

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>1337+49, 8' RT.</u>	EXPLORATION ID <u>B-001-0-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCLEISH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>3.25" HSA / NQ2</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>806.9 (ft)</u> EOB: <u>25.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>7/12/17</u> END: <u>7/12/17</u>	SAMPLING METHOD: <u>SPT / NQ2</u>	ENERGY RATIO (%): <u>77</u>	LAT / LONG: <u>40.225064, -83.064749</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI		
ASPHALT (12")	806.9																
STIFF, BROWN AND REDDISH BROWN MOTTLED, SILT AND CLAY, SOME STONE FRAGMENTS, LITTLE SAND, (NOT ENOUGH MATERIAL TO TEST), DAMP TO MOIST	805.9	1															
		2	3	9	11	SS-1	2.00	-	-	-	-	-	-	-	16	A-6a (V)	
		3	4														
@3.5'; NO RECOVERY, AUGER SAMPLE TAKEN		4	3	12	0	SS-2	-	-	-	-	-	-	-	-	17	A-6a (V)	
		5	4	5													
		6	9														
		7	7	18	44	SS-3	1.50	21	7	13	32	27	28	17	11	18	A-6a (5)
		8															
@8.5' - 10.0'; ENCOUNTERED BOULDERS/COBBLES		9	4	15	28	SS-4	1.50	-	-	-	-	-	-	-	-	18	A-6a (V)
		10	7	5													
	795.9	11															
MEDIUM DENSE, BROWN AND REDDISH BROWN MOTTLED, STONE FRAGMENTS WITH SAND, SILT, AND CLAY, MOIST TO WET	794.9	12	3	15	78	SS-5	-	46	13	10	17	14	34	20	14	23	A-2-6 (1)
		13															
		14	3	21	22	SS-6	-	-	-	-	-	-	-	-	-	17	A-2-6 (V)
		15	2	14													
	790.8	16															
LIMESTONE, LIGHT GRAY, MODERATELY WEATHERED, STRONG, THIN BEDDED, CRYSTALLINE, FOSSILIFEROUS, BEDDING, MODERATELY FRACTURED, OPEN, VERY ROUGH; BLOCKY, GOOD; RQD 63%, REC 96%.		17															
@ 18.7' - 19.0'; $\gamma = 164$ pcf; $Q_u = 13,563$ psi		18	37		95	NQ2-1											CORE
		19															
		20															
		21															
@ 23.2' - 23.5'; $\gamma = 163$ pcf; $Q_u = 14,189$ psi		22															
		23	88		97	NQ2-2											CORE
		24															
	781.4	25															
		EOB															

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 10/24/24 14:43 - X:\GINT\PROJECTS\2017 COMPLETE\60386.GPJ

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 100 LB. BENTONITE CHIPS

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>1343+91, 6' RT.</u>	EXPLORATION ID <u>B-002-0-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCLEISH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>3.25" HSA / NQ2</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>808.0 (ft)</u> EOB: <u>19.0 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>7/15/17</u> END: <u>7/15/17</u>	SAMPLING METHOD: <u>SPT / NQ2</u>	ENERGY RATIO (%): <u>77</u>	LAT / LONG: <u>40.226824, -83.064635</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT (12")	808.0																	
VERY STIFF, BROWN, <b>SILTY CLAY</b> , SOME SAND, LITTLE STONE FRAGMENTS, DAMP	807.0	1																
		2	5	14	30	56	SS-1	3.50	17	13	16	24	30	37	17	20	15	A-6b (8)
	804.5	3																
VERY DENSE, GRAY, <b>GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT</b> , TRACE CLAY, DAMP		4	8	25	67	56	SS-2	-	51	11	12	20	6	NP	NP	NP	6	A-2-4 (0)
		5																
@6.0'; DENSE, BROWN		6	11	12	46	89	SS-3	-	41	13	13	25	8	NP	NP	NP	7	A-2-4 (0)
		7																
	799.0	8																
<b>LIMESTONE</b> , LIGHT GRAY, MODERATELY WEATHERED, STRONG, THIN BEDDED, CRYSTALLINE, SLIGHTLY STYLOLITIC, BEDDING, MODERATELY FRACTURED, OPEN, VERY ROUGH; BLOCKY, GOOD; RQD 25%, REC 83%.		9	35	-	100		SS-4	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)
		10																
		11																
@ 13.3' - 13.6'; $\gamma = 165$ pcf; $Q_u = 14,672$ psi		12	8			93	NQ2-1											CORE
		13																
@ 16.4' - 16.8'; $\gamma = 163$ pcf; $Q_u = 10,563$ psi		14																
		15																
		16	54			92	NQ2-2											CORE
		17																
		18																
	789.0	19																EOB

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 11/7/24 11:06 - X:\GINT\PROJECTS\2017 COMPLETE\1600386.GPJ

