



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID: ---	Sample Type: ---	Tested By:	GA
Sample ID: ---	Test Date: 03/29/21	Checked By:	bfs
Depth : ---	Test Id:	613636	

## Moisture Content of Soil and Rock - ASTM D2216

Boring ID	Sample ID	Depth	Description	Moisture Content, %
USMPDI-	058RAB-10-20-210317	---	Moist, very dark grayish brown sandy silt	11.3
USMPDI-	062RAB-20-25-210309	---	Moist, very dark grayish brown silty sand	35.9
USMPDI-	066RAB-10-20-210315	---	Moist, dark brown clayey sand	33.9
USMPDI-	068RAB-10-20-210311	---	Moist, very dark brown sand with silt	20.3
USMPDI-	068RAB-20-32.1-210312	---	Moist, very dark grayish brown sandy silt	45.9
USMPDI-	069RAB-20-36.3-210312	---	Moist, dark grayish brown sandy silt	47.4

Notes: Temperature of Drying : 110° Celsius



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID: ---	Sample Type: ---	Tested By:	GA
Sample ID: ---	Test Date: 04/07/21	Checked By:	n/a
Depth : ---	Test Id:	613642	

## Specific Gravity of Soils by ASTM D854

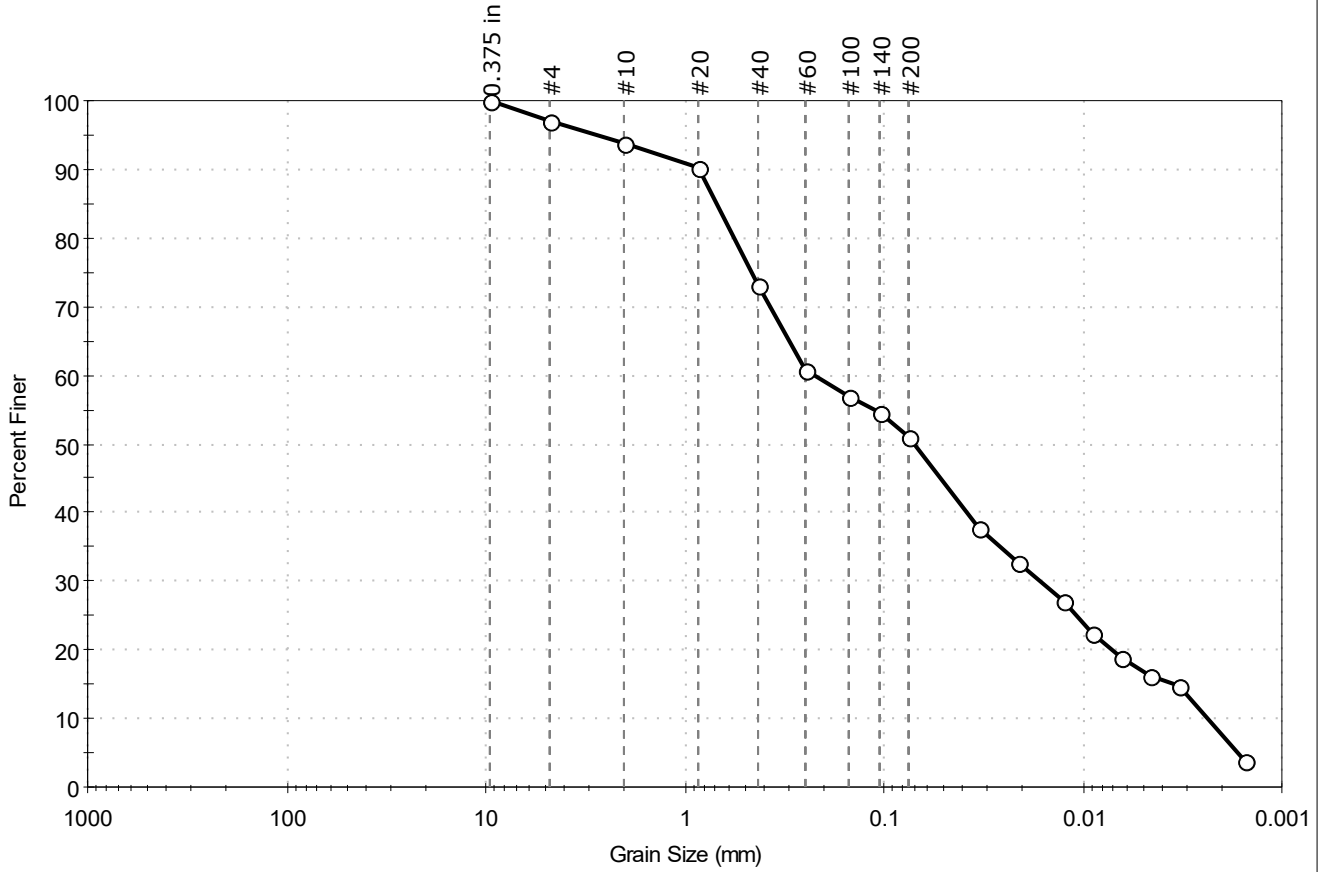
Boring ID	Sample ID	Depth	Visual Description	Specific Gravity	Comment
USMPDI-	058RAB-10-20-210317	---	Moist, very dark grayish brown sandy silt	2.64	
USMPDI-	062RAB-20-25-210309	---	Moist, very dark grayish brown silty sand	2.65	
USMPDI-	066RAB-10-20-210315	---	Moist, dark brown clayey sand	2.68	
USMPDI-	068RAB-10-20-210311	---	Moist, very dark brown sand with silt	2.68	
USMPDI-	068RAB-20-32.1-210312	---	Moist, very dark grayish brown sandy silt	2.64	
USMPDI-	069RAB-20-36.3-210312	---	Moist, dark grayish brown sandy silt	2.63	

Notes: Specific Gravity performed by using method B (oven dried specimens) of ASTM D854  
 Moisture Content determined by ASTM D2216.



