



# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 1	<b>Date:</b> 4/5/22		
<b>Direction Photo Taken:</b> East			
<b>Description:</b> TP-1  Test pit excavation into embankment of Beacon Point Road Levee. Beacon Point Road is located opposite the chain link fence.			

<b>Photo No.</b> 2	<b>Date:</b> 4/5/22		
<b>Direction Photo Taken:</b> East			
<b>Description:</b> TP-1 spoils piles, stone boulders visible in pile.			



# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 3	<b>Date:</b> 4/5/22		
<b>Direction Photo Taken:</b> West			
<b>Description:</b> TP-2  Excavation, note Armor Stone with spoils in background and in excavation sidewall.			

<b>Photo No.</b> 4	<b>Date:</b> 4/5/22		
<b>Direction Photo Taken:</b> Northwest			
<b>Description:</b> TP-2 Spoils pile, with Armor Stones.			



# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 5	<b>Date:</b> 4/4/22		
<b>Direction Photo Taken:</b> South			
<b>Description:</b> TP-3  Excavation in at Beacon Point Road Dike with armor stone on top. Upper armor stone was excavated with test pit.  In place armor stone is below with topsoil mix in joints.			

<b>Photo No.</b> 6	<b>Date:</b> 4/4/22		
<b>Direction Photo Taken:</b> Southeast			
<b>Description:</b> TP-3  Sidewall of excavation with end of armor stone at landside crest (inside of WPCF site).			



# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 7	<b>Date:</b> 4/4/22		
<b>Direction Photo Taken:</b> South			
<b>Description:</b> TP-3 spoil piles.			

<b>Photo No.</b> 8	<b>Date:</b> 4/4/22		
<b>Direction Photo Taken:</b> South			
<b>Description:</b> TP-3 Additional spoil pile.			



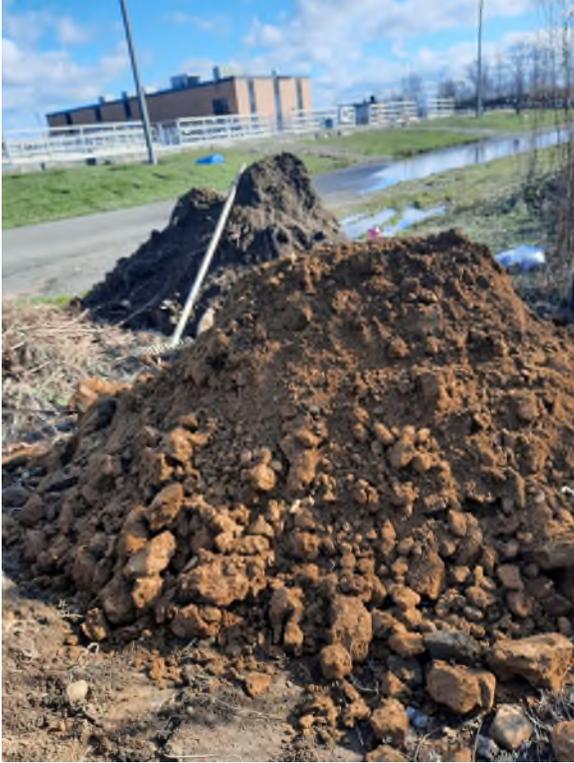
# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 7	<b>Date:</b> 4/4/22		
<b>Direction Photo Taken:</b> South			
<b>Description:</b> TP-4  Excavation in face of embankment and toe at Beacon Point Road Dike.			

<b>Photo No.</b> 8	<b>Date:</b> 4/4/22		
<b>Direction Photo Taken:</b> West			
<b>Description:</b> TP-4  Excavation from landside of toe of Beacon Point Road Dike. Underdrain was not encountered.			



# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 7	<b>Date:</b> 4/4/22		
<b>Direction Photo Taken:</b> Northeast			
<b>Description:</b> TP-4 Spoils pile			

<b>Photo No.</b> 8	<b>Date:</b> 4/5/22		
<b>Direction Photo Taken:</b> West			
<b>Description:</b> TP-5  Excavation of test pit and armor stone.			



# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 7	<b>Date:</b> 4/5/22		
<b>Direction Photo Taken:</b> South			
<b>Description:</b> TP-5 spoils pile with stone.			

<b>Photo No.</b> 8	<b>Date:</b> 4/7/21		
<b>Direction Photo Taken:</b> West			
<b>Description:</b> TP-6  Excavation of TP-6, undisturbed armor stone on top left of photo.			



# Photographic Log

<b>Client Name:</b> Town of Stratford		<b>Site Location:</b> Stratford WPCF 105 Beacon Point Road Stratford, Connecticut	<b>Project No.</b> 18.0172256.70
<b>Photo No.</b> 7	<b>Date:</b> 4/7/21		
<b>Direction Photo Taken:</b> West			
<b>Description:</b> TP-6  Armor Stone temporarily moved for test pit.			

<b>Photo No.</b> 8	<b>Date:</b> 4/7/21		
<b>Direction Photo Taken:</b> West			
<b>Description:</b> TP-5 spoils pile.			



## **Appendix D – Rock Core Photographs**



**Appendix D**  
**STRATFORD WATER POLLUTION CONTROL FACILITY PERIMETER FLOOD WALL IMPROVEMENTS**  
**STRATFORD, CONNECTICUT**  
Rock Core Photographs

Boring No.	Run	Depth (ft)	Recovery (in)	Recovery (%)	RQD (in)	RQD (%)	Rock Type	Box Row
GZ-5	C-1	29.6 - 34.6	57	95	51	85	GNEISS	1



- Notes:**
1. Box row corresponds to the core box section in which the rock core sample is contained; Row 1 = Top.
  2. Top photo is dry; bottom photo is wetted.
  3. Rock core sample starts on left side of photo.



## **Appendix E – Previous Explorations by Others**

CLIENT  
CDM, Inc.  
FOREMAN/DRILLER:  
Scott Marino

**General Borings, Inc.**  
P. O. BOX 7135 PROSPECT, CT 06712

SOIL ENGINEER  
DESIGN ENGINEER

INSPECTOR:  
Surface Elevation: ±111

PROJECT NAME: Stratford WWTP  
LOCATION: Stratford, CT  
GBI JOB NO. 18-04

Date Started: 2/16/04  
Date Finished: 2/17/04

TYPE: S Auger, Casing, Sampler, Core Bar  
H Auger, FJ, S.S., NQ

Hole No. CDM-1  
Line & Station

Groundwater Observations  
AT 9.0 AFTER 0.0 HRS  
Drill Water AFTER HRS

Size I. D.: Hammer, Fall  
4", 140 LBS., 30"

Offset L R  
N Coordinate  
E Coordinate

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE: DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
		DEPTH IN FEET FROM - TO	NO.	PEN. IN	REC. IN	TYPE	0-6	6-12	12-18	18-24		
5		0-2.0	1	24	24	SS	36	15	15	49	FILL	1) Dense, brown, fine-medium SAND, little silt, trace fine gravel.
10		5.0-7.0	2	24	24	SS	29	34	38	38	SAND	2) Very dense, gray-brown, fine-coarse SAND, trace fine gravel, silt and pieces of cobble.  (Solid stem augers to 10')
15		10.0-12.0	3	24	12	SS	15	18	21	23		3) Wet, dense, gray-brown, fine-coarse SAND, some fine gravel, trace silt.
20		15.0-17.0	4	24	8	SS	14	11	15	19		4) Wet, medium dense, light brown-gray fine-medium SAND, trace fine gravel, trace silt.
25		20.0-22.0	5	24	6	SS	30	33	34	43		5) Wet, very dense, brown-gray, fine-medium SAND, trace silt, trace fine gravel.
30		25.0-27.0	6	24	1	SS	18	15	14	19		6) -NO RECOVERY- 1" piece of cobble stuck in tip of spoon.
35		30.0-32.0	7	24	18	SS	9	10	13	19		7) Wet, medium dense, gray, fine SAND, trace silt.
40		35.0-37.0	8	24	20	SS	14	17	23	27		8) Wet, dense, gray, fine SAND, trace silt

From Ground Surface to Feet Used in Casing Then in Casing For Feet  
 Feet in Earth      Feet in Rock      No. of Samples      Hole No. CDM-1  
 SAMPLE TYPE CODING: SS = DRIVEN      C = CORE      A = AUGER      U = UNDISTURBED PISTON  
 PROPORTIONS USED: TRACE = 1-10%      LITTLE = 10-20%      SOME = 20-35%      AND = 35-50%



CLIENT:  
CDM, Inc.  
FOREMAN/DRILLER:  
John Muccino

**General Borings, Inc.**  
P. O. BOX 7135 PROSPECT, CT 06712

SOIL ENGINEER  
DESIGN ENGINEER

PROJECT NAME: Stratford WWTP  
LOCATION: Stratford, CT  
INSPECTOR:  
Surface Elevation: ±110  
Date Started: 2/16/04  
Date Finished: 2/16/04

GBI JOB NO. 18-04

TYPE	S Auger	Casing	Sampler	Core Bar
H Auger	FJ	S. S.		
Groundwater Observations	Size I. D.			
AT 6.0 AFTER HRS	Hammer		140 LBS.	Bit
AT AFTER HRS	Fall		30"	

Hole No. CDM-2  
Line & Station  
Offset L R  
N Coordinate  
E. Coordinate

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)	
		DEPTH IN FEET FROM - TO	NO.	PEN. IN	REC. IN	TYPE	0-6	6-12	12-18	18-24			
5		0-2.0	1	24	8	SS	8	23	20	33		4" Topsoil	
												FILL	1) Moist, dense, brown, fine-medium SAND, trace silt, roots, fractured cobble in tip of split spoon.
10		5.0-7.0	2	24	12	SS	19	26	31	38		SAND	2a) Wet, very dense, black, fine-coarse SAND, trace fine gravel, trace silt, petroleum odor and stain. 2b) Very dense, brown-gray, coarse-fine SAND, little fine gravel, trace silt. 3) Wet, medium dense, brown-gray, coarse-fine SAND, some fine gravel, trace silt.
15		10.0-12.0	3	24	8	SS	15	13	13	18			
20		15.0-17.0	4	24	18	SS	11	13	12	16			4) Wet, medium dense, brown-gray, coarse-fine SAND, trace fine gravel, trace silt.
25		20.0-22.0	5	24	8	SS	13	26	25	31			5) Wet, very dense, brown, fine-coarse SAND, trace fine gravel, trace silt.
30		25.0-27.0	6	24	16	SS	22	19	16	36			6) Wet, dense, gray, coarse-fine SAND, little fine-medium gravel, trace silt.
35		30.0-32.0	7	24	5	SS	10	19	28	31			7) Wet, dense, gray, coarse-fine SAND, little fine-medium gravel, trace silt.
40		35.0-37.0	8	24	20	SS	13	16	20	19		SAND & SILT	8) Wet, dense, gray, fine SAND, some silt.

From Ground Surface to	Feet Used	in. Casing Then	in. Casing For	Feet
Feet in Earth	Feet in Rock	No. of Samples	Hole No. CDM-2	
SAMPLE TYPE CODING:	SS = DRIVEN	C = CORE	A = AUGER	U = UNDISTURBED PISTON
PROPORTIONS USED:	TRACE = 1-10%	LITTLE = 10-20%	SOME = 20-35%	AND = 35-50%

CLIENT  
**CDM, Inc.**  
 FOREMAN/DRILLER  
 John Muccino

**General Borings, Inc.**  
 P. O. BOX 7135 PROSPECT, CT 06712

SOIL ENGINEER  
 DESIGN ENGINEER

INSPECTOR:  
 Surface Elevation: ±110  
 Date Started: 2/16/04  
 Date Finished: 2/16/04

PROJECT NAME: Stratford WWTP  
 LOCATION: Stratford, CT  
 GBI JOB NO. 18-04

Groundwater Observations  
 AT 6.0 AFTER HRS  
 AT AFTER HRS

TYPE S Auger Casing Sampler Core Bar  
 H Auger FJ S. S.  
 Size I. D. 4" 1-3/8"  
 Hammer 140 LBS. Bit  
 Fall 30"

Hole No. CDM-2  
 Line & Station  
 Offset L R  
 N Coordinate  
 E. Coordinate

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
		DEPTH IN FEET FROM - TO	NO.	PEN. IN	REC. IN	TYPE	0-6	6-12	12-18	18-24		
45		40.0-42.0	9	24	21	SS	16	13	28	29	SAND & SILT	9) Wet, dense, gray, fine SAND and SILT.
		45.0-47.0	10	24	4	SS	14	20	18	16		10) Wet, dense, gray, fine SAND and SILT.
50		50.0-52.0	11	24	7	SS	13	15	21	26	SAND	11) Wet, dense, gray, fine-medium SAND, little silt.
		55.0-57.0	12	24	16	SS	15	19	24	20		12) Wet, dense, gray, fine-medium SAND, trace silt.
60		60.0-62.0	13	24	19	SS	12	24	23	25		13) Wet, dense, gray, fine-medium SAND. trace silt.
		65.0-67.0	14	24	14	SS	15	13	8	21		14) Wet, medium dense, gray, fine-medium SAND, trace silt.
70		70.0-71.8	15	22	13	SS	21	20	36	50/4		15) Wet, very dense, gray, fine-medium SAND, trace silt, fractured rock in tip of spoon.
75											EOB	Hole caving in, roller bit refusal at 73.0' END OF BORING 73.0'
80												

From Ground Surface to Feet Used in Casing Then in Casing For Feet  
 Feet in Earth 73 Feet in Rock 0 No. of Samples 15 Hole No. CDM-2  
 SAMPLE TYPE CODING: SS = DRIVEN C = CORE A = AUGER U = UNDISTURBED PISTON  
 PROPORTIONS USED: TRACE = 1-10% LITTLE = 10-20% SOME = 20-35% AND = 35-50%

CLIENT  
CDM, Inc.  
FOREMAN/DRILLER  
Scott Marino

**General Borings, Inc.**  
P. O. BOX 7135 PROSPECT, CT 06712

SOIL ENGINEER  
DESIGN ENGINEER

PROJECT NAME: Stratford WWTP  
LOCATION: Stratford, CT  
INSPECTOR:  
Surface Elevation: ±111  
Date Started: 12/18/04  
Date Finished: 12/18/04

GBI JOB NO. 18-04

TYPE	S Auger	Casing	Sampler	Core Bar	Hole No.	CDM-5
	H Auger	FJ	S. S.		Line & Station	
Groundwater Observations	Size I. D	4"	1-3/8"		Offset L R	
AT 6.0 AFTER 0.0 HRS	Hammer		140 LBS	Bit	N Coordinate	
AT AFTER HRS	Fall		30"		E. Coordinate	

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
		DEPTH IN FEET FROM - TO	NO.	PEN. IN	REC. IN	TYPE	0-6	6-12	12-18	18-24		
5		0-2.0	1	24	18	SS	7	17	19	17	5'	6" Topsoil
											FILL	1) Moist, dense, brown, fine-medium SAND, trace fine gravel, trace silt, trace roots.
10		5.0-7.0	2	24	11	SS	8	8	8	10		2) Moist, medium dense, black, fine-coarse SAND, some coarse-fine gravel, some silt, trace roots.
												(Solid stem augers to 10')
15		10.0-12.0	3	24	4	SS	3	3	2	3		3) Wet, loose, black, fine-medium SAND, some silt, trace fine gravel
20		15.0-17.0	4	24	8	SS	6	8	11	15	SAND	4) Wet, medium dense, gray, coarse-fine SAND, trace silt, trace fine gravel.
												(4" FJ Casing installed at 20')
25		20.0-22.0	5	24	3	SS	8	9	10	13		5) Broken cobble fragments stuck in tip of spoon. Hard steady grinding.
											POSSIBLE ROCK	(NO RECOVERY)
30		25.0-25.0		0	0	SS	100/0				EOB	25.5' - Roller bit refusal, possible top of bedrock or boulder
35												
40												

From Ground Surface to	25.5	Feet Used	0	in Casing Then		in Casing For		Feet	
Feet in Earth	25.5	Feet in Rock	0	No. of Samples	5	Hole No.	CDM-5		
SAMPLE TYPE CODING:	SS = DRIVEN	C = CORE	A = AUGER	U = UNDISTURBED PISTON					
PROPORTIONS USED:	TRACE = 1-10%	LITTLE = 10-20%	SOME = 20-35%	AND = 35-50%					

CLIENT:

CDM, Inc.

**General Borings, Inc.**

P. O. BOX 7135 PROSPECT, CT 06712

FOREMAN/DRILLER:

Richard Posa

SOIL ENGINEER

INSPECTOR:

PROJECT NAME: Stratford WWTP

DESIGN ENGINEER

Surface Elevation: ±109

LOCATION: Stratford, CT

Date Started: 2/19/04

GBI JOB NO. 15-D4

Date Finished: 2/20/04

TYPE: S Auger, Casing, Sampler, Core Bar

Hole No. CDM-6

Groundwater Observations

Size I. D. 4" 1-3/8"

Line & Station

AT 9.0 AFTER 0.0 HRS

Hammer 140 LBS. Bit

Offset L R

Drill Water AFTER HRS

Fall 30"

N Coordinate

E. Coordinate

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
		DEPTH IN FEET FROM - TO	NO.	PEN. IN	REC. IN	TYPE	0-6	6-12	12-18	18-24		
5		0-2.0	1	24	9	SS	17	18	15	14	FILL	1) Moist/frozen, dense, brown, fine SAND, some silt, little root fibers, trace fine gravel.
		5.0-7.0	2	24	10	SS	7	5	5	6		2) Moist, loose, brown, fine-medium SAND, some silt, little gravel.
10											LOAMY SAND	(Solid stem augers to 10')
		10.0-12.0	3	24	8	SS	3	4	4	5		3) Wet, loose, dark brown, fine-medium SAND, little silt, little organics (loamy)
15												
		15.0-17.0	4	24	5	SS	4	6	6	8		4) Wet, medium dense, dark brown, fine-coarse SAND trace silt, trace gravel.
20											SAND	
		20.0-22.0	5	24	5	SS	14	11	14	14		5) Wet, medium dense, gray, fine-coarse SAND and fine GRAVEL, trace silt
25												
		25.0-27.0	6	24	15	SS	10	12	12	14		6) Wet, medium dense, brown, fine-coarse SAND, trace fine gravel, trace silt.
30												
		30.0-32.0	7	24	18	SS	14	12	13	16		7) Wet, medium dense, brown, fine-coarse SAND, trace fine gravel, trace silt.
35												
		35.0-37.0	8	24	0	SS	12	14	13	15		8) -NO RECOVERY-
40												

From Ground Surface to Feet in Earth      Feet Used in Casing Then in Casing For Feet

SAMPLE TYPE CODING: SS = DRIVEN      C = CORE      A = AUGER      U = UNDISTURBED PISTON

PROPORTIONS USED: TRACE = 1-10%      LITTLE = 10-20%      SOME = 20-35%      AND = 35-50%

No. of Samples      Hole No. CDM-6

CLIENT:  
CDM, Inc.

FOREMAN/DRILLER:  
Richard Posa

INSPECTOR:

Surface Elevation: ±109

Date Started: 2/19/04

Date Finished: 2/20/04

Groundwater Observations

AT 9.0 AFTER 0.0 HRS  
Drill Water AFTER HRS

**General Borings, Inc.**  
P. O. BOX 7135 PROSPECT, CT 06712

PROJECT NAME: Stratford WWTP

LOCATION: Stratford, CT

GBI JOB NO. 18-04

TYPE	S Auger	Casing	Sampler	Core Bar
	H Auger	FJ	S . S.	
Size I. D.		4"	1-3/8"	
Hammer			140 LBS.	Bit
Fall			30"	

SOIL ENGINEER

DESIGN ENGINEER

Hole No. CDM-6

Line & Station

Offset L R

N Coordinate

E. Coordinate

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE: DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
		DEPTH IN FEET FROM - TO	NO.	PEN. IN	REC. IN	TYPE	0-6	6-12	12-18	18-24		
45		40.0-42.0	9	24	20	SS	13	15	18	22	SAND	9) Wet, dense, light brown, fine-medium SAND, little silt.
		45.0-47.0	10	24	15	SS	9	16	17	20		10) Wet, dense, light brown, fine-medium SAND, little silt.
50												
		50.0-52.0	11	24	18	SS	14	17	19	23		11) Wet, dense, light brown, fine-medium SAND, little silt.
55												
		55.0-57.0	12	24	5	SS	10	16	18	24		12) Wet, dense, light brown, fine-medium SAND, little silt.
60												
		60.0-62.0	13	24	12	SS	15	17	20	22		13) Wet, dense, light brown, fine-medium SAND, little silt.
65												
70												
		70.0-72.0	14	24	18	SS	17	20	21	24		14) Wet, dense, light brown, fine-medium SAND, little silt.
75												
80												

From Ground Surface to	Feet Used	in. Casing Then	in. Casing For	Feet
Feet in Earth	Feet in Rock	No. of Samples	Hole No.	CDM-6
SAMPLE TYPE CODING:	SS = DRIVEN	C = CORE	A = AUGER	U = UNDISTURBED PISTON
PROPORTIONS USED:	TRACE = 1-10%	LITTLE = 10-20%	SOME = 20-35%	AND = 35-50%

**General Borings, Inc.**

P. O. BOX 7135 PROSPECT, CT 06712

CLIENT: CDM, Inc.  
 FOREMAN/DRILLER: Richard Posa

PROJECT NAME: Stratford WWTP  
 LOCATION: Stratford, CT  
 GBI JOB NO. 18-04

SOIL ENGINEER  
 DESIGN ENGINEER

INSPECTOR:  
 Surface Elevation: ±109  
 Date Started: 2/19/04  
 Date Finished: 2/20/04

TYPE: S Auger, H Auger  
 Casing: 4"  
 Sampler: 1-3/8"  
 Core Bar: Hammer, Fall  
 Size I. D.: 4"  
 140 LBS.  
 30"

Hole No. CDM-6  
 Line & Station  
 Offset L R  
 N Coordinate  
 E. Coordinate

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE: DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
		DEPTH IN FEET FROM - TO	NO.	PEN. IN	REC. IN	TYPE	0-6	6-12	12-18	18-24		
85		80.0-82.0	15	24	12	SS	22	32	35	41	SAND	15) Wet, very dense, brown-gray, fine-coarse SAND, little coarse-fine gravel, little silt.
90		90.0-92.0	16	24	6	SS	24	31	40	48		16) Wet, very dense, brown-gray, fine-coarse SAND, little coarse-fine gravel, little silt.
100		100.0-100.3	17	3	0	SS	100/3					17) No recovery, bouncing on cobbles.
110		100.0-112.0	18	24	18	SS	143	34	40	34		18) Wet, very dense, brown-gray, fine-coarse SAND, little fine gravel, little silt.
120												Drilled to 120.0' No refusal END OF BORING 120.0'

From Ground Surface to	Feet Used	in. Casing Then	in. Casing For	Feet
Feet in Earth 120	Feet in Rock 0	No. of Samples 18	Hole No. CDM-6	
SAMPLE TYPE CODING: SS = DRIVEN	C = CORE	A = AUGER	U = UNDISTURBED PISTON	
PROPORTIONS USED: TRACE = 1-10%	LITTLE = 10-20%	SOME = 20-35%	AND = 35-50%	

CLIENT:  
CDM, Inc.

**General Borings, Inc.**  
P. O. BOX 7135 PROSPECT, CT 06712

FOREMAN/DRILLER:  
Richard Posa

SOIL ENGINEER

INSPECTOR: LOCATION: Stratford, CT

DESIGN ENGINEER

Surface Elevation: ±110' GBI JOB NO 18-04

Date Started: 2/20/04 TYPE S Auger Casing Sampler Core Bar Hole No. CDM-8

Date Finished: 2/20/04 H Auger HA S. S. Line & Station

Groundwater Observations Size I. D. 3-1/4" 1-3/8" Offset L R

AT N/R AFTER HRS Hammer 140 LBS Bit N Coordinate

AT AFTER HRS Fall 30" E. Coordinate

DEPTH	Casing blows per foot	SAMPLE					BLOWS PER 6 INCHES ON SAMPLER				STRATA CHANGE: DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)	
		DEPTH IN FEET FROM - TO	NO.	PEN IN	REC IN	TYPE	0-6	6-12	12-18	18-24			
5												No Samples Taken 0' - 15'	
10													
15													
20		15.0-17.0	1	24	3	SS	12	13	15	18	SAND		1) Wet, medium dense, brown fine-medium SAND, trace silt, trace fine gravel.
25		20.0-22.0	2	24	18	SS	6	10	18	23			2) Wet, medium dense, gray, fine-medium SAND, trace silt.
30		25.0-27.0	3	24	20	SS	3	6	10	14			3) Wet, medium dense, gray fine SAND, trace silt.
35		30.0-32.0	4	24	12	SS	40	42	44	49	TILL		4) Wet, very dense, brown-gray, fine-coarse SAND, some silt, some coarse-fine gravel, little clay (till).
40		35.0-36.0	5	12	9	SS	59	100/6			36.0' EOB		5) Wet, very dense, brown-gray, fine-coarse SAND, some silt, some coarse-fine gravel, trace cobble fragments
													END OF BORING 36.0'

From Ground Surface to Feet in Earth	36	Feet Used in Rock	0	in. Casing Then		in. Casing For		Feet	
SAMPLE TYPE CODING:	SS = DRIVEN	C = CORE	A = AUGER	U = UNDISTURBED PISTON					
PROPORTIONS USED:	TRACE = 1-10%	LITTLE = 10-20%	SOME = 20-35%	AND = 35-50%					

BORING CONTRACTOR:  
General Boring, Inc.

CE MAGUIRE, INC.  
ARCHITECTS-ENGINEERS-PLANNERS  
BORING LOG

SHEET 1 OF 1  
LOCATION: See Plan  
HOLE NO: B-2  
BORING TYPE: B  
LINE & STA.: -  
OFFSET: -

LOG PREPARED BY:  
CONTR. MS CEM CCC

TOWN, STATE: Stratford, Connecticut  
PROJECT NAME: Stratford STP Sludge Composting  
CEM NO: 7907 OFFICE: New Britain

GROUND WATER OBSERVATIONS

9.0  
AT     FT. AFTER 0 HOURS  
  
AT     FT. AFTER     HOURS

AUGER CASING SAMPLER CORE BAR.  
TYPE HS     SS      
SIZE, I.D. 2 1/2     1 3/8      
HAMMER WT.         140 BIT.  
HAMMER FALL         30    

SURFACE ELEV. 9.8  
DATE STARTED-FINISHED: 4/24-4/24/8  
BORING FOREMAN: E. Palkey  
INSPECTOR: C.C. Casanova  
SOILS ENGR.: D.R. Stock

LOCATION OF BORING:

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE DEPTH FROM - TO	TYPE OF SAMPLE	BLOWS PER 5" ON SAMPLER			STRATA CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOIL & ROCK INCL. COLOR, LOSS OF WASH WATER, JOINTS IN ROCK, ETC.	SAMPLE		
				0-6	6-12	12-18			NO.	PEN.	REC.
0		0-1.5	D	3	7	15	Moist medium Dense 3.0 6.8	Br. f-m SAND some silt tr. gravel, tr. organics	1	18	6
5		5-6.5	D	26	30	32	Dry Very Dense	Lt. Br. f-c SAND some gravel tr. silt	2	18	10
10		10-11.5	D	7	22	37	0.8 Wet Very Dense	Br. f-c SAND little gravel tr. silt	3	18	18
15		15-16.5	D	15	14	14	Wet Medium Dense	Br. f-c SAND some gravel tr. silt	4	18	12
20		18.5-20	D	25	33	36	Wet Very Dense 20.0	Br. f-c SAND tr. gravel tr. silt	5	18	14
							-10.2	Bottom of Boring 20.0'			

GROUND SURFACE TO 18.5 FT., USED NSB "CASING: THEN    " CASING TO 20 FT.

D=DRY W=WASHED C=CORED P=PIT A=AUGER V=VANE TEST  
JP=UNDISTURBED, PISTON UB=UNDISTURBED, BALL CHECK OER=OPEN END ROD  
PROPORTIONS USED: TRACE=0-10%, LITTLE=10-20%, SOME=20-35%, AND 35-50%

FOOTAGE IN EARTH	20.0
FOOTAGE IN ROCK	0.0
NO OF SAMPLES	5

BORING CONTRACTOR:  
Geostel Boring, Inc.

CE MAGUIRE, INC.  
ARCHITECTS-ENGINEERS-PLANNERS  
BORING LOG

SHEET 1 OF 1  
LOCATION: See Plan  
HOLE NO: R-2  
BORING TYPE: B  
LINE & STA.: -  
OFFSET: -

LOG PREPARED BY:  
CONTR. MS CEM CCC

TOWN, STATE: Stratford, Connecticut  
PROJECT NAME: Stratford STP Sludge Composting  
CEM NO. 7907 OFFICE: New Britain

GROUND WATER OBSERVATIONS  
13.0  
AT     FT. AFTER 0 HOURS  
  
AT     FT. AFTER     HOURS

AUGER CASING SAMPLER CORE BAR.  
TYPE HS SS  
SIZE, I.D. 2 1/4 1 3/8  
HAMMER WT.     140 BIT.  
HAMMER FALL     30

SURFACE ELEV. 9.5  
DATE STARTED-FINISHED: 4/24-4/24/80  
BORING FOREMAN: E. Polkey  
INSPECTOR: C.C. Gosciniak  
SOILS ENGR.: D. R. Stock

LOCATION OF BORING:

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE DEPTH FROM - TO	TYPE OF SAMPLE	BLOWS PER 6" ON SAMPLER FROM - TO			STRATA CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOIL & ROCK INCL. COLOR, LOSS OF WASH WATER, JOINTS IN ROCK, ETC.	SAMPLE		
				0-6	6-12	12-18			NO.	PEN.	REC.
0		0-1.5	D	3	10	6	Moist Medium Dense 2.5	Br. f-m SAND some silt tr. gravel tr. organics	1	18	8
5		5-6.5	D	30	62	43	Dry Very Dense 7.0	Lt. Br. f-c SAND tr. silt tr. gravel	2	18	4
10		10-11.5	D	16	12	15	9.0 0.5 Wet medium Dense	Br. f-c SAND tr. gravel tr. silt	3	18	18
15		15-16.5	D	54	31	27	16.5 Wet Very Dense	Br. f-c SAND tr. gravel tr. silt	4	18	12
20							-7.0	Bottom of Boring 16.5'			

GROUND SURFACE TO 15 FT., USED HSB "CASING: THEN     "CASING TO 16.5 FT.  
D=DRY W=WASHED C=CORED P=PIT A=AUGER V=VANE TEST  
UP=UNDISTURBED, PISTON UB=UNDISTURBED, BALL CHECK OER=OPEN END ROD  
PROPORTIONS USED: TRACE=0-10%, LITTLE=10-20%, SOME=20-35%, AND 35-50%

FOOTAGE IN EARTH	<u>16.5</u>
FOOTAGE IN ROCK	<u>0.0</u>
NO. OF SAMPLES	<u>4</u>
HOLE NO <u>R-2</u> TYPE	<u>B</u>



BORING CONTRACTOR:  
General Borings, Inc.

CE MAGUIRE, INC.  
ARCHITECTS-ENGINEERS-PLANNERS  
BORING LOG

SHEET 1 OF 1  
LOCATION: See Plan  
HOLE NO: B-7  
BORING TYPE: B  
LINE & STA.: -  
OFFSET: -

LOG PREPARED BY:  
CONTR. MS CEM CCE

TOWN, STATE Stratford, Connecticut  
PROJECT NAME: Stratford STP Sludge Composting  
CEM NO. 7907 OFFICE: New Britain

GROUND WATER OBSERVATIONS  
AT 8.0 FT. AFTER 0 HOURS  
AT     FT. AFTER     HOURS

AUGER CASING SAMPLER CORE BAR.  
TYPE HS     SS      
SIZE, I.D. 2 1/2     1 3/8      
HAMMER WT.         140 BIT.  
HAMMER FALL         30    

SURFACE ELEV. 10.5  
DATE STARTED-FINISHED 12-5-92/12-10-92  
BORING FOREMAN: E. Pelkey  
INSPECTOR: C.C. Griswold  
SOILS ENGR.: D.B. Stack

LOCATION OF BORING:

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE DEPTH FROM - TO	TYPE OF SAMPLE	BLOWS PER 6" ON SAMPLER			STRATA CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOIL & ROCK INCL. COLOR, LOSS OF WASH WATER, JOINTS IN ROCK, ETC.	SAMPLE		
				0-6	6-12	12-18			NO.	PEN.	REC.
0		0-1.5	D	3	18	15	Dry Dense 2.5	Orange - Br. f-m SAND little silt tr. gravel	1	18	7
5		5-6.5	D	15	17	18	Dry Dense 8.0	Lt. Br. f-c SAND little gravel tr. silt	2	18	8
10		8.5-10	D	18	29	23	Wet Very Dense 9.0	Lt. Br. f-c SAND little gravel tr. silt	3	18	9
							10.0 0.5	Br. f-c SAND little gravel tr. silt			
								Bottom of Boring 10.0'			

GROUND SURFACE TO 8.5 FT., USED HSR CASING: THEN     CASING TO 10 FT.  
D=DRY W=WASHED C=CORED P=PIT A=AUGER V=VANE TEST  
UP=UNDISTURBED, PISTON UB=UNDISTURBED, BALL CHECK OER=OPEN END ROD  
PROPORTIONS USED: TRACE=0-10%, LITTLE=10-20%, SOME=20-35%, AND 35-50%

FOOTAGE IN EARTH	10.0
FOOTAGE IN ROCK	0.0
NO. OF SAMPLES	3
HOLE NO. <u>B-7</u> TYPE	<u>B</u>

BORING CONTRACTOR:  
Gauguin & Sons, Inc.

CE MAGUIRE, INC.  
ARCHITECTS-ENGINEERS-PLANNERS  
BORING LOG

SHEET 1 OF 1  
LOCATION: See P  
HOLE NO: B-A  
BORING TYPE: B  
LINE & STA.: -  
OFFSET: -

LOG PREPARED BY:  
CONTR 175 CEM CCC

TOWN, STATE Stratford, Connecticut  
PROJECT NAME Stratford STP Sludge Composting  
CEM NO 7907 OFFICE: New Britain

GROUND WATER OBSERVATIONS  
E.S.  
AT 0 FT. AFTER 0 HOURS  
AT    FT. AFTER    HOURS

AUGER CASING SAMPLER CORE BAR.  
TYPE HS SS  
SIZE, I.D. 2 1/2 1 3/8  
HAMMER WT.    140 BIT.  
HAMMER FALL    30

SURFACE ELEV. 11.1  
DATE STARTED-FINISHED: 4/25-  
BORING FOREMAN: E. Palkey  
INSPECTOR: G.C. Griswold  
SOILS ENGR.: D.R. Stock

LOCATION OF BORING:

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE DEPTH FROM - TO	TYPE OF SAMPLE	BLOWS PER 6" ON SAMPLER			STRATA CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOIL & ROCK INCL. COLOR, LOSS OF WASH WATER, JOINTS IN ROCK, ETC.	SAM	
				0-6	6-12	12-18			NO.	PE
0		0-1.5	D	20	36	18	Dry V. Dense 2.0	Br. f-m SAND some silt tr. gravel tr. coal (FILL)	1	1
5		5-6.5	D	7	12	11	Moist Medium Dense 8.0	Orange-Br. f-c SAND little gravel tr. silt	2	1E
10		8.5-10	D	7	7	7	Wet 3.1 m. Dense 10.0	Br. f-c SAND tr. silt	3	1E
							1.1	Bottom of Boring 10.0'		

GROUND SURFACE TO 8.5 FT., USED HSB" CASING: THEN -" CASING TO 10 FT.  
D=DRY W=WASHED C=CORED P=PIT A=AUGER V=VANE TEST  
UP=UNDISTURBED, PISTON UB=UNDISTURBED, BALL CHECK OER=OPEN END ROD  
PROPORTIONS USED: TRACE=C-10%, LITTLE=10-20%, SOME=20-35%, AND 35-50%

FOOTAGE IN EARTH	10.0
FOOTAGE IN ROCK	0.0
NO. OF SAMPLES	3
HOLE NO. & TYPE	

54 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 2

TO G.A. Maguire & Assoc.  
 PROJECT NAME Sewer Extension Prgm.  
 PORT SENT TO Above  
 SAMPLES SENT TO Above

ADDRESS Providence, R.I.  
 LOCATION Stratford, Conn.  
 PROJ. NO. \_\_\_\_\_  
 OUR JOB NO. 67-196

DATE \_\_\_\_\_  
 HOLE NO. BH-14  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_

GROUND WATER OBSERVATIONS	at <u>5'</u> after _____ Hours	CASING	SAMPLER	CORE BAR.	SURFACE ELEV. _____
	_____ after _____ Hours				
	Type _____		<u>S/S</u>		DATE STARTED <u>7/31/67</u>
	Size I.D. _____		<u>1 3/8"</u>		DATE COMPL. <u>7/31/67</u>
	Hammer Wt. _____		<u>140#</u>	<u>BIT</u>	BORING FOREMAN <u>R. Hewins</u>
	Hammer Fall _____		<u>30"</u>		INSPECTOR _____
					SOILS ENGR. _____

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE			
				From 0-6	To 6-12	To 12-18				No.	Pen	Rec	
		0'-1'6"	D	2	8	3	dry loose	1'	Brown sandy TOPSOIL.	1	18"	18	
									Miscellaneous FILL.				
5		5'-6'6"	D	4	5	5	wet loose				2	18"	15
							"						
		10'-11'6"	D	1	1	1	"			3	18"	14	
								14'					
5		15'-16'6"	D	2	2	2	wet soft		Gray organic SILT, trace of fine sand.	4	18"	18	
		20'-21'6"	D	3	2	2	moist soft			5	18"	18	
		25'-26'6"	D	9	8	8	moist stiff			6	18"	13	
		30'-31'6"	D	16	15	16	moist very stiff			7	18"	15	
		35'-36'6"	D	14	13	13	"			8	18"	13	

GROUND SURFACE TO 45' USED non CASING: THEN \_\_\_\_\_

Sample Type C=Cored W=Washed U=Undisturbed Piston P=Test Pit A=Auger V=Vane Test	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35%	140lb Wt. x 30" fall on 2" O.D. Sampler	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Silt 8-16 C-Cl	SUMMARY: Earth Boring <u>45</u> Rock Coring _____ Samples <u>9</u>
		Cohesionless Density 0-10 Loose 10-30 Med. Dense		



54 WATER STREET EAST PROVIDENCE, R. I.

C.A. Maguire & Assoc.

ADDRESS Providence, R.I.

SHEET 1 OF 1

DATE

HOLE NO. BH-111

PROJECT NAME Sewer Extension Program

LOCATION Stratford, Conn.

LINE & STA.

REPORT SENT TO above

PROJ. NO.

OFFSET

SAMPLES SENT TO "

OUR JOB NO. 67-196

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR	SURFACE ELEV. <u>7.6</u>
<u>5'0"</u> after <u>1/2</u> Hours		Type	<u>S/S</u>		DATE STARTED <u>8/21/67</u>
<u>10'</u> casing		Size I.D. <u>2 1/2"</u>	<u>1 3/8"</u>		DATE COMPL. <u>8/22/67</u>
	after _____ Hours	Hammer Wt. <u>300#</u>	<u>140#</u>	BIT	BORING FOREMAN <u>C. Lenling</u>
		Hammer Fall <u>24"</u>	<u>30"</u>		INSPECTOR _____
					SOILS ENGR _____

LOCATION OF BORING:

Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
			From 0-6	6-12	To 12-18				No	Pen	Rec.
8	0'-1'6"	D	18	26	34	moist v/dense	1'6"	brown fine-medium SAND, asphalt, grav. tr. silt (FILL)	1	18"	10'
19											
26								CEMENT, COBBLES, and BOULDER (FILL).			
29							5'0"				
30											
15	5'-6'6"	D	6	6	9	wet m/dense	7'0"	Brown coarse-medium SAND, trace silt, and fine gravel.	2	18"	12"
27											
23	7'-8'6"	D	1	3	1	wet soft	9'0"	Gray organic SILT. (Sample too wet to pick up)	--	18"	0"
31											
34						wet medium		Brown fine-coarse SAND, trace of silt, and mica.			
18	10'-11'6"	D	7	8	11		12'5"		3	18"	14"
25											
35											
38											
40											
28	15'-16'6"	D	9	12	16	wet medium dense		Brown fine-coarse SAND, trace of silt, some fine-medium gravel.	4	18"	16"
36											
53											
30	18'6"-20'	D	10	10	17	"	20'0"		5	18"	13"
								BOTTOM OF BORING 20'0"			

GROUND SURFACE TO <u>18'6"</u>	USED <u>2 1/2"</u>	"CASING: THEN <u>Sampled to 20'0"</u>	SUMMARY:
Sample Type	Proportions Used	140# Wt. 30" fall on 2" O.D. Sampler	Earth Boring <u>20'0"</u>
D : C=Cored W=Washed	trace 0 to 10%	Cohesiveness Density Cohesive Consistency	Rock Coring <u>--</u>
undisturbed Piston	little 10 to 20%	0-10 Loose 0-4 Soft 30 + Hard	Samples <u>5</u>
Test Pit A=Auger V=Vane Test	some 20 to 35%	10-30 Med. Dense 4-8 M/Stiff	
		30-50 Dense 8-15 Stiff	
			HOLE NO BH-11

# American Drilling & Boring Co., Inc.

54 WATER STREET EAST PROVIDENCE, R. I.

C. A. Maciuro & Assoc.

ADDRESS Providence, R. I.

LOCATION Storford, Conn.

SHEET 1 OF 1  
 DATE 9/23/63  
 HOLE NO. BH-119  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 19'

PROJECT NAME Water Interceptor Line

PORT SENT TO 310VQ

PROJ. NO. \_\_\_\_\_  
 OUR JOB NO. 62-299

SAMPLES SENT TO 330VQ

GROUND WATER OBSERVATIONS  
1'4" after \_\_\_\_\_ Hours  
 \_\_\_\_\_ after \_\_\_\_\_ Hours

CASING SAMPLER CORE BAR  
 Type S/S  
 Size I.D. 1 3/8"  
 Hammer Wt. 140#  
 Hammer Fall 30"

Date \_\_\_\_\_ Time \_\_\_\_\_  
 START 9/23/63 a.m.  
 COMPLETE 9/23/63 p.m.  
 TOTAL HRS. \_\_\_\_\_  
 BORING FOREMAN \_\_\_\_\_  
 INSPECTOR \_\_\_\_\_  
 SOILS ENGR. \_\_\_\_\_

## LOCATION OF BORING: SWAMP & WOODS

Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
			From 0-6	6-12	To 12-18				No.	Pen	Rec.
	<u>0'-1'6"</u>	<u>D</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>Moist soft</u>	<u>3'0"</u>	<u>Black organic SILT &amp; peat</u>	<u>1</u>	<u>18"</u>	<u>12"</u>
	<u>5'-6'6"</u>	<u>D</u>	<u>15</u>	<u>18</u>	<u>22</u>	<u>Moist dense</u>		<u>Black coarse to fine SAND, little fine to medium gravel, trace of silt</u>	<u>2</u>	<u>18"</u>	<u>14"</u>
	<u>8'6"-10'</u>	<u>D</u>	<u>16</u>	<u>20</u>	<u>24</u>	<u>Moist dense</u>	<u>10'0"</u>		<u>3</u>	<u>18"</u>	<u>12"</u>
								<u>BOTTOM OF BORING 10'0"</u>			

GROUND SURFACE TO 10'

USED S/S WASHBACK THEN \_\_\_\_\_

Sample Type  
 D = Dry C=Cored W=Washed  
 U = Undisturbed Piston  
 TP=Test Pit A=Auger V=Vane Test

Proportions Used	140lb Wt. x 30" fall on 2" O.D. Sampler	Cohesionless Density	Cohesive Consistency
trace 0 to 10%	0-10 Loose	0-4 Soft	30 + Hard
little 10 to 20%	10-30 Med. Dense	4-8 M/Stiff	
some 20 to 35%	30-50 Dense	8-15 Stiff	
75 to 50%	50 + Very Dense	15-30 V-Stiff	

SUMMARY:  
 Earth Boring 10'  
 Rock Coring 0  
 Samples \_\_\_\_\_

HOLE NO BH-119

# American Drilling & Boring Co., Inc.

54 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. McGuire & Assoc.  
 PROJECT NAME Reinstitonic Interceptor  
 REPORT SENT TO above  
 COPIES SENT TO "

ADDRESS Providence, RI  
 LOCATION STRATFORD, CT.  
 PROJ. NO. \_\_\_\_\_  
 OUR JOB NO. 69-67

DATE \_\_\_\_\_  
 HOLE NO. 150  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 6.7

GROUND WATER OBSERVATIONS  
 At 4'10" after \_\_\_\_\_ Hours  
 Hole completed \_\_\_\_\_  
 \_\_\_\_\_ after \_\_\_\_\_ Hours

CASING SAMPLER CORE BAR.  
 Type 6" Hollow  
 Size I.D. Stem  
 Hammer Wt. \_\_\_\_\_  
 Hammer Fall \_\_\_\_\_  
S/S  
1-3/8"  
140#  
30"  
 BIT

Date Time  
 START 2/19/69 \_\_\_\_\_ a.m.  
 COMPLETE 2/20/69 \_\_\_\_\_ a.m.  
 TOTAL HRS. \_\_\_\_\_  
 BORING FOREMAN G. H. ...  
 INSPECTOR D. A. ...  
 SOILS ENGR \_\_\_\_\_

### LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	To 6-12	To 12-18				No.	Pen	Rec.
		<u>0'-1'-6"</u>	<u>D</u>	<u>43</u>	<u>47</u>	<u>13</u>	<u>dry very dense</u>	<u>2'-0"</u>	<u>Brown sandy TOPSOIL</u>	<u>1</u>	<u>18"</u>	<u>14"</u>
		<u>5'-8'6"</u>	<u>D</u>	<u>4</u>	<u>3</u>	<u>1</u>	<u>wet loose</u>	<u>6'-0"</u>	<u>Brown fine to coarse sand &amp; gravel, little peat, FILL</u>	<u>2</u>	<u>18"</u>	<u>12"</u>
		<u>10'-11'6"</u>	<u>D</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>wet soft</u>	<u>12'-0"</u>	<u>Brown PEAT</u>	<u>3</u>	<u>18"</u>	<u>3"</u>
		<u>15'-16'6"</u>	<u>D</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>wet loose</u>		<u>Dark brown fine SAND mixed with peat</u>	<u>4</u>	<u>18"</u>	<u>20"</u>
		<u>20'-21'6"</u>	<u>D</u>	<u>4</u>	<u>5</u>	<u>7</u>	<u>wet medium dense</u>	<u>21'-0"</u>		<u>5</u>	<u>18"</u>	<u>18"</u>
		<u>25'-26'6"</u>	<u>D</u>	<u>5</u>	<u>7</u>	<u>8</u>	<u>"</u>		<u>Dark brown-gray fine to coarse SAND, trace silt</u>	<u>6</u>	<u>18"</u>	<u>20"</u>
		<u>29'-30'6"</u>	<u>D</u>	<u>11</u>	<u>12</u>	<u>14</u>	<u>"</u>	<u>30'-6"</u>	<u>"</u>	<u>7</u>	<u>18"</u>	<u>14"</u>
									<u>Bottom of Boring 30'-6"</u>			

GROUND SURFACE TO \_\_\_\_\_  
 Sample Type \_\_\_\_\_  
 D=Dry C=Cored W=Washed  
 U=Undisturbed P=Piston  
 T=Test Pit A=Auger V=Vane Test  
 UT=Undisturbed Thinwall

USED \_\_\_\_\_  
 Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

"CASING: THEN \_\_\_\_\_  
 140 lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density Cohesive Consistency  
 0-10 Loose 0-4 Soft 30 + Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff  
 50 + Very Dense 15-30 V-Stiff

SUMMARY:  
 Earth Boring 30'6"  
 Rock Coring \_\_\_\_\_  
 Samples 7  
**HOLE NO. 150**

# American Drilling & Boring Co., Inc.

54 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 1

DATE \_\_\_\_\_

HOLE NO. 215

LINE & STA. \_\_\_\_\_

OFFSET \_\_\_\_\_

SURF. ELEV. 10.0

TO C.A. McGuire & Assoc.

ADDRESS Providence, RI

PROJECT NAME Housatonic Interceptor

LOCATION STAFFORD, CT.

PORT SENT TO above

PROJ. NO. \_\_\_\_\_

SAMPLES SENT TO \_\_\_\_\_

OUR JOB NO. 69-67

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR	Date	Time
At <u>9'</u> after _____ Hours	Hole completed	Type <u>6" Hollow</u>	<u>S/S</u>	_____	START <u>2/20/69</u>	_____ a.m.
At _____ after _____ Hours		Size I.D. <u>Stem Auger</u>	<u>1-3/8"</u>	_____	COMPLETE <u>2/20/69</u>	_____ a.m.
		Hammer Wt. _____	<u>140#</u>	BIT _____	BORING FOREMAN <u>G. H. Harty</u>	
		Hammer Fall _____	<u>30"</u>	_____	INSPECTOR <u>J. A. HARTY</u>	
				_____	SOILS ENGR. _____	

## LOCATION OF BORING:

H	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	To 6-12	To 12-18				No.	Pen	Rec.
		<u>0'-1'-6"</u>	<u>D</u>	<u>13</u>	<u>4</u>	<u>4</u>	<u>wet loose</u>	<u>1'-6"</u>	<u>Brown sandy TOPSOIL</u>	<u>1</u>	<u>13"</u>	<u>7"</u>
		<u>5'-6'-6"</u>	<u>D</u>	<u>21</u>	<u>27</u>	<u>33</u>	<u>wet very dense</u>	<u>10'-0"</u>	<u>Brown fine to medium SAND, Little fine to medium gravel Trace of silt</u>	<u>2</u>	<u>13"</u>	<u>5"</u>
		<u>10'-11'-6"</u>	<u>D</u>	<u>7</u>	<u>3</u>	<u>1</u>	<u>wet loose</u>	<u>20'-0"</u>	<u>Gray-brown fine to coarse SAND, little fine to medium gravel, trace of silt</u>	<u>3</u>	<u>13"</u>	<u>10"</u>
		<u>15'-16'-6"</u>	<u>D</u>	<u>17</u>	<u>17</u>	<u>19</u>	<u>wet dense</u>	<u>24'-0"</u>	<u>Gray-brown fine SAND, little silt</u>	<u>4</u>	<u>15"</u>	<u>20"</u>
		<u>20'-21'-6"</u>	<u>D</u>	<u>11</u>	<u>1</u>	<u>1</u>	<u>wet loose</u>	<u>25'-6"</u>	<u>Gray fine SAND</u>	<u>5</u>	<u>18"</u>	<u>9"</u>
		<u>24'-25'-6"</u>	<u>D</u>	<u>13</u>	<u>15</u>	<u>18</u>	<u>wet dense</u>		<u>Bottom of Boring 25'-6"</u>	<u>6</u>	<u>18"</u>	<u>15"</u>

GROUND SURFACE TO \_\_\_\_\_

USED \_\_\_\_\_ "CASING: THEN \_\_\_\_\_

Sample Type  
 C = Dry C = Cored W = Washed  
 U = Undisturbed Piston  
 TP = Test Pit A = Auger V = Vane Test

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%

140 lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density Cohesive Consistency  
 0-10 Loose 0-4 Soft 30 + Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff

SUMMARY:  
 Earth Boring 25'-6"  
 Rock Coring \_\_\_\_\_  
 Samples 6

# American Drilling & Boring Co., Inc.

54 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. Maguire & Assoc.

ADDRESS Providence, R. I.

PROJECT NAME Sewage Plant

LOCATION STRATFORD, Ct.

