BORING LOG NO. 10-B11

CLIENT:	USACE, Galveston District Galveston, Texas	PROJECT:	Galveston Channel Deepening, TO-0010
BORING LOCATION:	N: 13687071.98 E: 3316866.96	SITE:	San Jacinto Placement Area Galveston, Texas

Approx. Surface Elevation: 12.6 feet

Graphic Log	DESCRIPTION	Elevation	Depth, Feet	USCS Symbol	Type	Recovery, In	SPT, Blows/Ft	Calibrated Hand Penetrom., TSF	Torvane, TSF	Moisture Content, %	Dry Density, PCF	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Minus #200 Sieve, %	Compressive Strength, TSF	Failure Strain, %	Confining Pressure, PSI
	FILL: FAT CLAY gray, brown, w/ wood, moist, medium stiff	10.6 / 2.0	1	CH	ST	11		0.75		46		81	30	51	92			
	FILL: CLAYEY SAND gray, brown, fine, loose	8.6 / 4.0	2–3	SC	ST	9		0.0		19								
	FILL: FAT CLAY dark bluish gray, w/ sand seams and pockets,w/ organic matter stains, very soft	-1.4 / 14.0	4–5	CH	ST	5		0.5		45		90	28	62				
			6–7		ST	23		0.0	0.05	57	67	84	27	57	89			
			8–9		ST	21		0.0	0.1	62								
			10–11		ST	21		0.0	0.2	47		96	31	65	96			
			12–13		ST	11		0.0	0.2	74	60							
	FILL: SANDY FAT CLAY bluish gray, very soft	-3.4 / 16.0	14–15	CH	ST	23		0.0	0.15	52		90	29	61	69			
	FILL: FAT CLAY bluish gray with vertical sand seam, very soft	-5.4 / 18.0	16–17	CH	ST	21		0.0	0.1	79	55	121	32	89	97			
	POORLY GRADED SAND w/ SILT bluish gray, w/ shell, fine, some cohesion, medium dense	-9.4 / 22.0	18–19	SP-SM	SS	16	41			18					7			
			20–21		SS	14	52			25								
	POORLY GRADED SAND w/ CLAY bluish gray, w/ shell, fine, some cohesion, medium dense to dense	-17.4 / 30.0	22–23	SP-SC	SS	13	29			37								
			24–25		SS	12	13			31								
			26–27		SS	13	15			27								
			28–29		SS	9	18			28								
	Boring terminated at 30 feet.		30															

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL.

REMARKS: Dry auger to 14 feet; wet rotary thereafter.

WATER LEVEL OBSERVATIONS			
▽ 12.5 ft	WS	▼ 12 ft	at 5 min
▼ 12 ft	at 10 min	▼ 12 ft	at 15 min

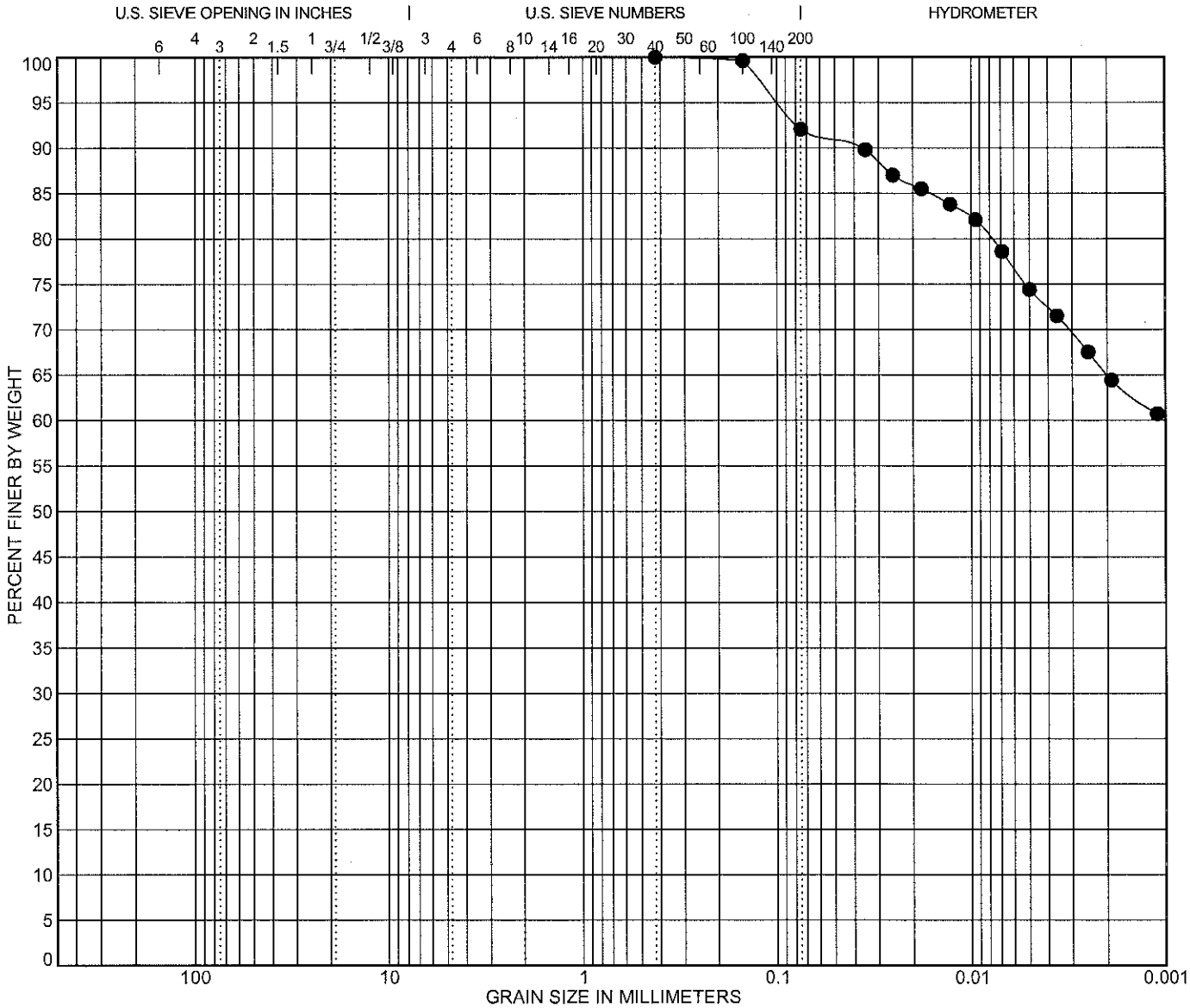
Terracon

DATE DRILLED: 4/12/2010

PROJECT NUMBER: 92105154

10-B11

EXHIBIT A-11



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	**10-B11**	**0.0**	**FAT CLAY(CH)**	**81**	**30**	**51**		