Client: Anchor QEA, LLC	Project: GascoSiltronic: US Moorings 03192021	Project No: GTX-313361
Location:	Boring ID: USMPDI-	Sample Type: bag
Tested By: GA	Sample ID: 058RAB-10-20-210317	Test Date: 04/01/21
Checked By: bfs	Depth: ---	Test Id: 613625
Test Comment: ---	Visual Description: Moist, very dark grayish brown sandy silt	Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	3.0	45.9	51.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	97		
#10	2.00	94		
#20	0.85	90		
#40	0.42	73		
#60	0.25	61		
#100	0.15	57		
#140	0.11	55		
#200	0.075	51		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0334	38		
---	0.0211	33		
---	0.0125	27		
---	0.0090	22		
---	0.0064	19		
---	0.0046	16		
---	0.0033	15		
---	0.0015	4		

Coefficients	
D <sub>85</sub> = 0.6860 mm	D <sub>30</sub> = 0.0161 mm
D <sub>60</sub> = 0.2234 mm	D <sub>15</sub> = 0.0035 mm
D <sub>50</sub> = 0.0703 mm	D <sub>10</sub> = 0.0024 mm
C <sub>u</sub> = 93.083	C <sub>c</sub> = 0.483

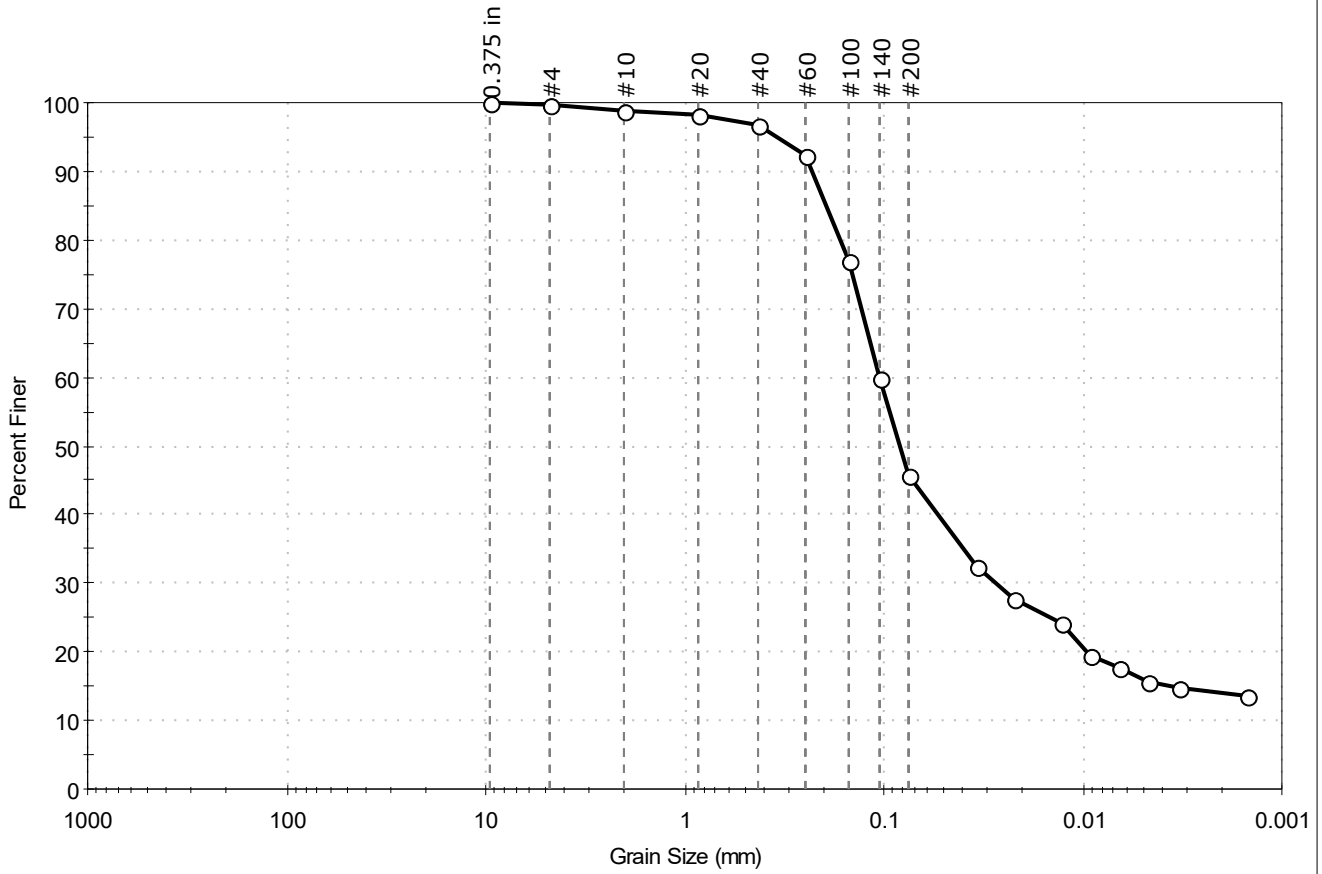
Classification	
ASTM	Sandy SILT (ML)
AASHTO	Silty Soils (A-4 (0))

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 : 2.64	
Separation of Sample: #200 Sieve	



Client: Anchor QEA, LLC	Project: GascoSiltronic: US Moorings 03192021	Project No: GTX-313361
Location:	Boring ID: USMPDI-	Sample Type: bag
Tested By: GA	Sample ID: 062RAB-20-25-210309	Test Date: 04/01/21
Checked By: bfs	Depth: ---	Test Id: 613626
Test Comment: ---	Visual Description: Moist, very dark grayish brown silty sand	Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.4	54.0	45.6

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	100		
#10	2.00	99		
#20	0.85	98		
#40	0.42	97		
#60	0.25	92		
#100	0.15	77		
#140	0.11	60		
#200	0.075	46		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0345	32		
---	0.0221	28		
---	0.0129	24		
---	0.0092	19		
---	0.0066	18		
---	0.0047	16		
---	0.0033	15		
---	0.0015	13		

Coefficients	
D <sub>85</sub> = 0.1959 mm	D <sub>30</sub> = 0.0272 mm
D <sub>60</sub> = 0.1062 mm	D <sub>15</sub> = 0.0035 mm
D <sub>50</sub> = 0.0834 mm	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