PORT SENT TO above

PROJ. NO. 69-67

SAMPLES SENT TO "

OUR JOB NO. 69-67

SHEET 1 OF 1  
 DATE \_\_\_\_\_  
 HOLE NO. 217  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 9.0

**GROUND WATER OBSERVATIONS**

**CASING SAMPLER CORE BAR,**

Date \_\_\_\_\_ Time \_\_\_\_\_  
 START 2/20/69 a.m.  
 COMPLETE 2/20/69 p.m.  
 TOTAL HRS. \_\_\_\_\_  
 BORING FOREMAN G. HEVON  
 INSPECTOR D.A. PETERSON  
 SOILS ENGR. \_\_\_\_\_

6' after \_\_\_\_\_ Hours  
**Hole completed**  
 \_\_\_\_\_ after \_\_\_\_\_ Hours

Type 6" Hollow  
 Size I.D. Auger  
 Hammer Wt. \_\_\_\_\_  
 Hammer Fall \_\_\_\_\_

SAMPLER 5/S  
1-3/8"  
1600  
30"

CORE BAR \_\_\_\_\_  
 BIT \_\_\_\_\_

**LOCATION OF BORING:**

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-5	6-12	To 12-18				No.	Pen	Rec.
		0'-1'-6"	D	11	13	16	dry medium dense	4'-0"	Brown fine sandy TOPSOIL	1	13"	20"
		5'-6'-6"	D	22	31	36	dry very dense		Brown fine to coarse SAND, Trace fine to medium gravel	2	18"	14"
		10'-11'-6"	D	7	7	11	wet medium dense	11'-0"		3	16"	13"
		15'-16'-6"	D	14	14	15	"		Gray-brown fine to coarse SAND, some fine to medium gravel, trace silt	4	18"	16"
		20'-21'-6"	D	17	19	23	wet dense		"	5	18"	15"
		24'-25'-6"	D	19	23	24	"	25'-6"	"	6	18"	18"
									Bottom of Boring 25'-6"			

GROUND SURFACE TO \_\_\_\_\_

USED "CASING: THEN \_\_\_\_\_

Sample Type  
 D=Dry C=Cored W=Washed  
 U=Undisturbed Piston  
 T=Test Pit A=Auger V=Vane Test

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 35 to 50%

140lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density Cohesive Consistency  
 0-10 Loose 0-4 Soft 30+ Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff  
 50+ Very Dense 15-30 V-Stiff

**SUMMARY:**  
 Earth Boring 25'-6"  
 Rock Coring \_\_\_\_\_  
 Samples 6  
**HOLE NO. 217**

# American Drilling & Boring Co., Inc.

54 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 1  
 DATE \_\_\_\_\_  
 HOLE NO 219  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 11.2

TO C.A. Maguire & Assoc. ADDRESS Providence, RI  
 PROJECT NAME Housatonic Interceptor LOCATION STRAFORD, CT.  
 PORT SENT TO above PROJ. NO. \_\_\_\_\_  
 SAMPLES SENT TO " OUR JOB NO. 69-67

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	Date	Time
At <u>12'</u> after _____ Hours	Hole completed	Type <u>6" Hollow Stem</u>	<u>8/S</u>	_____	START <u>2/21/69</u>	_____ a.m.
_____ after _____ Hours		Size I.D. _____	<u>1-3/8"</u>	_____	COMPLETE <u>2/21/69</u>	_____ a.m.
		Hammer Wt. _____	<u>140#</u>	BIT _____	TOTAL HRS. _____	
		Hammer Fall _____	<u>30"</u>	_____	BORING FOREMAN <u>G. Hevey</u>	
					INSPECTOR <u>D.A. Erickson</u>	
					SOILS ENGR. _____	

## LOCATION OF BORING

Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc	SAMPLE		
			From 0-5	6-12	To 12-18				No.	Pen	Rec.
	0'-1'-6"	D	11	13	8	dry medium dense	1'-0"	Brown fine SAND, Little silt	1	18"	16"
	5'-6'-6"	D	27	33	46	dry very dense		Brown fine to coarse SAND, Little fine to medium gravel Trace of silt	2	18"	17"
	10'-11'-6"	D	15	18	19	wet dense	11'-5"	-becomes wet & dense @ 8'	3	18"	12"
	15'-16'-6"	D	14	15	15	"		Gray-brown fine to coarse SAND, some fine to coarse gravel, trace of silt	4	18"	11"
	20'-21'-6"	D	11	12	12	wet medium dense		"	5	18"	7"
	25'-26'-6"	D	4	7	13	"	26'-6"	"	6	16"	11"
								Bottom of Boring 26'-6"			

ROUND SURFACE TO \_\_\_\_\_ USED \_\_\_\_\_ "CASING: THEN \_\_\_\_\_

<p>Sample Type</p> <p>F=C=Cored W=Washed</p> <p>F=Undisturbed Piston</p> <p>F=Test Pit A=Auger V=Vane Test</p>	<p>Proportions Used</p> <p>trace 0 to 10%</p> <p>little 10 to 20%</p> <p>some 20 to 35%</p>	<p>140 lb Wt. x 30" fall on 2" O.D. Sampler</p> <p>Cohesionless Density</p> <p>0-10 Loose</p> <p>10-30 Med. Dense</p> <p>30-50 Dense</p>	<p>Cohesive Consistency</p> <p>0-4 Soft 30 + Hard</p> <p>4-8 M/Soft</p> <p>8-15 Stiff</p>	<p>SUMMARY:</p> <p>Earth Boring <u>26'6"</u></p> <p>Rock Coring _____</p> <p>Samples <u>6</u></p>
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HOLE NO 219



# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 2 OF 1  
 DATE \_\_\_\_\_  
 HOLE NO. BH-223A  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. \_\_\_\_\_

TO same as 1 ADDRESS \_\_\_\_\_  
 PROJECT NAME \_\_\_\_\_ LOCATION \_\_\_\_\_  
 PORT SENT TO \_\_\_\_\_ PROJ. NO. \_\_\_\_\_  
 SAMPLES SENT TO \_\_\_\_\_ OUR JOB NO. 70-10

GROUND WATER OBSERVATIONS	CASING	SAMPLER	CORE BAR.	Date	Time
_____ after _____ Hours	Type _____	_____	_____	START _____	_____
_____ after _____ Hours	Size I.D. <u>same as 1</u>	_____	_____	COMPLETE _____	_____
	Hammer Wt. _____	_____	BIT _____	TOTAL HRS. <u>same as 1</u>	_____
	Hammer Fall _____	_____	_____	BORING FOREMAN _____	_____
				INSPECTOR _____	_____
				SOILS ENGR. _____	_____

### LOCATION OF BORING:

Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
			From 0-6	6-12	To 12-18				No	Pen	Rec
			32	40'-41'6"	D				4	6	6
37											
43											
52											
56						wet medium dense		Gray fine to coarse SAND, Little silt	10	18"	12"
43	45'-46'6"	D	10	12	13						
48											
55											
63							50'-6"				
67											
63	50'-51'6"	D	9	11	12	moist medium dense		Brown fine to coarse SAND, Little fine to medium gravel and silt	11	18"	12"
65							54'-0"				
67											
67											
65						"		Brown fine SAND, little silt	12	18"	10"
68	55'-56'6"	D	11	12	13						
75											
82											
87											
91						moist dense					
98	60'-61'6"	D	14	21	23		62'-0"		13	18"	6"
113											
122											
125											
177						moist very dense		Brown fine to medium SAND, Little silt	14	18"	7"
123	65'-66'6"	D	26	35	44						
140											
150											
153											
162						"			15	18'	--
174	70'-71'6"	D	18	26	27						
215											
233											
256											
300						"			16	18'	--
287	75'-76'6"	D	44	56	72						
322							78'-0"				
341											
368								Brown fine to medium SAND, Trace silt			
387											

GROUND SURFACE TO _____	USED _____	CASING: _____	THEN _____
Sample Type D= Dry C=Cored W=Washed U= Undisturbed Piston T= Test Pit A=Auger V=Vane Test IT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Stiff 8-15 Stiff 15-30 V-Stiff
SUMMARY: Earth Boring _____ Rock Coring _____ Samples _____			HOLE NO. BH-223

# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. BH-223A  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 5.0

TO same as 1 ADDRESS same as 1  
 PROJECT NAME \_\_\_\_\_ LOCATION \_\_\_\_\_  
 REPORT SENT TO \_\_\_\_\_ PROJ. NO. \_\_\_\_\_  
 COPIES SENT TO \_\_\_\_\_ OUR JOB NO. \_\_\_\_\_

GROUND WATER OBSERVATIONS At _____ after _____ Hours _____ after _____ Hours	CASING SAMPLER CORE BAR. Type _____ Size I.D. <u>same as 1</u> Hammer Wt. _____ Hammer Fall _____	Date _____ Time _____ START _____ COMPLETE _____ TOTAL HRS. <u>same as 1</u> BORING FOREMAN _____ INSPECTOR _____ SOILS ENGR. _____
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### LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	6-12	To 12-18				No.	Pen	Rec.
253	80'-81'-6"	D**	25	46	51	moist very dense		Brown fine to medium SAND, Trace silt	18	18"	--	
248												
179							83'-0"					
183												
175												
153	85'-86'-6"	D	28	22	27	moist dense		Brown fine to medium SAND, Trace silt & fine gravel	18	18"	12"	
167												
170												
173												
180												
156	90'-91'-6"	D	19	23	21	"		"	19	18"	14"	
161												
164												
168												
173									20	18"	10"	
140	95'-96'-6"	D	17	24	26	"						
143												
135												
122												
131												
115	100'-101'-6"	D	18	17	22	"			21	18"	12"	
123												
130												
135												
142												
122	105'-106'-6"	D	19	23	24	"			22	18"	10"	
135												
143												
148							109'-0"					
156												
128	110'-111'-6"	D*	17	24	26	"	silt	Brown-gray fine SAND, little and fine gravel, cemented TILL	23	18"	12"	
145												
147												
147												
152												
	115'-116'-6"	D	12	19	22	"			24	18"	10"	

GROUND SURFACE TO _____ Sample Type _____ D=Dry C=Cored W=Washed U=Undisturbed Piston T=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall	USED _____ THEN _____ Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Stiff 8-15 Stiff 15-30 V-Stiff	SUMMARY: Earth Boring _____ Rock Coring _____ Samples _____ HOLE NO. BH-223
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# American Drilling & Coring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. Macuire & Assoc.  
 PROJECT NAME Housatonic Interceptor  
 PORT SENT TO above  
 SAMPLES SENT TO "

ADDRESS Providence, RI  
 LOCATION STRATFORD, CT.  
 PROJ. NO. \_\_\_\_\_  
 OUR JOB NO. 69-67

SHEET 1 OF 2  
 DATE \_\_\_\_\_  
 HOLE NO. BH-225  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 7.1

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	Date	Time
at <u>8'6"</u>	after <u>1/2</u> Hours	Type _____	<u>S/S</u>	_____	START <u>1/29/69</u>	_____
_____	after _____ Hours	Size I.D. <u>2 1/2"</u>	<u>1-3/8"</u>	_____	COMPLETE <u>1/30/69</u>	_____
_____	_____	Hammer Wt. <u>300#</u>	<u>140#</u>	BIT _____	BORING FOREMAN <u>R. FITE</u>	_____
_____	_____	Hammer Fall <u>24"</u>	<u>30"</u>	_____	INSPECTOR <u>J. J. ...</u>	_____
_____	_____	_____	_____	_____	SOILS ENGR. _____	_____

## LOCATION OF BORING:

Casing Blows per foot	Sample Depths From-To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
			From 0-6	6-12	To 12-18				No.	Pen	Rec
1-21	0'-1'-6"	D	38	35	31	moist very dense	3'-0"	Brown fine to medium SAND, Little fine to coarse gravel, Trace of silt, FILL.	1	18"	12"
2-21						wet soft		Dark gray ORGANIC SILT, trace of fine sand	2	18"	13"
3-21	5'-6'-6"	D	1	1	3	moist medium stiff	12'-0"	"	3	18"	12"
4-21								Gray fine to coarse SAND, Little mica	4	18"	12"
5-21	15'-16'-6"	D	7	5	6	wet medium dense	20'-0"		5	18"	12"
6-21						"		Brown fine to coarse SAND & fine to coarse gravel	6	18"	13"
7-21	20'-21'-6"	D	6	12	17	"	25'-0"		7	18"	12"
8-21						"		Brown fine SAND, trace of silt & mica	8	18"	13"
9-21	25'-26'-6"	D	6	8	11	"		"			
10-21						"		"			
11-21	30'-31'-6"	D	5	9	14	"		"			
12-21						"		"			
13-21	35'-36'-6"	D	6	10	13	"		"			

GROUND SURFACE TO <u>75'</u>	USED <u>2 1/2"</u>	CASING: THEN <u>o.c. rod to 30'</u>
Sample Type D=Dry C=Cored W=Washed U=Undisturbed Piston T=Test Pit A=Auger V=Vane Test IT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density Cohesive Consistency 0-10 Loose 0-4 Soft 30 + Hard 10-30 Med Dense 4-8 M/Stiff 30-50 Dense 8-15 Stiff 50+ Very Dense 15-30 V-Stiff
SUMMARY: Earth Boring <u>80'</u> Rock Coring _____ Samples <u>17</u>		HOLE NO. <u>BH-225</u>

# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. Mawire & Assoc., Inc.  
 PROJECT NAME Sewage Treatment Plant  
 REPORT SENT TO above  
 SAMPLES SENT TO "

ADDRESS Providence, R.I.  
 LOCATION Stratford, Conn.  
 PROJ. NO. \_\_\_\_\_  
 OUR JOB NO. 70-10'

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. B-227  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 9.7'

GROUND WATER OBSERVATIONS 9'5" after <u>1</u> Hours 66' Casing _____ after _____ Hours	Rods "AW" Type _____ Size I.D. <u>2 1/2"</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	CASING <u>2 1/2"</u> <u>300#</u> <u>24"</u>	SAMPLER <u>S/S</u> <u>1 3/8"</u> <u>140#</u> <u>30"</u>	CORE BAR <u>S/T</u> <u>1 3/8"</u> BIT <u>Dia.</u>	Date _____ Time _____ START <u>11/18/69</u> <u>_____</u> a.m. COMPLETE <u>11/19/69</u> <u>_____</u> p.m. TOTAL HRS. _____ BORING FOREMAN <u>R. L. _____</u> INSPECTOR <u>_____</u> SOILS ENGR. _____
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### LOCATION OF BORING:

Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
			From 0-6	To 6-12	To 12-18				No.	Pen.	Rec.
2	0'-1'6"	D	2	1	2	Moist loose	2'	Brown fine SAND, little silt	1	18"	16"
3											
11											
24											
43						Moist very dense		Brown fine to coarse SAND, some fine to coarse gravel, trace of silt	2	18"	10"
33	5'-6'6"	D	32	41	30		8'				
48											
32											
26											
24						Wet medium dense		Brown medium to coarse SAND trace of fine gravel & silt	3	18"	8"
14	10'-11'6"	D	7	9	15		15'				
23											
24											
25											
22	15'-16'6"	D	10	12	12	Moist medium dense		Brown fine to coarse SAND, and gravel	4	18"	14"
24											
24											
29											
30						"			5	18"	6"
23	20'-21'6"	D	6	8	6		23'				
27											
30											
32											
35						"		Brown gray fine to coarse SAND, trace of silt	6	18"	12"
30	25'-26'6"	D	13	9	9						
37											
42											
55											
57											
48	30'-31'6"	D	8	10	11	"			7	18"	14"
55											
63											
64											
67						Wet medium dense			8	18"	12"
50	35'-36'6"	D	11	14	13						
52											
58											
60											
65							40'				

GROUND SURFACE TO <u>60'</u> Sample Type _____ U=Undisturbed Piston T=Test Pit A=Auger V=Vane Test JT=Undisturbed Thinwall	PROPORTIONS USED trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	USED <u>2 1/2"</u> CASING: THEN <u>cased to 70'</u> 140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense	THEN <u>cased to 70'</u> Cohesive Consistency 0-4 Soft 4-8 M/Soft 8-15 Stiff 15-30 V-Stiff 30+ Hard	SUMMARY: Earth Boring <u>66'</u> Rock Coring <u>10'</u> Samples <u>14</u> HOLE NO B227
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# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 4 OF 4  
 DATE \_\_\_\_\_  
 HOLE NO B- 227  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. \_\_\_\_\_

TO \_\_\_\_\_ ADDRESS \_\_\_\_\_  
 PROJECT NAME \_\_\_\_\_ LOCATION \_\_\_\_\_  
 PORT SENT TO \_\_\_\_\_ PROJ. NO. \_\_\_\_\_  
 SAMPLES SENT TO \_\_\_\_\_ OUR JOB NO. \_\_\_\_\_

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR	Date	Time
At _____ after _____ Hours	Type _____	_____	_____	_____	START _____	_____ a.m.
_____ after _____ Hours	Size I.D. _____	_____	_____	_____	COMPLETE _____	_____ p.m.
	Hammer Wt. _____	_____	_____	BIT _____	TOTAL HRS. _____	
	Hammer Fall _____	_____	_____	_____	BORING FOREMAN _____	
		_____	_____	_____	INSPECTOR _____	
		_____	_____	_____	SOILS ENGR _____	

## LOCATION OF BORING

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	6-12	12-18				No.	Pen	Rec.
58		40'-41'6"	D	7	9	11	Wet medium dense		Gray fine to medium SAND, little silt	9	18"	14"
63												
65												
70								44'				
73												
70		45'-46'6"	D	7	10	11	"		Brown fine SAND and silt	10	18"	16"
77												
78												
78												
82		50'-51'6"	D	9	12	14	Wet medium dense			11	18"	14"
93								53'				
110												
115												
123												
110		55'-56'6"	D	5	7	9	"		Gray brown fine SAND, some silt, trace mica	12	18"	10"
125												
130								58'				
142												
150												
147		60'-61'6"	D	8	10	10	"		Gray-brown fine SAND, trace silt, trace mica	13	18"	12"
158												
160												
173												
173							Wet very dense					
173		65'-66'	D	13	130		min/ft	66'	Top of Rock	14	12"	0
		66'-71'	C				2		Gray-green-white GRANITE, Gneiss, Fractured, few seams medium hard, trace of quartz	C1	60"	59"
							3					
							3					
							4	71'				
		71'-76'	C				4		Gray-green, white GRANITE, Gneiss, medium hard, trace of quartz	C2	60"	60"
							4					
							4					
							4	76'				
									Bottom of boring 76'			

GROUND SURFACE TO \_\_\_\_\_ USED \_\_\_\_\_ "CASING: THEN \_\_\_\_\_

Sample Type	Proportions Used	140lb Wt. x 30" fall on 2" O.D. Sampler	SUMMARY:
D=Dry C=Cored W=Washed	trace 0 to 10%	Cohesionless Density	Earth Boring _____
L = Undisturbed Piston	little 10 to 20%	0-10 Loose	Rock Coring _____
T = Test Pit A=Auger V=Vane Test	some 20 to 35%	10-30 Med. Dense	Samples _____
UT=Undisturbed Thinwall	and 35 to 50%	30-50 Dense	
		50+ Very Dense	
		0-4 Soft	
		4-8 M/Stiff	
		8-15 Stiff	
		15-30 V-Stiff	

HOLE NO B 227



100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 2 OF 2  
 DATE \_\_\_\_\_  
 HOLE NO. B-229  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. \_\_\_\_\_

TO \_\_\_\_\_ ADDRESS \_\_\_\_\_  
 PROJECT NAME \_\_\_\_\_ LOCATION \_\_\_\_\_  
 REPORT SENT TO \_\_\_\_\_ PROJ. NO. \_\_\_\_\_  
 FILES SENT TO \_\_\_\_\_ OUR JOB NO. \_\_\_\_\_

GROUND WATER OBSERVATIONS	_____ after _____ Hours	Type _____	CASING _____	SAMPLER _____	CORE BAR _____	START _____ COMPLETE _____ TOTAL HRS. _____ BORING FOREMAN _____ INSPECTOR _____ SOILS ENGR. _____
	_____ after _____ Hours	Size I.D. _____ Hammer Wt. _____ Hammer Fall _____	_____	_____	BIT _____	

**LOCATION OF BORING:**

Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hard- ness, Drilling time, seams and etc	SAMPLE		
			From 0-6	6-12	To 12-18				No	Pen	Rec.
	40'-41'6"	D	4	5	12	Wet medium dense		Gray fine to medium SAND, little silt	8	16"	10"
	43'-44'0"	D	6	13	18	Moist dense	48'		9	18"	14"
	46'-47'6"	D	10	9	13	Moist medium dense		Gray-brown fine SAND, some silt	10	18"	16"
47	55'-56'6"	D	8	11	12	"			11	18"	14"
	60'-61'6"	D	7	10	11	Wet medium dense	60'6"	Gray fine to coarse SAND, little silt, trace mica	12	18"	10"
75	65'-66'6"	D	18	22	17	Moist dense		Gray fine to coarse SAND, some fine to medium gravel little silt	13	18"	12"
145	70'-71'	D	42	123		Moist very dense	71'	Rock Fragments	14	12"	6"
	71'-76'	C				min/ft 2 2 3 3 3	76'	Top of Rock Gray GRANITE GNEISS fractured, seamy, medium hard	C1	60"	34"
	76'-81'	C				3 4 4 5 5	81'	Gray GRANITE GNEISS seamy, medium hard, trace of quartz	C2	60"	49"

GROUND SURFACE TO \_\_\_\_\_ USED \_\_\_\_\_ "CASING: THEN BOTTOM OF BORING: 81"

Core Type Dry C=Cored W=Washed U=Undisturbed Piston T=Test Pit A=Auger V=Vane Test TU=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Stiff 8-15 Stiff 15-30 V-Stiff	SUMMARY Earth Boring <u>15</u> Rock Coring _____ Samples _____
	HOLE NO B229			

# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C. A. McGuire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 REPORT SENT TO above PROJ. NO. 70-10  
 SAMPLES SENT TO " OUR JOB NO. 70-10

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. B-231  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 3.2

GROUND WATER OBSERVATIONS		Rods-"AW"	CASING	SAMPLER	CORE BAR.	START	Date	Time
<u>1'6"</u>	after <u>1/4</u> Hours	Type _____	_____	<u>S/S</u>	_____	COMPLETE	<u>11/20/69</u>	_____
_____	after _____ Hours	Size I.D. <u>2 1/2"</u>	_____	<u>1 3/8"</u>	_____	TOTAL HRS. _____	_____	_____
_____	_____	Hammer Wt. <u>300#</u>	_____	<u>140#</u>	BIT	BORING FOREMAN <u>R. Fife</u>	_____	_____
_____	_____	Hammer Fall <u>24"</u>	_____	<u>30"</u>	_____	INSPECTOR <u>W. S. BROWN</u>	_____	_____
_____	_____	_____	_____	_____	_____	SOILS ENGR. _____	_____	_____

## LOCATION OF BORING:

Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
			From 0-6	5-12	To 12-18				No.	Pen	Rec.
12	0'-1'6"	D	7	10	14	Moist medium dense	3'0"	Brown fine to coarse SAND & fine to medium gravel (Fill)	1	18"	13"
27											
34											
13											
9											
4	5'-6'6"	D	2	2	3	Wet loose		Dark gray fine to coarse SAND, trace of peat & fine gravel (Fill)	2	18"	6"
5											
7											
9											
9											
5	10'-11'6"	D	2	3	2	"			3	18"	6"
6											
7											
7							14'0"				
3	15'-16'6"	D	1	2	2	Moist soft		Brown fibrous PEAT	4	18"	14"
5											
8											
9							19'6"				
16											
12	20'-21'6"	D	5	7	8	Wet medium dense		Brown fine to medium SAND, trace of fine to medium gravel	5	18"	12"
18											
23											
32											
40	25'-26'6"	D	6	10	11	"	26'5"		6	18"	12"
								Bottom of Boring 26'6"			

GROUND SURFACE TO 25' USED 2 1/2" CASING: THEN S/S to 26'6"

Sample Type: D=Dry C=Cored W=Washed U=Undisturbed Piston T=Test Pit A=Auger V=Vane Test JT=Undisturbed Thinwall

Proportions Used:  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

10lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density Consistency:  
 0-10 Loose 0-4 Soft 30+ Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff  
 50+ Very Dense 15-30 V-Stiff

SUMMARY:  
 Earth Boring 26'6"  
 Rock Coring \_\_\_\_\_  
 Samples 6

HOLE NO **B-231**



# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. McGuire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 PORT SENT TO above PROJ. NO. \_\_\_\_\_  
 SAMPLES SENT TO " OUR JOB NO. 70-10

SHEET 1 OF 1  
 DATE \_\_\_\_\_  
 HOLE NO. B-234  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 8.0'

GROUND WATER OBSERVATIONS <u>3'2"</u> after <u>1/2</u> Hours No casing after _____ Hours	Rods "AW" CASING SAMPLER CORE BAR. Type <u>No casing S/S</u> Size I.D. <u>1 3/8"</u> Hammer Wt. <u>140#</u> BIT Hammer Fall <u>30"</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Date</th> <th>Time</th> <th></th> </tr> <tr> <td>START <u>11/26/69</u></td> <td></td> <td>a.m.</td> </tr> <tr> <td>COMPLETE <u>11/26/69</u></td> <td></td> <td>p.m.</td> </tr> <tr> <td>TOTAL HRS. _____</td> <td></td> <td></td> </tr> <tr> <td>BORING FOREMAN <u>S. J. [unclear]</u></td> <td></td> <td></td> </tr> <tr> <td>INSPECTOR <u>[unclear]</u></td> <td></td> <td></td> </tr> <tr> <td>SOILS ENGR _____</td> <td></td> <td></td> </tr> </table>	Date	Time		START <u>11/26/69</u>		a.m.	COMPLETE <u>11/26/69</u>		p.m.	TOTAL HRS. _____			BORING FOREMAN <u>S. J. [unclear]</u>			INSPECTOR <u>[unclear]</u>			SOILS ENGR _____		
Date	Time																						
START <u>11/26/69</u>		a.m.																					
COMPLETE <u>11/26/69</u>		p.m.																					
TOTAL HRS. _____																							
BORING FOREMAN <u>S. J. [unclear]</u>																							
INSPECTOR <u>[unclear]</u>																							
SOILS ENGR _____																							

## LOCATION OF BORING

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6"	6-12"	12-18"				No.	Pen	Rec.
		0'-1'6"	D	12	9	7	Moist medium dense		Brown-black fine to coarse SAND, brick, ashes, shells organic matter (FILL)	1	13"	7"
5		5'-6'6"	D	6	7	6	Wet medium dense			2	18"	10"
10		10'-11'6"	D	13	17	22	Moist dense	12'6"	paper	3	18"	10"
15		15'-16'6"	D	3	3	3	Moist medium stiff		Brown gray organic SILT with peat	4	18"	12"
20		20'-21'6"	D	3	4	4	"			5	18"	10"
25		25'-26'6"	D	4	5	6	"			6	18"	12"
30		30'-31'6"	D	5	7	6	Wet dense	31'6"	Dk Br-Gray F/C SAND, lit. silt T/F/Gryl & wood chips	7	18"	14"
35		33'6"-35'	D	8	10	9	Moist medium dense	35'	Dark gray fine to coarse SAND, some fine gravel, trace silt	8	18"	12"
									Bottom of boring 35'			

GROUND SURFACE TO <u>35'</u>	USED <u>No</u> "CASING: THEN <u>S/S to 35'</u>	140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density Cohesive Consistency 0-10 Loose 0-4 Soft 30 + Hard 10-30 Med. Dense 4-8 M/Stiff 30-50 Dense 8-15 Stiff 50+ Very Dense 15-30 V-Stiff
Sample Type D=Dry C=Cored W=Washed J=Undisturbed Piston T=Test Pit A=Auger V=Vane Test JT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	SUMMARY: Earth Boring <u>35'</u> Rock Coring _____ Samples <u>8</u> HOLE NO. <u>B-234</u>

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. Maguire & Assoc., Inc.

ADDRESS Providence, RI

PROJECT NAME Sewage Treatment Plant

LOCATION Stratford, Conn.

REPORT SENT TO above

PROJ. NO. \_\_\_\_\_

COPIES SENT TO "

OUR JOB NO. 70-10

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. B-236  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 7.6

**GROUND WATER OBSERVATIONS**

5' after 1/4 Hours

Rods-AW Type \_\_\_\_\_  
 Size I.D. 2 1/2"  
 Hammer Wt. 300#  
 Hammer Fall 24"

CASING \_\_\_\_\_  
 SAMPLER S/S  
1-3/8"  
140#  
30"

CORE BAR \_\_\_\_\_  
 BIT \_\_\_\_\_

Date \_\_\_\_\_ Time \_\_\_\_\_  
 START 11/24/69  
 COMPLETE 11/24/69  
 TOTAL HRS. \_\_\_\_\_  
 BORING FOREMAN R. Fife  
 INSPECTOR G. Sauter  
 SOILS ENGR. \_\_\_\_\_

**LOCATION OF BORING**

DEPT.	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6"	6-12"	12-18"				No.	Pen	Rec.
	8	0'-1'-6"	D	3	8	9	moist medium dense		6" Brown TOPSOIL, brown fine to medium SAND, some fine to coarse gravel, FILL	1	18"	12"
	16											
	23											
	24											
	30											
	10	5'-6'-6"	D	3	6	5	"		Brown fine to coarse SAND & fine to coarse gravel, trace of silt & peat, FILL	2	18"	12"
	19											
	26											
	31											
	20							10'-0"				
	11	10'-11'-6"	D	6	8	5	"		Brown fine to coarse SAND, Some fine gravel	3	18"	12"
	18											
	27											
	25							14'-0"				
	49						moist very dense					
	31	15'-16'-6"	D	21	26	31			Brown fine to coarse SAND	4	18"	12"
	57											
	63							18'-0"				
	64											
	68											
	23	20'-21'-6"	D	17	29	33	"		Brown fine SAND, little silt	5	18"	12"
	39											
	51											
	59							24'-0"				
	64	25'-26'-6"	D	22	34	38	"		Brown fine SAND, some silt	6	18"	12"
								26'-6"				
									Bottom of Boring 26'-6"			

GROUND SURFACE TO 25'

USED 2 1/2"

"CASING: THEN S/S to 26'-6"

Sample Type  
 D=Dry C=Cored W=Washed  
 U=Undisturbed Piston  
 T=Test Pit A=Auger V=Vane Test  
 TH=Undisturbed Thinwall

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

140lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density Cohesive Consistency  
 0-10 Loose 0-4 Soft 30+ Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff  
 50+ Very Dense 15-30 V-Stiff

SUMMARY:  
 Earth Boring 26'-6"  
 Rock Boring \_\_\_\_\_  
 Samples 6

HOLE NO B-236



# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. Maquire & Assoc., Inc.

PROJECT NAME Sewage Treatment Plant

REPORT SENT TO above

COPIES SENT TO "

ADDRESS Providence, R.I.

LOCATION Stratford, Conn.

PROJ. NO.

OUR JOB NO. 70-10

SHEET 1 OF 1  
 DATE \_\_\_\_\_  
 HOLE NO. B-238  
 LINE & STA \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 3.7

GROUND WATER OBSERVATIONS		Rods-AW	CASING	SAMPLER	CORE BAR	START	Date	Time
At 6'	after 1/2 Hours	Type		S/S		COMPLETE	11/20/69	a.m.
	after _____ Hours	Size I.D.	2 1/2"	1-3/8"		TOTAL HRS.	11/20/69	p.m.
		Hammer Wt.	300#	140#	BIT	BORING FOREMAN	R. Fife	
		Hammer Fall	24"	30"		INSPECTOR	G. Sauter	
						SOILS ENGR.		

## LOCATION OF BORING:

PTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6"	6-12"	To 12-18"				No	Pen	Rec.
	4	0 <sup>1</sup> -1 <sup>1</sup> -6"	D	2	5	7	moist medium dense	3 <sup>1</sup> -0"	6" Brown TOPSOIL, Brown fine to coarse sand and fine to coarse gravel, FILL	1	18"	12"
	15											
	25											
	26											
	11						moist soft	6 <sup>1</sup> -0"	Gray ORGANIC SILT, trace of fine gravel & fine to medium sand	2	18"	6"
	3	5 <sup>1</sup> -6 <sup>1</sup> -6"	D	1	1	1						
	5											
	6											
	7											
	5											
	4	10 <sup>1</sup> -11 <sup>1</sup> -6"	D	1	1	2	"		Brown fibrous PEAT Trace fine sand	3	18"	14"
	5											
	5											
	7											
	6							15 <sup>1</sup> -0"				
	5	15 <sup>1</sup> -16 <sup>1</sup> -6"	D	2	2	2	"		Brown fibrous PEAT	4	18"	13"
	9											
	13											
	17											
	18						moist stiff					
	10	20 <sup>1</sup> -21 <sup>1</sup> -6"	D	2	4	5				5	18"	14"
	12											
	15											
	17											
	18											
	8	25 <sup>1</sup> -26 <sup>1</sup> -6"	D	2	3	5	"			6	18"	13"
	12											
	13							28 <sup>1</sup> -0"				
	21											
	23						moist medium dense		Gray fine to medium SAND	7	18"	12"
	15	30 <sup>1</sup> -31 <sup>1</sup> -6"	D	7	10	8						
	26											
	28											
	30											
	31	35 <sup>1</sup> -36 <sup>1</sup> -6"	D	5	6	8	"	36 <sup>1</sup> -6"		8	18"	12"
									Bottom of Boring 36 <sup>1</sup> -6"			

GROUND SURFACE TO 25' USED 25' CASING: THEN S/S to 36' 6"

Sample Type	Proportions Used	140lb Wt. x 30" fall on 2" O.D. Sampler	SUMMARY
D=Dry C=Cored W=Washed	trace 0 to 10%	Cohesionless Density	Earth Boring 36' 6"
U=Undisturbed Piston	little 10 to 20%	Cohesive Consistency	Rock Coring
T=Test Pit A=Auger V=Vane Test	some 20 to 35%	0-10 Loose 0-4 Soft 30+ Hard	Samples 8
U=Undisturbed Thruwall	and 35 to 50%	10-30 Med. Dense 4-8 M/Stiff	
		30-50 Dense 8-15 Stiff	
		50+ Very Dense 15-30 V-Stiff	

HOLE NO 8-238

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.A. McGuire & Assoc., Inc.  
 PROJECT NAME Sewage Treatment Plant  
 REPORT SENT TO above  
 APLES SENT TO "

ADDRESS Providence, R.I.  
 LOCATION Stratford, Conn.  
 PROJ. NO. \_\_\_\_\_  
 OUR JOB NO. 70-10

SHEET \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. B-242  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 4.9'

**GROUND WATER OBSERVATIONS**

2'9" after 1/2 Hours  
No casing  
 after \_\_\_\_\_ Hours

Rods "AW"  
 Type \_\_\_\_\_  
 Size I.D. \_\_\_\_\_  
 Hammer Wt. \_\_\_\_\_  
 Hammer Fall \_\_\_\_\_

CASING \_\_\_\_\_  
 SAMPLER S/S  
1 3/8"  
140#  
30"

CORE BAR \_\_\_\_\_  
 BIT \_\_\_\_\_

Date \_\_\_\_\_ Time \_\_\_\_\_  
 START 11/26/69 o.n  
 COMPLETE 11/26/69 p.n  
 TOTAL HRS. \_\_\_\_\_  
 BORING FOREMAN \_\_\_\_\_  
 INSPECTOR G. S. ...  
 SOILS ENGR. \_\_\_\_\_

**LOCATION OF BORING**

DEP.	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev	SOIL IDENTIFICATION. Remarks include color, gradation, Type of soil etc. Fracv-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6"	6-12"	12-18"				No.	Pen	Rec.
		0'-1'6"	D	1	1	2	Moist loose	2'6"	Brown fine SAND, wood, brick, (FILL)	1	18"	6"
5		5'-6'6"	D	P U S H			Moist soft	7'	Brown-gray organic SILT, wood fragments, little fine to medium sand	2	18"	10'
		10'-11'6"	D	1	1	1	"		Gray organic SILT	3	18"	12'
		15'-16'6"	D	2	3	3	Moist medium stiff	17'		4	18"	12'
		17'-18'6"	D	4	5	6	Wet medium dense		Gray fine to coarse SAND, some fine gravel, trace silt	5	18"	10'
		20'6"-22'	D	6	6	7	"	22'		6	18"	12"
									Bottom of boring 22'			

GROUND SURFACE TO 22'  
 Sample Type \_\_\_\_\_  
 = Dry C=Cored W=Washed  
 P=Undisturbed Piston  
 Test Pit A=Auger V=Vane Test  
 I.=Undisturbed Thinwall

USED No "CASING: THEN

Proportions Used	140lb Wt. x 30" fall on 2" O.D. Sampler
Trace 0 to 10%	Cohesionless Density Cohesive Consistency
little 10 to 20%	0-10 Loose 0-4 Soft 30 + Hard
some 20 to 35%	10-30 Med Dense 4-8 M/Stiff
and 35 to 50%	30-50 Dense 8-15 Stiff
	50 + Very Dense 15-30 V-Stiff

**SUMMARY:**  
 Earth Boring 22'  
 Rock Coring 0  
 Samples 6  
**HOLE NO. B-242**

100 WATER STREET EAST PROVIDENCE, R. I

TO C.E. Maguire & Assoc., Inc.

ADDRESS Providence, R.I.

PROJECT NAME Sewage Treatment Plant -

LOCATION Stratford, Conn.

REPORT SENT TO above

Dike PROJ. NO. 1912

SAMPLES SENT TO "

OUR JOB NO. 3-223

DATE 11/10/72

HOLE NO. EM-360

LINE & STA. \_\_\_\_\_

OFFSET \_\_\_\_\_

SURF. ELEV. 6.7

GROUND WATER OBSERVATIONS

At 5' after \_\_\_\_\_ Hours

At \_\_\_\_\_ after \_\_\_\_\_ Hours

Rods "AW"  
Type \_\_\_\_\_

Size I.D. \_\_\_\_\_

Hammer Wt. \_\_\_\_\_

Hammer Fall \_\_\_\_\_

CASING \_\_\_\_\_

SAMPLER \_\_\_\_\_

CORE BAR \_\_\_\_\_

HW

300#

24"

S/S

1-3/8"

140#

30"

BIT

Date \_\_\_\_\_ Time \_\_\_\_\_  
START 11/10/72  
COMPLETE 11/10/72  
TOTAL HRS. \_\_\_\_\_  
BORING FOREMAN R. Farra  
INSPECTOR RELIANT  
SOILS ENGR. \_\_\_\_\_

LOCATION OF BORING

Moved hole 15' south from original location

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc	SAMPL	
				From 0-6	To 6-12	To 12-18				No.	Pen
6		0'-2'									
4											
8											
8											
10								5'			
3		5'-7'	D	10	5	2	Moist	6'	Gray decomposed MICA	1	24'
8		7'-9'	D	3	2	2	Moist soft		Brown fine-medium Sand, Gravel & organic matter glass & wood chips	0	24'
10											
12		9'-11'	D	2	2	2		11'		2	24'
19											
11		11'-12'6"	D	1	1	2	Moist soft		Gray organic Silt	3	18'
12											
14											
15											
12								16'			
18		16'-18'	UP	PRESS			Moist soft		Gray organic Silt	UP1	24'
20											
24											
26											
28											
30											
31											
32		23'-25'	UP	PRESS				25'		UP2	24'
36											
		30'-31'6"	D	2	2	2	Moist soft		Brown organic Silt, trace of wood	4	18'
		35'-36'6"	D	1	1	2	"		"	5	18'
								40'			

GROUND SURFACE TO 25'

USED HW CASING: THEN wash by pipe to bottom of hole

Sample Type  
D=Dry C=Cored W=Washed  
UP=Undisturbed Piston  
TP=Test Pit A=Auger V=Vane Test  
UT=Undisturbed Thinwall

Proportions Used  
Trace 0 to 10%  
little 10 to 20%  
some 20 to 35%  
and 35 to 50%

140lb Wt. x 30" fall on 2" O.D. Sampler  
Cohesionless Density Cohesive Consistency  
0-10 Loose 0-4 Soft 30+ Hard  
10-30 Med. Dense 4-8 M/Soft  
30-50 Dense 8-15 Stiff  
50+ Very Dense 15-30 V-Stiff

SUMMARY:  
Earth Boring 45'  
Rock Coring 7'  
Samples 7

HOLE NO. 360



100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE \_\_\_\_\_  
 HOLE NO. EH-361  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 6.7

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR	Date	Time
At <u>5'</u>	after _____ Hours	Rods "AW" Type	<u>S/S</u>	_____	START	<u>11/16/72</u>
At _____	after _____ Hours	Size I.D. <u>HW</u>	<u>1-3/8"</u>	_____	COMPLETE	<u>11/16/72</u>
		Hammer Wt. <u>300#</u>	<u>140#</u>	BIT	TOTAL HRS. _____	
		Hammer Fall <u>24"</u>	<u>30"</u>	_____	BORING FOREMAN <u>R. Farra</u>	
					INSPECTOR <u>Veitach</u>	
					SOILS ENGR. _____	

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE	
				From 0-6	6-12	To 12-18				No	Pen
18		0'-2'	D	12	14	10	Dry/m dense	2'	Brown fine-med. Sand, some fine-coarse Gravel (FILL)	1	24"
12						11					
14		2'-4'	D	4	4	6	Moist loose	4'	Brown fine Sand, some organ-ic silt, cobbles. Fill	2	24"
10						4					
10		4'-6'	D	2	2	2	Moist soft	6'	Brown organic Silt mixed with fine-medium Sand	3	24"
2						2					
3		6'-8'	D	2	2	2	Moist soft	"	Black organic Silt with wood chips	4	24"
4						2					
6											
6											
2		10'-11'6"	D	2	2	2	"	"	"	-	10"
3											
4											
4		13'-15'	UP	PRESS						-	24"
4											
3											
6		16'-18'	UP	PRESS				16'	Lost Sample		
5											
6							Moist		Gray organic Silt	UP1	24" 2
8											
		EW Washed out to 33'6"									
		Washed out with close bit to 25'						25'			
		25'-27'	UP	PRESS			Moist soft-	27'	Gray organic Silt w/wood fiber, trace Sand	UP2	24" 2
		30'-31'6"	D	8	14	18	moist dense		Brown fine-coarse Sand, some fine-medium Gravel little silt	5	18" 12
		31'6"-35'	D	10	15	21	"			6	18" 14
								35'			
									Bottom of Boring - 35'		

GROUND SURFACE TO 20' USED HW "CASING: THEN HW to 33'6"

Sample Type  
 D=Dry C=Cored W=Washed  
 UP=Undisturbed Piston  
 TP=Test Pit A=Auger V=Vane Test  
 UT=Undisturbed Thinwall  
 TOWN PRESS - EAST PROV

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

(40lb Wt. = 30" fall on 2" O.D. Sampler)  
 Cohesionless Density Cohesive Consistency  
 0-10 Loose 0-4 Soft 30+ Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff  
 50+ Very Dense 15-30 V-Stiff

SUMMARY:  
 Earth Boring 35'  
 Rock Coring 0  
 Samples 6

HOLE NO. 361



# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

SHEET 1 OF 1  
 DATE \_\_\_\_\_  
 HOLE NO. B11-363  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 9.6

GROUND WATER OBSERVATIONS At <u>6'</u> after <u>10</u> <del>xxxx</del> mins. At _____ after _____ Hours	CASING Type <u>Rods "AW"</u> Size I.D. <u>BW</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	SAMPLER <u>S/S</u> <u>1-3/8"</u> <u>140#</u> <u>30"</u>	CORE BAR _____ BIT	Date <u>11/9/72</u> Time _____ START <u>11/9/72</u> COMPLETE _____ TOTAL HRS. _____ BORING FOREMAN <u>R. Parra</u> INSPECTOR <u>McGowan</u> SOILS ENGR. _____
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### LOCATION OF BORING

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE	
				From 0-6	6-12	To 12-18				No	Pen
12		0'-2'	D	17	20	15	Moist medium dense		(FILL) Brown fine-medium Sand, lit. fine-med. Gravel, wood	1	24'
14						10					
10		2'-3'	D	7	6		Moist medium dense	3'		2	12'
4		3'-4'	D	4	4		Moist medium stiff			3	12'
5		4'-6'	D	1	1	1	Moist soft			4	24'
2						1	"				
3		6'-8'	D	1	1	1	"			5	24'
4						1	"				
3		8'-10'	D	1	1	1	"			6	24'
4						1	"				
2		10'-11'6"	D	1	1	1	"	11'6"		7	18'
6											
12											
14											
8		15'-16'5"	D	7	8	10	Moist medium dense		Gray fine-coarse Sand, little fine Gravel, trace of silt	8	18'
16											
18											
9/8"		18'5"-20'	D	8	10	12	"			9	18'
									Bottom of Boring - 20'		

GROUND SURFACE TO <u>18'6"</u>	USED <u>BW</u> CASING: THEN <u>S/S</u>	140 lb Wt. x 30" fall on 2" O.D. Sampler	SUMMARY
Sample Type D=Dry C=Cored W=Washed UP=Undisturbed Piston TP=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	Cohesionless Density 0-10 Loose 10-30 Med Dense 30-50 Dense 50+ Very Dense	Earth Boring <u>20'</u> Rock Coring <u>0</u> Samples <u>9</u>
		Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Soft 8-15 Stiff 15-30 V-Stiff	HOLE NO <b>363</b>

# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. McGuire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

SHEET        OF         
 DATE         
 HOLE NO. EH-364  
 LINE & STA.         
 OFFSET         
 SURF. ELEV. 11.4

GROUND WATER OBSERVATIONS At <u>7'4"</u> after <u>10</u> <del>Hours</del> <u>Mins.</u> At <u>      </u> after <u>      </u> Hours	Rods "AW" Type <u>      </u> Size I.D. <u>BW</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	CASING <u>      </u> SAMPLER <u>S/S</u> CORE BAR <u>      </u> <u>BW</u> <u>1-3/8"</u> <u>300#</u> <u>140#</u> <u>24"</u> <u>30"</u>	Date <u>11/9/72</u> Time <u>      </u> START <u>11/9/72</u> COMPLETE <u>11/9/72</u> TOTAL HRS <u>      </u> BORING FOREMAN <u>R. Ferro</u> INSPECTOR <u>      </u> SOILS ENGR. <u>      </u>
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### LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc	SAMPLE	
				From 0-6	6-12	To 12-18				No.	Pen
2		0'-2'	D	2	3	3	Moist medium stiff	Brown Fibrous Peat	1	24'	
2						3			2	24'	
3		2'-4'	D	2	2	2			3	24'	
3						2					
4		4'-6'	D	2	2	2					
2						2					
3		6'-8'	D	2	2	2					
3						2					
4							10'				
16		10'-11'6"	D	8	10	14	Moist medium dense	Brown fine-coarse Sand, little coarse Gravel, trace of silt	5	15'	
18											
20											
21											
22		15'-16'6"	D	10	12	17	"	16'6"	6	18'	
								Bottom of Boring - 16'6"			

GROUND SURFACE TO <u>15'</u>	USED <u>bw</u> "CASING: THEN <u>spoon to 16'6"</u>	140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density      Cohesive Consistency	SUMMARY: Earth Boring <u>16'</u> Rock Coring <u>      </u> Samples <u>6</u>
Sample Type D=Dry C=Cored W=Washed UP=Undisturbed Piston TP=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	0-10 Loose      0-4 Soft      30+ Hard 10-30 Med Dense      4-8 M/Stiff 30-50 Dense      8-15 Stiff 50+ Very Dense      15-30 V-Stiff	HOLE NO <u>364</u>

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Waste Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE 11-365  
 HOLE NO. 111-365  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 9.6

GROUND WATER OBSERVATIONS		CASING Type <u>Rods "AW"</u> Size I.D. <u>BH</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	SAMPLER <u>S/S</u> <u>1-3/8"</u> <u>140#</u> <u>30"</u>	CORE BAR <u>BIT</u>	Date <u>11/13/72</u>
At <u>5'6"</u> after _____ Hours	START <u>11/15/72</u>				
At _____ after _____ Hours	COMPLETE	TOTAL HRS	BORING FOREMAN <u>R. F. Farn</u>		
	INSPECTOR <u>Calicath</u>		SOILS ENGR.		

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLI		
				From 0-6	To 6-12	12-18				No.	Pen.	
8		0'-1'	D	18	26		D/dnse	1'	Brown fine-med. Sand, little fine-coarse Gravel (FILL)	1	12'	
11							Loose					
14		1'-2'	D	4	4		medium		Dark brown Peat	2	12'	
10		2'-4'	D	3	4	4	stiff	4'		3	24'	
10						4						
6		4'-6'	D	14	18	21	Moist dense		Brown fine-coarse Sand, some fine-medium Gravel trace of silt	4	24'	
14						24						
18		6'-8'	D	11	16	22	"				5	24'
20						19						
22		8'-10'	D	14	20	18	"				6	24'
22						15						
24		10'-11'6"	D	15	18	24	"			7	18'	
30												
32												
34												
19		15'-16'6"	D	14	19	26	"		Same	8	18'	
28												
32												
18/6"		18'6"-20'	D	13	20	28	"	20'		9	18'	
									Bottom of Boring - 20'			

GROUND SURFACE TO 18'6" USED 1 1/2" "CASING: THEN spoon to 20'

Sample Type  
 D=Dry C=Cored W=Washed  
 UP=Undisturbed Piston  
 TP=Test Pit A=Auger V=Vane Test  
 UT=Undisturbed Thinwall

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

140 lb. Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density Cohesive Consistency  
 0-10 Loose 0-4 Soft 30 + Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff  
 50 + Very Dense 15-30 V-Stiff

SUMMARY:  
 Earth Boring 20  
 Rock Coring =  
 Samples 9

HOLE NO. 365

# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 1-223

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. CH-366  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 9.6

GROUND WATER OBSERVATIONS At <u>none</u> after _____ Hours At _____ after _____ Hours	CASING Type <u>Rods "AW"</u> Size I.D. <u>BW</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	SAMPLER <u>S/S</u> <u>1-3/8"</u> <u>140#</u> <u>30"</u>	CORE BAR BIT _____	Date START <u>11/15/72</u> COMPLETE <u>11/15/72</u> TOTAL HRS. _____ BORING FOREMAN <u>B. F. ...</u> INSPECTOR <u>...</u> SOILS ENGR. _____
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LOCATION OF BORING: 3' from hole 363 south

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE	
				From 0-6	6-12	To 12-18				No.	Pen.
				0'-2'	D	6				8	10
2'-4'	D	7	8	7	Moist stiff		Dark-brown sandy fibrous Peat	2	24"		
4'-6'	D	6	10	8	Moist very stiff		Same	3	24"		
6'-8'	D	8	12	10		8'		4	24"		
Bottom of Boring - 8'											

GROUND SURFACE TO _____ USED _____ "CASING: THEN _____	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Stiff 8-15 Stiff 15-30 V-Stiff	SUMMARY: Earth Boring _____ Rock Coring _____ Samples _____
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HOLE NO. 366

# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. McGuire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above DIKE PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

SHEET 1 OF 1  
 DATE \_\_\_\_\_  
 HOLE NO. RH-367  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 11.3

GROUND WATER OBSERVATIONS At <u>4'</u> after <u>1/4</u> Hours 10' casing At _____ after _____ Hours	Rods "AW" Type _____ Size I.D. _____ Hammer Wt. _____ Hammer Fall _____	CASING _____ S/S _____ 1-3/8" 140# 30"	CORE BAR _____ BIT _____	Date _____ Time _____ START <u>11/16/72</u> COMPLETE <u>11/16/72</u> TOTAL HRS. _____ BORING FOREMAN <u>Manco</u> INSPECTOR <u>Callahan</u> SOILS ENGR. _____
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### LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From-To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPL			
				From	To	To				No.	Pen		
				0-6	6-12	12-18							
3		0'-1'6"	D	4	5	7	Moist medium dense	5'	Brown fine Sand, little silt	1	18'		
6													
6													
10													
11													
5		5'-6'6"	D	10	11	10	"	10'	Brown fine-coarse Sand, little silt	2	18'		
14													
14													
28													
49													
		10'-11'	D	27	175		Moist/v dense	11'	Gray decomposed Rock Frag.	3	17'		
									Bottom of Boring - 11' Refusal				

GROUND SURFACE TO \_\_\_\_\_ USED \_\_\_\_\_ "CASING: THEN \_\_\_\_\_

Sample Type  
 D=Dry C=Cored W=Washed  
 UP=Undisturbed Piston  
 TP=Test Pit A=Auger V=Vane Test  
 UT=Undisturbed Thinwall

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

140lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density Cohesive Consistency  
 0-10 Loose 0-4 Soft 30 + Hard  
 10-30 Med. Dense 4-8 M/Stiff  
 30-50 Dense 8-15 Stiff  
 50 + Very Dense 15-30 V-Stiff

SUMMARY:  
 Earth Boring 11  
 Rock Coring 5  
 Samples 7

HOLE NO. 367



TO C.E. McGuire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE \_\_\_\_\_  
 HOLE NO. 711-369  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 10.7

GROUND WATER OBSERVATIONS		CASING Type <u>Rods "AW"</u>	SAMPLER <u>S/S</u>	CORE BAR.	Date	Time
At <u>7'5"</u>	after <u>1/4</u> Hours				START	<u>11/15/72</u>
At _____	after _____ Hours	Size I.D. <u>BW</u>	<u>1-3/8"</u>	COMPLETE	<u>11/16/72</u>	TOTAL HRS.
		Hammer Wt. <u>300#</u>	<u>140#</u>	BORING FOREMAN <u>Mingo</u>		INSPECTOR <u>WALLACE</u>
		Hammer Fall <u>24"</u>	<u>30"</u>	SOILS ENGR.		

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE	
				From 0-5	6-12	12-18				No	Pen
2		0'-2'	D	3	5	9	Dry/m dense	1'6"	Brown fine Sand, lit. silt trace fine-medium Gravel	1	24"
3						7					
19		2'-4'	D	18	24	28	Dry very dense			2	24"
28						35					
51		4'-6'	D	35	42	37				3	24"
47											
63		6'-8'	D	26	31	52	"			4	24"
50						35					
29		8'-10'	D	24	30	25	Moist v/dense		Brown fine-medium Sand, some fine-coarse Gravel	5	24"
20						18					
13		10'-12'	D	12	27	21	Moist dense	12'		6	24"
13						16					
15		12'-14'	D	11	14	17	"			7	24"
13						17					
13		14'-16'	D	16	20	18	"		Brown coarse-fine Sand some fine-medium Gravel, trace of silt	8	24"
10						19					
11											
15											
17											
20								20'			
9		20'-21'6"	D	11	14	14	Moist medium dense		Brown fine-coarse Sand, little fine-medium Gravel trace of silt	9	18'1"
14											
21											
23											
23											
18		25'-26'6"	D	8	13	12	"			10	18'1"
24											
19											
27											
26											
		30'-31'6"	D	12	17	27	"	31'6"		11	18'1"
									Bottom of Boring - 31'6"		

GROUND SURFACE TO \_\_\_\_\_ USED \_\_\_\_\_ "CASING: THEN \_\_\_\_\_

Sample Type  
 D=Dry C=Cored W=Washed  
 UP=Undisturbed Piston  
 TP=Test Pit A=Auger V=Vane Test  
 UT=Undisturbed Thinwall

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

140lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density  
 0-10 Loose  
 10-30 Med. Dense  
 30-50 Dense  
 50+ Very Dense  
 Cohesive Consistency  
 0-4 Soft 30+ Hard  
 4-8 M/Stiff  
 8-15 Stiff  
 15-30 V-Stiff

SUMMARY:  
 Earth Boring 31'6"  
 Rock Coring \_\_\_\_\_  
 Samples 11

HOLE NO. 369

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE \_\_\_\_\_  
 HOLE NO. BH-370  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. \_\_\_\_\_

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR	Date	Time
At <u>8'3"</u>	after <u>1/2</u> Hours	Rods "AW" Type	<u>S/S</u>		<u>11/17/72</u>	
At _____	after _____ Hours	Size I.D.	<u>BW</u>		<u>11/17/72</u>	
		Hammer Wt.	<u>300#</u>		TOTAL HRS.	
		Hammer Fall	<u>24"</u>		BORING FOREMAN <u>Monco</u>	
			<u>30"</u>	BIT	INSPECTOR <u>Volpe</u>	
					SOILS ENGR. _____	

LOCATION OF BORING

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist	Strata Change Elev	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPL		
				0-6"	6-12"	12-18"				No.	Pen	
3		0'-2'	D	5	10	20	Dry			1	24'	
5						10	dense					
16		2'-4'	D	17	26	41	Dry			2	24'	
37						52	very					
43		4'-6'	D	40	42	42	dense		Brown fine-medium Sand, some fine-medium Gravel Fill	3	24'	
39						29	"					
30		6'-8'	D	38	24	27	"				4	24'
46						27	"					
49		8'-10'	D	29	33	33	Moist				5	24'
38						29	very	10'				
20		10'-12'	D	20	29	31	dense	12'	Brn. fine-coarse Sand, little fine-coarse Gravel	6	24'	
38						21	"					
42		12'-14'	D	17	20	19	Moist			7	24'	
36						19	dense					
25		14'-16'	D	16	18	20	"		Brown fine-coarse Sand, some fine-medium Gravel, trace of silt	8	24'	
18						21	"					
17							"					
20							"					
21							"					
22		20'-21'6"	D	32	27	35	Moist	25'		9	18'1"	
31							very					
29							dense					
30							"					
37							"	25'				
24		25'-26'6"	D	35	41	47	Moist			10	18'1"	
38							very		Gray fine-medium Sand, some fine-coarse Gravel, little silt			
46							dense					
42							"					
59							"					
		30'-31'6"	D	23	34	51	"	31'6"			11	18'1"
									Bottom of Boring - 31'6"			

GROUND SURFACE TO _____	USED _____	"CASING: THEN _____	140lb Wt. x 30" fall on 2" O.D. Sampler	SUMMARY:
Sample Type	Proportions Used	Cohesionless Density	Cohesive Consistency	Earth Boring <u>31'</u>
D=Dry C=Cored W=Washed	Trace 0 to 10%	0-10 Loose	0-4 Soft 30 + Hard	Rock Coring _____
UP=Undisturbed Piston	little 10 to 20%	10-30 Med. Dense	4-8 M/Stiff	Samples <u>11</u>
TP=Test Pit A=Auger V=Vane Test	some 20 to 35%	30-50 Dense	8-15 Stiff	
UT=Undisturbed Thinwall	and 35 to 50%	50+ Very Dense	15-30 V-Stiff	

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE \_\_\_\_\_  
 HOLE NO. PII-371  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 9.0

GROUND WATER OBSERVATIONS		CASING Type <u>Rods "AW"</u> Size I.D. <u>EV</u> Hammer Wt <u>300#</u> Hammer Fall <u>24"</u>	SAMPLER <u>S/S</u> <u>1-3/8"</u> <u>140#</u> <u>30"</u>	CORE BAR <u>BIT</u>	Date <u>11/9/72</u>	Time _____
At <u>6'5"</u> after <u>1/4</u> Hours	START <u>11/9/72</u>				COMPLETE <u>11/9/72</u>	
At _____ after _____ Hours	TOTAL HRS. _____	BORING FOREMAN <u>Manco</u>	INSPECTOR <u>V. L. L. L.</u>	SOILS ENGR. _____		

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Const.	Strata Change Elev.	SOIL IDENTIFICATION <i>(Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.)</i>	SAMPL	
				From 0-6	To 6-12	To 12-18				No.	Pen
3		0'-2'	D	5	7	9	Moist		Brown fine-medium SAND, some fine Gravel, FILL	1	24"
5						9	medium				
5		2'-4'	D	9	10	10	dense				
8						12				2	24"
8		4'-6'	D	7	5	6	Moist			3	24"
7						5	loose	8'			
7		6'-8'	D	3	3	2	Wet			4	24"
9						3	loose				
9		8'-10'	D	2	1	1	Moist	17'	Black organic SILT & Peat	5	24"
6						1	soft				
3											
4											
7											
8											
8		15'-16'5"	D	1	2	1	Moist	17'	Brown fibrous Peat	6	18"
9							soft				
22											
49											
60											
40		20'-21'6"	D	26	31	28	Moist	26'6"	Gray-brown fine-medium SAND, some fine-medium Gravel, trace of silt	7	18"
52							very				
71							dense				
66											
70											
		25'-26'6"	D	24	33	35	"	26'6"	Bottom of Boring - 26'6"	8	18"

GROUND SURFACE TO _____	USED _____	"CASING: THEN _____	SUMMARY: Earth Boring <u>25'</u>
Sample Type	Proportions Used	140lb Wt. x 30" fall on 2" O.D. Sampler	Rock Coring _____
D=Dry C=Cored W=Washed	trace 0 to 10%	Cohesionless Density	Samples <u>8</u>
UP=Undisturbed Piston	little 10 to 20%	0-10 Loose	
TP=Test Pit A=Auger V=Vane Test	some 20 to 35%	10-30 Med Dense	
UT=Undisturbed Thinwall	and 35 to 50%	30-50 Dense	
		50+ Very Dense	
		Cohesive Consistency	
		0-4 Soft 30+ Hard	
		4-8 M/SHIT	
		8-15 Silt	
		15-30 V-SHIT	



# American Drilling & Boring Co., Inc.

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

SHEET 2 OF 2  
 DATE \_\_\_\_\_  
 HOLE NO. PH-373  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 7.6

GROUND WATER OBSERVATIONS At <u>5'</u> after <u>1/4</u> Hours <u>25'</u> casing At _____ after _____ Hours	Rods "AW" Type _____ Size I.D. _____ Hammer Wt. _____ Hammer Fall _____	CASING <u>HW</u> <u>4"</u> <u>300#</u> <u>24"</u>	SAMPLER <u>S/S</u> <u>1-3/8"</u> <u>140#</u> <u>30"</u>	CORE BAR _____ BIT _____	Date _____ Time _____ START <u>11/9/72</u> COMPLETE <u>11/10/72</u> TOTAL HRS. _____ BORING FOREMAN <u>Manco</u> INSPECTOR <u>Vell...</u> SOILS ENGR. _____
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### LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION - Remarks include color, gradation, Type of soil etc. Roots - color, type, condition, hardness, Drilling time, seams and etc.	SAMPL	
				From 0-6	6-12	To 12-18				No.	Pen
2		0'-2'	D	3	5	5	Dry medium dense		Brown fine SAND	1	24'
4						7				2	24'
7		2'-4'	D	5	5	5				3	24'
10						6					
6		4'-6'	D	16	16	15	Moist medium dense	9'	#4 w/brick, FILL	4	24'
4						14					
9		6'-8'	D	12	13	10	Wet soft	12'	Black organic SILT	5	24'
8						9					
11		8'6"-10'6"	D	3	1	1	Press	14'	Piston in organic Silt UP	1	24'
10						1					
6		12'-14'	UP				Wet soft	17'	Black organic Silt	6	18'
5											
9		16'-15'6"	D	1	1	1	Press	19'	Piston in Peat UP	2	24'
7											
10		17'-19'	UP				Moist medium dense	26'6"	Brown fine-medium SAND, some fine Gravel	7	18'
8											
12											
15											
26		20'-21'6"	D	10	14	16	"	26'6"	Bottom of Boring - 26'6"	8	18'
31											
43											
51											
72		25'-26'6"	D	23	25	20					

GROUND SURFACE TO _____ USED _____ THEN _____	140lb W x 30" fall on 2" O.D. Sampler Cohesiveness Density Cohesive Consistency 0-10 Loose 0-4 Soft 30 + Hard 10-30 Med Dense 4-8 M/Soft 30-50 Dense 8-15 Stiff 50+ Very Dense 15-30 V-Stiff	SUMMARY Earth Boring <u>20'</u> Rock Coring _____ Samples <u>8</u>	HOLE NO. <u>373</u>
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Sample Type  
 D=Dry C=Cored W=Washed  
 UP=Undisturbed Piston  
 TP=Test Pit A=Auger V=Vane Test  
 UT=Undisturbed Thinwall

Proportions Used  
 trace 0 to 10%  
 little 10 to 20%  
 some 20 to 35%  
 and 35 to 50%

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE \_\_\_\_\_  
 HOLE NO. BN-374  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 5.0

GROUND WATER OBSERVATIONS		RODS "AW" Type Size I.D. Hammer Wt. Hammer Fall	CASING <u>BN</u>	SAMPLER S/S <u>1-3/8"</u>	CORE BAR  <u>BIT</u>	Date	Time
At <u>5'1"</u>	after <u>1/2</u> Hours					START <u>11/13/72</u>	COMPLETE <u>11/13/72</u>
At _____	after _____ Hours					TOTAL HRS. _____	BORING FOREMAN <u>Manco</u>
						INSPECTOR <u>Valasco</u>	SOILS ENGR. _____

LOCATION OF BORING

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE	
				From 0-6	6-12	To 12-18				No.	Pen
3		0'-2'	D	4	7	12	Dry/m dense			1	24"
9						12					
28		2'-4'	D	11	14	27	Dry dense		Brown fine-medium Sand, little fine-medium Gravel, FILL	2	24"
36						19					
41		4'-5'	D	14	11	30	Dry/m dense			3	24"
23						8					
38		5'-8'	D	7	5	5		8'		4	24"
15						5					
14		8'-10'	D	4	4	3	Moist loose	10'	Brn-blk. fine-med. Sand, lit. fine Gravel (fuel odor noted)	5	24"
10						1					
8		11'-12'	D	1	1	1	Moist soft		Dark gray organic Silt, little fibrous Peat	6	24"
5						1					
5											
5											
4		15'-16'6"	D	1	1	1	Moist soft				7
5											
6								19'			
6											
7											
7		20'-21'6"	D	1	2	2	Moist soft		Black Fibrous Peat	8	18" T
10											
11											
10								24'			
23											
17		25'-26'6"	D	8	11	13	Moist medium dense		Gray fine-medium Sand, little fine-coarse Gravel, trace of silt	9	18" T
27											
32											
41											
38							Moist dense				
		30'-31'6"	D	9	15	17		31'6"		10	18" T
									Bottom of Boring - 31'6"		

GROUND SURFACE TO \_\_\_\_\_ USED \_\_\_\_\_ "CASING: THEN \_\_\_\_\_

Sample Type D=Dry C=Cored W=Washed UP=Undisturbed Piston TP=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Stiff 8-15 Stiff 15-30 V-Stiff	SUMMARY Earth Boring <u>11'6"</u> Rock Coring <u>0</u> Samples <u>10</u>
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TOWN PRESS - EAST PROV. HOLE NO. 374

100 WATER STREET EAST PROVIDENCE, R. I.

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE \_\_\_\_\_  
 HOLE NO. BH-375  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 6.7

GROUND WATER OBSERVATIONS		CASING Type <u>Rods "AW"</u> Size I.D. <u>HW</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	SAMPLER <u>S/S</u> <u>1-3/8"</u> <u>140#</u> <u>30"</u>	CORE BAR <u>BIT</u>	START <u>11/13/72</u>
At <u>4'</u> after <u>1/2</u> Hours	COMPLETE <u>11/15/72</u>				
At _____ after _____ Hours	TOTAL HRS. _____				
	BORING FOREMAN <u>Manco</u> INSPECTOR <u>V. D. Smith</u> SOILS ENGR. _____				

LOCATION OF BORING:

DEPTH	Casing Blows per Foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	6-12	To 12-18				No.	Pen	F
4		0'-2'	D	3	8	7	Dry/m		Brown fine-coarse Sand, some fine Gravel - Fill	1	24'	2
9						15	dense			2	24'	2
33		2'-4'	D	13	18	24	Dry/v			3	24'	2
38						32	"			4	24'	1
51		4'-6'	D	20	20	24	"			5	24'	1
33						26	Moist medium dense	8'		6	24'	5
9		6'-8'	D	20	17	16	"			7	24'	2
41						12	Moist medium dense	12'		8	12'	2
36		8'-10'	D	16	12	10	"			9	18'	1
25						5	"			10	18'	1
14		10'-12'	D	24	19	13	"	12'	11	18'	1	
17						10	Moist soft	14'	12	18'	1	
18		12'-14'	D	2	2	1	"		13	18'	1	
21						2	Moist soft	20'	14	18'	1	
12		14'-15'	D	1	1		"		15	18'	1	
10		15'-17'	UP	PRESS					16	18'	1	
10							Moist soft		17	18'	1	
8		17'-18'6"	D	1	1	1	"		18	18'	1	
7							Moist soft		19	18'	1	
7							"		20	18'	1	
5		20'-22'	UP	PRESS					21	18'	1	
7							Moist soft		22	18'	1	
7		22'-23'6"	D	1	2	2	"		23	18'	1	
11							Moist soft		24	18'	1	
13							"		25	18'	1	
10		25'-26'6"	D	2	1	2	"		26	18'	1	
13							Moist loose		27	18'	1	
16							"		28	18'	1	
16							Moist medium dense	35'	29	18'	1	
17							"		30	18'	1	
20		30'-31'6"	D	4	3	3	Moist loose	36'6"	31	18'	1	
27							Moist medium dense		32	18'	1	
32							"		33	18'	1	
29							Moist medium dense		34	18'	1	
30		35'-36'6"	D	5	8	10	"		35	18'	1	
							Bottom of Boring - 36'6"		36	18'	1	

GROUND SURFACE TO \_\_\_\_\_ USED \_\_\_\_\_ "CASING: THEN \_\_\_\_\_

Sample Type	Proportions Used	140lb Wt. v 30" Fall on 2" O.D. Sampler	SUMMARY:
D=Dry C=Cored W=Washed	trace 0 to 10%	Cohesionless Density	Earth Boring <u>36'6"</u>
UP=Undisturbed Piston	little 10 to 20%	0-10 Loose	Rock Coring <u>11</u>
TP=Test Pit A=Auger V=Vane Test	some 20 to 35%	10-30 Med Dense	Samples _____
UT=Undisturbed Thinwall	and 35 to 50%	30-50 Dense	HOLE NO. 375
		50+ Very Dense	
		Cohesive Consistency	
		0-4 Soft 30+ Hard	
		4-8 M/Stiff	
		8-15 Stiff	
		15-30 V-Stiff	

TOWN PRESS - EAST PROV.



