GEOTECHNICAL DATA REPORT

For

PESCADITO ENVIRONMENTAL RESOURCE CENTER TYPE I MUNICIPAL SOLID WASTE MANAGEMENT FACILITY LAREDO, WEBB COUNTY, TEXAS MSW PERMIT NO. 2374

Prepared for

CB&I

Dallas, Texas

On behalf of

RANCHO VIEJO WASTE MANAGEMENT, LLC

Prepared by

RABA KISTNER CONSULTANTS, INC.

San Antonio, Texas

PROJECT NO. ASF13-140-00

February 25, 2015

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1.0 INTRODUCTION

This Geotechnical Data Report (GDR) was prepared specifically to present a discussion of geotechnical testing and results for a municipal solid waste (MSW) permit application (MSW Permit No. 2374) for the proposed Pescadito Environmental Resource Center facility. As depicted on *Figure 1 – Site Location Map*, the proposed facility is located within an approximate 12,194-acre ranch property, located about 18 miles east of Laredo and south of U.S. Highway 59 in rural south-central Webb County, Texas. Rancho Viejo Waste Management, LLC is seeking a MSW permit to construct a new Type I municipal solid waste management facility at the referenced site. The proposed facility is approximately 1,100 acres, which includes a municipal solid waste landfill facility (MSWLF) unit comprising approximately 800 to 850 acres.

Geotechnical exploration and testing activities reported herein were conducted by **Raba Kistner Consultants, Inc. (RKCI)** This GDR is intended to accompany the Subsurface Investigation Report (SIR) for this permit application that was prepared under a separate cover by our affiliate company **Raba Kistner Environmental, Inc. (RKEI)**.

2.0 FIELD EXPLORATION PROGRAM

The proposed facility is approximately 1,100 acres, although the area of the proposed Type I MSWLF will comprise approximately 800 to 850 acres. As described in more detail in the SIR for this permit application, the field exploration program, which formed the basis of the geotechnical data study for this site, was accomplished in four (4) phases by our affiliate company **RKEI** from November 2009 through January 2012.

Following completion of the most recent field exploration activities in January 2012, collective subsurface characterization activities within the proposed permit boundary area had been evaluated by a total of 57 exploratory soil borings, 19 piezometers, and 2 exploratory test pits at the locations shown on *Figure 2 – Boring/Test Pit Location Map* attached to this report.

As presented on *Figure 2*, soil borings installed during preliminary study phases (Phases I and II) are designated as borings B-1 through B-26 (excluding B-9), whereas borings installed following TCEQ approval of the Soil Boring Plan (Phase III) are designated as borings B-9, B-101 through B-126, B-11A, B-109A, B-114A, and DB-1, respectively. Exploratory test pits designated as TP-1 and TP-2 were excavated in January 2012 (Phase IV).

2.1 STANDARD PENETRATION TEST (SPT)

The Standard Penetration Test (SPT) is a field procedure used to obtain disturbed samples and estimate relative density of granular material and consistency of cohesive material by driving a thick-walled sampler into the bottom of a boring at specific sampling intervals. The field test is expressed as blows per foot (BPF), which has been correlated with a variety of soil properties. A total of 29 SPTs were conducted in borings B-1 and B-2 and are presented on the boring logs provided in the SIR, *Appendix B*.

2.2 POCKET PENETROMETER

A pocket penetrometer is a small handheld testing device used to estimate the consistency of cohesive soils. Pocket penetrometer results (as Shear Strength) for borings B-2 through B-27, B-103 through B-105, B-107 through B-126, B-11A, B-109A, B-114A, and DB-1 are shown on boring logs in *Appendix B* of the SIR. Pocket penetrometer measurements were not obtained at borings B-101, B-102, and B-106. Pocket Penetrometer results (as Shear Strength) are presented on *Figures A-1 through A-78* in *Appendix A*, of this report.

3.0 LABORATORY TESTING

Laboratory testing was performed on selected samples of the soil strata encountered and recovered during our field exploration operations. Samples were selected for testing so that the engineering properties of at least one sample per soil stratum that may form the bottom or sides of potential excavations would be determined. Additional samples were tested to provide general information about each stratum.

Laboratory testing focused on classification, moisture content, and permeability testing specifically referenced in the TCEQ permitting requirements at 30 TAC §330.63(e)(5). Note that much of the classification testing was conducted on disturbed samples obtained from RotoSonic borings (Phases II and III). While disturbed samples are suitable for classification and moisture content testing, other geotechnical test results from RotoSonic samples should only be used for qualitative reference purposes. Undisturbed samples for all four strata identified in the SIR were subsequently obtained from the test pits (Phase IV) and tested for classification, moisture content, and permeability. The sections below provide a more detailed description of testing and the results.

3.1 CLASSIFICATION TESTS

Index testing such as Atterberg Limits and the percentage passing, the No. 200 sieve, were used to classify soils in accordance with ASTM Standard Test Methods D4318 and D1140, respectively. Classification tests were assigned to each soil strata visually identified during field sampling and logging to assist in the interpretation and presentation of final boring logs. In addition, classification tests were assigned to all advanced testing, (e.g., permeability). Classification test results are useful as correlative tools for other properties such as permeability. Classification tests were conducted on samples collected from each stratum (I through IV) identified in the SIR. The results of the classification tests are presented on *Figures A-1 through A-78* in *Appendix A* of this report.

3.2 MOISTURE CONTENT TESTS

Natural moisture content tests were performed in accordance with ASTM Standard Test Method D2216. Moisture content results, when combined with classification testing results, are useful as performance indicators of cohesive soils such as estimating the shrink or swell potential of cohesive materials. Moisture content tests were conducted on samples collected from each stratum (I through IV) identified in the SIR. The results of the moisture content tests are presented on *Figures A-1 through A-78* in *Appendix A* of this report.

3.3 PERMEABILITY TESTS

Permeability (hydraulic conductivity) tests were conducted in accordance with ASTM Standard Test Method D5084, Method C or falling head procedures using de-aired tap water. Permeability tests were assigned to relatively undisturbed samples obtained at test pits TP-1 and TP-2. Permeability tests were conducted on samples collected from each stratum (I through IV) identified in the SIR. Samples from Strata I through IV were tested on their horizontal axis as they represent the sidewall of the proposed landfill excavation. Additionally, a sample of Stratum IV was tested along the vertical axis to represent the bottom of the proposed landfill excavation. A summary of the permeability test results are presented in tabular form on *Figure B-1* in *Appendix B* of this report. In addition, a detailed summary and graphical presentation of each hydraulic conductivity test is provided as *Figures B-2 through B-19* in *Appendix B* of this report. Note that the majority of permeability tests were performed for horizontal flow paths; the sample trimmed for a vertical flow path is indicated with "-V" as the sample number suffix on *Figures B-16 and B-17*.

4.0 STRATIGRAPHY AND SOIL PROPERTIES

The following sections address the generalized stratigraphy observed in the borings and test pit excavations performed for this study, potential uses of materials that may be excavated during construction, and typical properties of those materials. The majority of laboratory test results are presented in graphical and numerical form on the borings logs presented in *Appendix C* of the SIR.

4.1 GENERALIZED STRATIGRAPHY

The subsurface conditions encountered at the boring locations are shown on the boring logs presented in **Appendix B** of the SIR. The boring logs should be consulted for boring specific (detailed) stratigraphic information. These boring logs represent our interpretation of the subsurface conditions based on the field logs, visual examination of field samples by our personnel, and laboratory test results of selected field samples. Each stratum has been designated by grouping soils that possess similar physical and engineering characteristics. The lines designating the interfaces between strata on the boring logs represent approximate boundaries. Transitions between strata may be gradual.

Generalized soil profiles corresponding to geologic (stratigraphic) fence diagrams included as *Figures 4 through 13* of the SIR present the soil type, layer thickness, and depth to water are also presented on *Figures C-1 through C-10* in *Appendix C* of this report. An index map is provided as *Figure 3 – Fence Diagram Index Map*. These profiles depict that the majority of soils observed in the borings were cohesive in nature and the granular inclusions were sporadic and discontinuous across the site.

As presented on the referenced figures, the stratigraphic units have been designated at the site based upon review and interpretation of boring logs and geologic sections, in addition to consideration of down hole geophysical logging data, and test pit information and photographs. In general, the soils observed within the borings and test pits performed for this study are predominately cohesive in nature. Fat clays (CH) and lean clays (CL) are predominant and were observed in about 95.5% of the samples obtained during drilling operations. Test pit observations were similar. The remaining 4.5% of samples included about 2.5% cemented soils and about 2% "granular" soils. The cemented soils included thin layers of siltstones, claystones, and clay shales. Thick layers of sandstones were observed in the relatively deep

boring DB-1. The types of "granular" soils observed included silts (ML and MH), poorly graded sands (SP), clayey sands (SC), and silty sands (SM).

4.2 SOIL PROPERTIES

A graphical summary of the engineering properties for each of the four soil strata described above are presented on *Figures C-11 through C-14* in *Appendix C* of this report. The results of Atterberg Limits testing, specifically the Liquid Limit and the Plastic Limit have been presented in the first column/graph of these graphical summaries. Atterberg Limit testing includes Liquid Limits, Plastic Limits, and a resultant Plasticity Index. The Plasticity Index (PI) is simply the numerical difference between the Liquid and Plastic Limits. The PI is used in soil classification and also commonly used as a correlative tool for estimating volume change (shrink/swell), soil shear strength, and even permeability characteristics. Results of laboratory tests indicate that about 89% of samples tested for plasticity have a PI greater than 20.

The second column/graph presented on *Figures C-11 through C-14* presents the results of moisture content testing. As depth increases, the range of moisture variation decreases.

The last column/graph presents a comparison of the information presented in the first two columns/graphs. That is, the measured Plastic Limit less the corresponding measured moisture content. On the basis of these results, the in-situ moisture conditions are consistently dryer than the soil's plastic limit, indicating:

- soils are significantly desiccated, (i.e., very dry in their present condition).
- soils could experience significant swell with increases in moisture content.
- soils are generally overconsolidated.

5.0 CONCLUSIONS

In general, the subsurface soils encountered in this study are predominately cohesive (clayey) in nature. Fat clays (CH) and lean clays (CL) are predominant and were observed in about 95.5% of the samples obtained during drilling operations. Test pit observations were similar. The remaining 4.5% of samples included about 2.5% cemented soils and about 2% "granular" soils. The cemented soils included thin layers of siltstones, claystones, and clay shales. Thick layers of sandstones were observed in the relatively deep boring DB-1. The types of "granular" soils observed included silts (ML and MH), poorly graded sands (SP), clayey sands (SC), and silty sands (SM).

The cohesive soils encountered in the borings and test pits were stiff to hard in consistency, and appear overconsolidated, (i.e., "stiff, fissured clays"). The presence of stiff, fissured clays, and their associated strength characteristics, should be accounted for in the facility design.

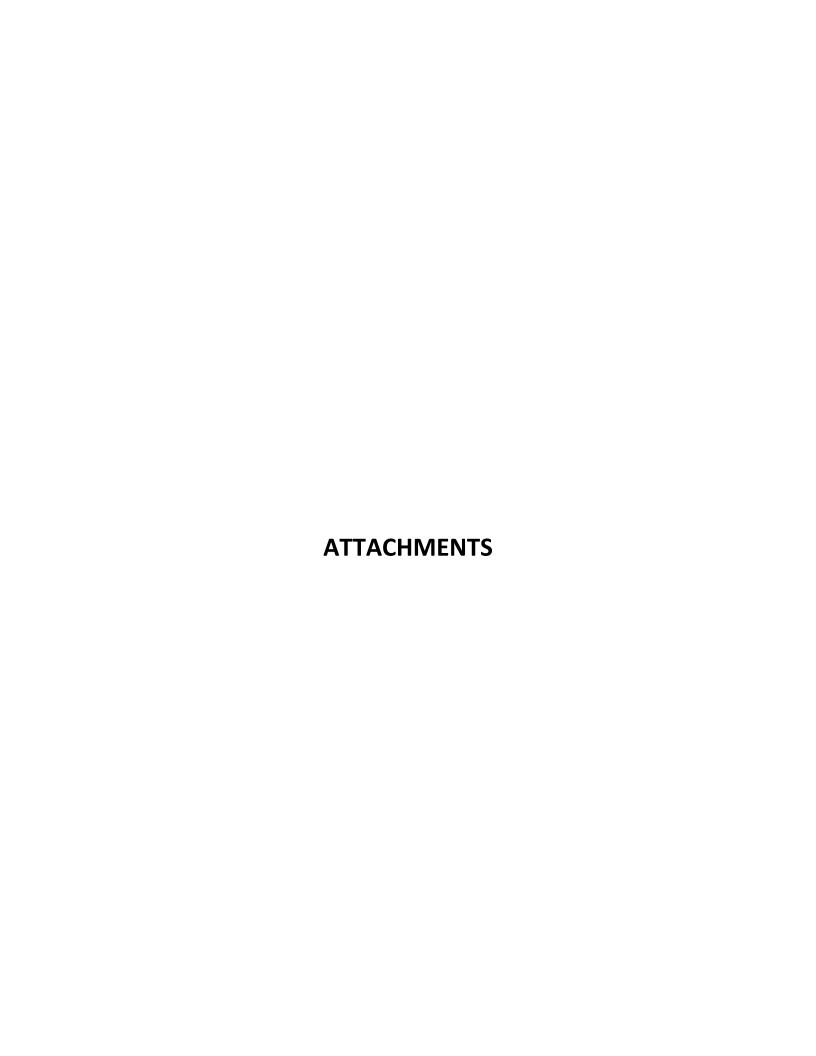
The cohesive soils were also highly plastic while the natural moisture contents were seven to eight percentage points (on average) below the soil plastic limit. These conditions result in a potential for shrink/swell movements with changes in the moisture content. There is a significant swell potential of the highly plastic clay with the increase in the soil moisture contents. The shrink or swell potential of the predominantly clayey soils should be accounted for in the facility design.

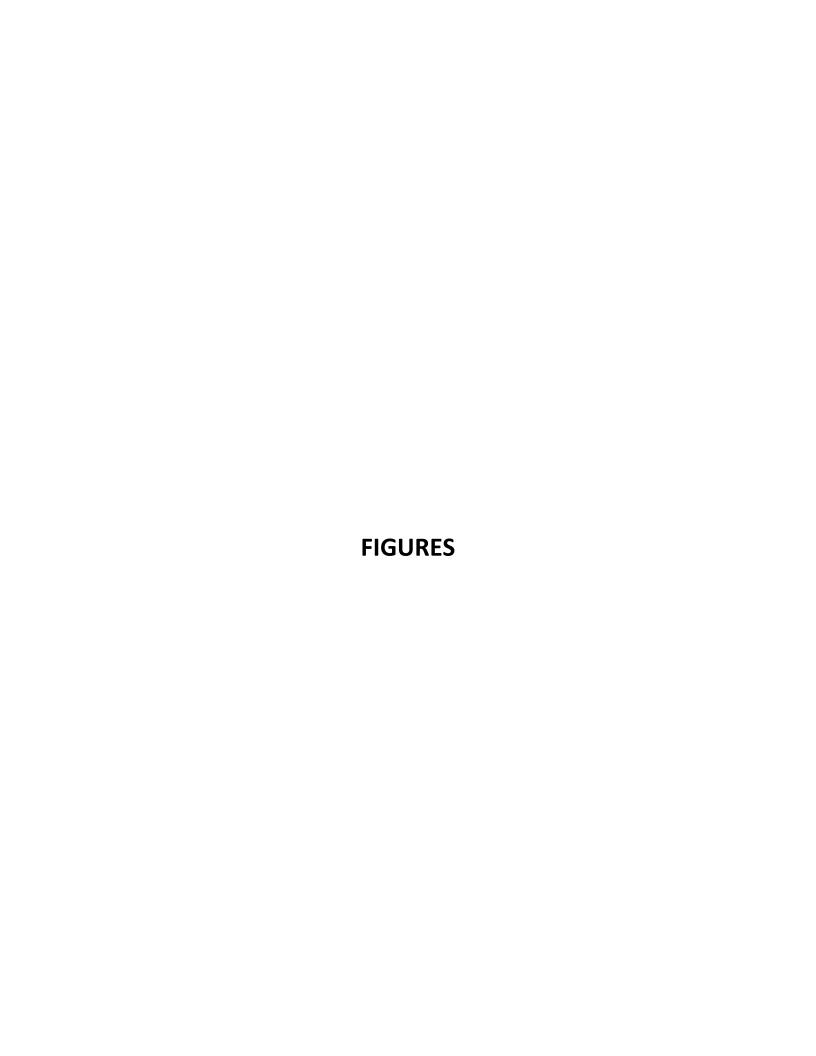
6.0 REFERENCES

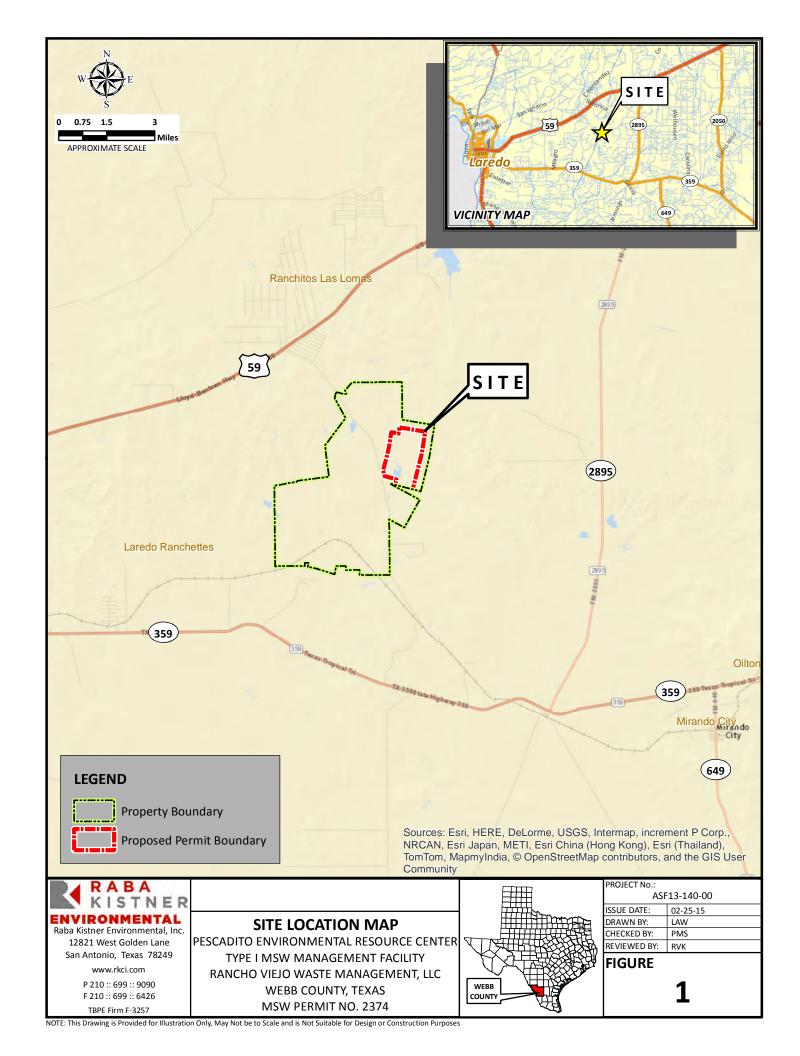
1. ASTM Standard Test Methods

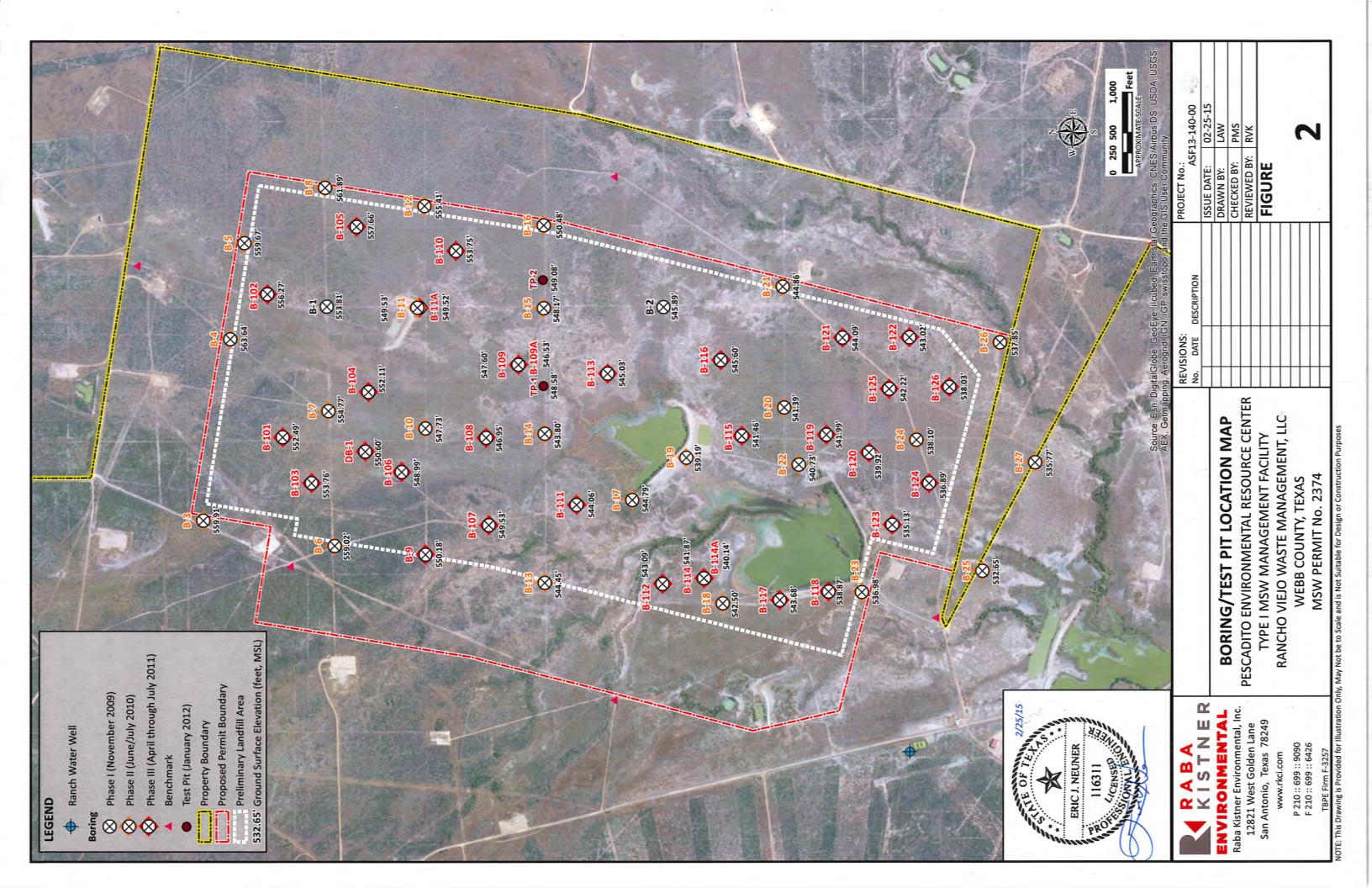
ASTM Standard	Description	Latest Revision*
D1140	Standard Test Methods for Amount of Material in Soils Finer than No. 200 (75-µm) Sieve	2006
1)//16	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass	2010
D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils	2010
D5084	Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous	2010
	Materials Using a Flexible Wall Permeameter	

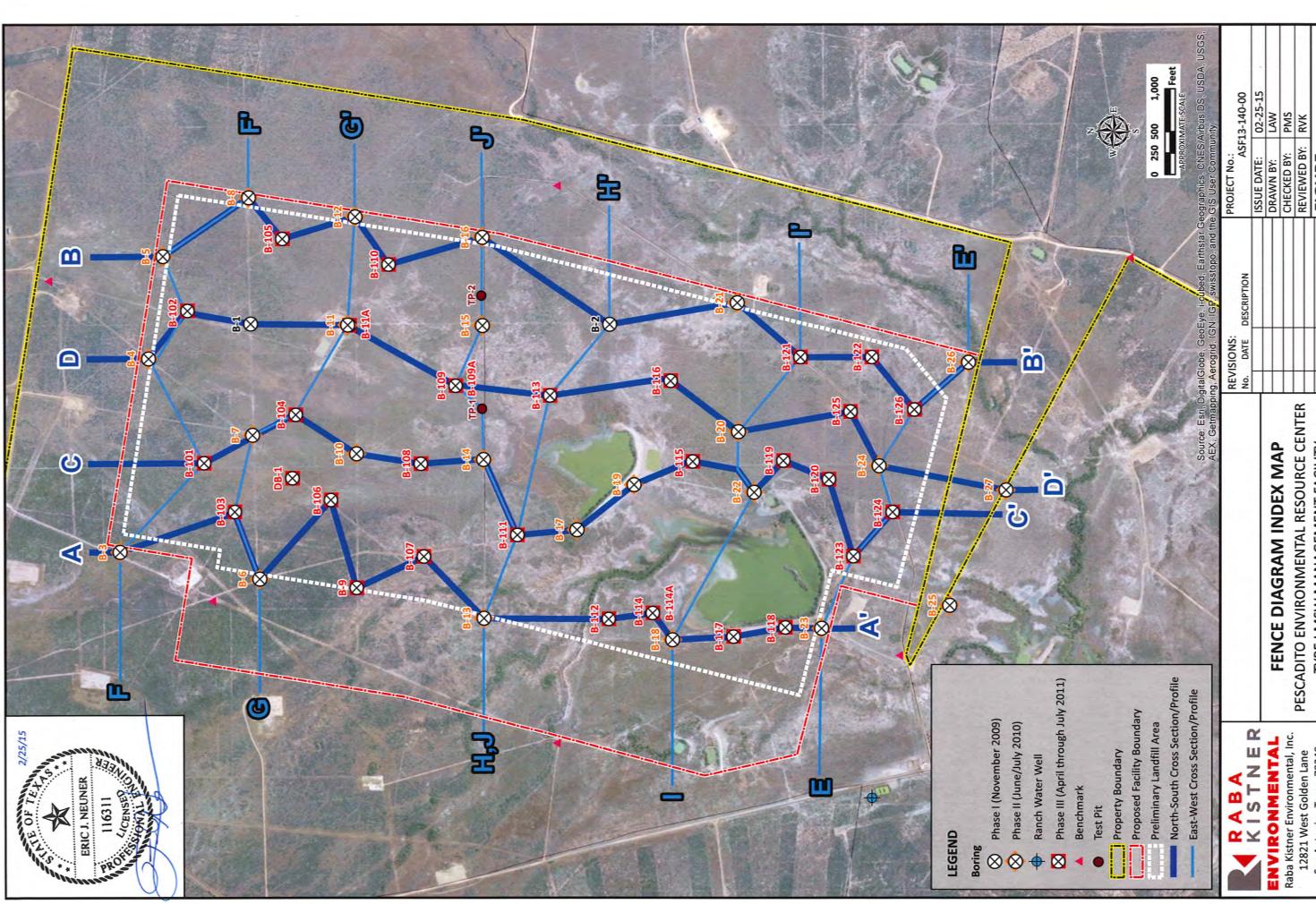
^{*} Latest revisions to the referenced Standards as of November 21, 2013.