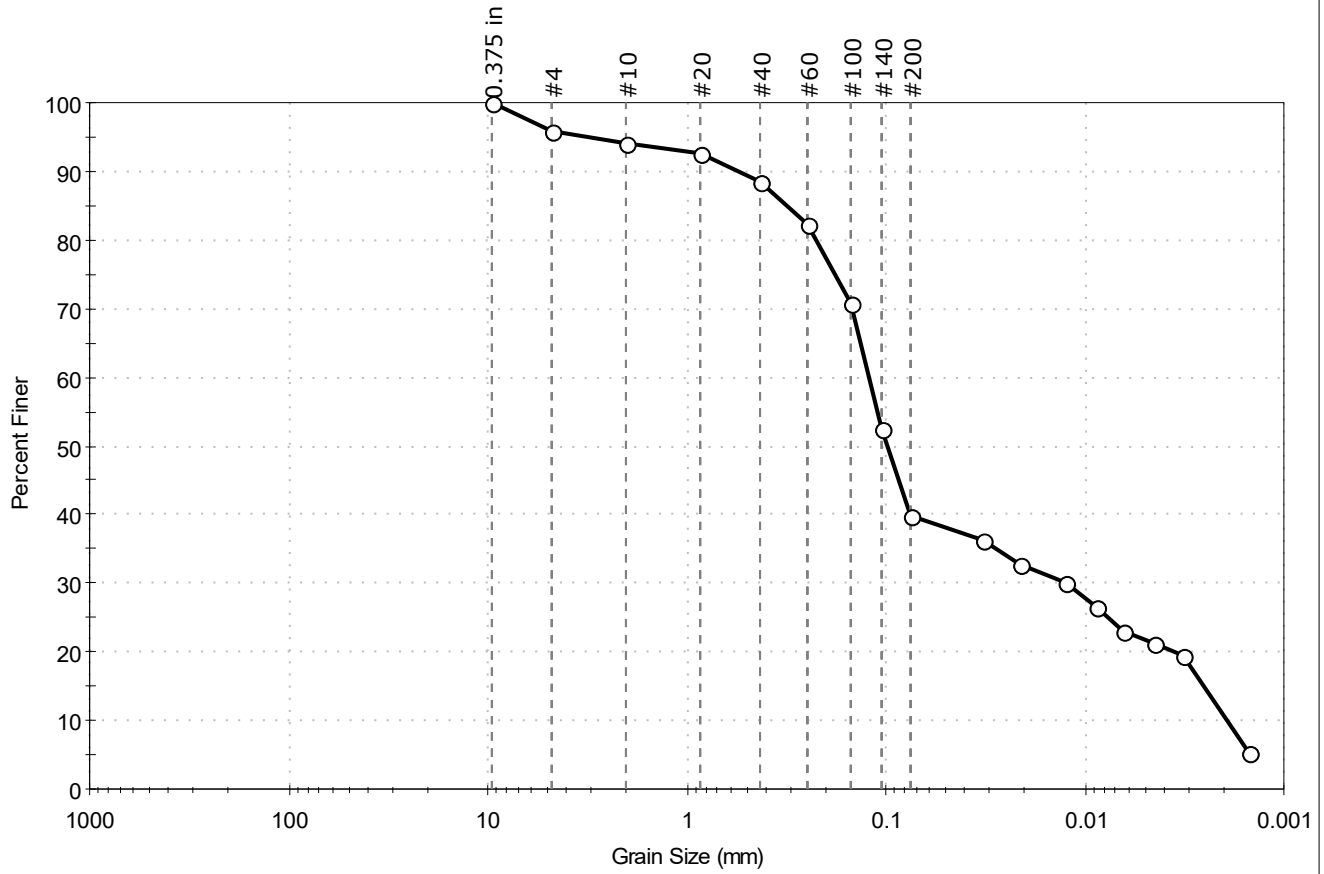
Classification	
ASTM	Silty SAND (SM)
AASHTO	Silty Soils (A-4 (0))

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



Client: Anchor QEA, LLC	Project: GascoSiltronic: US Moorings 03192021	Project No: GTX-313361
Location:	Boring ID: USMPDI-	Sample Type: bag
Tested By: GA	Sample ID: 066RAB-10-20-210315	Test Date: 04/01/21
Checked By: bfs	Depth: ---	Test Id: 613627
Test Comment: ---	Visual Description: Moist, dark brown clayey sand	Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	4.0	56.3	39.7

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	96		
#10	2.00	94		
#20	0.85	93		
#40	0.42	88		
#60	0.25	82		
#100	0.15	71		
#140	0.11	52		
#200	0.075	40		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0324	36		
---	0.0212	33		
---	0.0125	30		
---	0.0089	27		
---	0.0064	23		
---	0.0045	21		
---	0.0032	19		
---	0.0015	5		

Coefficients	
D <sub>85</sub> = 0.3159 mm	D <sub>30</sub> = 0.0124 mm
D <sub>60</sub> = 0.1222 mm	D <sub>15</sub> = 0.0025 mm
D <sub>50</sub> = 0.0992 mm	D <sub>10</sub> = 0.0019 mm
C <sub>u</sub> = 64.316	C <sub>c</sub> = 0.662