100 WATER STREET EAST PROVIDENCE, R. I.

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. BH-377  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 5.7

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R. I.  
 PROJECT NAME Sewage Treatment Plant LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

GROUND WATER OBSERVATIONS		CASING Type Size I.D. Hammer Wt. Hammer Fall	SAMPLER 5/S 1-3/8" 140# 30"	CORE BAR BIT	Date	Time
At <u>4'6"</u> after <u>1/4</u> Hours	Rods "AW"				START <u>11/7/72</u>	COMPLETE <u>11/7/72</u>
At _____ after _____ Hours	20' casing	24"	30"		INSPECTOR _____	SOILS ENGR. _____

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMP	
				From 0-6	To 6-12	To 12-18				No.	Pen
2		0'-1'6"	D	3	5	4	Dry loose		Gray-brown fine SAND, trace fine Gravel, trace of silt FILL	1	18'
2		1'6"-3'	D	4	4	4				2	18'
3											
2		3'-4'6"	D	3	4	3	Moist loose	5'		3	18'
2											
2		4'6"-6'	D	4	3	3	Wet loose	6'	Gray-brn. fine SAND, some silt, FILL	4	18'
3											
3		6'-8'6"	D	1	1	1	Wet soft	8'6"	Dark brown organic matter trace very fine sand	5	30'
2											
2		10'-11'6"	D	1	1	1	Wet soft		Gray organic SILT	6	18'
3											
3											
4								15'			
3		15'-16'6"	D	1	2	1	Moist loose	18'	Brown fine SAND, some silt trace peat	7	10'
7											
10											
12											
15							Wet medium dense	21'6"	Gray fine SAND, trace silt	8	18'
		20'-21'6"	D	4	7	9					
									Bottom of Boring - 21'6"		

GROUND SURFACE TO _____	USED _____	"CASING: THEN _____	SUMMARY:
Sample Type D=Dry C=Cored W=Washed UP=Undisturbed Piston TP=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density Cohesive Consistency 0-10 Loose 0-# Soft 30+ Hard 10-30 Med. Dense 4-8 M/Stiff 30-50 Dense 8-15 Stiff 50+ Very Dense 15-30 V-Stiff	Earth Boring <u>21</u> Rock Coring _____ Samples <u>8</u>
			HOLE NO. <u>37</u>





100 WATER STREET EAST PROVIDENCE, R. I.

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 HOLE NO. PH-380  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 7.8

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

GROUND WATER OBSERVATIONS At <u>3'6"</u> after _____ Hours At _____ after _____ Hours	Rods "AW" Type _____ Size I.D. <u>BW</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	CASING _____ SAMPLER <u>S/S</u> <u>1-3/8"</u> BIT _____ <u>30"</u>	Date _____ Time _____ START <u>11/7/72</u> COMPLETE <u>11/7/72</u> TOTAL HRS. _____ BORING FOREMAN <u>R. Parin</u> INSPECTOR <u>T. Williams</u> SOILS ENGR. _____
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**LOCATION OF BORING:**

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	To 6-12	To 12-18				No.	Pen.	
				12	0'-2'	D				5	13	12
8					12							
8	2'-4'	D	15	13	11			2	24			
6					12							
6	4'-6'	D	8	9	4							
6					4							
8	6'-7'6"	D	11	8	5				3	18		
4												
2	7'6"-8'	D	2			Moist soft	15'	Black organic SILT	4	5"		
1	9'-10'6"	D	2	2	2						5	17
2												
3												
4												
4												
6												
7	15'-16'6"	D	4	7	12	Wet/m dense Wet medium dense	20'	Gray coarse-fine SAND, some fine-medium Gravel, trace of silt	6	18"		
12												
16												
7/10	18'6"-20'	D	9	14	13				7	18"		
								Bottom of Boring - 20'				

GROUND SURFACE TO _____ USED _____ "CASING: THEN _____	140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 4-8 M/Stiff 8-15 Stiff 15-30 V-Stiff	SUMMARY Earth Boring <u>20'</u> Rock Coring _____ Samples <u>7</u>
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Sample Type  
 D=Dry C=Cored W=Washed  
 UP=Undisturbed Piston  
 TP=Test Pit A=Auger V=Vane Test  
 UT=Undisturbed Thinwall

HOLE NO 380

# AMERICAN DRIVING & BORING CO., INC.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 1  
DATE \_\_\_\_\_  
HOLE NO. PH-381  
LINE & STA. \_\_\_\_\_  
OFFSET \_\_\_\_\_  
SURF. ELEV. 6.8

TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
REPORT SENT TO above Dike PROJ NO. 1912  
SAMPLES SENT TO " OUR JOB NO. 3-223

GROUND WATER OBSERVATIONS			CASING _____ SAMPLER <u>S/S</u> CORE BAR _____  Size I D. <u>BW</u> Hammer Wt. <u>300#</u> Hammer Fall <u>24"</u>	START <u>11/6/72</u> COMPLETE <u>11/6/72</u> TOTAL HRS. _____ BORING FOREMAN <u>R. Paris</u> INSPECTOR <u>V. ...</u> SOILS ENGR _____
At <u>3'</u> after <u>24</u> Hours casing all out At _____ after _____ Hours	Rods "AW" Type _____ Size I D. _____ Hammer Wt. _____ Hammer Fall _____			

### LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION <small>Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.</small>	SAMPL		
				From 0-6	6-12	To 12-18				No.	Pen	
18		0'-2'	D	12	19	19	Moist dense		Brown fine-medium SAND, some fine Gravel & wood FILL	1	24'	
20						15	"					
19		2'-4'	D	17	24	14	"				2	24'
18						14						
10												
28		5'-7'	D	20	28	30	Moist dense				3	24'
56						12	"					
12												
6								9'				
6		0'-11'	D	8	8	2	Moist soft			Black organic SILT with wood chips	4	24'
3						2	"					
6												
8												
8								15'				
3		15'-16'6"	D	2	2	2	Moist soft		Gray organic SILT with Shells	5	18'	
6							"					
8												
8												
8												
12		20'-21'6"	D	1	2	2	Moist soft				6	18'
15							"					
12												
11												
12		25'-26'6"	D	1	2	2	Moist soft				7	18'
14							"					
16												
18												
20												
11		30'-31'6"	D	1	2	2	Moist soft			8	18'	
18							"					
20												
21												
22								35'				
15		35'-36'6"	D	21	24	25	Moist dense		Gray-brown fine-medium SAND, some fine-med. Gravel trace of silt	9	18'	
21							"					
23												
10'6"		38'6"-40'	D	20	26	27	"	40'		10	18'	
									Bottom of Boring - 40'			

GROUND SURFACE TO _____ Sample Type D=Dry C=Cored W=Washed UP=Undisturbed Piston TP=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall	USED _____ Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	"CASING: THEN _____ 140lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Silt 8-15 Silt 15-30 V-Silt	SUMMARY: Earth Boring <u>40'</u> Rock Coring _____ Samples <u>10</u> HOLE NO. <u>381</u>
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TO C.E. Maguire & Assoc., Inc. ADDRESS Providence, R.I.  
 PROJECT NAME Sewage Treatment Plant - LOCATION Stratford, Conn.  
 REPORT SENT TO above Dike PROJ. NO. 1912  
 SAMPLES SENT TO " OUR JOB NO. 3-223

DATE \_\_\_\_\_  
 HOLE NO. PH-312  
 LINE & STA. \_\_\_\_\_  
 OFFSET \_\_\_\_\_  
 SURF. ELEV. 7.7

GROUND WATER OBSERVATIONS		Casing Type <b>Rods "AW"</b>	SAMPLER <b>S/S</b>	CORE BAR	Date	Time
At <u>5'8"</u> after _____ Hours	START <u>11/17/72</u>				_____	
At _____ after _____ Hours	COMPLETE <u>11/17/72</u>	_____	TOTAL HRS. _____	BORING FOREMAN <u>R. Farga</u>	INSPECTOR <u>V. L. ...</u>	SOILS ENGR. _____
		Size I.D. <u>EW</u>	<u>1-3/8"</u>			
		Hammer Wt. <u>300#</u>	<u>140#</u>	BIT		
		Hammer Fall <u>24"</u>	<u>30"</u>			

LOCATION OF BORING:

DEPTH	Casing Blows per 100'	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata-Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMP	
				From 0-6'	6-12'	12-18'				No.	Pen
13		0'-2'	D	14	16	10	Moist medium dense	4'	Brown fine-medium Sand, little fine-coarse Gravel Fill	1	24
15										2	24
14		2'-4'	D	10	13	9	Moist medium dense	10'	Brown fine-coarse Sand, some fine-medium Gravel little silt	3	24
16										4	24
18		4'-6'	D	11	12	14	"	25'	Brown coarse-fine Sand, some fine-medium Gravel trace of silt	5	24
15										6	18
20		6'-8'	D	10	13	9		25'	Bottom of Boring - 25' Refusal	7	18
21										8	18
22		8'-10'	D	11	14	10		25'	DXX open end AW rod 300#-30"		
24											
25		10'-11'6"	D	6	13	14					
21											
24											
30											
32											
18		15'-16'6"	D	8	14	20					
34											
36											
42											
44											
22		20'-21'6"	D	9	11	22					
46											
48											
50											
200											
		25'-25'	DXX	100	NO PEN						

GROUND SURFACE TO 25' USED Ref "CASING: THEN Refusal

Sample Type: D=Dry C=Cored W=Washed UP=Undisturbed Piston TP=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall

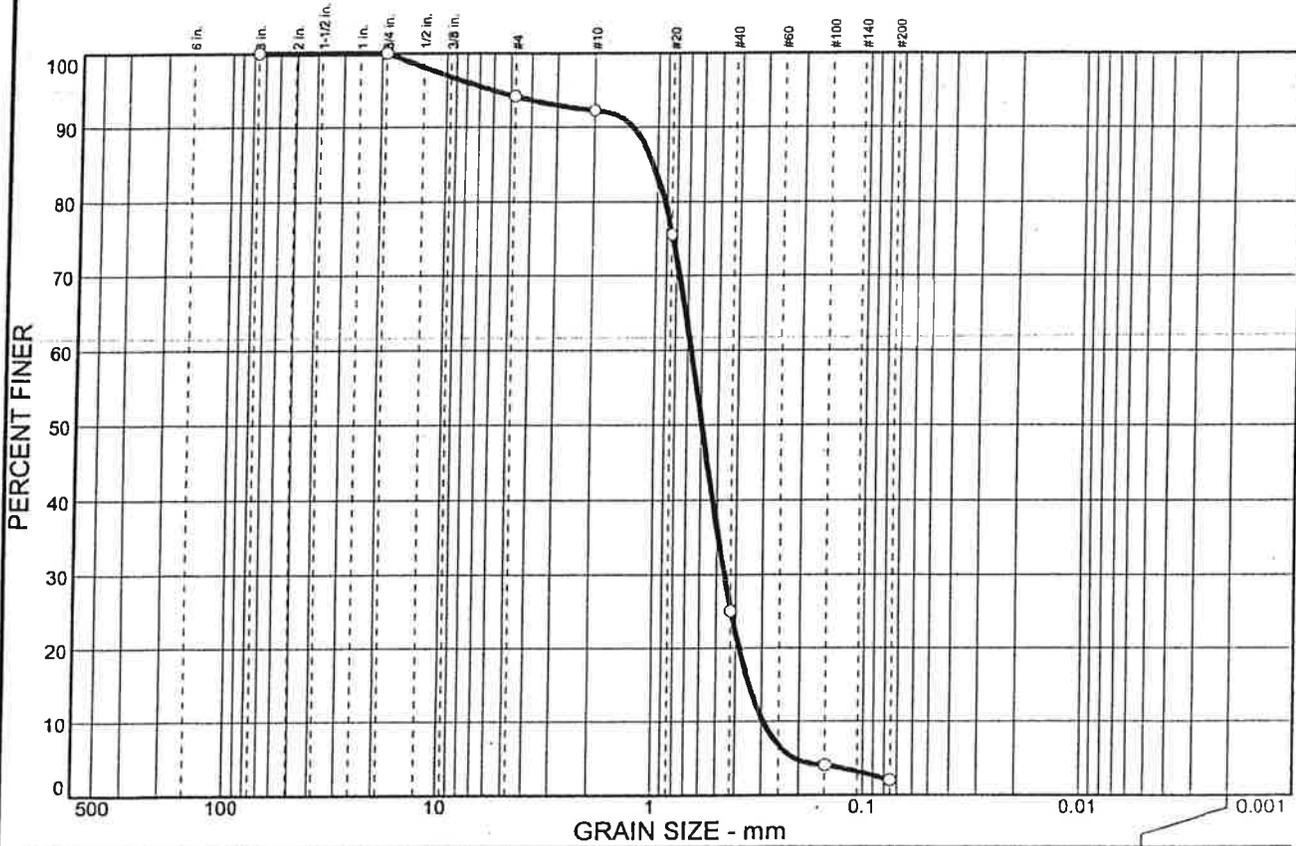
Proportions Used: trace 0 to 10%, little 10 to 20%, some 20 to 35%, and 35 to 50%

140lb Wt. x 30" fall on 2" O.D. Sampler  
 Cohesionless Density: 0-10 Loose, 10-30 Med. Dense, 30-50 Dense, 50+ Very Dense  
 Cohesive Consistency: 0-4 Soft, 4-8 M/Stiff, 8-15 Stiff, 15-30 V-Stiff

SUMMARY: Earth Drilling 25', Rock Coring -, Samples 8

TOWN PRESS - EAST PROV. HOLE NO. 382

# PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	5.8	1.9	67.2	23.1	2.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3 in.	100.0		
3/4 in.	100.0		
#4	94.2		
#10	92.3		
#20	75.5		
#40	25.1		
#100	4.0		
#200	2.0		

**Soil Description**

Poorly graded sand

**Atterberg Limits**

PL= --      LL= --      PI= --

**Coefficients**

D<sub>85</sub>= 1.06      D<sub>60</sub>= 0.677      D<sub>50</sub>= 0.596  
D<sub>30</sub>= 0.459      D<sub>15</sub>= 0.346      D<sub>10</sub>= 0.295  
C<sub>u</sub>= 2.29      C<sub>c</sub>= 1.05

**Classification**

USCS= SP      AASHTO= --

**Remarks**

As received moisture content = 18.7%

\* (no specification provided)

Sample No.: S-4  
 Location: CDM-1

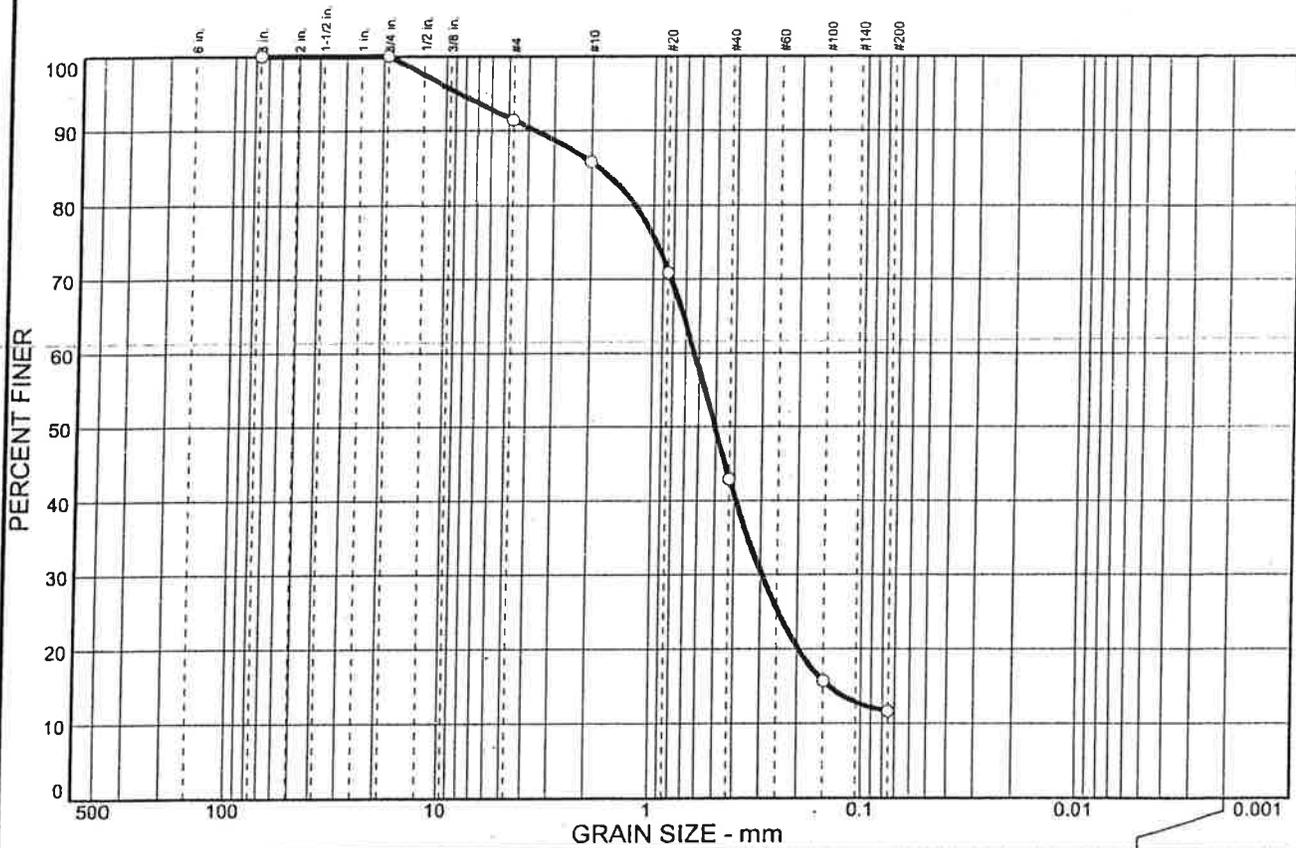
Source of Sample: --

Date: 3/12/04  
 Elev./Depth: 15-17

<b>CDM Jessberger</b>  Geotechnical Engineering Laboratory	Client: Town of Stratford Project: Stratford WPCF  Project No: 25472-41255
Date: 3/12/04 Elev./Depth: 15-17  Plate	



# PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	8.6	5.6	42.9	31.3	11.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3 in.	100.0		
3/4 in.	100.0		
#4	91.4		
#10	85.8		
#20	70.9		
#40	42.9		
#100	15.7		
#200	11.6		

**Soil Description**

Poorly graded sand with silt

**Atterberg Limits**

PL= --      LL= --      PI= --

**Coefficients**

D<sub>85</sub>= 1.83      D<sub>60</sub>= 0.637      D<sub>50</sub>= 0.504  
D<sub>30</sub>= 0.294      D<sub>15</sub>= 0.141      D<sub>10</sub>=  
C<sub>u</sub>=

**Classification**

USCS= SP-SM      AASHTO= --

**Remarks**

As received moisture content = 6.3%  
Soil classification and description based on Visual-Manual Procedure (ASTM-D2488)

\* (no specification provided)

Sample No.: S-2  
Location: CDM-4

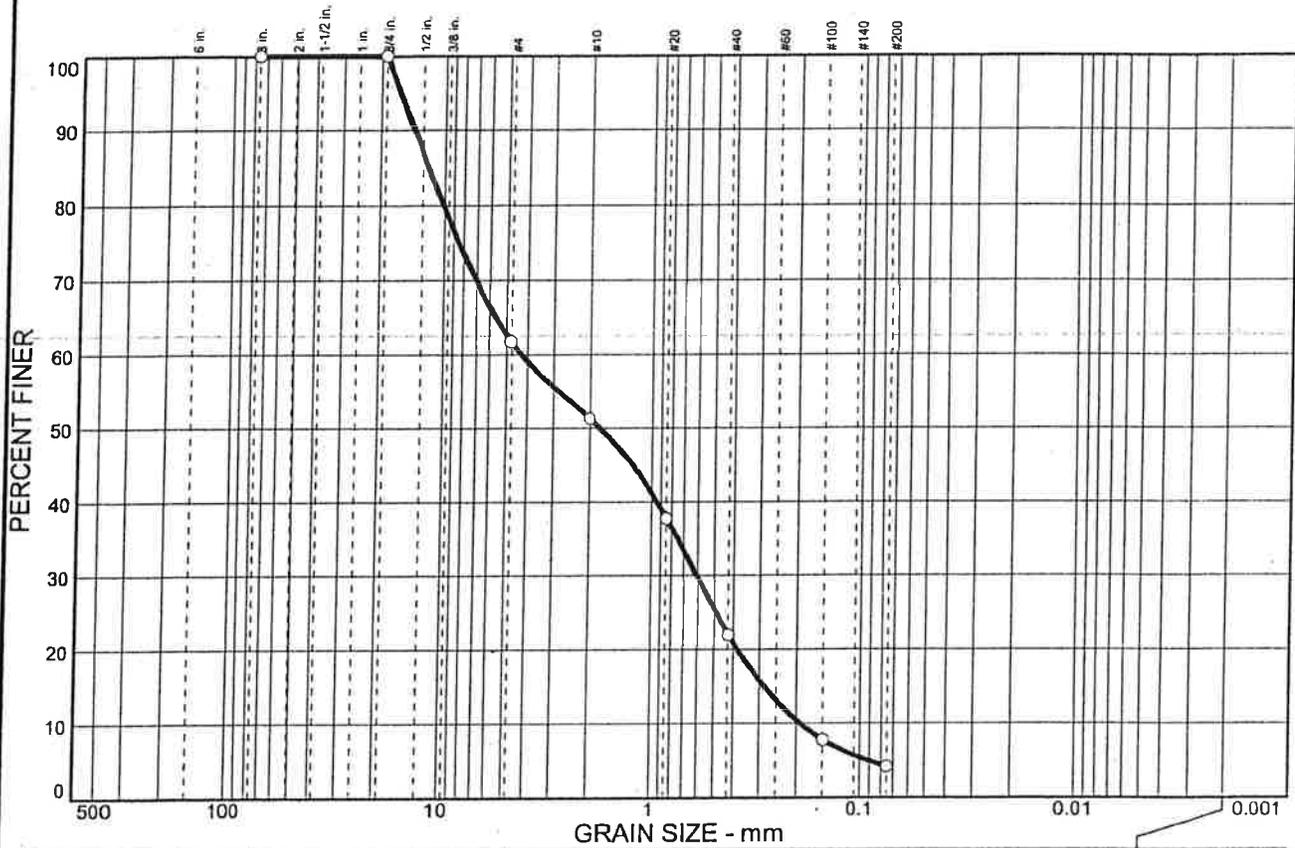
Source of Sample: --

Date: 3/12/04  
Elev./Depth: 5-7

<b>CDM Jessberger</b>  <b>Geotechnical Engineering Laboratory</b>	<b>Client:</b> Town of Stratford <b>Project:</b> Stratford WPCF  <b>Project No:</b> 25472-41255  <div style="text-align: right;"><b>Plate</b></div>
---	--



# PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	38.3	10.4	29.3	17.8	4.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3 in.	100.0		
3/4 in.	100.0		
#4	61.7		
#10	51.3		
#20	37.7		
#40	22.0		
#100	7.8		
#200	4.2		

**Soil Description**

Poorly graded sand with gravel

**Atterberg Limits**

PL= --      LL= --      PI= --

**Coefficients**

D<sub>85</sub>= 12.0      D<sub>60</sub>= 4.27      D<sub>50</sub>= 1.79  
D<sub>30</sub>= 0.606      D<sub>15</sub>= 0.287      D<sub>10</sub>= 0.193  
C<sub>u</sub>= 22.19      C<sub>c</sub>= 0.45

**Classification**

USCS= SP      AASHTO= --

**Remarks**

As received moisture content = 11.9%

\* (no specification provided)

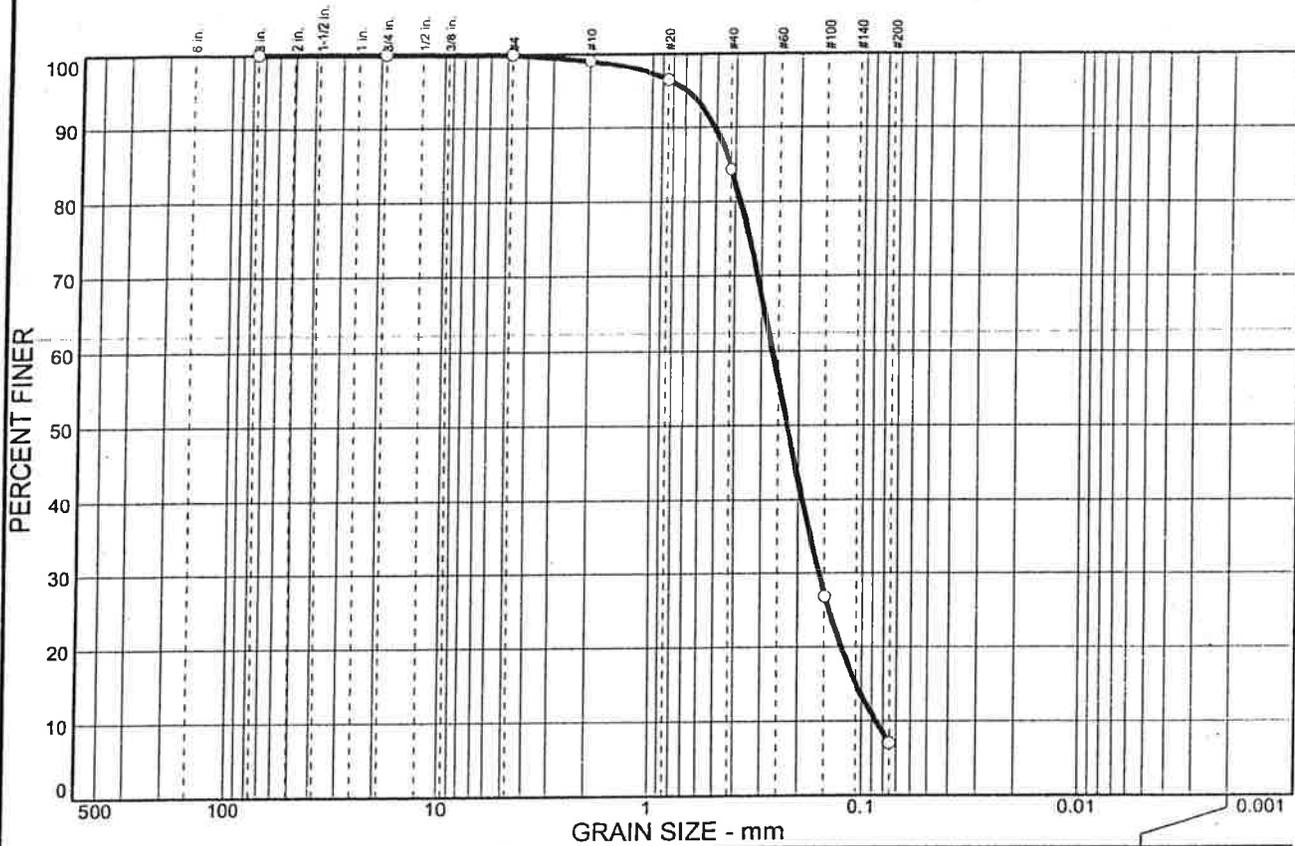
Sample No.: S-5  
Location: CDM-6

Source of Sample: --

Date: 3/12/04  
Elev./Depth: 20-22

<b>CDM Jessberger</b>  <b>Geotechnical Engineering Laboratory</b>	<b>Client:</b> Town of Stratford <b>Project:</b> Stratford WPCF  <b>Project No:</b> 25472-41255
<b>Plate</b>	

# PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.1	0.9	14.7	77.3	7.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3 in.	100.0		
3/4 in.	100.0		
#4	99.9		
#10	99.0		
#20	96.5		
#40	84.3		
#100	26.9		
#200	7.0		

**Soil Description**

Poorly graded sand with silt

**Atterberg Limits**

PL= --      LL= --      PI= --

**Coefficients**

D<sub>85</sub>= 0.433      D<sub>60</sub>= 0.267      D<sub>50</sub>= 0.227  
 D<sub>30</sub>= 0.160      D<sub>15</sub>= 0.107      D<sub>10</sub>= 0.0866  
 C<sub>u</sub>= 3.09      C<sub>c</sub>= 1.11

**Classification**

USCS= SP-SM      AASHTO= --

**Remarks**

As received moisture content = 24.3%  
 Soil classification and description based on Visual-Manual Procedure (ASTM-D2488)

\* (no specification provided)

Sample No.: S-2  
 Location: CDM-8

Source of Sample: --

Date: 3/12/04  
 Elev./Depth: 20-22

**CDM Jessberger**  
**Geotechnical Engineering Laboratory**

Client: Town of Stratford  
 Project: Stratford WPCF

Project No: 25472-41255

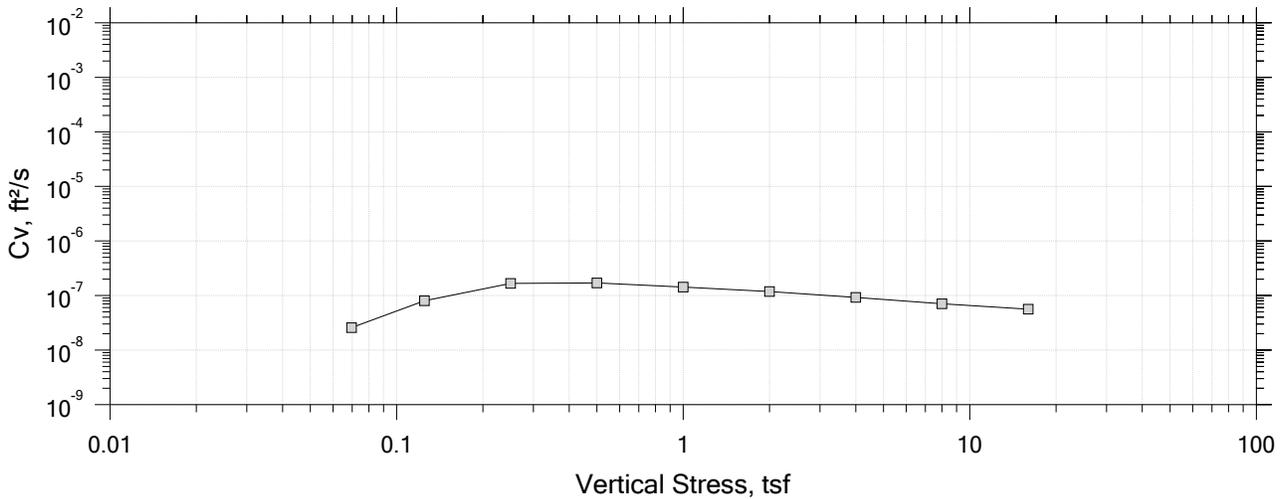
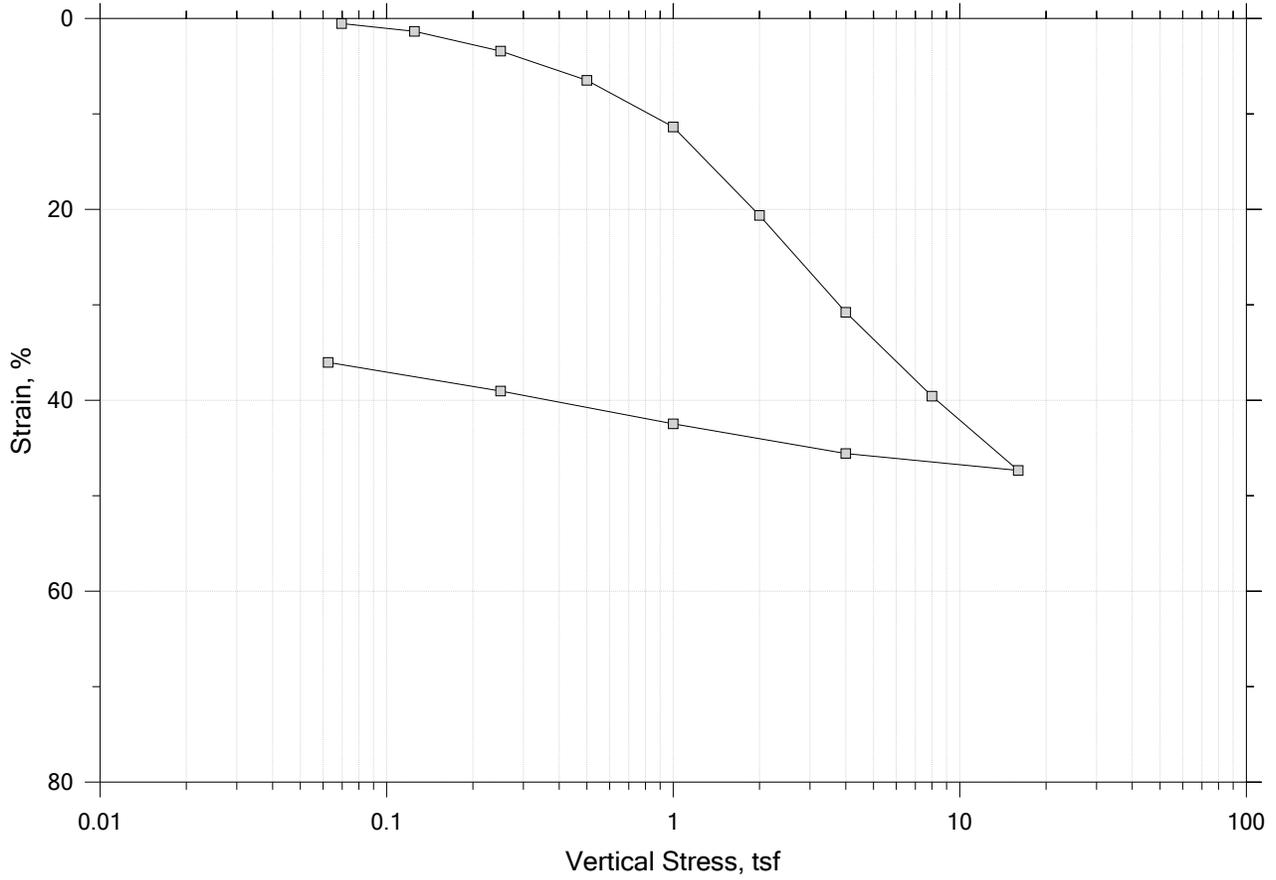
Plate



## **Appendix F – Geotechnical Laboratory Analysis**

# One-Dimensional Consolidation by ASTM D2435 - Method A

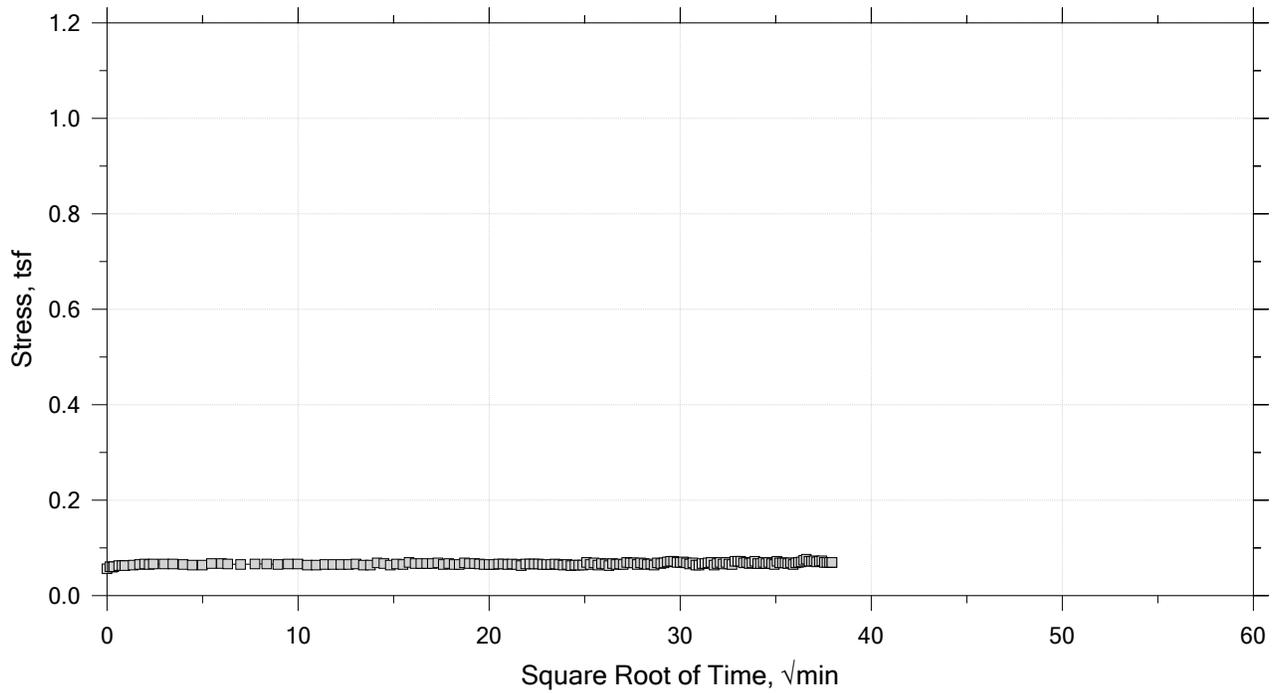
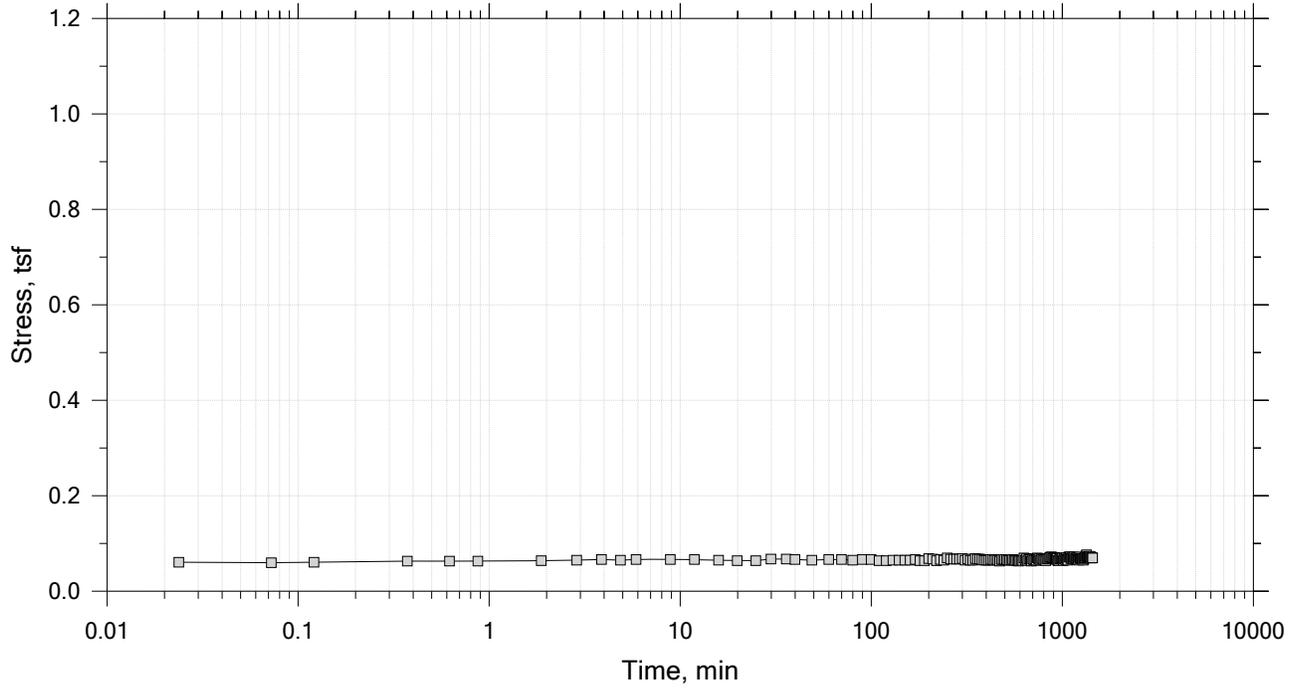
## Summary Report



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		
	Displacement at End of Increment		

# One-Dimensional Consolidation by ASTM D2435 - Method A

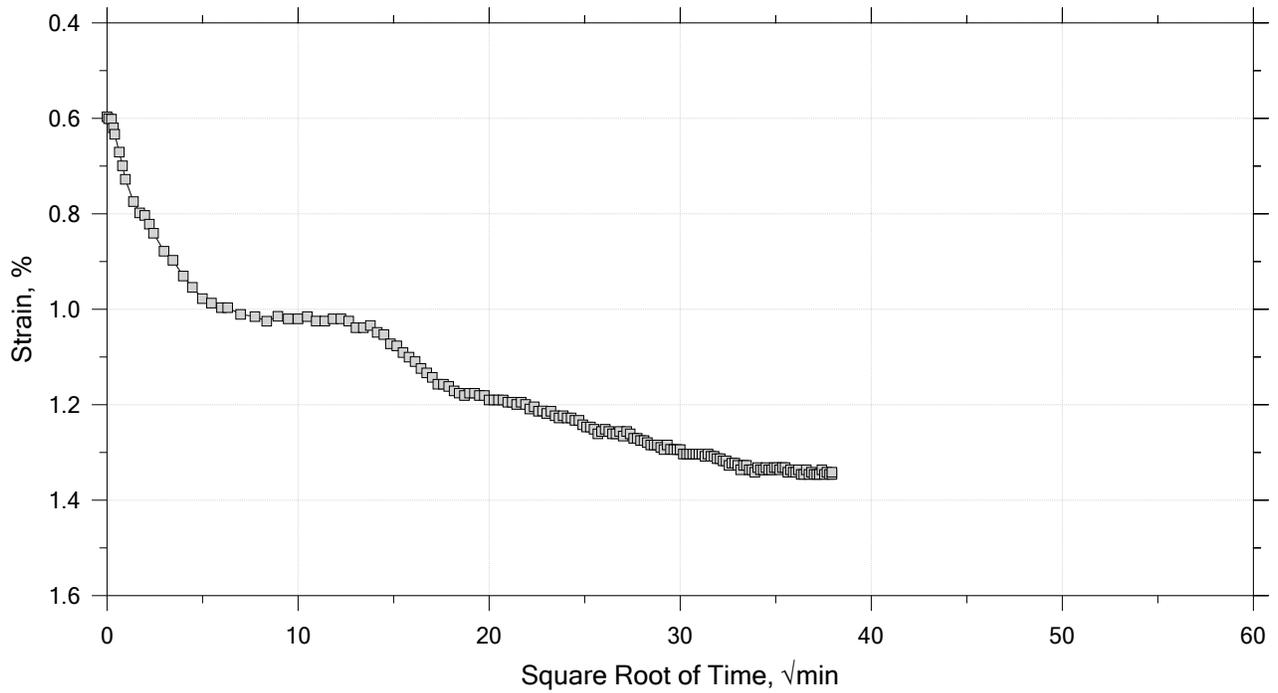
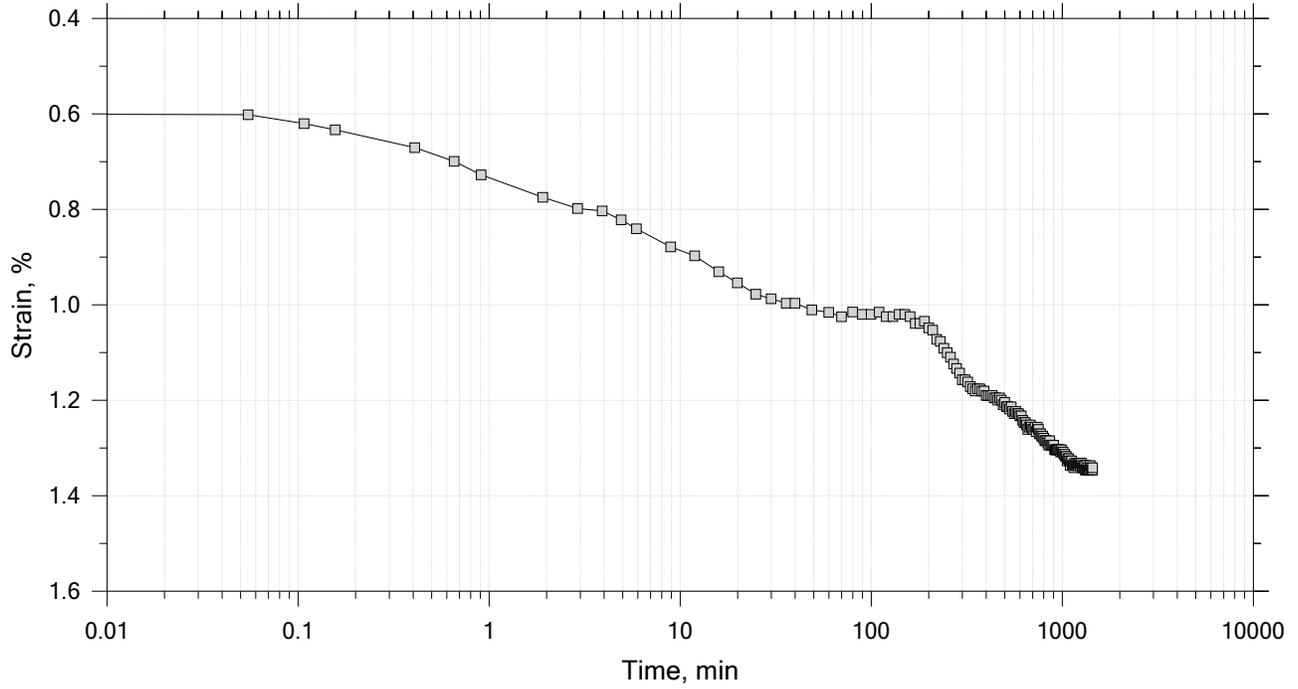
Time Curve 1 of 13  
 Constant Volume Step  
 Stress: 0.0696 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 2 of 13  
 Constant Load Step  
 Stress: 0.125 tsf



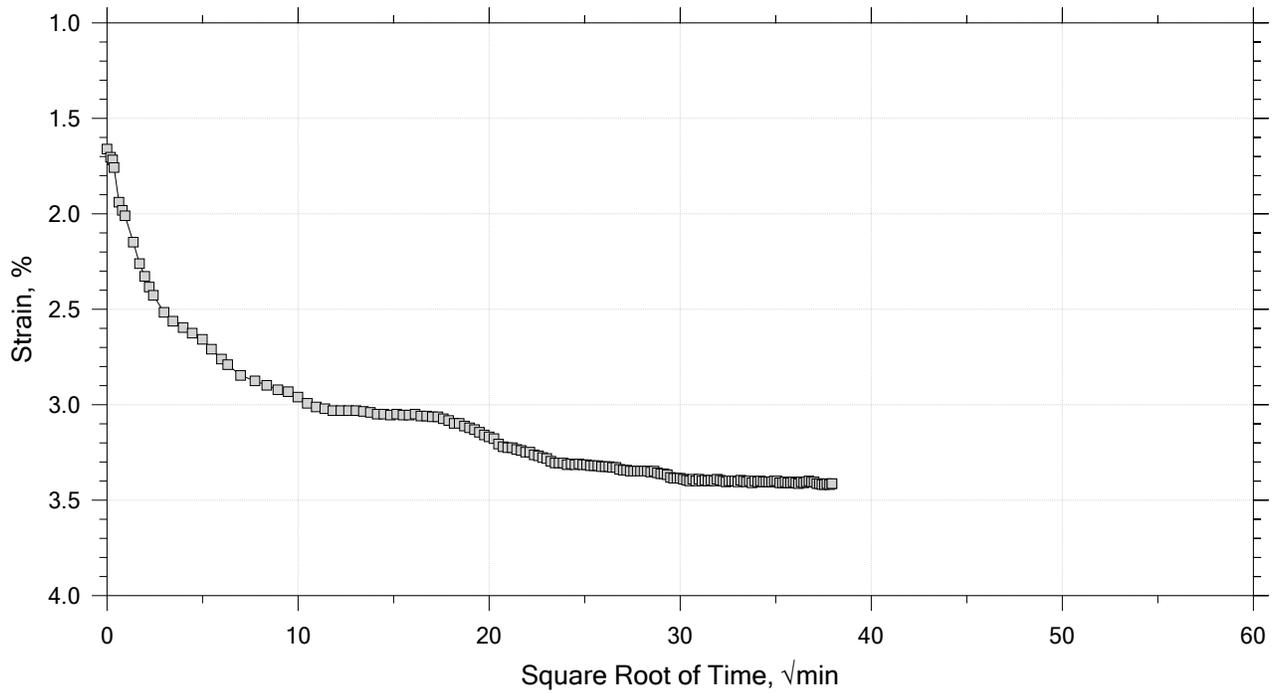
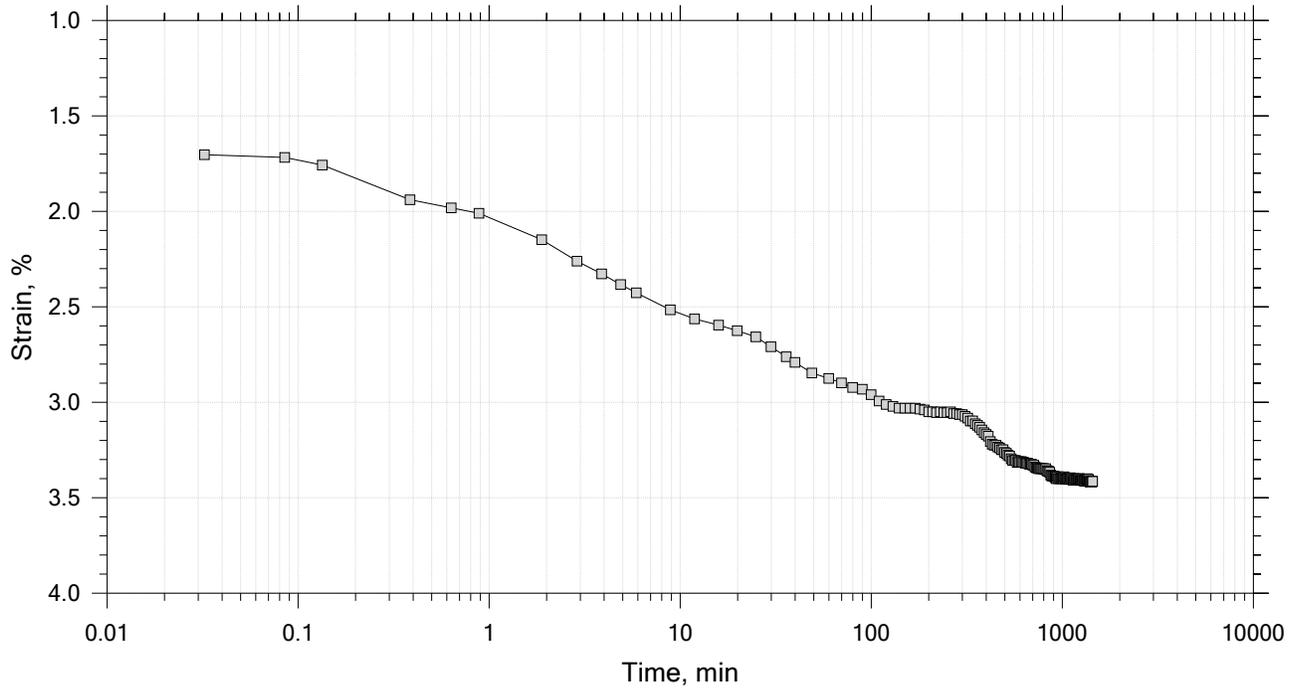
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 3 of 13