FENCE DIAGRAM INDEX MAP

PESCADITO ENVIRONMENTAL RESOURCE CENT TYPE I MSW MANAGEMENT FACILITY RANCHO VIEJO WASTE MANAGEMENT, LLC WEBB COUNTY, TEXAS

Raba Kistner Environmental, Inc. 12821 West Golden Lane San Antonio, Texas 78249

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MSW PERMIT No. 2374

APPENDIX A

RESULTS OF SOIL SAMPLE ANALYSES



Pages 1 through 78

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

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ILL IN	AIVIE. ASF	13-140-00			DINOAIN	2013.0	r J	Don't limit			25/20
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strengtl Test
B-1	0.0 to 3.0										
	3.0 to 5.0	12	19	49	15	34	SC		50		
	5.0 to 7.5	11	22								
	7.5 to 10.0	10	34								
	10.0 to 12.5	16	35								
	12.5 to 15.0	30	28	116	24	92	СН		86		
	15.0 to 17.5	25	25								
	17.5 to 20.0	27	24								
	20.0 to 22.5	40	17								
	22.5 to 25.0	50	20	110	23	87	СН		86		
	25.0 to 27.5	50/4	15								
	27.5 to 30.0	50/5.5	15								
	30.0 to 35.0										
	35.0 to 40.0										
	40.0 to 45.0										
	45.0 to 50.0										
	50.0 to 55.0										
	55.0 to 57.5		34	152	39	113	СН		89		
	57.5 to 60.0										
	60.0 to 62.5	50/1	14								
	62.5 to 65.0										
	65.0 to 67.5	50/2	13	91	19	72	СН		65		
	67.5 to 68.0										
	68.0 to 70.0										
	70.0 to 72.5	50/5	19								
	72.5 to 75.0										
	75.0 to 77.5		40	95	21	74	СН		81		
	77.5 to 80.0										
	80.0 to 82.5	50	17								
	82.5 to 85.0										
	85.0 to 87.5	50/6	20								
	87.5 to 90.0										
	90.0 to 95.0										
	95.0 to 97.5	50/6	14	66	23	43					
B-2	0.0 to 5.0		22	57	14	43					
	5.0 to 7.0		28								
	7.0 to 10.0										
	10.0 to 12.5	16	28								
	12.5 to 15.0										

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

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2/25/2015

Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-2	15.0 to 17.0		49	163	38	125	СН		98		
	17.0 to 20.0										
	20.0 to 22.5	27	32								
	22.5 to 25.0										
	25.0 to 27.5		23	112	29	83	СН		69		
	27.5 to 30.0										
	30.0 to 32.5	50/6	20	143	28	115	СН		99		
	32.5 to 35.0										
	35.0 to 37.5	50/6	11								
	37.5 to 40.0										
	40.0 to 42.5	50	22	116	32	84	СН		99		
	42.5 to 45.0										
	45.0 to 47.5	50/6	16	76	28	48	СН		99		
	47.5 to 50.0										
	50.0 to 52.5	50	10								
	52.5 to 55.0										
	55.0 to 57.5	50/6	11								
	57.5 to 60.0										
	60.0 to 62.5	49	18	72	22	50	CH		88		
	62.5 to 65.0										
	65.0 to 67.5										
	67.5 to 78.5										
B-3	0.0 to 2.0										
	2.0 to 4.5									1.25	PP
	4.5 to 7.0									2.00	PP
	7.0 to 9.5			91	26	65	CH		98	1.25	PP
	9.5 to 12.0									1.63	PP
	12.0 to 15.0									2.25	PP
	15.0 to 17.0									2.25	PP
	17.0 to 19.0									2.25	PP
	19.0 to 21.5									2.25	PP
	21.5 to 24.0									2.25	PP
	24.0 to 25.0									2.25	PP
	24.5 to 27.0									2.25	PP
	25.0 to 27.0									2.25	PP
	27.0 to 29.5			64	24	40	CH		100	2.25	PP
	29.5 to 32.0									2.25	PP
	32.0 to 34.5									2.25	PP
	34.5 to 37.0	er TV = To	orvane III	C = Unconfin			: Field Van		I = Unconsol	2.25	PP

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2/25/2015

ILE NA	AME: ASF	13-140-00	PESCA	IDITO_FE	BRUAR	Y 2015.G	PJ				/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-3	37.0 to 39.5									2.25	PP
	39.5 to 42.0									2.25	PP
	42.0 to 43.5									2.25	PP
	43.5 to 45.0									2.25	PP
	45.0 to 47.0									2.25	PP
	47.0 to 49.5									2.25	PP
	49.5 to 52.0									2.25	PP
	52.0 to 54.5									2.25	PP
	54.5 to 57.0									2.25	PP
	57.0 to 59.5									2.25	PP
	59.5 to 60.0									2.25	PP
	60.0 to 64.5									2.25	PP
	64.5 to 67.0		14	32	15	17	CL	119	69	2.25	PP
	67.0 to 69.0									2.25	PP
	69.0 to 71.5		12	63	22	41	СН	117	91	2.25	PP
	71.5 to 74.0									2.25	PP
	74.0 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 84.0									2.25	PP
	84.0 to 86.5									2.25	PP
	86.5 to 89.0									2.25	PP
	89.0 to 91.5									2.25	PP
	91.5 to 93.0									2.25	PP
	93.0 to 95.5									2.25	PP
	95.5 to 98.0									2.25	PP
	98.0 to 99.0									2.25	PP
	99.0 to 101.5		16					107		2.25	PP
	101.5 to 104.0									2.25	PP
	104.0 to 106.0									2.25	PP
	106.0 to 108.5									2.25	PP
	108.5 to 111.0									2.25	PP
	111.0 to 112.0									2.25	PP
	112.0 to 114.5		12	42	24	18	CL		99	2.25	PP
	114.5 to 117.0									2.25	PP
	117.0 to 119.5		17	55	28	27	СН	109	100	2.25	PP
	I		i							2.25	DD
	119.5 to 122.0		ļ							2.25	PP

PP = Pocket Penetrometer

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Borning Derivation Deriva	LIFE IN	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	Z015.G	PJ				23/2013
126.5 to 129.0 129.0 to 131.5 131.5 to 134.0 131.5 to 134.0 131.5 to 135.0 135.0 to 137.5 14		Depth		Content				USCS	Weight	% -200 Sieve	Strength	
129.0 to 131.5 131.5 to 134.0 134.0 to 135.0 135.0 to 137.5 137.5 to 140.0 140.0 to 142.0 140.0 to 142.0 141.5 to 147.0 147.0 to 149.5 152.0 to 156.5 156.5 to 159.0 159.0 to 180.0 159.0	B-3	124.0 to 126.5									2.25	PP
131.5 to 134.0 134.0 to 135.0 135.0 to 137.5 135.0 to 137.5 144 42 19 23 CL 1114 99 225 PP 137.5 to 140.0 140.0 to 142.0 142.0 to 144.5 144.5 to 147.0 147.0 to 149.5 149.5 to 152.0 152.0 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 150.0 B4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 10.0 to 13.0 17 55 29 26 CH 106 97 225 PP		126.5 to 129.0									2.25	PP
134.0 to 135.0 135.0 to 137.5 144 42 19 23 CL 114 99 225 PP 137.5 to 140.0 140.0 to 142.0 142.0 to 144.5 144.5 to 147.0 147.0 to 149.5 149.5 to 152.0 152.0 to 154.0 159.0 to 150.0 159.0		129.0 to 131.5									2.25	PP
135.0 to 137.5		131.5 to 134.0									2.25	PP
137.5 to 140.0 140.0 to 142.0 140.0 to 142.0 142.0 to 144.5 144.5 to 147.0 144.5 to 147.0 149.5 to 152.0 152.0 to 154.0 154.0 to 156.5 155.5 to 159.0 159.0 to 160.0 B-4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 16.0 to 18.0 16.0 to 18.0 16.0 to 18.0 2.25 pp 18.0 to 21.0 2.25 pp 24.0 to 27.0 27.0 to 30.0 38.0 to 38.0 38.0 to 38.0 38.0 to 38.0 38.0 to 40.0 40.0 to 43.0 40.0 to 43.0 40.0 to 43.0 40.0 to 43.0 40.0 to 40.0 40.0 to 43.0 40.0 to 40.0 40.0 to 52.0 52.0 to 54.0 52.0 to 54.0 52.2 to pp 54.0 to 57.0 55.0 to 56.0		134.0 to 135.0									2.25	PP
140.0 to 142.0 142.0 to 144.5 142.0 to 144.5 144.5 to 147.0 147.0 to 149.5 149.5 to 152.0 152.0 to 154.0 155.5 to 159.0 159.0 to 160.0 B-4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 16.0 to 18.0 16.0 to 18.0 16.0 to 18.0 2.25 PP 18.0 to 21.0 2.25 PP 18.0 to 21.0 2.25 PP 18.0 to 27.0 2.0 to 24.0 2.25 PP 2.0 to 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0		135.0 to 137.5		14	42	19	23	CL	114	99	2.25	PP
142.0 to 144.5 144.5 to 147.0 147.0 to 149.5 149.5 to 152.0 149.5 to 152.0 152.0 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 B-4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 16.0 to 18.0 16.0 to 18.0 16.0 to 18.0 16.0 to 18.0 2.25 PP 13.0 to 16.0 2.26 PP 13.0 to 24.0 2.26 PP 13.0 to 33.0 3.0 3.0 to 36.0 3.0 to 38.0 3.0 to 38.0 3.0 to 38.0 3.0 to 40.0 4.0 to 43.0 4.0 to 49.0 4.0 to 52.0 4.0 to 27.0 4.0 to 38.0 3.0 to 38.0 3.0 to 38.0 3.0 to 38.0 3.0 to 40.0 4.0 to 43.0 4.0 to 43.0 4.0 to 49.0 4.0 to 52.0 5.0 to 54.0 5.0 to 54.0 5.0 to 57.0 5.0 to 50.0 5.0 to 57.0 5.0 to 50.0 5.0 to 57.0 5.		137.5 to 140.0									2.25	PP
144.5 to 147.0 147.0 to 149.5 149.5 to 152.0 149.5 to 152.0 152.0 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 B-4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 16.0 to 18.0 16.0 to 18.0 16.0 to 18.0 16.0 to 18.0 2.25 PP 13.0 to 16.0 2.25 PP 2.25 PP 2.25 PP 2.26 PP 2.27 PP 2.28 PP 2.28 PP 2.28 PP 2.28 PP 2.28 PP 2.28 PP 2.29 PP 2.20 PP 2.0 to 4.0 2.2 to 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2		140.0 to 142.0									2.25	PP
147.0 to 149.5 149.5 to 152.0 152.0 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 B-4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 10.0 to 13.0 17 55 29 26 CH 106 97 2.25 PP 13.0 to 16.0 16.0 to 18.0 16.0 to 18.0 16.0 to 18.0 2.25 PP 13.0 to 16.0 2.25 PP 13.0 to 16.0 2.25 PP 13.0 to 16.0 2.25 PP		142.0 to 144.5									2.25	PP
149.5 to 152.0 152.0 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 B-4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 150.0 to 13.0 17 55 29 26 CH 106 106 107 225 PP 13.0 to 16.0 150.0 to 18.0 160.0 to 180.0 160.0 to 180		144.5 to 147.0									2.25	PP
152.0 to 154.0 to 156.5		147.0 to 149.5									2.25	PP
154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 B-4 0.0 to 2.0 2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 150.0 to 18.0 150.0 to 18.0 110.0 to 18.0 110.0 to 18.0 110.0 to 24.0 2.10 to 24.0 2.10 to 27.0 2.70 to 30.0 3.0 to 33.0 3.0 to 36.0 3.0 to 38.0 3.0 to 38.0 3.0 to 38.0 3.0 to 40.0 4.0 to 49.0 4.0 to 49.0 4.0 to 52.0 5.0 to 54.0 5.0 to 57.0 5.0 to 60.0 150.0 to 150.0 12.25 150.0 to 150.0 150.0 t		149.5 to 152.0									2.25	PP
156.5 to 159.0 to 160.0 B-4		152.0 to 154.0									2.25	PP
159.0 to 160.0 B-4		154.0 to 156.5									2.25	PP
B-4		156.5 to 159.0									2.25	PP
2.0 to 4.0 4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 17 55 29 26 CH 106 97 2.25 PP 13.0 to 18.0 18.0 to 21.0 2.10 to 24.0 2.25 PP 24.0 to 27.0 2.25 PP 33.0 to 33.0 33.0 to 36.0 33.0 to 38.0 38.0 to 40.0 40.0 to 43.0 40.0 to 43.0 40.0 to 43.0 40.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0		159.0 to 160.0									2.25	PP
4.0 to 6.0 6.0 to 8.0 8.0 to 10.0 10.0 to 13.0 17 55 29 26 CH 106 97 2.25 PP 13.0 to 18.0 18.0 to 21.0 2.25 PP 21.0 to 24.0 2.25 PP 27.0 to 30.0 33.0 to 38.0 38.0 to 40.0 4.0 to 43.0 4.0 to 43.0 4.0 to 49.0 4.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0	B-4	0.0 to 2.0									0.50	PP
6.0 to 8.0 8.0 to 10.0 10.0 to 13.0 17 55 29 26 CH 106 97 2.25 PP 13.0 to 16.0 16.0 to 18.0 18.0 to 21.0 2.25 PP 21.0 to 24.0 2.25 PP 27.0 to 30.0 30.0 to 33.0 30.0 to 38.0 38.0 to 40.0 40.0 to 43.0 40.0 to 43.0 40.0 to 49.0 49.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0		2.0 to 4.0									0.63	PP
8.0 to 10.0 10.0 to 13.0 17 55 29 26 CH 106 97 2.25 PP 13.0 to 16.0 16.0 to 18.0 18.0 to 21.0 21.0 to 24.0 24.0 to 27.0 27.0 to 30.0 33.0 to 36.0 33.0 to 38.0 36.0 to 38.0 38.0 to 40.0 40.0 to 43.0 43.0 to 43.0 44.0 to 49.0 45.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0		4.0 to 6.0									1.63	PP
10.0 to 13.0		6.0 to 8.0									1.88	PP
13.0 to 16.0 16.0 to 18.0 16.0 to 18.0 2.25 PP 18.0 to 21.0 2.25 PP 21.0 to 24.0 2.25 PP 24.0 to 27.0 2.25 PP 27.0 to 30.0 2.25 PP 30.0 to 33.0 2.25 PP 33.0 to 36.0 3.0 to 38.0 3.0 to 38.0 3.0 to 40.0 43.0 to 40.0 43.0 to 40.0 44.0 to 43.0 46.0 to 49.0 49.0 to 52.0 52.0 to 54.0 52.25 PP 55.0 to 60.0		8.0 to 10.0									2.00	PP
16.0 to 18.0 18.0 to 21.0 2.25 PP 21.0 to 24.0 2.25 PP 24.0 to 27.0 2.25 PP 27.0 to 30.0 2.25 PP 30.0 to 33.0 2.25 PP 33.0 to 36.0 3.0 to 38.0 2.25 PP 40.0 to 43.0 42.25 PP 43.0 to 46.0 2.25 PP 49.0 to 52.0 52.0 to 54.0 2.25 PP 57.0 to 60.0 2.25 PP 52.25 PP 57.0 to 60.0		10.0 to 13.0		17	55	29	26	CH	106	97	2.25	PP
18.0 to 21.0 21.0 to 24.0 21.0 to 24.0 22.5 PP 24.0 to 27.0 22.5 PP 27.0 to 30.0 22.5 PP 30.0 to 33.0 22.5 PP 33.0 to 36.0 32.25 PP 38.0 to 40.0 40.0 to 43.0 41.0 to 43.0 42.25 PP 44.0 to 52.0 52.0 to 54.0 57.0 to 60.0 22.5 PP 57.0 to 60.0		13.0 to 16.0									2.25	PP
21.0 to 24.0 24.0 to 27.0 24.0 to 27.0 2.25 PP 27.0 to 30.0 2.25 PP 30.0 to 33.0 3.0 to 33.0 3.0 to 38.0 3.0 to 38.0 3.0 to 40.0 40.0 to 43.0 40.0 to 43.0 40.0 to 49.0 40.0 to 52.0 52.0 to 54.0 52.0 to 57.0 57.0 to 60.0 22.5 PP 22.25 PP		16.0 to 18.0									2.25	PP
24.0 to 27.0 2.25 PP 27.0 to 30.0 2.25 PP 30.0 to 33.0 2.25 PP 36.0 to 38.0 2.25 PP 38.0 to 40.0 2.25 PP 40.0 to 43.0 2.25 PP 43.0 to 46.0 2.25 PP 49.0 to 52.0 2.25 PP 52.0 to 54.0 2.25 PP 57.0 to 60.0 2.25 PP												
27.0 to 30.0 30.0 to 33.0 30.0 to 33.0 31.0 to 36.0 32.25 PP 33.0 to 38.0 2.25 PP 38.0 to 40.0 2.25 PP 40.0 to 43.0 40.0 to 43.0 40.0 to 49.0 40.0 to 49.0 40.0 to 52.0 52.0 to 54.0 57.0 to 60.0 22.5 PP 57.0 to 60.0											2.25	
30.0 to 33.0 30.0 to 33.0 30.0 to 36.0 32.25 PP 36.0 to 38.0 22.25 PP 38.0 to 40.0 22.25 PP 40.0 to 43.0 46.0 to 49.0 49.0 to 52.0 52.0 to 54.0 57.0 to 60.0 22.5 PP 22.5 PP 22.5 PP 22.5 PP 22.5 PP 22.5 PP 22.5 PP 22.5 PP												
33.0 to 36.0 36.0 to 38.0 2.25 PP 38.0 to 40.0 2.25 PP 40.0 to 43.0 43.0 to 46.0 43.0 to 49.0 49.0 to 52.0 52.0 to 54.0 57.0 to 60.0											2.25	PP
36.0 to 38.0 36.0 to 38.0 38.0 to 40.0 40.0 to 43.0 43.0 to 46.0 42.25 PP 46.0 to 49.0 49.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0											2.25	PP
38.0 to 40.0 40.0 to 43.0 43.0 to 46.0 43.0 to 49.0 49.0 to 52.0 52.25 PP 52.0 to 54.0 57.0 to 60.0												
40.0 to 43.0 43.0 to 46.0 43.0 to 46.0 46.0 to 49.0 49.0 to 52.0 52.0 to 54.0 52.0 to 57.0 57.0 to 60.0												PP
43.0 to 46.0 46.0 to 49.0 49.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0												PP
46.0 to 49.0 49.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0 2.25 PP 2.25 PP 2.25 PP 2.25 PP 2.25 PP												
49.0 to 52.0 52.0 to 54.0 54.0 to 57.0 57.0 to 60.0 2.25 PP 2.25 PP 2.25 PP												
52.0 to 54.0 54.0 to 57.0 57.0 to 60.0 2.25 PP 2.25 PP												
54.0 to 57.0 57.0 to 60.0 2.25 PP												
57.0 to 60.0 2.25 PP												
D = Docket Departmenter TV = Terrene LIC = Upconfined Compression EV = Field Vanc LIU = Upconcolidated Undrained Trioxial	DD 5 :	1	<u> </u>					F: 1.1.	,			

PP = Pocket Penetrometer

TV = Torvane

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FV = Field Vane

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

	AME: ASF1	3-140-00	PESCA	DITO_FE	DRUAR	2015.6	r J	I			25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-4	60.0 to 62.0									2.25	PP
	62.0 to 64.0									2.25	PP
	64.0 to 67.0									2.25	PP
	67.0 to 70.0		20	169	26	143	СН	95	90	2.25	PP
	70.0 to 72.0									2.25	PP
	72.0 to 75.0									2.25	PP
	75.0 to 78.0									2.25	PP
	78.0 to 81.0									2.25	PP
	81.0 to 83.0									2.25	PP
	83.0 to 85.0									2.25	PP
	85.0 to 88.0									2.25	PP
	88.0 to 91.0									2.25	PP
	91.0 to 93.0									2.25	PP
	93.0 to 95.0									2.25	PP
	94.0		15	45	24	21	CL	106	99		
	95.0 to 98.0		16	60	29	31	CH	105	100	2.25	PP
	98.0 to 101.0									2.25	PP
	101.0 to 104.0									2.25	PP
	104.0 to 106.0									2.25	PP
	106.0 to 109.0									2.25	PP
	109.0 to 112.0									2.25	PP
	112.0 to 115.0									2.25	PP
	115.0 to 118.0									2.25	PP
	118.0 to 120.0									2.25	PP
B-5	0.0 to 3.0									0.50	PP
	3.0 to 5.0									0.50	PP
	5.0 to 7.0		27							0.50	PP
	7.0 to 10.0									2.25	PP
	10.0 to 12.0									2.25	PP
	12.0 to 14.0									2.25	PP
	14.0 to 16.0									2.25	PP
	16.0 to 18.0									2.25	PP
	18.0 to 20.0									2.25	PP
	20.0 to 23.0		19	74	25	49	СН		100	2.25	PP
	23.0 to 26.0									2.25	PP
	26.0 to 28.0									2.25	PP
	28.0 to 30.0		12							2.25	PP
	30.0 to 33.0									2.25	PP
	33.0 to 36.0									2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	J PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			21	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-5	36.0 to 39.0									2.25	PP
	39.0 to 42.0									2.25	PP
	42.0 to 44.0									2.25	PP
	44.0 to 46.0		17							2.25	PP
	46.0 to 48.0									2.25	PP
	48.0 to 50.0		18	81	23	58	СН		99	2.25	PP
	50.0 to 52.0									2.25	PP
	52.0 to 54.0		17							2.25	PP
	54.0 to 57.0									2.25	PP
	57.0 to 59.0									2.25	PP
	59.0 to 61.0									2.25	PP
	61.0 to 64.0									2.25	PP
	64.0 to 67.0									2.25	PP
	67.0 to 69.0									2.25	PP
	69.0 to 71.0									2.25	PP
	71.0 to 73.0									2.25	PP
	73.0 to 75.0									2.25	PP
	75.0 to 78.0		12							2.25	PP
	78.0 to 80.0									2.25	PP
	80.0 to 82.0		16	112	29	83	СН		98	2.25	PP
	82.0 to 85.0									2.25	PP
	85.0 to 88.0									2.25	PP
	88.0 to 91.0		22							2.25	PP
	91.0 to 94.0									2.25	PP
	94.0 to 97.0									2.25	PP
	97.0 to 99.0									2.25	PP
	99.0 to 102.0									2.25	PP
	102.0 to 105.0									2.25	PP
	105.0 to 108.0									2.25	PP
	108.0 to 111.0									2.25	PP
	111.0 to 113.0		16	79	20	59	СН		98	2.25	PP
	113.0 to 115.0									2.25	PP
	115.0 to 118.0									2.25	PP
	118.0 to 121.0									2.25	PP
	121.0 to 123.0									2.25	PP
	123.0 to 125.0									2.25	PP
	125.0 to 128.0									2.25	PP
	128.0 to 131.0									2.25	PP
	131.0 to 133.0									2.25	PP
DD = Dock	et Penetromete	er T\/ = To	orvane III	C = Unconfin	ed Compres	sion EV	Field Van	0 111	I = I Inconsol	lidated Undra	inod Triavia

PP = Pocket Penetrometer

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UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILE N	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			. 21	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-5	133.0 to 136.0									2.25	PP
	136.0 to 139.0									2.25	PP
	139.0 to 141.0									2.25	PP
	141.0 to 143.0									2.25	PP
	143.0 to 145.0									2.25	PP
	145.0 to 148.0									2.25	PP
	148.0 to 151.0									2.25	PP
	151.0 to 153.0									2.25	PP
	153.0 to 155.0									2.25	PP
	155.0 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
B-6	0.0 to 2.5									1.38	PP
	2.5 to 5.0									1.88	PP
	5.0 to 7.0			50	18	32	СН		69	2.25	PP
	7.0 to 9.5									2.25	PP
	9.5 to 12.0									2.25	PP
	12.0 to 14.0									2.25	PP
	14.0 to 16.5									2.25	PP
	16.5 to 19.0									2.25	PP
	19.0 to 21.5									2.25	PP
	21.5 to 24.0									2.25	PP
	24.0 to 26.0									2.25	PP
	26.0 to 27.0									2.25	PP
	27.0 to 29.5			55	14	41	CH		62	2.25	PP
	29.5 to 32.0									2.25	PP
	32.0 to 34.5									2.25	PP
	34.5 to 37.0									2.25	PP
	37.0 to 39.5									2.25	PP
	39.5 to 42.0									2.25	PP
	42.0 to 44.0									2.25	PP
	44.0 to 46.0									2.25	PP
	46.0 to 47.0									2.25	PP
	47.0 to 49.5									2.25	PP
	49.5 to 52.0									2.25	PP
	52.0 to 54.5									2.25	PP
	54.5 to 57.0									2.25	PP
	57.0 to 59.5			65	24	41	СН		100	2.25	PP
	59.5 to 62.0									2.25	PP
	62.0 to 64.0									2.25	PP
P = Pock	et Penetromete	r TV = To	orvane III	C = Unconfin	ed Compres	eion EV =	Field Van	<u> </u>	I = Unconsol		

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILL IN	AME: ASF	13-1 -1 0-00) I LOO/ (<u> </u>	יייייייייייייייייייייייייייייייייייייי	2010.0					25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-6	64.0 to 66.5									2.25	PP
	66.5 to 69.0									2.25	PP
	69.0 to 71.5									2.25	PP
	71.5 to 74.0									2.25	PP
	74.0 to 76.5									2.25	PP
	76.5 to 79.0									2.25	PP
	79.0 to 81.5									2.25	PP
	81.5 to 83.0									2.25	PP
	83.0 to 85.5									2.25	PP
	85.5 to 88.0									2.25	PP
	88.0 to 89.0									2.25	PP
	89.0 to 91.5									2.25	PP
	91.5 to 94.0									2.25	PP
	94.0 to 97.0									2.25	PP
	97.0 to 99.5									2.25	PP
	99.5 to 102.0									2.25	PP
	102.0 to 104.5		16	35	19	16	CL	106	100	2.25	PP
	104.5 to 107.0									2.25	PP
	107.0 to 109.0									2.25	PP
	109.0 to 111.5									2.25	PP
	111.5 to 114.0									2.25	PP
	114.0 to 116.0									2.25	PP
	116.0 to 118.5									2.25	PP
	118.5 to 121.0									2.25	PP
	121.0 to 123.5									2.25	PP
	123.5 to 126.0									2.25	PP
	126.0 to 127.0									2.25	PP
	127.0 to 129.5		22	42	29	13	ML	100	99	2.25	PP
	129.5 to 132.0									2.25	PP
	132.0 to 134.0		21	48	27	21	CL	97	98	2.25	PP
	134.0 to 136.5									2.25	PP
	136.5 to 139.0									2.25	PP
	139.0 to 141.0									2.25	PP
	141.0 to 142.0									2.25	PP
	142.0 to 144.5									2.25	PP
	144.5 to 147.0									2.25	PP
	147.0 to 149.0			184	40	144	СН		96	2.25	PP
	149.0 to 151.5									2.25	PP