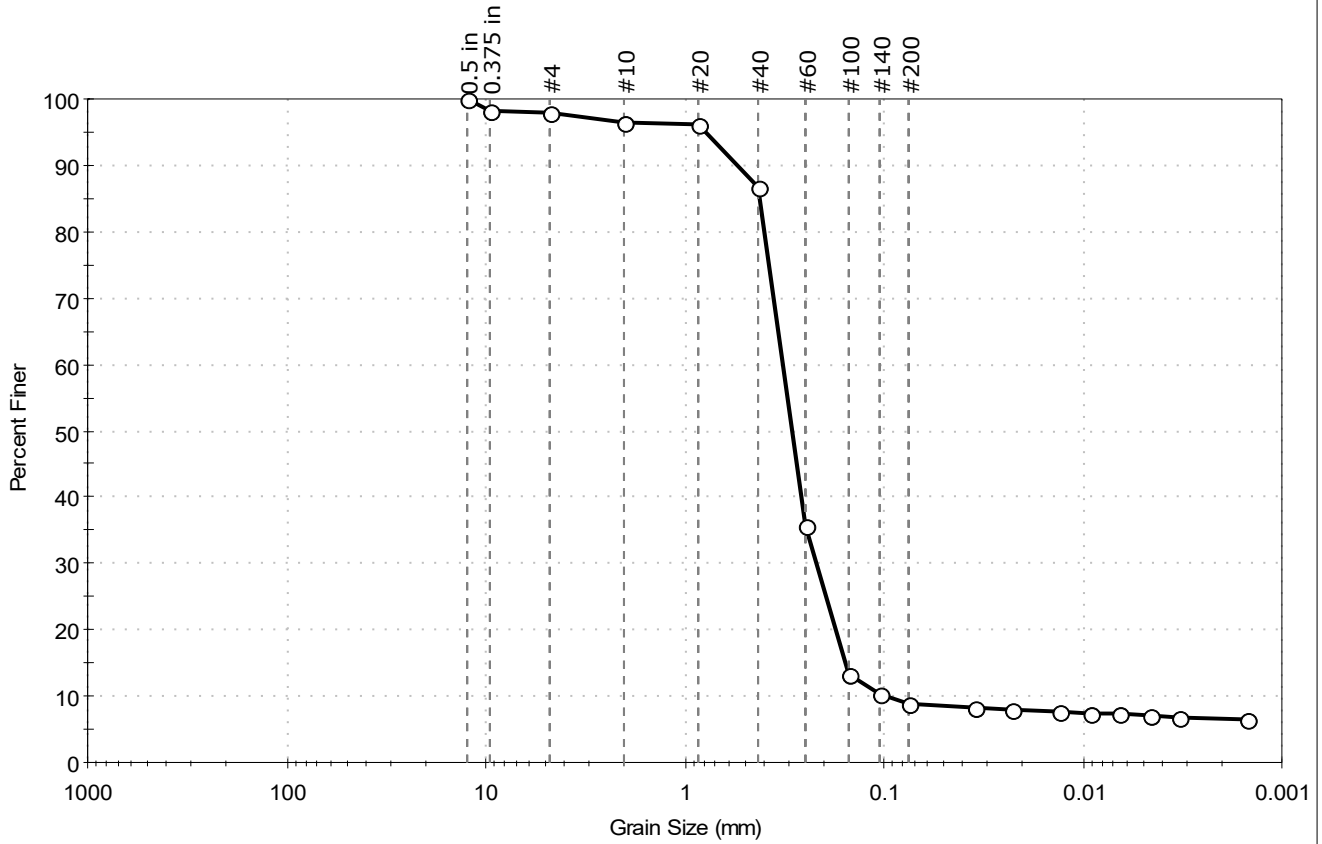
Classification	
ASTM	Clayey SAND (SC)
AASHTO	Clayey Soils (A-6 (1))

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 : 2.68
Separation of Sample: #200 Sieve



Client: Anchor QEA, LLC	Project: GascoSiltronic: US Moorings 03192021	Project No: GTX-313361
Location:	Boring ID: USMPDI-	Sample Type: bag
Tested By: GA	Sample ID: 068RAB-10-20-210311	Test Date: 04/01/21
Checked By: bfs	Depth: ---	Test Id: 613628
Test Comment: ---	Visual Description: Moist, very dark brown sand with silt	Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	2.2	88.9	8.9

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.5 in	12.50	100		
0.375 in	9.50	98		
#4	4.75	98		
#10	2.00	97		
#20	0.85	96		
#40	0.42	87		
#60	0.25	36		
#100	0.15	13		
#140	0.11	10		
#200	0.075	8.9		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0348	8		
---	0.0226	8		
---	0.0131	8		
---	0.0093	8		
---	0.0066	7		
---	0.0047	7		
---	0.0033	7		
---	0.0015	7		

**Coefficients**

D <sub>85</sub> = 0.4169 mm	D <sub>30</sub> = 0.2193 mm
D <sub>60</sub> = 0.3215 mm	D <sub>15</sub> = 0.1564 mm
D <sub>50</sub> = 0.2897 mm	D <sub>10</sub> = 0.0969 mm
C <sub>u</sub> = 3.318	C <sub>c</sub> = 1.544

**Classification**

**ASTM** Poorly graded SAND with Silt (SP-SM)

**AASHTO** Fine Sand (A-3 (1))

**Sample/Test Description**

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Dispersion Device : Apparatus A - Mech Mixer