Constant Load Step

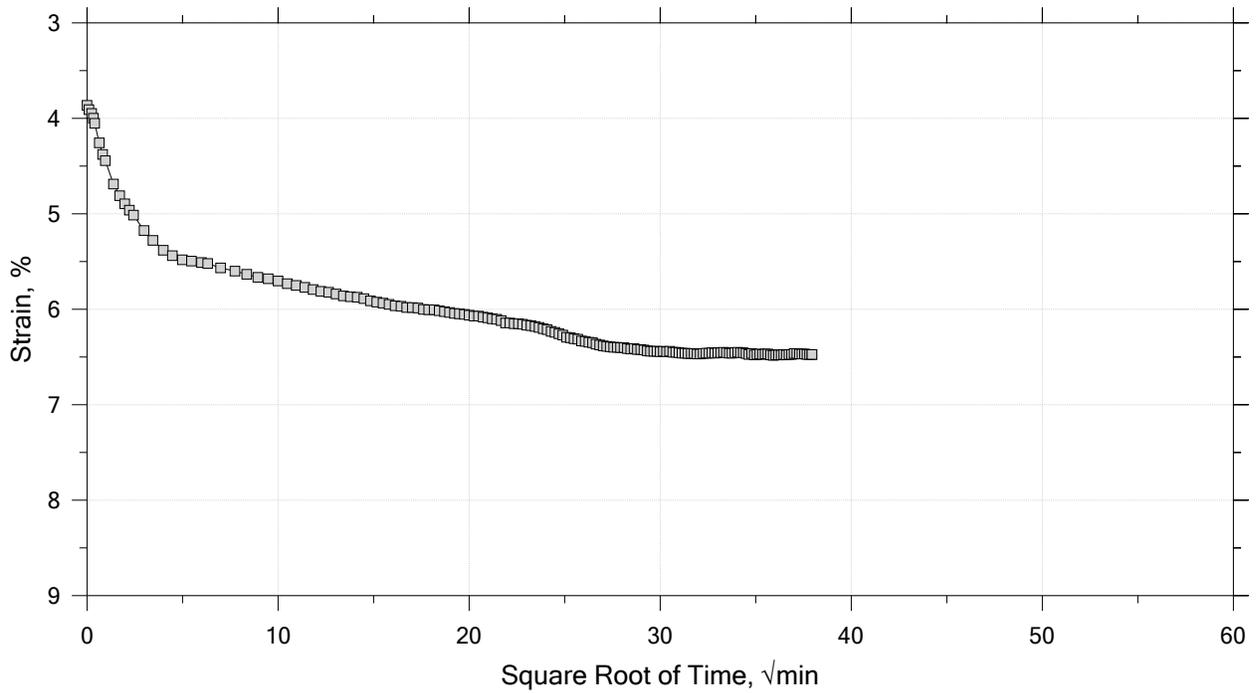
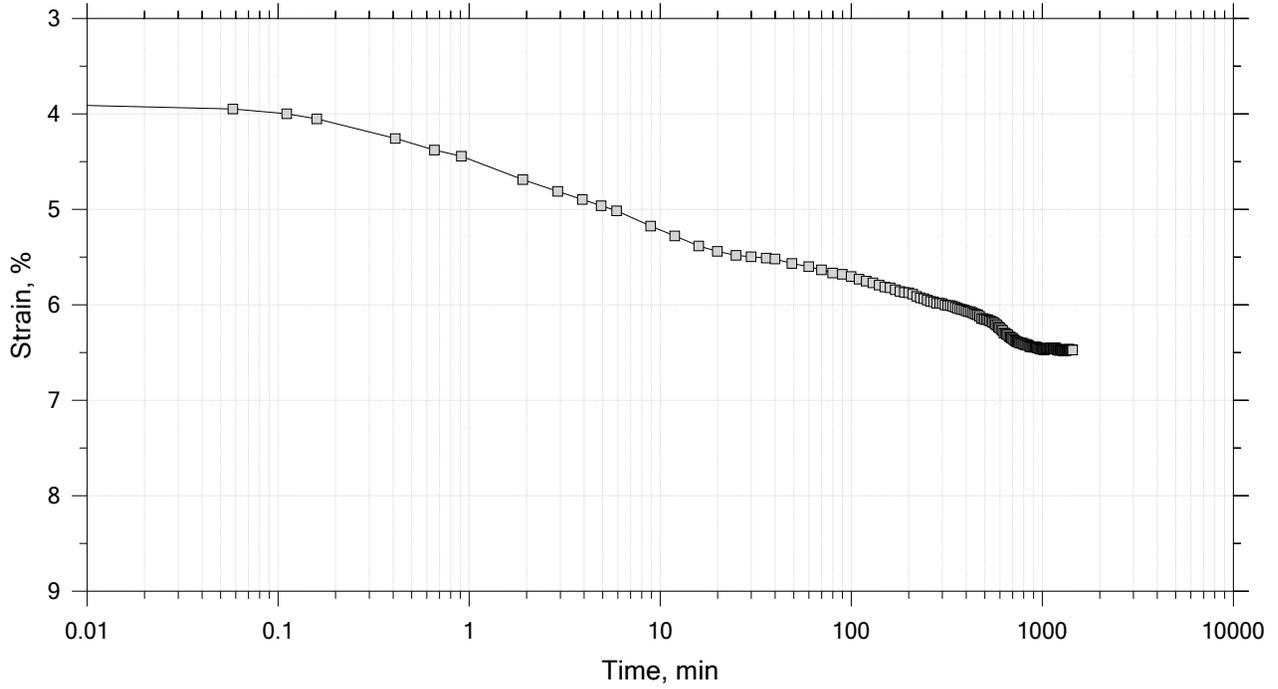
Stress: 0.25 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

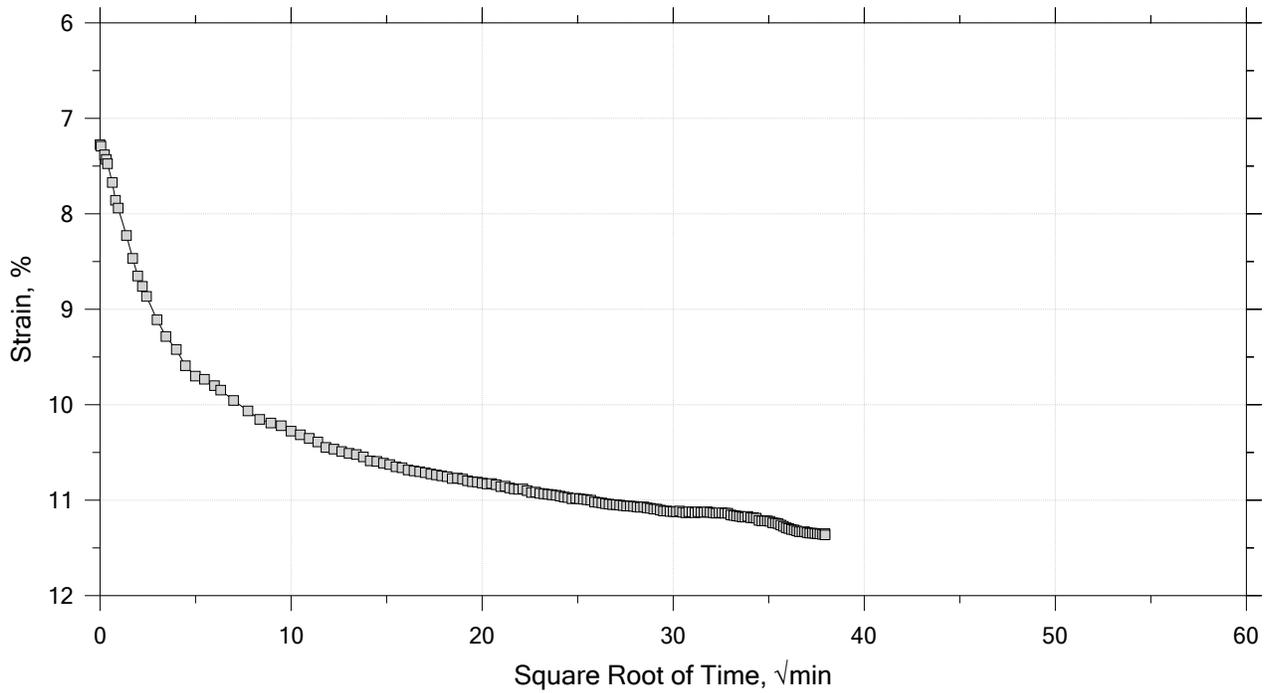
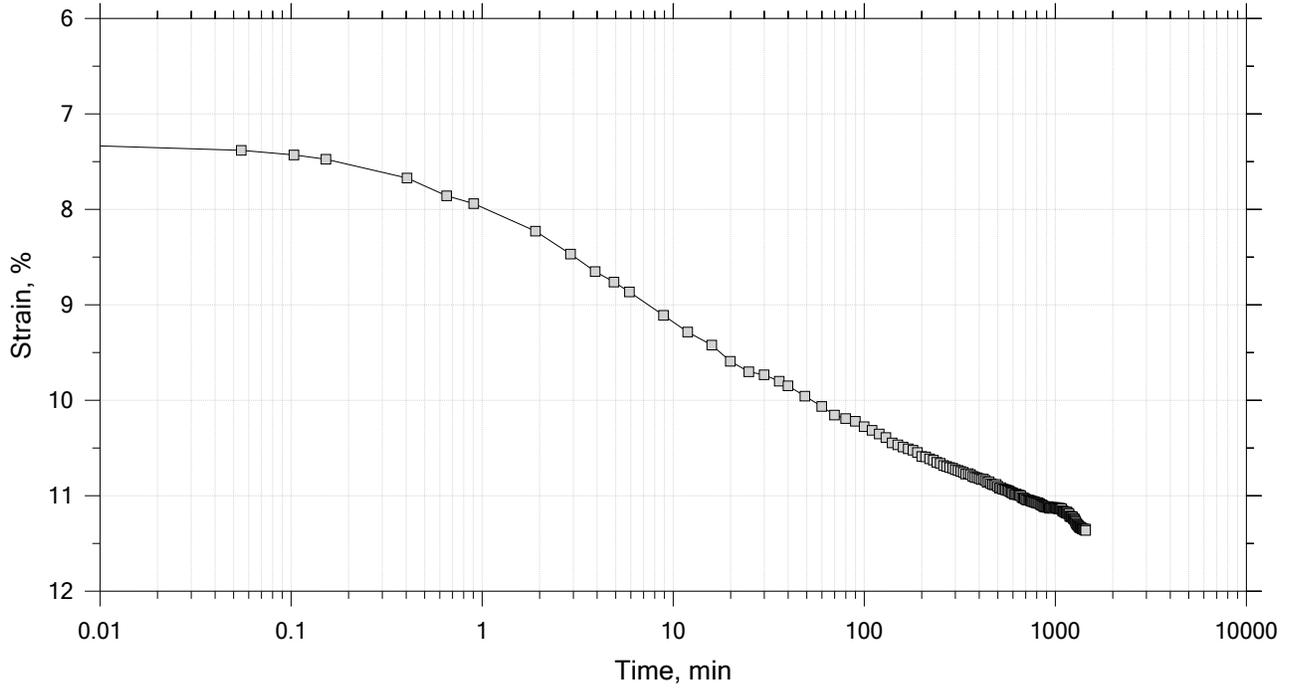
Time Curve 4 of 13  
 Constant Load Step  
 Stress: 0.5 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 5 of 13  
 Constant Load Step  
 Stress: 1 tsf



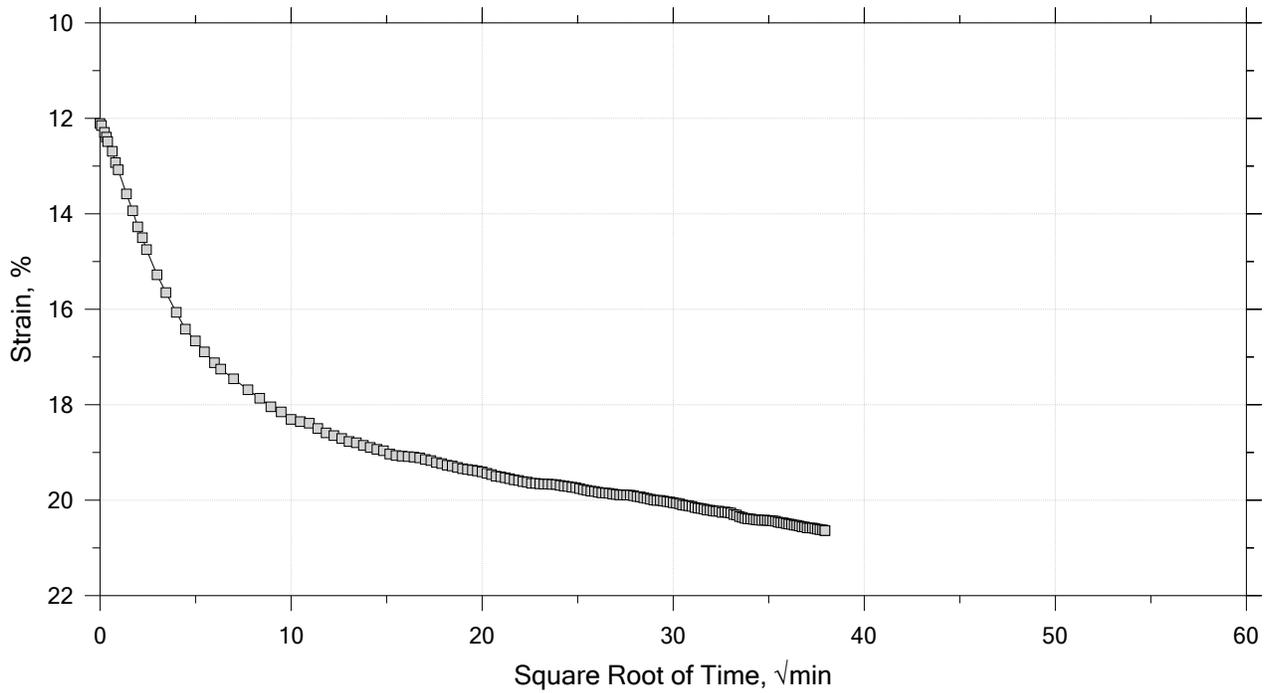
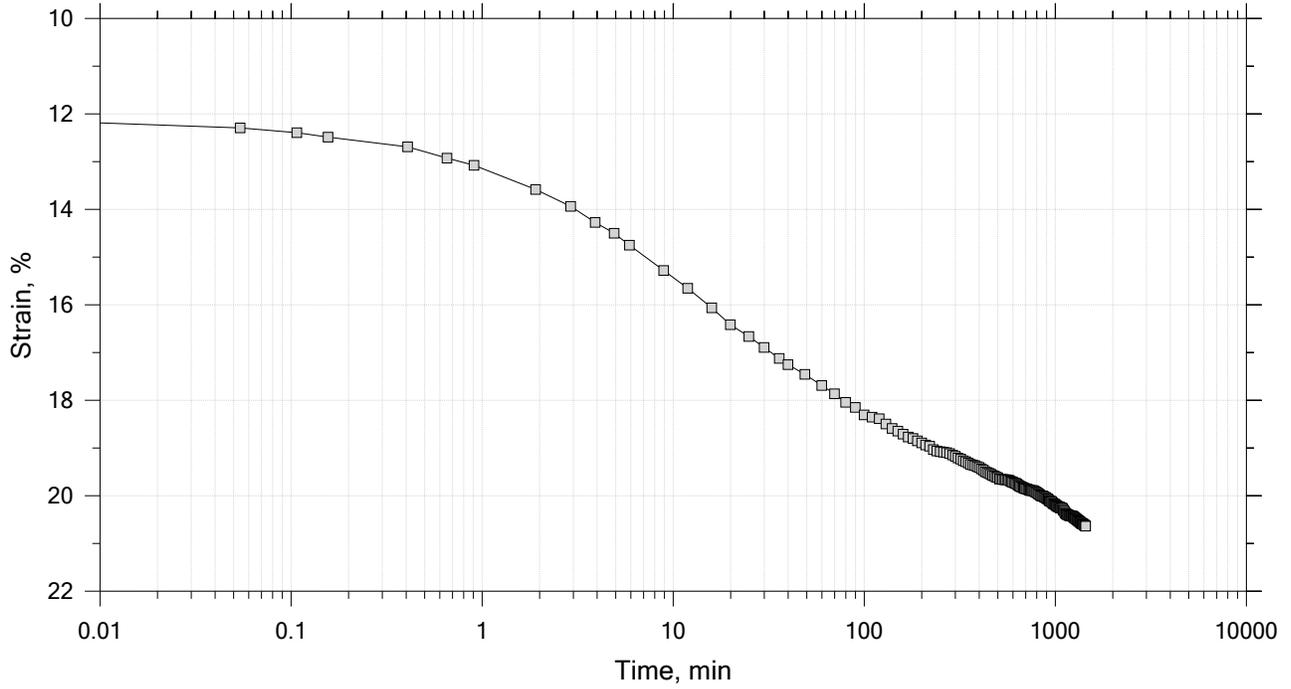
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 6 of 13

Constant Load Step

Stress: 2 tsf



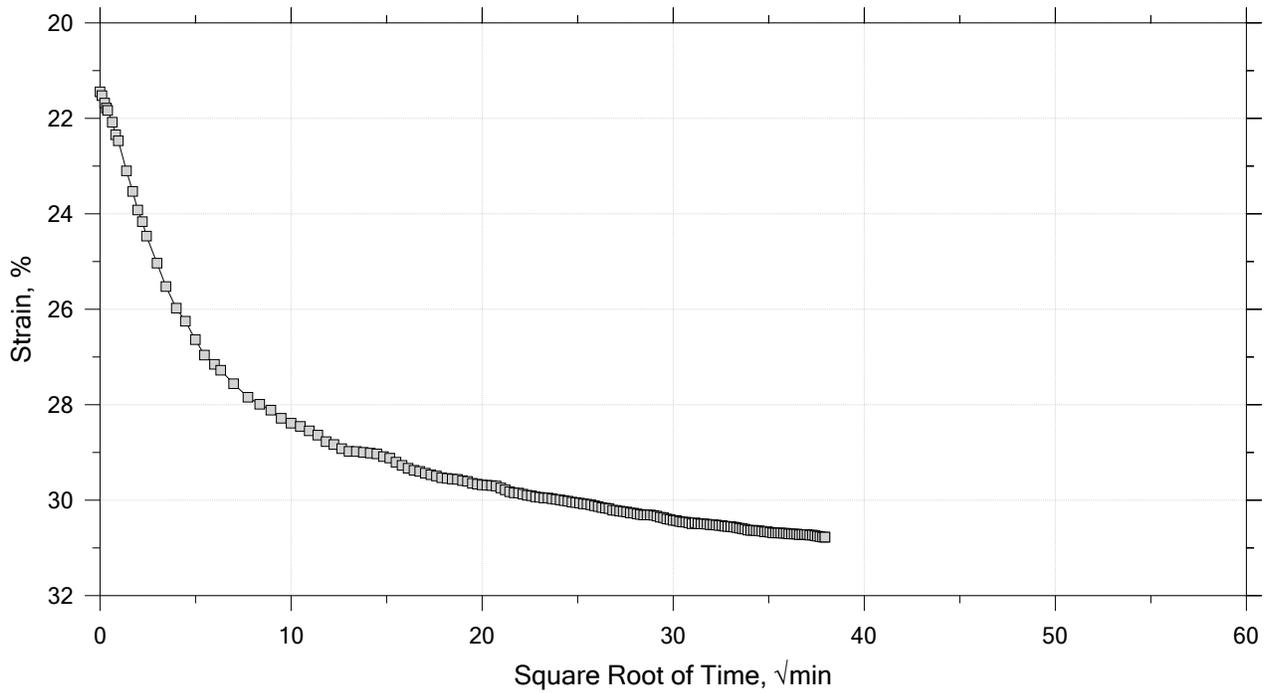
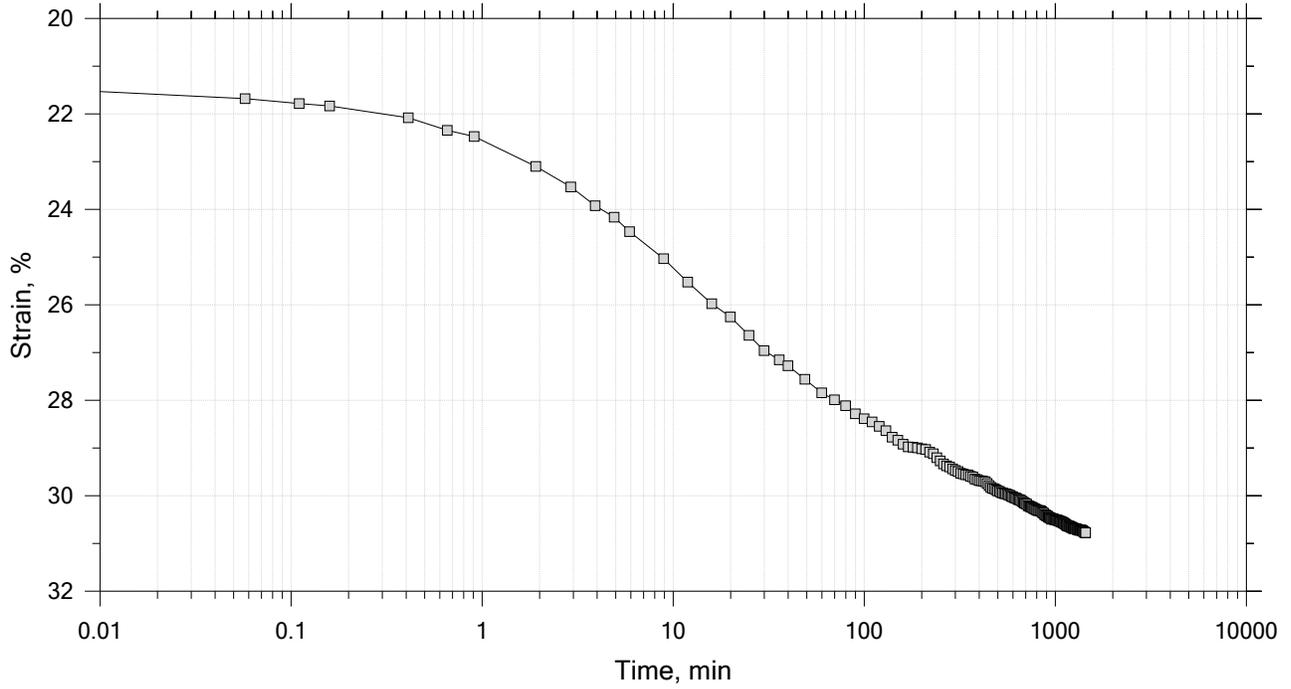
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 7 of 13

Constant Load Step

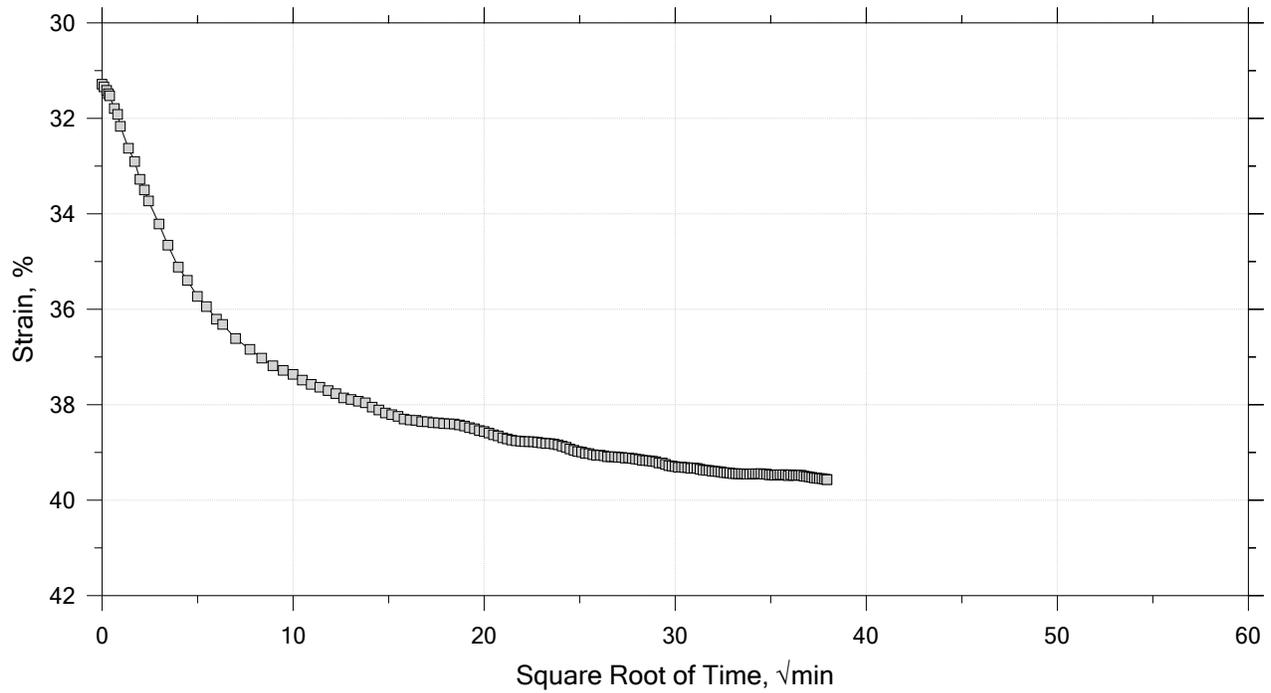
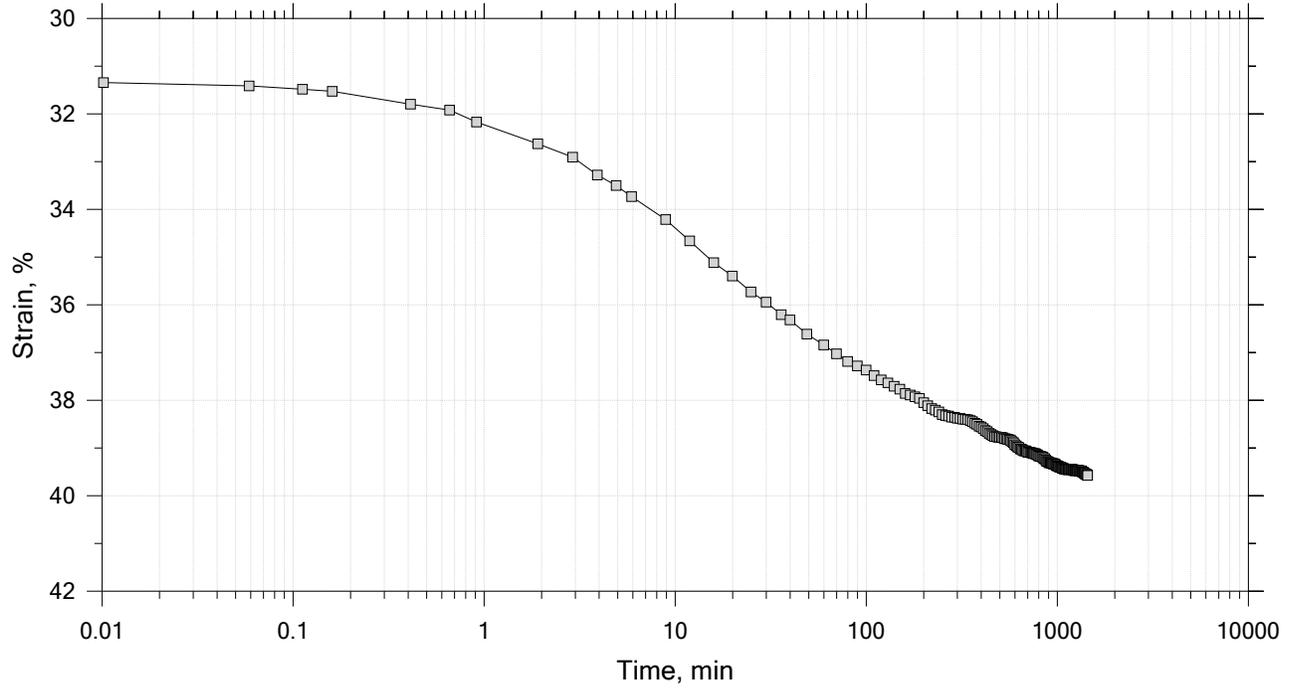
Stress: 4 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 8 of 13  
 Constant Load Step  
 Stress: 8 tsf



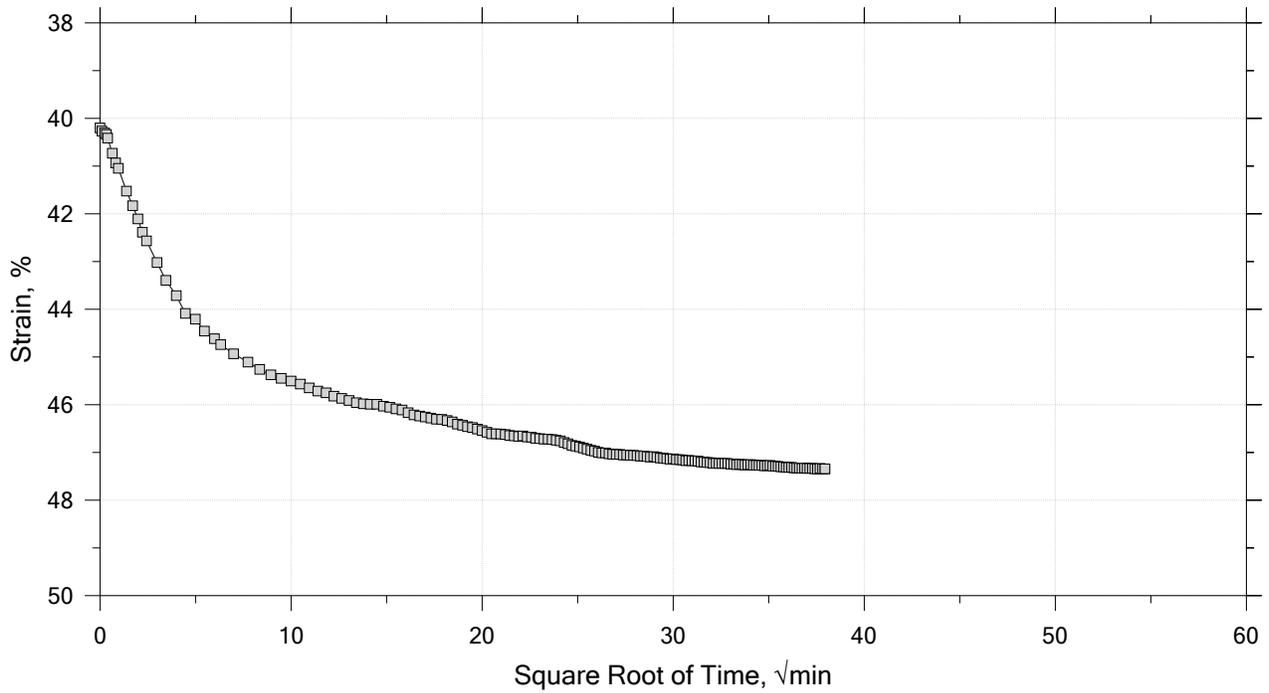
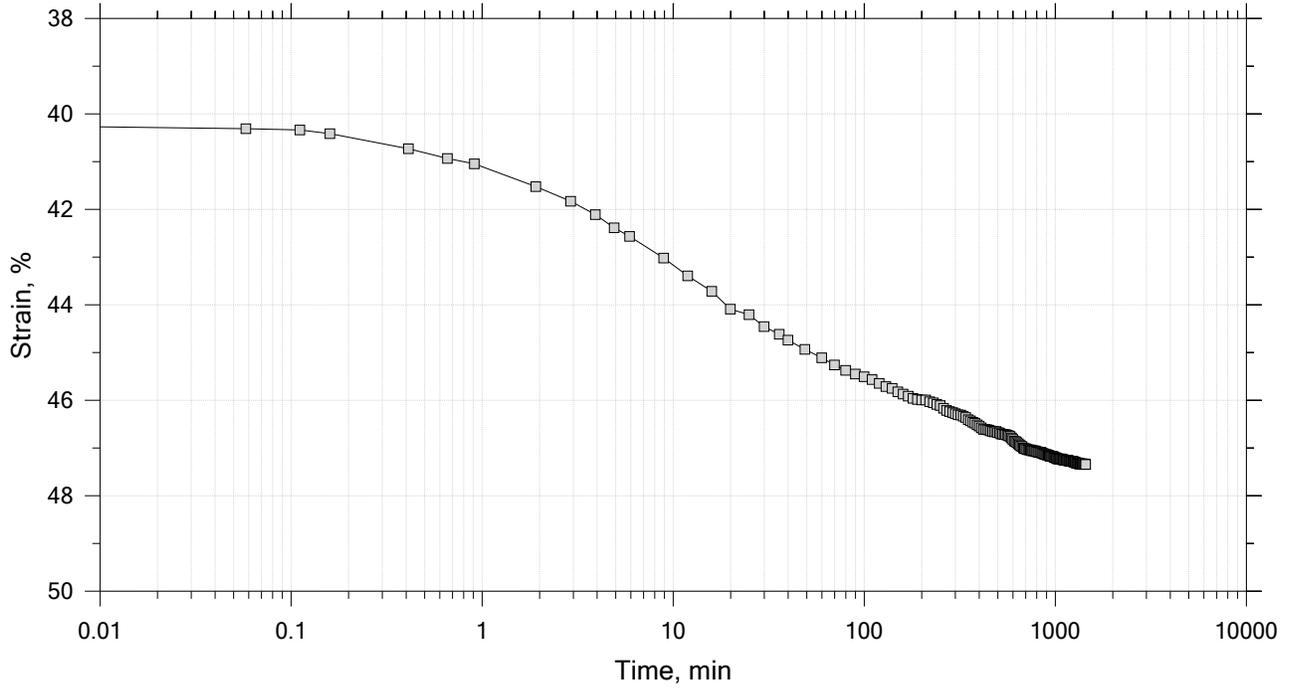
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 9 of 13

Constant Load Step

Stress: 16 tsf



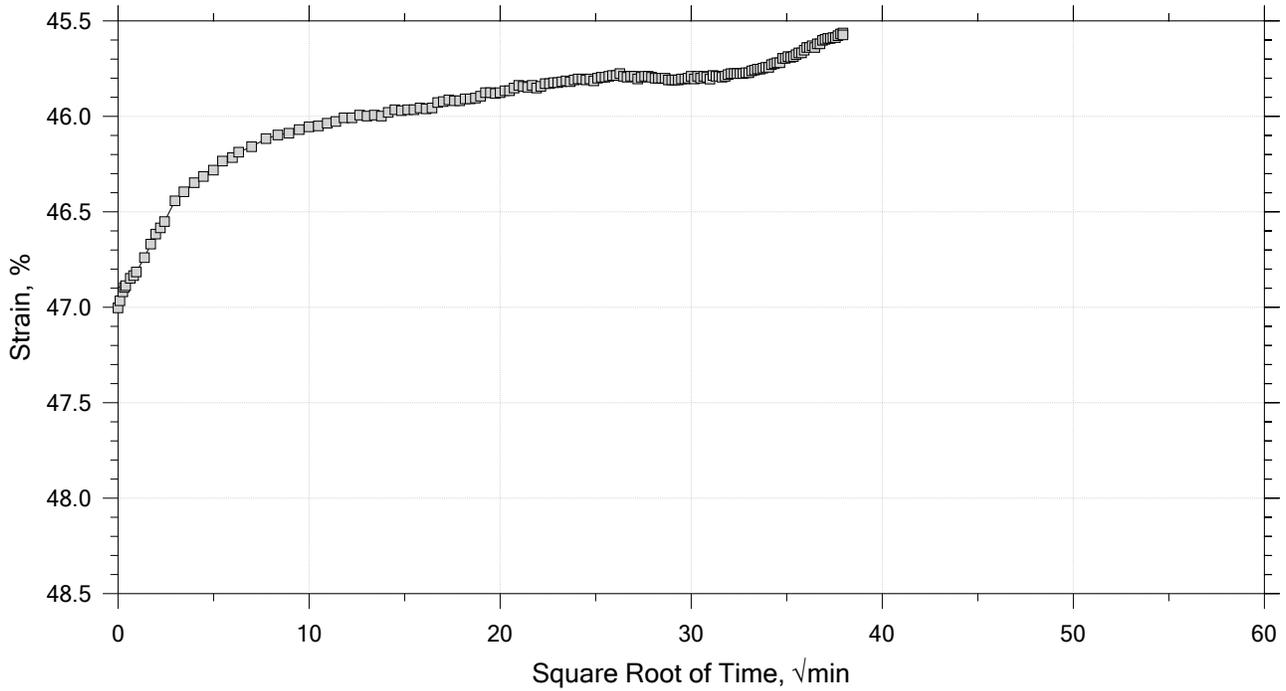
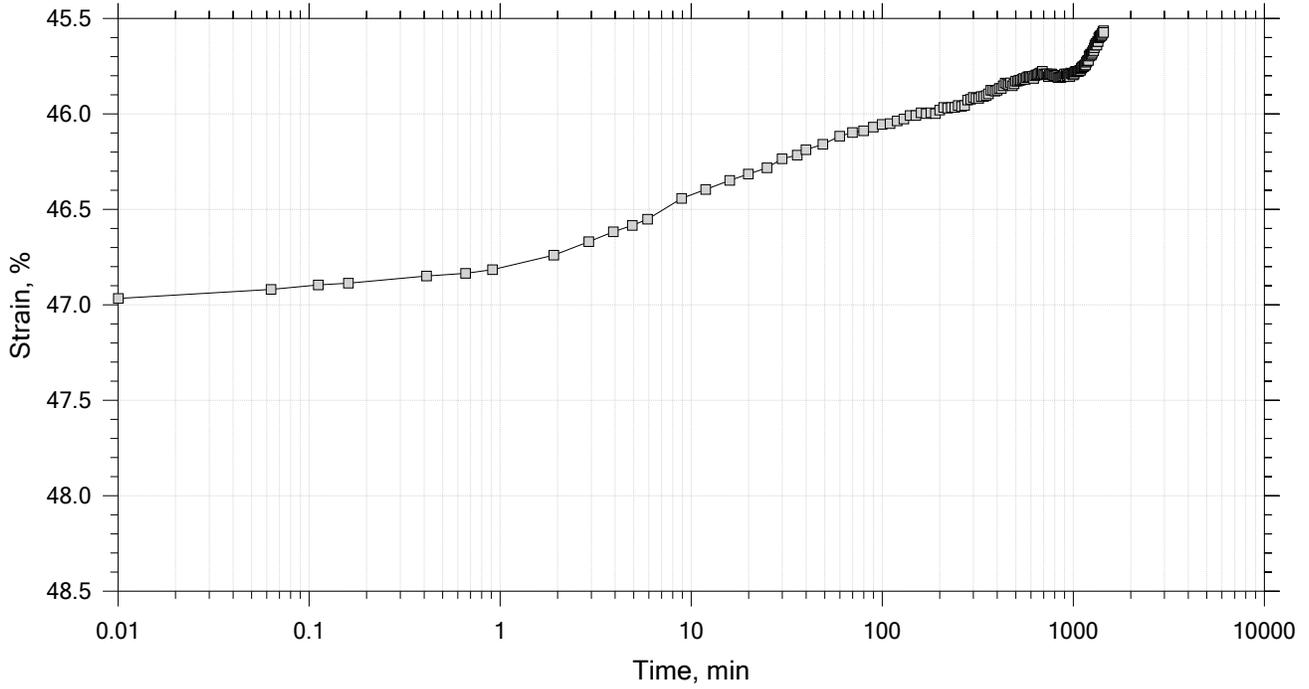
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 10 of 13

Constant Load Step

Stress: 4 tsf



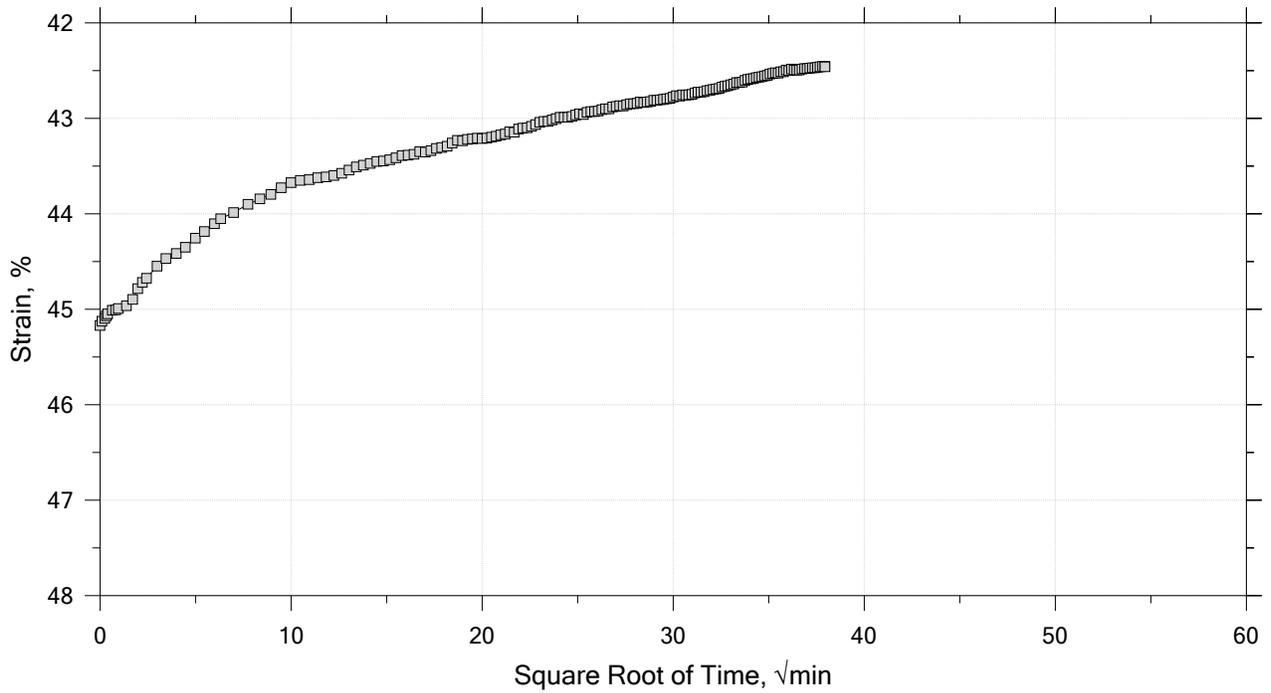
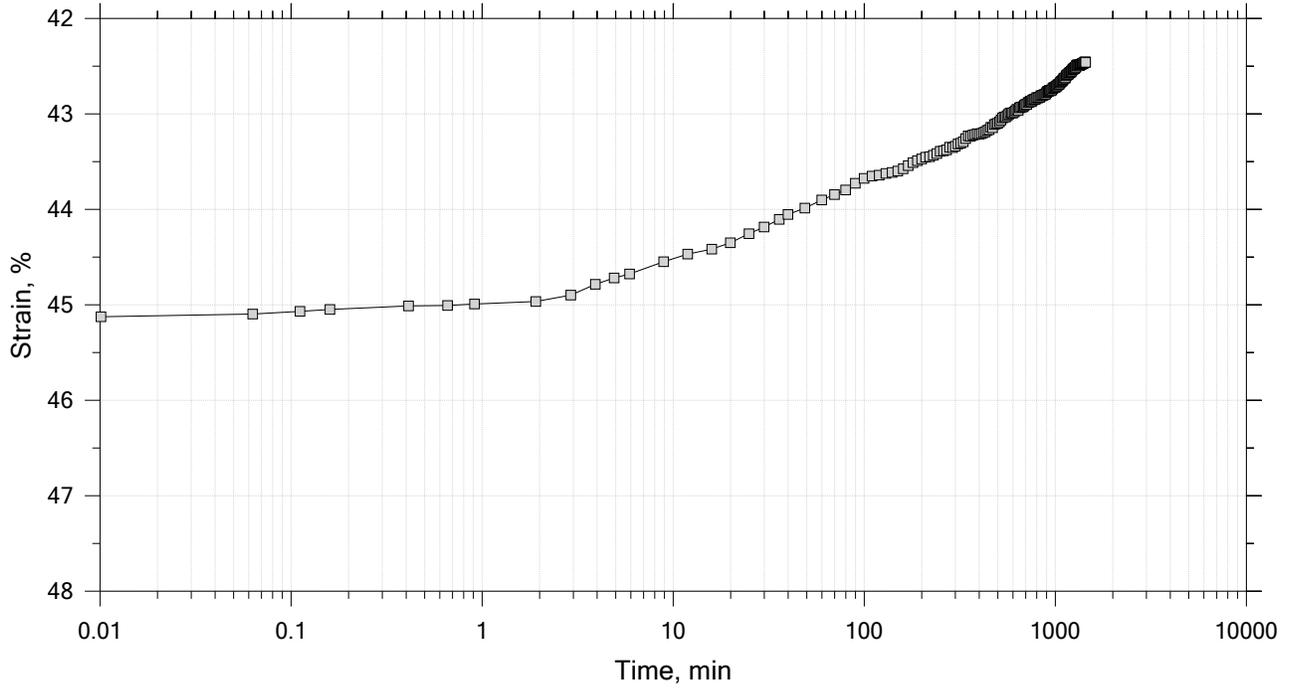
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 11 of 13

Constant Load Step

Stress: 1 tsf



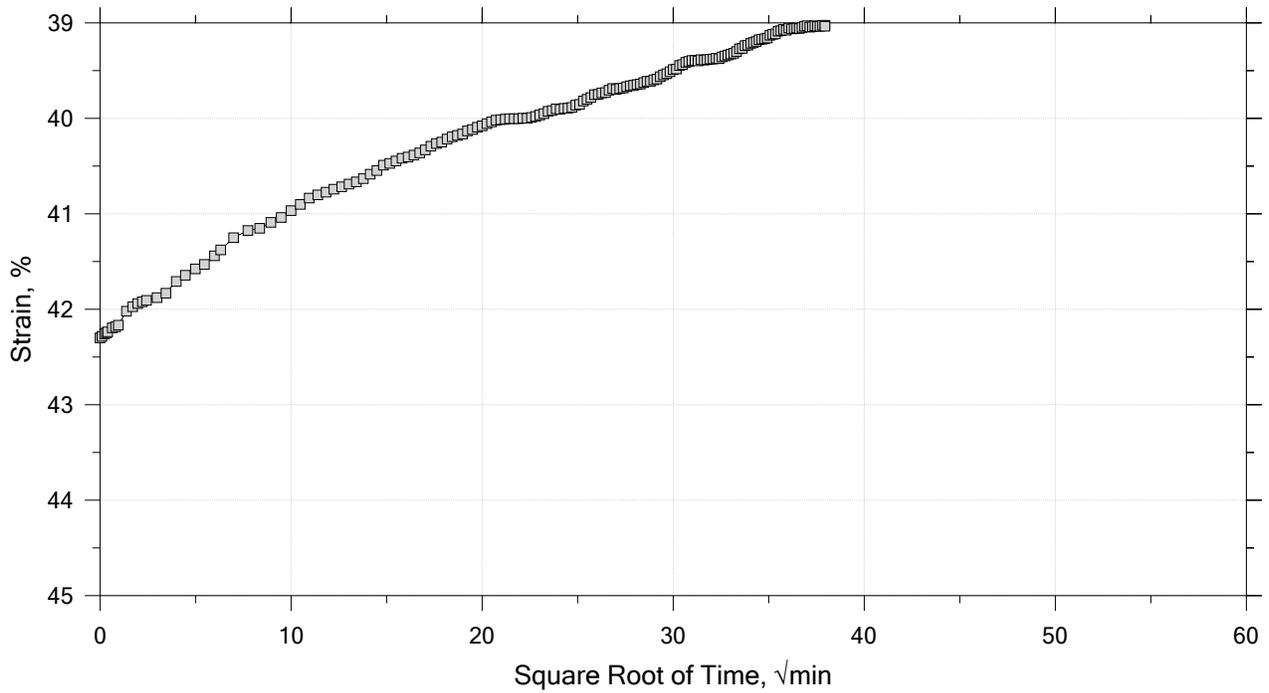
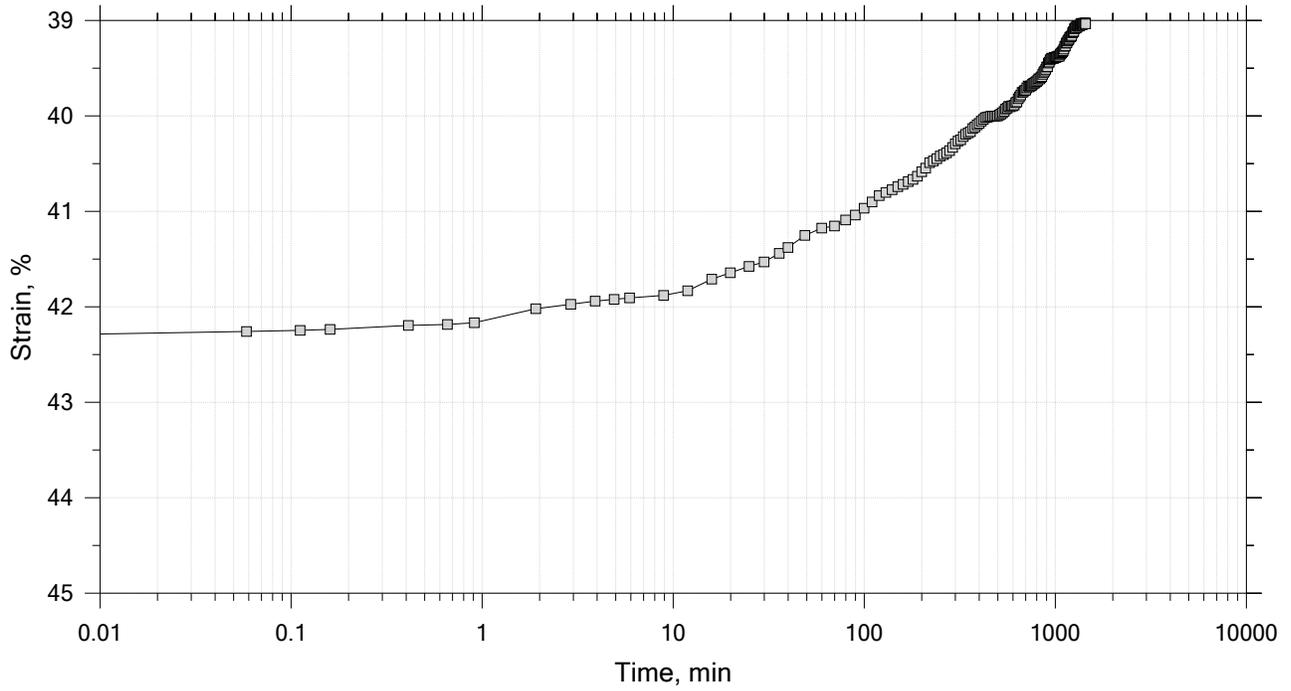
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 12 of 13

Constant Load Step

Stress: 0.25 tsf



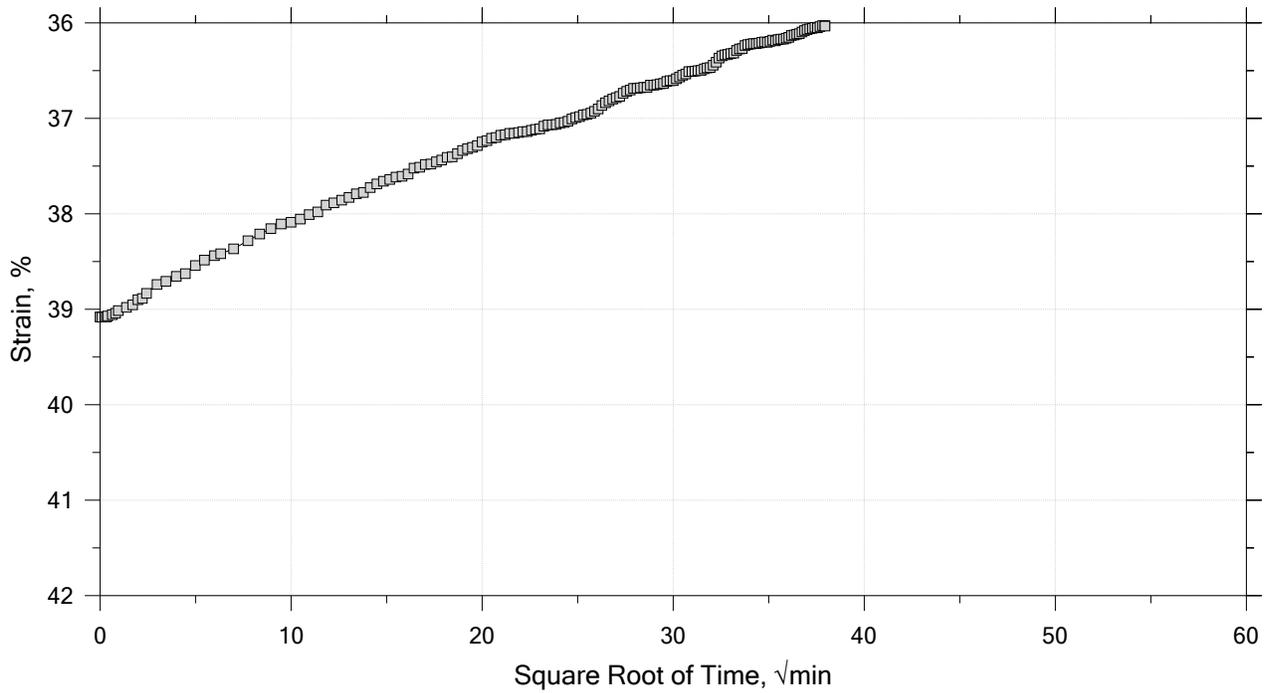
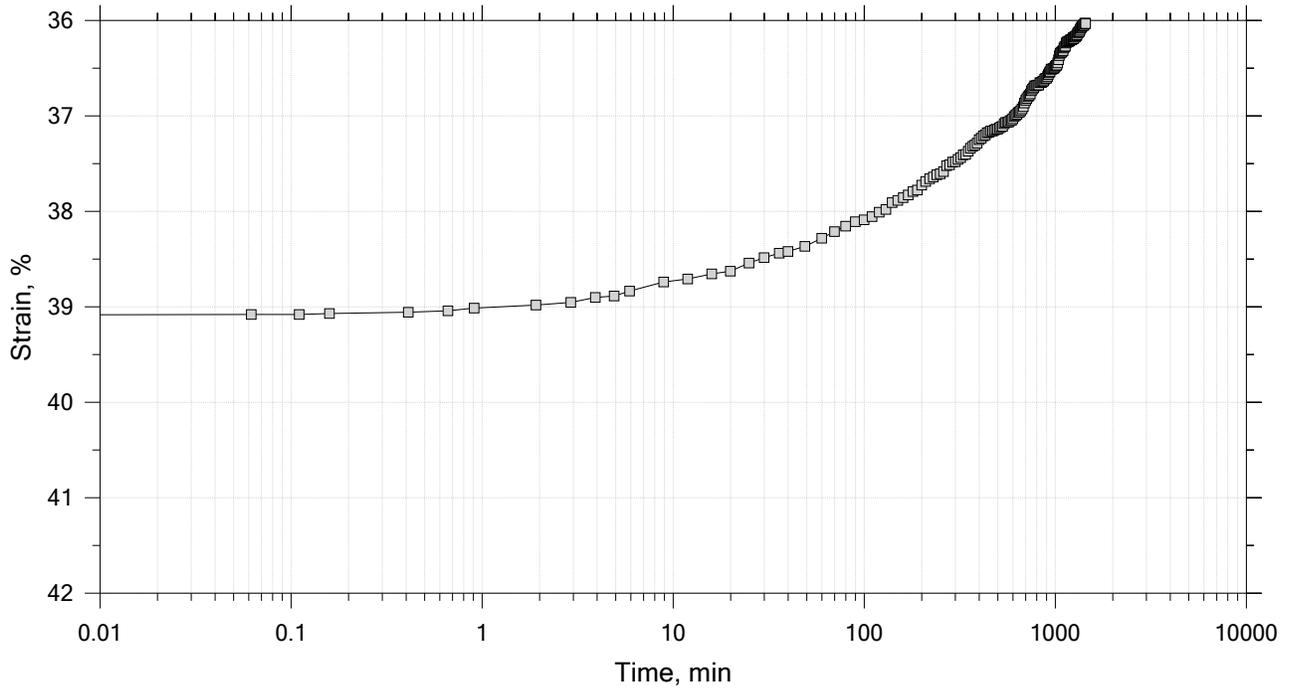
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 13 of 13

Constant Load Step

Stress: 0.0625 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Specimen Diameter: 2.50 in	Estimated Specific Gravity: 2.70	Liquid Limit: 134
Initial Height: 1.00 in	Initial Void Ratio: 3.53	Plastic Limit: 78
Final Height: 0.61 in	Final Void Ratio: 1.76	Plasticity Index: 56

	Before Test Trimmings	Before Test Specimen	After Test Specimen	After Test Trimmings
Container ID	E5086	RING		E2310
Mass Container, gm	8.29	107.75	107.75	8.18
Mass Container + Wet Soil, gm	117.06	208.81	187	85.48
Mass Container + Dry Soil, gm	67.32	155.68	155.68	54.93
Mass Dry Soil, gm	59.03	47.929	47.929	46.75
Water Content, %	84.26	110.85	65.35	65.35
Void Ratio	---	3.53	1.76	---
Degree of Saturation, %	---	84.75	100.00	---
Dry Unit Weight, pcf	---	37.197	60.979	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: trm	Checked By: anm
	Sample No.: ST-1 (Tube)	Test Date: 5/13/22	Depth: 17-19 ft bg
	Test No.: IP-1R	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray silt		
	Remarks: TX-005, Swell Pressure = 0.0696 tsf		





Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	---	Sample Type:	---
Sample ID:	---	Test Date:	05/09/22
Depth :	---	Tested By:	ckg
		Checked By:	bfs
		Test Id:	665529