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 70 LB. BENTONITE CHIPS

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>1345+40, 4' RT.</u>	EXPLORATION ID <u>B-003-0-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCLEISH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>3.25" HSA / NQ2</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>808.6 (ft)</u> EOB: <u>20.5 ft.</u>	PAGE 1 OF 1
START: <u>7/15/17</u> END: <u>7/15/17</u>	SAMPLING METHOD: <u>SPT / NQ2</u>	ENERGY RATIO (%): <u>77</u>	LAT / LONG: <u>40.227234, -83.064613</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV. 808.6	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
ASPHALT (12")	807.6	1																
VERY STIFF, DARK BROWN, <b>SILTY CLAY</b> , "AND" STONE FRAGMENTS, LITTLE SAND, DAMP	805.1	2	7	4	14	67	SS-1	4.00	38	9	10	20	23	39	17	22	17	A-6b (5)
VERY DENSE, BROWN, <b>GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT</b> , TRACE CLAY, DAMP	800.1	3																
@6.0'; MEDIUM DENSE		4	8	55	-	83	SS-2	-	-	-	-	-	-	-	-	-	7	A-2-4 (V)
		5																
		6	14	11	22	100	SS-3	-	44	14	12	22	8	NP	NP	NP	8	A-2-4 (0)
		7																
VERY DENSE, GRAY, <b>GRAVEL AND STONE FRAGMENTS WITH SAND</b> , LITTLE SILT, TRACE CLAY, DAMP	800.1	8																
		9	27	31	94	17	SS-4	-	54	14	9	17	6	NP	NP	NP	3	A-1-b (0)
		10																
<b>LIMESTONE</b> , LIGHT GRAY, MODERATELY WEATHERED, VERY STRONG, THIN BEDDED, CRYSTALLINE, FOSSILIFEROUS, SLIGHTLY STYLOLITIC, BEDDING, HIGHLY FRACTURED, OPEN, VERY ROUGH; VERY BLOCKY, FAIR; RQD 45%, REC 100%.	798.1	11																
@12.5'; SLIGHTLY WEATHERED, FRACTURED TO MODERATELY FRACTURED, BLOCKY, GOOD.		12																
@ 14.6' - 14.9'; $\gamma = 164$ pcf; $Q_u = 16,880$ psi		13	18			100	NQ2-1											CORE
		14																
		15																
@ 18.1' - 18.5'; $\gamma = 164$ pcf; $Q_u = 15,331$ psi		16																
@18.7'; CLAY INFILLING		17																
@19.2' - 19.3'; CLAY INFILLING		18	72			100	NQ2-2											CORE
		19																
		20																
	788.1	EOB																

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 10/24/24 14:43 - X:\GINT\PROJECTS\2017 COMPLETE\600386.GPJ

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / BINKLEY</u>	DRILL RIG: <u>ACKER XLS TRACK</u>	STATION / OFFSET: <u>1346+80, 20' RT.</u>	EXPLORATION ID <u>B-004-0-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / AJ</u>	HAMMER: <u>ACKER AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>3.25" HSA / NQ2</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>808.1 (ft)</u> EOB: <u>22.0 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>7/15/17</u> END: <u>7/15/17</u>	SAMPLING METHOD: <u>SPT / NQ2</u>	ENERGY RATIO (%): <u>89</u>	LAT / LONG: <u>40.227619, -83.064549</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
TOPSOIL (6") VERY STIFF, DARK BROWN, <b>SILTY CLAY</b> , MODERATELY ORGANIC (LOI = 4.9%), DAMP	808.1																	
	807.6	1																
		2	2	3	10	44	SS-1	3.50	19	26	18	27	10	40	19	21	18	A-6b (3)
		3																
		4	2	6	39	28	SS-2	2.00	-	-	-	-	-	-	-	-	18	A-6b (V)
DENSE TO VERY DENSE, BROWN AND REDDISH BROWN, <b>SANDY SILT</b> , SOME STONE FRAGMENTS, SOME CLAY, DAMP TO MOIST	802.1																	
		5																
		6	9	17	53	56	SS-3	1.50	35	6	10	23	26	NP	NP	NP	13	A-4a (3)
		7																
		8																
<b>LIMESTONE</b> , LIGHT GRAY, MODERATELY WEATHERED, STRONG, THIN BEDDED, FOSSILIFEROUS, STYLOLITIC, PETROLIFEROUS. BEDDING, MODERATELY FRACTURED, OPEN, VERY ROUGH; BLOCKY, GOOD; RQD 45%, REC 96%. @ 14.4' - 14.8'; $\gamma$ = 162 pcf; Qu = 11,969 psi  @ 17.8' - 18.0'; HIGH ANGLE FRACTURE  @ 20.4' - 20.8'; $\gamma$ = 163 pcf; Qu = 14,374 psi	796.1																	
		9	1	6	-	45	SS-4	1.00	-	-	-	-	-	-	-	-	21	A-4a (V)
		10																
		11	1	50/4"	-	14	SS-5	-	-	-	-	-	-	-	-	-	9	A-4a (V)
		12																
TR	786.1																	
		13																
		14		0		100	NQ2-1											CORE
		15																
		16																
EOB	786.1																	
		17		63		94	NQ2-2											CORE
		18																
		19																
		20		80		93	NQ2-3											CORE
	21																	
	22																	