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Streng Test
B-6	154.0 to 157.0									2.25	PP
	157.0 to 159.0									2.25	PF
	159.0 to 160.0									2.25	PF
B-7	0.0 to 3.0									0.13	PF
	3.0 to 5.0									0.13	PF
	5.0 to 7.0									0.25	PF
	7.0 to 10.0									1.75	PF
	10.0 to 13.0									1.75	PF
	13.0 to 15.0									1.88	PF
	15.0 to 17.0									2.25	PF
	17.0 to 20.0									2.25	PF
	20.0 to 23.0									2.25	PF
	23.0 to 26.0									2.25	PF
	26.0 to 29.0									2.25	PF
	29.0 to 32.0									2.25	PF
	32.0 to 35.0									2.25	PF
	35.0 to 38.0									2.25	PF
	38.0 to 41.0									2.25	PF
	41.0 to 43.0									2.25	PF
	43.0 to 45.0									2.25	PF
	45.0 to 47.0									2.25	PF
	47.0 to 50.0									2.25	PF
	50.0 to 53.0									2.25	PF
	53.0 to 55.0									2.25	PF
	55.0 to 57.0									2.25	PF
	57.0 to 59.0									2.25	PF
	59.0 to 62.0									2.25	PF
	62.0 to 64.0									2.25	PF
	64.0 to 67.0									2.25	PF
	67.0 to 70.0									2.25	PF
	70.0 to 72.0									2.25	PF
	72.0 to 75.0									2.25	PF
	75.0 to 78.0									2.25	PF
	78.0 to 81.0									2.25	PF
	81.0 to 83.0									2.25	PF
	83.0 to 85.0									2.25	PF
	85.0 to 88.0		10	71	18	53	СН	116	96	2.25	PF
	88.0 to 90.0									2.25	PF
	90.0 to 92.0									2.25	PF

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILL IV	AME: ASF1	13-140-00	FESCA	טווט_רב	DRUAR	7 ZU 13.G	ΓJ	Г			25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-7	92.0 to 95.0									2.25	PP
	95.0 to 98.0									2.25	PP
	98.0 to 100.0									2.25	PP
	100.0 to 103.0									2.25	PP
	103.0 to 106.0									2.25	PP
	106.0 to 108.0									2.25	PP
	108.0 to 110.0									2.25	PP
	110.0 to 113.0									2.25	PP
	113.0 to 116.0									2.25	PP
	116.0 to 119.0									2.25	PP
	119.0 to 121.0									2.25	PP
	121.0 to 123.0									2.25	PP
	123.0 to 126.0		17	96	22	74	CH	108	98	2.25	PP
	126.0 to 129.0									2.25	PP
	129.0 to 132.0									2.25	PP
	132.0 to 134.0									2.25	PP
	134.0 to 136.0									2.25	PP
	136.0 to 147.0										
	147.0 to 150.0									2.25	PP
	150.0 to 152.0									2.25	PP
	152.0 to 155.0									2.25	PP
	155.0 to 157.0									2.25	PP
	157.0 to 160.0									2.25	PP
B-8	0.0 to 2.0									0.75	PP
	2.0 to 4.0									0.75	PP
	4.0 to 7.0		21							1.00	PP
	7.0 to 10.0									2.00	PP
	10.0 to 13.0		20	67	24	43	CH		87	2.25	PP
	13.0 to 15.0									2.25	PP
	15.0 to 17.0									2.25	PP
	17.0 to 19.0									2.25	PP
	19.0 to 21.0									2.25	PP
	21.0 to 23.0									2.25	PP
	23.0 to 25.0									2.25	PP
	25.0 to 27.0									2.25	PP
	27.0 to 30.0		21	76	27	49	СН		96	2.25	PP
	30.0 to 32.0									2.25	PP
	32.0 to 35.0		32							2.25	PP
	35.0 to 38.0									2.25	PP

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

Boring		I									
No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-8 3	38.0 to 40.0		18							2.25	PP
4	40.0 to 42.0									2.25	PP
4	42.0 to 44.0		22							2.25	PP
4	44.0 to 46.0									2.25	PP
4	46.0 to 48.0									2.25	PP
4	48.0 to 50.0									2.25	PP
5	50.0 to 54.0									2.25	PP
5	54.0 to 57.0									2.25	PP
5	57.0 to 60.0									2.25	PP
6	60.0 to 63.0									2.25	PP
6	63.0 to 65.0		13							2.25	PP
6	65.0 to 67.0									2.25	PP
6	67.0 to 69.0									2.25	PP
6	69.0 to 72.0									2.25	PP
7	72.0 to 76.0		15	102	26	76	CH		100	2.25	PP
7	76.0 to 79.0									2.25	PP
7	79.0 to 82.0									2.25	PP
8	82.0 to 84.0									2.25	PP
8	84.0 to 86.0									2.25	PP
8	86.0 to 89.0		12	65	20	45	CH		96	2.25	PP
8	89.0 to 91.0									2.25	PP
9	91.0 to 93.0									2.25	PP
9	93.0 to 95.0									2.25	PP
9	95.0 to 97.0									2.25	PP
9	97.0 to 100.0									2.25	PP
10	00.0 to 103.0									2.25	PP
10	03.0 to 107.0		13	68	23	45	CH		98	2.25	PP
10	07.0 to 110.0									2.25	PP
11	10.0 to 113.0									2.25	PP
11	13.0 to 115.0									2.25	PP
11	15.0 to 117.0									2.25	PP
11	17.0 to 120.0									2.25	PP
B-9	0.0 to 2.5									1.50	PP
	2.5 to 5.0									1.38	PP
	5.0 to 7.5									1.38	PP
	7.5 to 10.0									2.25	PP
1	10.0 to 12.5									1.88	PP
1	12.5 to 15.0									2.25	PP
1	15.0 to 17.5									2.25	PP

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILL IN	AME: ASF	13-140-00	LOOK	D110_1 L	יואטאום	2013.0	1 0		1		25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-9	17.5 to 20.0									1.50	PP
	20.0 to 22.5			51	23	28	СН		95	1.88	PP
	22.5 to 25.0									2.00	PP
	25.0 to 27.5									2.00	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	60.0 to 62.5									2.25	PP
	62.5 to 65.0			44	19	25	CL		100	2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5										
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5									2.25	PP
	97.5 to 100.0										
	100.0 to 102.5									2.25	PP
	102.5 to 105.0									2.25	PP
	105.0 to 107.5			54	20	34	СН		98	2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
,	112.5 to 115.0					1	Ì		1	2.25	PP

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILL IV	AME: ASF	13-170-00	LOOK	<u>DITO_I L</u>	יואטאום	2013.0	ıJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-9	115.0 to 117.5									2.25	PP
	117.5 to 120.0									2.25	PP
	120.0 to 122.5									2.25	PP
	122.5 to 125.0									2.25	PP
	125.0 to 127.5									2.25	PP
	127.5 to 130.0									2.25	PP
	130.0 to 132.5									2.25	PP
	132.5 to 135.0									2.25	PP
	135.0 to 137.5									2.25	PP
	137.5 to 140.0									2.25	PP
	140.0 to 142.5									2.25	PP
	142.5 to 145.0			48	21	27	CL		100	2.25	PP
	145.0 to 147.5									2.25	PP
	147.5 to 150.0									2.25	PP
	150.0 to 152.5									2.25	PP
	152.5 to 155.0									2.25	PP
	155.0 to 157.5									2.25	PP
	157.5 to 160.0									2.25	PP
B-10	0.0 to 3.0									0.88	PP
	3.0 to 5.0									0.88	PP
	5.0 to 7.0									1.25	PP
	7.0 to 10.0									2.25	PP
	10.0 to 13.0									2.25	PP
	13.0 to 15.0									2.25	PP
	15.0 to 18.0									2.25	PP
	18.0 to 21.0									2.25	PP
	21.0 to 24.0									2.25	PP
	24.0 to 27.0									2.25	PP
	27.0 to 30.0									2.25	PP
	30.0 to 33.0									2.25	PP
	33.0 to 35.0									2.25	PP
	35.0 to 37.0									2.25	PP
	37.0 to 40.0									2.25	PP
	40.0 to 43.0									2.25	PP
	43.0 to 45.0		11	33	21	12	CL	120	57	2.25	PP
	45.0 to 47.0									2.25	PP
	47.0 to 50.0									2.25	PP
	50.0 to 53.0									2.25	PP
	53.0 to 55.0									2.25	PP

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-10	55.0 to 57.0									2.25	PP
	57.0 to 60.0									2.25	PP
	60.0 to 63.0									2.25	PP
	63.0 to 66.0									2.25	PP
	66.0 to 68.0									2.25	PP
	68.0 to 70.0									2.25	PP
	70.0 to 73.0									2.25	PP
	73.0 to 76.0			44	26	18	CL		97	2.25	PP
	76.0 to 79.0									2.25	PP
	79.0 to 82.0									2.25	PP
	82.0 to 85.0									2.25	PP
	85.0 to 88.0									2.25	PP
	88.0 to 91.0									2.25	PP
	91.0 to 94.0									2.25	PP
	94.0 to 97.0									2.25	PP
	97.0 to 100.0									2.25	PP
	100.0 to 103.0									2.25	PP
	103.0 to 106.0									2.25	PP
	106.0 to 109.0									2.25	PP
	109.0 to 112.0									2.25	PP
	112.0 to 115.0		13	45	22	23	CL		100	2.25	PP
	115.0 to 117.0									2.25	PP
	117.0 to 120.0									2.25	PP
B-11	0.0 to 2.5									0.13	PP
	2.5 to 5.0									0.38	PP
	5.0 to 6.0									0.25	PP
	6.0 to 8.5									2.25	PP
	8.5 to 11.0									2.25	PP
	11.0 to 13.0									2.25	PP
	13.0 to 14.0									2.25	PP
	14.0 to 16.5									2.25	PP
	16.5 to 19.0									2.25	PP
	19.0 to 22.0									2.25	PP
	22.0 to 24.5									2.25	PP
	24.5 to 27.0									2.25	PP
	27.0 to 29.5									2.25	PP
	29.5 to 32.0									2.25	PP
	32.0 to 33.0									2.25	PP
	33.0 to 35.5									2.25	PP
D = Pock	et Penetromete	r TV = To	orvane III	C = Unconfin	ed Compres	sion E\/ =	: Field Van	<u> </u>	I = Unconsol	idated I Indra	ined Triavis

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ear ngth sf) 25 25 25	Strength Test PP PP PP
25 25	PP
25	
	DD
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00	PP
25	PP
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	PP
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	25 25 25 25 25 25 25 25 25 25

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASE	13-140-00	JPESCA	DITO_FE	BRUAR	Y 2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-11	126.0 to 127.0									2.25	PP
	127.0 to 129.5		20	55	27	28	СН	103	99	2.25	PP
	129.5 to 132.0									2.25	PP
	132.0 to 134.0									2.25	PP
	134.0 to 136.5		17	56	26	30	СН		100	2.25	PP
	136.5 to 139.0									2.25	PP
	139.0 to 141.0									2.25	PP
	141.0 to 143.5									2.25	PP
	143.5 to 145.0									2.25	PP
	145.0 to 147.5									2.25	PP
	147.5 to 150.0									2.25	PP
	150.0 to 151.0									2.25	PP
	151.0 to 153.5									2.25	PP
	153.5 to 156.0									2.25	PP
	156.0 to 158.5									2.25	PP
	158.5 to 160.0									2.25	PP
B-11A	0.0 to 6.0									0.50	PP
	6.0 to 16.0									1.50	PP
	16.0 to 24.0									2.25	PP
	24.0 to 31.0									2.25	PP
	31.0 to 38.0									2.25	PP
	38.0 to 46.0									2.25	PP
	46.0 to 60.0									2.25	PP
	60.0 to 66.0									2.25	PP
	66.0 to 86.0									2.25	PP
	86.0 to 104.0										
B-12	0.0 to 2.0									0.75	PP
	2.0 to 4.0									0.50	PP
	4.0 to 7.0									0.25	PP
	7.0 to 9.0									1.50	PP
	9.0 to 10.0									1.63	PP
	10.0 to 12.0									2.25	PP
	12.0 to 15.0									2.25	PP
	15.0 to 18.0									2.25	PP
	18.0 to 20.0		31							2.25	PP
	20.0 to 23.0									2.25	PP
	23.0 to 26.0									2.25	PP
	26.0 to 29.0									2.25	PP
	29.0 to 30.0										
DD = Dock	cet Penetromete	r TV = To	orvane III	C = Unconfin	ed Compres	sion EV =	Field Van	ال م	I = Unconsol	idated I Indra	ined Triavial

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

	AME: ASF	13-140-00	PESCA	DITO_FE	DRUAR	1 2015.6	ΓJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-12	30.0 to 33.0									2.25	PP
	33.0 to 34.0									2.25	PP
	34.0 to 35.0										
	35.0 to 37.0									2.25	PP
	37.0 to 39.0		37							2.25	PP
	39.0 to 42.0									2.25	PP
	42.0 to 44.0									2.25	PP
	44.0 to 46.0									2.25	PP
	46.0 to 48.0									2.25	PP
	48.0 to 50.0									2.25	PP
	50.0 to 53.0									2.25	PP
	53.0 to 56.0									2.25	PP
	56.0 to 58.0		28	78	24	54	СН	85	81	2.25	PP
	58.0 to 60.0									2.25	PP
	60.0 to 63.0									2.25	PP
	63.0 to 66.0		15							2.25	PP
	66.0 to 69.0									2.25	PP
	69.0 to 72.0									2.25	PP
	72.0 to 74.0									2.25	PP
	74.0 to 77.0									2.25	PP
	77.0 to 80.0									2.25	PP
	80.0 to 82.0										
	82.0 to 84.0									2.25	PP
	84.0 to 86.0									2.25	PP
	86.0 to 87.0									2.25	PP
	87.0 to 90.0		18					103	47	2.25	PP
	90.0 to 93.0									2.25	PP
	93.0 to 97.0									2.25	PP
	97.0 to 99.0									2.25	PP
	99.0 to 100.0									2.25	PP
	100.0 to 102.0									2.25	PP
	102.0 to 104.0									2.25	PP
	104.0 to 107.0									2.25	PP
	107.0 to 110.0		9	100	26	74	СН	102	99	2.25	PP
	110.0 to 113.0									2.25	PP
	113.0 to 116.0									2.25	PP
	116.0 to 117.0									2.25	PP
	117.0 to 120.0		14							2.25	PP
	120.0 to 121.0									2.25	PP

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO FERRIJARY 2015 GP.I.

2/25/2015

FILE N	AME: ASF1	13-140-00) PESCA	DITO_FE	BRUAR'	Y 2015.G	PJ			2/	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-12	121.0 to 123.0									2.25	PP
	123.0 to 126.0		36							2.25	PP
	126.0 to 129.0									2.25	PP
	129.0 to 131.0									2.25	PP
	131.0 to 134.0									2.25	PP
	134.0 to 137.0									2.25	PP
	137.0 to 140.0		16	78	22	56	СН	103	93	2.25	PP
	140.0 to 142.0									2.25	PP
	142.0 to 145.0									2.25	PP
	145.0 to 146.0									2.25	PP
	146.0 to 149.0									2.25	PP
	149.0 to 151.0									2.25	PP
	151.0 to 154.0									2.25	PP
	154.0 to 156.0									2.25	PP
	156.0 to 158.0		13							2.25	PP
	158.0 to 160.0									2.25	PP
B-13	0.0 to 2.5									0.13	PP
	2.5 to 5.0									0.13	PP
	5.0 to 7.5									0.25	PP
	7.5 to 10.0									0.50	PP
	10.0 to 12.5									1.25	PP
	12.5 to 15.0									0.38	PP
	15.0 to 17.0									2.25	PP
	17.0 to 19.5									2.25	PP
	19.5 to 22.0									2.25	PP
	22.0 to 25.5									2.25	PP
	25.5 to 27.0									2.25	PP
	27.0 to 29.5									2.25	PP
	29.5 to 32.0									2.25	PP
	32.0 to 34.0									2.25	PP
	34.0 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0			56	23	33	СН		99	2.25	PP
	40.0 to 42.0									2.25	PP
	42.0 to 44.5									2.25	PP
	44.5 to 47.0									2.25	PP
	47.0 to 49.5									2.25	PP
	49.5 to 52.0									2.25	PP
	52.0 to 54.5									2.25	PP
						·					

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

Boring No. Sample Depth (ft) Blows per ft Content (%) Liquid Limit Plastic Limit Plasticity Index USCS Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf) 2.25 2.25 2.25 2.25 2.25 2.25 2.25	Strength Test PP PP PP PP PP
57.0 to 59.5 59.5 to 62.0 62.0 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 69.0		2.25 2.25 2.25 2.25 2.25 2.25	PP PP PP
59.5 to 62.0 62.0 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 69.0		2.25 2.25 2.25 2.25	PP PP
62.0 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 69.0		2.25 2.25 2.25	PP
63.0 to 65.5 65.5 to 68.0 68.0 to 69.0		2.25 2.25	
65.5 to 68.0 68.0 to 69.0		2.25	PP
68.0 to 69.0			
			PP
69.0 to 71.5		2.25	PP
		2.25	PP
71.5 to 74.0		2.25	PP
74.0 to 76.0		2.25	PP
76.0 to 77.0		2.25	PP
77.0 to 80.0 60 17 43 CH	71	0.63	PP
80.0 to 82.5		0.75	PP
82.5 to 85.0		0.75	PP
85.0 to 86.0		0.88	PP
86.0 to 88.5		2.25	PP
88.5 to 91.0		2.25	PP
91.0 to 93.5		2.25	PP
93.5 to 96.0		2.25	PP
96.0 to 98.0 84 23 61 CH	99	2.25	PP
98.0 to 100.5		2.25	PP
100.5 to 103.0		2.25	PP
103.0 to 104.0		2.25	PP
104.0 to 106.0		2.25	PP
106.0 to 108.0		2.25	PP
108.0 to 110.5		2.25	PP
110.5 to 113.0		2.25	PP
113.0 to 115.5		2.25	PP
115.5 to 118.0		2.25	PP
118.0 to 120.5		2.25	PP
120.5 to 123.0 79 23 56 CH	100	2.25	PP
123.0 to 125.5		2.25	PP
125.5 to 128.0		2.25	PP
128.0 to 130.5		2.25	PP
130.5 to 133.0		2.25	PP
133.0 to 135.5		2.25	PP
135.5 to 138.0		2.25	PP
138.0 to 140.5		2.25	PP
140.5 to 143.0		2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

ILE IN	AIVIE. ASF	13-140-00	J PESCA	יחווס_רם	DRUAR	2015.G	PJ				25/201
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-13	143.0 to 145.5									2.25	PP
	145.5 to 148.0									2.25	PP
	148.0 to 149.0									2.25	PP
	149.0 to 151.5									2.25	PP
	151.0								99		
	151.5 to 154.0			87	26	61	СН		99	2.25	PP
	154.0 to 159.0									2.25	PP
	159.0 to 160.0									2.25	PP
B-14	0.0 to 2.0									0.13	PP
	2.0 to 4.0									0.13	PP
	4.0 to 6.0									0.25	PP
	6.0 to 8.0									0.38	PP
	8.0 to 10.0									0.38	PP
	10.0 to 13.0									0.50	PP
	13.0 to 15.0		19							2.25	PP
	15.0 to 17.0									2.25	PP
	17.0 to 19.0									2.25	PP
	19.0 to 20.0									2.25	PP
	20.0 to 22.0									2.25	PP
	22.0 to 24.0		14							2.25	PP
	24.0 to 26.0									2.25	PP
	26.0 to 28.0									2.25	PP
	28.0 to 30.0									2.25	PP
	30.0 to 32.0			59	16	43	CH		76	2.25	PP
	32.0 to 34.0									2.25	PP
	34.0 to 36.0									2.25	PP
	36.0 to 38.0		17							2.25	PP
	38.0 to 40.0									2.25	PP
	40.0 to 43.0			49	17	32	CL		98	2.25	PP
	43.0 to 46.0									2.25	PP
	46.0 to 48.0									2.25	PP
	48.0 to 50.0									2.25	PP
	50.0 to 52.0									2.25	PP
	52.0 to 54.0			37	17	20	CL		89	2.25	PP
	54.0 to 56.0									2.25	PP
	56.0 to 58.0		9							2.25	PP
	58.0 to 60.0									2.25	PP
	60.0 to 62.0			38	13	25	CL		75	2.25	PP
	62.0 to 64.0									2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILE N	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			. 2	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-14	64.0 to 66.0		12							2.25	PP
	66.0 to 69.0									2.25	PP
	69.0 to 71.0									2.25	PP
	71.0 to 73.0									2.25	PP
	73.0 to 75.0									2.25	PP
	75.0 to 77.0									2.25	PP
	77.0 to 79.0									2.25	PP
	79.0 to 81.0									2.25	PP
	81.0 to 84.0		22							2.25	PP
	84.0 to 86.0									2.25	PP
	86.0 to 88.0									2.25	PP
	88.0 to 90.0									2.25	PP
	90.0 to 92.0									2.25	PP
	92.0 to 94.0		17							2.25	PP
	94.0 to 96.0									2.25	PP
	96.0 to 98.0									2.25	PP
	98.0 to 100.0									2.25	PP
	100.0 to 102.0									2.25	PP
	102.0 to 104.0									2.25	PP
	104.0 to 107.0									2.25	PP
	107.0 to 109.0		14							2.25	PP
	109.0 to 111.0									2.25	PP
	111.0 to 113.0									2.25	PP
	113.0 to 115.0									2.25	PP
	115.0 to 116.0									2.25	PP
	116.0 to 118.0									2.25	PP
	118.0 to 120.0									2.25	PP
	120.0 to 123.0									2.25	PP
	123.0 to 125.0		21							2.25	PP
	125.0 to 127.0									2.25	PP
	127.0 to 129.0									2.25	PP
	129.0 to 132.0									2.25	PP
	132.0 to 134.0		12							2.25	PP
	134.0 to 137.0									2.25	PP
	137.0 to 139.0									2.25	PP
	139.0 to 142.0									2.25	PP
	142.0 to 145.0		22							2.25	PP
	145.0 to 148.0									2.25	PP
	148.0 to 151.0									2.25	PP
P = Pock	et Penetromete	er T\/ = To	orvane II	C = Unconfin	ed Compres	sion F\/=	Field Van	e III	I = Unconso	idated Undra	ined Triavia

PP = Pocket Penetrometer

TV = Torvane

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UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILE N	AME: ASF	13-140-00	J PESCA	DITO_FE	BRUAR	Y 2015.G	PJ				/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-14	151.0 to 153.0									2.25	PP
	153.0 to 155.0									2.25	PP
	155.0 to 157.0									2.25	PP
	157.0 to 160.0									2.25	PP
B-15	0.0 to 3.0									0.13	PP
	3.0 to 5.0									2.25	PP
	5.0 to 7.0									2.25	PP
	7.0 to 9.0									2.25	PP
	9.0 to 12.0									2.25	PP
	12.0 to 15.0									2.25	PP
	15.0 to 18.0		28							2.25	PP
	18.0 to 20.0									2.25	PP
	20.0 to 22.0									2.25	PP
	22.0 to 24.0									2.25	PP
	24.0 to 26.0		26							2.25	PP
	26.0 to 28.0									2.25	PP
	28.0 to 29.0									2.25	PP
	29.0 to 31.0									2.25	PP
	31.0 to 33.0									2.25	PP
	33.0 to 35.0									2.25	PP
	35.0 to 37.0									2.25	PP
	37.0 to 40.0									2.25	PP
	40.0 to 43.0		35							2.25	PP
	43.0 to 46.0			166	30	136	CH		100	2.25	PP
	46.0 to 49.0		28							2.25	PP
	49.0 to 52.0									2.25	PP
	52.0 to 55.0									2.25	PP
	55.0 to 57.0									2.25	PP
	57.0 to 59.0									2.25	PP
	59.0 to 61.0									2.25	PP
	61.0 to 63.0		12							2.25	PP
	63.0 to 65.0									2.25	PP
	65.0 to 67.0									2.25	PP
	67.0 to 70.0									2.25	PP
	70.0 to 73.0									2.25	PP
	73.0 to 76.0									2.25	PP
	76.0 to 79.0		15							2.25	PP
	79.0 to 82.0									2.25	PP
	82.0 to 85.0									2.25	PP
P = Pock	cet Penetromete	r TV = To	orvane II	C = Unconfin	ed Compres	sion FV =	Field Van		I = Unconso	idated I Indra	ined Triavis

PP = Pocket Penetrometer

TV = Torvane

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UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

LIFE IA	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	ZU 15.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-15	85.0 to 88.0			34	14	20	CL		52	2.25	PP
	88.0 to 90.0									2.25	PP
	90.0 to 92.0			47	14	33	CL		55	2.25	PP
	92.0 to 94.0									2.25	PP
	94.0 to 96.0									2.25	PP
	96.0 to 99.0		10							2.25	PP
	99.0 to 102.0									2.25	PP
	102.0 to 104.0									2.25	PP
	104.0 to 106.0									2.25	PP
	106.0 to 108.0			75	16	59	CH		67	2.25	PP
	108.0 to 110.0									2.25	PP
	110.0 to 112.0									2.25	PP
	112.0 to 114.0									2.25	PP
	114.0 to 117.0		16							2.25	PP
	117.0 to 119.0									2.25	PP
	119.0 to 120.0									2.25	PP
B-16	0.0 to 2.0									0.13	PP
	2.0 to 5.0									0.13	PP
	5.0 to 7.0		23	39	17	22	CL	101	54	0.38	PP
	7.0 to 9.0									1.38	PP
	9.0 to 12.0		22							1.63	PP
	12.0 to 14.0		33							2.25	PP
	14.0 to 16.0									2.25	PP
	16.0 to 18.0									2.25	PP
	18.0 to 21.0									2.25	PP
	21.0 to 24.0									2.25	PP
	24.0 to 27.0									2.25	PP
	27.0 to 29.0									2.25	PP
	29.0 to 32.0									2.25	PP
	32.0 to 35.0									2.25	PP
	35.0 to 38.0		22							2.25	PP
	38.0 to 40.0									2.25	PP
	40.0 to 42.0									2.25	PP
	42.0 to 45.0									2.25	PP
	45.0 to 47.0									2.25	PP
	47.0 to 49.0		31							2.25	PP
	49.0 to 51.0									2.25	PP
	51.0 to 53.0									2.25	PP
DD 5 :	53.0 to 55.0	r TV = T		C = Unconfin		51	Field Ven	<u>,</u>	I = I Inconcol	2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO FERRIJARY 2015 GP.I.