Percent Passing the Indicated Sieve

	Specimen Identification		3/8"	#4	#10	#40	#100	#200
●	**10-B11**	**0.0**				**100**	**99.6**	**92**

	Specimen Identification		D100	D50	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**10-B11**	**0.0**	**0.425**				**0.0**	**7.9**	**27.1**	**65.0**

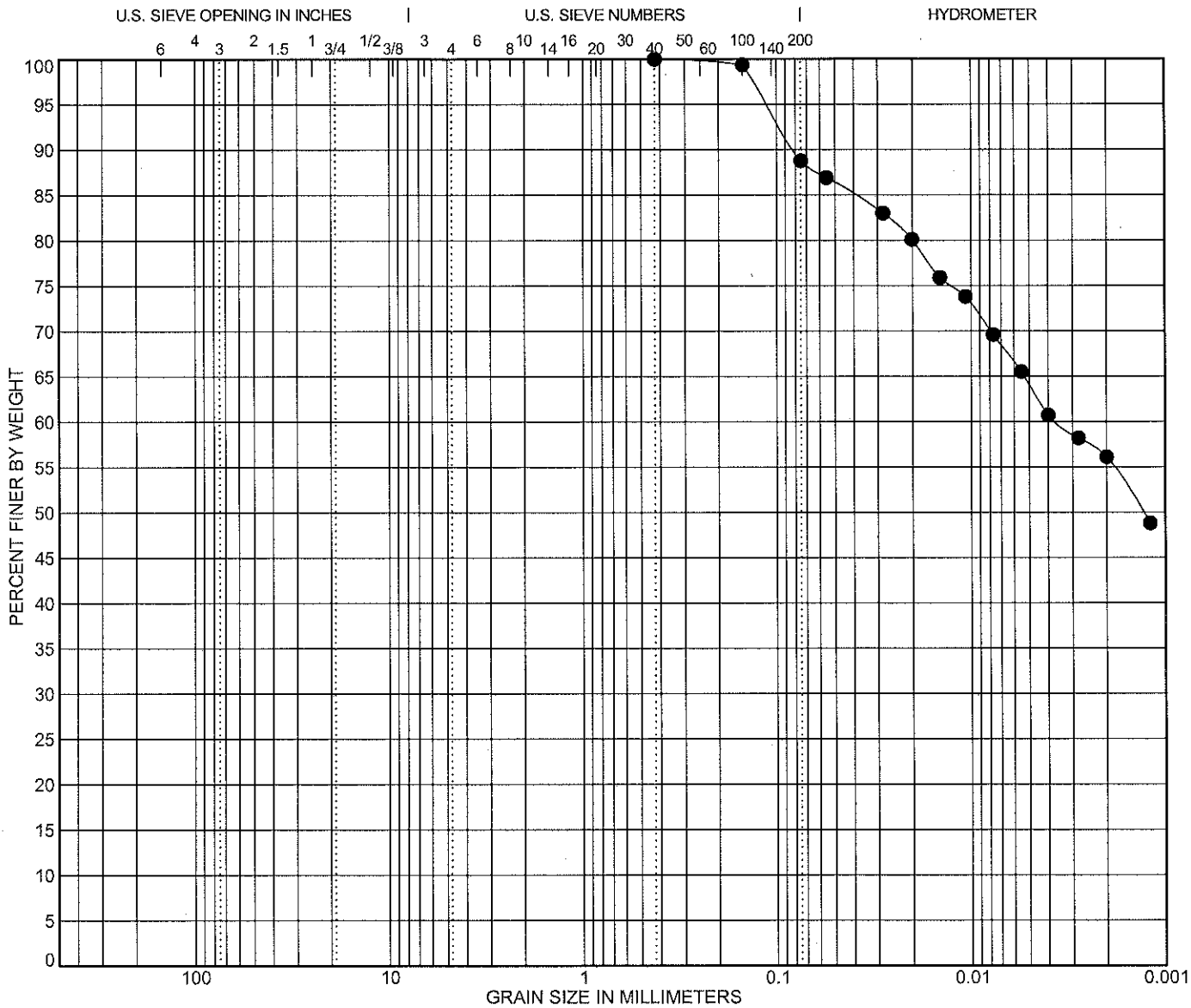
GRAIN SIZE DISTRIBUTION

Galveston Channel Deepening,
TO-0010
Galveston, Texas
Project Number 92105154

Terracon

Terracon Consultants, Inc.
11555 Clay Road, Suite 100
Houston, Texas 77043
Telephone: 713-690-8989
Fax: 713-690-8787

SPECIMEN ID
10-B11, 0.0



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification	LL	PL	PI	Cc	Cu
● **10-B11**	**6.0**	**FAT CLAY(CH)**	**84**	**27**	**57**		

Percent Passing the Indicated Sieve

Specimen Identification		3/8"	#4	#10	#40	#100	#200
● **10-B11**	**6.0**				**100**	**99.3**	**88.7**

Specimen Identification		D100	D50	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **10-B11**	**6.0**	**0.425**	**0.001**			**0.0**	**11.2**	**32.6**	**56.1**

GRAIN SIZE DISTRIBUTION

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TO-0010
Galveston, Texas
Project Number 92105154