Dispersion Period : 1 minute

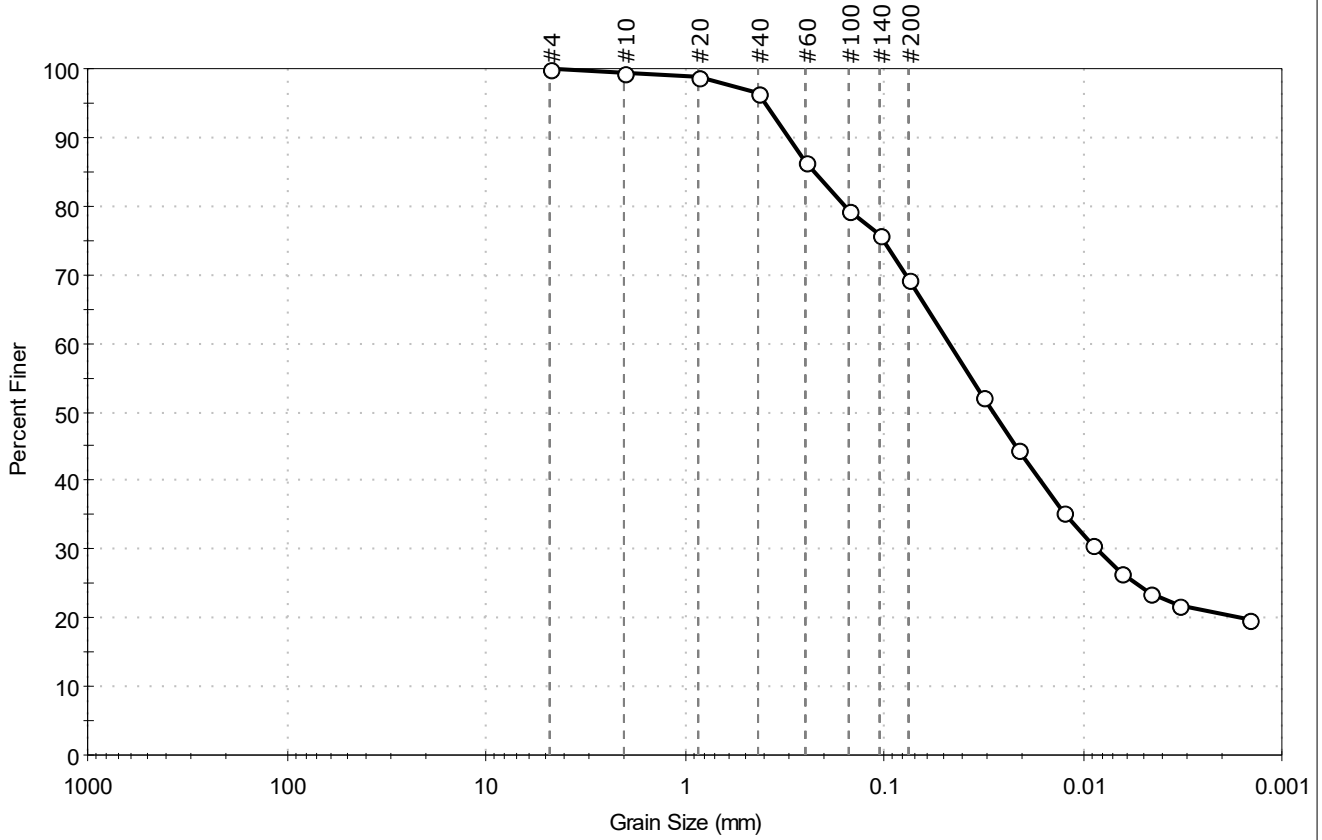
Est. Specific Gravity : 2.68

Separation of Sample: #200 Sieve



Client: Anchor QEA, LLC  
 Project: GascoSiltronic: US Moorings 03192021  
 Location: \_\_\_\_\_ Project No: GTX-313361  
 Boring ID: USMPDI- Sample Type: bag Tested By: GA  
 Sample ID: 068RAB-20-32.1-210312 Test Date: 04/01/21 Checked By: bfs  
 Depth: --- Test Id: 613629  
 Test Comment: ---  
 Visual Description: Moist, very dark grayish brown sandy silt  
 Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	30.8	69.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	99		
#20	0.85	99		
#40	0.42	96		
#60	0.25	86		
#100	0.15	79		
#140	0.11	76		
#200	0.075	69		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0319	52		
---	0.0212	44		
---	0.0126	36		
---	0.0090	31		
---	0.0064	27		
---	0.0046	24		
---	0.0033	22		
---	0.0015	20		

<b>Coefficients</b>	
D <sub>85</sub> = 0.2251 mm	D <sub>30</sub> = 0.0086 mm
D <sub>60</sub> = 0.0471 mm	D <sub>15</sub> = N/A
D <sub>50</sub> = 0.0283 mm	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

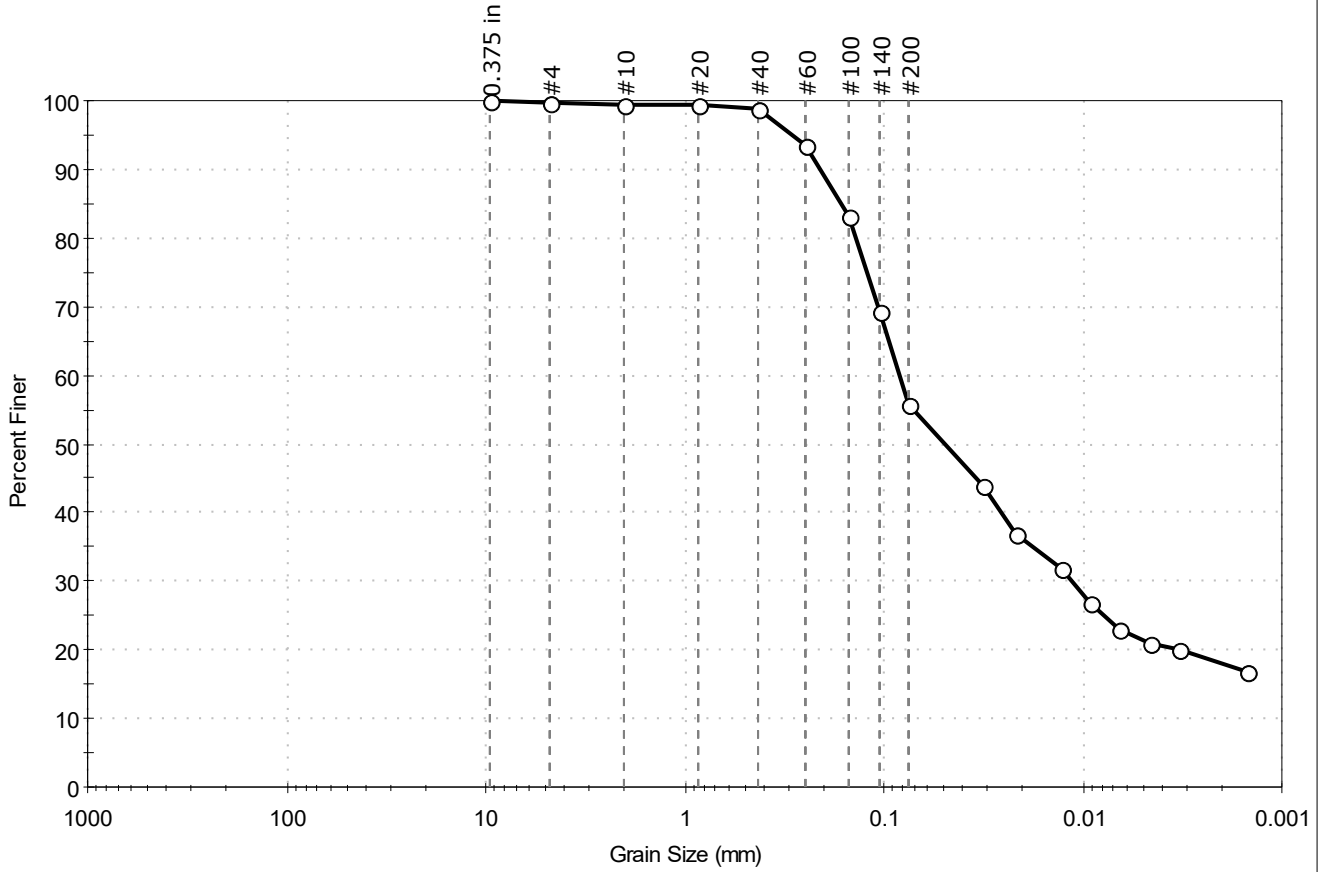
<b>Classification</b>	
<b>ASTM</b>	Sandy SILT (ML)
<b>AASHTO</b>	Clayey Soils (A-7-5 (10))