2/25/2015

FILE NA	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR'	Y 2015.G	PJ			2	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-16	55.0 to 57.0									2.25	PP
	57.0 to 59.0		33	131	34	97	СН	86	89	2.25	PP
	59.0 to 61.0									2.25	PP
	61.0 to 63.0									2.25	PP
	63.0 to 65.0									2.25	PP
	65.0 to 67.0									2.25	PP
	67.0 to 69.0									2.25	PP
	69.0 to 71.0									2.25	PP
	71.0 to 73.0									2.25	PP
	73.0 to 75.0		22							2.25	PP
	75.0 to 77.0									2.25	PP
	77.0 to 79.0									2.25	PP
	79.0 to 81.0									2.25	PP
	81.0 to 84.0									2.25	PP
	84.0 to 86.0									2.25	PP
	86.0 to 87.0		15	114	22	92	СН	112	98	2.25	PP
	87.0 to 88.0			82	26	56				2.25	PP
	88.0 to 90.0									2.25	PP
	90.0 to 92.0									2.25	PP
	92.0 to 95.0									2.25	PP
	95.0 to 97.0									2.25	PP
	97.0 to 99.0									2.25	PP
	99.0 to 101.0									2.25	PP
	101.0 to 102.0									2.25	PP
	102.0 to 104.0		13							2.25	PP
	104.0 to 106.0									2.25	PP
	106.0 to 108.0									2.25	PP
	108.0 to 110.0									2.25	PP
	110.0 to 112.0									2.25	PP
	112.0 to 115.0									2.25	PP
	115.0 to 117.0									2.25	PP
	117.0 to 119.0									2.25	PP
	119.0 to 122.0		13	42	19	23	CL	120	71	2.25	PP
	122.0 to 123.0									2.25	PP
	123.0 to 124.0									2.25	PP
	124.0 to 126.0									2.25	PP
	126.0 to 128.0									2.25	PP
	129 0 to 121 0									2.25	PP
	128.0 to 131.0										

PP = Pocket Penetrometer

TV = Torvane

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FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO FERRIJARY 2015 GP.I.

2/25/2015

FILE N	AME: ASF1	13-140-00) PESCA	DITO_FE	BRUAR'	Y 2015.G	PJ			2	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-16	134.0 to 136.0									2.25	PP
	136.0 to 138.0									2.25	PP
	138.0 to 140.0									2.25	PP
	140.0 to 141.0									2.25	PP
	141.0 to 144.0									2.25	PP
	144.0 to 146.0									2.25	PP
	146.0 to 148.0									2.25	PP
	148.0 to 149.0									2.25	PP
	149.0 to 151.0									2.25	PP
	151.0 to 153.0									2.25	PP
	153.0 to 156.0									2.25	PP
	156.0 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
B-17	0.0 to 4.0									0.13	PP
	4.0 to 8.0									0.25	PP
	8.0 to 12.0									0.50	PP
	12.0 to 15.0			34	13	21	SC		49	0.50	PP
	15.0 to 17.0									2.25	PP
	17.0 to 19.0									0.13	PP
	19.0 to 21.0		15							2.25	PP
	21.0 to 22.0									2.25	PP
	22.0 to 24.0			29	13	16	SC		49	0.13	PP
	24.0 to 26.0									2.25	PP
	26.0 to 27.0									2.00	PP
	27.0 to 29.0									2.25	PP
	29.0 to 31.0									2.25	PP
	31.0 to 33.0		17							2.25	PP
	33.0 to 37.0									2.25	PP
	37.0 to 40.0									2.25	PP
	40.0 to 42.0									2.25	PP
	42.0 to 44.0									2.25	PP
	44.0 to 47.0									2.25	PP
	47.0 to 50.0									2.25	PP
	50.0 to 53.0		7							2.25	PP
	53.0 to 56.0			54	24	30	СН		93	2.25	PP
	56.0 to 57.0									2.25	PP
	57.0 to 59.0		16							2.25	PP
	59.0 to 61.0									2.25	PP
	61.0 to 63.0									2.25	PP
						1		1		-	1

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILE NA	MME: ASF1	3-140-00	PESCA	DITO_FE	RKUAK,	r 2015.G	۲J			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-17	63.0 to 65.0									2.25	PP
	65.0 to 67.0									2.25	PP
	67.0 to 69.0		16							2.25	PP
	69.0 to 71.0									2.25	PP
	71.0 to 73.0									2.25	PP
	73.0 to 75.0			49	20	29	CL		86	2.25	PP
	75.0 to 77.0									2.25	PP
	77.0 to 79.0									2.25	PP
	79.0 to 81.0									2.25	PP
	81.0 to 83.0									2.25	PP
	83.0 to 84.0									2.25	PP
	84.0 to 86.0		6							2.25	PP
	86.0 to 88.0									2.25	PP
	88.0 to 91.0									2.25	PP
	91.0 to 94.0									2.25	PP
	94.0 to 96.0									2.25	PP
	96.0 to 97.0									2.25	PP
	97.0 to 99.0									2.25	PP
	99.0 to 101.0									2.25	PP
1	101.0 to 103.0		10							2.25	PP
1	103.0 to 105.0									2.25	PP
1	105.0 to 107.0		13							2.25	PP
1	107.0 to 110.0									2.25	PP
1	110.0 to 112.0									2.25	PP
1	112.0 to 114.0									2.25	PP
1	114.0 to 116.0									2.25	PP
1	116.0 to 118.0									2.25	PP
1	118.0 to 120.0									2.25	PP
B-18	0.0 to 3.0									1.00	PP
	3.0 to 5.0									1.13	PP
	5.0 to 7.0		18	53	21	32	СН		70	1.00	PP
	7.0 to 10.0									0.13	PP
	10.0 to 13.0									0.13	PP
	13.0 to 16.0									1.88	PP
	16.0 to 18.0									2.25	PP
	18.0 to 21.0									2.25	PP
	21.0 to 23.0									0.00	PP
	23.0 to 26.0									2.25	PP
			1								1

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

LIFE IA	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-18	29.0 to 32.0									2.25	PP
	32.0 to 35.0									2.25	PP
	35.0 to 38.0									2.25	PP
	38.0 to 40.0									2.25	PP
	40.0 to 42.0									2.25	PP
	42.0 to 45.0									2.25	PP
	45.0 to 48.0									2.25	PP
	48.0 to 51.0									2.25	PP
	51.0 to 54.0									2.25	PP
	54.0 to 57.0									2.25	PP
	57.0 to 60.0									2.25	PP
	60.0 to 63.0									2.25	PP
	63.0 to 65.0									2.25	PP
	65.0 to 67.0									2.25	PP
	67.0 to 70.0		24	138	42	96	CH		97	2.25	PP
	70.0 to 73.0									2.25	PP
	73.0 to 75.0									2.25	PP
	75.0 to 78.0									2.25	PP
	78.0 to 80.0									2.25	PP
	80.0 to 82.0									2.25	PP
	82.0 to 85.0									2.25	PP
	85.0 to 87.0									2.25	PP
	87.0 to 90.0									2.25	PP
	90.0 to 92.0									2.25	PP
	92.0 to 94.0									2.25	PP
	94.0 to 97.0									2.25	PP
	97.0 to 100.0									2.25	PP
	100.0 to 103.0									2.25	PP
	103.0 to 105.0									2.25	PP
	105.0 to 108.0		14	50	25	25	СН	109	100	2.25	PP
	108.0 to 110.0									2.25	PP
	110.0 to 113.0									2.25	PP
	113.0 to 115.0									2.25	PP
	115.0 to 117.0									2.25	PP
	117.0 to 120.0									2.25	PP
	120.0 to 124.0									2.25	PP
	124.0 to 127.0									2.25	PP
	127.0 to 130.0									2.25	PP
	130.0 to 132.0									2.25	PP
DD - DI	ot Donotromote	r T\/ = T/		C = Unconfin		-i	Field Van		I = I Inconcol	مسلم ما المسلساء:	اماد مات المماد

PP = Pocket Penetrometer

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UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUARY	7 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-18	132.0 to 135.0									2.25	PP
	135.0 to 138.0									2.25	PP
	138.0 to 141.0									2.25	PP
	141.0 to 144.0									2.25	PP
	144.0 to 147.0									2.25	PP
	147.0 to 150.0		25	53	24	29	СН		99	2.25	PP
	150.0 to 153.0									2.25	PP
	153.0 to 156.0									2.25	PP
	156.0 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
B-19	0.0 to 2.5									0.13	PP
	2.5 to 6.0									0.38	PP
	6.0 to 7.0									1.88	PP
	7.0 to 9.0									2.25	PP
	9.0 to 10.0									2.25	PP
	10.0 to 12.5			32	20	12	CL		52	2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 19.0									2.25	PP
	19.0 to 21.5									2.25	PP
	21.5 to 24.0									2.25	PP
	24.0 to 26.0									2.25	PP
	26.0 to 27.0									2.25	PP
	27.0 to 29.5									2.25	PP
	29.5 to 32.0									2.25	PP
	32.0 to 34.0									2.25	PP
	34.0 to 36.5		14	54	21	33	СН		95	2.25	PP
	36.5 to 39.0									2.25	PP
	39.0 to 41.5									2.25	PP
	41.5 to 44.0									2.25	PP
	44.0 to 46.0									2.25	PP
	46.0 to 47.0									2.25	PP
	47.0 to 49.5			75	18	57	СН		60	2.25	PP
	49.5 to 52.0									2.25	PP
	52.0 to 54.5									2.25	PP
	54.5 to 57.0									2.25	PP
	57.0 to 59.0									2.25	PP
	59.0 to 61.5		19	57	24	33	СН	110	96	2.25	PP
	61.5 to 64.0									2.25	PP
							L				

PP = Pocket Penetrometer

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UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-19	64.0 to 67.0									2.25	PP
	67.0 to 69.5									2.25	PP
	69.5 to 72.0									2.25	PP
	72.0 to 73.0									2.25	PP
	73.0 to 75.5									2.25	PP
	75.5 to 78.0									2.25	PP
	78.0 to 79.0									2.25	PP
	79.0 to 81.5									2.25	PP
	81.5 to 84.0		13	75	20	55	СН	139	86	2.25	PP
	84.0 to 86.0									2.25	PP
	86.0 to 87.0									2.25	PP
	87.0 to 89.5									2.25	PP
	89.5 to 92.0									2.25	PP
	92.0 to 94.0									2.25	PP
	94.0 to 96.5									2.25	PP
	96.5 to 99.0									2.25	PP
	99.0 to 100.0									2.25	PP
	100.0 to 102.0									2.25	PP
	102.0 to 104.0									2.25	PP
	104.0 to 106.0									2.25	PP
	106.0 to 108.0									2.25	PP
	108.0 to 110.0									2.25	PP
	110.0 to 112.0									2.25	PP
	112.0 to 114.0									2.25	PP
	114.0 to 116.0									2.25	PP
	116.0 to 117.0									2.25	PP
	117.0 to 120.0									2.25	PP
	120.0 to 123.0									2.25	PP
	123.0 to 126.0									2.25	PP
	126.0 to 128.0									2.25	PP
	128.0 to 130.0									2.25	PP
	130.0 to 132.5									2.25	PP
	132.5 to 135.0									2.25	PP
	135.0 to 137.0									2.25	PP
	137.0 to 140.0									2.25	PP
	140.0 to 142.0									2.25	PP
	142.0 to 144.0									2.25	PP
	144.0 to 160.0									2.25	PP
	146.0 to 148.0									2.25	PP
PP = Pock	et Penetromete	r TV = To	orvane III	C = Unconfin	ed Compres	sion E\/ =	Field Van	<u> </u>	I = Unconsol	idated I Indra	ined Triavial

PP = Pocket Penetrometer

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UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

No. Depth per ft Content C	FILE NA	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ				25/2015
150.0 to 152.0 152.0 to 154.0 152.0 to 154.0 154.0 to 156.0 to 158.0 156.0 to 158.0 156.0 to 158.0 2.25 PP	Boring No.	Depth		Content	Liquid Limit		Plasticity Index	USCS	Weight	% -200 Sieve	Strength	Strength Test
152.0 to 154.0 154.0 to 156.0 156.0 to 158.0 158.0 to 160.0 158.0 to 160.0 B-20 0.0 to 3.0 3.0 to 5.0 5.0 to 7.0 7.0 to 10.0 10.0 to 13.0 15 39 24 15 CL 99 2.25 PF 13.0 to 15.0 15.0 to 18.0 15.0 to 21.0 21.0 to 23.0 22.5 PF 26.0 to 28.0 28.0 to 30.0 30.0 to 33.0 33.0 to 35.0 33.0 to 35.0 33.0 to 35.0 37.0 to 40.0 40.0 to 42.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 58.0 to 68.0 60.0 to 68.0 60.0 to 68.0 60.0 to 68.0 60.0 to 69.0 6	B-19	148.0 to 150.0									2.25	PP
154.0 to 156.0 156.0 to 158.0 156.0 to 158.0 158.0 to 160.0 B-20 0.0 to 3.0 3.0 to 5.0 3.0 to 5.0 5.0 to 7.0 7.0 to 10.0 10.0 to 13.0 15 39 24 15 CL 99 2.25 PF 13.0 to 15.0 2.25 PF 13.0 to 15.0 2.25 PF 2.20 2.25 PF		150.0 to 152.0									2.25	PP
156.0 to 158.0 158.0 to 160.0 B-20 0.0 to 3.0 3.0 to 5.0 5.0 to 7.0 7.0 to 10.0 10.0 to 13.0 15.0 to 18.0 15.0 to 18.0 15.0 to 18.0 15.0 to 18.0 2.25 PF 13.0 to 18.0 2.25 PF		152.0 to 154.0									2.25	PP
158.0 to 160.0 B-20		154.0 to 156.0									2.25	PP
B-20		156.0 to 158.0									2.25	PP
3.0 to 5.0 5.0 to 7.0 7.0 to 10.0 10.0 to 13.0 15 39 24 15 CL 99 2.25 PF 13.0 to 18.0 15.0 to 18.0 18.0 to 21.0 2.25 PF 2.25 PF 2.10 to 23.0 2.25 PF 2.20 to 28.0 to 30.0 3.0 to 33.0 3.0 to 35.0 3.0 to 35.0 3.0 to 40.0 4.0 to 42.0 4.0 to 42.0 4.0 to 45.0 4.0 to 50.0 5.0 to 52.0 5.0 to 54.0 5.0 to 68.0 6.0 to 68.0 6.0 to 68.0 6.0 to 68.0 6.0 to 69.0		158.0 to 160.0									2.25	PP
5.0 to 7.0 7.0 to 10.0 10.0 to 13.0 115 39 24 115 CL 99 2.25 PF 13.0 to 15.0 15.0 to 18.0 18.0 to 21.0 21.0 to 23.0 23.0 to 26.0 26.0 to 28.0 28.0 to 30.0 30.0 to 33.0 30.0 to 33.0 30.0 to 35.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 50.0 to 58.0 58.0 to 58.0 58.0 to 58.0 58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 60.0 to 69.0 69.0 to 71.0	B-20	0.0 to 3.0									0.38	PP
7.0 to 10.0 10.0 to 13.0 15 39 24 15 CL 99 2.25 PF 13.0 to 15.0 15.0 to 18.0 15.0 to 18.0 15.0 to 21.0 2.10 to 23.0 23.0 to 26.0 26.0 to 28.0 28.0 to 30.0 33.0 to 35.0 33.0 to 35.0 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 50.0 to 54.0 55.0 to 54.0 55.0 to 60.0 60.0 to 63.0 60.0 to 69.0 60.0 to 71.0		3.0 to 5.0									0.50	PP
10.0 to 13.0 15 39 24 15 CL 99 2.25 PF 13.0 to 15.0 15.0 to 18.0 15.0 to 18.0 15.0 to 21.0 2.10 to 23.0 2.25 PF 2.20 to 28.0 2.20 to 28.0 2.20 to 28.0 2.20 to 33.0 30.0 to 33.0 33.0 to 35.0 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 60.0 to 63.0 60.0 to 69.0 60.0 to 69.0 60.0 to 69.0 60.0 to 69.0 60.0 to 71.0		5.0 to 7.0									0.50	PP
13.0 to 15.0 15.0 to 18.0 15.0 to 18.0 15.0 to 18.0 18.0 to 21.0 21.0 to 23.0 21.0 to 23.0 23.0 to 26.0 26.0 to 28.0 28.0 to 30.0 30.0 to 33.0 30.0 to 35.0 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 50.0 to 58.0 58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		7.0 to 10.0									2.25	PP
15.0 to 18.0 18.0 to 21.0 21.0 to 23.0 21.0 to 23.0 23.0 to 26.0 26.0 to 28.0 26.0 to 28.0 28.0 to 30.0 30.0 to 33.0 30.0 to 35.0 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 50.0 to 52.0 50.0 to 63.0 60.0 to 63.0 60.0 to 69.0 60.0 to 69.0 60.0 to 69.0 60.0 to 71.0		10.0 to 13.0		15	39	24	15	CL		99	2.25	PP
18.0 to 21.0 21.0 to 23.0 21.0 to 23.0 23.0 to 26.0 26.0 to 28.0 26.0 to 28.0 28.0 to 30.0 30.0 to 33.0 30.0 to 33.0 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 52.0 to 54.0 55.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		13.0 to 15.0									2.25	PP
21.0 to 23.0 23.0 to 26.0 23.0 to 26.0 26.0 to 28.0 26.0 to 28.0 2 2.25 PF 28.0 to 30.0 2 2.25 PF 30.0 to 35.0 32.0 to 37.0 32.0 to 37.0 32.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		15.0 to 18.0									2.25	PP
23.0 to 26.0 26.0 to 28.0 26.0 to 28.0 28.0 to 30.0 30.0 to 33.0 32.25 PF 33.0 to 35.0 32.25 PF 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		18.0 to 21.0									2.25	PP
26.0 to 28.0		21.0 to 23.0									2.25	PP
28.0 to 30.0 30.0 to 33.0 30.0 to 33.0 2.25 PF 33.0 to 37.0 2.25 PF 37.0 to 40.0 2.25 PF 42.0 to 45.0 42.0 to 45.0 47.0 to 50.0 52.0 to 52.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 60.0 to 69.0 69.0 to 71.0 2.25 PF 2.		23.0 to 26.0									2.25	PP
30.0 to 33.0 33.0 to 35.0 35.0 to 37.0 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 52.0 to 52.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 60.0 to 66.0 69.0 to 71.0		26.0 to 28.0									2.25	PP
33.0 to 35.0 35.0 to 37.0 35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 52.0 to 52.0 52.0 to 54.0 54.0 to 58.0 60.0 to 63.0 60.0 to 69.0 69.0 to 71.0		28.0 to 30.0									2.25	PP
35.0 to 37.0 37.0 to 40.0 40.0 to 42.0 40.0 to 42.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 52.0 to 52.0 52.0 to 54.0 58.0 to 60.0 60.0 to 63.0 60.0 to 69.0 69.0 to 71.0		30.0 to 33.0									2.25	PP
37.0 to 40.0 40.0 to 42.0 40.0 to 42.0 42.0 to 45.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 52.0 to 54.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 66.0 to 69.0 69.0 to 71.0		33.0 to 35.0									2.25	PP
40.0 to 42.0 42.0 to 45.0 42.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		35.0 to 37.0									2.25	PP
42.0 to 45.0 45.0 to 47.0 45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 52.25 PF 52.0 to 54.0 58.0 to 60.0 60.0 to 63.0 66.0 to 69.0 69.0 to 71.0		37.0 to 40.0									2.25	PP
45.0 to 47.0 47.0 to 50.0 50.0 to 52.0 52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 66.0 to 69.0 69.0 to 71.0		40.0 to 42.0									2.25	PP
47.0 to 50.0 50.0 to 52.0 52.0 to 54.0 52.0 to 58.0 58.0 to 60.0 60.0 to 63.0 66.0 to 69.0 69.0 to 71.0		42.0 to 45.0									2.25	PP
50.0 to 52.0 52.0 to 54.0 52.0 to 58.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 60.0 to 66.0 66.0 to 69.0 69.0 to 71.0		45.0 to 47.0									2.25	PP
52.0 to 54.0 54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		47.0 to 50.0									2.25	PP
54.0 to 58.0 58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		50.0 to 52.0									2.25	PP
58.0 to 60.0 60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		52.0 to 54.0									2.25	PP
60.0 to 63.0 63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		54.0 to 58.0									2.25	PP
63.0 to 66.0 66.0 to 69.0 69.0 to 71.0		58.0 to 60.0									2.25	PP
66.0 to 69.0 69.0 to 71.0		60.0 to 63.0									2.25	PP
69.0 to 71.0 2.25 PF		63.0 to 66.0									2.25	PP
		66.0 to 69.0									2.25	PP
71.0 to 74.0 12 44 23 21 CI 116 93 2.25 DI		69.0 to 71.0									2.25	PP
		71.0 to 74.0		12	44	23	21	CL	116	93	2.25	PP
74.0 to 77.0 2.25 PF		74.0 to 77.0									2.25	PP
77.0 to 80.0 2.25 PF		77.0 to 80.0									2.25	PP
80.0 to 82.0 2.25 PF		80.0 to 82.0									2.25	PP
82.0 to 84.0 2.25 PF		82.0 to 84.0									2.25	PP

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

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Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-20	84.0 to 87.0									2.25	PP
	87.0 to 90.0									2.25	PP
	90.0 to 93.0									2.25	PP
	93.0 to 95.0									2.25	PP
	95.0 to 97.0									2.25	PP
	97.0 to 100.0									2.25	PP
	100.0 to 103.0									2.25	PP
	103.0 to 106.0									2.25	PP
	106.0 to 109.0		18	67	24	43	СН		100	2.25	PP
	109.0 to 112.0									2.25	PP
	112.0 to 115.0									2.25	PP
	115.0 to 118.0									2.25	PP
	118.0 to 120.0									2.25	PP
B-21	0.0 to 3.0									0.50	PP
	3.0 to 5.0									1.25	PP
	5.0 to 7.0									1.00	PP
	7.0 to 9.0									1.25	PP
	9.0 to 11.0									1.25	PP
	11.0 to 14.0									1.75	PP
	14.0 to 16.0									1.75	PP
	16.0 to 18.0									2.00	PP
	18.0 to 21.0		24	78	32	46	СН	98	96	2.25	PP
	21.0 to 25.0									2.00	PP
	25.0 to 28.0									2.25	PP
	28.0 to 32.0									2.25	PP
	32.0 to 35.0									2.25	PP
	35.0 to 38.0									2.25	PP
	38.0 to 40.0									2.25	PP
	40.0 to 43.0									2.25	PP
	43.0 to 47.0									2.25	PP
	47.0 to 50.0									2.25	PP
	50.0 to 54.0									2.25	PP
	54.0 to 57.0									2.25	PP
	57.0 to 59.0		11	60	17	43	СН		94	2.25	PP
	59.0 to 61.0									2.25	PP
	61.0 to 64.0									2.25	PP
	64.0 to 67.0									2.25	PP
	67.0 to 70.0									2.25	PP
l	70.0 to 74.0									2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

LIFE IA	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR	r 2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-21	74.0 to 77.0									2.25	PP
	77.0 to 80.0									2.25	PP
	80.0 to 83.0									2.25	PP
	83.0 to 85.0									2.25	PP
	85.0 to 87.0									2.25	PP
	87.0 to 90.0									2.25	PP
	90.0 to 94.0									2.25	PP
	94.0 to 97.0									2.25	PP
	97.0 to 100.0									2.25	PP
	100.0 to 103.0									2.25	PP
	103.0 to 105.0									2.25	PP
	105.0 to 107.0									2.25	PP
	107.0 to 110.0									2.25	PP
	110.0 to 112.0									2.25	PP
	112.0 to 115.0									2.25	PP
	115.0 to 119.0									2.25	PP
	119.0 to 121.0									2.25	PP
	121.0 to 124.0									2.25	PP
	124.0 to 127.0		16	53	22	31	СН		100	2.25	PP
	127.0 to 130.0									2.25	PP
	130.0 to 132.0									2.25	PP
	132.0 to 134.0									2.25	PP
	134.0 to 137.0									2.25	PP
	137.0 to 140.0									2.25	PP
	140.0 to 143.0									2.25	PP
	143.0 to 145.0									2.25	PP
	145.0 to 150.0									2.25	PP
	150.0 to 153.0									2.25	PP
	153.0 to 156.0									2.25	PP
	156.0 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
B-22	0.0 to 3.0									1.00	PP
	3.0 to 6.0									1.25	PP
	6.0 to 7.0									1.25	PP
	7.0 to 10.0									0.50	PP
	10.0 to 14.0									1.25	PP
	14.0 to 16.0									1.25	PP
	16.0 to 18.0									2.25	PP
	18.0 to 21.0		19	53	34	19	МН	99	96	2.25	PP

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

	Sample		Water					Dry Unit		Shear	25/20
Boring No.	Depth (ft)	Blows per ft	Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Weight (pcf)	% -200 Sieve	Strength (tsf)	Strengt Test
B-22	21.0 to 23.0									2.25	PP
	23.0 to 25.0									2.25	PP
	25.0 to 28.0									2.25	PP
	28.0 to 31.0									2.25	PF
	31.0 to 33.0									2.25	PF
	33.0 to 36.0									2.25	PF
	36.0 to 38.0									2.25	PF
	38.0 to 40.0									2.25	PF
	40.0 to 43.0									2.25	PF
	43.0 to 47.0									2.25	PF
	47.0 to 50.0									2.25	PF
	50.0 to 53.0									2.25	PF
	53.0 to 56.0									2.25	PF
	56.0 to 60.0									2.25	PF
	60.0 to 63.0									2.25	PF
	63.0 to 67.0									2.25	PF
	67.0 to 70.0									2.25	PF
	70.0 to 73.0									2.25	PF
	73.0 to 75.0									2.25	PF
	75.0 to 77.0									2.25	PF
	77.0 to 80.0									2.25	PF
	80.0 to 84.0									2.25	PF
	84.0 to 86.0									2.25	PF
	86.0 to 88.0									2.25	PF
	88.0 to 91.0		18	65	35	30	МН	100	98	2.25	PF
	91.0 to 94.0									2.25	PF
	94.0 to 97.0									2.25	PF
	97.0 to 101.0									2.25	PF
	101.0 to 104.0									2.25	PF
	104.0 to 107.0									2.25	PF
	107.0 to 110.0									2.25	PF
	110.0 to 114.0									2.25	PF
	114.0 to 117.0									2.25	PF
	117.0 to 120.0									2.25	PF
B-23	0.0 to 3.0									0.63	PF
	3.0 to 5.0									0.88	PF
	5.0 to 8.0									1.00	PF
	8.0 to 11.0									2.25	PF
	11.0 to 13.0									2.25	PF