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Telephone: 713-690-8989
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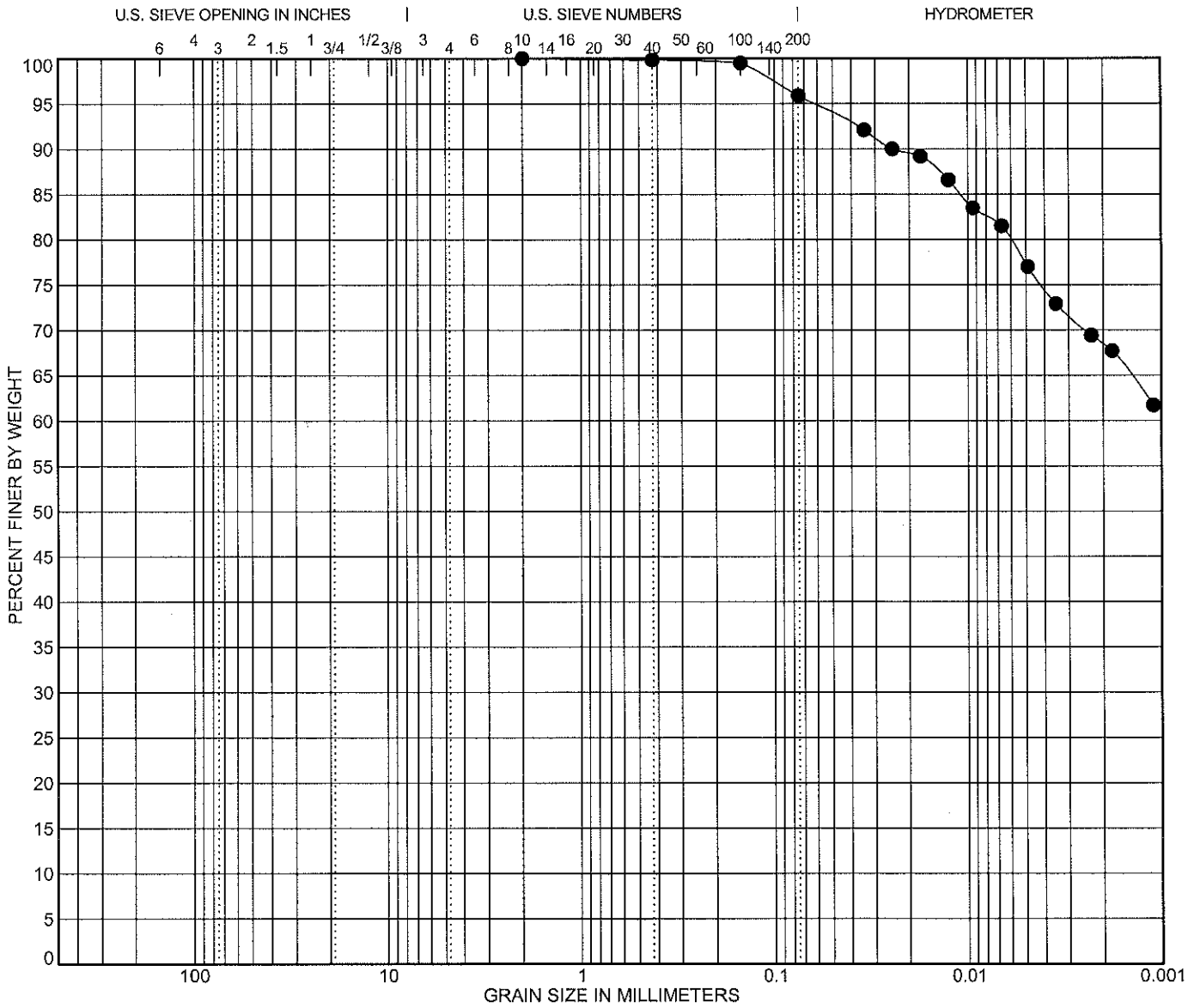
SPECIMEN ID
10-B11, 6.0



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	**10-B11**	**10.0**	**FAT CLAY(CH)**	**96**	**31**	**65**		

Percent Passing the Indicated Sieve

	Specimen Identification		3/8"	#4	#10	#40	#100	#200
●	**10-B11**	**10.0**			**100**	**99.8**	**99.5**	**95.9**

	Specimen Identification		D100	D50	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**10-B11**	**10.0**	**2**				**0.0**	**4.1**	**27.4**	**68.4**

GRAIN SIZE DISTRIBUTION

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TO-0010
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Project Number 92105154

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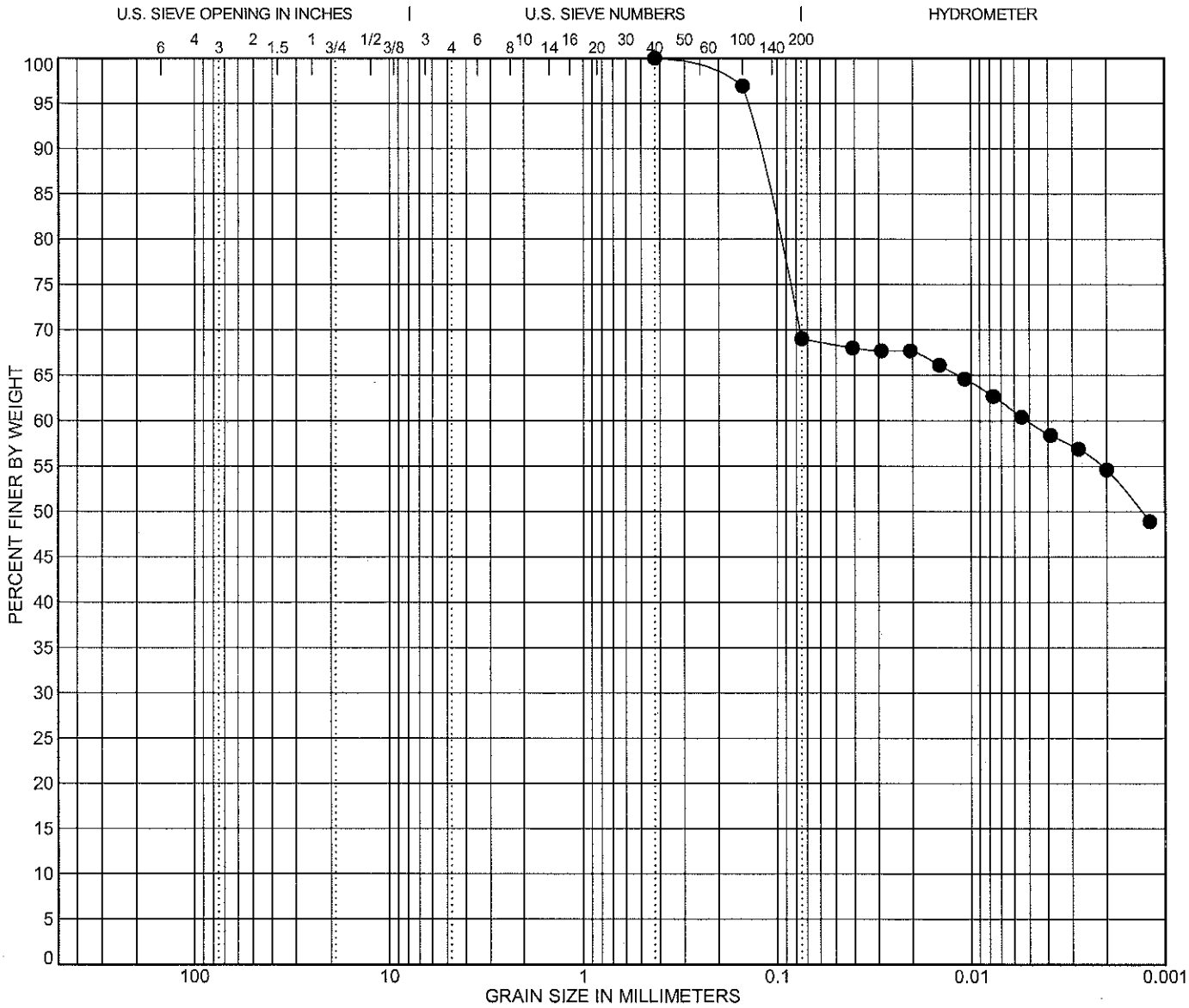
Telephone: 713-690-8989
Fax: 713-690-8787