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 75 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 11/8/24 10:18 - X:\GINT\PROJECTS\2017 COMPLETE\600386.GPJ

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / CAREY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>1351+01, 5' RT.</u>	EXPLORATION ID <u>B-005-0-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / MCLEISH</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>3.25" HSA / NQ2</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>810.1 (ft)</u> EOB: <u>17.5 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>7/15/17</u> END: <u>7/15/17</u>	SAMPLING METHOD: <u>SPT / NQ2</u>	ENERGY RATIO (%): <u>77</u>	LAT / LONG: <u>40.228764, -83.064566</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
ASPHALT (14")	810.1																	
VERY STIFF, BROWN, <b>SANDY SILT</b> , SOME CLAY, LITTLE STONE FRAGMENTS, DAMP	808.9	1																
		2	3	4	13	56	SS-1	3.00	16	16	16	25	27	34	28	6	15	A-4a (3)
@3.5'; SOME STONE FRAGMENTS		3																
		4	3	6	23	44	SS-2	-	-	-	-	-	-	-	-	-	14	A-4a (V)
	804.1	5																
VERY DENSE, BROWN AND GRAY, <b>GRAVEL AND STONE FRAGMENTS WITH SAND</b> , LITTLE SILT, TRACE CLAY, DAMP	802.6	6	37	18	63	33	SS-3	-	66	10	7	13	4	NP	NP	NP	6	A-1-b (0)
<b>LIMESTONE</b> , BROWNISH GRAY, MODERATELY WEATHERED, VERY STRONG, THIN BEDDED, CRYSTALLINE, CONTAINS CLAY INFILLING, JOINTED, FRACTURED, OPEN, VERY ROUGH; VERY BLOCKY, POOR; RQD 8%, REC 100%. @8.1' - 16.8'; HIGH ANGLE FRACTURE WITH CLAY INFILLING AND RUST STAINING		7	18	31														
		8																
		9																
		10	0		100		NQ2-1											CORE
		11																
		12																
		13																
		14																
		15	15		100		NQ2-2											CORE
		16																
@16.8'; MODERATELY FRACTURED	792.6	17																
@ 16.8' - 17.1'; $\gamma = 167$ pcf; $Q_u = 15,896$ psi		EOB																

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 10/24/24 14:43 - X:\GINT\PROJECTS\2017 COMPLETE\6030386.GPJ

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / MCLEISH</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>1356+38, 5' LT.</u>	EXPLORATION ID <u>B-006-0-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / AJ</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>3.25" HSA / NQ2</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>809.8 (ft)</u> EOB: <u>11.3 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>7/15/17</u> END: <u>7/15/17</u>	SAMPLING METHOD: <u>SPT / NQ2</u>	ENERGY RATIO (%): <u>77</u>	LAT / LONG: <u>40.230148, -83.063919</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
ASPHALT (11") & BASE (2")	809.8																	
MEDIUM DENSE, BROWN, <b>STONE FRAGMENTS WITH SAND AND SILT</b> , LITTLE CLAY, DAMP	808.7	1	17															
		2	7	14	44	SS-1	1.50	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)
		3	4															
		4	17															
		5	21	91	89	SS-2	3.50	44	13	15	17	11	22	17	5	13	A-2-4 (0)	
		6	50															
<b>LIMESTONE</b> , LIGHT GRAY, SLIGHTLY WEATHERED, VERY STRONG, THIN BEDDED, CRYSTALLINE, BEDDING, MODERATELY FRACTURED, OPEN, VERY ROUGH; BLOCKY, GOOD; RQD 40%, REC 100%. @ 7.9' - 8.0': CLAY SEAM @ 8.5' - 8.9'; $\gamma = 167$ pcf; $Q_u = 17,676$ psi	803.7	TR	50/1"	-	83	SS-3	-	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)
		7																
		8																
		9	40		100	NQ2-1												CORE
		10																
	798.5	11																
		EOB																