<b>Sample/Test Description</b>
Sand/Gravel Particle Shape : ---
Sand/Gravel Hardness : ---
Dispersion Device : Apparatus A - Mech Mixer
Dispersion Period : 1 minute
Est. Specific Gravity : 2.64
Separation of Sample: #200 Sieve



Client: Anchor QEA, LLC  
 Project: GascoSiltronic: US Moorings 03192021  
 Location: \_\_\_\_\_ Project No: GTX-313361  
 Boring ID: USMPDI- Sample Type: bag Tested By: GA  
 Sample ID: 069RAB-20-36.3-210312 Test Date: 04/01/21 Checked By: bfs  
 Depth: --- Test Id: 613630  
 Test Comment: ---  
 Visual Description: Moist, dark grayish brown sandy silt  
 Sample Comment: ---

## Particle Size Analysis - ASTM D6913/D7928



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.2	44.0	55.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	100		
#10	2.00	100		
#20	0.85	99		
#40	0.42	99		
#60	0.25	93		
#100	0.15	83		
#140	0.11	69		
#200	0.075	56		
Hydrometer	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0321	44		
---	0.0217	37		
---	0.0127	32		
---	0.0091	27		
---	0.0065	23		
---	0.0046	21		
---	0.0033	20		
---	0.0015	17		

**Coefficients**

D <sub>85</sub> = 0.1642 mm	D <sub>30</sub> = 0.0112 mm
D <sub>60</sub> = 0.0834 mm	D <sub>15</sub> = N/A
D <sub>50</sub> = 0.0497 mm	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

**Classification**

ASTM Sandy SILT (ML)

AASHTO Clayey Soils (A-7-5 (5))

**Sample/Test Description**

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Dispersion Device : Apparatus A - Mech Mixer

Dispersion Period : 1 minute

Est. Specific Gravity : 2.63

Separation of Sample: #200 Sieve



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID:	USMPDI-	Sample Type:	bag
Sample ID:	058RAB-10-20-210317	Test Date:	03/30/21
Depth :	---	Test Id:	613619
Test Comment:	---		
Visual Description:	Moist, very dark grayish brown sandy 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
◆	8RAB-10-20-2103	USMPDI-	---	11	n/a	n/a	n/a	n/a	Sandy SILT (ML)

27% Retained on #40 Sieve  
 Dry Strength: NONE  
 Dilatancy: RAPID  
 Toughness: n/a  
 The sample was determined to be Non-Plastic



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID:	USMPDI-	Sample Type:	bag
Sample ID:	062RAB-20-25-210309	Test Date:	03/29/21
Depth :	---	Checked By:	bfs
		Test Id:	613620
Test Comment:	---		
Visual Description:	Moist, very dark grayish brown silty sand		
Sample Comment:	---		

## Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

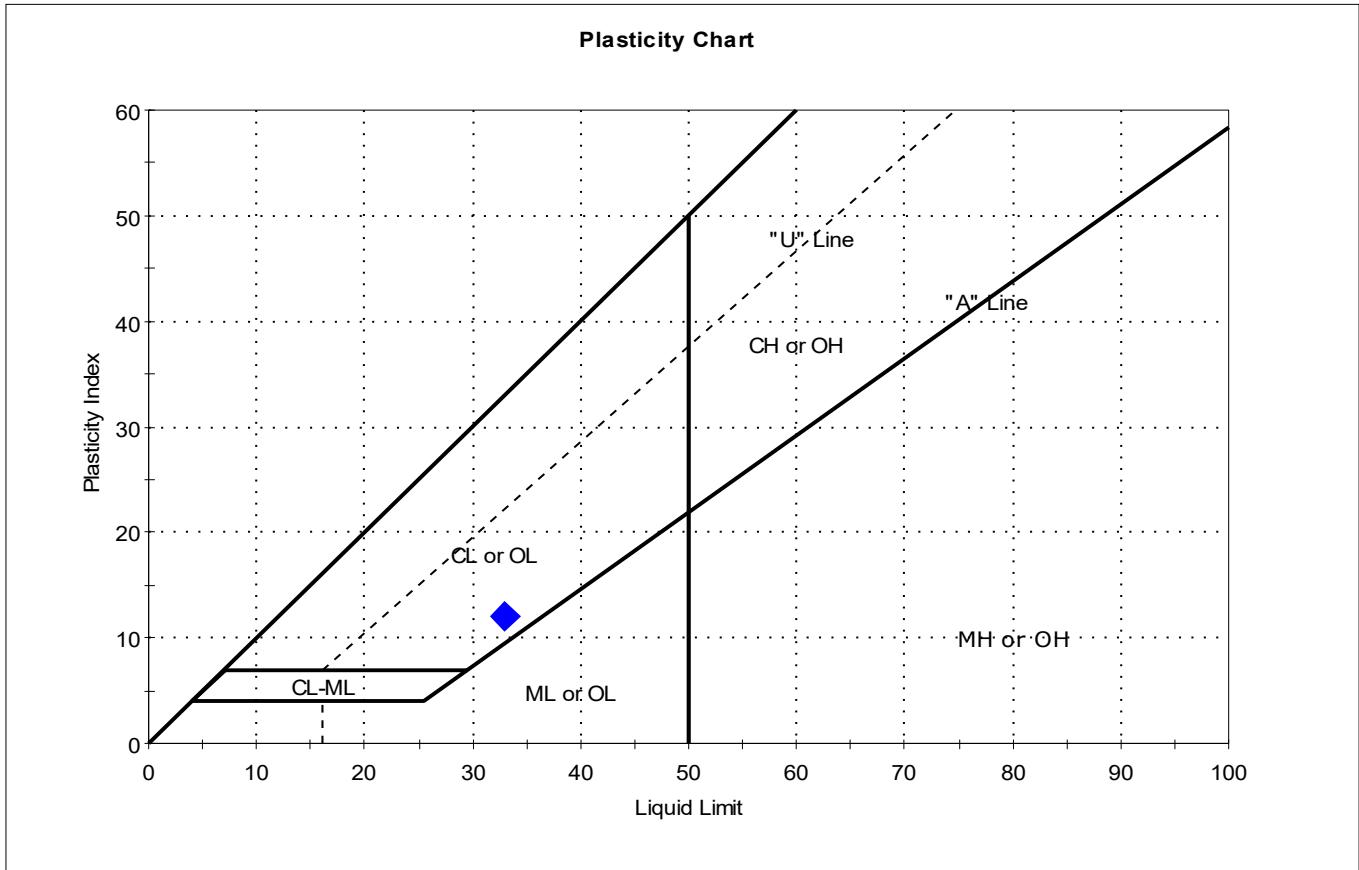
Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	2RAB-20-25-2103	USMPDI-	---	36	n/a	n/a	n/a	n/a	Silty SAND (SM)