## Moisture Content of Soil and Rock - ASTM D2216

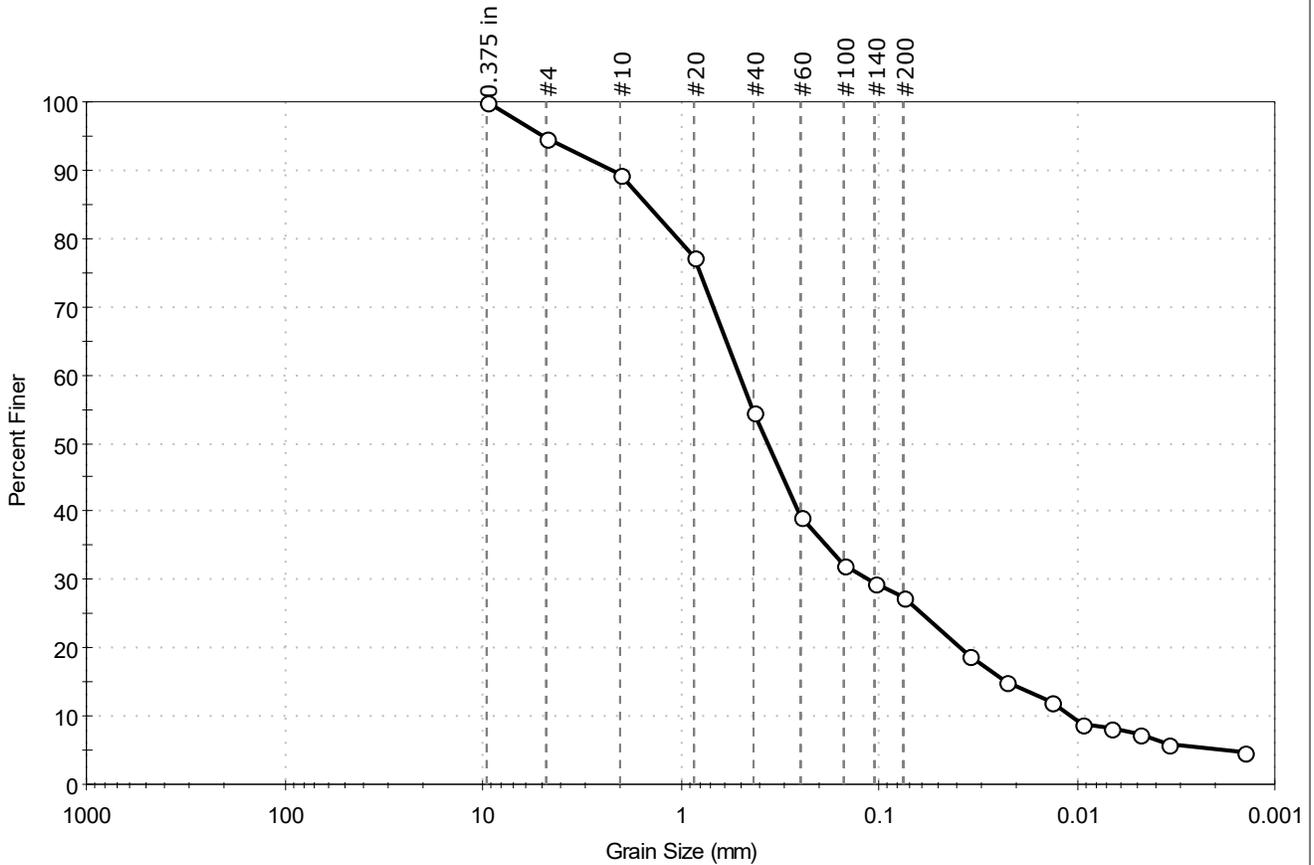
Boring ID	Sample ID	Depth	Description	Moisture Content, %
GZ-1	ST- 1 (Tube)	17-19 ft bg	Wet, very dark gray silt	182.3
GZ-1	SS- 10 (Jar)	25-27 ft bg	Moist, very dark brown silt	432.5
GZ-1	SS- 7 (Jar)	15-17 ft bg	Moist, very dark grayish brown silt	74.1
GZ-1	SS- 9 (Jar)	23-25 ft bg	Moist, black silt	361.8
GZ-3	SS- 5 (Jar)	10-11.6 ft bg	Moist, black silt	134.5

Notes: Temperature of Drying : 110° Celsius



Client: GZA GeoEnvironmental, Inc.  
 Project: Stratford Water Pollution Facility Improve.  
 Location: Stratford, CT  
 Project No: GTX-315388  
 Boring ID: GZ-2  
 Sample Type: jar  
 Tested By: ckg  
 Sample ID: SS-2 (Jar)  
 Test Date: 05/11/22  
 Checked By: bfs  
 Depth: 2-4 ft bg  
 Test Id: 665521  
 Test Comment: ---  
 Visual Description: Moist, dark brown silty sand  
 Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	5.2	67.3	27.5

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	95		
#10	2.00	89		
#20	0.85	77		
#40	0.42	55		
#60	0.25	39		
#100	0.15	32		
#140	0.11	30		
#200	0.075	27		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0354	19		
---	0.0229	15		
---	0.0135	12		
---	0.0095	9		
---	0.0068	8		
---	0.0048	7		
---	0.0034	6		
---	0.0014	5		

**Coefficients**

D <sub>85</sub> = 1.4665 mm	D <sub>30</sub> = 0.1120 mm
D <sub>60</sub> = 0.5012 mm	D <sub>15</sub> = 0.0226 mm
D <sub>50</sub> = 0.3628 mm	D <sub>10</sub> = 0.0107 mm
C <sub>u</sub> = 46.841	C <sub>c</sub> = 2.339

**Classification**

ASTM N/A

AASHTO Silty Gravel and Sand (A-2-4 (0))

**Sample/Test Description**

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Dispersion Device : Apparatus A - Mech Mixer

Dispersion Period : 1 minute

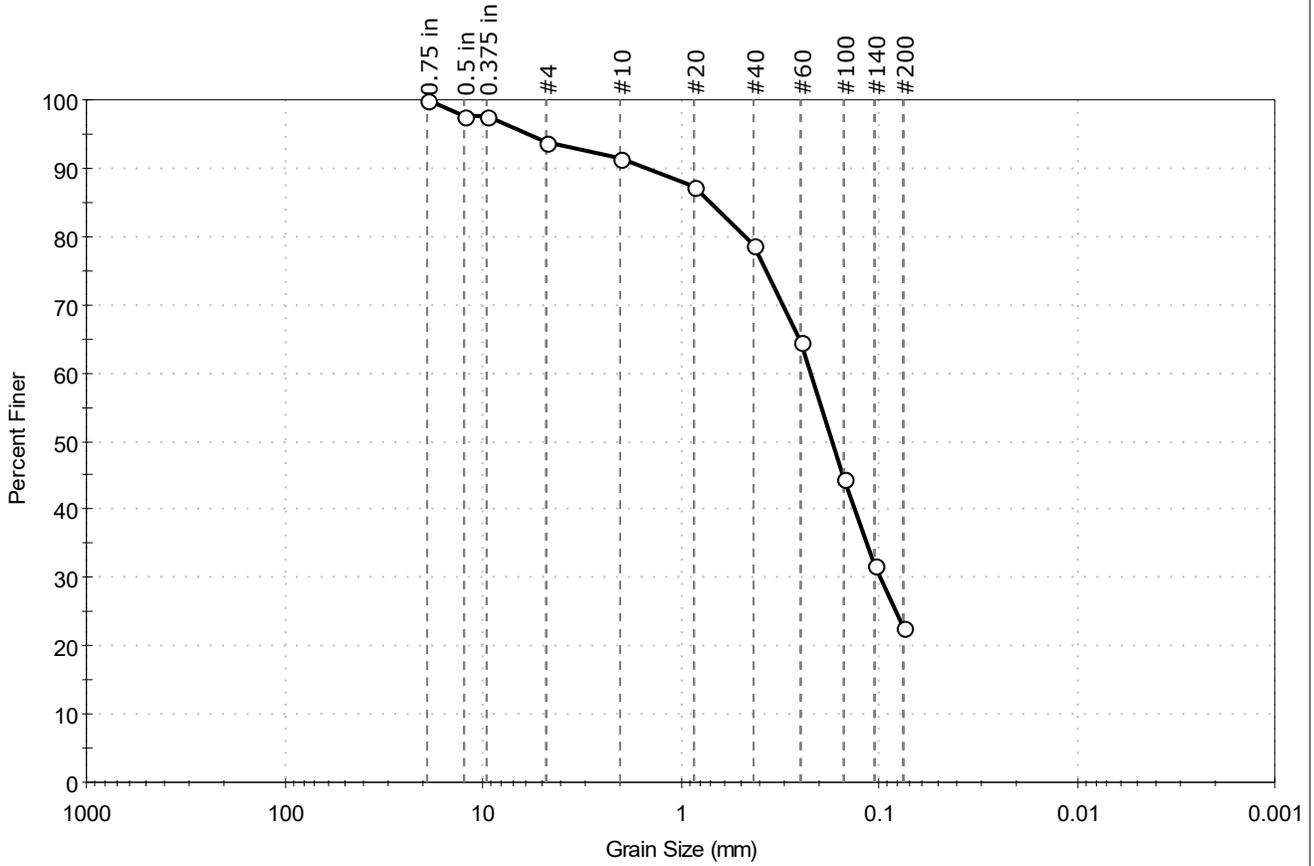
Est. Specific Gravity : 2.65

Separation of Sample: #200 Sieve



Client: GZA GeoEnvironmental, Inc.  
 Project: Stratford Water Pollution Facility Improve.  
 Location: Stratford, CT  
 Project No: GTX-315388  
 Boring ID: GZ-2  
 Sample Type: jar  
 Tested By: ckg  
 Sample ID: SS-5 (Jar)  
 Test Date: 05/02/22  
 Checked By: bfs  
 Depth: 8-10 ft bg  
 Test Id: 665525  
 Test Comment: ---  
 Visual Description: Moist, dark gray silty sand  
 Sample Comment: ---

## Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	6.2	71.0	22.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	98		
0.375 in	9.50	98		
#4	4.75	94		
#10	2.00	91		
#20	0.85	87		
#40	0.42	79		
#60	0.25	65		
#100	0.15	45		
#140	0.11	32		
#200	0.075	23		

<b>Coefficients</b>	
D <sub>85</sub> = 0.7037 mm	D <sub>30</sub> = 0.0991 mm
D <sub>60</sub> = 0.2219 mm	D <sub>15</sub> = N/A
D <sub>50</sub> = 0.1720 mm	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

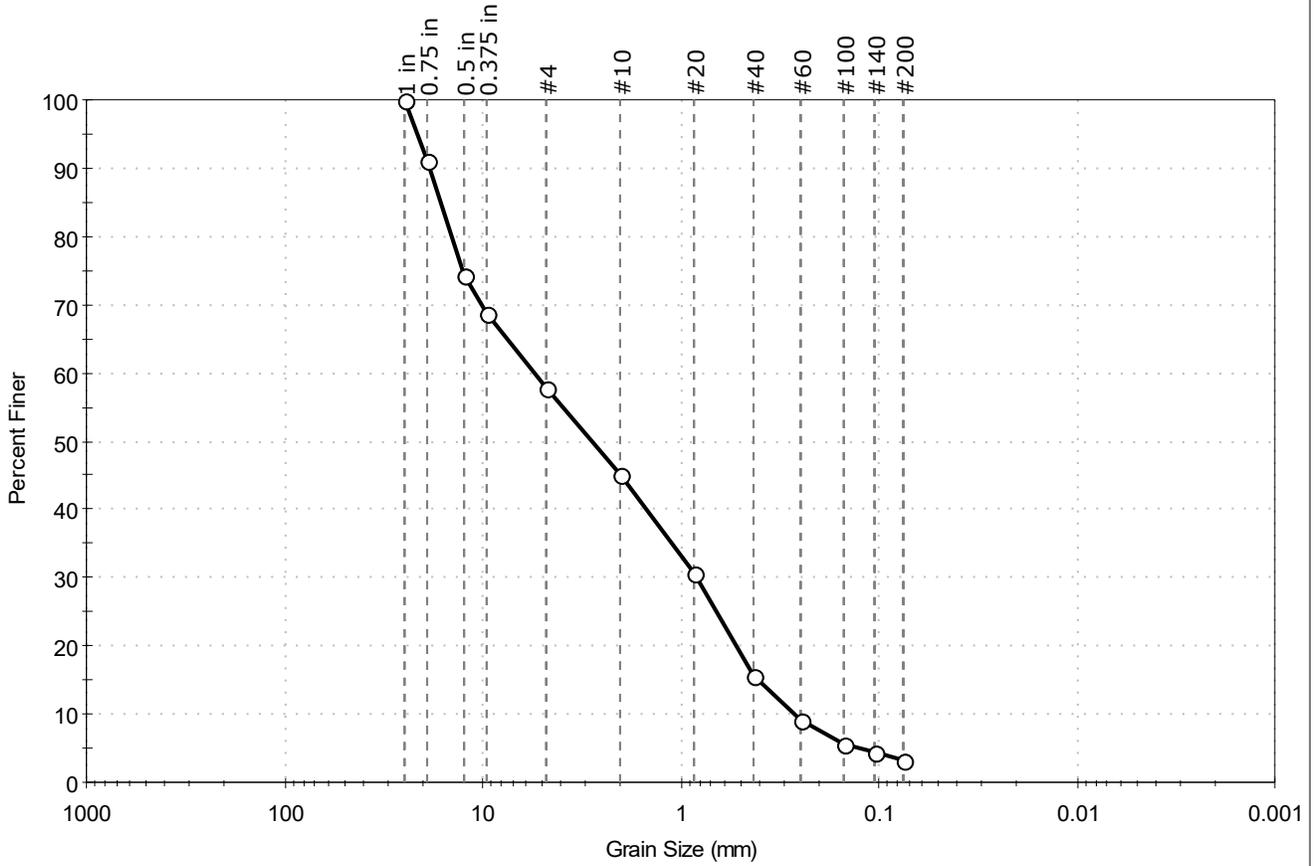
<b>Classification</b>	
ASTM	N/A
AASHTO	Silty Gravel and Sand (A-2-4 (0))

<b>Sample/Test Description</b>
Sand/Gravel Particle Shape : ANGULAR
Sand/Gravel Hardness : HARD



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-5	Sample Type:	jar
Sample ID:	SS-5	Test Date:	05/11/22
Depth :	10-12 ft bg	Checked By:	bfs
		Test Id:	665522
Test Comment:	---		
Visual Description:	Moist, olive brown sand with gravel		
Sample Comment:	---		

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	42.2	54.7	3.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	91		
0.5 in	12.50	74		
0.375 in	9.50	69		
#4	4.75	58		
#10	2.00	45		
#20	0.85	31		
#40	0.42	16		
#60	0.25	9		
#100	0.15	6		
#140	0.11	4		
#200	0.075	3.1		

<b>Coefficients</b>	
D <sub>85</sub> = 16.3266 mm	D <sub>30</sub> = 0.8199 mm
D <sub>60</sub> = 5.4552 mm	D <sub>15</sub> = 0.4029 mm
D <sub>50</sub> = 2.7812 mm	D <sub>10</sub> = 0.2707 mm
C <sub>u</sub> = 20.152	C <sub>c</sub> = 0.455

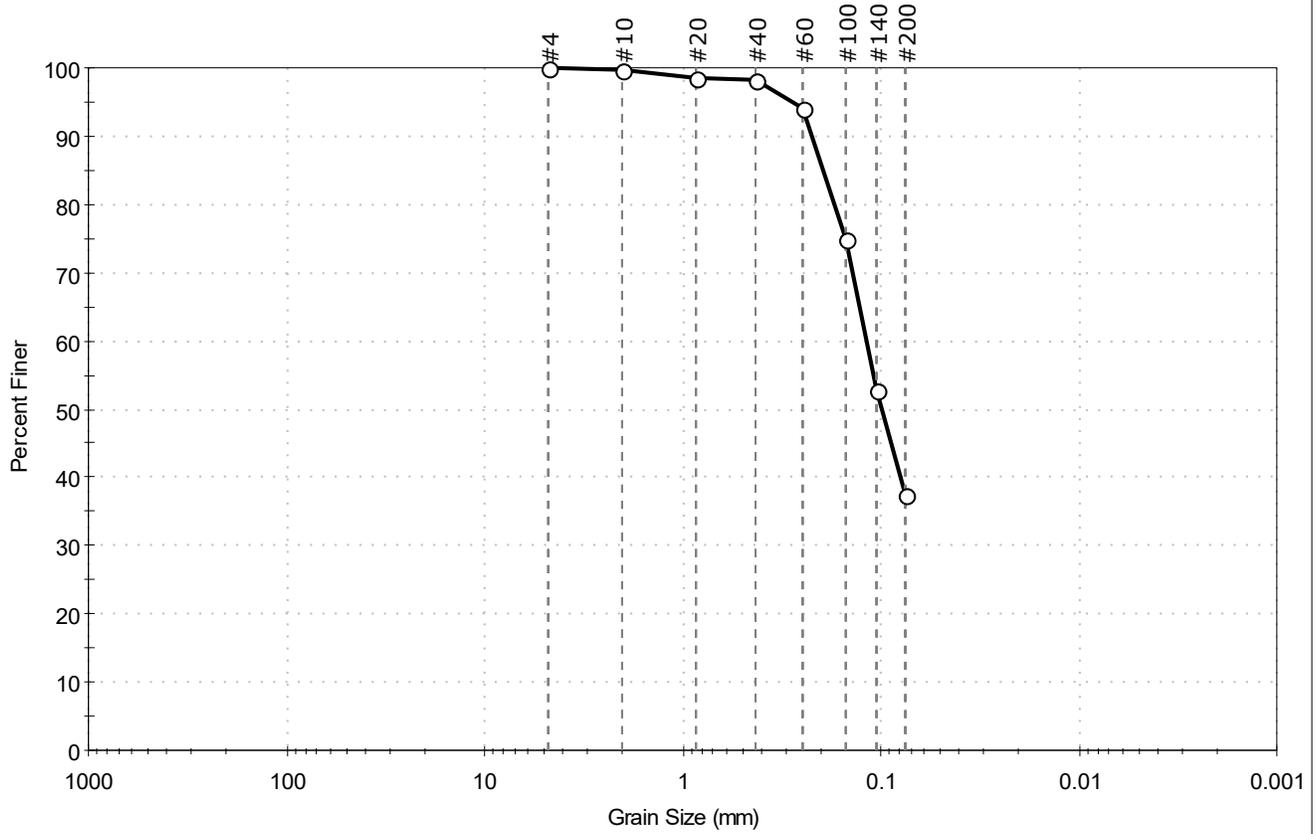
<b>Classification</b>	
<b>ASTM</b>	Poorly graded SAND with Gravel (SP)
<b>AASHTO</b>	Stone Fragments, Gravel and Sand (A-1-a (1))

<b>Sample/Test Description</b>	
Sand/Gravel Particle Shape : ANGULAR	
Sand/Gravel Hardness : HARD	



Client: GZA GeoEnvironmental, Inc.  
 Project: Stratford Water Pollution Facility Improve.  
 Location: Stratford, CT  
 Project No: GTX-315388  
 Boring ID: GZ-14  
 Sample Type: jar  
 Tested By: ckg  
 Sample ID: SS-9 (Jar)  
 Test Date: 05/02/22  
 Checked By: bfs  
 Depth: 25-27 ft bg  
 Test Id: 665526  
 Test Comment: ---  
 Visual Description: Moist, light olive brown silty sand  
 Sample Comment: ---

## Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	62.4	37.6

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	99		
#40	0.42	98		
#60	0.25	94		
#100	0.15	75		
#140	0.11	53		
#200	0.075	38		

**Coefficients**

D <sub>85</sub> = 0.1959 mm	D <sub>30</sub> = N/A
D <sub>60</sub> = 0.1186 mm	D <sub>15</sub> = N/A
D <sub>50</sub> = 0.0993 mm	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

**Classification**

ASTM N/A

AASHTO Silty Soils (A-4 (0))

**Sample/Test Description**

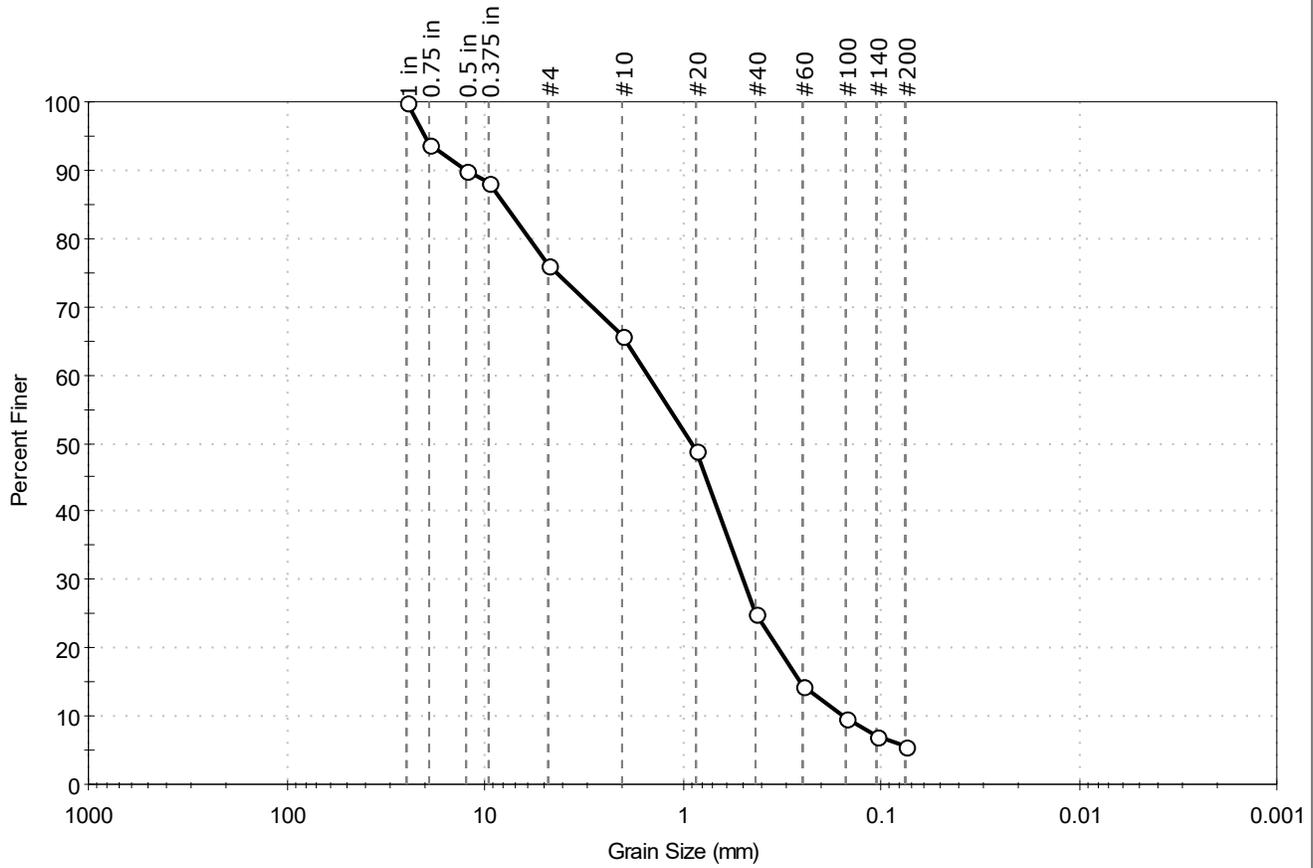
Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-14	Sample Type:	jar
Sample ID:	SS-5	Test Date:	05/02/22
Depth :	10-12 ft bg	Checked By:	bfs
		Test Id:	665833
Test Comment:	---		
Visual Description:	Moist, light yellowish brown sand with silt and gravel		
Sample Comment:	---		

## Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	23.9	70.4	5.7

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	94		
0.5 in	12.50	90		
0.375 in	9.50	88		
#4	4.75	76		
#10	2.00	66		
#20	0.85	49		
#40	0.42	25		
#60	0.25	14		
#100	0.15	10		
#140	0.11	7		
#200	0.075	5.7		

<u>Coefficients</u>	
D <sub>85</sub> = 7.9583 mm	D <sub>30</sub> = 0.4888 mm
D <sub>60</sub> = 1.4852 mm	D <sub>15</sub> = 0.2571 mm
D <sub>50</sub> = 0.8934 mm	D <sub>10</sub> = 0.1557 mm
C <sub>u</sub> = 9.539	C <sub>c</sub> = 1.033

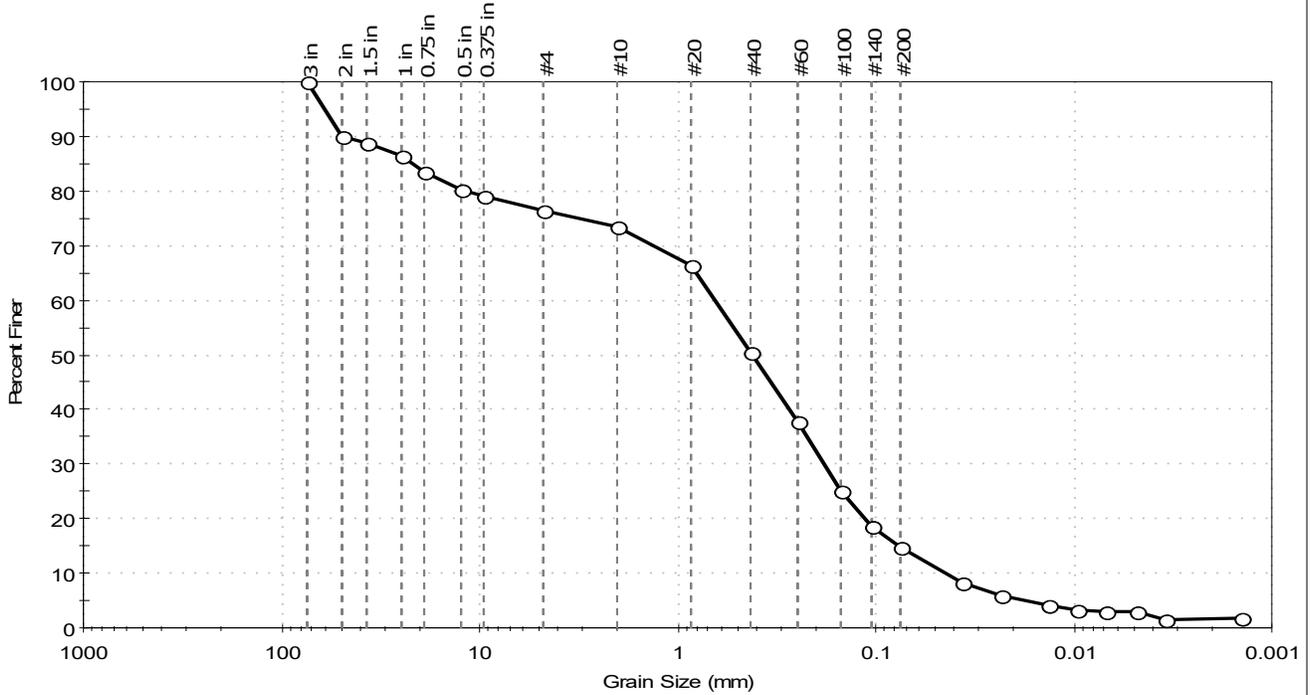
<u>Classification</u>	
ASTM	N/A
AASHTO	Stone Fragments, Gravel and Sand (A-1-b (1))

<u>Sample/Test Description</u>
Sand/Gravel Particle Shape : ANGULAR
Sand/Gravel Hardness : HARD



Client: GZA GeoEnvironmental, Inc.  
 Project: Stratford Water Pollution Facility Improve.  
 Location: Stratford, CT  
 Project No: GTX-315388  
 Boring ID: TP-3  
 Sample Type: bag  
 Tested By: ckg  
 Sample ID: S-2 (Bag)  
 Test Date: 05/11/22  
 Checked By: bfs  
 Depth: 2-4.5 ft bg  
 Test Id: 665523  
 Test Comment: ---  
 Visual Description: Moist, brown silty sand with gravel  
 Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	23.7	61.5	14.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
3 in	75.00	100		
2 in	50.00	90		
1.5 in	37.50	89		
1 in	25.00	86		
0.75 in	19.00	84		
0.5 in	12.50	80		
0.375 in	9.50	79		
#4	4.75	76		
#10	2.00	74		
#20	0.85	66		
#40	0.42	50		
#60	0.25	38		
#100	0.15	25		
#140	0.11	19		
#200	0.075	15		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0365	8		
---	0.0235	6		
---	0.0136	4		
---	0.0096	3		
---	0.0068	3		
---	0.0048	3		
---	0.0035	2		
---	0.0014	2		

Coefficients	
D <sub>85</sub> = 21.8681 mm	D <sub>30</sub> = 0.1832 mm
D <sub>60</sub> = 0.6436 mm	D <sub>15</sub> = 0.0766 mm
D <sub>50</sub> = 0.4192 mm	D <sub>10</sub> = 0.0441 mm
C <sub>u</sub> = 14.594	C <sub>c</sub> = 1.182

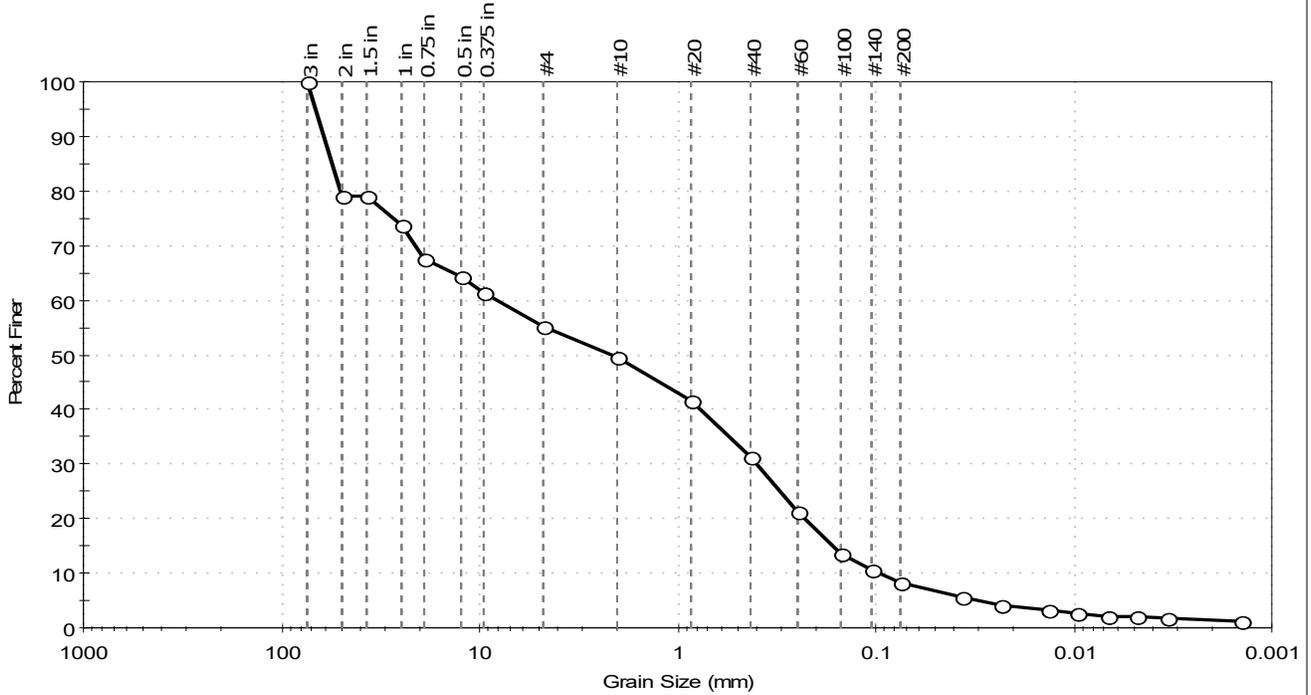
Classification	
ASTM	N/A
AASHTO	Silty Gravel and Sand (A-2-4 (0))

Sample/Test Description
Sand/Gravel Particle Shape : ANGULAR
Sand/Gravel Hardness : HARD
Dispersion Device : Apparatus A - Mech Mixer
Dispersion Period : 1 minute
Est. Specific Gravity : 2.65
Separation of Sample: #200 Sieve



Client: GZA GeoEnvironmental, Inc.  
 Project: Stratford Water Pollution Facility Improve.  
 Location: Stratford, CT Project No: GTX-315388  
 Boring ID: TP-6 Sample Type: bag Tested By: ckg  
 Sample ID: S-2 (Bag) Test Date: 05/11/22 Checked By: bfs  
 Depth: 2 ft bg Test Id: 665524  
 Test Comment: ---  
 Visual Description: Moist, brown sand with silt and gravel  
 Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	44.9	46.9	8.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
3 in	75.00	100		
2 in	50.00	79		
1.5 in	37.50	79		
1 in	25.00	74		
0.75 in	19.00	67		
0.5 in	12.50	64		
0.375 in	9.50	61		
#4	4.75	55		
#10	2.00	49		
#20	0.85	42		
#40	0.42	31		
#60	0.25	21		
#100	0.15	14		
#140	0.11	11		
#200	0.075	8.2		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0369	6		
---	0.0233	4		
---	0.0133	3		
---	0.0096	3		
---	0.0068	2		
---	0.0048	2		
---	0.0034	2		
---	0.0014	1		

Coefficients	
D <sub>85</sub> = 56.1283 mm	D <sub>30</sub> = 0.3977 mm
D <sub>60</sub> = 8.1226 mm	D <sub>15</sub> = 0.1642 mm
D <sub>50</sub> = 2.1838 mm	D <sub>10</sub> = 0.0975 mm
C <sub>u</sub> = 83.309	C <sub>c</sub> = 0.200

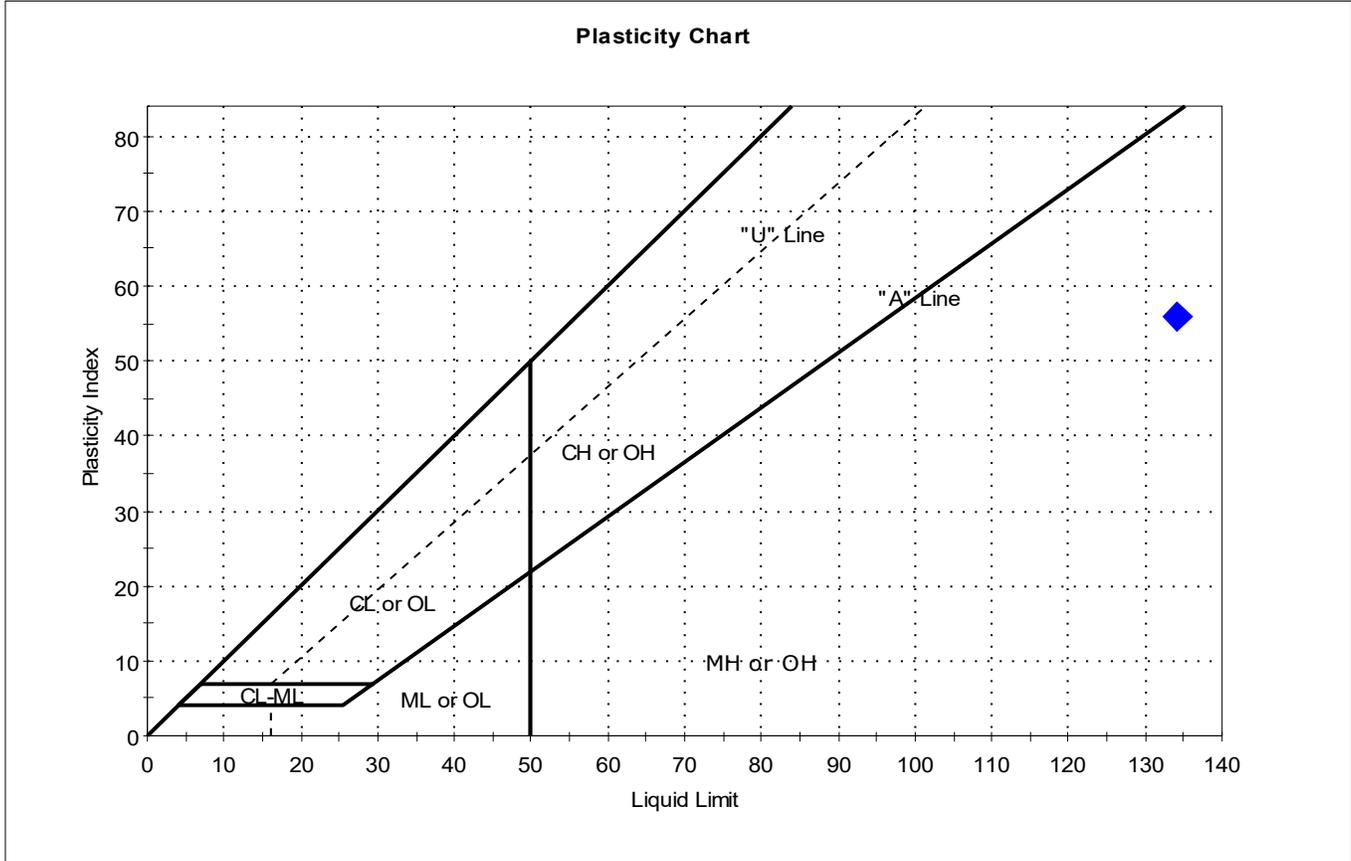
Classification	
ASTM	N/A
AASHTO	Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description	
Sand/Gravel Particle Shape	: ANGULAR
Sand/Gravel Hardness	: HARD
Dispersion Device	: Apparatus A - Mech Mixer
Dispersion Period	: 1 minute
Est. Specific Gravity	: 2.65
Separation of Sample	: #200 Sieve



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-1	Sample Type:	tube
Sample ID:	ST-1 (Tube)	Test Date:	05/09/22
Depth :	17-19 ft bg	Test Id:	665515
Test Comment:	---		
Visual Description:	Wet, very dark gray silt		
Sample Comment:	Sample contains organics		

## Atterberg Limits - ASTM D4318



Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	ST-1 (Tube)	GZ-1	17-19 ft bg	182	134	78	56	1.9	

Sample Prepared using the WET method

Dry Strength: VERY HIGH

Dilatancy: SLOW

Toughness: LOW



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-1	Sample Type:	jar
Sample ID:	SS-7 (Jar)	Test Date:	05/06/22
Depth :	15-17 ft bg	Checked By:	bfs
		Test Id:	665519
Test Comment:	---		
Visual Description:	Moist, very dark grayish brown silt		
Sample Comment:	---		

## Atterberg Limits - ASTM D4318

**Sample Determined to be non-plastic**

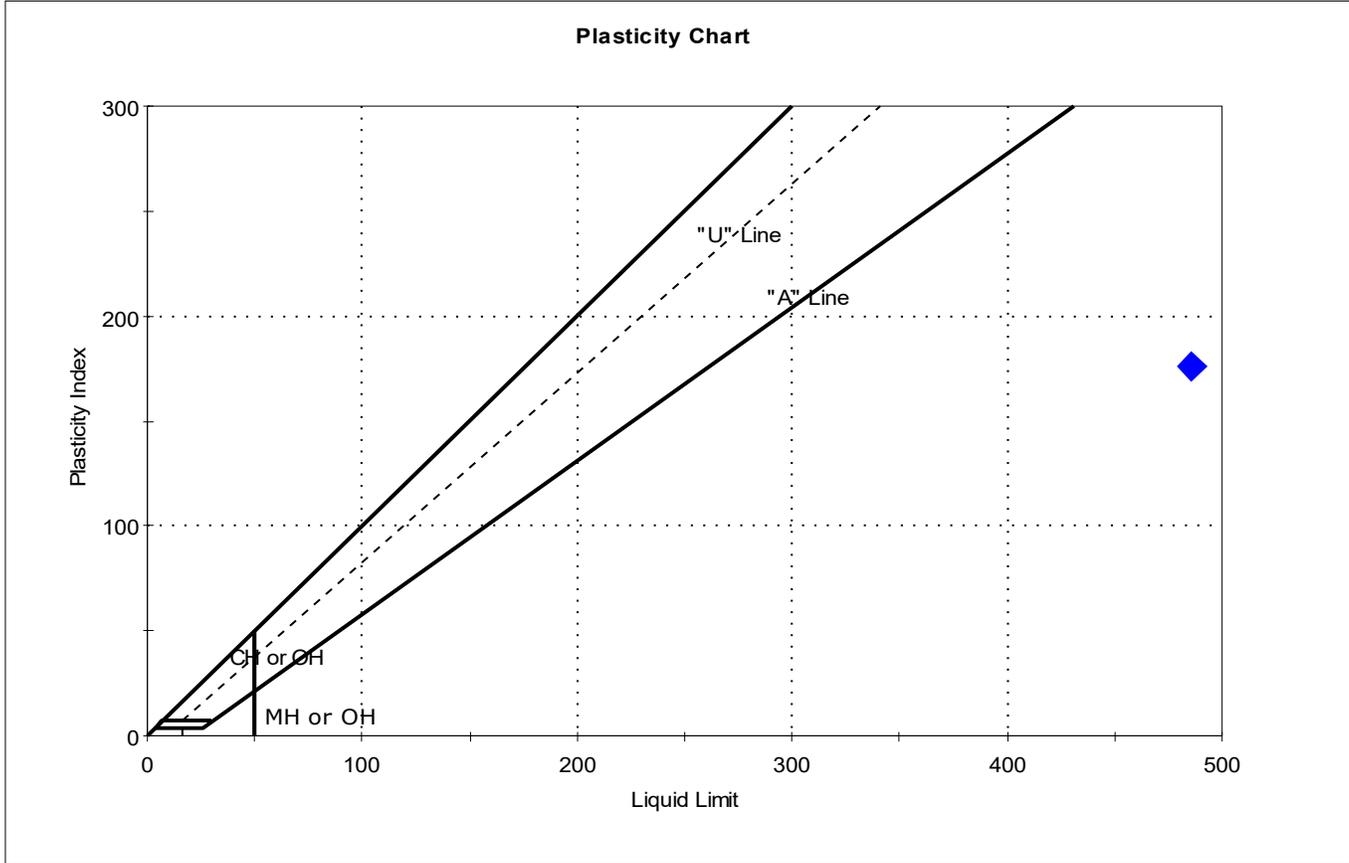
Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-7 (Jar)	GZ-1	15-17 ft bg	74	n/a	n/a	n/a	n/a	

Dry Strength: LOW  
Dilatancy: RAPID  
Toughness: n/a  
The sample was determined to be Non-Plastic



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-1	Sample Type:	jar
Sample ID:	SS-9 (Jar)	Test Date:	05/07/22
Depth :	23-25 ft bg	Checked By:	bfs
		Test Id:	665520
Test Comment:	---		
Visual Description:	Moist, black silt		
Sample Comment:	Sample contains organics		

## Atterberg Limits - ASTM D4318



Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-9 (Jar)	GZ-1	23-25 ft bg	362	486	310	176	0.3	

Sample Prepared using the WET method

Dry Strength: VERY HIGH

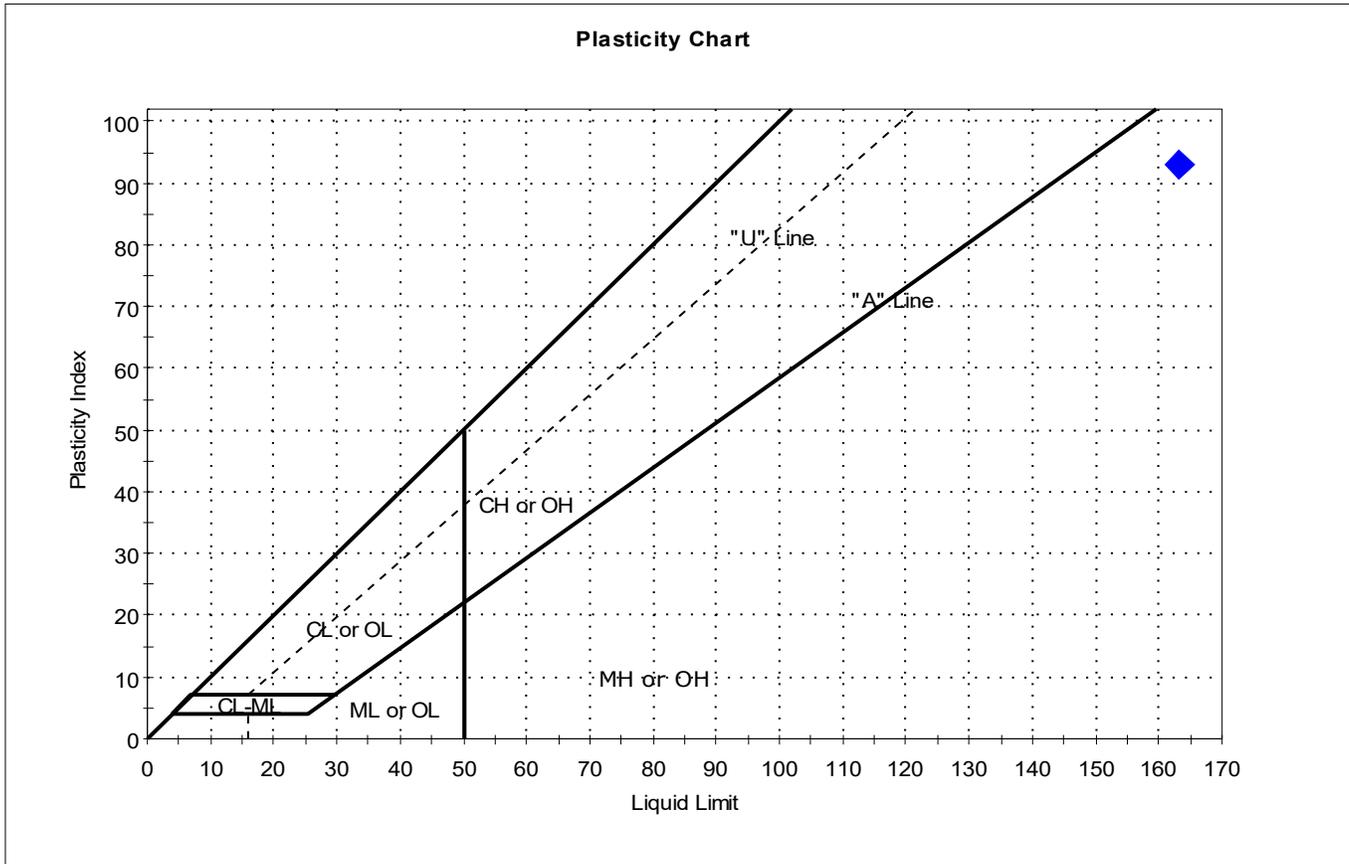
Dilatancy: SLOW

Toughness: LOW



Client:	GZA GeoEnvironmental, Inc.		Project No:	GTX-315388	
Project:	Stratford Water Pollution Facility Improve.		Tested By:	cam	
Location:	Stratford, CT	Sample Type:	jar	Checked By:	bfs
Boring ID:	GZ-3	Test Date:	05/10/22	Test Id:	665517
Sample ID:	SS-5 (Jar)				
Depth :	10-11.6 ft bg				
Test Comment:	---				
Visual Description:	Moist, black silt				
Sample Comment:	---				

## Atterberg Limits - ASTM D4318



Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-5 (Jar)	GZ-3	10-11.6 ft bg	135	163	70	93	0.7	

Sample Prepared using the WET method

Dry Strength: VERY HIGH

Dilatancy: SLOW

Toughness: LOW



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-4	Sample Type:	jar
Sample ID:	SS-7 (Jar)	Test Date:	05/06/22
Depth :	14-16 ft bg	Checked By:	bfs
		Test Id:	665518
Test Comment:	---		
Visual Description:	Moist, very dark grayish brown silt with sand		
Sample Comment:	Sample contains organics		

## Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-7 (Jar)	GZ-4	14-16 ft bg	47	n/a	n/a	n/a	n/a	

Dry Strength: LOW  
 Dilatancy: RAPID  
 Toughness: n/a  
 The sample was determined to be Non-Plastic



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-1	Sample Type:	tube
Sample ID:	ST-2 (Tube)	Test Date:	05/20/22
Depth :	21-23 ft bg	Test Id:	665528
Test Comment:	---		
Visual Description:	Moist, very dark gray sandy silt		
Sample Comment:	Sample contains organics		

## Moisture Content of Soil and Rock - ASTM D2216

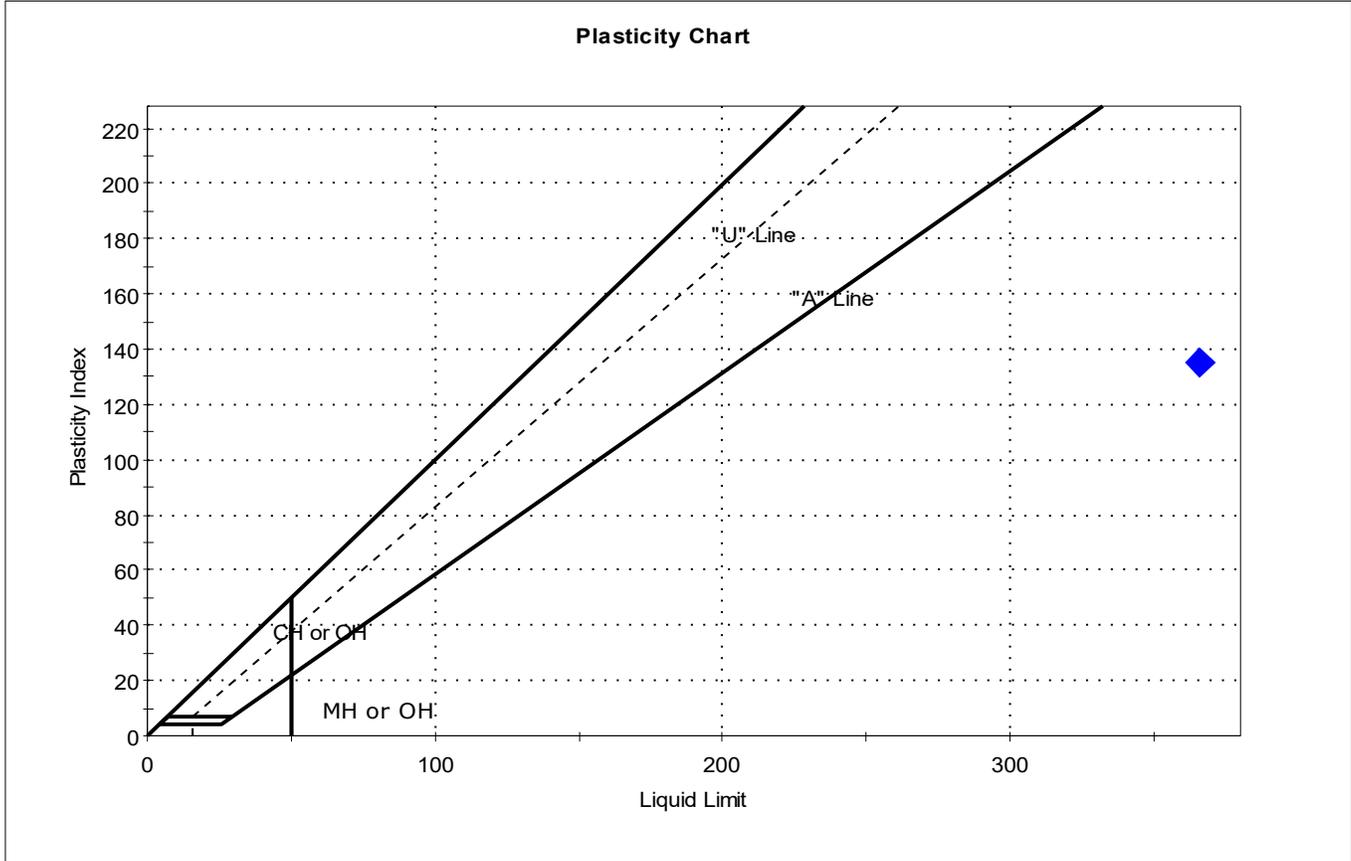
Boring ID	Sample ID	Depth	Description	Moisture Content,%
GZ-1	ST- 2 (Tube)	21-23 ft bg	Wet, very dark gray sandy silt	429.5

Notes: Temperature of Drying : 60° Celsius



Client:	GZA GeoEnvironmental, Inc.		
Project:	Stratford Water Pollution Facility Improve.		
Location:	Stratford, CT	Project No:	GTX-315388
Boring ID:	GZ-1	Sample Type:	tube
Sample ID:	ST-2 (Tube)	Test Date:	05/10/22
Depth :	21-23 ft bg	Test Id:	665516
Test Comment:	---		
Visual Description:	Wet, very dark gray sandy silt		
Sample Comment:	Sample contains organics		

## Atterberg Limits - ASTM D4318



Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	ST-2 (Tube)	GZ-1	21-23 ft bg	430	366	231	135	1.5	

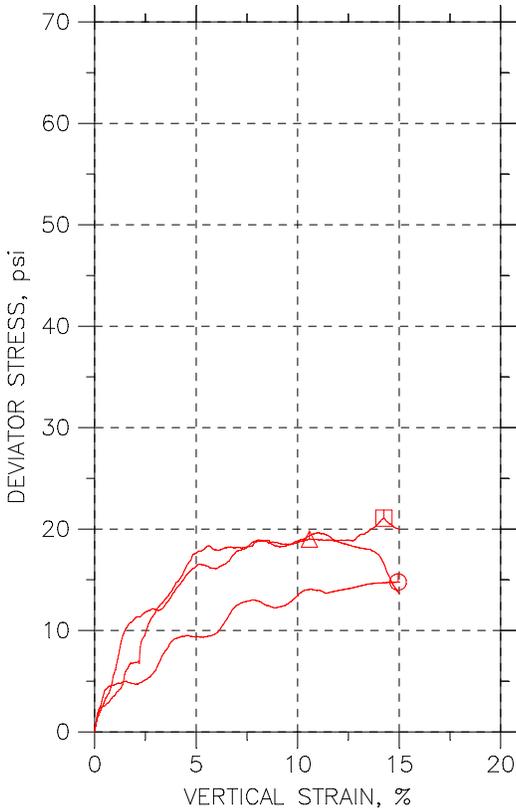
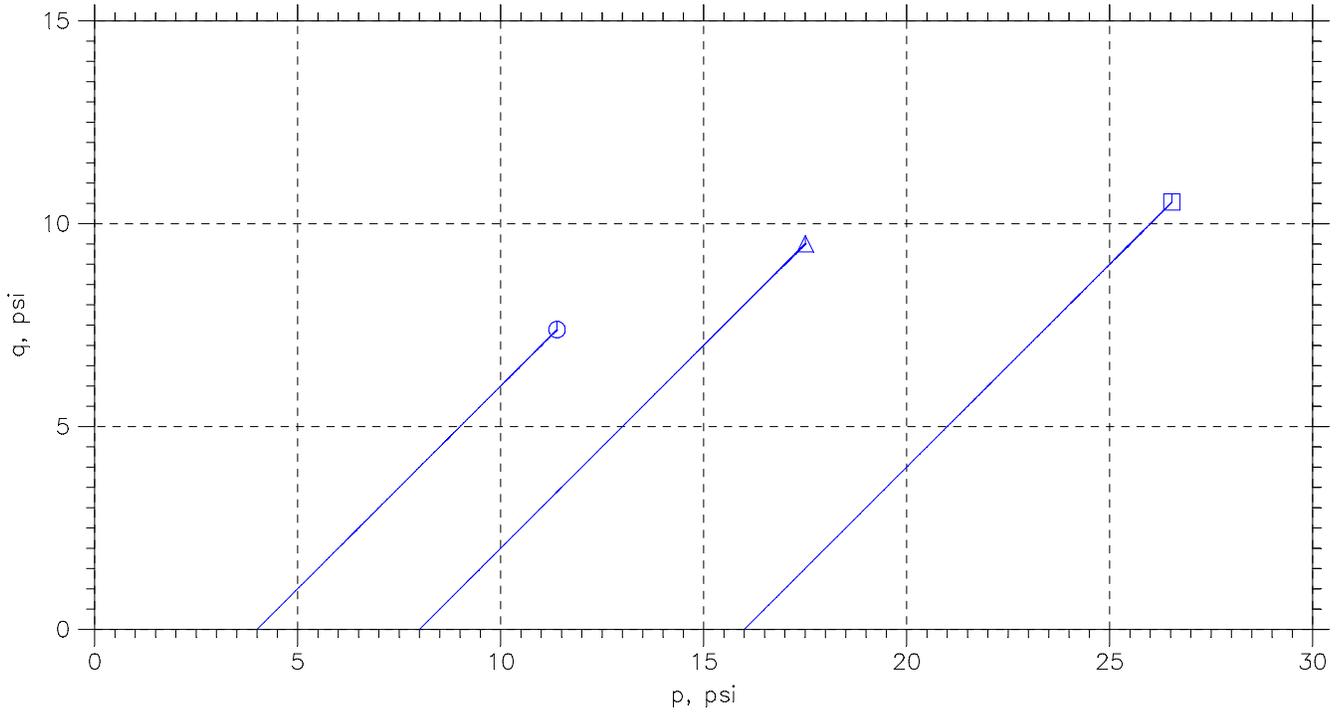
Sample Prepared using the WET method

Dry Strength: HIGH

Dilatancy: SLOW

Toughness: LOW

# UNCONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D2850

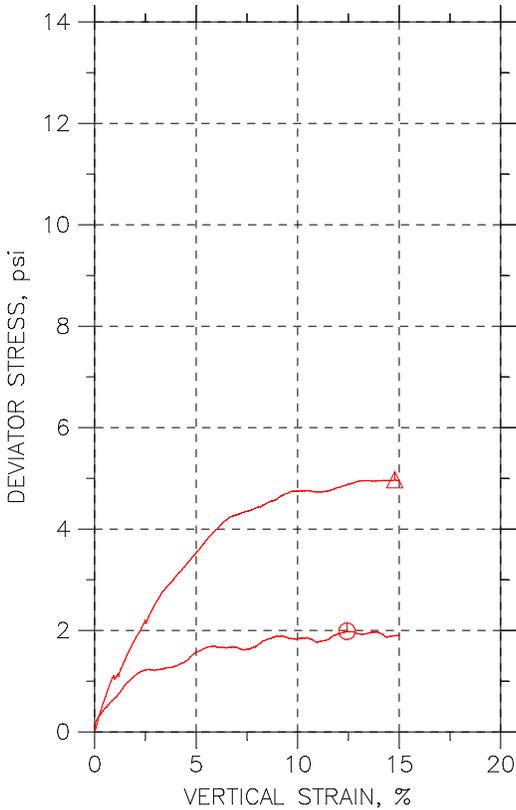
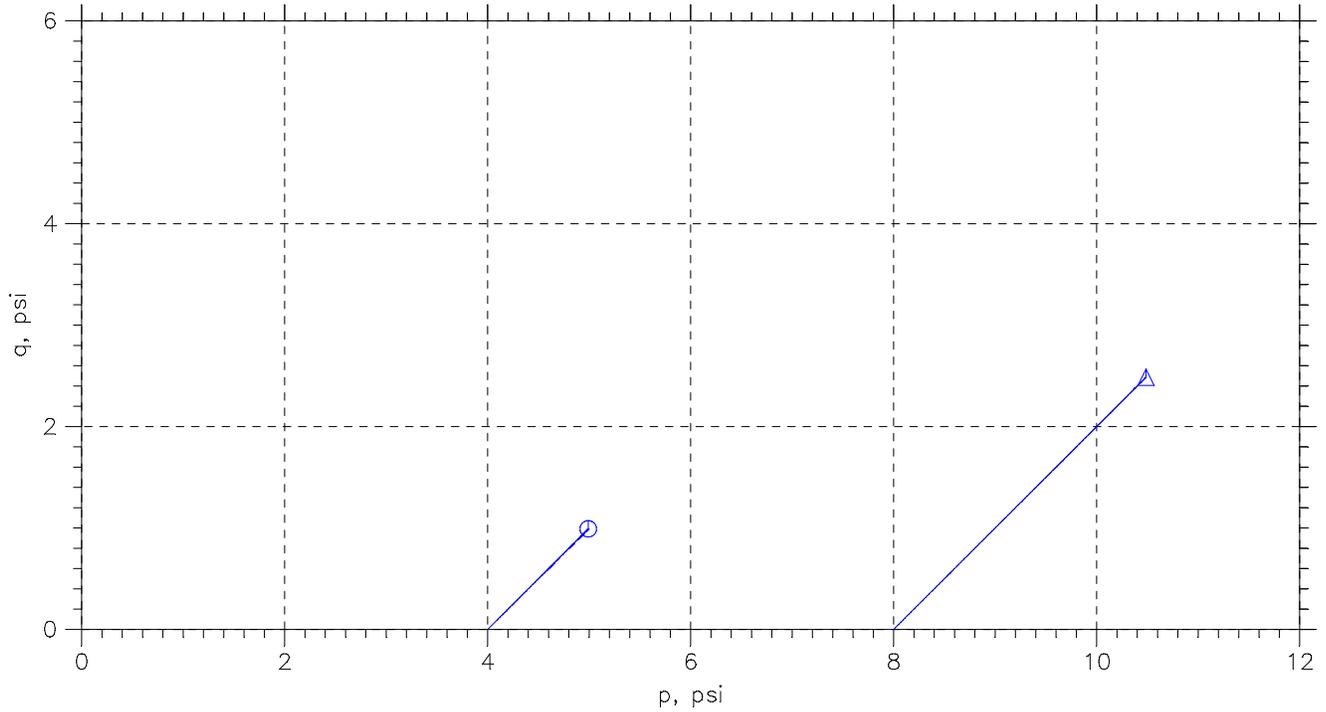


Symbol	○	△	□	
Sample No.	ST-1(Tube)	ST-1(Tube)	ST-1(Tube)	
Test No.	UU-1-1	UU-1-2	UU-1-3	
Depth	17-19 ft	17-19 ft	17-19 ft	
Tested by	trm/jlw	trm/jlw	trm/jlw	
Test Date	5/5/22	5/5/22	5/5/22	
Checked by	anm	anm	anm	
Check Date	<b>5/18/22</b>	<b>5/18/22</b>	<b>5/18/22</b>	
Diameter, in	2.8	2.8	2.8	
Height, in	6	6	6.3	
Water Content, %	182.3	416.5	260.5	
Dry Density, pcf	22.72	12.45	20.96	
Saturation, %	76.7	89.7	99.8	
Void Ratio	6.42	12.5	7.04	
Confining Stress, psi	4	8	16	
Undrained Strength, psi	7.388	9.503	10.53	
Max. Dev. Stress, psi	14.78	19.01	21.07	
Strain at Failure, %	15	10.6	14.3	
Strain Rate, %/min	1	1	1	
Estimated Specific Gravity	2.7	2.7	2.7	
Liquid Limit	134	134	134	
Plastic Limit	78	78	78	
Plasticity Index	56	56	56	

	Project: Stratford Water Pollution	
	Location: Stratford, CT	
	Project No.: GTX-315388	
	Boring No.: GZ-1	
	Sample Type: intact	
	Description: Wet, very dark gray silt	
Remarks: System-016		

Phase calculations based on start and end of test.

# UNCONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D2850



Symbol	⊖	△		
Sample No.	ST-2(1)	ST-2(2)		
Test No.	UU-2-1	UU-2-2		
Depth	21-23 ft	21-23 ft		
Tested by	trm	trm		
Test Date	5/18/22	5/18/22		
Checked by	anm	anm		
Check Date	<b>5/20/22</b>	<b>5/20/22</b>		
Diameter, in	2.87	2.87		
Height, in	5.75	6		
Water Content, %	327.6	515.4		
Dry Density, pcf	14.63	9.677		
Saturation, %	85.9	86.0		
Void Ratio	8.39	13.2		
Confining Stress, psi	4	8		
Undrained Strength, psi	0.9915	2.486		
Max. Dev. Stress, psi	1.983	4.971		
Strain at Failure, %	12.4	14.8		
Strain Rate, %/min	1	1		
Estimated Specific Gravity	2.2	2.2		
Liquid Limit	366	366		
Plastic Limit	231	231		
Plasticity Index	135	135		

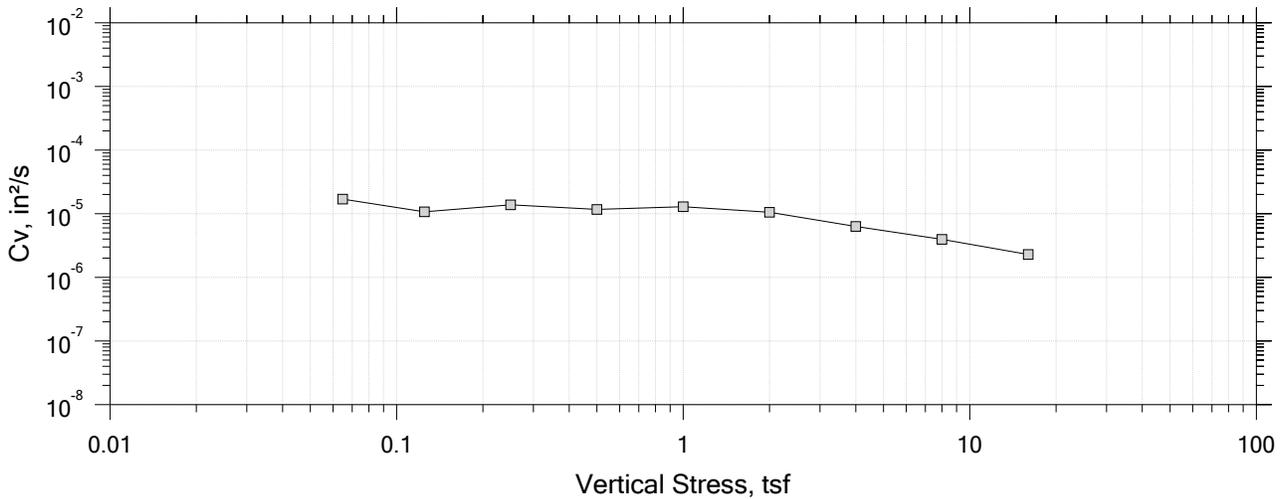
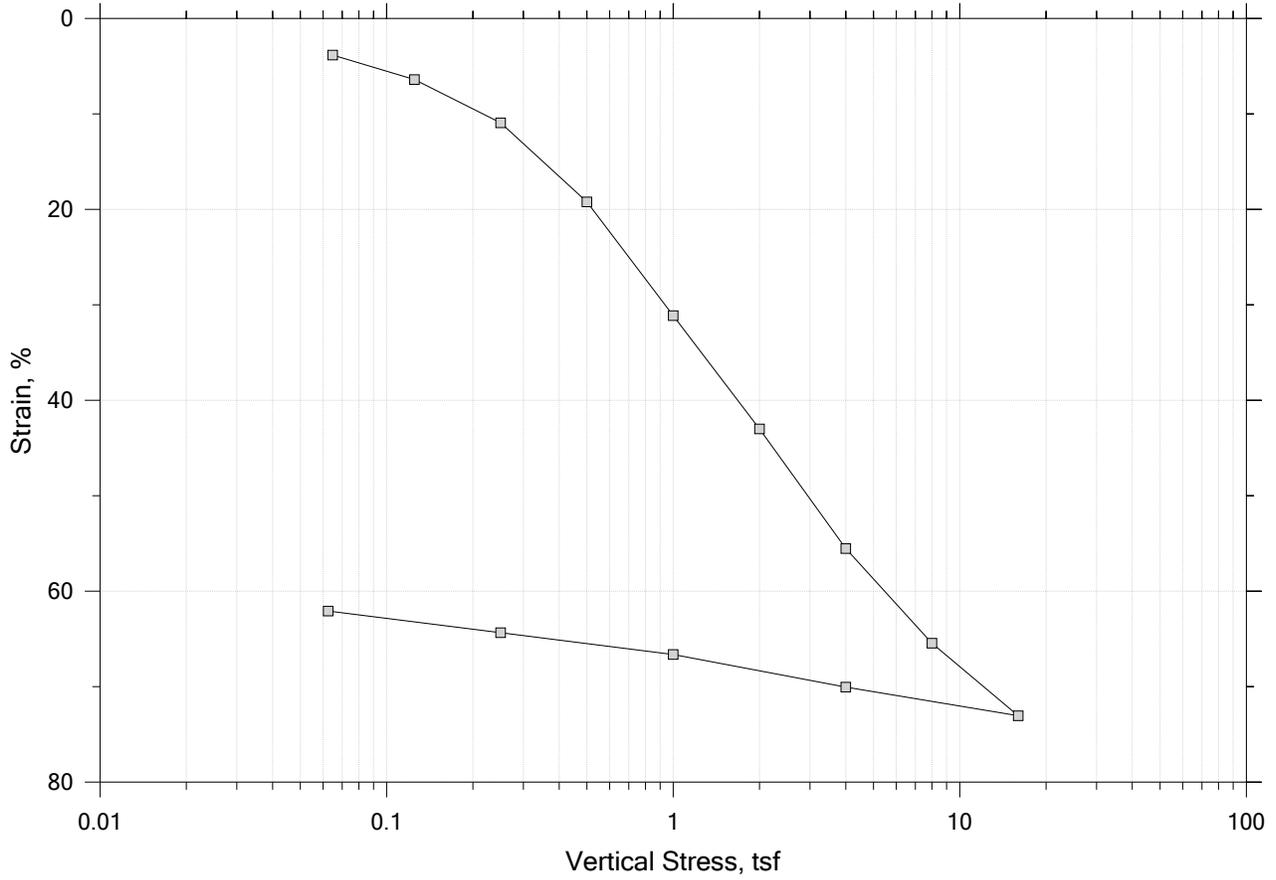


Project: Stratford Water Pollution	
Location: Stratford, CT	
Project No.: GTX-315388	
Boring No.: GZ-1	
Sample Type: intact	
Description: Wet, very dark gray sandy silt	
Remarks: TX-001, Sample contains organic	

Phase calculations based on start of test.

# One-Dimensional Consolidation by ASTM D2435 - Method A

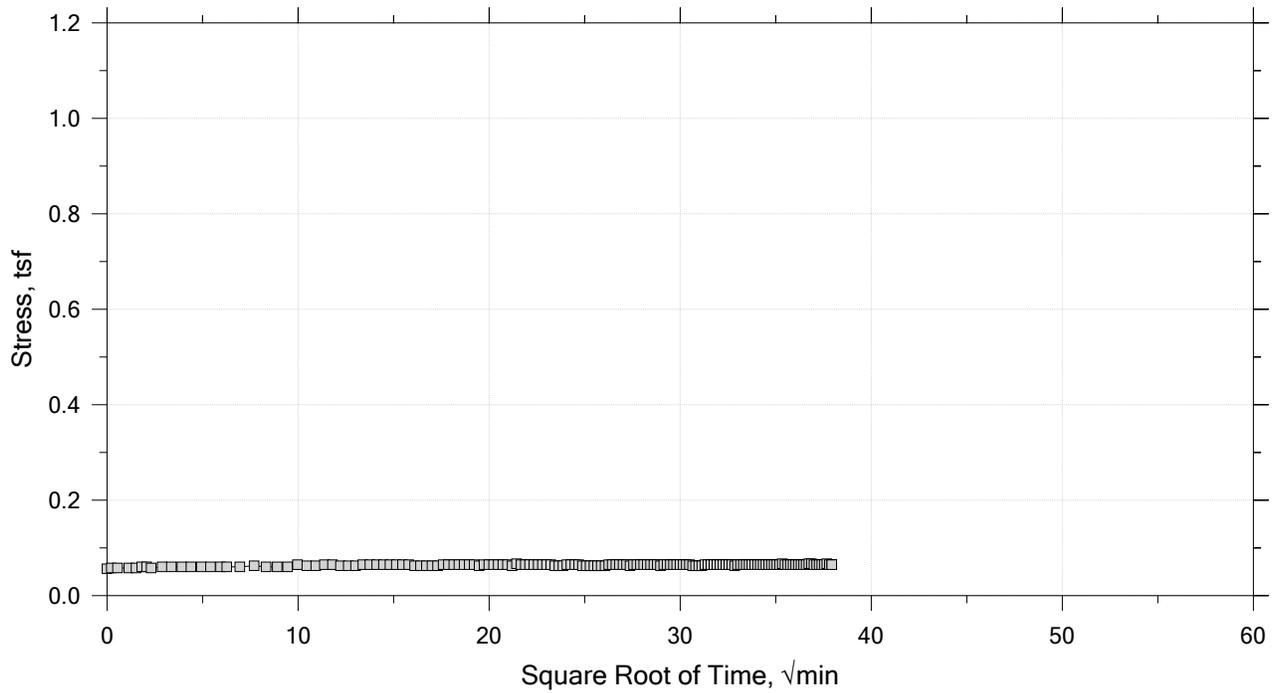
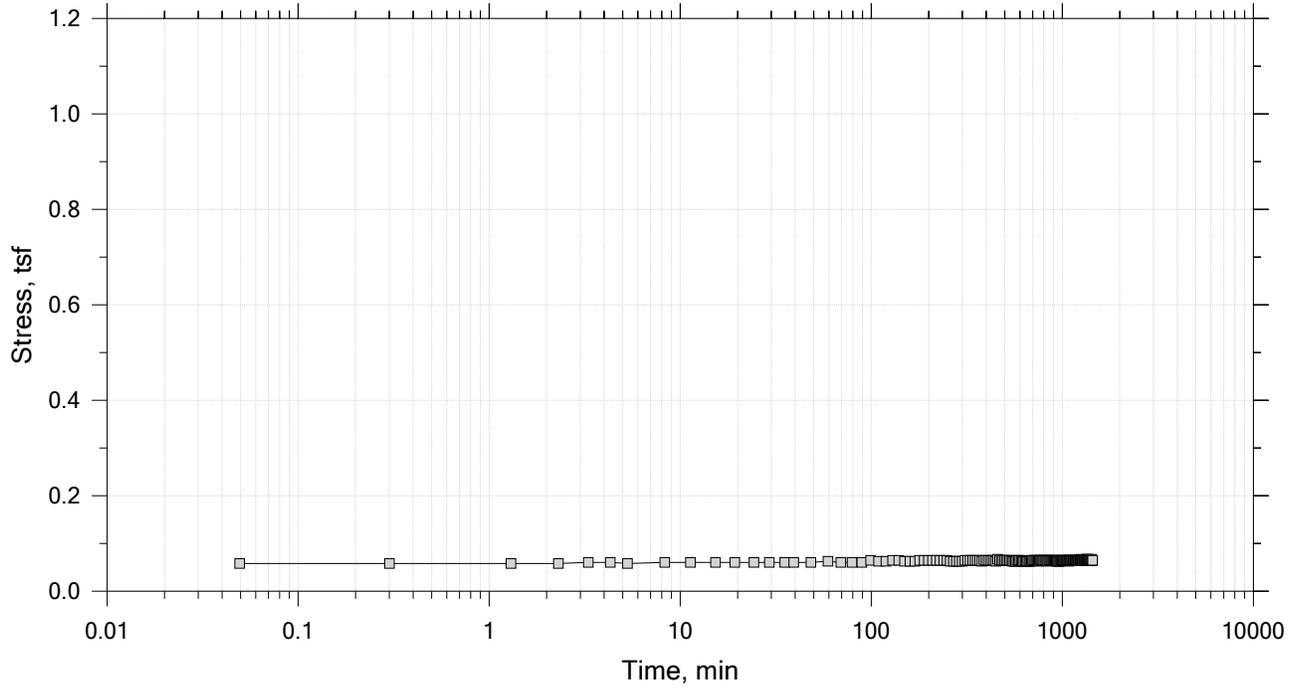
## Summary Report



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		
	Displacement at End of Increment		

# One-Dimensional Consolidation by ASTM D2435 - Method A

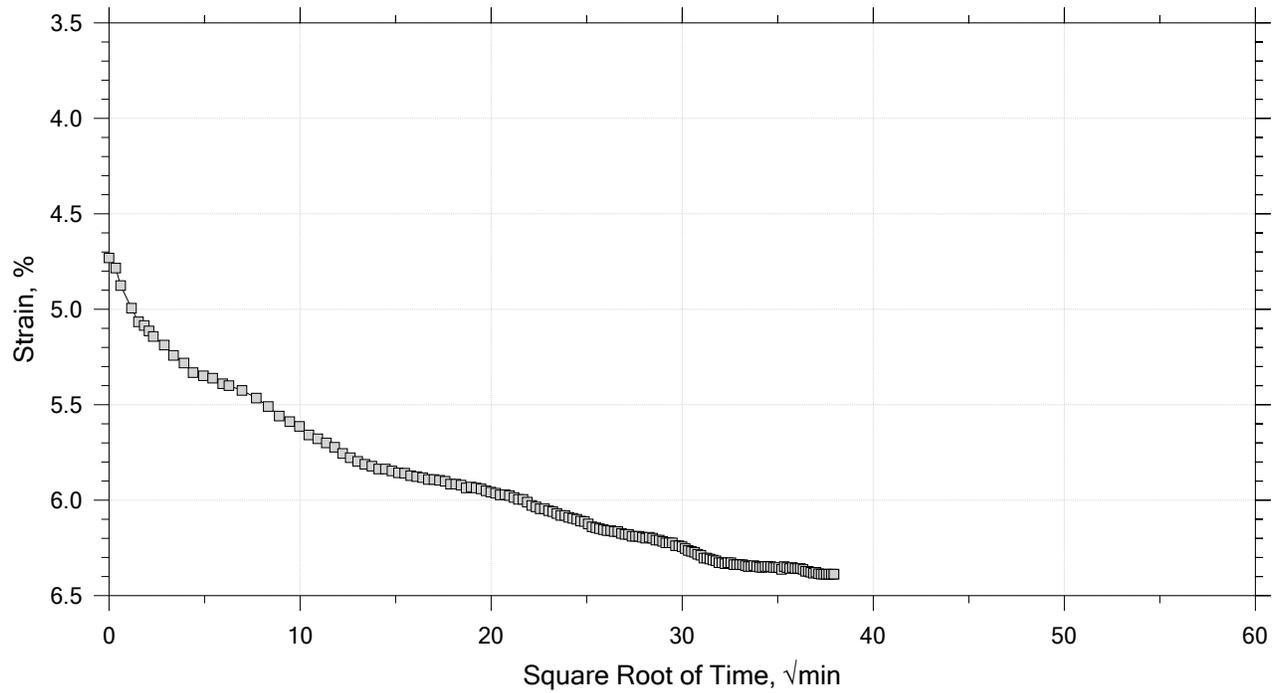
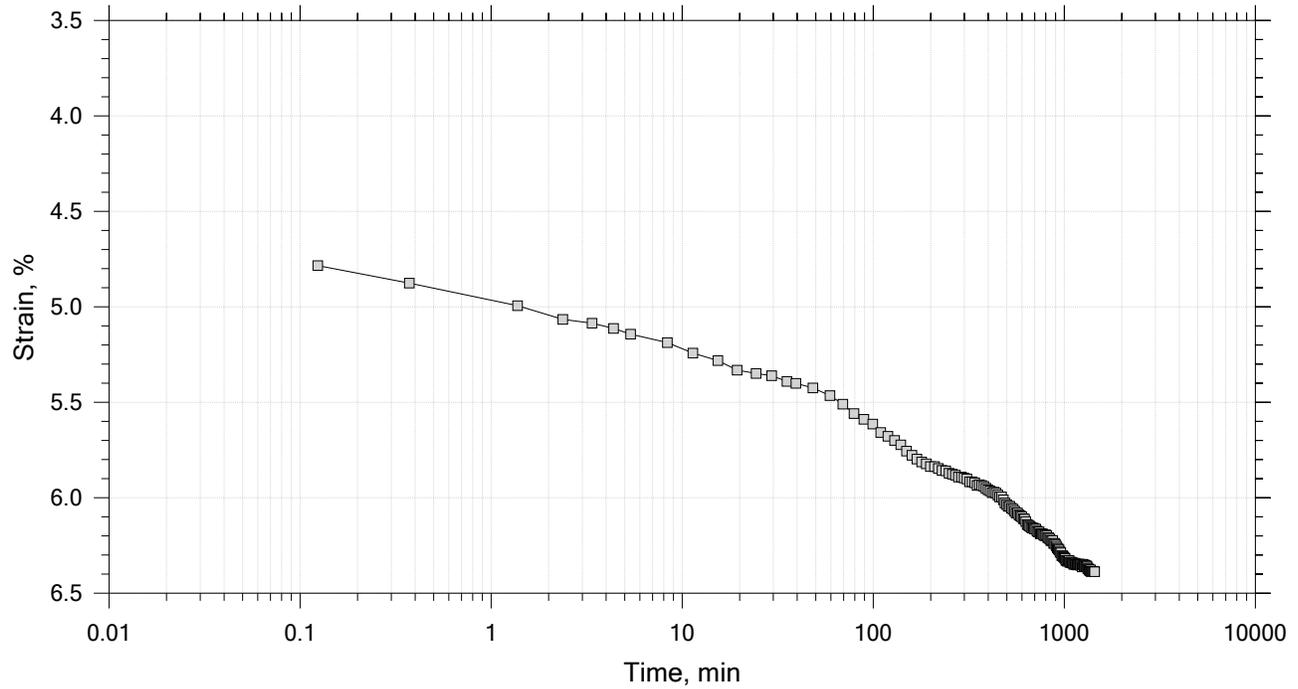
Time Curve 1 of 13  
 Constant Volume Step  
 Stress: 0.0648 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

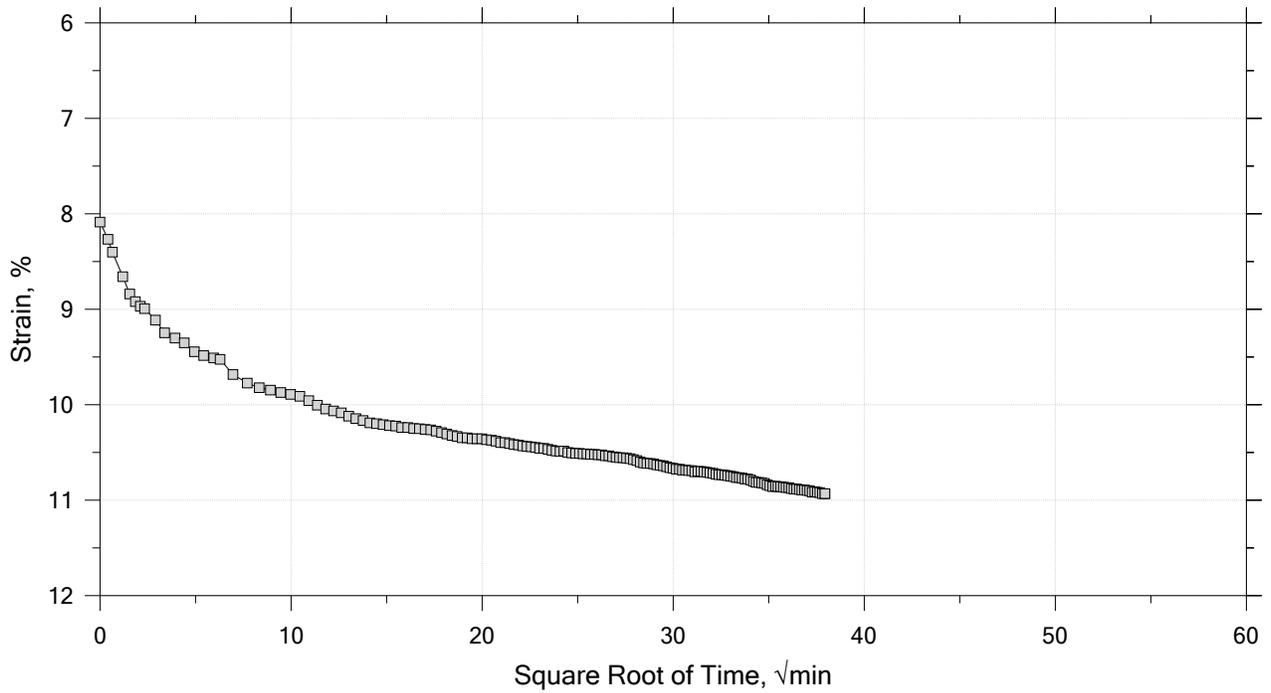
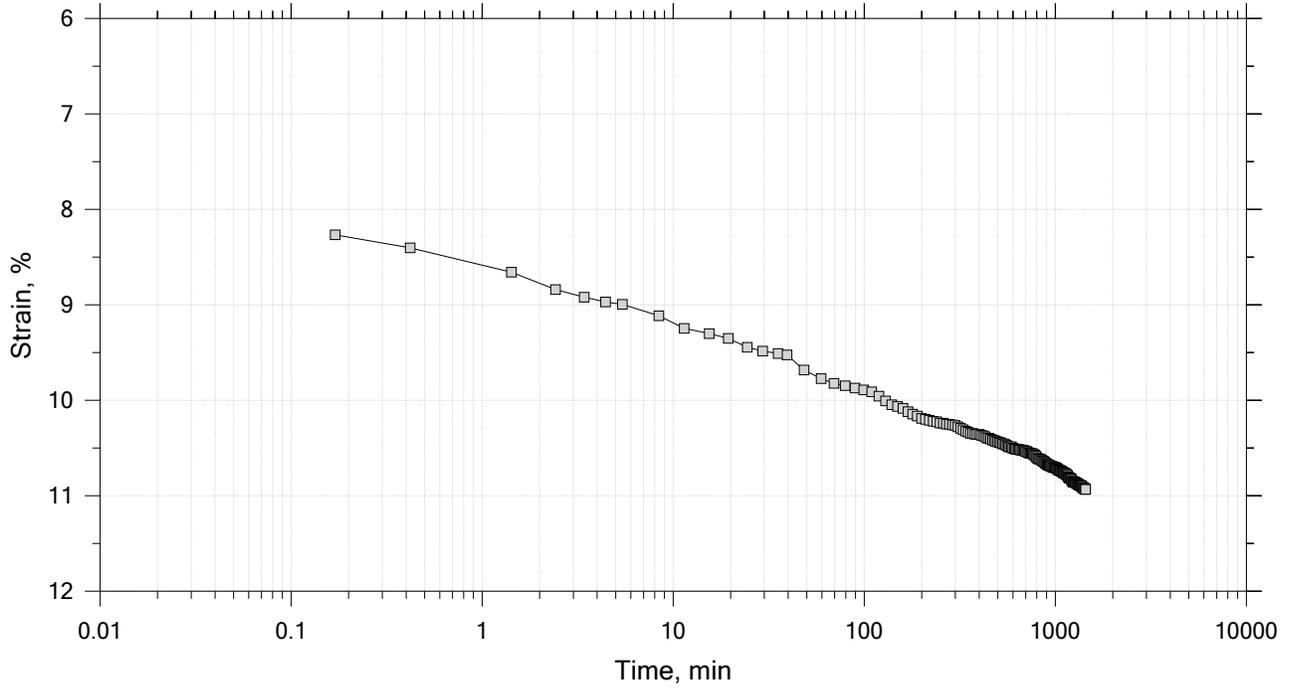
Time Curve 2 of 13  
 Constant Load Step  
 Stress: 0.125 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

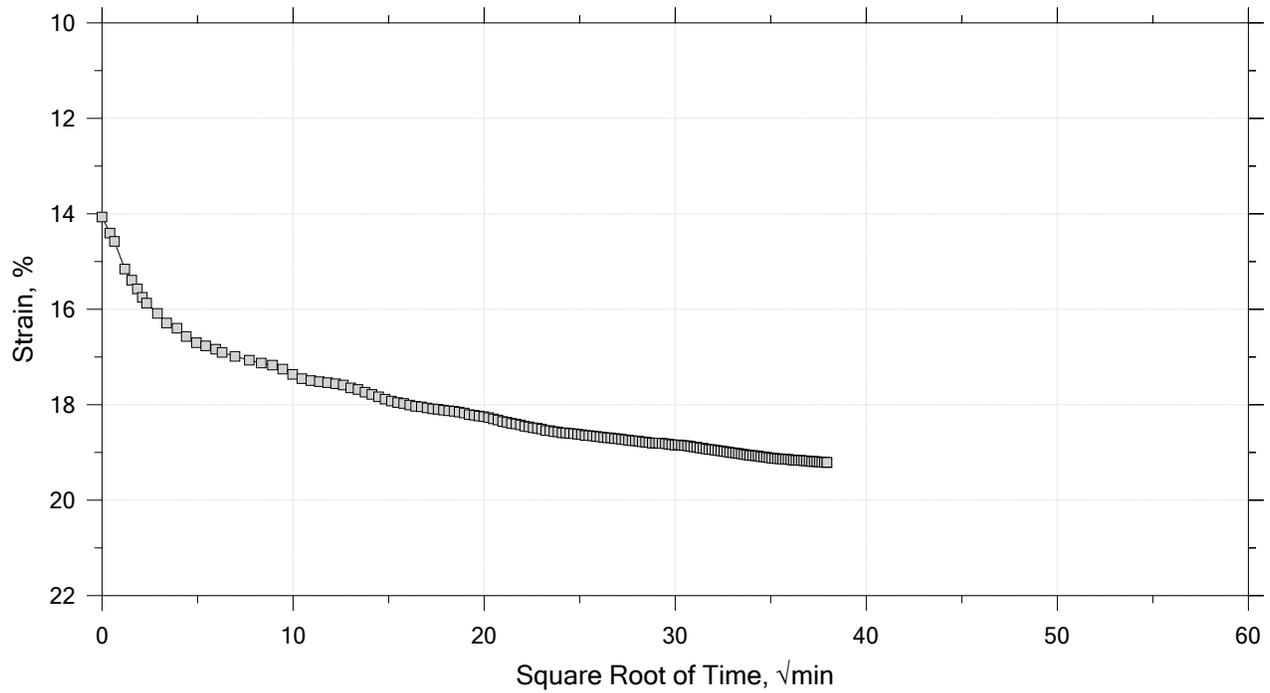
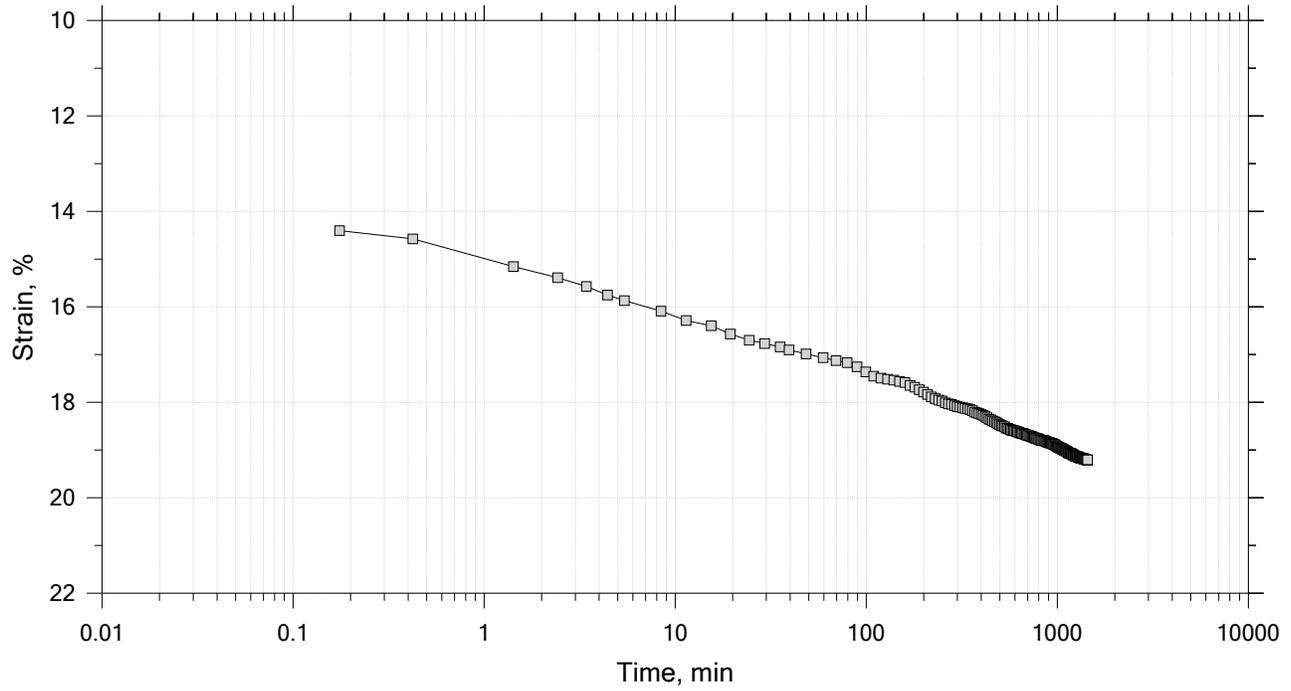
Time Curve 3 of 13  
 Constant Load Step  
 Stress: 0.25 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 4 of 13  
 Constant Load Step  
 Stress: 0.5 tsf



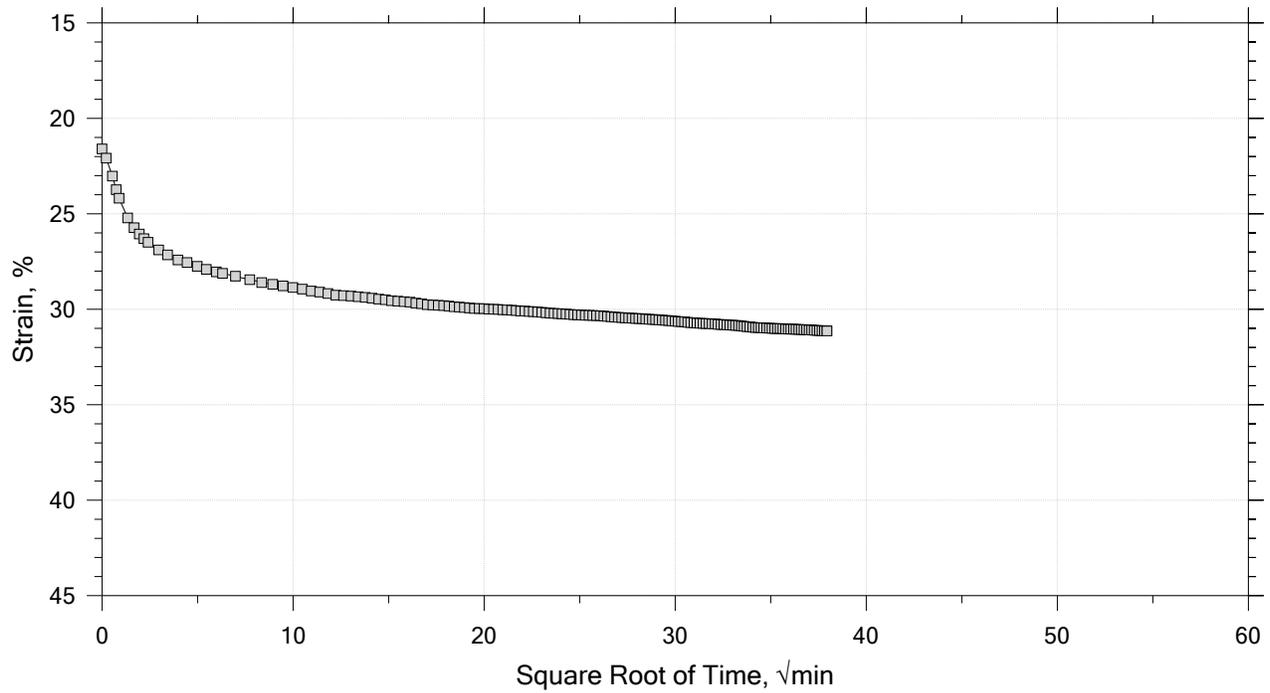
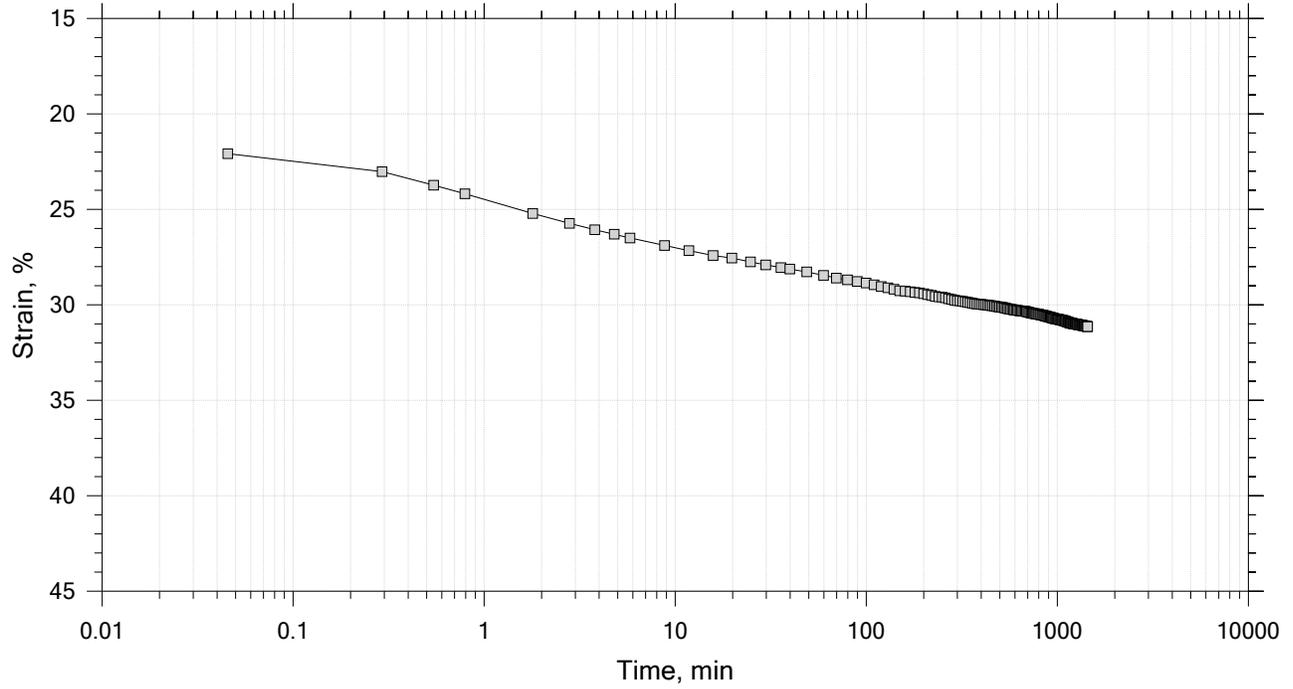
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 5 of 13

Constant Load Step

Stress: 1 tsf



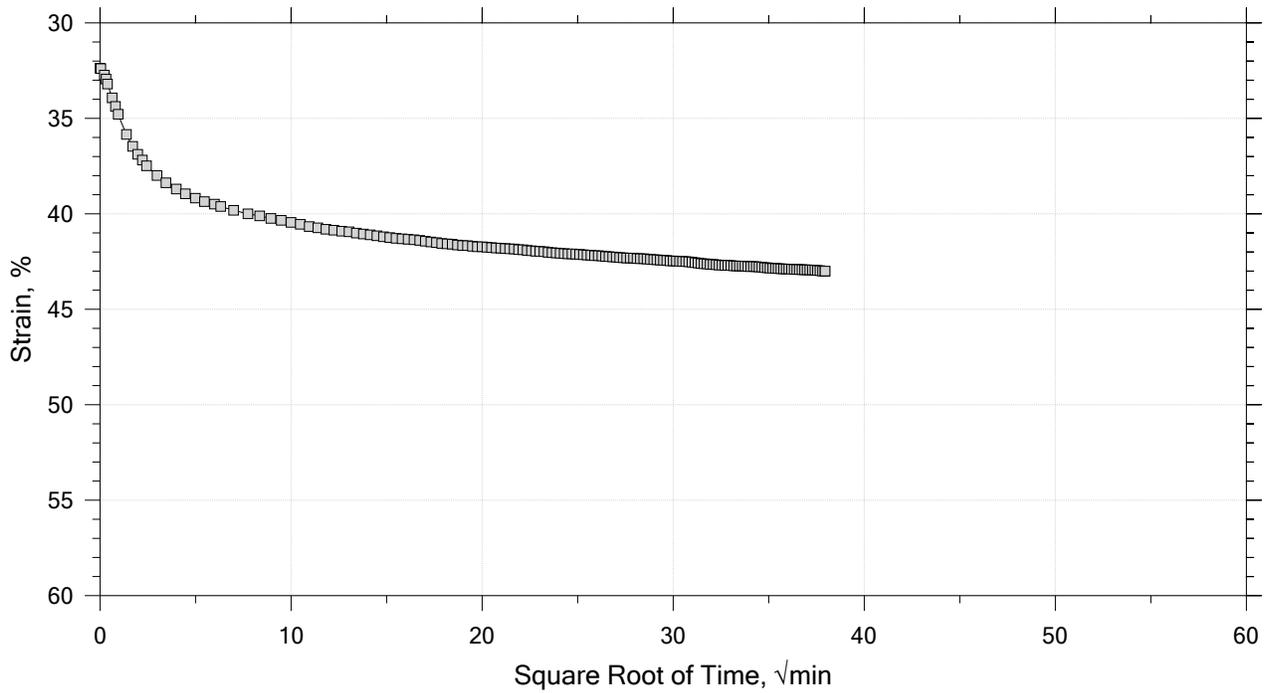
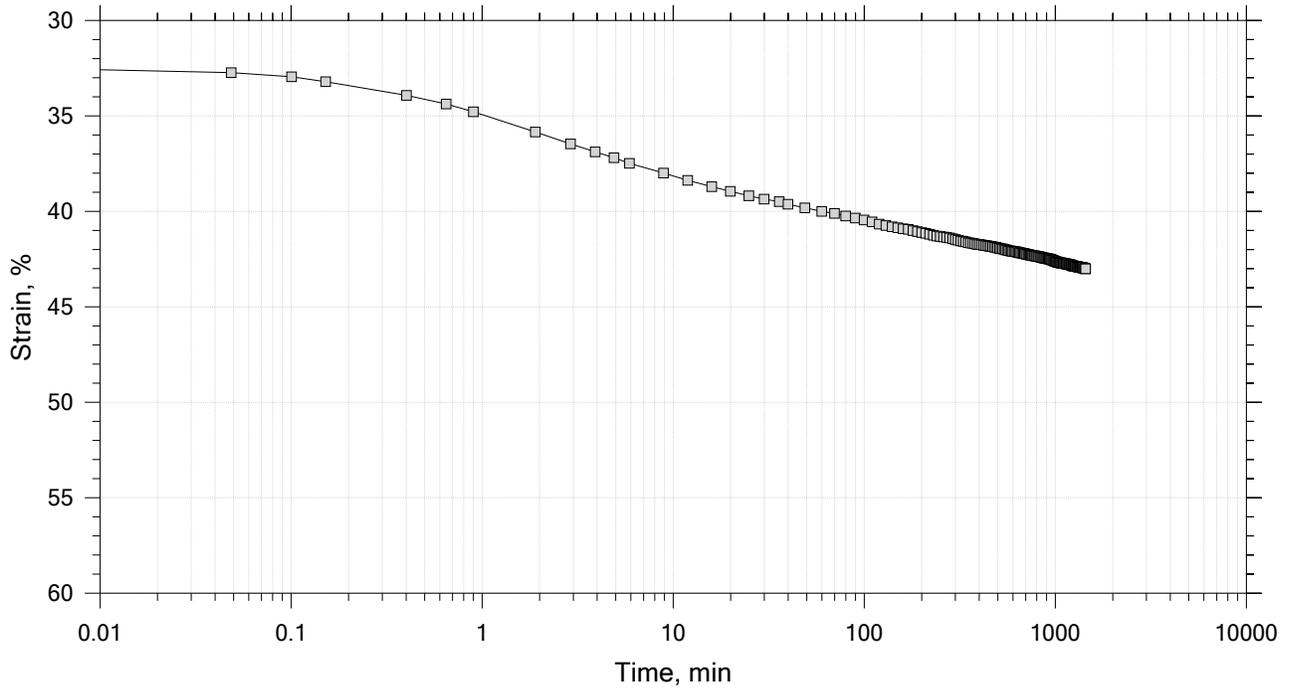
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 6 of 13

Constant Load Step

Stress: 2 tsf



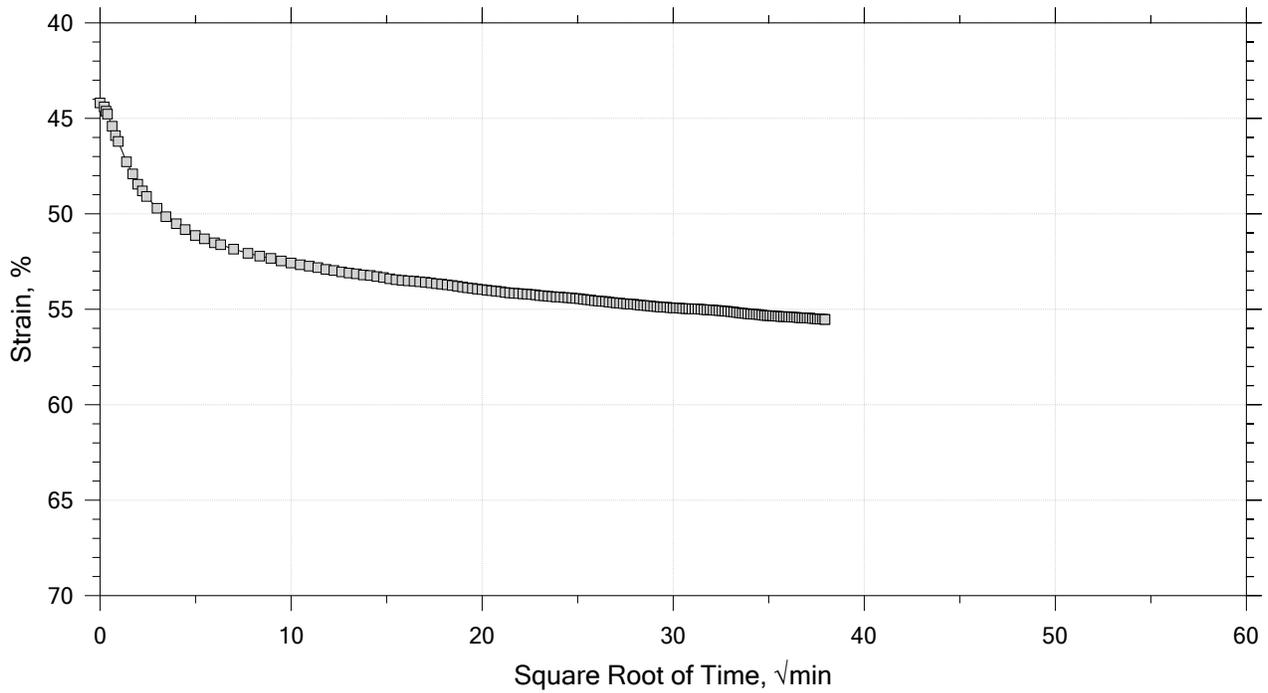
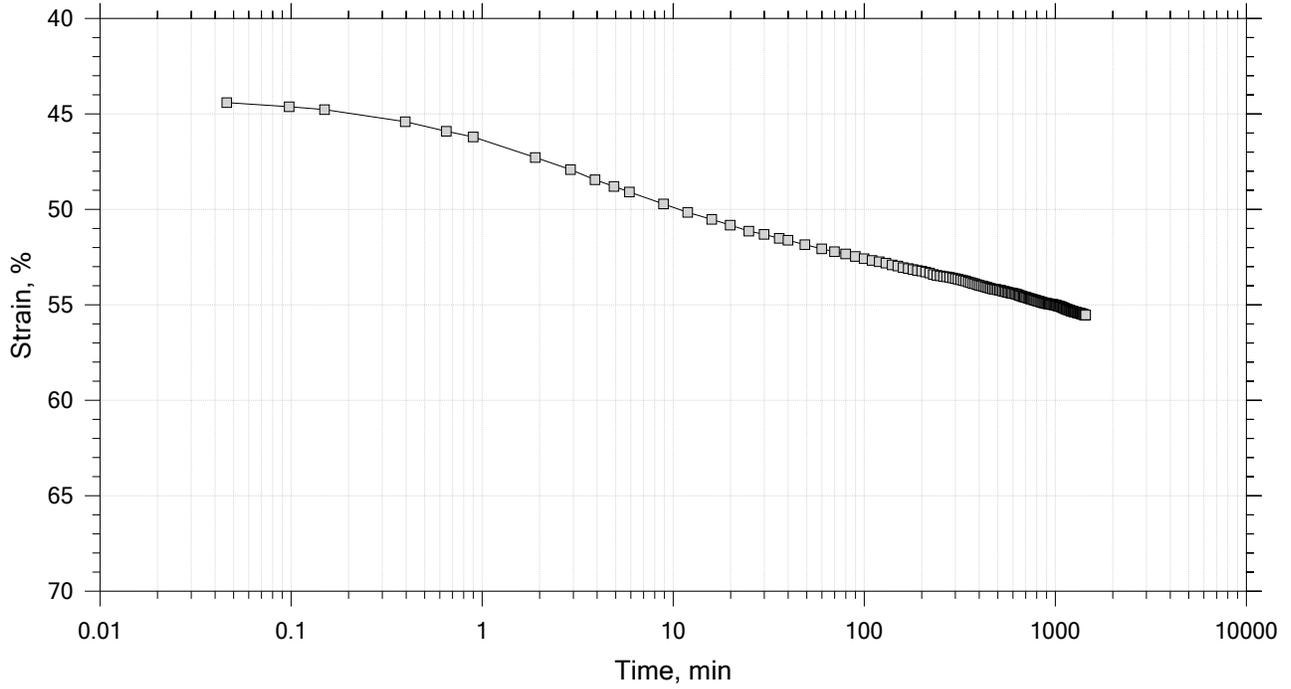
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 7 of 13

Constant Load Step

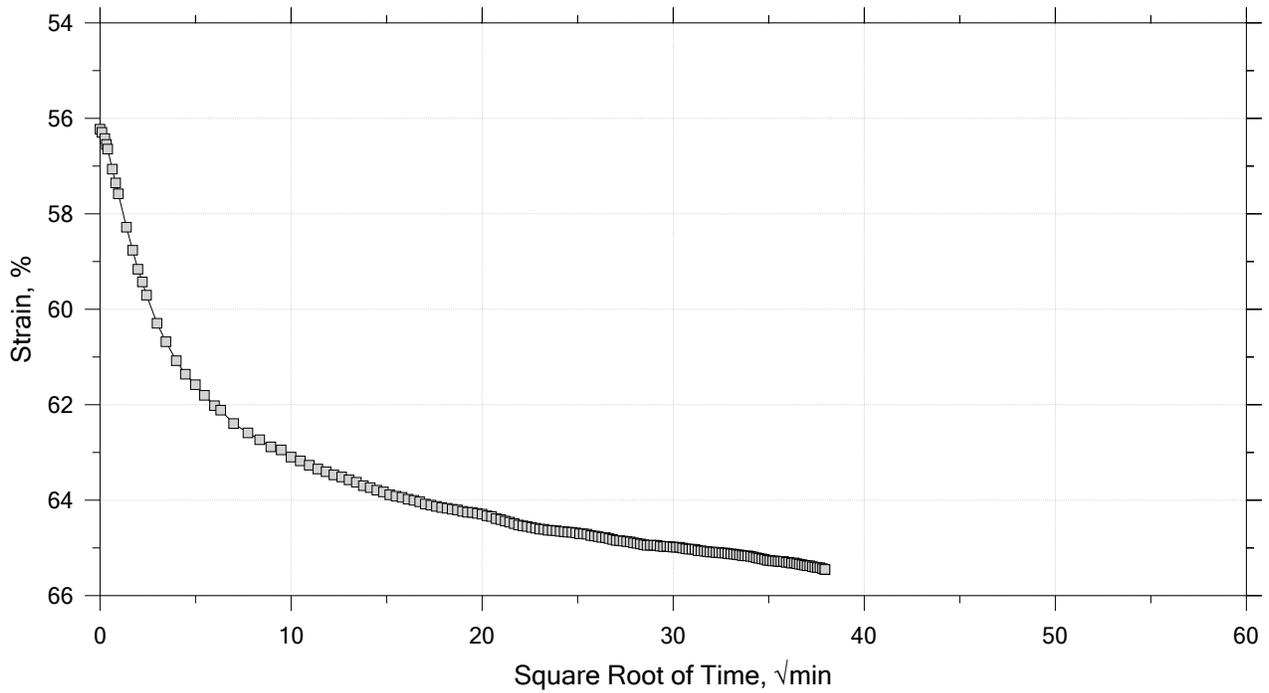
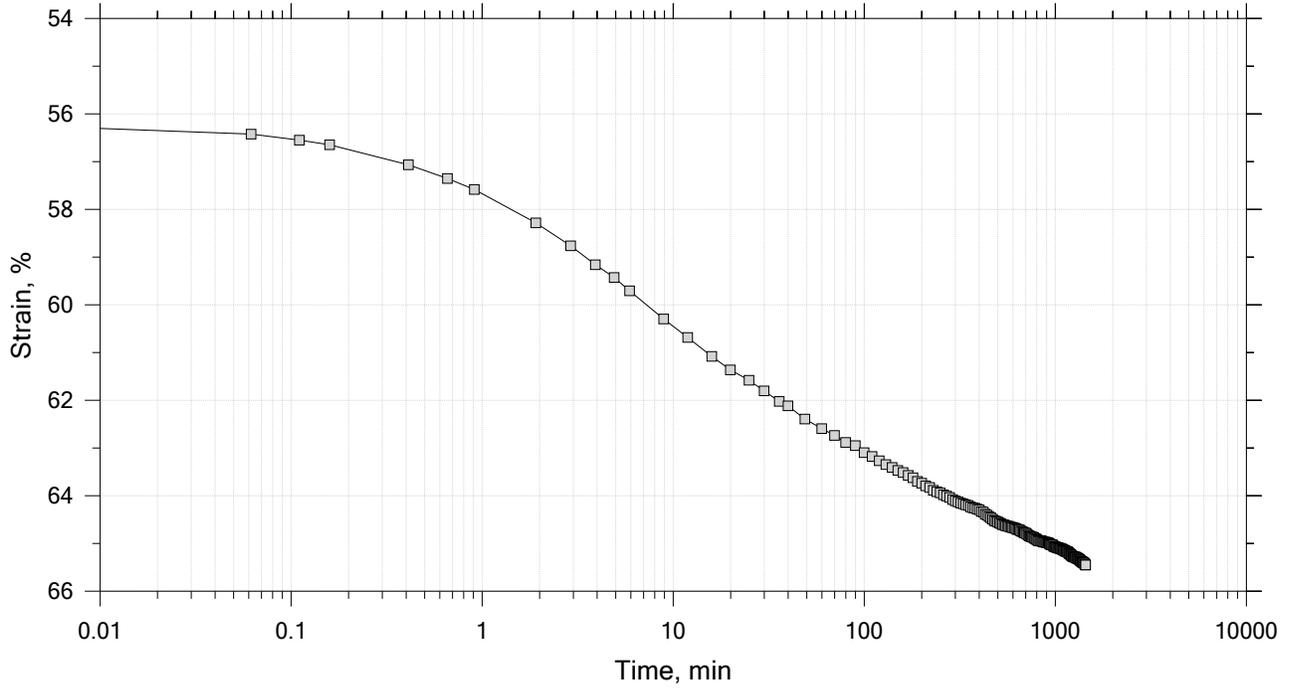
Stress: 4 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 8 of 13  
 Constant Load Step  
 Stress: 8 tsf