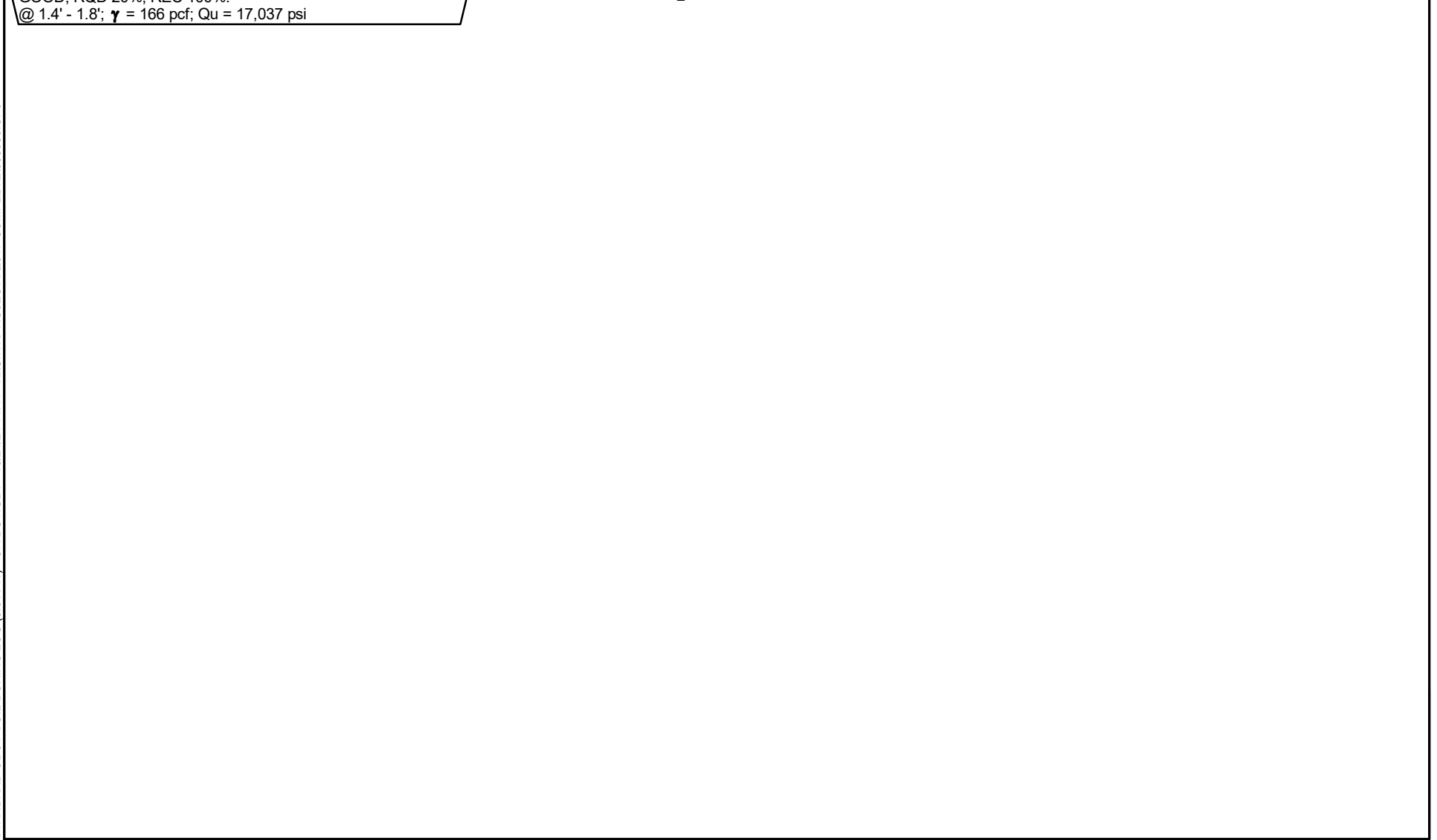
STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 11/8/24 12:18 - X:\GINT\PROJECTS\2017 COMPLETE\600386.GPJ

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 25 LB. BENTONITE CHIPS

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / BINKLEY</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>1356+51, 26' RT.</u>	EXPLORATION ID <u>B-006-1-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / AJ</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>HAND AUGER / NX</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>800.5 (ft)</u> EOB: <u>2.0 ft.</u>	PAGE 1 OF 1
START: <u>7/10/17</u> END: <u>7/10/17</u>	SAMPLING METHOD: <u>HAND AUGER</u>	ENERGY RATIO (%): <u>77</u>	LAT / LONG: <u>40.230151, -83.063798</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV. 800.5	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	ABAN- DONED
								GR	CS	FS	SI	CL	LL	PL	PI		
<b>LIMESTONE</b> , LIGHT GRAY, SLIGHTLY WEATHERED, VERY STRONG, THIN BEDDED, CRYSTALLINE, BEDDING, MODERATELY FRACTURED, OPEN, VERY ROUGH; BLOCKY, GOOD; RQD 20%, REC 100%. @ 1.4' - 1.8'; $\gamma$ = 166 pcf; Qu = 17,037 psi		TR															
	798.5	EOB	21		100												CORE

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 10/24/24 14:44 - X:\GINT\PROJECTS\2017 COMPLETE\600386.GPJ



NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: NOT RECORDED

PROJECT: <u>DEL-315-6.34</u>	DRILLING FIRM / OPERATOR: <u>ODOT / MCLEISH</u>	DRILL RIG: <u>CME 55 TRUCK</u>	STATION / OFFSET: <u>1358+39, 1' RT.</u>	EXPLORATION ID <u>B-007-0-17</u>
TYPE: <u>LANDSLIDE</u>	SAMPLING FIRM / LOGGER: <u>ODOT / AJ</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>CL SR 315</u>	
PID: <u>102124</u> SFN: <u>N/A</u>	DRILLING METHOD: <u>3.25" HSA / NQ2</u>	CALIBRATION DATE: <u>6/1/17</u>	ELEVATION: <u>811.2 (ft)</u> EOB: <u>12.7 ft.</u>	PAGE <u>1 OF 1</u>
START: <u>7/15/17</u> END: <u>7/15/17</u>	SAMPLING METHOD: <u>SPT / NQ2</u>	ENERGY RATIO (%): <u>77</u>	LAT / LONG: <u>40.230656, -83.063635</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			
ASPHALT (18")	811.2																		
STIFF TO VERY STIFF, REDDISH BROWN, <b>SILT AND CLAY</b> , "AND" STONE FRAGMENTS, SOME SAND, DAMP  @6.0'; WITH WOOD FRAGMENTS, MOIST	809.7	1																	
		2	8	16	33	28	SS-1	2.00	41	12	11	19	17	27	16	11	10	A-6a (0)	
		3		10															
		4	4	4	12	44	SS-2	1.50	-	-	-	-	-	-	-	-	-	13	A-6a (V)
		5		5															
		6		10															
		7		6															
<b>LIMESTONE</b> , GRAY, SLIGHTLY WEATHERED, VERY STRONG, THIN BEDDED, CRYSTALLINE, SLIGHTLY STYOLITIC, BEDDING AND JOINTED, MODERATELY FRACTURED, OPEN, VERY ROUGH; BLOCKY, GOOD; RQD 72%, REC 88%. @ 8.7' - 9.0'; $\gamma = 168$ pcf; $Q_u = 21,096$ psi @9.4' - 10.1'; CLAY SEAM @11.3' - 11.7'; HIGH ANGLE PARTIALLY HEALED FRACTURE	803.4	TR																	
		8																	
		9																	
		10		72		88	NQ2-1												CORE
		11																	
	798.5	EOB																	

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 11/8/24 12:18 - X:\GINT\PROJECTS\2017 COMPLETE\1600386.GPJ

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 75 LB. BENTONITE CHIPS



# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
 Office of Geotechnical Engineering  
 1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
 DATE STARTED: 01-07-2020  
 DATE COMPLETED: 01-07-2020

HOLE #: D-001-1-19  
 CREW: Jalbrzikowski, Hesler, Bloor & Painter  
 PROJECT: DEL-315-6.34  
 LAT/LONG: 40.225176, -83.064828  
 LOCATION: DEL-315-6.44 Southern BMP location Southbound

SURFACE ELEVATION: 806.6  
 WATER ON COMPLETION: None observed.  
 HAMMER WEIGHT: 35 lbs.  
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
-	3	13.3	...				3	VERY LOOSE	SOFT
-	7	31.1	.....				8	LOOSE	MEDIUM STIFF
- 1 ft	7	31.1	.....				8	LOOSE	MEDIUM STIFF
-	6	26.6	.....				7	LOOSE	MEDIUM STIFF
-	5	22.2	.....				6	LOOSE	MEDIUM STIFF
- 2 ft	5	22.2	.....				6	LOOSE	MEDIUM STIFF
-	6	26.6	.....				7	LOOSE	MEDIUM STIFF
-	5	22.2	.....				6	LOOSE	MEDIUM STIFF
- 3 ft	5	22.2	.....				6	LOOSE	MEDIUM STIFF
- 1 m	6	26.6	.....				7	LOOSE	MEDIUM STIFF
-	7	27.0	.....				7	LOOSE	MEDIUM STIFF
- 4 ft	5	19.3	.....				5	LOOSE	MEDIUM STIFF
-	5	19.3	.....				5	LOOSE	MEDIUM STIFF
-	6	23.2	.....				6	LOOSE	MEDIUM STIFF
- 5 ft	14	54.0	.....				15	MEDIUM DENSE	STIFF
-	12	46.3	.....				13	MEDIUM DENSE	STIFF
-	10	38.6	.....				11	MEDIUM DENSE	STIFF
- 6 ft	6	23.2	.....				6	LOOSE	MEDIUM STIFF
-	9	34.7	.....				9	LOOSE	STIFF
- 2 m	17	65.6	.....				18	MEDIUM DENSE	VERY STIFF
- 7 ft	11	37.6	.....				10	LOOSE	STIFF
-	9	30.8	.....				8	LOOSE	MEDIUM STIFF
-	11	37.6	.....				10	LOOSE	STIFF
- 8 ft	9	30.8	.....				8	LOOSE	MEDIUM STIFF
-	25	85.5	.....				24	MEDIUM DENSE	VERY STIFF
- 9 ft									
- 3 m	10 ft								
-									
- 11 ft									
-									
- 12 ft									
-									
- 4 m	13 ft								

Soil Profile Based on B-001-0-17:

0.0' - 0.5': Topsoil (noted at DCP location)

0.5' - 11.0': Brown and reddish brown SILTY AND CLAY, some stone fragment, some sand, damp to moist.

11.0' - 16.1': Brown and reddish brown mottled STONE FRAGMENTS WITH SAND, SILT AND CLAY, moist to wet.