SPECIMEN ID
10-B11, 10.0



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification	LL	PL	PI	Cc	Cu
● **10-B11**	**14.0**	**SANDY FAT CLAY(CH)**	**90**	**29**	**61**		

Percent Passing the Indicated Sieve

Specimen Identification		3/8"	#4	#10	#40	#100	#200
● **10-B11**	**14.0**				**100**	**96.9**	**69**

Specimen Identification		D100	D50	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **10-B11**	**14.0**	**0.425**	**0.001**			**0.0**	**31.0**	**14.4**	**54.6**

GRAIN SIZE DISTRIBUTION

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TO-0010
Galveston, Texas
Project Number 92105154

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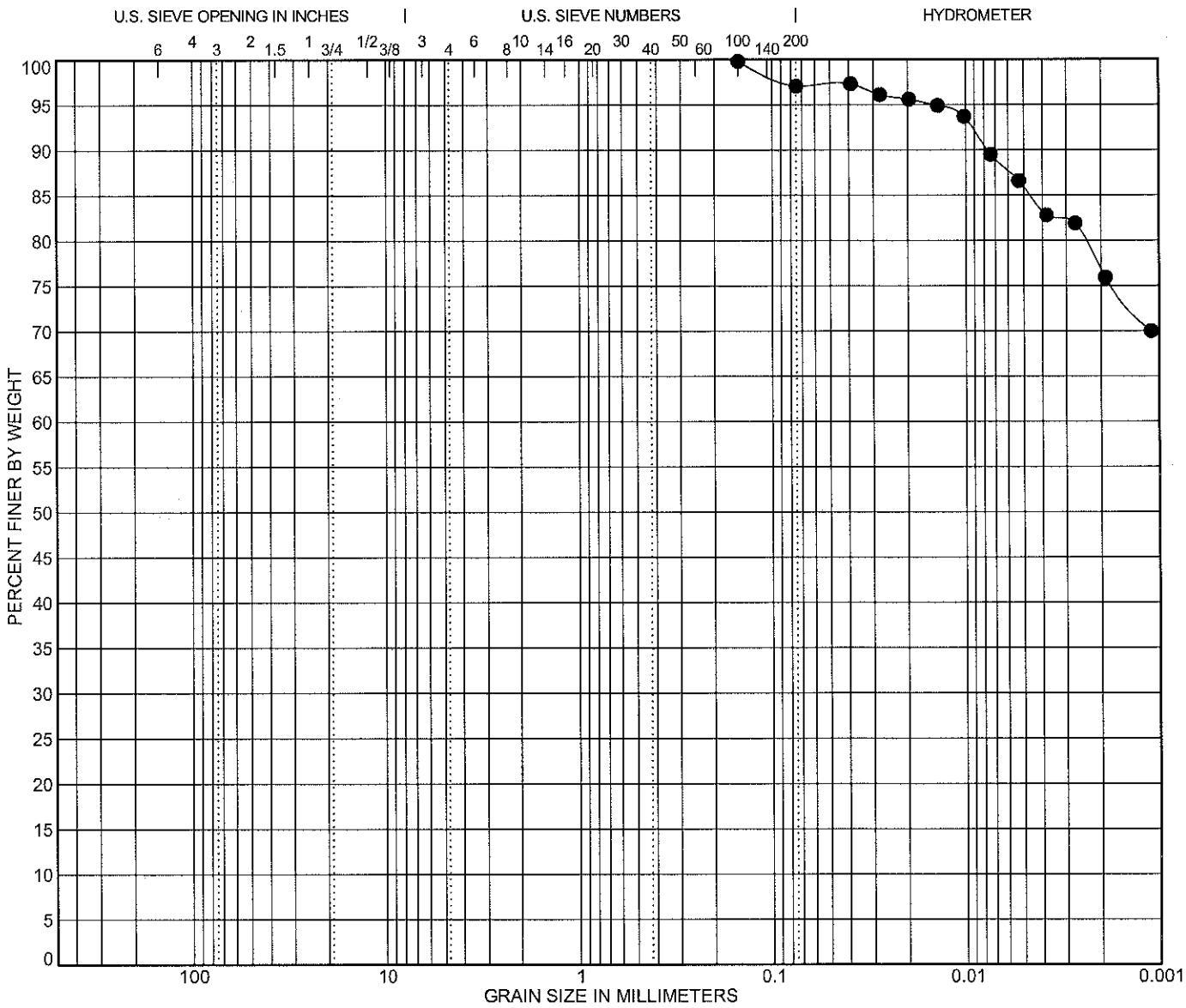
SPECIMEN ID
10-B11, 14.0



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	**10-B11**	**16.0**	**FAT CLAY(CH)**	**121**	**32**	**89**		

Percent Passing the Indicated Sieve

	Specimen Identification		3/8"	#4	#10	#40	#100	#200
●	**10-B11**	**16.0**					**99.8**	**97.1**

	Specimen Identification		D100	D50	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**10-B11**	**16.0**	**0.15**				**0.0**	**2.7**	**20.3**	**76.8**