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

LIFE IN	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	<u> 2015.G</u>	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-23	13.0 to 15.0									2.25	PP
	15.0 to 18.0									2.25	PP
	18.0 to 21.0									2.25	PP
	21.0 to 23.0									2.25	PP
	23.0 to 25.0									2.25	PP
	25.0 to 28.0									2.25	PP
	28.0 to 31.0									2.25	PP
	31.0 to 33.0									2.25	PP
	33.0 to 36.0		22	58	21	37	СН	104	100	2.25	PP
	36.0 to 39.0									2.25	PP
	39.0 to 42.0									2.25	PP
	42.0 to 45.0									2.25	PP
	45.0 to 47.0									2.25	PP
	47.0 to 50.0		19	48	29	19	ML	99	100	2.25	PP
	50.0 to 53.0									2.25	PP
	53.0 to 55.0									2.25	PP
	55.0 to 57.0									2.25	PP
	57.0 to 60.0									2.25	PP
	60.0 to 63.0									2.25	PP
	63.0 to 65.0									2.25	PP
	65.0 to 67.0									2.25	PP
	67.0 to 70.0									2.25	PP
	70.0 to 73.0									2.25	PP
	73.0 to 75.0									2.25	PP
	75.0 to 77.0									2.25	PP
	77.0 to 80.0									2.25	PP
	80.0 to 83.0									2.25	PP
	83.0 to 85.0									2.25	PP
	85.0 to 87.0									2.25	PP
	87.0 to 90.0									2.25	PP
	90.0 to 93.0									2.25	PP
	93.0 to 96.0									2.25	PP
	96.0 to 98.0									2.25	PP
	98.0 to 100.0									2.25	PP
	100.0 to 103.0									2.25	PP
	103.0 to 105.0									2.25	PP
	105.0 to 110.0									2.25	PP
	110.0 to 112.0									2.25	PP
	112.0 to 115.0									2.25	PP
DD - Dool	ot Donotromoto	or T/ - T	om rono I li	C = I Inconfin	ad Camproo	sion E\/-	Field Man		I - I Inconcol	idatad I ladra	inad Triavial

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

(ft) perit (%)	Dry Unit Weight (pcf) % -200 Sieve	Shear Strength (tsf)	Strength Test
B-24 0.0 to 3.0 3.0 to 7.0	CL 100	2.25	
B-24 0.0 to 3.0 3.0 to 7.0			PP
3.0 to 7.0		2.25	PP
		0.13	PP
7.0 to 10.0		0.38	PP
		0.63	PP
10.0 to 14.0		0.63	PP
14.0 to 16.0		0.50	PP
16.0 to 18.0		2.25	PP
18.0 to 22.0		2.25	PP
22.0 to 26.0		2.25	PP
26.0 to 30.0		2.25	PP
30.0 to 33.0		2.25	PP
33.0 to 37.0 19 36 23 13 C	CL 96	2.25	PP
37.0 to 41.0		2.25	PP
41.0 to 45.0		2.25	PP
45.0 to 47.0		2.25	PP
47.0 to 51.0		2.25	PP
51.0 to 55.0		2.25	PP
55.0 to 57.0		2.25	PP
57.0 to 61.0		2.25	PP
61.0 to 65.0		2.25	PP
65.0 to 69.0 19 52 24 28 C	CH 98	2.25	PP
69.0 to 73.0		2.25	PP
73.0 to 77.0		2.25	PP
77.0 to 81.0		2.25	PP
81.0 to 84.0		2.25	PP
84.0 to 88.0		2.25	PP
88.0 to 91.0		2.25	PP
91.0 to 94.0		2.25	PP
94.0 to 106.0			
106.0 to 109.0		2.25	PP
109.0 to 112.0 11 45 21 24 C	CL 94	2.25	PP
112.0 to 114.0		2.25	PP
114.0 to 117.0		2.25	PP
117.0 to 120.0		2.25	PP
120.0 to 124.0		2.25	PP
124.0 to 128.0		2.25	PP
128.0 to 131.0		2.25	PP
131.0 to 135.0		2.25	PP

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	3-140-00	0 PESCA	DITO_FE	BRUAR	/ 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-24	135.0 to 139.0									2.25	PP
	139.0 to 143.0									2.25	PP
	143.0 to 147.0									2.25	PP
	147.0 to 150.0		9	57	19	38	CH		95	2.25	PP
	150.0 to 153.0									2.25	PP
	153.0 to 156.0									2.25	PP
	156.0 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
B-25	0.0 to 3.0									1.38	PP
	3.0 to 5.0									1.88	PP
	5.0 to 7.0									2.25	PP
	7.0 to 10.0									2.25	PP
	10.0 to 14.0									2.25	PP
	14.0 to 16.0									2.25	PP
	16.0 to 18.0									2.25	PP
	18.0 to 21.0									2.25	PP
	21.0 to 23.0									2.25	PP
	23.0 to 25.0									2.25	PP
	25.0 to 28.0									2.25	PP
	28.0 to 30.0									2.25	PP
	30.0 to 33.0		18	55	25	30	СН	105	99	2.25	PP
	33.0 to 35.0		14	39	19	20	CL		93	2.25	PP
	35.0 to 37.0									2.25	PP
	37.0 to 40.0									2.25	PP
	40.0 to 42.0									2.25	PP
	42.0 to 44.0									2.25	PP
	44.0 to 47.0									2.25	PP
	47.0 to 50.0									2.25	PP
	50.0 to 54.0									2.25	PP
	54.0 to 57.0		14	52	26	26	СН		100	2.25	PP
	57.0 to 60.0									2.25	PP
	60.0 to 64.0									2.25	PP
	64.0 to 67.0									2.25	PP
	67.0 to 69.0									2.25	PP
	69.0 to 70.0									2.25	PP
	70.0 to 74.0									2.25	PP
	74.0 to 78.0									2.25	PP
	78.0 to 81.0									2.25	PP
	81.0 to 85.0									2.25	PP
	1						-	·			

PP = Pocket Penetrometer

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UC = Unconfined Compression FV = Field Vane

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

Boring Sample Boring Row Perf Content Cont	LIFE IA	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	<u> 2015.G</u>	PJ				23/2013
88.0 to 90.0 93.0 93.0 95.0 97.0 93.0 to 95.0 97.0 190.0 to 93.0 95.0 97.0 190.0 to 100.0 100.0 100.0 100.0 100.0 110.0 113.0 117.0 117.0 to 120.0 8.26 0.0 to 3.0 13.0 to 5.0 13.0 to 5.0 15.0 to 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.		Depth		Content				USCS	Weight	% -200 Sieve	Strength	
90.0 to 93.0 93.0 to 95.0 95.0 to 97.0 97.0 to 100.0 100.0 to 104.0 104.0 to 107.0 107.0 to 110.0 113.0 to 113.0 117.0 to 120.0 8-26	B-25	85.0 to 88.0									2.25	PP
93.0 to 95.0 95.0 to 97.0 97.0 to 100.0 100.0 to 104.0 107.0 to 110.0 110.0 to 113.0 113.0 to 117.0 117.0 to 120.0 B-26 0.0 to 3.0 3.0 to 7.0 7.0 to 10.0 13.0 to 15.0 15.0 to 18.0 15.0 to 18.0 15.0 to 18.0 22.5 to		88.0 to 90.0		13	67	24	43	СН		99	2.25	PP
95.0 to 97.0 97.0 97.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 113.0 117.0 117.0 to 120.0 100.0 to 13.0 100.0 100.0 13.0 15.0 15.0 15.0 15.0 15.0 to 18.0 18.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12		90.0 to 93.0									2.25	PP
97.0 to 100.0 to 104.0 to 107.0 to 100.0 to 104.0 to 107.0 to 110.0 to 113.0 to 115.0 to 113.0 to 117.0 to 120.0 B-26		93.0 to 95.0									2.25	PP
100.0 to 104.0 to 107.0 to 104.0 to 107.0 to 104.0 to 107.0 to 110.0 to 113.0 to 117.0 to 120.0 B-26		95.0 to 97.0									2.25	PP
104.0 to 107.0 107.0 to 110.0 110.0 to 113.0 113.0 to 117.0 117.0 to 120.0 18-26		97.0 to 100.0									2.25	PP
107.0 to 110.0 to 113.0 to 117.0 to 110.0 to 113.0 to 117.0 to 120.0 B-26		100.0 to 104.0									2.25	PP
110.0 to 113.0 113.0 to 117.0 113.0 to 117.0 113.0 to 120.0 B-26		104.0 to 107.0									2.25	PP
113.0 to 117.0 to 120.0 B-26		107.0 to 110.0									2.25	PP
B-26		110.0 to 113.0									2.25	PP
B-26		113.0 to 117.0									2.25	PP
3.0 to 7.0 7.0 to 10.0 10.0 to 13.0 11.25 PP 13.0 to 15.0 13.0 to 15.0 18.0 to 20.0 13 45 20 25 CL 81 2.25 PP 2.25 PP 2.0 to 22.0 2.25 PP 2.0 to 28.0 2.25 PP 2.0 to 28.0 2.25 PP 2.0 to 32.0 3.0 to 34.0 3.0 to 45.0 4.1.0 to 43.0 4.3.0 to 45.0 4.5.0 to 47.0 4.7.0 to 50.0 5.6.0 to 60.0 6.0 to 64.0 6.0 to 67.0 6.7.0 to 70.0 7.0 to 70.0 7.0 to 70.0 7.0 to 70.0 7.0 to 77.0 7.0 to 80.0 1.26 PP 2.25 PP		117.0 to 120.0									2.25	PP
7.0 to 10.0 10.0 to 13.0 11.25 PP 13.0 to 15.0 15.0 to 18.0 15.0 to 18.0 15.0 to 20.0 13 45 20 25 CL 81 2.25 PP 20.0 to 22.0 22.5 PP 22.0 to 25.0 22.5 PP 25.0 to 28.0 22.5 PP 28.0 to 32.0 32.0 to 34.0 33.0 to 41.0 41.0 to 43.0 41.0 to 43.0 45.0 to 47.0 45.0 to 47.0 50.0 to 53.0 50.0 to 53.0 50.0 to 50.0 50.0 to 64.0 64.0 to 67.0 67.0 to 70.0 70.0 to 74.0 70.0 to 74.0 70.0 to 77.0	B-26	0.0 to 3.0									0.13	PP
10.0 to 13.0 13.0 to 15.0 13.0 to 15.0 15.0 to 18.0 15.0 to 18.0 15.0 to 18.0 18.0 to 20.0 13		3.0 to 7.0									0.38	PP
13.0 to 15.0 15.0 to 18.0 15.0 to 18.0 15.0 to 18.0 18.0 to 20.0 18.0 to 20.0 19.0 to 22.0 20.0 to 22.0 20.0 to 22.0 20.0 to 25.0 20.0 to 28.0 20.0 to 32.0 32.0 to 34.0 34.0 to 38.0 38.0 to 41.0 41.0 to 43.0 45.0 to 47.0 47.0 to 50.0 56.0 to 60.0 66.0 to 64.0 66.0 to 64.0 67.0 to 70.0 7.0 to 70.0 7.0 to 70.0 7.7.0 to 80.0 13. 45. 20 25. CL 81 2.25		7.0 to 10.0									1.25	PP
15.0 to 18.0 18.0 to 20.0 18.0 to 20.0 18.0 to 20.0 18.0 to 20.0 20.0 to 22.0 20.0 to 22.0 22.0 to 25.0 22.0 to 25.0 22.0 to 28.0 22.5 PP 28.0 to 32.0 32.0 to 34.0 33.0 to 41.0 41.0 to 43.0 45.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 53.0 50.0 to 64.0 64.0 to 67.0 64.0 to 67.0 70.0 to 70.0 70.0 to 74.0 77.0 to 80.0 13 45 20 25 CL 81 2.25 PP		10.0 to 13.0									2.25	PP
18.0 to 20.0 13		13.0 to 15.0									2.25	PP
20.0 to 22.0 22.0 to 25.0 22.0 to 25.0 22.0 to 28.0 22.25 PP 26.0 to 32.0 22.25 PP 33.0 to 34.0 32.0 to 34.0 33.0 to 34.0 34.0 to 38.0 32.25 PP 41.0 to 43.0 42.25 PP 45.0 to 47.0 47.0 to 50.0 50.0 to 53.0 50.0 to 53.0 50.0 to 60.0 60.0 to 64.0 60.0 to 67.0 60.0 to 67.0 70.0 to 74.0 71.0 to 50.0 77.0 to 80.0 77.0 to 80.0		15.0 to 18.0									2.25	PP
22.0 to 25.0 25.0 to 28.0 25.0 to 28.0 22.5 PP 28.0 to 32.0 22.5 PP 32.0 to 34.0 32.25 PP 34.0 to 38.0 32.25 PP 41.0 to 43.0 41.0 to 43.0 42.25 PP 45.0 to 47.0 45.0 to 47.0 47.0 to 50.0 50.0 to 53.0 50.0 to 50.0 50.0 to 60.0 60.0 to 60.0 60.0 to 60.0 60.0 to 67.0 67.0 to 70.0 70.0 to 74.0 74.0 to 77.0 75.0 to 70.0 76.0 to 77.0 77.0 to 80.0		18.0 to 20.0		13	45	20	25	CL		81	2.25	PP
25.0 to 28.0 28.0 to 32.0 32.0 to 34.0 32.0 to 34.0 34.0 to 38.0 38.0 to 41.0 41.0 to 43.0 43.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 53.0 50.0 to 60.0 60.0 to 64.0 64.0 to 67.0 67.0 to 70.0 77.0 to 80.0 22.5 PP 72.25 PP 77.0 to 80.0		20.0 to 22.0									2.25	PP
28.0 to 32.0 to 34.0		22.0 to 25.0									2.25	PP
32.0 to 34.0 34.0 to 38.0 34.0 to 38.0 32.25 PP 38.0 to 41.0 22.25 PP 41.0 to 43.0 22.25 PP 43.0 to 45.0 22.25 PP 45.0 to 47.0 22.25 PP 47.0 to 50.0 22.25 PP 50.0 to 53.0 22.25 PP 50.0 to 64.0 22.25 PP 60.0 to 64.0 22.25 PP 64.0 to 67.0 22.25 PP 67.0 to 70.0 22.25 PP 70.0 to 74.0 22.25 PP 74.0 to 77.0 22.25 PP 77.0 to 80.0		25.0 to 28.0									2.25	PP
34.0 to 38.0 38.0 to 41.0 38.0 to 41.0 41.0 to 43.0 42.25 PP 43.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 53.0 50.0 to 66.0 60.0 to 64.0 60.0 to 64.0 67.0 to 70.0 70.0 to 74.0 77.0 to 80.0 22.5 PP 77.0 to 80.0 22.5 PP 78.0 to 47.0 79.0 to 77.0 79.0 to 77.0 79.0 to 77.0 79.0 to 80.0		28.0 to 32.0									2.25	PP
38.0 to 41.0 41.0 to 43.0 41.0 to 43.0 42.25 PP 43.0 to 45.0 45.0 to 47.0 47.0 to 50.0 53.0 to 56.0 56.0 to 60.0 60.0 to 64.0 64.0 to 67.0 67.0 to 70.0 74.0 to 77.0 77.0 to 80.0 2.25 PP		32.0 to 34.0									2.25	PP
41.0 to 43.0 43.0 to 45.0 43.0 to 45.0 45.0 to 47.0 47.0 to 50.0 50.0 to 53.0 50.0 to 60.0 60.0 to 64.0 64.0 to 67.0 67.0 to 70.0 70.0 to 74.0 77.0 to 80.0 2.25 PP		34.0 to 38.0									2.25	PP
43.0 to 45.0 45.0 to 47.0 45.0 to 47.0 47.0 to 50.0 50.0 to 53.0 50.0 to 56.0 50.0 to 66.0 60.0 to 64.0 64.0 to 67.0 67.0 to 70.0 77.0 to 80.0 2.25 PP 77.0 to 80.0 2.25 PP 72.25 PP 72.25 PP 73.0 to 77.0 75.0 to 77.0 to 77.0		38.0 to 41.0									2.25	PP
45.0 to 47.0 47.0 to 50.0 47.0 to 50.0 50.0 to 53.0 50.0 to 56.0 53.0 to 56.0 64.0 to 64.0 64.0 to 67.0 67.0 to 70.0 70.0 to 74.0 77.0 to 80.0 2.25 PP											2.25	
47.0 to 50.0 50.0 to 53.0 53.0 to 56.0 53.0 to 56.0 56.0 to 60.0 60.0 to 64.0 60.0 to 67.0 67.0 to 70.0 77.0 to 80.0 2.25 PP 50.0 to 50.0 2.25 PP		43.0 to 45.0									2.25	PP
50.0 to 53.0 50.0 to 53.0 50.0 to 56.0 50.0 to 60.0 50.0 to 60.0 60.0 to 64.0 67.0 to 70.0 67.0 to 70.0 74.0 to 77.0 77.0 to 80.0 2.25 PP		45.0 to 47.0									2.25	PP
53.0 to 56.0 56.0 to 60.0 60.0 to 64.0 60.0 to 67.0 67.0 to 70.0 70.0 to 74.0 77.0 to 80.0 2.25 PP												
56.0 to 60.0 60.0 to 64.0 64.0 to 67.0 67.0 to 70.0 70.0 to 74.0 77.0 to 80.0 2.25 PP											2.25	PP
60.0 to 64.0 64.0 to 67.0 67.0 to 70.0 70.0 to 74.0 77.0 to 80.0 2.25 PP												
64.0 to 67.0 67.0 to 70.0 70.0 to 74.0 74.0 to 77.0 77.0 to 80.0											2.25	PP
67.0 to 70.0 70.0 to 74.0 74.0 to 77.0 77.0 to 80.0 2.25 PP 2.25 PP 2.25 PP 2.25 PP											2.25	PP
70.0 to 74.0 74.0 to 77.0 77.0 to 80.0												
74.0 to 77.0 77.0 to 80.0 2.25 PP		67.0 to 70.0									2.25	PP
77.0 to 80.0 2.25 PP												PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILE INA	AME: ASF1	13-1 4 0-00	FLOCA		ואטאוע	2013.0	ı J				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-26	80.0 to 83.0									2.25	PP
	83.0 to 85.0		12	52	22	30	СН		85	2.25	PP
	85.0 to 87.0									2.25	PP
	87.0 to 89.0									2.25	PP
	89.0 to 92.0									2.25	PP
	92.0 to 95.0		11	76	21	55	СН		99	2.25	PP
	95.0 to 97.0									2.25	PP
	97.0 to 100.0									2.25	PP
	100.0 to 104.0									2.25	PP
	104.0 to 107.0									2.25	PP
	107.0 to 110.0									2.25	PP
	110.0 to 114.0									2.25	PP
	114.0 to 117.0									2.25	PP
	117.0 to 119.0									2.25	PP
	119.0 to 121.0									2.25	PP
	121.0 to 124.0									2.25	PP
	124.0 to 127.0									2.25	PP
	127.0 to 130.0									2.25	PP
	130.0 to 133.0									2.25	PP
	133.0 to 135.0									2.25	PP
	135.0 to 138.0									2.25	PP
	138.0 to 141.0									2.25	PP
	141.0 to 145.0		12	69	24	45	СН		100	2.25	PP
	145.0 to 149.0									2.25	PP
	149.0 to 153.0									2.25	PP
	153.0 to 157.0									2.25	PP
	157.0 to 160.0									2.25	PP
B-27	0.0 to 3.0									0.38	PP
	3.0 to 7.0									0.38	PP
	7.0 to 10.0									1.50	PP
	10.0 to 13.0									2.25	PP
	13.0 to 15.0									2.25	PP
	15.0 to 18.0									2.25	PP
	18.0 to 21.0									2.25	PP
	21.0 to 25.0									2.25	PP
	25.0 to 29.0									2.25	PP
	29.0 to 32.0		10	39	19	20	CL		98	2.25	PP
	32.0 to 35.0									2.25	PP
	35.0 to 38.0									2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO, FEBRUARY 2015 GP.I.

2/25/2015

FILE N	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR'	<u>Y 2015.G</u>	۲J	I		2/	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-27	38.0 to 40.0									2.25	PP
	40.0 to 43.0									2.25	PP
	43.0 to 47.0									2.25	PP
	47.0 to 50.0									2.25	PP
	50.0 to 54.0									2.25	PP
	54.0 to 57.0									2.25	PP
	57.0 to 60.0									2.25	PP
	60.0 to 64.0									2.25	PP
	64.0 to 66.0									2.25	PP
	66.0 to 69.0									2.25	PP
	69.0 to 73.0									2.25	PP
	73.0 to 77.0									2.25	PP
	77.0 to 80.0									2.25	PP
	80.0 to 83.0									2.25	PP
	83.0 to 87.0									2.25	PP
	87.0 to 91.0									2.25	PP
	91.0 to 94.0									2.25	PP
	94.0 to 97.0									2.25	PP
	97.0 to 100.0									2.25	PP
	100.0 to 103.0									2.25	PP
	103.0 to 107.0									2.25	PP
	107.0 to 110.0									2.25	PP
	110.0 to 113.0		10	46	22	24				2.25	PP
	113.0 to 117.0									2.25	PP
	117.0 to 120.0									2.25	PP
B-101	0.0 to 10.0										
	10.0 to 25.0										
	25.0 to 27.0									2.25	PP
	27.0 to 29.0									2.25	PP
	29.0 to 30.0										
	30.0 to 34.0									2.25	PP
	34.0 to 55.0										
	55.0 to 60.0									2.25	PP
	60.0 to 63.0									2.25	PP
	63.0 to 68.0									2.25	PP
	68.0 to 85.0										
	85.0 to 90.0									2.25	PP
	90.0 to 92.0									2.25	PP
	92.0 to 95.0										
P = Pock	ket Penetrometer	r TV = To	orvane U	C = Unconfin	ed Compres	sion FV =	Field Vane	e Ul	J = Unconsol	idated Undra	ined Triaxia

PP = Pocket Penetrometer

TV = Torvane

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			21	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-101	95.0 to 115.0										
	115.0 to 118.0										
	118.0 to 120.0										
	120.0 to 146.0										
	146.0 to 151.0										
B-102	0.0 to 18.0										
	18.0 to 21.0										
	21.0 to 23.0									0.88	PP
	23.0 to 25.0									2.25	PP
	25.0 to 50.0										
	50.0 to 54.0									2.25	PP
	54.0 to 58.0									2.25	PP
	58.0 to 59.0										
	59.0 to 60.0										
	60.0 to 62.0										
	62.0 to 64.0									2.25	PP
	64.0 to 66.0									2.25	PP
	66.0 to 68.0									2.25	PP
	68.0 to 70.0									2.25	PP
	70.0 to 82.0										
	82.0 to 86.0										
	86.0 to 88.0										
	88.0 to 90.0										
	90.0 to 92.0									2.25	PP
	92.0 to 94.0									2.25	PP
	94.0 to 96.0									2.25	PP
	96.0 to 112.0										
	112.0 to 114.0									2.25	PP
	114.0 to 117.0										
	117.0 to 120.0										
	120.0 to 122.0									2.25	PP
	122.0 to 140.0										
	140.0 to 142.0									2.25	PP
	142.0 to 146.0									2.25	PP
	146.0 to 150.0										
	150.0 to 160.0										
B-103	0.0 to 2.5									0.63	PP
	2.5 to 5.0									1.25	PP
	5.0 to 7.5			41	16	25	CL		64	1.25	PP
DD - Dock	cet Penetromete	r T\/ = To	orvane III	C = Unconfin	ed Compres	sion EV/=	Field Van		I = Unconsol	idated Lindra	inod Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO, FEBRUARY 2015 GP.I.

2/25/2015

ILE N	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/201
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-103	7.5 to 10.0									0.88	PP
	10.0 to 12.5									2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
	22.5 to 25.0									2.25	PP
	25.0 to 27.5									2.25	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									1.63	PP
	45.0 to 47.5			45	18	27	CL		91	2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	60.0 to 63.0									2.25	PP
	63.0 to 64.0									2.25	PP
	64.0 to 65.0									2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 74.5									2.25	PP
	74.5 to 75.5									2.25	PP
	75.5 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5			84	22	62	СН		92	2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5									2.25	PP
	97.5 to 100.0										
P = Pock	cet Penetromete	r TV = To	orvane Lli	∟ C = Unconfin	led Compres	sion FV =	: Field Van	اا ا	J = Unconsol	idated Undra	ined Tria:

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-103	100.0 to 102.5									2.25	PP
	102.5 to 105.0									2.25	PP
	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
	112.5 to 115.0									2.25	PP
	115.0 to 117.5									2.25	PP
	117.5 to 120.0									2.25	PP
B-104	0.0 to 2.5									1.25	PP
	2.5 to 5.0									0.88	PP
	5.0 to 7.5									1.25	PP
	7.5 to 10.0			69	31	38	CH		98	2.25	PP
	10.0 to 12.5									2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
	22.5 to 25.0									2.25	PP
	25.0 to 27.5									2.25	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0			49	22	27	CL		92	2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	60.0 to 62.5									2.25	PP
	62.5 to 65.0									2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
PP = Pock	et Penetromete	r TV = Tc	orvana III	C = Unconfinence	ad Compres	cion F\/ =	Field Van	ا ا	I = Unconsol	idated I Indra	inad Triavial

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO FERRIJARY 2015 GP.I.