16.1': Limestone

# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
Office of Geotechnical Engineering  
1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
DATE STARTED: 01-07-2020  
DATE COMPLETED: 01-07-2020

HOLE #: D-001-2-19  
CREW: Jalbrzikowski, Hesler, Bloor & Painter  
PROJECT: DEL-315-6.34  
LAT/LONG: 40.225531, -83.064811  
LOCATION: DEL-315-6.44 Southern BMP location Southbound

SURFACE ELEVATION: 806.3  
WATER ON COMPLETION: None observed.  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
-	2	8.9	••				2	VERY LOOSE	SOFT
-	4	17.8	••••				5	LOOSE	MEDIUM STIFF
- 1 ft	5	22.2	•••••				6	LOOSE	MEDIUM STIFF
-	5	22.2	•••••				6	LOOSE	MEDIUM STIFF
-	5	22.2	•••••				6	LOOSE	MEDIUM STIFF
- 2 ft	6	26.6	••••••				7	LOOSE	MEDIUM STIFF
-	6	26.6	••••••				7	LOOSE	MEDIUM STIFF
-	10	44.4	••••••••				12	MEDIUM DENSE	STIFF
- 3 ft	11	48.8	•••••••••				13	MEDIUM DENSE	STIFF
- 1 m	9	40.0	••••••••				11	MEDIUM DENSE	STIFF
-	9	34.7	••••••••				9	LOOSE	STIFF
- 4 ft	7	27.0	••••••				7	LOOSE	MEDIUM STIFF
-	9	34.7	••••••••				9	LOOSE	STIFF
-	8	30.9	•••••••				8	LOOSE	MEDIUM STIFF
- 5 ft	9	34.7	••••••••				9	LOOSE	STIFF
-	7	27.0	••••••				7	LOOSE	MEDIUM STIFF
-	8	30.9	•••••••				8	LOOSE	MEDIUM STIFF
- 6 ft	4	15.4	••••				4	VERY LOOSE	SOFT
-	3	11.6	•••				3	VERY LOOSE	SOFT
- 2 m	6	23.2	•••••				6	LOOSE	MEDIUM STIFF
- 7 ft	5	17.1	••••				4	VERY LOOSE	SOFT
-	6	20.5	•••••				5	LOOSE	MEDIUM STIFF
-	6	20.5	•••••				5	LOOSE	MEDIUM STIFF
- 8 ft	6	20.5	•••••				5	LOOSE	MEDIUM STIFF
-	13	44.5	••••••••				12	MEDIUM DENSE	STIFF
-	19	65.0	••••••••••				18	MEDIUM DENSE	VERY STIFF
- 9 ft	13	44.5	••••••••				12	MEDIUM DENSE	STIFF
-	11	37.6	••••••••				10	LOOSE	STIFF
-	7	23.9	•••••				6	LOOSE	MEDIUM STIFF
- 3 m 10 ft	10	34.2	•••••••				9	LOOSE	STIFF
-									
-									
-									
- 11 ft									
-									
- 12 ft									
-									
- 4 m 13 ft									

# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
 Office of Geotechnical Engineering  
 1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
 DATE STARTED: 01-07-2020  
 DATE COMPLETED: 01-07-2020

HOLE #: D-004-1-19  
 CREW: Jalbrzikowski, Hesler, Bloor & Painter  
 PROJECT: DEL-315-6.34  
 LAT/LONG: 40.227453, -83.064682  
 LOCATION: DEL-315-6.44 Northern BMP location Southbound

SURFACE ELEVATION: 808.9  
 WATER ON COMPLETION: None observed.  
 HAMMER WEIGHT: 35 lbs.  
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY		
			0	50	100	150		NON-COHESIVE	COHESIVE	
-	2	8.9	••				2	VERY LOOSE	SOFT	
-	5	22.2	•••••				6	LOOSE	MEDIUM STIFF	
- 1 ft	5	22.2	•••••				6	LOOSE	MEDIUM STIFF	
-	5	22.2	•••••				6	LOOSE	MEDIUM STIFF	
-	6	26.6	•••••				7	LOOSE	MEDIUM STIFF	
- 2 ft	9	40.0	••••••••				11	MEDIUM DENSE	STIFF	
-	9	40.0	••••••••				11	MEDIUM DENSE	STIFF	
-	8	35.5	••••••••				10	LOOSE	STIFF	
- 3 ft	10	44.4	••••••••				12	MEDIUM DENSE	STIFF	
- 1 m	11	48.8	••••••••				13	MEDIUM DENSE	STIFF	
-	27	104.2	••••••••••••••••••••				25+	MEDIUM DENSE	VERY STIFF	
- 4 ft	11	42.5	••••••••				12	MEDIUM DENSE	STIFF	
-	7	27.0	•••••				7	LOOSE	MEDIUM STIFF	
-	25	96.5	••••••••••••••••				25+	MEDIUM DENSE	VERY STIFF	
- 5 ft	Refusal at 132cm (25+ blows/2cm) ~EL. 804.6 ft.									
- 6 ft										
- 2 m										
- 7 ft										
- 8 ft										
- 9 ft										
- 3 m	10 ft	Soil Profile Based on B-004-0-17: 0.0' - 0.5': Topsoil 0.5' - 6.0': Dark brown SILTY CLAY, "and" sand, little gravel and stone fragement, moderately organic moist. 6.0' - 12.0': Brown and reddish brown SANDY SILT, some stone fragments, some clay, damp 12.0': Limestone								
-	11 ft									
-	12 ft									
- 4 m	13 ft									

Latitude & Longitude from OGE handheld GPS unit. Elevation from Consultant Survey terrain file.

# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
 Office of Geotechnical Engineering  
 1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
 DATE STARTED: 01-07-2020  
 DATE COMPLETED: 01-07-2020

HOLE #: D-004-2-19  
 CREW: Jalbrzikowski, Hesler, Bloor & Painter  
 PROJECT: DEL-315-6.34  
 LAT/LONG: 40.227908, -83.064717  
 LOCATION: DEL-315-6.44 Northern BMP location Southbound

SURFACE ELEVATION: 808.2  
 WATER ON COMPLETION: None observed.  
 HAMMER WEIGHT: 35 lbs.  
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
-	2	8.9	••				2	VERY LOOSE	SOFT
-	3	13.3	•••				3	VERY LOOSE	SOFT
- 1 ft	3	13.3	•••				3	VERY LOOSE	SOFT
-	4	17.8	••••				5	LOOSE	MEDIUM STIFF
-	4	17.8	••••				5	LOOSE	MEDIUM STIFF
- 2 ft	6	26.6	•••••				7	LOOSE	MEDIUM STIFF
-	5	22.2	•••••				6	LOOSE	MEDIUM STIFF
-	5	22.2	•••••				6	LOOSE	MEDIUM STIFF
- 3 ft	6	26.6	•••••				7	LOOSE	MEDIUM STIFF
- 1 m	13	57.7	••••••••••				16	MEDIUM DENSE	VERY STIFF
-	12	46.3	••••••••••				13	MEDIUM DENSE	STIFF
- 4 ft	8	30.9	••••••				8	LOOSE	MEDIUM STIFF
-	12	46.3	••••••••••				13	MEDIUM DENSE	STIFF
-	10	38.6	••••••••••				11	MEDIUM DENSE	STIFF
- 5 ft	9	34.7	••••••••••				9	LOOSE	STIFF
-	11	42.5	••••••••••				12	MEDIUM DENSE	STIFF
-	17	65.6	••••••••••••••				18	MEDIUM DENSE	VERY STIFF
- 6 ft	19	73.3	••••••••••••••				20	MEDIUM DENSE	VERY STIFF
-	25	96.5	••••••••••••••••				25+	MEDIUM DENSE	VERY STIFF
- 2 m	Refusal at 188 cm (25+ blows/8 cm) ~EL. 802.0 ft.								
- 7 ft									
-									
- 8 ft									
-									
- 9 ft									
-									
- 3 m 10 ft									
-									
- 11 ft									
-									
- 12 ft									
-									
- 4 m 13 ft									

# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
 Office of Geotechnical Engineering  
 1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
 DATE STARTED: 07-10-2017  
 DATE COMPLETED: 07-10-2017

HOLE #: D-007-1-17  
 CREW: K. Mcleish, J. Binkley, & A. Jalbrzikowski  
 PROJECT: DEL-315-6.34  
 LAT/LONG: 40.230701, -83.063684  
 LOCATION: Delaware County, Ohio

SURFACE ELEVATION: 811.0  
 WATER ON COMPLETION: none observed  
 HAMMER WEIGHT: 35 lbs.  
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
-	0	0.0	0'-0.7'; LIMESTONE FRAGMENTS				0	VERY LOOSE	VERY SOFT
-	0	0.0					0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0	0.7'-1.8'; LIMESTONE BOULDERS				0	VERY LOOSE	VERY SOFT
-	0	0.0					0	VERY LOOSE	VERY SOFT
-	0	0.0					0	VERY LOOSE	VERY SOFT
- 2 ft	0	0.0	1.8'-3.5'; BROWN STONE FRAGS.				0	VERY LOOSE	VERY SOFT
-	0	0.0	WITH SAND, SILT, & CLAY, DAMP				0	VERY LOOSE	VERY SOFT
-	0	0.0					0	VERY LOOSE	VERY SOFT
- 3 ft	0	0.0					0	VERY LOOSE	VERY SOFT
- 1 m	0	0.0	WILDCAT DCP STARTED @3.5'				0	VERY LOOSE	VERY SOFT
-	12	46.3	.....				13	MEDIUM DENSE	STIFF
- 4 ft	24	92.6	.....				25+	MEDIUM DENSE	VERY STIFF
-	15	57.9	.....				16	MEDIUM DENSE	VERY STIFF
-	25	96.5	.....				25+	MEDIUM DENSE	VERY STIFF
- 5 ft									
-									
- 6 ft									
-									
- 2 m									
- 7 ft									
-									
- 8 ft									
-									
- 9 ft									
-									
- 3 m	10 ft								
-									
-									
-									
-									
-									
-									
-									
-									
- 4 m	13 ft								

Latitude & Longitude from OGE handheld GPS unit. Elevation from Consultant Survey terrain file. Hole dry before coring. Hole advanced with handheld NX Core Drill.