GRAIN SIZE DISTRIBUTION

Galveston Channel Deepening,
TO-0010
Galveston, Texas
Project Number 92105154

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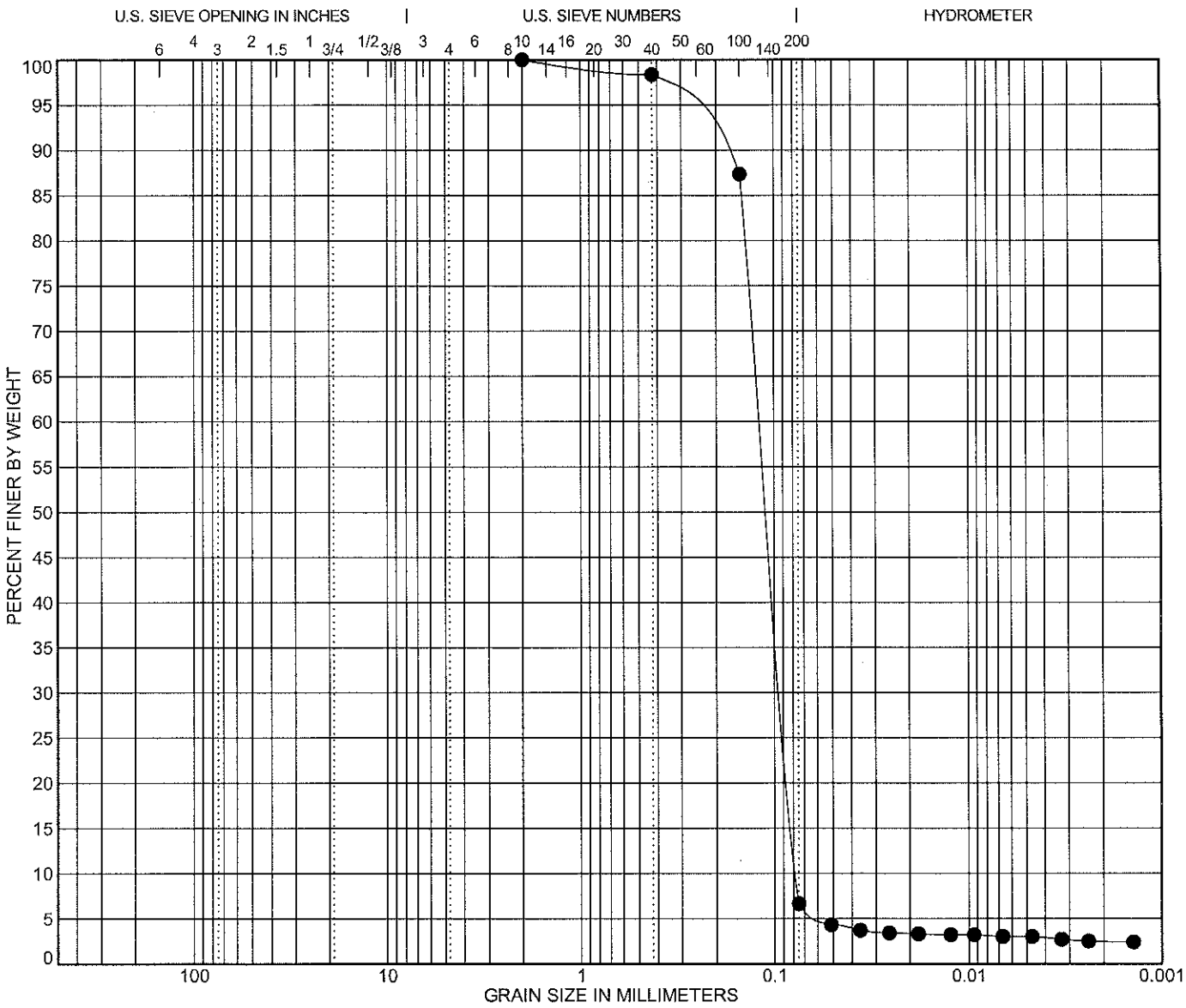
Telephone: 713-690-8989
Fax: 713-690-8787

SPECIMEN ID
10-B11, 16.0



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	**10-B11**	**18.5**					**0.92**	**1.54**

Percent Passing the Indicated Sieve

	Specimen Identification		3/8"	#4	#10	#40	#100	#200
●	**10-B11**	**18.5**			**100**	**98.4**	**87.4**	**6.6**

	Specimen Identification		D100	D50	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**10-B11**	**18.5**	**2**	**0.109**	**0.092**	**0.077**	**0.0**	**93.4**	**4.2**	**2.5**

GRAIN SIZE DISTRIBUTION

Galveston Channel Deepening,
TO-0010
Galveston, Texas
Project Number 92105154

Terracon

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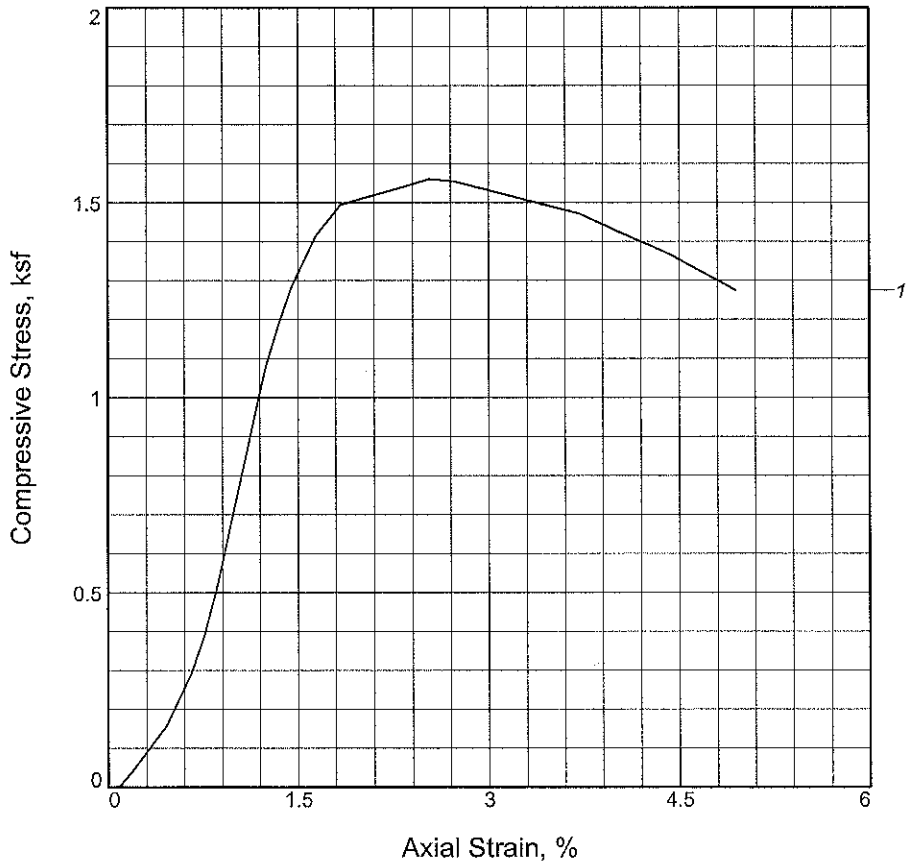
Houston, Texas 77043
Telephone: 713-690-8989
Fax: 713-690-8787

SPECIMEN ID
10-B11, 18.5

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, ksf	1.561			
Undrained shear strength, ksf	0.780			
Failure strain, %	2.5			
Strain rate, in./min.	0.055			
Water content, %	46.0			
Wet density, pcf	115.3			
Dry density, pcf	79.0			
Saturation, %	107.7			
Void ratio	1.1731			
Specimen diameter, in.	2.782			
Specimen height, in.	5.584			
Height/diameter ratio	2.01			

Description: Reddish brown Fat Clay w/calcareous nodules and roots

LL =	**PL =**	**PI =**	**Assumed GS=** 2.75	**Type:** Undisturb

Project No.: 92105154

Date Sampled:

Remarks:
ASTM D2166

Client: USACE

Project: Galveston Channel Deepening San Jacinto Placement Area
Contract #W912HY-09-D-0021, Task Order #0010

Location: 10-B11

Sample Number: 1 **Depth:** 0-2 ft.