3% Retained on #40 Sieve  
 Dry Strength: NONE  
 Dilatancy: RAPID  
 Toughness: n/a  
 The sample was determined to be Non-Plastic



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID:	USMPDI-	Sample Type:	bag
Sample ID:	066RAB-10-20-210315	Test Date:	03/30/21
Depth:	---	Test Id:	613621
Test Comment:	---		
Visual Description:	Moist, dark brown clayey sand		
Sample Comment:	---		

## Atterberg Limits - ASTM D4318



Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	6RAB-10-20-2103	USMPDI-	---	34	33	21	12	1.1	Clayey SAND (SC)

Sample Prepared using the WET method  
 12% Retained on #40 Sieve  
 Dry Strength: VERY HIGH  
 Dilatancy: SLOW  
 Toughness: MEDIUM



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID:	USMPDI-	Sample Type:	bag
Sample ID:	068RAB-10-20-210311	Test Date:	03/29/21
Depth :	---	Test Id:	613622
Test Comment:	---		
Visual Description:	Moist, very dark brown sand with silt		
Sample Comment:	---		

## Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

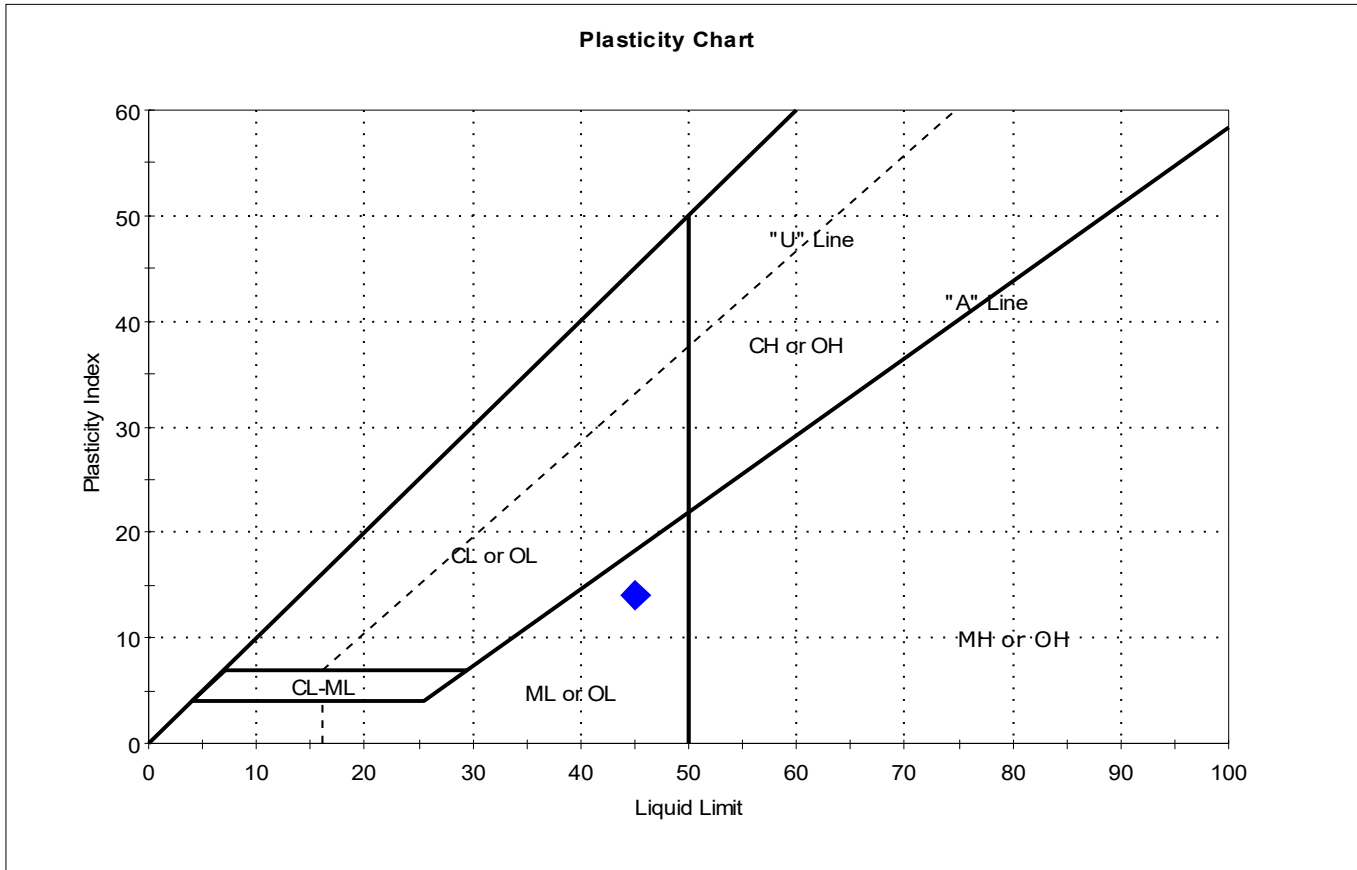
Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	8RAB-10-20-2103	USMPDI-	---	20	n/a	n/a	n/a	n/a	Poorly graded SAND with Silt (SP-SM)