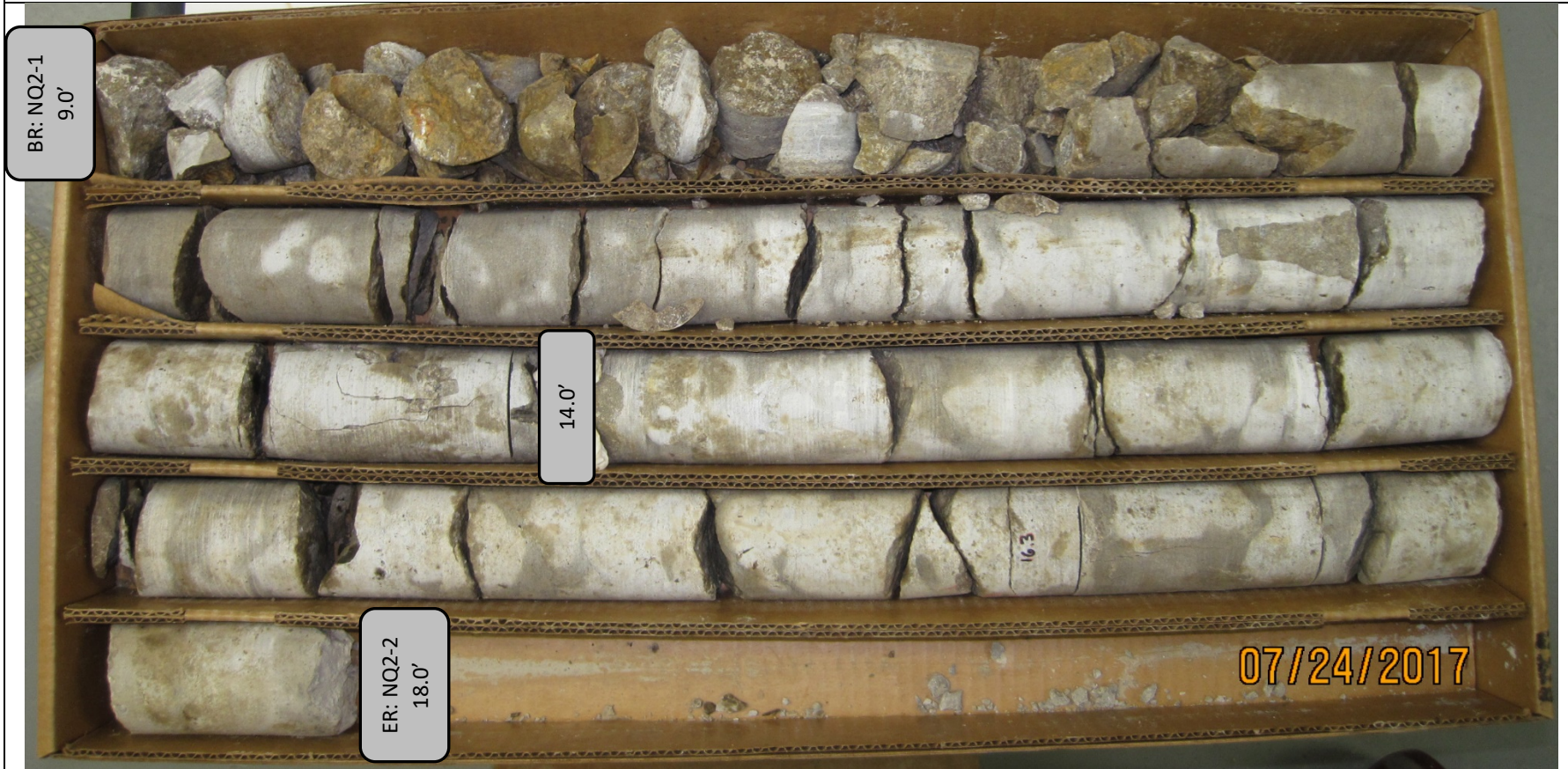
B-001-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	15.5'	20.5'	57/60	95%	22/60	37%
NQ2-2	20.5'	25.5'	58/60	97%	53/60	88%

DEL-315-6.34 PID 102124

B-002-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	9.0'	14.0'	56/60	93%	5/60	8%
NQ2-2	14.0'	18.0'	44/48	92%	26/48	54%

DEL-315-6.34 PID 102124

B-003-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	10.5'	15.5'	60/60	100%	11/60	18%
NQ2-2	15.5'	20.5'	60/60	100%	43/60	72%

DEL-315-6.34 PID 102124



B-004-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	12.0'	15.5'	42/42	100%	0/42	0%
NQ2-2	15.5'	19.5'	45/48	94%	30/48	63%
NQ2-2	19.5'	22.0'	28/30	93%	24/30	80%

DEL-315-6.34 PID 102124

B-005-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	7.5'	12.5'	60/60	100%	0/60	0%
NQ2-2	12.5'	17.5'	60/60	100%	9/60	15%

DEL-315-6.34 PID 102124

B-006-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	6.1'	11.3'	62.4/62.4	100%	25/62.4	40%
DEL-315-6.34 PID 102124						

B-007-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	7.7'	12.7'	53/60	88%	43/60	72%
DEL-315-6.34 PID 102124						

DEL-315-6.40 Line 1 Inverted Resistivity Section

Electrode 1  
South