2/25/2015

FILE N	AME: ASF1	13-140-00) PESCA	DITO_FE	BRUAR\	/ 2015.G	PJ			2/	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-104	77.5 to 81.3									2.25	PP
	81.3 to 84.0									2.25	PP
	84.0 to 86.5									2.25	PP
	86.5 to 89.0									2.25	PP
	89.0 to 91.0			34	18	16	CL		53	2.25	PP
	91.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5									2.25	PP
	97.5 to 100.0									2.25	PP
	100.0 to 102.5									2.25	PP
	102.5 to 105.0									2.25	PP
	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
	112.5 to 115.0									2.25	PP
	115.0 to 117.5									2.25	PP
	117.5 to 120.0									2.25	PP
B-105	0.0 to 2.5									1.50	PP
	2.5 to 5.0									1.50	PP
	5.0 to 7.5									2.25	PP
	7.5 to 10.0									1.88	PP
	10.0 to 12.5			60	29	31	СН		92	2.00	PP
	12.5 to 15.0									1.75	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
	22.5 to 25.0									2.25	PP
	25.0 to 27.5									2.25	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5									2.13	PP
	32.5 to 35.0									2.25	PP
	35.0 to 36.0									2.25	PP
	36.0 to 38.5									2.25	PP
	38.5 to 41.0									2.25	PP
	41.0 to 43.5									2.25	PP
	43.5 to 46.0									2.25	PP
	46.0 to 48.5									2.25	PP
	48.5 to 51.0									2.25	PP
	51.0 to 53.5			77	25	52	СН		65	2.25	PP
											_

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

Boring No. Sample Depth (ft) Blows per ft (%) Liquid Limit Plastic Limit Plasticity Index USCS Dry Unit Weight (pcf) % -200 Sieve Shear Strength (tsf)	Strength Test PP
56.0 to 61.0 61.0 to 63.5 63.5 to 66.0 66.0 to 68.5 68.5 to 71.0 71.0 to 73.5 73.5 to 76.0 76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP PP PP PP PP PP
61.0 to 63.5 63.5 to 66.0 63.5 to 66.0 66.0 to 68.5 68.5 to 71.0 71.0 to 73.5 73.5 to 76.0 76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP PP PP PP
63.5 to 66.0 66.0 to 68.5 68.5 to 71.0 71.0 to 73.5 73.5 to 76.0 76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP PP PP PP
66.0 to 68.5 68.5 to 71.0 71.0 to 73.5 73.5 to 76.0 76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP PP PP
68.5 to 71.0 71.0 to 73.5 71.0 to 73.5 73.5 to 76.0 76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP PP PP
71.0 to 73.5 73.5 to 76.0 76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP PP
73.5 to 76.0 76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP PP
76.0 to 78.5 78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP PP
78.5 to 81.0 81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP
81.0 to 83.5 83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	
83.5 to 86.0 86.0 to 88.5 88.5 to 91.0	PP
86.0 to 88.5 88.5 to 91.0	
88.5 to 91.0 2.25	PP
	PP
91.0 to 93.5	PP
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PP
93.5 to 96.0 59 21 38 CH 54 2.25	PP
96.0 to 98.5 2.25	PP
98.5 to 101.0 2.25	PP
101.0 to 103.5 2.25	PP
103.5 to 106.0 2.25	PP
106.0 to 108.5	PP
108.5 to 111.0 2.25	PP
111.0 to 112.5 2.25	PP
112.5 to 115.0 2.25	PP
115.0 to 116.0	
116.0 to 117.0	
117.0 to 118.0 2.25	PP
118.0 to 119.5 2.25	PP
119.5 to 122.0 2.25	PP
122.0 to 124.5	PP
124.5 to 126.0 2.25	PP
126.0 to 128.5	PP
128.5 to 131.0 2.25	PP
131.0 to 133.5 45 23 22 CL 87 2.25	PP
133.5 to 136.0 2.25	PP
136.0 to 138.5	PP
138.5 to 141.0 2.25	PP
141.0 to 143.5	PP
143.5 to 146.0 2.25	

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	13-140-00	J PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-105	146.0 to 148.5									2.25	PP
	148.5 to 151.0									2.25	PP
	151.0 to 153.5									2.25	PP
	153.5 to 156.0									2.25	PP
	156.0 to 158.5									2.25	PP
	158.5 to 160.0									2.25	PP
B-106	0.0 to 20.0										
	20.0 to 22.0									2.25	PP
	22.0 to 24.0									2.25	PP
	24.0 to 26.0									2.25	PP
	26.0 to 28.0										
	28.0 to 40.0										
	40.0 to 42.0									2.25	PP
	42.0 to 44.0										
	44.0 to 46.0										
	46.0 to 70.0										
	70.0 to 72.0										
	72.0 to 74.0										
	74.0 to 76.0										
	76.0 to 78.0										
	78.0 to 88.0										
	88.0 to 90.0									2.25	PP
	90.0 to 92.0									2.25	PP
	92.0 to 94.0									2.25	PP
	94.0 to 96.0									2.25	PP
	96.0 to 98.0									2.25	PP
	98.0 to 100.0										
	100.0 to 112.0										
	112.0 to 113.0									2.25	PP
	113.0 to 114.0										
	114.0 to 116.0									2.25	PP
	116.0 to 118.0										
	118.0 to 120.0										
B-107	0.0 to 2.5									1.50	PP
	2.5 to 5.0									1.38	PP
	5.0 to 7.5									1.38	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									1.88	PP
	12.5 to 15.0									2.25	PP
PP = Pock	ket Penetromete	er TV = To	orvane U	C = Unconfin	ed Compres	sion FV =	Field Van	e Ul	J = Unconsol	idated Undra	ined Triaxial

CU = Consolidated Undrained Triaxial

RABAKISTNER-

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			. 21	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-107	15.0 to 17.5			40	21	19	CL		88	2.25	PP
	17.5 to 20.0									1.50	PP
	20.0 to 22.5									1.88	PP
	22.5 to 25.0									2.00	PP
	25.0 to 27.5									2.00	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 48.5									2.25	PP
	48.5 to 51.0									2.25	PP
	51.0 to 53.5									2.25	PP
	53.5 to 56.0			54	18	36	СН		99	2.25	PP
	56.0 to 58.5									2.25	PP
	58.5 to 61.0									2.25	PP
	61.0 to 62.5									2.25	PP
	62.5 to 65.0									2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 68.5									2.25	PP
	68.5 to 71.0									2.25	PP
	71.0 to 74.0									2.25	PP
	74.0 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5			51	26	25	СН		98	2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5									2.25	PP
	97.5 to 100.0									2.25	PP
	100.0 to 102.0									2.25	PP
	102.0 to 103.0									2.25	PP
	103.0 to 105.5									2.25	PP
DD = Dock	cet Penetromete	r T\/ = To	orvane II	C = Unconfin	ed Compres	sion EV =	Field Van		I = Unconsol	idated I Indra	ined Triavia

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASE	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-107	105.5 to 107.0									2.25	PP
	107.0 to 109.0									2.25	PP
	109.0 to 111.5									2.25	PP
	111.5 to 114.0									2.25	PP
	114.0 to 116.5									2.25	PP
	116.5 to 119.0									2.25	PP
	119.0 to 121.5									2.25	PP
	121.5 to 124.0									2.25	PP
	124.0 to 126.5									2.25	PP
	126.5 to 128.0			68	34	34	МН		95	2.25	PP
	128.0 to 130.5									2.25	PP
	130.5 to 132.0									2.25	PP
	132.0 to 134.5									2.25	PP
	134.5 to 137.0									2.25	PP
	137.0 to 139.5									2.25	PP
	139.5 to 142.0									2.25	PP
	142.0 to 144.5									2.25	PP
	144.5 to 147.0									2.25	PP
	147.0 to 149.5									2.25	PP
	149.5 to 152.0									2.25	PP
	152.0 to 154.5									2.25	PP
	154.5 to 157.0									2.25	PP
	157.0 to 158.5									2.25	PP
	158.5 to 160.0									2.25	PP
B-108	0.0 to 2.5									1.50	PP
	2.5 to 5.0									1.38	PP
	5.0 to 7.5									1.38	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									1.88	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0			49	19	30	CL		100	1.50	PP
	20.0 to 22.5									1.88	PP
	22.5 to 25.0									2.00	PP
	25.0 to 26.0									2.00	PP
	26.0 to 28.5									2.25	PP
	28.5 to 31.0									2.25	PP
	31.0 to 32.5									2.25	PP
	32.5 to 36.0									2.25	PP
DD = Dock	et Penetromete	er T\/ = To	orvane II	C = Unconfin	ed Compres	sion E\/ =	: Field Van	<u> </u>	I = Unconsol	idated I Indra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE IN	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR	7 2015.G	PJ			2/	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-108	36.0 to 38.5									2.25	PP
	38.5 to 41.0									2.25	PP
	41.0 to 43.5									2.25	PP
	43.5 to 46.0									2.25	PP
	46.0 to 48.5									2.25	PP
	48.5 to 52.0									2.25	PP
	52.0 to 53.0									2.25	PP
	53.0 to 55.5									2.25	PP
	55.5 to 58.0			53	19	34	СН		100	2.25	PP
	58.0 to 60.5									2.25	PP
	60.5 to 63.0									2.25	PP
	63.0 to 65.5									2.25	PP
	65.5 to 68.0									2.25	PP
	68.0 to 70.5									2.25	PP
	70.5 to 73.0									2.25	PP
	73.0 to 75.5									2.25	PP
	75.5 to 78.0									2.25	PP
	78.0 to 80.5									2.25	PP
	80.5 to 83.0									2.25	PP
	83.0 to 85.5									2.25	PP
	85.5 to 88.0									2.25	PP
	88.0 to 90.5									2.25	PP
	90.5 to 91.5									2.25	PP
	91.5 to 94.0									2.25	PP
	94.0 to 96.5			59	24	35	СН		100	2.25	PP
	96.5 to 99.0									2.25	PP
	99.0 to 101.5									2.25	PP
	101.5 to 104.0									2.25	PP
	104.0 to 106.5									2.25	PP
	106.5 to 109.0									2.25	PP
	109.0 to 111.5									2.25	PP
	111.5 to 114.0									2.25	PP
	114.0 to 116.5									2.25	PP
	116.5 to 119.0									2.25	PP
	119.0 to 120.0									2.25	PP
B-109	0.0 to 2.5									1.00	PP
	2.5 to 5.0									1.00	PP
	5.0 to 7.5									2.00	PP
	7.5 to 10.0									2.25	PP
DD = Dock	cet Penetrometer	r TV = To	on/one III	C = Unconfin	od Compres	sion EV -	Field Vane	- 111	I = Unconsol	idated Lindra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			. 21	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-109	10.0 to 12.5									2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5			92	30	62	СН		99	2.25	PP
	22.5 to 25.0									1.00	PP
	25.0 to 27.5									2.25	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 46.0									2.25	PP
	46.0 to 48.0									2.25	PP
	48.0 to 50.0									2.25	PP
	50.0 to 51.5									2.25	PP
	51.5 to 54.0									2.25	PP
	54.0 to 56.0									2.25	PP
	56.0 to 58.5			25	15	10	SC		40	2.25	PP
	58.5 to 61.0									2.25	PP
	61.0 to 63.5									2.25	PP
	63.5 to 67.0									2.25	PP
	67.0 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5									2.25	PP
	97.5 to 100.0			63	19	44	СН		100	2.25	PP
	100.0 to 102.5									2.25	PP
	102.5 to 105.0									2.25	PP
DD = Dock	et Penetromete	r T\/ = To	orvane III	C = Unconfin	ed Compres	sion EV =	: Field Van		I = Unconsol	idated I Indra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASE	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-109	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
	112.5 to 115.0									2.25	PP
	115.0 to 117.0									2.25	PP
	117.0 to 118.0									2.25	PP
	118.0 to 120.5									2.25	PP
	120.5 to 123.0									2.25	PP
	123.0 to 125.5									2.25	PP
	125.5 to 128.0									2.25	PP
	128.0 to 130.5									2.25	PP
	130.5 to 133.0									2.25	PP
	133.0 to 135.5									2.25	PP
	135.5 to 138.0			49	22	27	CL		98	2.25	PP
	138.0 to 140.5									2.25	PP
	140.5 to 143.0									2.25	PP
	143.0 to 145.5									2.25	PP
	145.5 to 148.0									2.25	PP
	148.0 to 150.5									2.25	PP
	150.5 to 153.0									2.25	PP
	153.0 to 155.5									2.25	PP
	155.5 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
B-109A	0.0 to 6.0									0.50	PP
	6.0 to 16.0									2.25	PP
	16.0 to 24.0									2.25	PP
	24.0 to 36.0									2.25	PP
	36.0 to 56.0									2.25	PP
	56.0 to 76.0									2.25	PP
	76.0 to 85.0									2.25	PP
B-110	0.0 to 2.5									0.75	PP
	2.5 to 5.0									1.00	PP
	5.0 to 7.5									1.00	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
DD = Dock	et Penetromete	$\Delta r = TV = Tc$	onvana III	C = Unconfin	ad Compres	sion EV =	Field Van	١١١ م	I = Unconsol	idated I Indra	inad Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

166 147	AME: ASF	13-140-00	FLOCK		DRUAR	1 2015.6	ΓJ	Т	ı		25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-110	22.5 to 25.0		17	63	21	42	СН		59	2.25	PP
	25.0 to 27.5									2.25	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	60.0 to 62.5									2.25	PP
	62.5 to 65.0		14			NP	SM		48	2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.0									2.25	PP
	97.0 to 98.0									2.25	PP
	98.0 to 100.5									2.25	PP
	100.5 to 103.0		15	60	26	34	CH		100	2.25	PP
	103.0 to 105.5									2.25	PP
	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
	112.5 to 115.0									2.25	PP
	115.0 to 117.5									2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASE	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-110	117.5 to 120.0									2.25	PP
B-111	0.0 to 2.5									0.50	PP
	2.5 to 5.0									0.75	PP
	5.0 to 7.5									0.75	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									2.00	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
	22.5 to 25.0									2.25	PP
	25.0 to 26.5								100	2.25	PP
	26.5 to 28.5		14	50	23	27				2.25	PP
	28.5 to 30.0									2.25	PP
	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	58.5			59	23	36					
	60.0 to 62.5									2.25	PP
	62.5 to 65.0		18	62	26	36	CH		99	2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
DD = Dock	cet Penetromete	TV = Tc	orvana III	C = Unconfin	ed Compres	sion EV =	: Field Van	<u> </u>	I = Unconsol	idated Lindra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO, FEBRUARY 2015 GP.I.

2/25/2015

FILE N	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-111	90.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.0									2.25	PP
	97.0 to 98.5									2.25	PP
	98.5 to 101.0									2.25	PP
	101.0 to 104.0		9	40	17	23	CL		84	2.25	PP
	104.0 to 105.5									2.25	PP
	105.5 to 108.0									2.25	PP
	108.0 to 110.0									2.25	PP
	110.0 to 111.5									2.25	PP
	111.5 to 114.0									2.25	PP
	114.0 to 116.5									2.25	PP
	116.5 to 118.5									2.25	PP
	118.5 to 120.0									2.25	PP
B-112	0.0 to 1.0										
	1.0 to 2.0									1.25	PP
	2.0 to 6.0										
	6.0 to 8.5									2.25	PP
	8.5 to 11.0									2.25	PP
	11.0 to 13.5									2.25	PP
	13.5 to 16.0									2.25	PP
	16.0 to 18.5									2.25	PP
	18.5 to 21.0									2.25	PP
	21.0 to 23.5									2.25	PP
	23.5 to 26.0									2.25	PP
	26.0 to 27.5									2.25	PP
	27.5 to 29.0									2.25	PP
	29.0 to 30.5									2.25	PP
	30.5 to 32.0									2.25	PP
	31.5 to 34.0									2.25	PP
	34.0 to 35.0									2.25	PP
	35.0 to 36.0									2.25	PP
	36.0 to 38.2									2.25	PP
	38.2 to 39.0									2.25	PP
	39.0 to 41.0									2.25	PP
	41.0 to 42.0									2.25	PP
	42.0 to 44.5									2.25	PP
	44.5 to 47.0									2.25	PP
	47.0 to 47.5										
P = Pock	cet Penetrometer	r TV = To	orvane U	C = Unconfin	ed Compres	sion FV =	Field Vane	الا د	J = Unconsol	idated Undra	ined Triaxia

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILE NA	AME: ASF	13-140-00	PESCA	חווס_FF	RKUAK	Y 2015.G	۲J			2/	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-112	47.5 to 48.5									2.25	PP
	48.5 to 51.0									2.25	PP
	51.0 to 53.5									2.25	PP
	53.5 to 56.0									2.25	PP
	56.0 to 58.5									2.25	PP
	58.5 to 61.0		13						100	2.25	PP
	61.0 to 63.5									2.25	PP
	63.5 to 66.0									2.25	PP
	66.0 to 68.5									2.25	PP
	68.5 to 71.0									2.25	PP
	71.0 to 73.5									2.25	PP
	73.5 to 76.0									2.25	PP
	76.0 to 78.5									2.25	PP
	78.5 to 81.0									2.25	PP
	81.0 to 83.5									2.25	PP
	83.5 to 86.0									2.25	PP
	86.0 to 88.5									2.25	PP
	88.5 to 91.0									2.25	PP
	91.0 to 93.5									2.25	PP
	93.5 to 96.0									2.25	PP
	96.0 to 98.5		19	90	25	65	СН		99	2.25	PP
	98.5 to 101.0									2.25	PP
	101.0 to 103.5									2.25	PP
	103.5 to 106.0									2.25	PP
	106.0 to 108.5									2.25	PP
	108.5 to 109.5									2.25	PP
	109.5 to 110.5									2.25	PP
	110.5 to 113.0									2.25	PP
	113.0 to 115.5									2.25	PP
	115.5 to 118.0									2.25	PP
	118.0 to 119.0									2.25	PP
	119.0 to 121.0									2.25	PP
	121.0 to 123.0									2.25	PP
	123.0 to 124.0									2.25	PP
	124.0 to 126.5									2.25	PP
	126.5 to 129.0									2.25	PP
	129.0 to 131.5		11	55	22	33	СН		92	2.25	PP
										0.05	
	131.5 to 134.0									2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE IN	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ				/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-112	136.5 to 139.0									2.25	PP
	139.0 to 141.5									2.25	PP
	141.5 to 142.0										
	142.0 to 143.0									2.25	PP
	143.0 to 145.5									2.25	PP
	145.5 to 148.0									2.25	PP
	148.0 to 149.5									2.25	PP
	149.5 to 151.0									2.25	PP
	151.0 to 153.5									2.25	PP
	153.5 to 156.0									2.25	PP
	156.0 to 158.5									2.25	PP
	158.0 to 160.0									2.25	PP
B-113	0.0 to 2.5									0.50	PP
	2.5 to 5.0									0.50	PP
	5.0 to 7.5									1.75	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									0.50	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
	22.5 to 25.0									2.25	PP
	25.0 to 27.5									2.25	PP
	27.5 to 30.0									2.25	PP
	30.0 to 32.5		8	40	17	23	CL		95	2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 51.5									2.25	PP
	51.5 to 54.0									2.25	PP
	54.0 to 56.5									2.25	PP
	56.5 to 59.0									2.25	PP
	59.0 to 61.5									2.25	PP
	61.5 to 63.0									2.25	PP
	63.0 to 65.0									2.25	PP
DD = Dock	cet Penetromete	r T\/ = To	orvono III	C = Unconfin	od Compres	sion E\/-	Field Van		I = I Inconsol	idated Undra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

	MIE: ASF1	0 1 10 00	71 200/1	<u> </u>	.D. (O) (()						25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-113	65.0 to 67.5									2.25	PP
	67.5 to 70.0		8	44	17	27	CL		90	2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.0									2.25	PP
	82.0 to 83.5									2.25	PP
	83.5 to 86.0									2.25	PP
	86.0 to 88.5									2.25	PP
	88.5 to 91.0									2.25	PP
	91.0 to 93.5									2.25	PP
	93.5 to 96.0									2.25	PP
	96.0 to 98.5									2.25	PP
(98.5 to 101.0									2.25	PP
1	101.0 to 104.0									2.25	PP
1	104.0 to 105.5									2.25	PP
1	105.5 to 107.5		17	57	24	33	CH		69	2.25	PP
1	107.5 to 108.5									2.25	PP
1	108.5 to 110.0									2.25	PP
1	110.0 to 111.0									1.75	PP
1	111.0 to 113.5									1.63	PP
1	113.5 to 116.0									1.75	PP
1	116.0 to 119.0									2.25	PP
1	119.0 to 120.0									2.25	PP
1	120.0 to 122.5									2.25	PP
1	122.5 to 125.0									2.25	PP
1	125.0 to 127.5									2.25	PP
1	127.5 to 130.0									2.25	PP
1	130.0 to 132.5									2.25	PP
1	132.5 to 135.0									2.25	PP
1	135.0 to 137.5									2.25	PP
1	137.5 to 139.0									2.25	PP
1	139.0 to 140.0									2.25	PP
1	140.0 to 142.5									2.25	PP
1	142.5 to 145.0									2.25	PP
1	145.0 to 147.5									2.25	PP
1	147.5 to 150.0									2.25	PP
1	1										

PP = Pocket Penetrometer

CU = Consolidated Undrained Triaxial

TV = Torvane UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASE	13-140-00	JPESCA	DITO_FE	BRUAR	Y 2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-113	152.5 to 155.0									2.25	PP
	155.0 to 157.5									2.25	PP
	157.5 to 158.3									2.25	PP
	158.3 to 160.0									2.25	PP
B-114	0.0 to 1.0									0.88	PP
	1.0 to 3.5									0.38	PP
	3.5 to 6.0									0.50	PP
	6.0 to 7.0									0.88	PP
	7.0 to 9.5									1.00	PP
	9.5 to 12.0										
	12.0 to 14.5										
	14.5 to 17.0									2.25	PP
	17.0 to 19.5									2.25	PP
	19.5 to 22.0									2.25	PP
	22.0 to 24.5									2.25	PP
	24.5 to 27.0									2.25	PP
	27.0 to 29.5									2.25	PP
	29.5 to 32.0		11	40	19	21	CL		89	2.25	PP
	32.0 to 34.5									2.25	PP
	34.5 to 35.5									2.25	PP
	35.5 to 38.0									2.25	PP
	37.0 to 37.8									2.25	PP
	38.0 to 40.5									2.25	PP
	40.5 to 42.0									2.25	PP
	42.0 to 43.0									2.25	PP
	43.0 to 45.5									2.25	PP
	45.5 to 46.0										
	46.0 to 46.8									2.25	PP
	46.8 to 47.0										
	47.0 to 49.0									2.25	PP
	49.0 to 50.5									2.25	PP
	50.5 to 53.0									2.25	PP
	53.0 to 54.0									2.25	PP
	54.0 to 56.0									2.25	PP
	56.0 to 57.0									2.25	PP
	57.0 to 59.5		13	48	21	27	CL		100	2.25	PP
	59.5 to 62.0									2.25	PP
	62.0 to 64.5									2.25	PP
	64.5 to 65.5									2.25	PP
PP = Pock	cet Penetromete	er TV = To	orvane III	C = Unconfin	ed Compres	sion EV =	Field Van	<u> </u>	I = Unconsol	lidated I Indra	ined Triavial

PP = Pocket Penetrometer

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UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

LIFE IA	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-114	65.5 to 68.0									2.25	PP
	68.0 to 70.5									2.25	PP
	70.5 to 73.0									2.25	PP
	73.0 to 75.5									2.25	PP
	75.5 to 78.0									2.25	PP
	78.0 to 79.0										
	79.0 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 86.0									2.25	PP
	86.0 to 88.5									2.25	PP
	88.5 to 91.0									2.25	PP
	91.0 to 93.5									2.25	PP
	93.5 to 96.0		10	45	17	28	CL		88	2.25	PP
	96.0 to 98.5									2.25	PP
	98.5 to 101.0									2.25	PP
	101.0 to 103.5									2.25	PP
	103.5 to 106.0									2.25	PP
	106.0 to 108.5									2.25	PP
	108.5 to 111.0									2.25	PP
	111.0 to 113.5									2.25	PP
	113.5 to 116.0									2.25	PP
	116.0 to 118.0									2.25	PP
	118.0 to 120.0									2.25	PP
B-114A	0.0 to 6.0									0.75	PP
	6.0 to 15.0									2.25	PP
	15.0 to 20.0									2.25	PP
B-115	0.0 to 2.5									1.00	PP
	2.5 to 5.0									1.25	PP
	5.0 to 7.5									1.25	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
	22.5 to 25.0									2.25	PP
	25.0 to 27.5									2.25	PP
	27.5 to 30.0									2.25	PP
DD - Deel	ot Donotromoto	or T\/ = T	on con I le	C = 1 le a a sefie	ad Camproo	oion FV-	Field Van		I = I Inconcol	مسلم ما المسلمات	in a d Tainvial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

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CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO FEBRUARY 2015 GP.I.