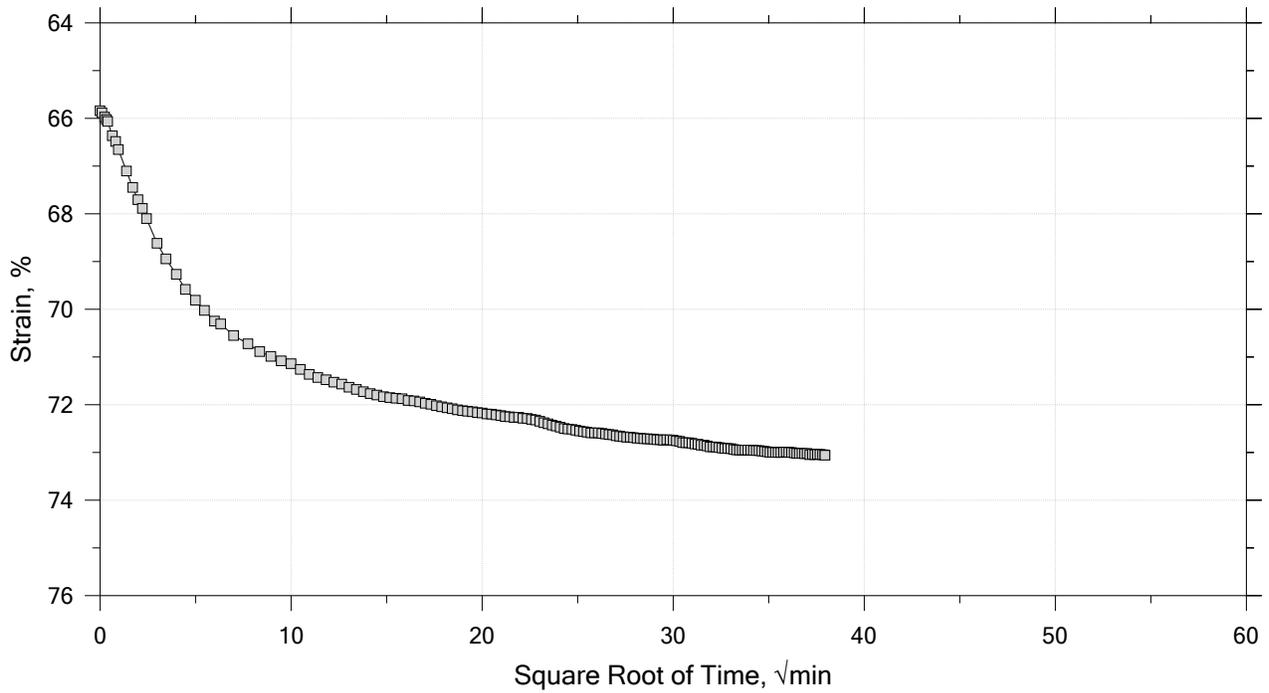
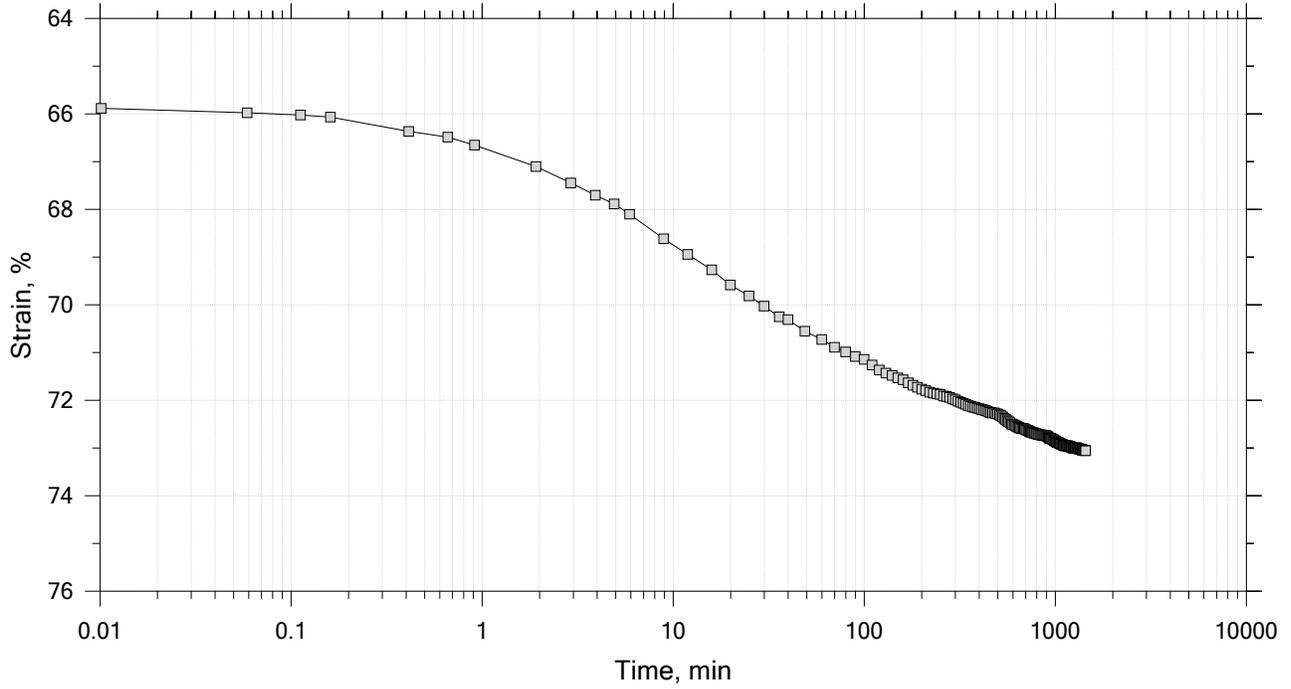
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 9 of 13

Constant Load Step

Stress: 16 tsf



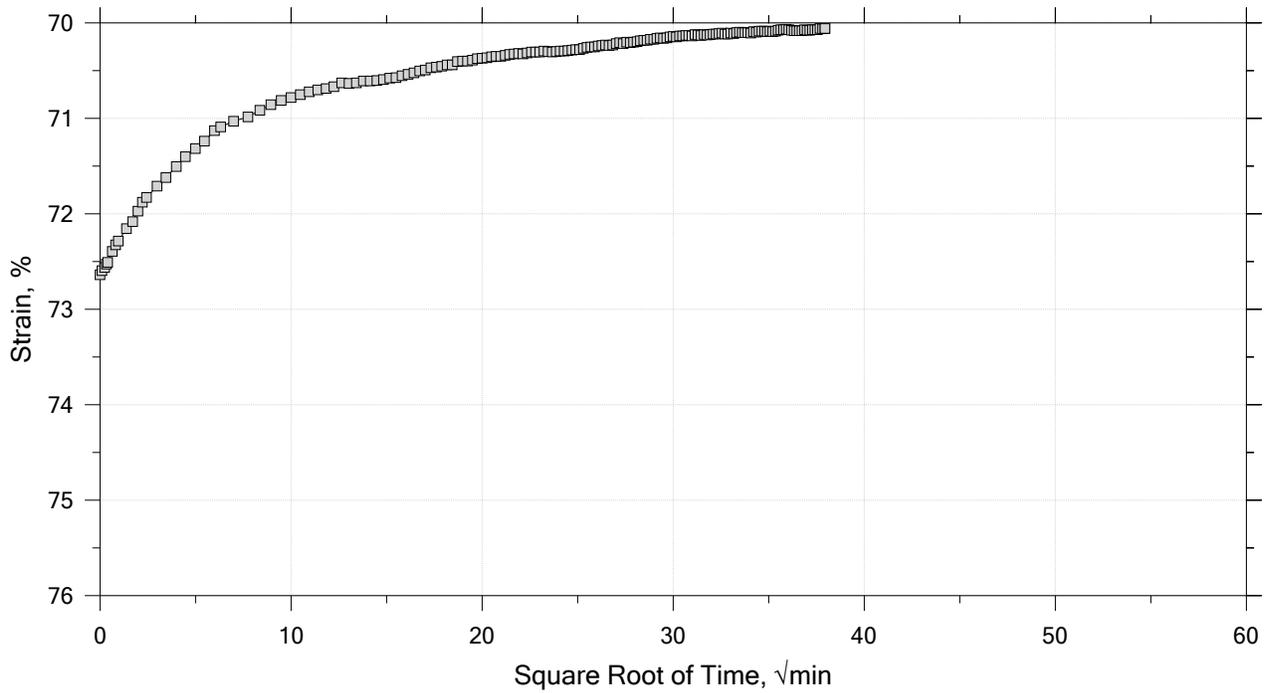
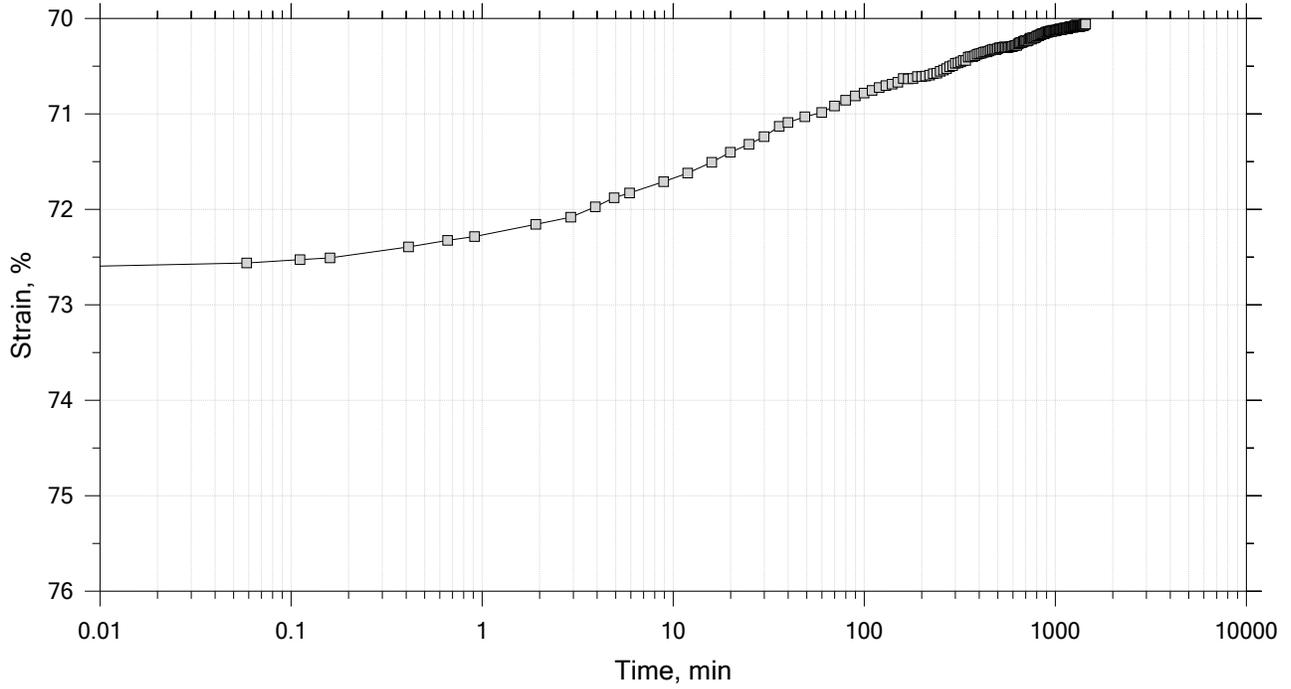
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 10 of 13

Constant Load Step

Stress: 4 tsf



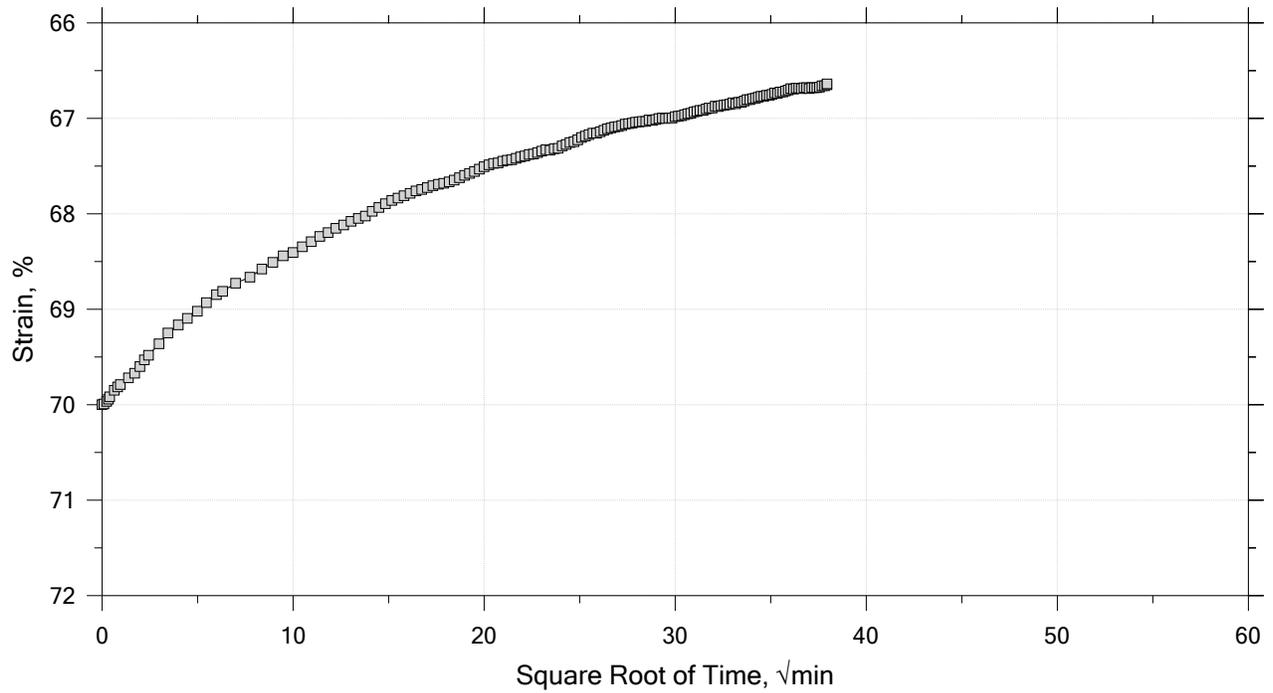
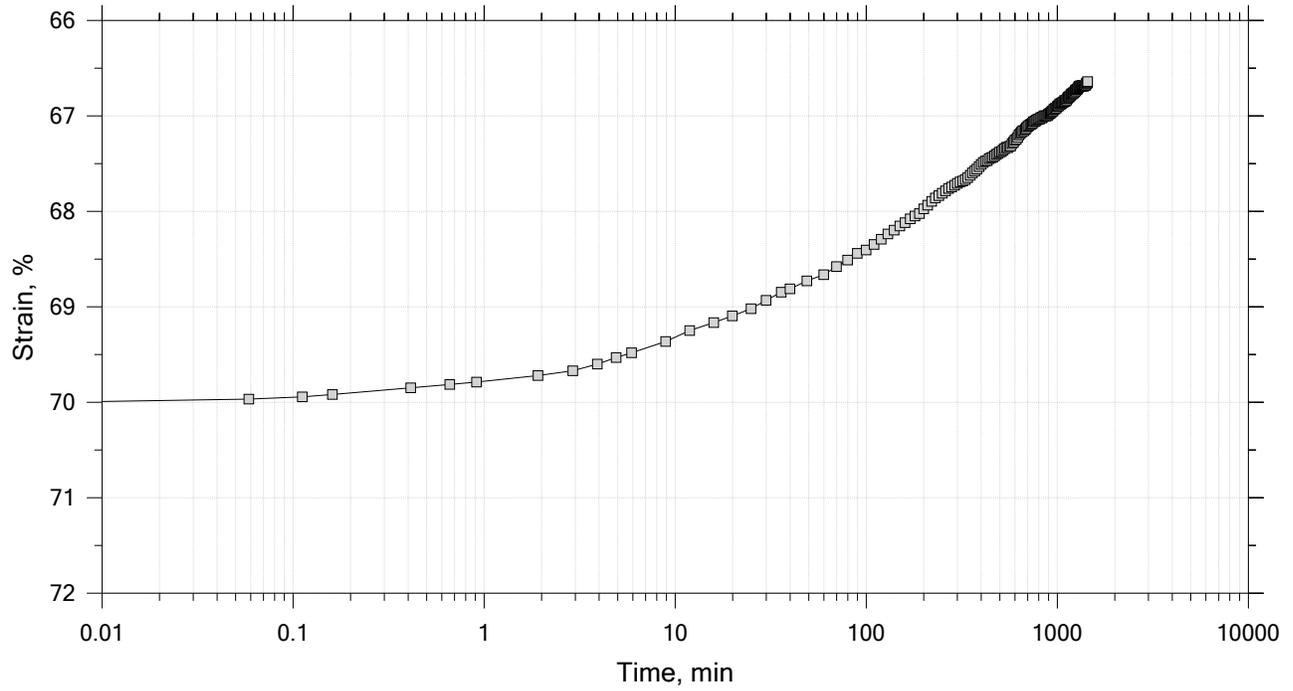
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 11 of 13

Constant Load Step

Stress: 1 tsf



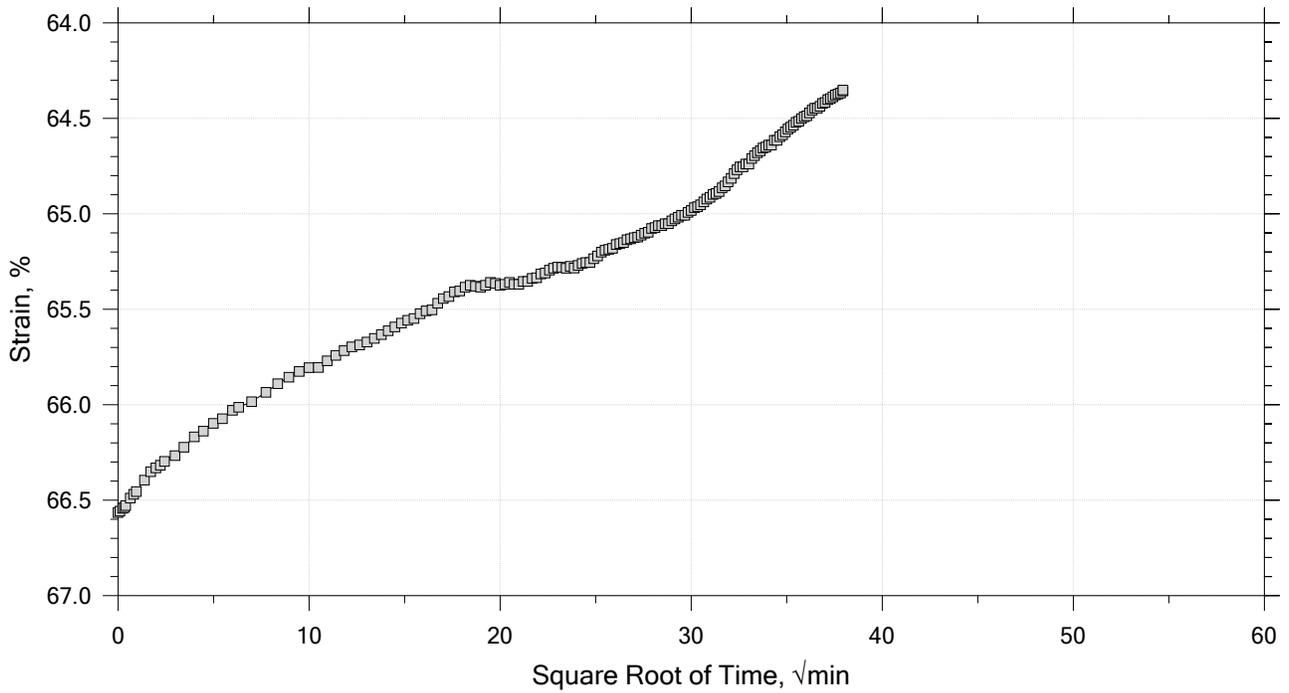
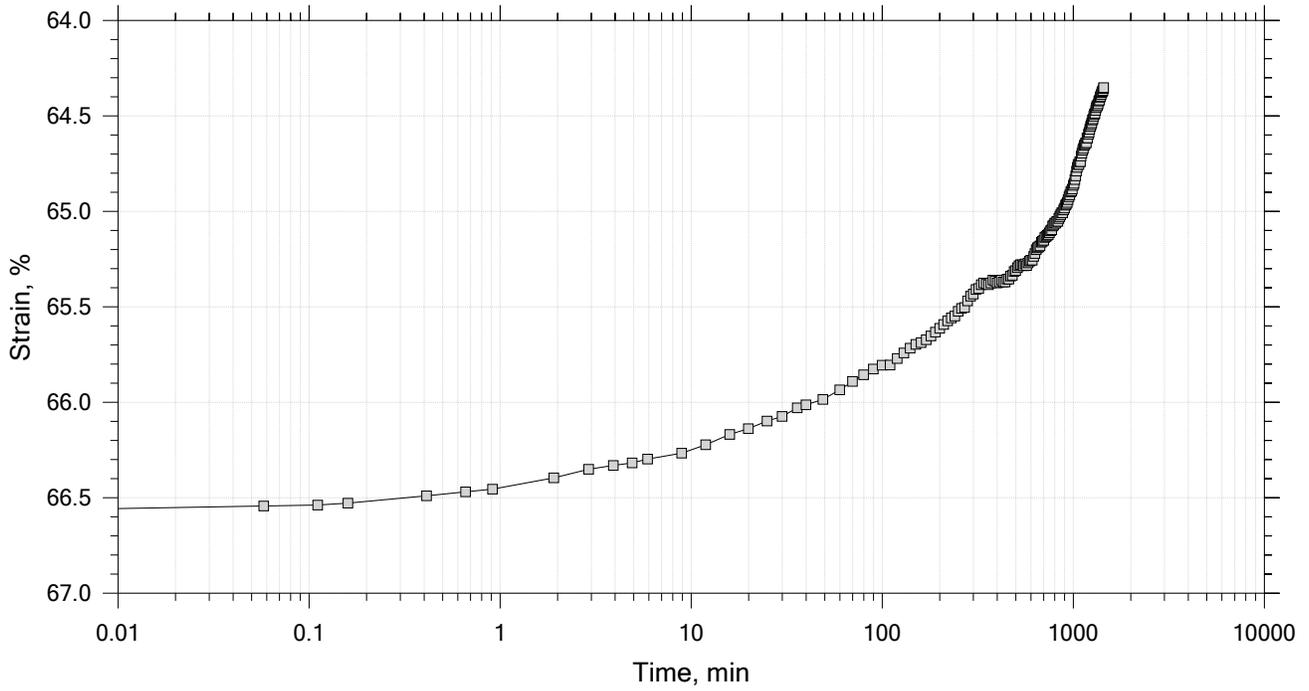
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 12 of 13

Constant Load Step

Stress: 0.25 tsf



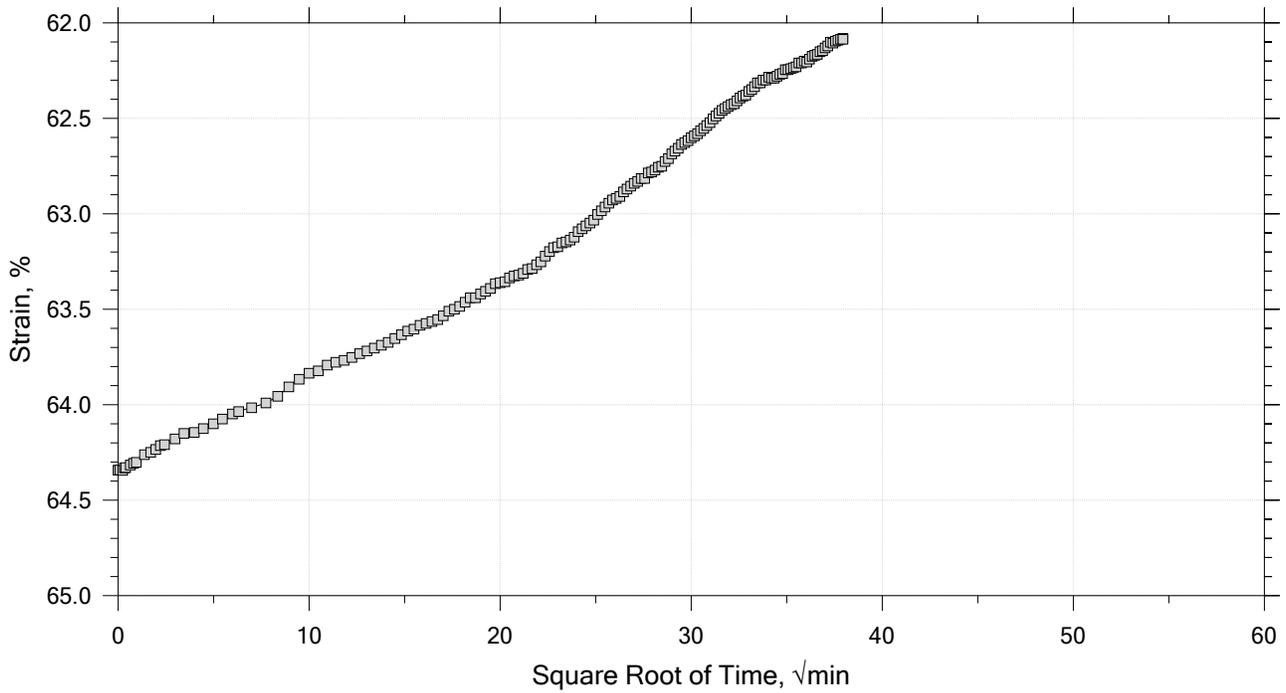
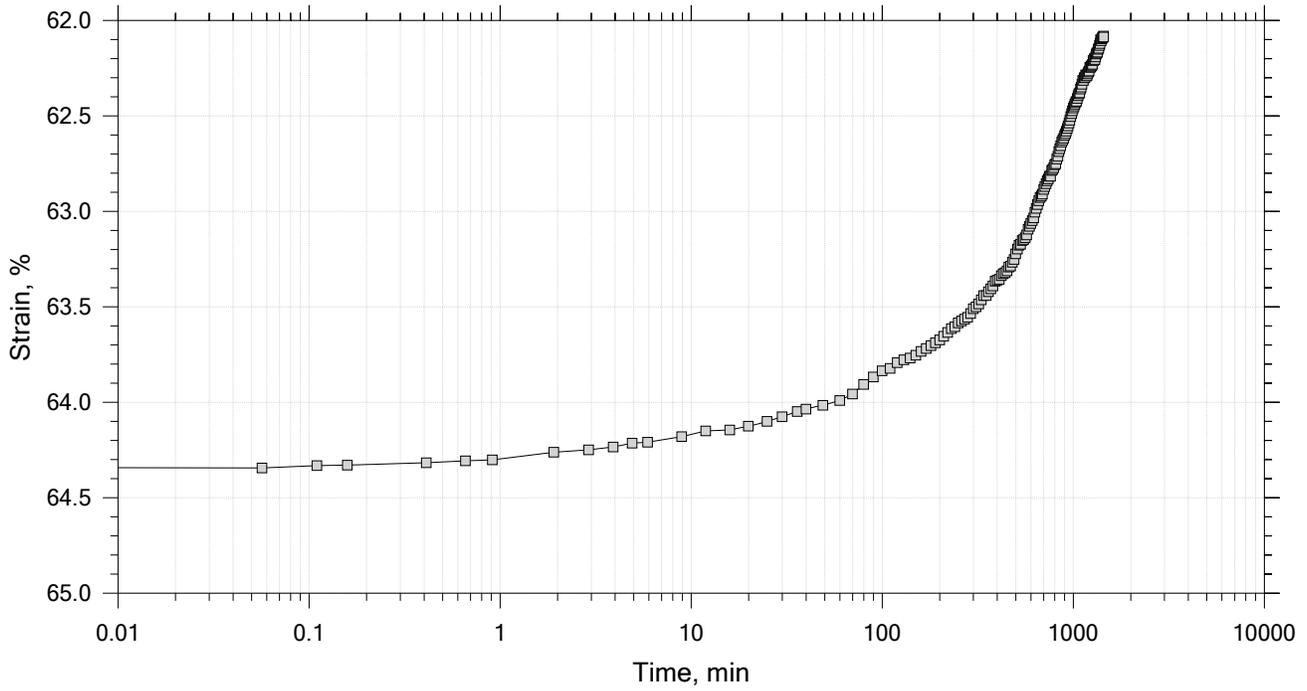
	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Time Curve 13 of 13

Constant Load Step

Stress: 0.0625 tsf



	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		

# One-Dimensional Consolidation by ASTM D2435 - Method A

Specimen Diameter: 2.50 in	Estimated Specific Gravity: 2.17	Liquid Limit: 366
Initial Height: 1.00 in	Initial Void Ratio: 12.8	Plastic Limit: 231
Final Height: 0.40 in	Final Void Ratio: 4.52	Plasticity Index: 135

	Before Test Trimmings	Before Test Specimen	After Test Specimen	After Test Trimmings
Container ID	E-5745	RING		E5250
Mass Container, gm	8.31	108.01	108.01	8.02
Mass Container + Wet Soil, gm	69.15	181.85	147	46
Mass Container + Dry Soil, gm	19.8	120.66	120.66	20.34
Mass Dry Soil, gm	11.49	12.648	12.648	12.32
Water Content, %	429.50	483.83	208.28	208.28
Void Ratio	---	12.79	4.52	---
Degree of Saturation, %	---	82.02	100.00	---
Dry Unit Weight, pcf	---	9.8156	24.539	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

	Project: Stratford Water Pollution	Location: Stratford, CT	Project No.: GTX-315388
	Boring No.: GZ-1	Tested By: md	Checked By: anm
	Sample No.: ST-2 (Tube)	Test Date: 05/05/22	Depth: 21-23 ft bg
	Test No.: IP-2	Sample Type: intact	Elevation: ---
	Description: Wet, very dark gray sandy silt		
	Remarks: System LTII-TX-012, Swell Pressure = 0.0648 tsf, Sample contains organic		





## **Appendix G – Environmental Laboratory Analysis**

**Summary of Soil Analytical Results  
Stratford WPCF  
105 Beacon Point Road, Stratford, Connecticut**

Sample ID		Remediation Standard Regulations				GZ-2
Sample Depth Below Grade (ft)						0-8
Sample Date						4/4/2022
Analytical Parameter	Units	R-DEC	I/C-DEC	GA-PMC	GB-PMC	
<b>Total Metals</b>						
Silver	mg/kg	340	10,000	NA	NA	3.1
Arsenic	mg/kg	10	10	NA	NA	4.0
Barium	mg/kg	4,700	140,000	NA	NA	90
Cadmium	mg/kg	34	1,000	NA	NA	2.9
Chromium	mg/kg	100*	100*	NA	NA	51
Mercury	mg/kg	20	610	NA	NA	1.3
Lead	mg/kg	400	1,000	NA	NA	82
Selenium	mg/kg	340	10,000	NA	NA	ND<2.9
<b>Pesticides</b>						
Various	mg/kg	varies	varies	varies	varies	ND
<b>Polychlorinated Biphenyls (PCBs)</b>						
PCBs	mg/kg	<b>1</b>	10	NA	NA	<b>4.8</b>
<b>Volatile Organic Compounds (VOCs)</b>						
Various	mg/kg	varies	varies	varies	varies	ND
<b>Semi-Volatile Organic Compounds (SVOCs)</b>						
Acenaphthylene	mg/kg	1,000	2,500	8.4	84	ND<0.35
Anthracene	mg/kg	1,000	2,500	40	400	ND<0.35
Benz(a)anthracene	mg/kg	<b>1</b>	7.8	<b>1</b>	<b>1</b>	ND<0.35
Benzo(a)pyrene	mg/kg	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	ND<0.35
Benzo(b)fluoranthene	mg/kg	<b>1</b>	7.8	<b>1</b>	<b>1</b>	ND<0.35
Benzo(ghi)perylene	mg/kg	<i>8.4</i>	<i>78</i>	<i>1</i>	<i>1</i>	ND<0.35
Benzo(k)fluoranthene	mg/kg	8.4	78	<b>1</b>	<b>1</b>	ND<0.35
Chrysene	mg/kg	<i>84</i>	<i>780</i>	<i>1</i>	<i>1</i>	ND<0.35
Fluoranthene	mg/kg	1,000	2,500	5.6	56	ND<0.35
Indeno(1,2,3-cd)pyrene	mg/kg	<i>1.0</i>	7.8	<i>1</i>	<i>1</i>	ND<0.35
Phenanthrene	mg/kg	1,000	2,500	4	40	ND<0.35
Pyrene	mg/kg	1,000	2,500	4	40	ND<0.35
<b>Extractable Total Petroleum Hydrocarbons (ETPH)</b>						
ETPH	mg/kg	500	2,500	500	2,500	ND<59

Notes:

mg/kg = milligrams per kilogram

ug/l= micrograms per liter

ND = indicates Non Detected above the method reporting limit

NE = criteria not established

NT = not tested

NA= Not Applicable; an SPLP or TCLP result is needed for comparison with this criteria

\* = No criteria available, criteria for hexavalent chromium used as a reference.

**Bold** = indicated that this RSR criteria is exceeded.

**Bold and Shaded** = indicates one or more of the reference standards exceeded

1. Only detected constituents are shown

2. CT RSRs = Connecticut Remediation Standard Regulations

3. R-DEC = Residential Direct Exposure Criteria; applicable to soils at depths less than 15 feet below grade.

4. I/C-DEC = Industrial/Commercial Direct Exposure Criteria; applicable to soils at depths less than 15 feet below grade.

5. GA-PMC = Class GA Pollutant Mobility Criteria; applicable to soils above the seasonal low groundwater table

6. GB-PMC = Class GB Pollutant Mobility Criteria; applicable to soils above the seasonal high groundwater table

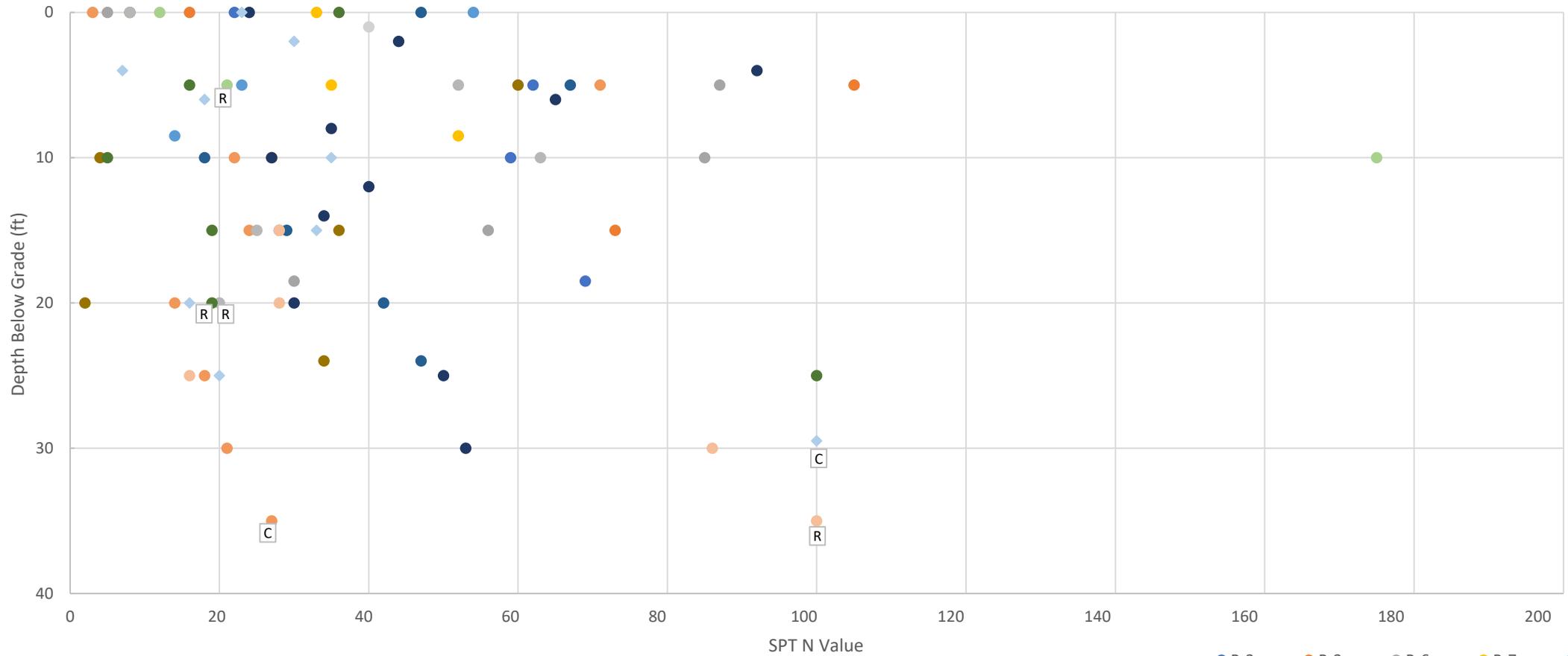
*Italics* = 2018 Recommended Criteria Values for Common Additional Polluting Substances; CTDEEP approval is required.



## **Appendix H – SPT N vs. Depth Summary**

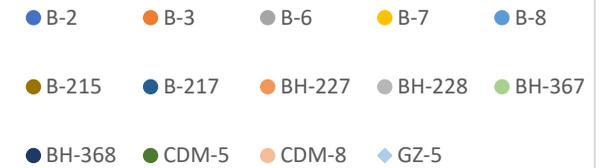
### Summary of Beacon Point Dike: SPT Value vs. Depth

Impact	Runaway Possible	Easy	Suitable	Suitable require HYS					
Vibro	Very Easy	Easy	Suitable	Very Difficult					



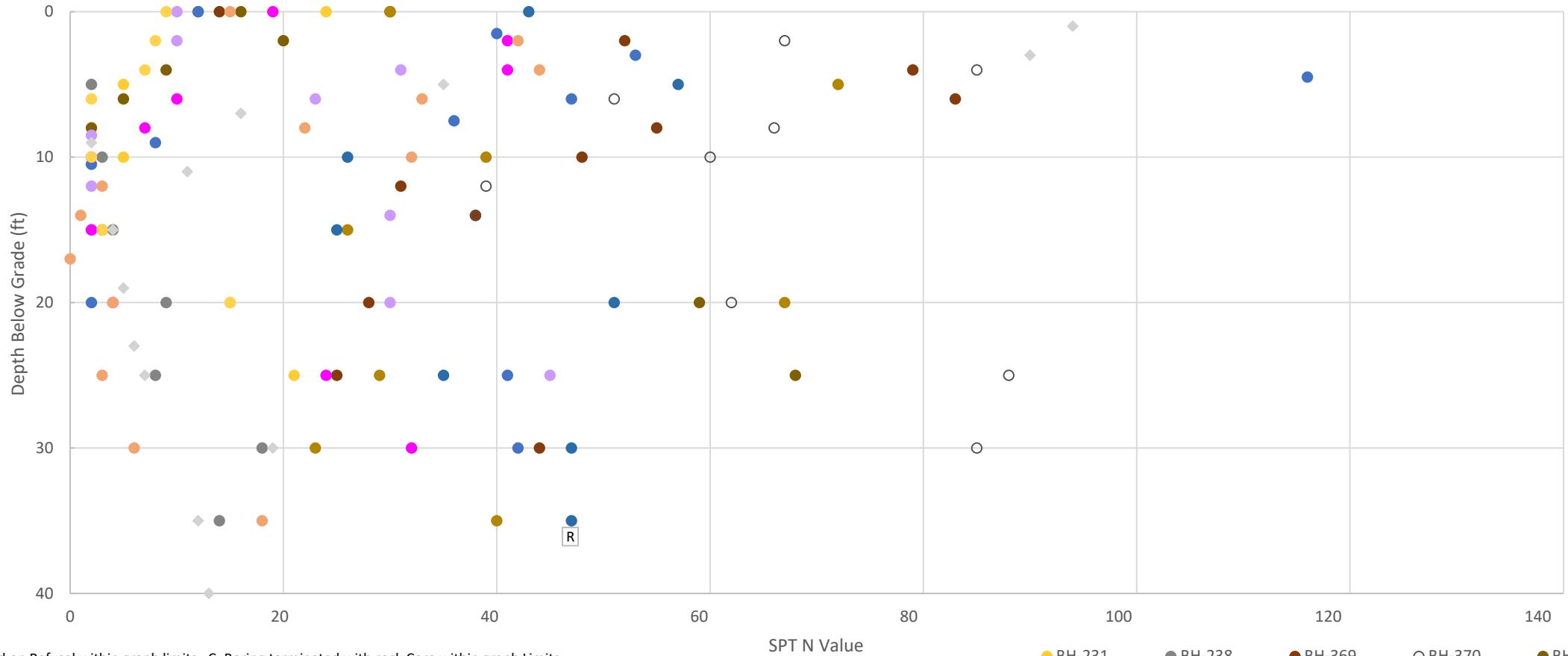
**Table Notes:**

- R=Boring terminated on Refusal within graph limits. C=Boring terminated with rock Core within graph Limits
- 1. Drivability is based on SPT N value and comparison to the ArcelorMittal Piling Handbook, 9th Edition, revision 2022, Table 11.2 (attached). This is prepared for generally feasibility and is not for bidding or production estimates.
- 2. Refer to boring logs for more information.
- 3. Boring depth presented limited to 40 feet below grade, see Appendix C for full boring logs.
- 4. SPT values of 50 blows/6 inches, or 100 blows/foot, represent practical SPT refusal. Refer to report including boring logs and Table 1 and 2A for interpretation and presence of bedrock. Sound bedrock will not be penetrated by driving sheet piles.



### Summary of North Road Dike: SPT Value vs. Depth

Impact	Runaway Possible	Easy	Suitable	Suitable require HYS				
Vibro	Very Easy	Easy	Suitable	Very Difficult				



**Table Notes:**

R=Boring terminated on Refusal within graph limits. C=Boring terminated with rock Core within graph Limits

1. Drivability is based on SPT N value and comparison to the ArcelorMittal Piling Handbook, 9th Edition, revision 2022, Table 11.2 (attached). This is prepared for generally feasibility and is not for bidding or production estimates.

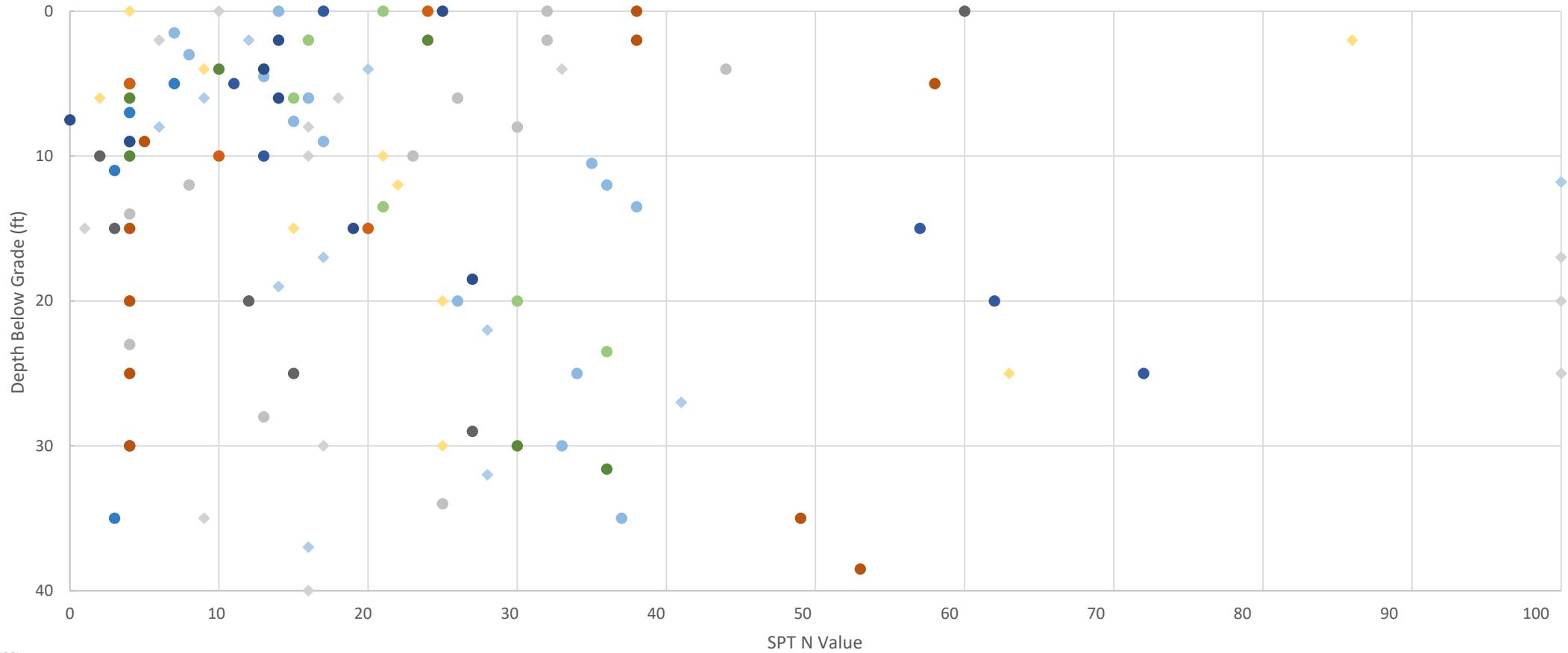
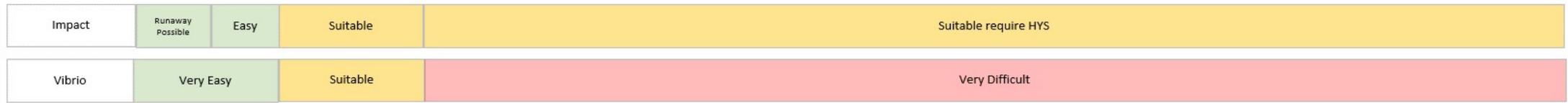
2. Refer to boring logs for more information.

3. Boring depth presented limited to 40 feet below grade, see Appendix C for full boring logs.

4. SPT values of 50 blows/6 inches, or 100 blows/foot, represent practical SPT refusal. Refer to report including boring logs and Table 1 and 2B for interpretation and presence of bedrock. Sound bedrock will not be penetrated by driving sheet piles.

- BH-231
- BH-238
- BH-369
- BH-370
- BH-371
- BH-372
- BH-373
- BH-374
- BH-375
- BH-377
- CDM-1
- CDM-2
- ◆ GZ-1(OW)

### Summary of Birdseye Flood Dike: SPT Value vs. Depth



**Table Notes:**

- R=Boring terminated on Refusal within graph limits. C=Boring terminated with rock Core within graph Limits
- 1. Drivability is based on SPT N value and comparison to the ArcelorMittal Piling Handbook, 9th Edition, revision 2022, Table 11.2 (attached). This is prepared for generally feasibility and is not for bidding or production estimates.
- 2. Refer to boring logs for more information.
- 3. Boring depth presented limited to 40 feet below grade, see Appendix C for full boring logs.
- 4. SPT values of 50 blows/6 inches, or 100 blows/foot, represent practical SPT refusal. Refer to report including boring logs and Table 1 and 2C for interpretation and presence of bedrock. Sound bedrock will not be penetrated by driving sheet piles.



### Summary of Beacon Point Levee: SPT Value vs. Depth



**Table Notes:**

- R=Boring terminated on Refusal within graph limits. C=Boring terminated with rock Core within graph Limits
- 1. Drivability is based on SPT N value and comparison to the ArcelorMittal Piling Handbook, 9th Edition, revision 2022, Table 11.2 (attached). This is prepared for generally feasibility and is not for bidding or production estimates.
- 2. Refer to boring logs for more information.
- 3. Boring depth presented limited to 40 feet below grade, see Appendix C for full boring logs.
- 4. SPT values of 50 blows/6 inches, or 100 blows/foot, represent practical SPT refusal. Refer to report including boring logs and Table 1 and 2 D for interpretation and presence of bedrock. Sound bedrock will not be penetrated by driving sheet piles .

- BH-111
- BH-225
- BH-233
- BH-234
- BH-237
- BH-242
- BH-361
- BH-363
- BH-364
- BH-365
- BH-366
- BH-382
- ◆ GZ-4(OW)



GZA GeoEnvironmental, Inc.



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Built on trust.

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ENVIRONMENTAL  
ECOLOGICAL  
WATER  
CONSTRUCTION  
MANAGEMENT

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3rd Floor  
Glastonbury, CT 06033  
T: 860.286.8900  
F: 860.633.5699  
www.gza.com

January 29, 2026  
File No. 18.0172256.70

Mr. John Casey  
Stratford Town Hall  
2725 Main Street  
Stratford, CT 06615

Re: Supplemental Analytical Data Report  
Stratford Water Pollution Control Facility (WPCF) Perimeter Flood Wall Improvements  
Stratford, Connecticut 06115

Dear Mr. Casey:

GZA GeoEnvironmental Inc. (GZA) has prepared this supplemental analytical data report to provide the results of the environmental soil testing at 105 Beacon Point Road in Stratford, CT (Site) for Stratford WPCF (Client). The soil sampling was completed on January 21, 2026 as a follow up to previous sampling conducted on April 4, 2022 in accordance with our contract signed on February 3, 2022. This report is subject to the terms and conditions of that contract and to the Limitations presented in **Appendix A**.

## BACKGROUND

This report presents the results of GZA's environmental subsurface explorations for the proposed WPCF Perimeter Flood Wall Improvements. The WPCF is located at 105 Beacon Point Road, Stratford, Connecticut, at the corner of Birdseye Street and Birdseye Street Extension. The WPCF is located on the western side of the Housatonic River. GZA has prepared a design for the proposed WPCF Perimeter Flood Wall Improvement Project.

For the design, GZA prepared a report titled, "Geotechnical Engineering and Environmental Data Report, Stratford Water Pollution Control Facility", dated February 20, 2023, which included environmental test results for a composite soil sample collected at test boring GZ-2 and indicated that soils from the 0- to 8-foot depth interval contained a concentration of polychlorinated biphenyls (PCBs) above the Connecticut Residential Direct Exposure Criteria (R-DEC). The location of boring GZ-2 is shown on the attached **Figure 1**. GZA recommended additional subsurface explorations and soil testing to further assess the extent and degree of the detected impact and recommended preparing a Soil Management Plan (SMP) to provide guidance for soil management during construction. The subsequent additional investigations were completed, and the results are reported herein.

## SCOPE OF WORK

On January 21, 2026, GZA completed three soil borings (GZ-101, GZ-102 and GZ-103) by hand and collected eight soil samples from these three borings to evaluate the extent and degree of the PCBs previously detected at GZ-2. Prior to on-Site activities, Call-Before-You-Dig was notified to identify underground utilities in the vicinity. GZA also retained Underground Surveying, Inc. to



perform a ground penetration radar (GPR) survey and locate private underground utilities. The soil borings were advanced to depths of 2.75- to 5-feet below grade (fbg) using an electric hammer drill and macro core sampler equipped with acetate sleeves. The locations of the borings are shown on **Figure 1**.

The recovered soil samples were observed in the field by GZA staff for indicators of a release (e.g., staining, discoloration and/or odors) and none were observed. In addition, the soil samples were screened using a photo-ionization detector (PID) with a 10.6 eV lamp. A PID is a screening instrument that is capable of detecting certain organic vapors, including constituents of solvents, petroleum fuels and oils, but not PCBs. A PID is used as a screening instrument only and does not provide absolute values for concentrations in soil samples. The PID was calibrated to 100 parts per million (ppm) isobutylene standard prior to sample screening. A background reading of 0.0 ppm on the PID was noted during the sampling and no elevated PID readings were observed from screening the soil samples.

Representative soil samples (three samples from boring GZ-101, two samples from GZ-102, and three samples from GZ-103) were collected from the borings, preserved for laboratory analysis and submitted under chain of custody to Complete Environmental Testing, Inc. (CET) in Stratford, Connecticut for analysis of PCBs by EPA method 8082A. Laboratory reports are provided in **Appendix B**.

## **ANALYTICAL RESULTS**

The analytical results are summarized on **Table 1** and were compared to the following criteria in the Connecticut Remediation Standard Regulations (CT RSRs):

- Residential Direct Exposure Criteria (R-DEC)
- Industrial/Commercial Direct Exposure Criteria (I/C-DEC)
- Class GA Pollutant Mobility Criteria (GA-PMC)
- Class GB Pollutant Mobility Criteria (GB-PMC)

The analytical results indicate that PCBs were detected at a concentration above the R-DEC in sample GZ-101 (0-2) and were either not detected or detected at concentrations at or below the R-DEC in the 7 other samples. As discussed above, PCBs were previously detected at a concentration exceeding the R-DEC in a sample from GZ-2 in April 2022.

## **CONCLUSIONS**

Based on our field observations and the analytical results, soils from the 0- to 8-foot depth interval from boring GZ-2 contain a concentration of PCBs above the R-DEC. Boring GZ-101 was performed next to GZ-2 and discrete samples were collected from the 0 to 2-foot, 2 to 4-foot and 4 to 5-foot depth intervals to evaluate the depth at which the PCBs were previously detected in composite sample GZ-2 (0-8). Sample GZ-101 (0-2) contained PCBs at a concentration above the R-DEC; however, PCBs were not detected in the soil samples from the other depth intervals. PCBs were not detected at concentrations above the R-DEC in the five soil samples submitted for testing from GZ-102 and GZ-103.

Based on the test results, GZA recommends excavating the soils from the area around GZ-2 to a depth of at least two feet below the ground surface. The soils should be stockpiled, and additional laboratory testing should be performed to provide the analytical test results for off site disposal at a permitted facility. The recommended area of excavation is presented on **Figure 1**.



GZA also recommends implementation of a Soil Management Plan (SMP) to provide a program for handling, segregating, stockpiling, sampling, and reusing or disposing of soil/material which may be encountered during planned excavation and construction activities.

Evaluation of soil quality was limited to the locations described. Additional testing of stockpiled soils may be required to assess the extent and degree of the detected impacts and develop sufficient information to facilitate acceptance of the material by a suitable offsite soil reuse/disposal facility.

If you have any questions regarding the information presented, please feel free to contact David Barstow at 860-250-2131.

Very truly yours,

**GZA GEOENVIRONMENTAL, INC.**

A handwritten signature in blue ink that reads "Christopher Eggers".

Christopher G. Eggers, P.E.  
Senior Project Manager

A handwritten signature in blue ink that reads "David M. Barstow".

David M. Barstow, P.E.  
Associate Principal

A handwritten signature in blue ink that reads "Adam T. Henry".

Adam T. Henry, LEP  
Consultant/Reviewer

Attachments:      Table 1: Summary of Soil Analytical Results  
                         Figure 1: Exploration Location Plan  
                         Appendix A: Limitations  
                         Appendix B: Laboratory Reports



## Table

**Summary of Soil Analytical Results**  
**Stratford WPCF**  
**105 Beacon Point Road, Stratford, Connecticut**  
**GZA Job # 18.0172256.70**

Sample ID		Remediation Standard Regulations				GZ-2	GZ-101	GZ-101	GZ-101	GZ-102	GZ-102	GZ-103	GZ-103	GZ-103
Sample Depth Below Grade (ft)						0-8	0-2	2-4	4-5	0-2	2-2.75	0-2	2-4	4-4.75
Sample Date		R-DEC	I/C-DEC	GA-PMC	GB-PMC	4/4/2022	1/21/2026	1/21/2026	1/21/2026	1/21/2026	1/21/2026	1/21/2026	1/21/2026	1/21/2026
Analytical Parameter	Units													
<b>Polychlorinated Biphenyls (PCBs)</b>														
PCBs	mg/kg	1	10	NA	NA	4.8	2.3	ND<0.053	ND<0.057	1	ND<0.050	1	0.27	0.14

Notes:

mg/kg = milligrams per kilogram

ND = indicates Non Detected above the method reporting limit

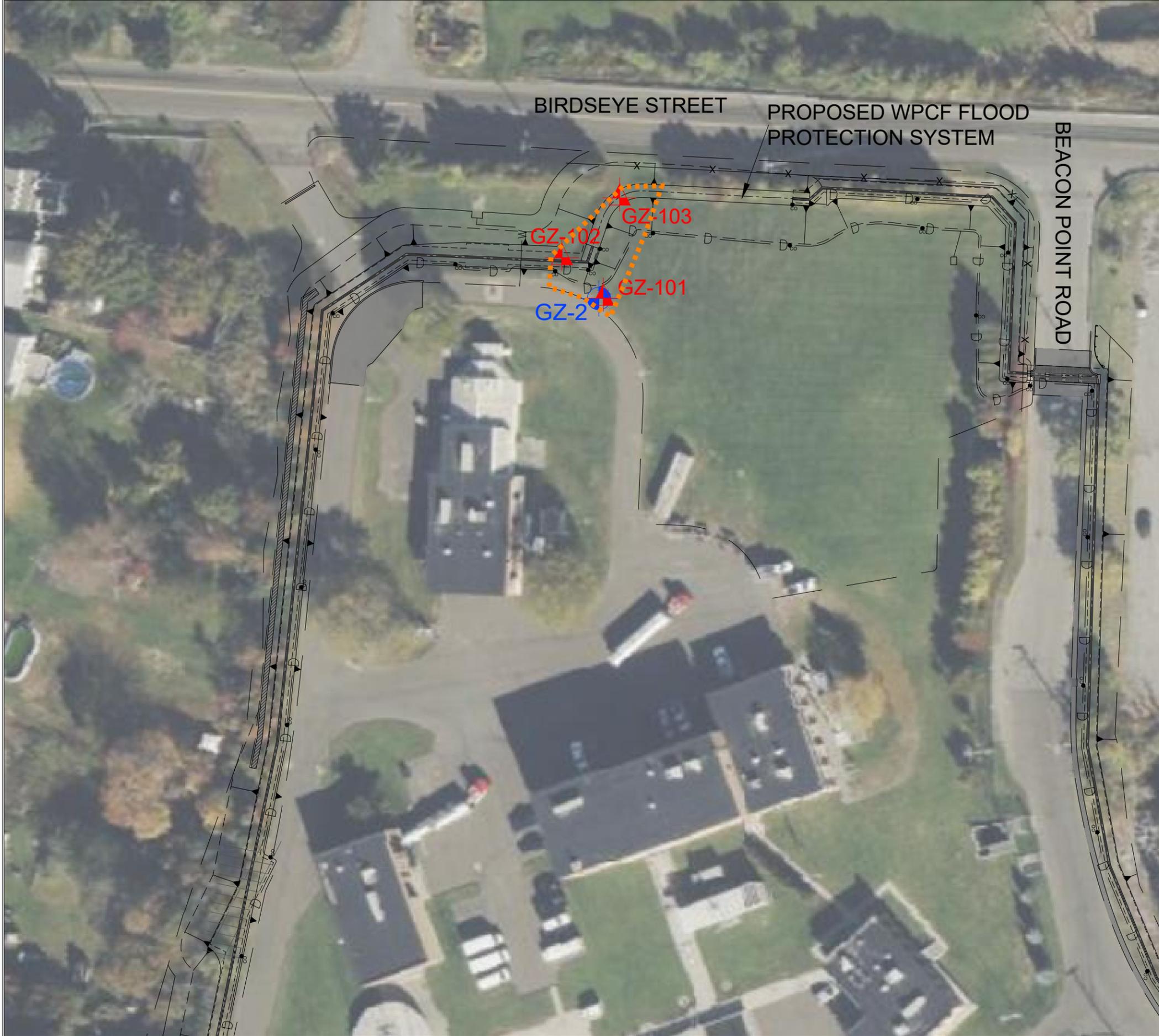
NA= Not Applicable; an SPLP or TCLP result is needed for comparison with this criteria

**Bold** = indicates one or more of the reference standards exceeded

1. Only detected constituents are shown
2. CT RSRs = Connecticut Remediation Standard Regulations
3. R-DEC = Residential Direct Exposure Criteria; applicable to soils at depths less than 15 feet below grade.
4. I/C-DEC = Industrial/Commercial Direct Exposure Criteria; applicable to soils at depths less than 15 feet below grade.
5. GA-PMC = Class GA Pollutant Mobility Criteria; applicable to soils above the seasonal low groundwater table
6. GB-PMC = Class GB Pollutant Mobility Criteria; applicable to soils above the seasonal high groundwater table
7. See GZA Geotechnical Report "Geotechnical Engineering and Environmental Data Report, Stratford Water Pollution Control Facility", dated February 20, 2023 for additional analytical parameters tested at GZ-2.