UNCONFINED COMPRESSION TEST
Terracon, Inc.
Houston, TX

UNCONFINED COMPRESSION TEST

7/21/2010

Date:
Client: USACE
Project: Galveston Channel Deepening San Jacinto Placement Area
Contract #W912HY-09-D-0021, Task Order #0010
Project No.: 92105154
Location: 10-B11
Depth: 0-2 ft. **Sample Number:** 1
Description: Reddish brown Fat Clay w/calcareous nodules and roots
Remarks: ASTM D2166
Type of Sample: Undisturb
Assumed Specific Gravity=2.75 **LL=** **PL=** **PI=**

Parameters for Specimen No. 1

Specimen Parameter	Initial
Moisture content: Moist soil+tare, gms.	166.960
Moisture content: Dry soil+tare, gms.	133.870
Moisture content: Tare, gms.	61.870
Moisture, %	46.0
Moist specimen weight, gms.	1027.39
Diameter, in.	2.782
Area, in.^{2}	6.079
Height, in.	5.584
Wet density, pcf	115.3
Dry density, pcf	79.0
Void ratio	1.1731
Saturation, %	107.7

Test Readings for Specimen No. 1

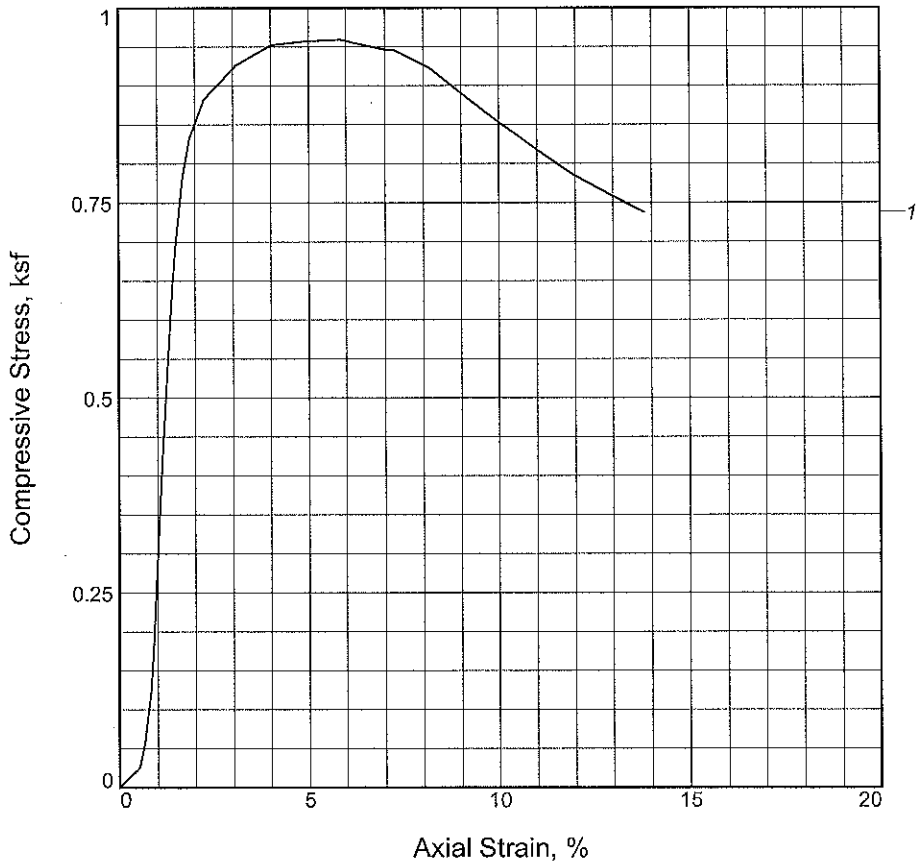
Strain rate, in./min. = 0.055
Unconfined compressive strength = 1.561 ksf **at reading no.** 15

No.	Def. Dial in.	Load Dial	Load lbs.	Strain %	Deviator Stress ksf
0	0.0400	0.000	0.0	0.0	0.000
1	0.0450	0.049	0.0	0.1	0.001
2	0.0505	1.752	1.8	0.2	0.041
3	0.0656	6.668	6.7	0.5	0.157
4	0.0765	12.438	12.4	0.7	0.293
5	0.0822	16.607	16.6	0.8	0.390
6	0.0879	21.921	21.9	0.9	0.515
7	0.0931	27.724	27.7	1.0	0.651
8	0.0987	34.004	34.0	1.1	0.797
9	0.1044	40.290	40.3	1.2	0.943
10	0.1096	46.067	46.1	1.2	1.078
11	0.1153	50.914	50.9	1.3	1.190
12	0.1210	55.037	55.0	1.4	1.285
13	0.1318	60.709	60.7	1.6	1.415
14	0.1427	64.276	64.3	1.8	1.495
15	0.1815	67.598	67.6	2.5	1.561

Test Readings for Specimen No. 1

No.	Def. Dial in.	Load Dial	Load lbs.	Strain %	Deviator Stress ksf
16	0.1924	67.491	67.5	2.7	1.555
17	0.2477	64.528	64.5	3.7	1.472
18	0.2888	60.215	60.2	4.5	1.363
19	0.3162	56.633	56.6	4.9	1.275

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, ksf	0.959			
Undrained shear strength, ksf	0.480			
Failure strain, %	5.9			
Strain rate, in./min.	0.055			
Water content, %	46.6			
Wet density, pcf	103.0			
Dry density, pcf	70.3			
Saturation, %	88.7			
Void ratio	1.4430			
Specimen diameter, in.	2.845			
Specimen height, in.	5.870			
Height/diameter ratio	2.06			

Description: Gray Fat Clay w/sand pockets

LL =	**PL =**	**PI =**	**Assumed GS=** 2.75	**Type:** Undisturbed

Project No.: 92105154

Date Sampled:

Remarks:
ASTM D2166

Client: USACE

Project: Galveston Channel Deepening San Jacinto Placement Area
Contract #W912HY-09-D-0021, Task Order #0010

Location: 10-B11

Sample Number: 6 **Depth:** 10-12 ft.