13% Retained on #40 Sieve  
 Dry Strength: NONE  
 Dilatancy: RAPID  
 Toughness: n/a  
 The sample was determined to be Non-Plastic



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID:	USMPDI-	Sample Type:	bag
Sample ID:	068RAB-20-32.1-210312	Test Date:	03/30/21
Depth:	---	Test Id:	613623
Test Comment:	---		
Visual Description:	Moist, very dark grayish brown sandy silt		
Sample Comment:	---		

## Atterberg Limits - ASTM D4318



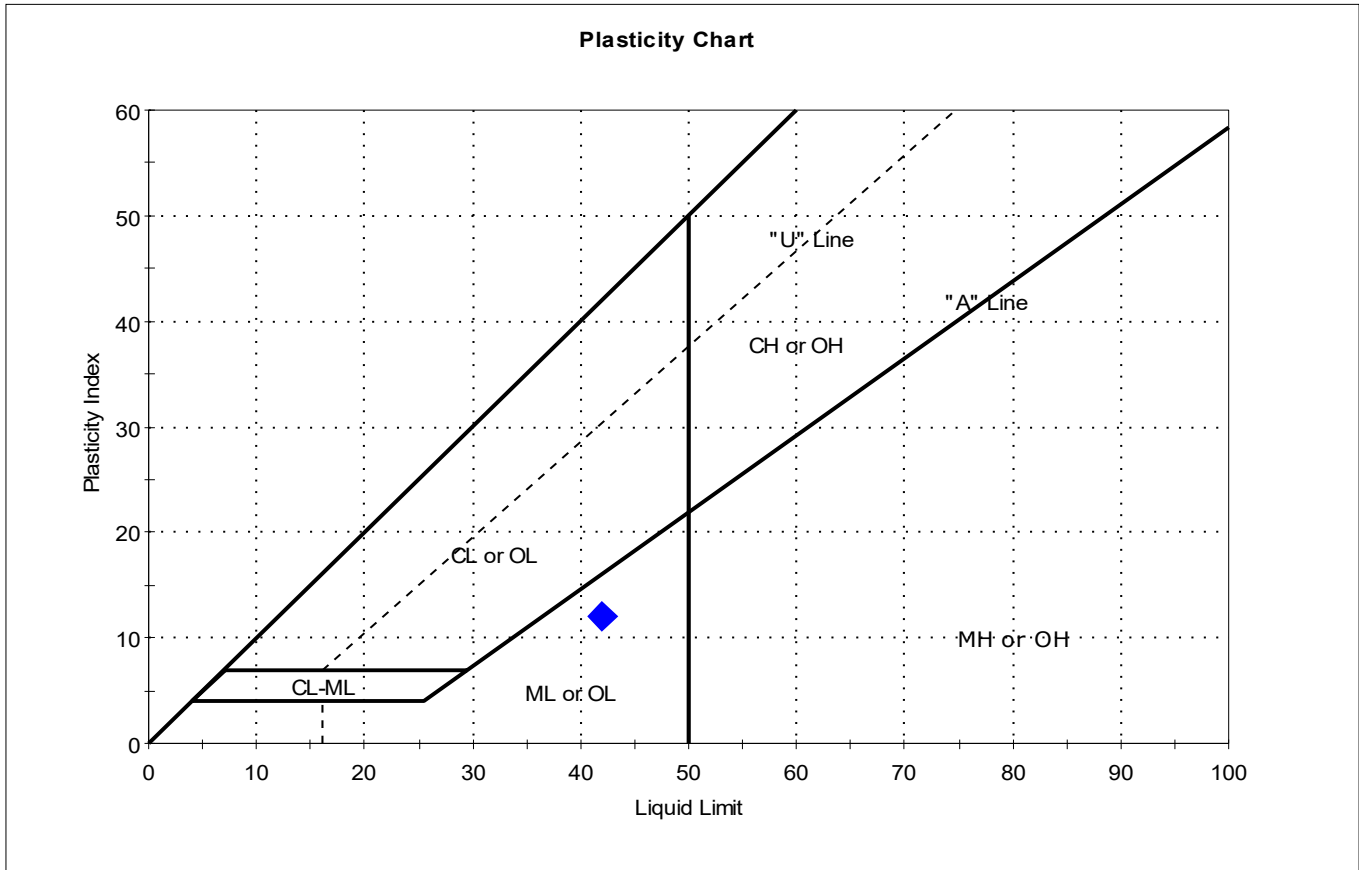
Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	068RAB-20-32.1-210312	USMPDI-	---	46	45	31	14	1.1	Sandy SILT (ML)

Sample Prepared using the WET method  
 4% Retained on #40 Sieve  
 Dry Strength: HIGH  
 Dilatancy: RAPID  
 Toughness: MEDIUM



Client:	Anchor QEA, LLC		
Project:	GascoSiltronic: US Moorings 03192021		
Location:		Project No:	GTX-313361
Boring ID:	USMPDI-	Sample Type:	bag
Sample ID:	069RAB-20-36.3-210312	Test Date:	03/30/21
Depth:	---	Test Id:	613624
Test Comment:	---		
Visual Description:	Moist, dark grayish brown sandy 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
◆	069RAB-20-36.3-210312	USMPDI-	---	47	42	30	12	1.5	Sandy SILT (ML)

Sample Prepared using the WET method  
 1% Retained on #40 Sieve  
 Dry Strength: HIGH  
 Dilatancy: RAPID  
 Toughness: LOW