2/25/2015

ILE N	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR	7 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-115	30.0 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5		15	54	24	30	СН		99	2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.0									2.25	PP
	57.0 to 60.0									2.25	PP
	60.0 to 62.5									2.25	PP
	62.5 to 65.0									2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5		18	90	29	61	СН		100	2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5									2.25	PP
	92.5 to 94.0									2.25	PP
	94.0 to 102.0									2.25	PP
	102.0 to 105.0									2.25	PP
	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
	112.5 to 115.0									2.25	PP
	115.0 to 117.5									2.25	PP
	117.5 to 120.0										PP
D 116										2.25	
B-116	0.0 to 2.5									1.38	PP DD
	2.5 to 5.0									1.13	PP
	5.0 to 7.5									1.50	PP
	7.5 to 8.5									2.25	PP
D D- '	8.5 to 11.0 ket Penetrometer	r TV = To			ed Compres	-i F)/	Field Van		J = Unconsol	2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE IN	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-116	11.0 to 12.2									2.25	PP
	12.2 to 13.5									2.25	PP
	13.5 to 16.0									2.25	PP
	16.0 to 18.5									2.25	PP
	18.5 to 21.0									2.25	PP
	21.0 to 23.5									2.25	PP
	23.5 to 26.3									2.25	PP
	26.3 to 28.8									2.25	PP
	28.8 to 31.0									2.25	PP
	31.0 to 33.5									2.25	PP
	33.5 to 36.0			47	19	28	CL		93	2.25	PP
	36.0 to 38.5									2.25	PP
	38.5 to 41.0									2.25	PP
	41.0 to 42.0									2.25	PP
	42.0 to 43.0									2.25	PP
	43.0 to 45.5									2.25	PP
	45.5 to 48.0									2.25	PP
	48.0 to 50.5									2.25	PP
	50.5 to 53.0									2.25	PP
	53.0 to 54.0									2.25	PP
	54.0 to 56.5									2.25	PP
	56.5 to 59.0									2.25	PP
	59.0 to 61.5									2.25	PP
	61.5 to 64.0									2.25	PP
	64.0 to 66.5									2.25	PP
	66.5 to 69.0									2.25	PP
	69.0 to 71.5			44	20	24	CL		99	2.25	PP
	71.5 to 74.0									2.25	PP
	74.0 to 76.5									2.25	PP
	76.5 to 78.0									2.25	PP
	78.0 to 79.0									2.25	PP
	79.0 to 81.5									2.25	PP
	81.5 to 84.0									2.25	PP
	84.0 to 86.5									2.25	PP
	86.5 to 89.0									2.25	PP
	89.0 to 91.5									2.25	PP
	91.5 to 94.0									2.25	PP
	94.0 to 96.5									2.25	PP
	96.5 to 99.0									2.25	PP
DD = Dock	et Penetromete	r TV = To	orvano III	C = Unconfin	od Compres	sion EV =	: Field Van	<u> </u>	I = Unconsol	idated I Indra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

Boring No. Sample Depth (ft) Blows per ft Content (%) Liquid Limit Plastic Limit Plasticity Index USCS Dry Unit Weight (pcf) % -200 Sieve	Shear Strength (tsf)	Strength Test
101.5 to 104.0	2.25	
	1	PP
	2.25	PP
104.0 to 106.5	2.25	PP
106.5 to 111.0 48 18 30 CL 98	2.25	PP
111.0 to 112.0	2.25	PP
112.0 to 114.5	2.25	PP
114.5 to 115.5	2.25	PP
115.5 to 118.0	2.25	PP
118.0 to 120.5	2.25	PP
120.5 to 123.0	2.25	PP
123.0 to 125.5	2.25	PP
125.5 to 128.0	2.25	PP
128.0 to 130.5	2.25	PP
130.5 to 133.0	2.25	PP
133.0 to 135.5	2.25	PP
135.5 to 138.0	2.25	PP
138.0 to 140.5	2.25	PP
140.5 to 143.0	2.25	PP
143.0 to 145.5	2.25	PP
145.5 to 148.0 54 23 31 CH 100	2.25	PP
148.0 to 150.5	2.25	PP
150.5 to 160.0	2.25	PP
B-117 0.0 to 2.5 5 NP SM 33		
2.5 to 5.0	1.50	PP
5.0 to 7.5	1.25	PP
7.5 to 10.0	1.13	PP
10.0 to 12.5	0.63	PP
12.5 to 15.0	2.25	PP
15.0 to 17.5	2.25	PP
17.5 to 20.0	2.25	PP
20.0 to 22.5	2.25	PP
22.5 to 25.0	2.25	PP
25.0 to 27.5	2.25	PP
27.5 to 30.0	2.25	PP
30.0 to 32.5	2.25	PP
32.5 to 35.0	2.25	PP
35.0 to 37.5	2.25	PP
37.5 to 40.0	2.25	PP
40.0 to 42.5 15 55 25 30 CH 99	2.25	PP

PP = Pocket Penetrometer

TV = Torvane

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FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			21	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-117	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	60.0 to 62.5									2.25	PP
	62.5 to 65.0									2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5		11	99	23	76	СН		97	2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5									2.25	PP
	97.5 to 100.0									2.25	PP
	100.0 to 102.5									2.25	PP
	102.5 to 105.0									2.25	PP
	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
	112.5 to 115.0									2.25	PP
	115.0 to 117.5									2.25	PP
	117.5 to 120.0									2.25	PP
B-118	0.0 to 2.5									0.88	PP
	2.5 to 5.0		11	49	18	31	CL		63	0.38	PP
	5.0 to 7.5									1.00	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 15.2										
	15.2 to 16.0									2.25	PP
DD = Dock	cet Penetromete	r T\/ = To	orvane III	C = Linconfin	ed Compres	sion EV =	: Field Van		I = I Inconsol	lidated I Indra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

Boring Sample No. Sample (ft)	Diama									
1 1 1 1	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-118 16.0 to 18	.5								2.25	PP
18.5 to 21	.0								2.25	PP
21.0 to 23	.5								2.25	PP
23.5 to 26	.0								2.25	PP
26.0 to 28	.5								2.25	PP
28.5 to 31	.0								2.25	PP
31.0 to 33	.5								2.25	PP
33.5 to 36	.0								2.25	PP
36.0 to 38	.5								2.25	PP
38.5 to 41	.0								2.25	PP
41.0 to 43	.5	12	54	24	30	CH		98	2.25	PP
43.5 to 46	.0								2.25	PP
46.0 to 48	.5								2.25	PP
48.5 to 51	.0								2.25	PP
51.0 to 53	.5								2.25	PP
53.5 to 56	.0								2.25	PP
56.0 to 58	.5								2.25	PP
58.5 to 61	.0								2.25	PP
61.0 to 63	.5								2.25	PP
63.5 to 66	.0								2.25	PP
66.0 to 68	.5								2.25	PP
68.5 to 71	.0								2.25	PP
71.0 to 73	.5								2.25	PP
73.5 to 76	.0								2.25	PP
76.0 to 78	.5								2.25	PP
78.5 to 81	.0								2.25	PP
81.0 to 83	.5	10	52	22	30	CH		90	2.25	PP
83.5 to 86	.0								2.25	PP
86.0 to 88	.5								2.25	PP
88.5 to 91	.0								2.25	PP
91.0 to 93	.5								2.25	PP
93.5 to 96	.0								2.25	PP
96.0 to 98	.5								2.25	PP
98.5 to 10	1.0								2.25	PP
101.0 to 10	3.5								2.25	PP
103.5 to 10	6.0								2.25	PP
106.0 to 10	8.5								2.25	PP
108.5 to 11	1.0								2.25	PP
111.0 to 11	3.5								2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

Borning No. Sample Blow per ft Content	FILE N	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUARY	<u>/ 2015.G</u>	PJ			2/	25/2015
116.0 to 118.5 118.5 to 121.0 120.0 to 122.5 6 81 20 61 CH 83 2.25 PP 122.5 to 125.0 125.0 to 127.5 127.5 to 130.1 130.0 to 132.5 137.5 to 130.0 130.0 to 132.5 137.5 to 140.0 140.0 to 142.5 146.5 to 149.0 144.0 to 146.5 146.5 to 149.0 144.0 to 146.5 155.5 to 159.0 159.0 to 160.0 159.0 to 160.5 150.5 to 150.0 150.0 to 10.5 150.5 to 130.0 150.0 to 10.5 150.5 to 130.0 150.0 to 16.0 t		Depth		Content	Liquid Limit		Plasticity Index	USCS	Weight		Strength	Strength Test
118.5 to 121.0 120.0 to 122.5 125.0 to 125.0 125.0 to 127.5 127.6 to 130.1 130.0 to 132.5 132.5 to 135.0 135.0 to 137.5 137.5 to 140.0 144.0 to 142.5 144.5 to 144.0 144.5 to 146.5 151.5 to 156.0 155.0 to 156.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 225 PP 122.5 to 50 5.0 to 72 13.0 to 10.5 10.5 to 13.0 13.0 to 13.5 10.5 to 13.0 13.0 to 13.5 10.5 to 150.0 150.0 to 160.0 12 65 24 41 CH 97 225 PP 125 to 50 5.0 to 72 10.5 to 15.0 10.5 to	B-118	113.5 to 116.0									2.25	PP
120.0 to 122.5		116.0 to 118.5									2.25	PP
122.5 to 125.0 125.0 to 127.5 126.0 to 127.5 127.6 to 130.1 130.0 to 132.5 132.5 to 135.0 135.0 to 137.5 135.0 to 137.5 137.5 to 140.0 140.0 to 142.5 144.0 to 146.5 146.5 to 149.0 149.0 to 161.5 161.5 to 154.0 154.0 to 156.5 165.5 to 159.0 159.0 to 180.0 12 65 24 41 CH 97 2.25 PP 1.25 to 5.0 8.0 to 7.2 7.2 to 8.0 8.0 to 10.5 10.5 to 13.0 13.0 to 15.5 10.5 to 13.0 15.0 to 15.0 2.25 PP		118.5 to 121.0									2.25	PP
125.0 to 127.5 127.6 to 130.1 127.6 to 130.1 130.0 to 132.5 132.5 to 135.0 132.5 to 135.0 132.5 to 137.6 137.5 to 140.0 140.0 to 142.5 144.5 to 144.0 144.4 to 146.5 146.5 to 149.0 149.0 to 151.5 151.5 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 1.26 PP 1.27 to 8.0 8.0 to 10.5 1.50 to 13.0 1.50 to 15.0 1.50 to 16.0 1.50 to 15.0 1.50 to 16.0 1.50 to 15.0 1.50 to 16.0 1.50 to 15.0 1.50		120.0 to 122.5		6	81	20	61	СН		83	2.25	PP
127.6 to 130.1 130.0 to 132.5 132.5 to 135.0 132.5 to 135.0 135.0 to 137.5 137.5 to 140.0 140.0 to 142.5 146.5 to 149.0 149.0 to 151.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 150.0 to 7.2 2.5 to 5.0 2.25 PP 1.25 to 9.0 8.0 to 10.5 10.5 to 13.0 13.0 to 15.0 15.0 to 16.0 15.0		122.5 to 125.0									2.25	PP
130.0 to 132.5 132.5 to 135.0 135.0 to 137.5 137.5 to 140.0 140.0 to 142.5 142.5 to 144.0 144.0 to 148.5 146.5 to 149.0 151.5 to 151.5 151.5 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 18.10 to 10.5 10.5 to 15.0 2.25 PP 3.0 to 10.5 10.5 to 13.0 2.25 PP		125.0 to 127.5									2.25	PP
132.5 to 135.0 135.0 to 137.5 135.0 to 137.5 137.5 to 140.0 140.0 to 142.5 142.5 to 144.0 144.0 to 146.5 146.5 to 149.0 149.0 to 151.5 151.5 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 18-119 0.0 to 2.5 2.5 to 5.0 8.0 to 7.2 46 16 30 CL 62 1.38 PP 13.0 to 150.5 150.0 to 150.5 150.0 to 150.5 150.0 to 150.0 150.0 to 150.5 150.0 to 150.0 150.0 to		127.6 to 130.1									2.25	PP
135.0 to 137.5 137.5 to 140.0 140.0 to 142.5 140.0 to 142.5 144.0 to 146.5 146.5 to 149.0 149.0 to 151.5 151.5 to 154.0 159.0 to 160.0 159.0 to 160.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 1.25 PP 1.26 PP 1.27 to 8.0 8.0 to 10.5 1.50 to 16.0		130.0 to 132.5									2.25	PP
137.5 to 140.0 140.0 to 142.5 140.0 to 142.5 142.5 to 144.0 144.5 to 144.0 146.5 to 149.0 149.0 to 151.5 151.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 1.25 PP 1.25 PP 1.26 PP 1.27 to 8.0 8.0 to 10.5 1.50 to 15.0 1.50 to 16.0 1.50 PP 1.50 t		132.5 to 135.0									2.25	PP
140.0 to 142.5 142.5 to 144.0 144.0 to 146.5 144.0 to 146.5 148.5 to 149.0 149.0 to 151.5 151.5 to 154.0 159.0 to 160.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 1.25		135.0 to 137.5									2.25	PP
142.5 to 144.0 144.0 to 146.5 146.5 to 149.0 149.0 to 151.5 151.5 to 154.0 151.5 to 155.0 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 150.0 to 2.5 2.5 to 5.0 2.5 to 7.2 2.5 to 1.5 to 13.0 2.5 to 13.0 2.5 to 15.0 2.5 to 25.0 2.5 to 26.0 2.5 to 26.0 2.5 to 27.0 2.5 to 28.5 to 31.0 3.5 to 36.0 3.5 to 36.0 3.5 to 36.0 to 38.5 3.5 to 36.0 to 38.5 3.5 to 41.0		137.5 to 140.0									2.25	PP
144.0 to 146.5 146.5 to 149.0 149.0 to 151.5 145.15 to 154.0 151.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 150.0 to 7.2 150.0 to 7.2 150.0 to 7.2 150.0 to 150.0 150.		140.0 to 142.5									2.25	PP
146.5 to 149.0 149.0 to 151.5 151.5 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 1.25 PP 1.25 PP 2.5 to 5.0 2.25 PP 1.25 PP 1.25 PP 2.5 to 5.0 2.25 PP 1.25 PP 1.25 PP 2.25 PP 1.25 PP 1.50 to 17.2 1.50 to 13.0 1.50 to 15.0 1.50 to 16.0 1.50 to		142.5 to 144.0									2.25	PP
149.0 to 151.5 151.5 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 1.25 PP 2.5 to 5.0 2.25 PP 5.0 to 7.2 46 16 30 CL 62 1.38 PP 1.50 to 10.5 10.5 to 13.0 13.0 to 15.0 15.0 to 16.0 15.0 to 16.0 15.0 to 16.0 16.0 to 18.5 18.5 to 21.0 2.25 PP		144.0 to 146.5									2.25	PP
151.5 to 154.0 154.0 to 156.5 156.5 to 159.0 159.0 to 160.0 12 65 24 41 CH 97 2.25 PP 1.25 PP 2.5 to 5.0 2.5 to 5.0 3.0 to 7.2 46 16 30 CL 62 1.38 PP 7.2 to 8.0 8.0 to 10.5 10.5 to 13.0 13.0 to 15.0 15.0 to 16.0 16.0 to 18.5 18.5 to 21.0 2.10 to 23.5 2.25 PP		146.5 to 149.0									2.25	PP
154.0 to 156.5 to 159.0 159.0 to 160.0 12		149.0 to 151.5									2.25	PP
156.5 to 159.0 159.0 to 160.0 159.0 to 16.0 150.0 to 16.0 150.0 to 16.0 150.0 to 18.5 18.5 to 21.0 21.0 to 23.5 22.5 to 26.0 26.0 to 28.5 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		151.5 to 154.0									2.25	PP
159.0 to 160.0 B-119		154.0 to 156.5									2.25	PP
B-119		156.5 to 159.0									2.25	PP
2.5 to 5.0 5.0 to 7.2 7.2 to 8.0 8.0 to 10.5 10.5 to 13.0 15.0 to 16.0 16.0 to 18.5 12.25 PP 13.1 to 21.0 2.25 PP 23.5 to 26.0 26.0 to 28.5 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		159.0 to 160.0		12	65	24	41	СН		97	2.25	PP
5.0 to 7.2 7.2 to 8.0 7.2 to 8.0 8.0 to 10.5 8.0 to 13.0 10.5 to 13.0 11.50 12.25 15.0 to 16.0 15.0 to 18.5 16.0 to 18.5 18.5 to 21.0 21.0 to 23.5 22.5 PP 23.5 to 26.0 22.5 PP 24.0 to 33.5 22.5 PP 31.0 to 33.5 3.5 to 36.0 3.5 to 36.0 3.5 to 41.0	B-119	0.0 to 2.5									1.25	PP
7.2 to 8.0 8.0 to 10.5 1.50 PP 10.5 to 13.0 2.25 PP 13.0 to 15.0 2.25 PP 15.0 to 16.0 2.25 PP 16.0 to 18.5 2.25 PP 21.0 to 23.5 2.25 PP 23.5 to 26.0 2.25 PP 24.0 to 33.5 2.25 PP 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		2.5 to 5.0									0.88	PP
8.0 to 10.5 10.5 to 13.0 10.5 to 13.0 13.0 to 15.0 13.0 to 16.0 15.0 to 16.0 16.0 to 18.5 18.5 to 21.0 2.25 PP 21.0 to 23.5 2.25 PP 23.5 to 26.0 2.25 PP 26.0 to 28.5 2.25 PP 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 33.5 to 36.0 38.5 to 41.0		5.0 to 7.2			46	16	30	CL		62	1.38	PP
10.5 to 13.0 13.0 to 15.0 13.0 to 15.0 15.0 to 16.0 16.0 to 18.5 18.5 to 21.0 2.25 PP 21.0 to 23.5 2.25 PP 23.5 to 26.0 2.25 PP 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 33.5 to 36.0 38.5 to 41.0		7.2 to 8.0									1.50	PP
13.0 to 15.0 15.0 to 16.0 15.0 to 16.0 16.0 to 18.5 18.5 to 21.0 2.25 PP 21.0 to 23.5 2.25 PP 23.5 to 26.0 2.25 PP 26.0 to 28.5 2.25 PP 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		8.0 to 10.5									2.25	PP
15.0 to 16.0 16.0 to 18.5 16.0 to 18.5 18.5 to 21.0 2.25 PP 21.0 to 23.5 2.25 PP 23.5 to 26.0 2.25 PP 26.0 to 28.5 2.25 PP 28.5 to 31.0 2.25 PP 31.0 to 33.5 2.25 PP 33.5 to 36.0 2.25 PP 36.0 to 38.5 2.25 PP 26.25 PP 27.25 PP 28.5 to 31.0 29.25 PP		10.5 to 13.0									2.25	PP
16.0 to 18.5 18.5 to 21.0 2.25 PP 21.0 to 23.5 2.25 PP 23.5 to 26.0 2.25 PP 26.0 to 28.5 2.25 PP 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		13.0 to 15.0									2.25	PP
18.5 to 21.0 21.0 to 23.5 22.5 PP 23.5 to 26.0 23.5 to 26.0 2.25 PP 26.0 to 28.5 2.25 PP 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		15.0 to 16.0									2.25	PP
21.0 to 23.5 23.5 to 26.0 23.5 to 28.5 26.0 to 28.5 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		16.0 to 18.5									2.25	PP
23.5 to 26.0 26.0 to 28.5 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		18.5 to 21.0									2.25	PP
26.0 to 28.5 28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		21.0 to 23.5									2.25	PP
28.5 to 31.0 31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		23.5 to 26.0									2.25	PP
31.0 to 33.5 33.5 to 36.0 36.0 to 38.5 38.5 to 41.0		26.0 to 28.5									2.25	PP
33.5 to 36.0 36.0 to 38.5 38.5 to 41.0 2.25 PP 2.25 PP		28.5 to 31.0									2.25	PP
36.0 to 38.5 38.5 to 41.0 2.25 PP 2.25 PP		31.0 to 33.5									2.25	PP
38.5 to 41.0 2.25 PP		33.5 to 36.0									2.25	PP
		36.0 to 38.5									2.25	PP
41.0 to 42.5 57 20 37 CH 62 2.25 PP		38.5 to 41.0									2.25	PP
		41.0 to 42.5			57	20	37	СН		62	2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression FV = Field Vane

UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ				/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-119	42.5 to 43.5									2.25	PP
	43.5 to 46.0									2.25	PP
	46.0 to 48.5									2.25	PP
	48.5 to 51.0									2.25	PP
	51.0 to 53.5									2.25	PP
	53.5 to 56.0									2.25	PP
	56.0 to 58.5									2.25	PP
	58.5 to 61.0									2.25	PP
	61.0 to 63.5									2.25	PP
	63.5 to 66.0									2.25	PP
	66.0 to 68.5									2.25	PP
	68.5 to 71.0									2.25	PP
	71.0 to 73.5									2.25	PP
	73.5 to 76.0									2.25	PP
	76.0 to 78.5									2.25	PP
	78.5 to 81.0			48	20	28	CL		86	2.25	PP
	81.0 to 83.5									2.25	PP
	83.5 to 86.0									2.25	PP
	86.0 to 88.5									2.25	PP
	88.5 to 91.0									2.25	PP
	91.0 to 93.5									2.25	PP
	93.5 to 96.0									2.25	PP
	96.0 to 98.5									2.25	PP
	98.5 to 101.0									2.25	PP
	101.0 to 103.5									2.25	PP
	103.5 to 106.0									2.25	PP
	106.0 to 107.0									2.25	PP
	107.0 to 109.5									2.25	PP
	109.5 to 112.0									2.25	PP
	112.0 to 114.5									2.25	PP
	114.5 to 117.0									2.25	PP
	117.0 to 119.5			60	20	40	СН		100	2.25	PP
	119.5 to 122.0									2.25	PP
	122.0 to 124.5									2.25	PP
	124.5 to 127.0									2.25	PP
	127.0 to 129.5									2.25	PP
	129.5 to 132.0									2.25	PP
	132.0 to 134.5									2.25	PP
	134.5 to 137.0									2.25	PP
DD = Dock	et Penetromete	er T\/ = To	on/ane III	C = Unconfin	ed Compres	sion E\/ =	: Field Van	a III	I = Unconsol	idated Lindra	ined Triavial

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE IN	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-119	137.0 to 139.5									2.25	PP
	139.5 to 142.0									2.25	PP
	142.0 to 144.5									2.25	PP
	144.5 to 148.0									2.25	PP
	148.0 to 149.5									2.25	PP
	149.5 to 152.0									2.25	PP
	152.0 to 154.5									2.25	PP
	154.5 to 156.0									2.25	PP
	156.0 to 159.0										
	159.0 to 160.0									2.25	PP
B-120	0.0 to 2.5									1.63	PP
	2.5 to 5.5									1.25	PP
	5.5 to 7.5									1.75	PP
	7.5 to 11.0										
	11.0 to 12.0								87		
	12.0 to 13.5									2.00	PP
	13.5 to 14.5									2.25	PP
	14.5 to 17.0			51	19	32				2.25	PP
	17.0 to 19.5									2.25	PP
	19.5 to 22.0									2.25	PP
	22.0 to 24.5									2.25	PP
	24.5 to 27.0									2.25	PP
	27.0 to 29.5									2.25	PP
	29.5 to 32.0									2.25	PP
	32.0 to 34.5									2.25	PP
	34.5 to 37.0									2.25	PP
	37.0 to 39.5									2.25	PP
	39.5 to 42.0									2.25	PP
	42.0 to 44.5									2.25	PP
	44.5 to 47.0									2.25	PP
	47.0 to 49.5			40	15	25	CL		73	2.25	PP
	49.5 to 52.0									2.25	PP
	52.0 to 54.5									2.25	PP
	54.5 to 57.0									2.25	PP
	57.0 to 59.5									2.25	PP
	59.5 to 62.0									2.25	PP
	62.0 to 64.5									2.25	PP
	64.5 to 67.0									2.25	PP
	67.0 to 69.5									2.25	PP
DD = Dock	cet Penetromete	TV = Tc	orvono II	C = Unconfin	od Compres	cion E\/ -	: Field Van	اا ا	I = Unconsol	idated I Indra	inad Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE IN	AME: ASF1	3-140-00	PESCA	DITO_FE	BRUAR	r 2015.G	PJ				/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-120	69.5 to 72.0									2.25	PP
	72.0 to 74.5									2.25	PP
	74.5 to 77.0									2.25	PP
	77.0 to 79.5									2.25	PP
	79.5 to 82.0									2.25	PP
	82.0 to 84.5									2.25	PP
	84.5 to 87.0									2.25	PP
	87.0 to 89.5			57	23	34	CH		99	2.25	PP
	89.5 to 92.0									2.25	PP
	92.0 to 94.5									2.25	PP
	94.5 to 97.0									2.25	PP
	97.0 to 99.5									2.25	PP
	99.5 to 102.0									2.25	PP
	102.0 to 104.5									2.25	PP
	104.5 to 107.0									2.25	PP
	107.0 to 109.5									2.25	PP
	109.5 to 112.0									2.25	PP
	112.0 to 114.5									2.25	PP
	114.5 to 117.0									2.25	PP
	117.0 to 120.0									2.25	PP
B-121	0.0 to 2.5									1.50	PP
	2.5 to 5.0									1.25	PP
	5.0 to 7.5									1.25	PP
	7.5 to 10.0									2.00	PP
	10.0 to 12.5			50	19	31	CH		96	2.25	PP
	12.5 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5									2.25	PP
	22.5 to 25.0									1.75	PP
	25.0 to 28.0									2.25	PP
	28.0 to 29.5									2.25	PP
	29.5 to 32.5									2.25	PP
	32.5 to 35.0									2.25	PP
	35.0 to 37.5									2.25	PP
	37.5 to 40.0									2.25	PP
	40.0 to 42.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
DD = Dock	cet Penetrometer	. TV = To	orvono III	C = Unconfin	ad Compres	sion EV =	Field Van	اا ا	I = Unconsol	idated I Indra	inad Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	PESCA	DITO_FE	RKOAK,	Y 2015.G	۲J			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-121	47.5 to 50.0									2.25	PP
	50.0 to 52.5			51	25	26	СН		88	2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	59.0 to 60.5									2.25	PP
	60.5 to 63.0									2.25	PP
	62.5 to 65.0									2.25	PP
	65.0 to 66.5									2.25	PP
	66.5 to 69.0									2.25	PP
	69.0 to 72.0									2.25	PP
	72.0 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0			70	20	50	СН		93	2.25	PP
	90.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5									2.25	PP
	97.5 to 100.0									2.25	PP
	100.0 to 102.5									2.25	PP
	102.5 to 105.0									2.25	PP
	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.5									2.25	PP
	112.5 to 115.0									2.25	PP
	115.0 to 117.5									2.25	PP
	117.5 to 120.0									2.25	PP
B-122	0.0 to 2.5									1.38	PP
	2.5 to 5.0									1.50	PP
	5.0 to 7.5									2.00	PP
	7.5 to 10.0									2.25	PP
	10.0 to 12.5									2.25	PP
	12.5 to 15.0			44	20	24	CL		95	2.25	PP
	15.0 to 16.0									2.25	PP
	16.0 to 18.5									2.25	PP
	18.5 to 21.0									2.25	PP
DD = Dock	et Penetromete	er T\/ = To	orvane II	C = Unconfin	ed Compres	sion EV =	Field Van		I = Unconsol	idated I Indra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	7 2015.G	PJ			. 21	/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-122	21.0 to 23.5									2.25	PP
	23.5 to 26.0									2.25	PP
	26.0 to 27.0									2.25	PP
	27.0 to 30.5									2.25	PP
	30.5 to 31.5									2.25	PP
	31.5 to 34.0									2.25	PP
	34.0 to 36.5									2.25	PP
	36.5 to 39.0									2.25	PP
	39.0 to 41.5									2.25	PP
	41.5 to 44.0									2.25	PP
	44.0 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0			45	19	26	CL		98	2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0									2.25	PP
	60.0 to 62.5									2.25	PP
	62.5 to 65.0									2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 70.0									2.25	PP
	70.0 to 72.5									2.25	PP
	72.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 88.5								66	2.25	PP
	88.5 to 91.0									2.25	PP
	91.0 to 93.5			54	23	31				2.25	PP
	93.5 to 96.0									2.25	PP
	96.0 to 98.5									2.25	PP
	98.5 to 101.0									2.25	PP
	101.0 to 103.5									2.25	PP
	103.5 to 106.0									2.25	PP
	106.0 to 109.0									2.25	PP
	109.0 to 111.0									2.25	PP
	111.0 to 113.5									2.25	PP
DD = Dock	et Penetromete	er T\/ = To	orvane III	C = Unconfin	ed Compres	sion F\/=	Field Van		I = Unconsol	idated I Indra	ined Triavia

