Location	Position	Lat/Long	Pavement Thickness (in)	Core Photo	Comments
B-006-0-20	Driving Lane WB CR 99	41.087813, -83.662309	Asphalt 8.0		
B-007-0-20	Driving Lane EB CR 99	41.087946, -83.661179	Asphalt 8.0		
B-008-0-20	Driving Lane EB CR 99	41.087938, -83.658521	Asphalt 10.0		
B-010-0-20	Driving Lane EB CR 99	41.087935, -83.655954	Asphalt 12.0		

HAN-75/CR-99 Interchange Project PID 102375
PAVEMENT CORE REPORT

Location	Position	Lat/Long	Pavement Thickness (in)	Core Photo	Comments
B-012-0-20	Driving Lane EB CR 99	41.087927, -83.653193	Asphalt 12.0		
B-013-0-20	Driving Lane EB CR 99	41.087922, -83.651809	Asphalt 12.0		
B-016-0-20	Inside Shoulder IR 75 SB	41.087694 -83.659868	Asphalt 18.0	No Photo	
B-018-0-20	Outside Shoulder Ramp A	41.085538, -83.660197	Asphalt 16.5		
B-021-0-20	Outside Shoulder Ramp B	41.085788, -83.659569	Asphalt 17.0		

HAN-75/CR-99 Interchange Project PID 102375
PAVEMENT CORE REPORT

Location	Position	Lat/Long	Pavement Thickness (in)	Core Photo	Comments
B-024-0-20	Inside Shoulder Ramp C	41.088546, -83.660529	Asphalt 8.0		
B-025-0-20	Outside Shoulder Ramp C	41.089361, -83.660347	Asphalt 17.0		
B-026-0-20	Groin between Ramp C & SB IR 75	41.090161, -83.660083	Asphalt 16.0		
B-028-0-20	Outside Shoulder Ramp D	41.088521, -83.659218	Asphalt 13.5		
B-030-0-20	Outside Shoulder Ramp D	41.090142, -83.659586	Asphalt 16.0	