UNCONFINED COMPRESSION TEST
Terracon, Inc.
Houston, TX

UNCONFINED COMPRESSION TEST

7/21/2010

Date:
Client: USACE
Project: Galveston Channel Deepening San Jacinto Placement Area
Contract #W912HY-09-D-0021, Task Order #0010
Project No.: 92105154
Location: 10-B11
Depth: 10-12 ft. **Sample Number:** 6
Description: Gray Fat Clay w/sand pockets
Remarks: ASTM D2166
Type of Sample: Undisturbed
Assumed Specific Gravity=2.75 **LL=** **PL=** **PI=**

Parameters for Specimen No. 1

Specimen Parameter	Initial
Moisture content: Moist soil+tare, gms.	150.330
Moisture content: Dry soil+tare, gms.	118.170
Moisture content: Tare, gms.	49.110
Moisture, %	46.6
Moist specimen weight, gms.	1008.87
Diameter, in.	2.845
Area, in.^{2}	6.357
Height, in.	5.870
Wet density, pcf	103.0
Dry density, pcf	70.3
Void ratio	1.4430
Saturation, %	88.7

Test Readings for Specimen No. 1

Strain rate, in./min. = 0.055
Unconfined compressive strength = 0.959 ksf **at reading no.** 17

No.	Def. Dial in.	Load Dial	Load lbs.	Strain %	Deviator Stress ksf
0	0.0000	0.000	0.0	0.0	0.000
1	0.0300	1.110	1.1	0.5	0.025
2	0.0382	2.528	2.5	0.6	0.057
3	0.0481	5.518	5.5	0.8	0.124
4	0.0519	7.877	7.9	0.9	0.177
5	0.0604	14.274	14.3	1.0	0.320
6	0.0656	18.344	18.3	1.1	0.411
7	0.0712	22.142	22.1	1.2	0.495
8	0.0769	25.531	25.5	1.3	0.571
9	0.0821	28.780	28.8	1.4	0.643
10	0.0878	31.279	31.3	1.5	0.698
11	0.0987	35.099	35.1	1.7	0.782
12	0.1095	37.453	37.5	1.9	0.833
13	0.1317	39.862	39.9	2.2	0.883
14	0.1814	42.202	42.2	3.1	0.926
15	0.2363	43.821	43.8	4.0	0.953

Test Readings for Specimen No. 1

No.	Def. Dial in.	Load Dial	Load lbs.	Strain %	Deviator Stress ksf
16	0.2883	44.457	44.5	4.9	0.958
17	0.3437	44.988	45.0	5.9	0.959
18	0.3574	44.975	45.0	6.1	0.957
19	0.4122	44.931	44.9	7.0	0.946
20	0.4259	45.017	45.0	7.3	0.946
21	0.4812	44.353	44.4	8.2	0.922
22	0.5361	43.012	43.0	9.1	0.885
23	0.5909	41.775	41.8	10.1	0.851
24	0.6463	40.567	40.6	11.0	0.818
25	0.7011	39.414	39.4	11.9	0.786
26	0.7560	38.586	38.6	12.9	0.761
27	0.8113	37.805	37.8	13.8	0.738

SUMMARY TABLE OF LABORATORY TEST DATA

Project name: TO-0010 Galveston Channel Deepening | Client: USACE, Galveston District | Terracon Project # : 92105154

Boring	Depth	Field tests			Atterberg Limits			Grain size Analysis										USCS Symbol	Wc	γd	Strenght tests																						
								% by weight passing sieve					Soil Particle Content								Direct Shear Test					Unconfined Compression				UU Triaxial Test				CU Triaxial Test							
		PP	TV	SPTn	LL	PL	PI	4	10	40	100	200	gravel	sand	silt	clay	sieve 200				C	φ	Wc	γd	Symbol	C	Wc	γd	Symbol	C	Wc	γd	Symbol	C	φ	c'	φ'	Wc	γd	Symbol
	ft	tsf	tsf	bl/ft	%	%	%	%	%	%	%	%	%	%	%	%	%		%	pcf	ksf	°	%	pcf		ksf	%	pcf		ksf	%	pcf		ksf	°	ksf	°	%	pcf	
10-B9	44.5-46			52														SM**	23																						
	46.5-48			15														SM**	29																						
	48.5-50			8														SM**	31																						
	50.5-52			8														CL**	39																						
	52-54	0.00	0.50		38	16	22	100	99	99	97	68	0	32	29	39		CL																0.30	13	0.24	27	34	86	CL**
	54.5-56			5														SC**	31																						
	56-58	0.00	0.10															CH**	40																						
	58-60	0.00	0.15		52	19	33	100	100	100	99	89	0	11	53	36		CH	34	87																					
	60-62																	CH**	39																						
	62-64	0.00	0.25															CH**	46																						
	64-66	0.50	0.25															CH**	54																						
	66-68	0.00	0.20		41	16	25	100	100	100	81	43	0	57	15	28		SC								0.93	44	80	CH**												
	68-70	0.00	0.10															SC**	26																						
	70-72	0.50																SC**	28																						
	72-74	1.50																CL**	23																						
	74-76	0.00	0.10															CL**	28																						
	76-78	1.00						100	100	99	95	85	0	15	57	28		CL*	32																						
	78.5-80			14														CL**	30																						
10-B9	0-2	0.00						95	93	89	81	33	5	62	8	25		SC*	42																						
	2-4	0.00	0.10		107	32	75	100	100	100	100	99	0	1	30	69		CH	62	58																					
	4-6	0.00	0.05															CH**																							
	6-8	0.00	0.05															CH**								0.18	84	56	CH**												
	8.5-10			0				100	100	99	87	15	0	85	7	8		SM*	32																						
	10.5-12			5														SM**	30																						
	12.5-14			0														SM**	32																						
	14.5-16			5														SM**	26																						
	16.5-18			0														SM**	31																						
	18.5-20			39														SP-SM**	27																						
	20.5-22			44				100	100	98	65	8	0	92	4	4		SP-SM*	25																						
	22.5-24			21														SM**	32																						
	24.5-26			30														SM**	27																						
	26.5-28			38														SM**	27																						
	28.5-30			30				100	100	99	95	32	0	68	24	8		SM*	29																						
10-B10	0-2	1.50																SC**	26																						
	2-4	0.50																CH**	47	72																					
	4-6	0.00	0.25		93	28	65	100	100	100	100	95	0	5	27	68		CH								0.42	63	67	CH**												
	6.5-8			10														SC**	26																						
	8.5-10			24				100	100	100	92	16	0	84	6	10		SC*	31																						
	10.5-12			1														CH**	50																						
	12.5-14																	CH**	53																						
	14-16	0.00	0.05		59	20	39	100	100	100	99	94	0	6	48	46		CH								0.19	52	71	CH**												
	16.5-18			1														CH**	71																						
	18.5-20			30				100	100	99	87	7	0	93	4	3		SP-SM*	28																						
	20.5-22			17														SP-SM**	26																						
	22.5-24			10														SP-SM**	27																						
	24.5-26			5														SP-SM**	30																						
	26.5-28			15														SP-SM**	30																						
	28.5-30			28														SP-SM**	29																						
	0-2	0.75			81	30	51	100	100	100	100	92	0	8	27	65		CH	46							0.78	46	79	CH**												