**Figure**

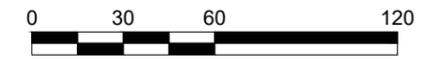


**GENERAL NOTES**

1. BASE MAP DEVELOPED FROM MICROSOFT CNESS DISTRIBUTION AIRBUS DS, 2026.
2. THE PURPOSE OF THIS DRAWING IS TO LOCATE, DESCRIBE, AND REPRESENT THE POSITIONS OF PREVIOUSLY COMPLETED TEST BORINGS AND ENVIRONMENTAL SAMPLING LOCATIONS IN RELATION TO THE SUBJECT SITE. THIS DRAWING IS NOT CONSIDERED A LAND SURVEY. THE LOCATIONS SHOWN SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.
3. THE LOCATION OF THE EXPLORATIONS WERE APPROXIMATELY DETERMINED BY LINE OF SIGHT AND/OR TAPE MEASUREMENTS FROM EXISTING SITE FEATURES. THE LOCATIONS SHOWN SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

**LEGEND**

-  INDICATES TEST BORING COMPLETED BY SOILTESTING, INC. ON APRIL 4, 5, 8, AND 14, 2022 AND OBSERVED BY GZA PERSONNEL.
-  INDICATES TEST BORING PERFORMED BY GZA PERSONNEL ON JANUARY 21, 2026 USING HAMMERDRILL AND MACROCORE SAMPLER
-  PROPOSED AREA OF EXCAVATION FROM 0 TO 2 FEET BELOW GRADE FOR PCB IMPACTED SOILS



HORIZONTAL SCALE IN FEET

NO.	ISSUE/DESCRIPTION	BY	DATE

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

**STRATFORD WPCF FLOOD PROTECTION SYSTEM IMPROVEMENTS  
STRATFORD, CONNECTICUT**

**ENVIRONMENTAL SOIL SAMPLING LOCATION PLAN**

PREPARED BY:  <b>GZA GeoEnvironmental, Inc.</b> Engineers and Scientists www.gza.com		PREPARED FOR: TOWN OF STRATFORD 2725 MAIN STREET STRATFORD, CT 06615	
PROJ MGR: AK	REVIEWED BY: DMB	CHECKED BY: DMB	FIG
DESIGNED BY: CGE	DRAWN BY: MJD	SCALE: AS NOTED	<b>1</b>
DATE: JANUARY, 2026	PROJECT NO. 18.0172256.70	REVISION NO. -	
			SHEET NO. 1 OF 1



## **Appendix A – Limitations**



## USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the contract documents, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

## STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in Proposal for Services and/or Report, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. If conditions other than those described in this report are found at the subject location(s), or the design has been altered in any way, GZA shall be so notified and afforded the opportunity to revise the report, as appropriate, to reflect the unanticipated changed conditions .
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, express or implied, is made.
4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

## SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
6. In preparing this report, GZA relied on certain information provided by the Client, state and local officials, and other parties referenced therein which were made available to GZA at the time of our evaluation. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.
7. Water level readings have been made in test holes (as described in this Report) and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this Report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The water table encountered in the course of the work may differ from that indicated in the Report.
8. GZA's services did not include an assessment of the presence of oil or hazardous materials at the property. Consequently, we did not consider the potential impacts (if any) that contaminants in soil or groundwater may have on construction activities, or the use of structures on the property.



9. Recommendations for foundation drainage, waterproofing, and moisture control address the conventional geotechnical engineering aspects of seepage control. These recommendations may not preclude an environment that allows the infestation of mold or other biological pollutants.

#### **COMPLIANCE WITH CODES AND REGULATIONS**

10. We used reasonable care in identifying and interpreting applicable codes and regulations. These codes and regulations are subject to various, and possibly contradictory, interpretations. Compliance with codes and regulations by other parties is beyond our control.

#### **COST ESTIMATES**

11. Unless otherwise stated, our cost estimates are only for comparative and general planning purposes. These estimates may involve approximate quantity evaluations. Note that these quantity estimates are not intended to be sufficiently accurate to develop construction bids, or to predict the actual cost of work addressed in this Report. Further, since we have no control over either when the work will take place or the labor and material costs required to plan and execute the anticipated work, our cost estimates were made by relying on our experience, the experience of others, and other sources of readily available information. Actual costs may vary over time and could be significantly more, or less, than stated in the Report.

#### **ADDITIONAL SERVICES**

12. GZA recommends that we be retained to provide services during any future: site observations, design, implementation activities, construction and/or property development/redevelopment. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.



## **Appendix B – Laboratory Results**



Client: Mr. David Barstow  
GZA GeoEnvironmental, Inc.  
35 Nutmeg Drive, Suite 325  
Trumbull, CT 06611

# Analytical Report

## CET# 26A0542

Report Date: January 22, 2026  
Project: Stratford WPCF  
Project Number: 18.0172256.70  
PO Number: 18.0172256.70

Connecticut Laboratory Certificate: PH 0116  
Massachusetts Laboratory Certificate: M-CT903  
Rhode Island Laboratory Certificate: 199



New York NELAP Accreditation: 11982  
Pennsylvania Laboratory Certificate: 68-02927

CET # : 26A0542

Project: Stratford WPCF

Project Number: 18.0172256.70

**SAMPLE SUMMARY**

The sample(s) were received at 4.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
GZ-101 0-2ft	26A0542-01	Soil	1/21/2026 10:40	01/21/2026
GZ-101 2-4ft	26A0542-02	Soil	1/21/2026 11:10	01/21/2026
GZ-101 4-5ft	26A0542-03	Soil	1/21/2026 11:30	01/21/2026

**Analyte: Percent Solids [SM 2540 G]**

**Analyst: SJMM**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
26A0542-01	GZ-101 0-2ft	90	1.0	%	1	BA62208	01/22/2026	01/22/2026 11:50	
26A0542-02	GZ-101 2-4ft	93	1.0	%	1	BA62208	01/22/2026	01/22/2026 11:50	
26A0542-03	GZ-101 4-5ft	86	1.0	%	1	BA62208	01/22/2026	01/22/2026 11:50	

CET # : 26A0542

Project: Stratford WPCF

Project Number: 18.0172256.70

**Client Sample ID GZ-101 0-2ft**

**Lab ID: 26A0542-01**

**PCBs by 8082**

**Analyst: ARB**

**Method: EPA 8082A**

**Matrix: Soil**

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
PCB-1221	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
PCB-1232	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
PCB-1242	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
PCB-1248	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
<b>PCB-1254</b>	<b>2.3</b>	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
PCB-1260	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
PCB-1268	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
PCB-1262	ND	0.11	2	EPA 3545A	BA62161	01/21/2026	01/22/2026 09:49	
<i>Surrogate: TCMX [1C]</i>	<i>116 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/22/2026 09:49</i>	
<i>Surrogate: TCMX [2C]</i>	<i>114 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/22/2026 09:49</i>	
<i>Surrogate: DCB [1C]</i>	<i>119 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/22/2026 09:49</i>	
<i>Surrogate: DCB [2C]</i>	<i>125 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/22/2026 09:49</i>	

CET # : 26A0542

Project: Stratford WPCF

Project Number: 18.0172256.70

**Client Sample ID GZ-101 2-4ft**

**Lab ID: 26A0542-02**

**PCBs by 8082**

**Analyst: ARB**

**Method: EPA 8082A**

**Matrix: Soil**

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1221	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1232	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1242	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1248	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1254	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1260	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1268	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
PCB-1262	ND	0.053	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:32	
<i>Surrogate: TCMX [1C]</i>	<i>111 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:32</i>	
<i>Surrogate: TCMX [2C]</i>	<i>112 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:32</i>	
<i>Surrogate: DCB [1C]</i>	<i>93.3 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:32</i>	
<i>Surrogate: DCB [2C]</i>	<i>99.0 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:32</i>	

CET # : 26A0542

Project: Stratford WPCF

Project Number: 18.0172256.70

**Client Sample ID GZ-101 4-5ft**

**Lab ID: 26A0542-03**

**PCBs by 8082**

**Analyst: ARB**

**Method: EPA 8082A**

**Matrix: Soil**

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1221	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1232	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1242	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1248	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1254	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1260	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1268	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
PCB-1262	ND	0.057	1	EPA 3545A	BA62161	01/21/2026	01/21/2026 18:52	
<i>Surrogate: TCMX [1C]</i>	<i>107 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:52</i>	
<i>Surrogate: TCMX [2C]</i>	<i>109 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:52</i>	
<i>Surrogate: DCB [1C]</i>	<i>86.1 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:52</i>	
<i>Surrogate: DCB [2C]</i>	<i>90.5 %</i>	<i>30 - 150</i>			BA62161	01/21/2026	<i>01/21/2026 18:52</i>	

CET # : 26A0542

Project: Stratford WPCF

Project Number: 18.0172256.70

### QUALITY CONTROL SECTION

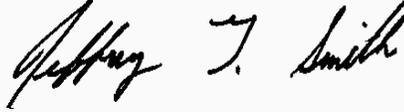
#### Batch BA62161 - EPA 8082A

Analyte	Result (mg/kg)	RL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
<b>Blank (BA62161-BLK1)</b>					Prepared: 1/21/2026 Analyzed: 1/21/2026				
PCB-1016	ND	0.050							
PCB-1221	ND	0.050							
PCB-1232	ND	0.050							
PCB-1242	ND	0.050							
PCB-1248	ND	0.050							
PCB-1254	ND	0.050							
PCB-1260	ND	0.050							
PCB-1268	ND	0.050							
PCB-1262	ND	0.050							
<i>Surrogate: TCMX [1C]</i>					105	30 - 150			
<i>Surrogate: TCMX [2C]</i>					108	30 - 150			
<i>Surrogate: DCB [1C]</i>					95.9	30 - 150			
<i>Surrogate: DCB [2C]</i>					102	30 - 150			
<b>LCS (BA62161-BS1)</b>					Prepared: 1/21/2026 Analyzed: 1/21/2026				
PCB-1016	0.882	0.050	1.000		88.2	40 - 140			
PCB-1260	0.913	0.050	1.000		91.3	40 - 140			
<i>Surrogate: TCMX [1C]</i>					95.3	30 - 150			
<i>Surrogate: TCMX [2C]</i>					96.3	30 - 150			
<i>Surrogate: DCB [1C]</i>					80.6	30 - 150			
<i>Surrogate: DCB [2C]</i>					85.1	30 - 150			
<b>LCS Dup (BA62161-BSD1)</b>					Prepared: 1/21/2026 Analyzed: 1/21/2026				
PCB-1016	0.845	0.050	1.000		84.5	40 - 140	4.24	20	
PCB-1260	0.868	0.050	1.000		86.8	40 - 140	5.08	20	
<i>Surrogate: TCMX [1C]</i>					95.5	30 - 150			
<i>Surrogate: TCMX [2C]</i>					95.9	30 - 150			
<i>Surrogate: DCB [1C]</i>					79.2	30 - 150			
<i>Surrogate: DCB [2C]</i>					82.6	30 - 150			

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Jeffrey Smith at 203-377-9984.

Sincerely,

This technical report was reviewed by Jeffrey Smith



David Ditta  
Laboratory Director

Project Manager

This report shall not be reproduced except in full, without the written approval of the laboratory

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The Relative Percent Difference (RPD) falls outside of control limits.
- + - The Surrogate was diluted out.
- \*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- \*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- \*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- \*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- \*I- Analyte exceeds method limits from second source standard in Initial Calibration Verification (ICV). No directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit

Reporting Limit (RL) is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.



80 Lupes Drive  
Stratford, CT 06615

Tel: (203) 377-9984  
Fax: (203) 377-9952  
email: cet1@cetlabs.com

### Quality Control Definitions and Abbreviations

Internal Standard (IS)	An Analyte added to each sample or sample extract. An internal standard is used to monitor retention time, calculate relative response, and quantify analytes of interest.
Surrogate Recovery	The % recovery for non-target organic compounds that are spiked into all samples. Used to determine method performance.
Continuing Calibration Batch	An analytical standard analyzed with each set of samples to verify initial calibration of the system. Samples that are analyzed together with the same method, sequence and lot of reagents within the same time period.
ND	Not detected at or above the specified reporting limit.
RL	RL is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.
Dilution	Multiplier added to detection levels (MDL) and/or sample results due to interferences and/or high concentration of target compounds.
Duplicate Result	Result from the duplicate analysis of a sample. Amount of analyte found in a sample.
Spike Level	Amount of analyte added to a sample
Matrix Spike Result	Amount of analyte found including amount that was spiked.
Matrix Spike Dup	Amount of analyte found in duplicate spikes including amount that was spike.
Matrix Spike % Recovery	% Recovery of spiked amount in sample.
Matrix Spike Dup % Recovery	% Recovery of spiked duplicate amount in sample.
RPD	Relative percent difference.
Blank	Method Blank that has been taken through all steps of the analysis.
LCS % Recovery	Laboratory Control Sample percent recovery. The amount of analyte recovered from a fortified sample.
Recovery Limits	A range within which specified measurements results must fall to be compliant.
CC	Calibration Verification

#### Flags:

- H- Recovery is above the control limits
- L- Recovery is below the control limits
- B- Compound detected in the Blank
- P- RPD of dual column results exceeds 40%
- #- Sample result too high for accurate spike recovery.



Connecticut Laboratory Certification PH0116  
Massachusetts Laboratory Certification M-CT903  
Pennsylvania NELAP Accreditation 68-02927

New York NELAP Accreditation 11982  
Rhode Island Certification 199



**Bureau of Water Protection and Land Reuse  
Remediation Division**

**REASONABLE CONFIDENCE PROTOCOL  
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM**

**Laboratory Name:** Complete Environmental Testing, Inc.

**Client:** GZA GeoEnvironmental, Inc.

**Project Location:** Stratford WPCF

**Project Number:** 18.0172256.70

**Sample Date(s):**  
01/21/2026

**Laboratory Sample ID(s):**  
26A0542-01 thru 26A0542-03

**List RCP Methods Used:**

EPA 8082A

<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1A</b>	Were the method-specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1B</b>	VPH and EPH Methods Only: Was the VPH or EPH method conducted without significant modifications (See respective RCPs)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3</b>	Were samples received at an appropriate temperature (<6° C)? If samples were received by the laboratory on the same day of collection and were stored and transported to the laboratory on ice, cooler temperatures above 6°C are acceptable.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<b>4</b>	Were all QA/QC performance criteria specified in the CT DEEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>5</b>	Were reporting limits / limits of quantitation specified or referenced on the chain-of-custody?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>5a</b>	Were these reporting limits / limits of quantitation met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>7</b>	Are project-specific matrix spikes and laboratory duplicates included in this data set for applicable RCPs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered, and all questions must be answered.

**I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.**

**Authorized Signature:**

**Position:** Laboratory Director

**Printed Name:** David Ditta

**Date:** 01/22/2026

**Name of Laboratory:** Complete Environmental Testing, Inc.

**This certification form is to be used for RCP methods only.**

## RCP Case Narrative

7- Project specific QC was not requested by the client.

### QC Batch/Sequence Report

<b>Batch</b>	<b>Sequence</b>	<b>CET ID</b>	<b>Sample ID</b>	<b>Specific Method</b>	<b>Matrix</b>	<b>Collection Date</b>
BA62161	S6A2210	26A0542-01	GZ-101 0-2ft	EPA 8082A	Soil	01/21/2026
BA62161	S6A2210	26A0542-02	GZ-101 2-4ft	EPA 8082A	Soil	01/21/2026
BA62161	S6A2210	26A0542-03	GZ-101 4-5ft	EPA 8082A	Soil	01/21/2026



COMPLETE ENVIRONMENTAL TESTING, INC.

# CHAIN OF CUSTODY

Volatile Soils Only:

Date and Time in Freezer

Client:

CET:

80 Lupes Drive Stratford, CT 06615		Tel: (203) 377-9984 Fax: (203) 377-9952 e-mail: cetservices@cetlabs.com e-mail: bottleorders@cetlabs.com		Matrix A=Air S=Soil W=Water DW=Drinking Water C=Cassette Solid Wipe Other (Specify)		Turnaround Time ** (check one)														Metals		Additional Analysis																							
Sample ID/Sample Depths (include Units for any sample depths provided)		Collection Date/Time		Same Day *		Next Day *		Two Day *		Three Day *		Std (5-7 Days)		8260 CT List	8260 Aromatics	8260 Halogens	CT ETPH	8270 CT List	8270 PNAs	PCBs <input type="checkbox"/> SOX <input type="checkbox"/> ASE	Pesticides	8 RCRA	13 Priority Poll	15 CT DEP	Total	SPLP	TCLP	Dissolved	Field Filtered	Lab to Filter	PCBs (Micrograms)												Hold	TOTAL # OF CONT.	NOTE #
GZ-101 (0-2')		11/21/2010 1040		X		X																																							
GZ-101 (2-4')		1110		X		X																																							
GZ-101 (4-5')		1130		X		X																																							
<del>GZ-101 (5-5.75')</del>		<del>1130</del>																																											
GZ-102 (0-2')		1340																																											
GZ-102 (2-2.5')		1400																																											
GZ-103 (0-2')		1200																																											
GZ-103 (2-4')		1210																																											
GZ-103 (4-4.75')		1230																																											
PRESERVATIVE (Cl-HCl, N-HNO <sub>3</sub> , S-H <sub>2</sub> SO <sub>4</sub> , Na-NaOH, C=Cool, O=Other)																																													
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O=Other)																																													
Soil VOCs Only (M=MeOH B=Sodium Bisulfate W=Water F=Empty Vial E=Encore)																																													
RELINQUISHED BY: <i>Matthew DeLong</i>		DATE/TIME: 11/21/10 1509		RECEIVED BY: <i>David Barstow</i>		DATE/TIME: 11/21/20 1510																																							
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		DATE/TIME:																																							
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		DATE/TIME:																																							
<b>Client / Reporting Information</b>																																													
Company Name		GZA Geoscientists		Address		35 Nutmeg Dr Suite 325		City		Stratford		State		CT		Zip		06611		Report To:		Dave Barstow		E-mail		david.barstow@gza.com		Phone #		Fax #															
Project:		Stratford WPCF		PO #:		18-0172256-70		Location:		Stratford		Project #:		18-0172256-70		CET Quote #:		Collector(s):		LC/MD		QA/QC		<input checked="" type="checkbox"/> Std		<input type="checkbox"/> Site Specific (MS/MSD) *		<input checked="" type="checkbox"/> RCP Pkg *		<input type="checkbox"/> DQAW *		Data Report		<input checked="" type="checkbox"/> PDF		<input type="checkbox"/> EDD - Specify Format		EXC		Other					
RSR Reporting Limits (check one)		<input checked="" type="checkbox"/> GA		<input type="checkbox"/> GB		<input type="checkbox"/> SWP		<input type="checkbox"/> Other		CT, RCP, RDEC		Laboratory Certification Needed (check one)		<input checked="" type="checkbox"/> CT		<input type="checkbox"/> NY		<input type="checkbox"/> RI		<input type="checkbox"/> MA		<input type="checkbox"/> PA		Temp Upon Receipt		4.0 °C		Evidence of Cooling:		Y N		PAGE		1		OF		1							



Client: Mr. David Barstow  
GZA GeoEnvironmental, Inc.  
35 Nutmeg Drive, Suite 325  
Trumbull, CT 06611

# Analytical Report

## CET# 26A0650

Report Date: January 26, 2026  
Project: Stratford WPCF  
Project Number: 18.0172256.70  
PO Number: 18.0172256.70

Connecticut Laboratory Certificate: PH 0116  
Massachusetts Laboratory Certificate: M-CT903  
Rhode Island Laboratory Certificate: 199



New York NELAP Accreditation: 11982  
Pennsylvania Laboratory Certificate: 68-02927

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

**SAMPLE SUMMARY**

The sample(s) were received at 4.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
GZ-102 0-2ft	26A0650-01	Soil	1/21/2026 13:40	01/21/2026
GZ-102 2-2.75ft	26A0650-02	Soil	1/21/2026 14:00	01/21/2026
GZ-103 0-2ft	26A0650-03	Soil	1/21/2026 12:00	01/21/2026
GZ-103 2-4ft	26A0650-04	Soil	1/21/2026 12:10	01/21/2026
GZ-103 4-4.75ft	26A0650-05	Soil	1/21/2026 12:30	01/21/2026

**Analyte: Percent Solids [SM 2540 G]**

**Analyst: AKC**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
26A0650-01	GZ-102 0-2ft	86	1.0	%	1	BA62349	01/23/2026	01/23/2026 16:52	
26A0650-02	GZ-102 2-2.75ft	84	1.0	%	1	BA62349	01/23/2026	01/23/2026 16:52	
26A0650-03	GZ-103 0-2ft	89	1.0	%	1	BA62349	01/23/2026	01/23/2026 16:52	
26A0650-04	GZ-103 2-4ft	91	1.0	%	1	BA62349	01/23/2026	01/23/2026 16:52	
26A0650-05	GZ-103 4-4.75ft	89	1.0	%	1	BA62349	01/23/2026	01/23/2026 16:52	

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

Client Sample ID GZ-102 0-2ft

Lab ID: 26A0650-01

PCBs by 8082

Analyst: ARB

Method: EPA 8082A

Matrix: Soil

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
PCB-1221	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
PCB-1232	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
PCB-1242	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
PCB-1248	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
<b>PCB-1254</b>	<b>1.0</b>	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
PCB-1260	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
PCB-1268	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
PCB-1262	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:04	
<i>Surrogate: TCMX [1C]</i>	<i>96.4 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:04</i>	
<i>Surrogate: TCMX [2C]</i>	<i>96.3 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:04</i>	
<i>Surrogate: DCB [1C]</i>	<i>125 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:04</i>	
<i>Surrogate: DCB [2C]</i>	<i>131 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:04</i>	

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

**Client Sample ID GZ-102 2-2.75ft**

**Lab ID: 26A0650-02**

**PCBs by 8082**

**Analyst: ARB**

**Method: EPA 8082A**

**Matrix: Soil**

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1221	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1232	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1242	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1248	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1254	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1260	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1268	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
PCB-1262	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:43	
<i>Surrogate: TCMX [1C]</i>	<i>92.2 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:43</i>	
<i>Surrogate: TCMX [2C]</i>	<i>94.8 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:43</i>	
<i>Surrogate: DCB [1C]</i>	<i>93.2 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:43</i>	
<i>Surrogate: DCB [2C]</i>	<i>93.6 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:43</i>	

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

**Client Sample ID GZ-103 0-2ft**

**Lab ID: 26A0650-03**

**PCBs by 8082**

**Analyst: ARB**

**Method: EPA 8082A**

**Matrix: Soil**

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
PCB-1221	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
PCB-1232	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
PCB-1242	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
PCB-1248	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
<b>PCB-1254</b>	<b>1.0</b>	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
PCB-1260	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
PCB-1268	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
PCB-1262	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:08	
<i>Surrogate: TCMX [1C]</i>	<i>107 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:08</i>	
<i>Surrogate: TCMX [2C]</i>	<i>110 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:08</i>	
<i>Surrogate: DCB [1C]</i>	<i>112 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:08</i>	
<i>Surrogate: DCB [2C]</i>	<i>114 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:08</i>	

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

Client Sample ID GZ-103 2-4ft

Lab ID: 26A0650-04

PCBs by 8082

Analyst: ARB

Method: EPA 8082A

Matrix: Soil

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
PCB-1221	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
PCB-1232	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
PCB-1242	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
PCB-1248	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
<b>PCB-1254</b>	<b>0.27</b>	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
PCB-1260	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
PCB-1268	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
PCB-1262	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 17:27	
<i>Surrogate: TCMX [1C]</i>	<i>92.1 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:27</i>	
<i>Surrogate: TCMX [2C]</i>	<i>93.6 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:27</i>	
<i>Surrogate: DCB [1C]</i>	<i>95.3 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:27</i>	
<i>Surrogate: DCB [2C]</i>	<i>98.2 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 17:27</i>	

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

**Client Sample ID GZ-103 4-4.75ft**

**Lab ID: 26A0650-05**

**PCBs by 8082**

**Analyst: ARB**

**Method: EPA 8082A**

**Matrix: Soil**

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
PCB-1221	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
PCB-1232	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
PCB-1242	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
PCB-1248	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
PCB-1254	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
<b>PCB-1260</b>	<b>0.14</b>	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
PCB-1268	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
PCB-1262	ND	0.050	1	EPA 3545A	BA62346	01/23/2026	01/23/2026 16:23	
<i>Surrogate: TCMX [1C]</i>	<i>83.0 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:23</i>	
<i>Surrogate: TCMX [2C]</i>	<i>84.9 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:23</i>	
<i>Surrogate: DCB [1C]</i>	<i>93.7 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:23</i>	
<i>Surrogate: DCB [2C]</i>	<i>94.9 %</i>	<i>30 - 150</i>			BA62346	01/23/2026	<i>01/23/2026 16:23</i>	

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

**QUALITY CONTROL SECTION**

**Batch BA62346 - EPA 8082A**

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
<b>Blank (BA62346-BLK1)</b>					Prepared: 1/23/2026 Analyzed: 1/23/2026				
PCB-1016	ND	0.050							
PCB-1221	ND	0.050							
PCB-1232	ND	0.050							
PCB-1242	ND	0.050							
PCB-1248	ND	0.050							
PCB-1254	ND	0.050							
PCB-1260	ND	0.050							
PCB-1268	ND	0.050							
PCB-1262	ND	0.050							
<i>Surrogate: TCMX [1C]</i>					95.3	30 - 150			
<i>Surrogate: TCMX [2C]</i>					96.3	30 - 150			
<i>Surrogate: DCB [1C]</i>					85.6	30 - 150			
<i>Surrogate: DCB [2C]</i>					87.5	30 - 150			
<b>LCS (BA62346-BS1)</b>					Prepared: 1/23/2026 Analyzed: 1/23/2026				
PCB-1016	0.869	0.050	1.000		86.9	40 - 140			
PCB-1260	0.923	0.050	1.000		92.3	40 - 140			
<i>Surrogate: TCMX [1C]</i>					95.7	30 - 150			
<i>Surrogate: TCMX [2C]</i>					95.6	30 - 150			
<i>Surrogate: DCB [1C]</i>					87.0	30 - 150			
<i>Surrogate: DCB [2C]</i>					90.2	30 - 150			
<b>LCS Dup (BA62346-BSD1)</b>					Prepared: 1/23/2026 Analyzed: 1/23/2026				
PCB-1016	0.837	0.050	1.000		83.7	40 - 140	3.72	20	
PCB-1260	0.883	0.050	1.000		88.3	40 - 140	4.44	20	
<i>Surrogate: TCMX [1C]</i>					91.1	30 - 150			
<i>Surrogate: TCMX [2C]</i>					91.0	30 - 150			
<i>Surrogate: DCB [1C]</i>					82.8	30 - 150			
<i>Surrogate: DCB [2C]</i>					84.5	30 - 150			

CET # : 26A0650

Project: Stratford WPCF

Project Number: 18.0172256.70

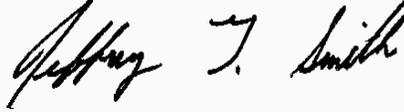
**Batch BA62349 - SM 2540 G**

Analyte	Result (%)	RL (%)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
<b>Duplicate (BA62349-DUP1)</b>		<b>Source: 26A0650-05</b>		Prepared: 1/23/2026 Analyzed: 1/23/2026					
Percent Solids	89	1.0		89			0.357	5	

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Jeffrey Smith at 203-377-9984.

Sincerely,

This technical report was reviewed by Jeffrey Smith



David Ditta  
Laboratory Director

Project Manager

This report shall not be reproduced except in full, without the written approval of the laboratory

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The Relative Percent Difference (RPD) falls outside of control limits.
- + - The Surrogate was diluted out.
- \*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- \*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- \*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- \*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- \*I- Analyte exceeds method limits from second source standard in Initial Calibration Verification (ICV). No directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit

Reporting Limit (RL) is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.



80 Lupes Drive  
Stratford, CT 06615

Tel: (203) 377-9984  
Fax: (203) 377-9952  
email: cet1@cetlabs.com

## Quality Control Definitions and Abbreviations

Internal Standard (IS)	An Analyte added to each sample or sample extract. An internal standard is used to monitor retention time, calculate relative response, and quantify analytes of interest.
Surrogate Recovery	The % recovery for non-target organic compounds that are spiked into all samples. Used to determine method performance.
Continuing Calibration Batch	An analytical standard analyzed with each set of samples to verify initial calibration of the system. Samples that are analyzed together with the same method, sequence and lot of reagents within the same time period.
ND	Not detected at or above the specified reporting limit.
RL	RL is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.
Dilution	Multiplier added to detection levels (MDL) and/or sample results due to interferences and/or high concentration of target compounds.
Duplicate Result	Result from the duplicate analysis of a sample. Amount of analyte found in a sample.
Spike Level	Amount of analyte added to a sample
Matrix Spike Result	Amount of analyte found including amount that was spiked.
Matrix Spike Dup	Amount of analyte found in duplicate spikes including amount that was spike.
Matrix Spike % Recovery	% Recovery of spiked amount in sample.
Matrix Spike Dup % Recovery	% Recovery of spiked duplicate amount in sample.
RPD	Relative percent difference.
Blank	Method Blank that has been taken through all steps of the analysis.
LCS % Recovery	Laboratory Control Sample percent recovery. The amount of analyte recovered from a fortified sample.
Recovery Limits	A range within which specified measurements results must fall to be compliant.
CC	Calibration Verification

### Flags:

- H- Recovery is above the control limits
- L- Recovery is below the control limits
- B- Compound detected in the Blank
- P- RPD of dual column results exceeds 40%
- #- Sample result too high for accurate spike recovery.



Connecticut Laboratory Certification PH0116  
Massachusetts Laboratory Certification M-CT903  
Pennsylvania NELAP Accreditation 68-02927

New York NELAP Accreditation 11982  
Rhode Island Certification 199



**Bureau of Water Protection and Land Reuse  
Remediation Division**

**REASONABLE CONFIDENCE PROTOCOL  
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM**

**Laboratory Name:** Complete Environmental Testing, Inc.

**Client:** GZA GeoEnvironmental, Inc.

**Project Location:** Stratford WPCF

**Project Number:** 18.0172256.70

**Sample Date(s):**  
01/21/2026

**Laboratory Sample ID(s):**  
26A0650-01 thru 26A0650-05

**List RCP Methods Used:**

EPA 8082A

<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1A</b>	Were the method-specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1B</b>	VPH and EPH Methods Only: Was the VPH or EPH method conducted without significant modifications (See respective RCPs)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3</b>	Were samples received at an appropriate temperature (<6° C)? If samples were received by the laboratory on the same day of collection and were stored and transported to the laboratory on ice, cooler temperatures above 6°C are acceptable.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<b>4</b>	Were all QA/QC performance criteria specified in the CT DEEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>5</b>	Were reporting limits / limits of quantitation specified or referenced on the chain-of-custody?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>5a</b>	Were these reporting limits / limits of quantitation met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>7</b>	Are project-specific matrix spikes and laboratory duplicates included in this data set for applicable RCPs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered, and all questions must be answered.

**I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.**

**Authorized Signature:**

**Position:** Laboratory Director

**Printed Name:** David Ditta

**Date:** 01/26/2026

**Name of Laboratory:** Complete Environmental Testing, Inc.

**This certification form is to be used for RCP methods only.**

## RCP Case Narrative

7- Project-specific QC was not requested by the client.

### QC Batch/Sequence Report

<b>Batch</b>	<b>Sequence</b>	<b>CET ID</b>	<b>Sample ID</b>	<b>Specific Method</b>	<b>Matrix</b>	<b>Collection Date</b>
BA62346	S6A2303	26A0650-01	GZ-102 0-2ft	EPA 8082A	Soil	01/21/2026
BA62346	S6A2303	26A0650-02	GZ-102 2-2.75ft	EPA 8082A	Soil	01/21/2026
BA62346	S6A2303	26A0650-03	GZ-103 0-2ft	EPA 8082A	Soil	01/21/2026
BA62346	S6A2303	26A0650-04	GZ-103 2-4ft	EPA 8082A	Soil	01/21/2026
BA62346	S6A2303	26A0650-05	GZ-103 4-4.75ft	EPA 8082A	Soil	01/21/2026



26A0650



COMPLETE ENVIRONMENTAL TESTING, INC.

# CHAIN OF CUSTODY

Volatile Soils Only:

Date and Time in Freezer

Client:

CET:

80 Lupes Drive  
Stratford, CT 06615

Tel: (203) 377-9984  
Fax: (203) 377-9952  
e-mail: cetservices@cetlabs.com  
e-mail: bottleorders@cetlabs.com

Matrix  
A=Air  
S=Soil  
W=Water  
DW=Drinking  
Water  
C=Cassette  
Solid  
Wipe  
Other  
(Specify)

Turnaround Time \*\*  
(check one)

Same Day \*  
Next Day \*  
Two Day \*  
Three Day \*  
Std (5-7 Days)

8260 CT List  
8260 Aromatics  
8260 Halogens  
CT ETPH  
8270 CT List  
8270 PNA's  
PCBs  SOX  ASE  
Pesticides  
8 RCRA  
13 Priority Poll  
15 CT DEP  
Total  
SPLP  
TCLP  
Dissolved  
Field Filtered  
Lab to Filter

Metals

Additional Analysis

TOTAL # OF CONT.  
NOTE #

Sample ID/Sample Depths (include Units for any sample depths provided)	Collection Date/Time	Matrix	Turnaround Time ** (check one)	8260 CT List	8260 Aromatics	8260 Halogens	CT ETPH	8270 CT List	8270 PNA's	PCBs <input type="checkbox"/> SOX <input type="checkbox"/> ASE	Pesticides	8 RCRA	13 Priority Poll	15 CT DEP	Total	SPLP	TCLP	Dissolved	Field Filtered	Lab to Filter	Additional Analysis	TOTAL # OF CONT.	NOTE #
GZ-101 (0-2')	11/21/10 1040	S	<input checked="" type="checkbox"/>																		X	1	
GZ-101 (2-4')	1110	S	<input checked="" type="checkbox"/>																		X	1	
GZ-101 (4-5')	1130	S	<input checked="" type="checkbox"/>																		X	1	
<del>GZ-101 (5-5.75')</del>	<del>1130</del>																				X	1	
GZ-102 (0-2')	1340	S																			X	1	
GZ-102 (2-2.5')	1400	S																			X	1	
GZ-103 (0-2')	1200	S																			X	1	
GZ-103 (2-4')	1210	S																			X	1	
GZ-103 (4-4.75')	1230	S																			X	1	

PRESERVATIVE (Cl-HCl, N-HNO<sub>3</sub>, S-H<sub>2</sub>SO<sub>4</sub>, Na-NaOH, C=Cool, O-Other)

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)

Soil VOCs Only (M=MeOH B=Sodium Bisulfate W=Water F=Empty Vial E=Encore)

RELINQUISHED BY: Matthew DeLong DATE/TIME: 11/21/10 1509 RECEIVED BY: David Barstow DATE/TIME: 11/21/10 1510

NOTES:

RELINQUISHED BY: DATE/TIME RECEIVED BY:

### Client / Reporting Information

Company Name

GZA Geoscientists

Address

35 Nutmeg Dr Suite 325

City

Stratford

State

CT

Zip

06611

Report To:

Dave Barstow

E-mail

david.barstow@gza.com

Phone #

Fax #

### Project Information

Project: Stratford WPCF

PO #: 18-0172256-70

Location: Stratford

Project #: 18-0172256-70

CET Quote #

Collector(s): LC / MD

QA/QC

Std

Site Specific (MS/MSD) \*

RCP Pkg \*

DQAW \*

Data Report  PDF

EDD - Specify Format EXCEL

Other

RSR Reporting Limits (check one)

GA

GB

SWP

Other CT RCP, RDEC

Laboratory Certification Needed (check one)

CT

NY

RI

MA

PA

Temp Upon Receipt

4.0 °C

Evidence of Cooling

Y  N

PAGE 1 OF 1

\* Additional charge may apply. \*\* TAT begins when the samples are received at the Lab and all issues are resolved. TAT for samples received after 3 p.m. will start on the next business day. All samples picked up by courier service will be considered next business day receipt for TAT purposes.

REV. 12/18

## Marie Sabo

---

**From:** CET Services  
**Sent:** Friday, January 23, 2026 2:09 PM  
**To:** Marie Sabo  
**Subject:** FW: CET# 26A0542 FINAL

---

**From:** Dave Barstow <david.barstow@gza.com>  
**Sent:** Friday, January 23, 2026 2:06 PM  
**To:** CET Services <cetservices@cetlabs.com>  
**Cc:** Matt deCoursey <Matthew.deCoursey@gza.com>; Chris Eggers <Christopher.Eggers@gza.com>; Alex Karp <Alexander.Karp@gza.com>  
**Subject:** RE: CET# 26A0542 FINAL

Hello,  
Can you run the remainder of the soils samples and expedite the test results?

Thanks  
Dave

**David Barstow, P.E.**  
**Geotechnical Engineer / Associate Principal**  
GZA | 95 Glastonbury Boulevard, 3<sup>rd</sup> Floor | Glastonbury, CT 06033  
o: 860.858.3106 | c: 860.250.2131 | [david.barstow@gza.com](mailto:david.barstow@gza.com) | [www.gza.com](http://www.gza.com) | [LinkedIn](#)

GEOTECHNICAL | ENVIRONMENTAL | ECOLOGICAL | WATER | CONSTRUCTION MANAGEMENT  
Known for excellence. Built on trust.

---

**From:** CET Services <cetservices@cetlabs.com>  
**Sent:** Thursday, January 22, 2026 2:20 PM  
**To:** Dave Barstow <david.barstow@gza.com>  
**Subject:** [EXTERNAL] CET# 26A0542 FINAL

Good afternoon,

Your technical report from Complete Environmental Testing is attached. These results will also be available on our Client Connect portal found at <https://results.cetlabs.com/>

Should you have any questions regarding this report please feel free to contact the laboratory.

**Give us your feedback:** [Survey](#)



GZA GeoEnvironmental, Inc.

**TECHNICAL SPECIFICATION ATTACHMENT – A3**

Prior Construction Drawings:

- “Town of Stratford, Connecticut – System of Sewers – Contract No. 2 – Construction of Secondary Treatment Facilities at Stratford Water Pollution Control Plant,” by Charles A. Maguire & Associates, Inc., dated 1970 (1970 C.A.M. Drawings).
- “Town of Stratford, Connecticut – Hurricane Protection for Water Pollution Control Plant – Contract No. 12,” CE Maguire, Inc., dated 1974 (1974 C.E.M Drawings).
- “Town of Stratford, Connecticut – Contract No. 06-01 – Water Pollution Control Facility Upgrade,” by Camp Dresser & McKee Inc., dated March 2006, As built drawings revised August 23, 2010 (2010 CDM Drawings).

SEP 8 1970

# TOWN OF STRATFORD, CONNECTICUT SYSTEM OF SEWERS

## CONTRACT NO. 2



U. S. DEPARTMENT OF THE INTERIOR  
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION  
NORTHEAST REGION

These documents have been reviewed and are approved in accordance with the requirements of the Construction Grants Program.

*William E. Johnson*  
Reviewing Engineer

*Stuart A. Peterson* 9/11/70  
Chief, Construction Grants Program Date

New England

64  
7699

# CONSTRUCTION OF SECONDARY TREATMENT FACILITIES AT STRATFORD WATER POLLUTION CONTROL PLANT

CHARLES A. MAGUIRE & ASSOCIATES INC.

ENGINEERS

PROVIDENCE

BOSTON

WETHERSFIELD

STATE WATER RESOURCES  
COMMISSION  
RECEIVED  
SEP 10 1970

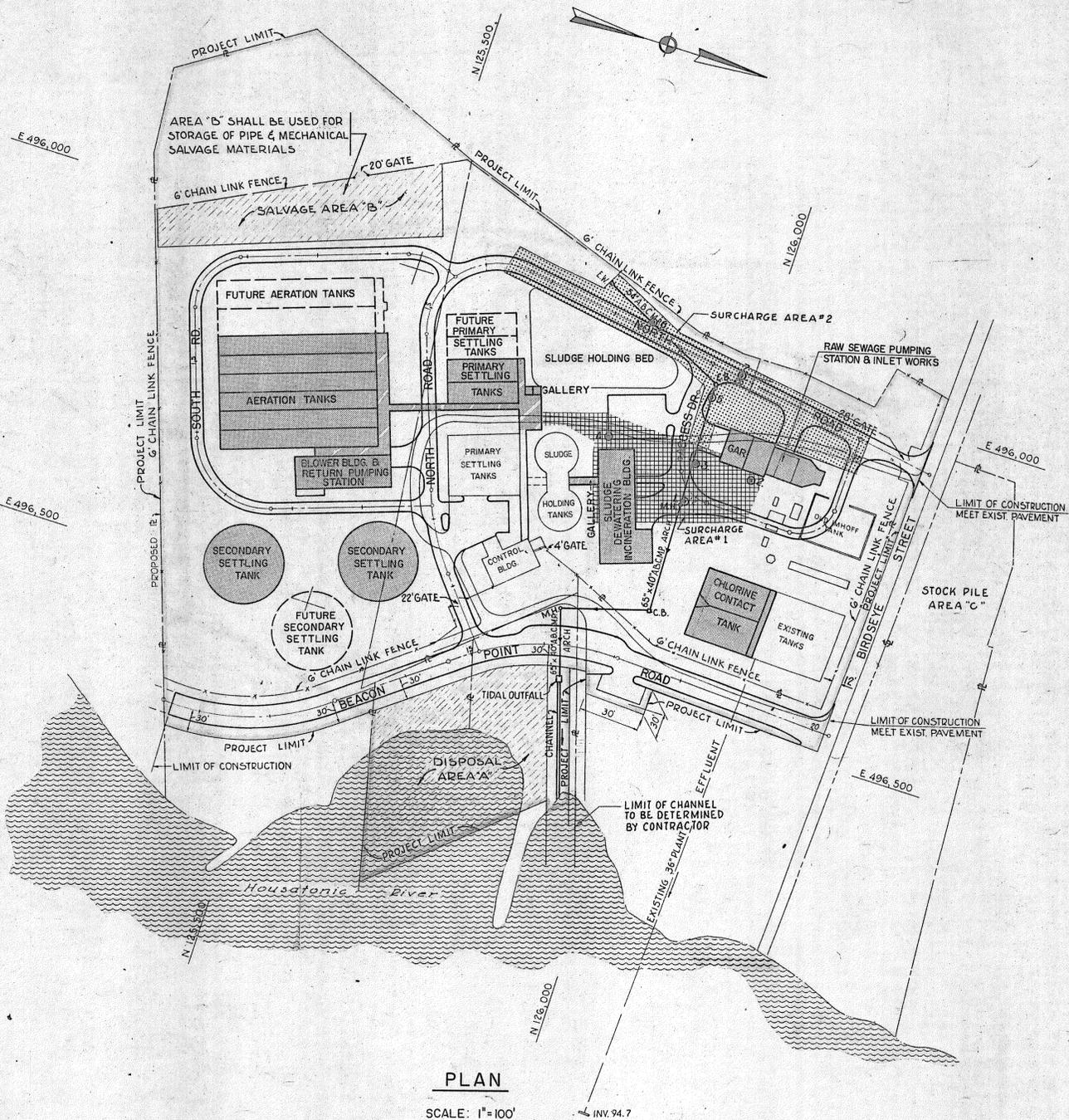
ANSWERED \_\_\_\_\_  
REFERRED \_\_\_\_\_  
FILED \_\_\_\_\_

APPROVED  
STATE OF CONNECTICUT  
WATER RESOURCES COMMISSION

BY *[Signature]*  
DATE *SEP 1*







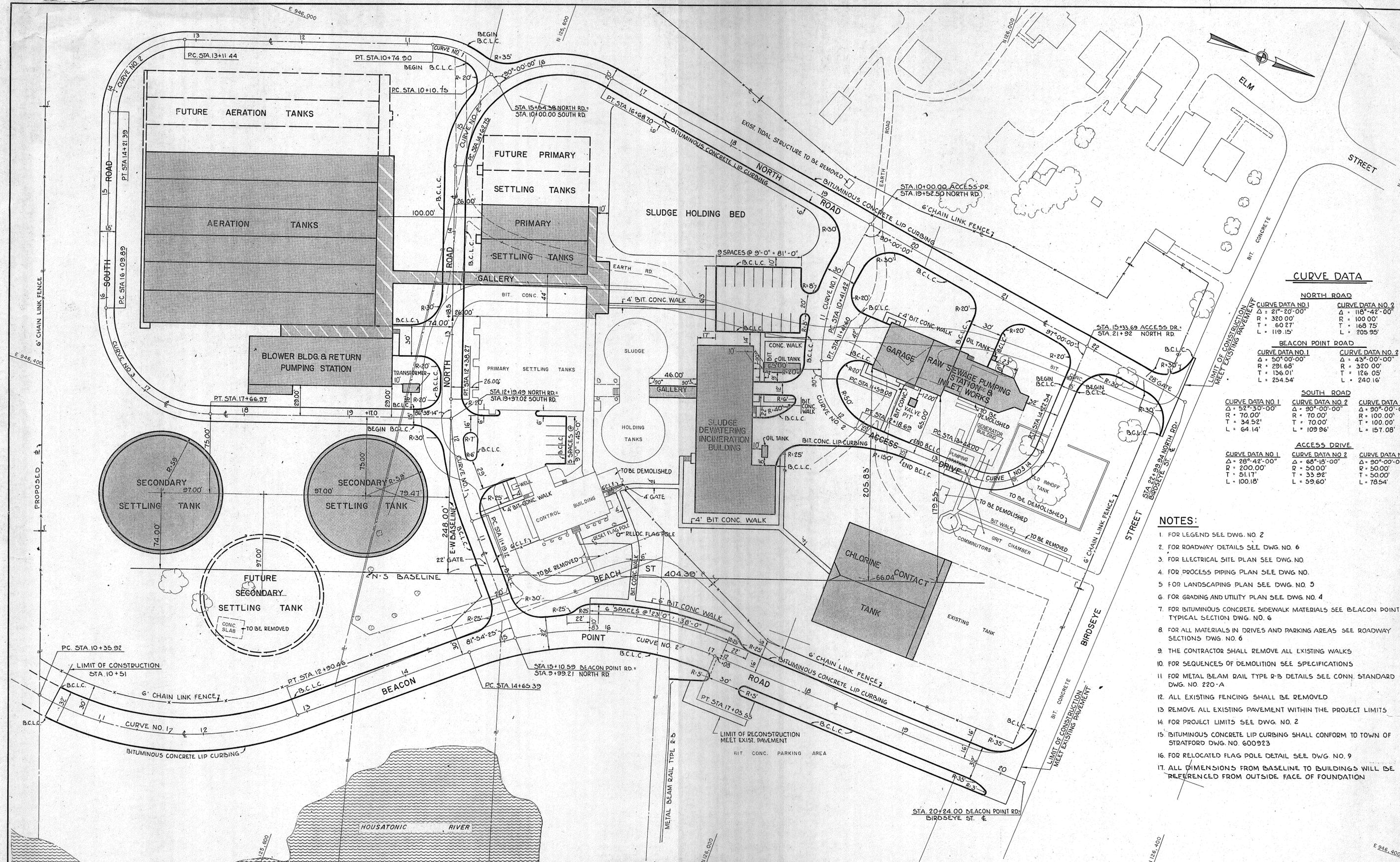
PLAN  
SCALE: 1"=100'

LEGEND		DESCRIPTION
EXISTING	PROPOSED	
PAVED	FUTURE	STRUCTURES
DIRT	W/O CURB	PAVEMENT
6' C.L.F.	6' C.L.F.	CHAIN LINK FENCE
—	—	EDGE OF WATER
—	—	PROPERTY LINE
—	2" GAS	GAS LINE
—	2" WATER	WATER LINE
—	10	CONTOURS
—	A.B.C.M.P.-S.D.	STORM DRAIN (ASBESTOS BONDED CORRUGATED METAL PIPE)
—	R.D.	ROOF DRAIN
—	S.S.	SANITARY
—	—	PAVED DITCH
△	△	THRUST BLOCK
□ C.B.	□ M.C.E.	METAL CULVERT END
○ C.B.	○ C.B.	CATCH BASIN
○ M.H.	○ M.H.	MANHOLE
○	○	HYDRANT
○	○	GATE VALVE AND BOX
○	○	CLEANOUT
○	○	SPOT ELEVATIONS
○	○	SOIL BORINGS
○	○	BORINGS BY U.S. ARMY CORPS OF ENGINEERS
○	○	OBSERVATION WELL BORINGS
○	○	SETTLEMENT PLATFORM
○	○	SURCHARGE AREA

- NOTES**
1. THE AREAS OUTLINED AND NOTED AS SURCHARGE AREAS 1 AND 2 SHALL RECEIVE A 4" LAYER OF FILL ABOVE FINISHED GRADE. FOR DETAILS SEE SPECIFICATIONS AND DRAWING NO. 8.
  2. THE SURCHARGE PERIOD SHALL BE AS SPECIFIED IN THE SPECIFICATIONS.
  3. ALL EXISTING UTILITIES AND PIPES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A 24" x 4" CAST IRON PIPE TEMPORARY BYPASS BETWEEN THE PRIMARY SETTLING TANKS AND THE PUMP STATION DURING SURCHARGING AND SHALL MAINTAIN THE TEMPORARY BYPASS UNTIL THE NEW 36" PERMANENT FORCE MAIN IS IN OPERATION. SEE SPECIFICATIONS.
  4. FOR DETAILS OF THE SETTLEMENT PLATE AND SURCHARGE SEE DWG. NO. 9
  5. CHAIN LINK FENCE SHALL BE INSTALLED 1 FOOT WITHIN THE PROPERTY LINE OR AS INDICATED ON THE PLANS
  6. ELEVATION 0.00 MEAN SEA LEVEL TOWN OF STRATFORD EQUALS ELEVATION 100.00 ON ARCHITECTURAL, STRUCTURAL, PLUMBING, ELECTRICAL, HEATING AND VENTILATING PLANS
  7. ONLY NON-COMBUSTIBLE MATERIALS FROM WITHIN THE PROJECT LIMITS SHALL BE DUMPED AT DISPOSAL AREA 'A' ALL AS DIRECTED BY THE OWNER. THIS AREA SHALL BE GRADED TO A FINISHED ELEVATION OF 106.0 AND RECEIVE A MINIMUM OF ONE FOOT OF FILL OVER THE DUMPED MATERIAL.
  8. ALL EXCESS EXCAVATED MATERIAL NOT USED FOR FILL IN AREA 'A' SHALL BE STOCKPILED IN AREA 'C', AS DIRECTED BY THE OWNER.

REVISION NUMBER	DESCRIPTION	INT.	DATE	REVISION NUMBER	DESCRIPTION	INT.	DATE

DRAWN: A. J. JALINSKAS CHECKED: R. D. TONG DATE: AUGUST 1970	DESIGNED: AT. STUMBERS APPROVED: O. E. JOHNSON	TOWN OF STRATFORD, CONNECTICUT <b>SYSTEM OF SEWERS</b> CONTRACT NO. 2 GENERAL <b>GENERAL SITE LAYOUT</b>	SCALE AS NOTED C. A. M. NO. 1165 DRAWING NO. <b>2</b>
CHARLES A. MAGUIRE & ASSOCIATES ENGINEERS PROVIDENCE, R.I.    WETHERSFIELD, CONN.    BOSTON, MASS.			APPROVED TOWN OF STRATFORD



**CURVE DATA**

NORTH ROAD	
CURVE DATA NO. 1	CURVE DATA NO. 2
Δ = 21°-20'-00"	Δ = 118°-42'-00"
R = 320.00'	R = 100.00'
T = 60.27'	T = 168.75'
L = 119.15'	L = 205.95'

BEACON POINT ROAD	
CURVE DATA NO. 1	CURVE DATA NO. 2
Δ = 50°-00'-00"	Δ = 43°-00'-00"
R = 291.68'	R = 320.00'
T = 136.01'	T = 126.05'
L = 254.54'	L = 240.16'

SOUTH ROAD		
CURVE DATA NO. 1	CURVE DATA NO. 2	CURVE DATA NO. 3
Δ = 52°-30'-00"	Δ = 90°-00'-00"	Δ = 90°-00'-00"
R = 70.00'	R = 70.00'	R = 100.00'
T = 34.52'	T = 70.00'	T = 100.00'
L = 64.14'	L = 109.96'	L = 157.08'

ACCESS DRIVE		
CURVE DATA NO. 1	CURVE DATA NO. 2	CURVE DATA NO. 3
Δ = 28°-42'-00"	Δ = 68°-18'-00"	Δ = 90°-00'-00"
R = 200.00'	R = 50.00'	R = 50.00'
T = 51.17'	T = 33.92'	T = 50.00'
L = 100.18'	L = 59.60'	L = 78.54'

**NOTES:**

- FOR LEGEND SEE DWG. NO. 2
- FOR ROADWAY DETAILS SEE DWG. NO. 6
- FOR ELECTRICAL SITE PLAN SEE DWG. NO.
- FOR PROCESS PIPING PLAN SEE DWG. NO. 5
- FOR LANDSCAPING PLAN SEE DWG. NO. 5
- FOR GRADING AND UTILITY PLAN SEE DWG. NO. 4
- FOR BITUMINOUS CONCRETE SIDEWALK MATERIALS SEE BEACON POINT RD. TYPICAL SECTION DWG. NO. 6
- FOR ALL MATERIALS IN DRIVES AND PARKING AREAS SEE ROADWAY SECTIONS DWG. NO. 6
- THE CONTRACTOR SHALL REMOVE ALL EXISTING WALKS
- FOR SEQUENCES OF DEMOLITION SEE SPECIFICATIONS
- FOR METAL BEAM RAIL TYPE R-B DETAILS SEE CONN. STANDARD DWG. NO. 220-A
- ALL EXISTING FENCING SHALL BE REMOVED
- REMOVE ALL EXISTING PAVEMENT WITHIN THE PROJECT LIMITS
- FOR PROJECT LIMITS SEE DWG. NO. 2
- BITUMINOUS CONCRETE LIP CURBING SHALL CONFORM TO TOWN OF STRATFORD DWG. NO. 600923
- FOR RELOCATED FLAG POLE DETAIL SEE DWG. NO. 9
- ALL DIMENSIONS FROM BASELINE TO BUILDINGS WILL BE REFERENCED FROM OUTSIDE FACE OF FOUNDATION

REVISION NUMBER	DESCRIPTION	INT.	DATE	REVISION NUMBER	DESCRIPTION	INT.	DATE

DRAWN: A. J. JALINSKAS    DESIGNED: A. T. STUMBERS  
 CHECKED: R. D. TONG    APPROVED: O. E. JOHNSON  
 DATE: AUGUST 1970

CHARLES A. MAGUIRE & ASSOCIATES ENGINEERS  
 PROVIDENCE, R.I.    WETHERSFIELD, CONN.    BOSTON, MASS.

APPROVED \_\_\_\_\_  
 TOWN OF STRATFORD

TOWN OF STRATFORD, CONNECTICUT  
**SYSTEM OF SEWERS**  
 CONTRACT NO. 2

SCALE  
 1" = 40'

GENERAL  
**SITE LAYOUT**

C.A.M. NO. 1165  
 DRAWING NO. **3**