SUMMARY TABLE OF LABORATORY TEST DATA

Project name: TO-0010 Galveston Channel Deepening | **Client: USACE, Galveston District** | **Terracon Project # : 92105154**

Boring	Depth	Field tests			Atterberg Limits			Grain size Analysis										USCS Symbol	Wc	γd
		PP	TV	SPTn	LL	PL	PI	% by weight passing sieve					Soil Particle Content							
								4	10	40	100	200	gravel	sand	silt	clay	sieve 200			
	ft	tsf	tsf	bl/ft	%	%	%	%	%	%	%	%	%	%	%	%	%		%	pcf
10-B11	2-4	0.00																SC**	19	
	4-6	0.50			90	28	62											CH*	45	
	6-8	0.00	0.05		84	27	57	100	100	100	99	89	0	11	33	56		CH	57	67
	8-10	0.00	0.10															CH**	62	
	10-12	0.00	0.20		96	31	65	100	100	100	100	96	0	4	27	69		CH	47	
	12-14	0.00	0.25															CH**	74	60
	14-16	0.00	0.15		90	29	61	100	100	100	97	69	0	31	14	55		CH	52	
	16-18	0.00	0.10		121	32	89	100	100	100	100	97	0	3	20	77		CH	79	55
	18.5-20			41				100	100	98	87	7	0	93	4	3		SP-SM*	18	
	20.5-22			52														SP-SM**	25	
	22.5-24			29														SP-SC**	37	
	24.5-26			13														SP-SC**	31	
	26.5-28			15														SP-SC**	27	
	28-5-30			18														SP-SC**	28	
10-B12	0-2	1.25																SC**	31	
	2-4	0.75			36	16	20	100	100	99	79	32	0	68	10	22		SC	26	94
	4-6	0.00	0.15															SC**	21	
	6.5-8			15														SC**	24	
	8.5-10			8				100	100	99	77	14	0	86	8	6		SC*	24	
	10.5-12			9														SC**	38	
	12.5-14			2														SC**	33	
	14.5-16			0														CH**	61	
	16.5-18			0														CH**	62	
	18.5-20			26				100	100	97	93	44	0	56	12	32		SC*	50	
	20.5-22			17														SC**	31	
	22.5-24			39														SC**	79	
	24.5-26			49														SC**	25	
	26.5-28			60				100	100	99	88	13	0	87	11	2		SC*	24	
	28.5-30			9														SC**	28	
10-B13	0-2	1.75			75	29	46	100	100	100	100	99	0	1	34	65		CH		
	2-4	0.50																CH**	48	
	4-6	1.00			98	31	67	100	100	100	100	96	0	4	29	67		CH		
	6.5-8			0														SC**	34	
	8.5-10			0				100	100	99	85	21	0	79	11	10		SC*	28	
	10.5-12			0														CH**	56	
	12.5-14			0	96	32	64											CH*	53	
	14.5-16			0														CH**	62	
	16.5-18			0														CH**	63	
	18.5-20			53														SP-SM**	25	
10-B14	0-2	1.00			97	34	63	100	100	100	100	100	0	0	20	80		CH	47	
	2-4	0.50	0.30		100	35	65	100	100	100	100	96	0	4	30	66		CH		
	4-6	0.00	0.25															CH**	53	
	6-8	0.00	0.20															CH**	71	
	8-10	0.00	0.10		96	32	64	100	100	100	100	100	0	0	23	77		CH	73	55
	10-12	0.00	0.25		33	26	7	100	100	100	100	99	0	1	44	56		ML	42	80
	12.5-14			0														ML**	64	
	14.5-16			38														SP-SM**	28	
	16.5-18			35				100	100	100	88	11	0	90	5	5		SP-SM*	28	
	18.5-20			50														SP-SM**	32	

Boring	Depth	Strenght tests: Direct Shear Test					Unconfined Compression				UU Triaxial Test				CU Triaxial Test						
		C	φ	Wc	γd	Symbol	C	Wc	γd	Symbol	C	Wc	γd	Symbol	C	φ	c'	φ'	Wc	γd	Symbol
	ft	ksf	°	%	pcf		ksf	%	pcf		ksf	%	pcf		ksf	°	ksf	°	%	pcf	
10-B11	2-4																				
	4-6																				
	6-8																				
	8-10																				
	10-12						0.48	47	70	CH**											
	12-14																				
	14-16																				
	16-18																				
	18.5-20																				
	20.5-22																				
	22.5-24																				
	24.5-26																				
	26.5-28																				
	28-5-30																				
10-B12	0-2																				
	2-4						0.44	26	94	CL**											
	4-6																				
	6.5-8																				
	8.5-10																				
	10.5-12																				
	12.5-14																				
	14.5-16																				
	16.5-18																				
	18.5-20																				
	20.5-22																				
	22.5-24																				
	24.5-26																				
	26.5-28																				
	28.5-30																				
10-B13	0-2						1.47	35	78	CH**											
	2-4																				
	4-6										0.29	60	67	CH**							
	6.5-8																				
	8.5-10																				
	10.5-12																				
	12.5-14																				
	14.5-16																				
	16.5-18																				
	18.5-20																				
10-B14	0-2																				
	2-4						0.53	48	72	CH**											
	4-6																				
	6-8																				
	8-10																				
	10-12																				
	12.5-14																				
	14.5-16																				
	16.5-18																				
	18.5-20																				