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE IN	AME: ASE	13-140-00	PESCA	DITO_FE	BRUAR	r 2015.G	PJ				/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-122	113.5 to 116.0									2.25	PP
	116.0 to 118.5									2.25	PP
	118.5 to 121.0									2.25	PP
	121.0 to 123.0									2.25	PP
	123.0 to 126.0									2.25	PP
	126.0 to 128.5			49	21	28	CL		95	2.25	PP
	128.5 to 131.0									2.25	PP
	131.0 to 133.5									2.25	PP
	133.5 to 136.0									2.25	PP
	136.0 to 138.5									2.25	PP
	138.5 to 141.0									2.25	PP
	141.0 to 143.5									2.25	PP
	143.5 to 146.0									2.25	PP
	146.0 to 148.5									2.25	PP
	148.5 to 151.0									2.25	PP
	151.0 to 153.5									2.25	PP
	153.5 to 156.0									2.25	PP
	156.0 to 158.5									2.25	PP
	158.5 to 160.0									2.25	PP
B-123	0.0 to 2.5										
	2.5 to 5.0									1.25	PP
	5.0 to 7.5									1.38	PP
	7.5 to 9.5									1.63	PP
	9.5 to 10.5										
	10.5 to 13.0									2.25	PP
	13.0 to 15.0			47	24	23	CL		83	2.25	PP
	15.0 to 16.0									2.25	PP
	16.0 to 18.5									2.25	PP
	18.5 to 21.0									2.25	PP
	21.0 to 23.5									2.25	PP
	23.5 to 26.0									2.25	PP
	26.0 to 28.5									2.25	PP
	28.5 to 31.0									2.25	PP
	31.0 to 33.5									2.25	PP
	33.5 to 36.0									2.25	PP
	36.0 to 38.5									2.25	PP
	38.5 to 41.0									2.25	PP
	41.0 to 43.5									2.25	PP
	43.5 to 46.0									2.25	PP
DD = Dock	cet Penetromete	r TV = Tc	orvono III	C = Unconfinence	od Compros	eion EV =	: Field Van	ا ا	I = I Inconsol	idated Undra	ined Triavial

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-123	46.0 to 48.5									2.25	PP
	48.5 to 51.0									2.25	PP
	51.0 to 53.5			65	27	38	СН		94	2.25	PP
	53.5 to 56.0									2.25	PP
	56.0 to 58.5									2.25	PP
	58.5 to 61.0									2.25	PP
	61.0 to 63.5									2.25	PP
	63.5 to 66.0									2.25	PP
	66.0 to 68.5									2.25	PP
	68.5 to 71.0									2.25	PP
	71.0 to 73.2									2.25	PP
	72.2 to 73.0									2.25	PP
	73.0 to 75.5									2.25	PP
	75.5 to 78.0									2.25	PP
	78.0 to 80.5									2.25	PP
	80.5 to 83.0									2.25	PP
	83.0 to 85.5									2.25	PP
	85.5 to 88.0									2.25	PP
	88.0 to 90.5			27	13	14	CL		54	2.25	PP
	90.5 to 93.0									2.25	PP
	93.0 to 95.5									2.25	PP
	95.5 to 98.0									2.25	PP
	98.0 to 100.5									2.25	PP
	100.5 to 103.0									2.25	PP
	103.0 to 105.5									2.25	PP
	105.5 to 108.0									2.25	PP
	108.0 to 110.5									2.25	PP
	110.5 to 113.0									2.25	PP
	113.0 to 115.5									2.25	PP
	115.5 to 118.0									2.25	PP
	118.0 to 120.5									2.25	PP
	120.5 to 123.0									2.25	PP
	123.0 to 125.5									2.25	PP
	125.5 to 128.0									2.25	PP
	128.0 to 130.5			40	16	24	SC		49	2.25	PP
	130.5 to 133.0									2.25	PP
	133.0 to 135.5									2.25	PP
	135.5 to 138.0									2.25	PP
	138.0 to 140.5									2.25	PP
DD = Dock	et Penetromete	er T\/ = To	orvane III	C = Unconfin	ed Compres	sion FV =	: Field Van	<u> </u>	I = Unconsol	idated I Indra	ined Triavia

PP = Pocket Penetrometer

TV = Torvane

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

LIFE IN	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-123	140.5 to 143.0									2.25	PP
	143.0 to 145.5									2.25	PP
	145.5 to 148.0									2.25	PP
	148.0 to 150.5									2.25	PP
	150.5 to 153.0									2.25	PP
	153.0 to 155.5									2.25	PP
	155.5 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
B-124	0.0 to 5.0										
	5.0 to 7.5									2.25	PP
	7.5 to 8.5									0.75	PP
	8.5 to 11.0									0.63	PP
	11.0 to 13.5									2.25	PP
	13.5 to 16.0									2.25	PP
	16.0 to 18.5									2.25	PP
	18.5 to 21.0									2.25	PP
	21.0 to 23.5			33	15	18	CL		93	2.25	PP
	23.5 to 26.0									2.25	PP
	26.0 to 27.0									2.25	PP
	27.0 to 29.5									2.25	PP
	29.5 to 31.0									2.25	PP
	31.0 to 33.5									2.25	PP
	33.5 to 36.0									2.25	PP
	36.0 to 38.5									2.25	PP
	38.5 to 41.0									2.25	PP
	41.0 to 43.5									2.25	PP
	42.5 to 45.0									2.25	PP
	45.0 to 47.5									2.25	PP
	47.5 to 50.0									2.25	PP
	50.0 to 52.5									2.25	PP
	52.5 to 55.0									2.25	PP
	55.0 to 57.5									2.25	PP
	57.5 to 60.0			81	31	50	СН		99	2.25	PP
	60.0 to 62.5									2.25	PP
	62.5 to 65.0									2.25	PP
	65.0 to 67.5									2.25	PP
	67.5 to 68.5									2.25	PP
	68.5 to 71.0									2.25	PP
	71.0 to 73.5									2.25	PP
DD - DI	cot Donotromoto	r T/- T/		C = Unconfin		:	Field Van	_ !!!	I = I Inconcol	حداد ما الممامات	المشيمة المسمية

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

ILE INA	MME: ASF 1	3-140-00	PESCA	DITO_FE	DRUAR	2015.6	FJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-124	73.5 to 75.0									2.25	PP
	75.0 to 77.5									2.25	PP
	77.5 to 80.0									2.25	PP
	80.0 to 82.5									2.25	PP
	82.5 to 85.0									2.25	PP
	85.0 to 87.5									2.25	PP
	87.5 to 90.0									2.25	PP
	90.0 to 92.5									2.25	PP
	92.5 to 95.0									2.25	PP
	95.0 to 97.5			109	23	86	СН		99	2.25	PP
	97.5 to 100.0									2.25	PP
1	100.0 to 101.5									2.25	PP
1	101.5 to 102.5									2.25	PP
1	102.5 to 105.0									2.25	PP
1	105.0 to 107.5									2.25	PP
1	107.5 to 110.0									2.25	PP
1	110.0 to 112.5									2.25	PP
1	112.5 to 115.0									2.25	PP
1	115.0 to 117.0									2.25	PP
1	117.0 to 118.0									2.25	PP
1	118.0 to 120.5									2.25	PP
1	120.5 to 123.0									2.25	PP
1	122.5 to 125.0									2.25	PP
1	125.0 to 127.5									2.25	PP
1	127.5 to 130.0									2.25	PP
1	130.0 to 132.5			68	25	43	СН		96	2.25	PP
1	132.5 to 135.0									2.25	PP
1	135.0 to 137.5									2.25	PP
1	137.5 to 140.0									2.25	PP
1	140.0 to 142.5									2.25	PP
1	142.5 to 145.0									2.25	PP
1	145.0 to 147.0									2.25	PP
1	147.0 to 149.0									2.25	PP
1	149.0 to 150.0									2.25	PP
1	150.0 to 153.0									2.25	PP
1	153.0 to 154.0									2.25	PP
1	154.0 to 157.0									2.25	PP
1	157.0 to 160.0									2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

Borning No. Sample Blow Per ft Content Conte	FILE N	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	<u>/ 2015.G</u>	PJ			2/	25/2015
\$ 5.0 to 7.5 7.5 to 10.5 7.5 to 10.5 7.5 to 10.5 10.5 to 11.5 10.5 to 11.5 11.5 to 14.0 14.0 to 16.5 15.5 to 19.0 18 21 CL 96 2.25 PP 19.0 to 21.5 21.5 to 24.0 24.0 to 26.5 26.5 to 29.0 29.0 to 31.5 31.5 to 34.0 34.0 to 36.5 38.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 44.0 to 46.0 44.0 to 46.0 44.0 to 47.0 47.0 to 49.5 55.1 to 52.0 52.0 to 54.5 56.5 to 68.0 68.0 to 60.5 60.5 to 63.0 68.0 to 60.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 75.5 to 77.0 77.0 to 79.5 75.5 to 83.0 88.0 to 90.5 90.5 to 93.0		Depth		Content	Liquid Limit		Plasticity Index	USCS	Weight	% -200 Sieve	Strength	Strength Test
7.5 to 10.5 to 11.5 to	B-125	2.5 to 5.0									1.25	PP
10.5 to 11.5 11.5 to 14.0 14.0 to 16.5 11.5 to 19.0 14.0 to 16.5 16.5 to 19.0 19.0 to 21.5 21.5 to 24.0 24.0 to 26.5 26.5 to 29.0 29.0 to 31.5 31.5 to 34.0 34.0 to 36.5 36.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 44.0 to 46.0 44.0 to 46.0 44.0 to 46.0 45.0 to 57.0 57.0 to 58.0 58.0 to 60.5 66.5 to 63.0 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.7 to 79.5 79.5 to 83.0 88.0 to 89.5 90.5 to 93.0 88.0 to 90.5 90.5 to 93.0		5.0 to 7.5									2.25	PP
11.5 to 14.0 14.0 to 16.5 16.5 to 19.0 16.5 to 19.0 15.0 to 19.0 15.0 to 19.0 15.0 to 21.5 2.25 PP 19.0 to 21.5 2.25 PP 21.5 to 24.0 2.26 PP 22.0 to 26.5 2.25 PP 22.0 to 31.5 2.25 PP 23.1 to 34.0 2.25 PP 23.0 to 14.5 2.25 PP 24.1 to 10.6 to 47.0 2.25 PP 25.0 to 54.5 2.25 PP 25.0 to 54.5 2.25 PP 25.0 to 56.5 2.25 PP 25.5 to 70.0 2.25 PP 25.5 to 70.0 2.25 PP 25.5 to 70.0 2.25 PP 25.5 to 80.0 25.5 PP 25.5 to 80.0		7.5 to 10.5									2.25	PP
14.0 to 16.5 16.5 to 19.0 18 21 CL 96 2.25 PP 19.0 to 21.5 21.5 to 24.0 24.0 to 26.5 26.5 to 29.0 29.0 to 31.5 31.5 to 34.0 34.0 to 36.5 36.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 44.0 to 46.0 45.0 to 47.0 47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 54.5 to 57.0 50.0 to 58.0 50.5 to 68.0 60.5 to 63.0 60.5 to 63.		10.5 to 11.5									2.25	PP
16.5 to 19.0 19.0 to 21.5 21.5 to 24.0 24.0 to 26.5 26.5 to 29.0 29.0 to 31.5 31.5 to 34.0 39.0 to 31.5 31.5 to 34.0 39.0 to 31.5 31.5 to 34.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 44.0 to 46.0 46.0 to 47.0 47.0 to 49.5 54.5 to 57.0 57.0 to 58.0 58.0 to 60.5 65.5 to 68.0 68.0 to 70.5 77.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		11.5 to 14.0									2.25	PP
19.0 to 21.5 21.5 to 24.0 24.0 to 26.5 26.5 to 29.0 29.0 to 31.5 31.5 to 34.0 31.5 to 34.0 31.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 44.0 to 46.0 44.0 to 47.0 44.0 to 49.5 54.5 to 57.0 57.0 to 58.0 63.0 to 65.5 60.5 to 63.0 63.0 to 65.5 60.5 to 68.0 63.0 to 65.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		14.0 to 16.5									2.25	PP
21.5 to 24.0 24.0 to 26.5 26.5 to 29.0 29.0 to 31.5 31.5 to 34.0 34.0 to 36.5 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 46.0 to 47.0 47.0 to 49.5 54.5 to 57.0 50.5 to 63.0 63.0 to 65.5 65.5 to 68.0 63.0 to 65.5 65.5 to 68.0 63.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 86.5 88.0 to 90.5 90.5 to 83.0 88.0 to 90.5 90.5 to 93.0		16.5 to 19.0			39	18	21	CL		96	2.25	PP
24.0 to 26.5 to 29.0 to 21.5		19.0 to 21.5									2.25	PP
265 to 29.0 29.0 to 31.5 31.5 to 34.0 34.0 to 36.5 36.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 54.5 to 67.0 58.0 to 60.5 60.5 to 68.0 68.0 to 70.5 70.5 to 73.0 77.0 to 79.5 77.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 86.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		21.5 to 24.0									2.25	PP
29.0 to 31.5 31.5 to 34.0 34.0 to 36.5 36.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 46.0 to 47.0 47.0 to 49.5 52.0 to 54.5 54.5 to 57.0 58.0 to 60.5 60.5 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 70.5 70.5 to 73.0 77.0 to 79.5 77.5 to 73.0 77.0 to 79.5 77.5 to 83.0 83.0 to 85.5 85.5 to 88.0 80.0 to 90.5 90.5 to 93.0 80.0 to 90.5 90.5 to 93.0		24.0 to 26.5									2.25	PP
31.5 to 34.0 34.0 to 36.5 36.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 46.0 to 47.0 47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 53.0 to 60.5 60.5 to 63.0 60.5		26.5 to 29.0									2.25	PP
34.0 to 36.5 36.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 46.0 to 47.0 47.0 to 49.5 52.0 to 54.5 54.5 to 57.0 58.0 to 60.5 60.5 to 68.0 63.0 to 65.5 65.5 to 68.0 68.0 to 70.5 70.5 to 73.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 98.3 to 80.5 98.5 to 88.0 98.5 to 89.0 99.5 to 93.0		29.0 to 31.5									2.25	PP
36.5 to 39.0 39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 44.0 to 47.0 45.5 to 52.0 52.0 to 54.5 54.5 to 57.0 56.5 to 68.0 63.0 to 65.5 65.5 to 68.0 68.0 to 70.5 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		31.5 to 34.0									2.25	PP
39.0 to 41.5 41.5 to 44.0 44.0 to 46.0 44.0 to 46.0 46.0 to 47.0 47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 55.0 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 70.5 77.0 to 73.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		34.0 to 36.5									2.25	PP
41.5 to 44.0 44.0 to 46.0 44.0 to 46.0 46.0 to 47.0 47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 54.5 to 57.0 58.0 to 60.5 60.5 to 63.0 63.0 to 65.5 66.5 to 68.0 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 79.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		36.5 to 39.0									2.25	PP
44.0 to 46.0 46.0 to 47.0 46.0 to 47.0 47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 54.5 to 57.0 58.0 to 60.5 60.5 to 63.0 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		39.0 to 41.5									2.25	PP
46.0 to 47.0 47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 54.5 to 57.0 58.0 to 60.5 60.5 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		41.5 to 44.0									2.25	PP
47.0 to 49.5 49.5 to 52.0 52.0 to 54.5 52.0 to 54.5 54.5 to 57.0 55.0 to 58.0 58.0 to 60.5 60.5 to 63.0 63.0 to 65.5 68.0 to 70.5 70.5 to 73.0 70.5 to 73.0 71.0 to 75.5 72.25 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		44.0 to 46.0									2.25	PP
49.5 to 52.0 52.0 to 54.5 54.5 to 57.0 54.0 to 58.0 55.0 to 58.0 56.5 to 63.0 60.5 to 63.0 66.5 to 68.0 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		46.0 to 47.0									2.25	PP
52.0 to 54.5 54.5 to 57.0 54.5 to 57.0 55.0 to 58.0 57.0 to 58.0 58.0 to 60.5 60.5 to 63.0 60.5 to 63.0 68.0 to 65.5 68.0 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		47.0 to 49.5									2.25	PP
54.5 to 57.0 40 18 22 CL 87 2.25 PP 57.0 to 58.0 1.75 PP 1.75 PP 58.0 to 60.5 2.25 PP 2.25 PP 60.5 to 63.0 2.25 PP 2.25 PP 65.5 to 68.0 2.25 PP 2.25 PP 70.5 to 73.0 2.25 PP 2.25 PP 75.5 to 77.0 2.25 PP 2.25 PP 77.0 to 79.5 2.25 PP 2.25 PP 83.0 to 85.5 2.25 PP 2.25 PP 88.0 to 90.5 2.25 PP 2.25 PP 90.5 to 93.0 2.25 PP 2.25 PP		49.5 to 52.0									2.25	PP
57.0 to 58.0 58.0 to 60.5 60.5 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 70.5 70.5 to 73.0 70.5 to 73.0 70.5 to 77.0 70.5 to 79.5 70.5 to 83.0 83.0 to 85.5 82.25 PP 83.0 to 85.5 82.25 PP 83.0 to 90.5 90.5 to 93.0		52.0 to 54.5									2.25	PP
58.0 to 60.5 60.5 to 63.0 63.0 to 65.5 63.0 to 65.5 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 88.0 to 90.5 90.5 to 93.0		54.5 to 57.0			40	18	22	CL		87	2.25	PP
60.5 to 63.0 63.0 to 65.5 65.5 to 68.0 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		57.0 to 58.0									1.75	PP
63.0 to 65.5 65.5 to 68.0 65.5 to 68.0 68.0 to 70.5 70.5 to 73.0 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		58.0 to 60.5									1.75	PP
65.5 to 68.0 68.0 to 70.5 68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 75.5 to 77.0 79.5 to 83.0 83.0 to 85.5 88.0 to 90.5 90.5 to 93.0 2.25 PP		60.5 to 63.0									2.25	PP
68.0 to 70.5 70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 75.5 to 77.0 75.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		63.0 to 65.5									2.25	PP
70.5 to 73.0 73.0 to 75.5 75.5 to 77.0 75.5 to 77.0 75.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		65.5 to 68.0									2.25	PP
73.0 to 75.5 75.5 to 77.0 75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		68.0 to 70.5									2.25	PP
75.5 to 77.0 77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		70.5 to 73.0									2.25	PP
77.0 to 79.5 79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0 2.25 PP 2.25 PP 2.25 PP 2.25 PP 2.25 PP 2.25 PP		73.0 to 75.5									2.25	PP
79.5 to 83.0 83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		75.5 to 77.0									2.25	PP
83.0 to 85.5 85.5 to 88.0 88.0 to 90.5 90.5 to 93.0		77.0 to 79.5									2.25	PP
85.5 to 88.0 88.0 to 90.5 90.5 to 93.0 2.25 PP 2.25 PP		79.5 to 83.0									2.25	PP
88.0 to 90.5 90.5 to 93.0 2.25 PP 2.25 PP		83.0 to 85.5									2.25	PP
90.5 to 93.0 2.25 PP		85.5 to 88.0									2.25	PP
		88.0 to 90.5									2.25	PP
93.0 to 95.5 47 19 28 CL 98 2.25 PP		90.5 to 93.0									2.25	PP
		93.0 to 95.5			47	19	28	CL		98	2.25	PP

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO_FEBRUARY 2015.GPJ

2/25/2015

LIFE IN	AIVIE. ASF	13-140-00	PESCA	DITO_FE	DRUAR	2015.G	PJ				25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-125	95.5 to 97.0									2.25	PP
	97.0 to 98.0									2.25	PP
	98.0 to 100.5									2.25	PP
	100.5 to 103.0									2.25	PP
	103.0 to 104.0									2.25	PP
	104.0 to 105.0									2.25	PP
	105.0 to 106.0									2.25	PP
	106.0 to 108.5									2.25	PP
	108.5 to 111.0									2.25	PP
	111.0 to 113.5									2.25	PP
	113.5 to 116.0									2.25	PP
	116.0 to 118.5									2.25	PP
	118.5 to 121.0									2.25	PP
B-126	0.0 to 2.5									1.13	PP
	2.5 to 5.0									1.25	PP
	5.0 to 7.5									1.25	PP
	7.5 to 9.0									2.25	PP
	9.0 to 11.5									2.25	PP
	11.5 to 14.0									2.25	PP
	14.0 to 15.0									2.25	PP
	15.0 to 17.5									2.25	PP
	17.5 to 20.0									2.25	PP
	20.0 to 22.5			50	23	27	CH		98	2.25	PP
	22.5 to 25.0									2.25	PP
	25.0 to 27.5									2.25	PP
	27.5 to 29.0									2.25	PP
	29.0 to 31.5									2.25	PP
	31.5 to 33.0									2.25	PP
	33.0 to 35.5									2.25	PP
	35.5 to 38.0									2.25	PP
	38.0 to 40.5									2.25	PP
	40.5 to 43.0									2.25	PP
	43.0 to 45.5									2.25	PP
	45.5 to 48.0									2.25	PP
	48.0 to 50.5									2.25	PP
	50.5 to 53.0									2.25	PP
	53.0 to 55.5									2.25	PP
	55.5 to 58.0									2.25	PP
	58.0 to 60.5			59	24	35	CH		100	2.25	PP
DD - DI	cot Donotromoto	r T\/ - T	on con a like	C = Unconfin	0	-:	- Field Van	_ 111	I = I Inconcol		المنابح نمت الممسا

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	Y 2015.G	PJ				/25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-126	60.5 to 63.0									2.25	PP
	63.0 to 64.0									2.25	PP
	64.0 to 66.5									2.25	PP
	66.5 to 69.0									2.25	PP
	69.0 to 71.5									2.25	PP
	71.5 to 74.0									2.25	PP
	74.0 to 76.5									2.25	PP
	76.5 to 79.0									2.25	PP
	79.0 to 81.5									2.25	PP
	81.5 to 84.0									2.25	PP
	84.0 to 86.5									2.25	PP
	86.5 to 89.0									2.25	PP
	89.0 to 91.5									2.25	PP
	91.5 to 94.0									2.25	PP
	94.0 to 96.5									2.25	PP
	96.5 to 99.0			78	28	50	СН		100	2.25	PP
	99.0 to 101.5									2.25	PP
	101.5 to 104.0									2.25	PP
	104.0 to 105.0									2.25	PP
	105.0 to 107.5									2.25	PP
	107.5 to 110.0									2.25	PP
	110.0 to 112.0									2.25	PP
	112.0 to 114.0									2.25	PP
	114.0 to 115.0									2.25	PP
	115.0 to 117.5									2.25	PP
	117.5 to 120.0									2.25	PP
	120.0 to 121.0									2.25	PP
	121.0 to 123.5									2.25	PP
	123.5 to 126.0									2.25	PP
	126.0 to 128.5									2.25	PP
	128.5 to 131.0									2.25	PP
	131.0 to 133.5			65	27	38	СН		97	2.25	PP
	133.5 to 136.0									2.25	PP
	136.0 to 138.5									2.25	PP
	138.5 to 141.0									2.25	PP
	141.0 to 143.5									2.25	PP
	143.5 to 146.0									2.25	PP
	146.0 to 148.5									2.25	PP
	148.5 to 151.0									2.25	PP
DD = Dock	et Penetromete	r TV = To	orvane III	C = Unconfin	ed Compres	sion EV =	Field Van		I = Unconsol	idated Lindra	ined Triavial

PP = Pocket Penetrometer

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PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASF13-140-00 PESCADITO FEBRUARY 2015.GPJ

2/25/2015

FILE N	AME: ASF1	13-140-00	PESCA	DITO_FE	BRUAR	7 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-126	151.0 to 153.5									2.25	PP
	153.5 to 156.0									2.25	PP
	156.0 to 158.0									2.25	PP
	158.0 to 160.0									2.25	PP
DB-1	0.0 to 6.0									0.38	PP
	6.0 to 16.0									0.75	PP
	16.0 to 24.0									2.25	PP
	24.0 to 29.0									2.25	PP
	29.0 to 36.0									2.25	PP
	36.0 to 45.0									2.25	PP
	45.0 to 56.0									2.25	PP
	56.0 to 66.0									2.25	PP
	66.0 to 73.0									2.25	PP
	73.0 to 84.0									2.25	PP
	84.0 to 86.0										
	86.0 to 90.0									2.25	PP
	90.0 to 100.0									2.25	PP
	100.0 to 106.0									2.25	PP
	106.0 to 116.0									2.25	PP
	116.0 to 126.0									2.25	PP
	126.0 to 133.0									2.25	PP
	133.0 to 136.0									2.25	PP
	136.0 to 146.0									2.25	PP
	146.0 to 153.0									2.25	PP
	153.0 to 156.0									2.25	PP
	156.0 to 166.0									2.25	PP
	166.0 to 176.0									2.25	PP
	176.0 to 186.0									2.25	PP
	186.0 to 196.0									2.25	PP
	196.0 to 206.0									2.25	PP
	206.0 to 216.0									2.25	PP
	216.0 to 226.0									2.25	PP
	226.0 to 236.0									2.25	PP
	236.0 to 246.0									2.25	PP
	246.0 to 253.0									2.25	PP
	253.0 to 260.0										
	260.0 to 276.0									2.25	PP
	276.0 to 278.0										
	278.0 to 296.0									2.25	PP
PP = Pock	et Penetromete	er TV = To	orvane U	C = Unconfin	ed Compres	sion FV =	Field Van	e Ul	J = Unconsol	idated Undra	ined Triaxial

CU = Consolidated Undrained Triaxial

RABAKISTNER-

PROJECT NAME: Pescadito Environmental Resource Center - Type I MSW

Management Facility - Rancho Viejo Waste Management, LLC Webb County, Texas - MSW Permit No. 2374

FILE NAME: ASE13-140-00 PESCADITO, FERRIJARY 2015 GP.I.

2/25/2015

FILE N	AME: ASF1	13-140-00) PESCA	DITO_FE	BRUAR'	/ 2015.G	PJ			2/	25/2015
Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
DB-1	296.0 to 316.0									2.25	PP
	316.0 to 336.0									2.25	PP
	336.0 to 356.0									2.25	PP
	356.0 to 366.0										
	366.0 to 386.0									2.25	PP
	386.0 to 389.0										
	389.0 to 400.0									2.25	PP
	400.0 to 413.0									2.25	PP
	413.0 to 426.0										
	426.0 to 456.0									2.25	PP
	456.0 to 466.0									2.25	PP
	466.0 to 476.0									2.25	PP
	476.0 to 480.0									2.25	PP
	480.0 to 486.0										
	486.0 to 502.0									2.25	PP
TP-1	3.0			46	18	28	CL		65		
	6.0			25	19	6	SC-SM		27		
	9.5			69	37	32	МН		99		
	11.5			55	32	23	МН		100		
	12.0			60	31	29	МН		99		
TP-2	13.0			64	29	35	CH		98		
	20.0			57	24	33	CH		96		
	22.0			51	29	22	MH		95		
	22.1			63	23	40	CH		99		

PP = Pocket Penetrometer

TV = Torvane

UC = Unconfined Compression

FV = Field Vane

UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial

APPENDIX B

SUMMARY OF RESULTS AND HYDRAULIC CONDUCTIVITY TEST RESULTS



Figures B-1 through B-19

SUMMARY OF RESULTS

Test Pit	Depth (feet)	Stratum	Orientation	ASTM Classification	Liquid Limit	Plasticity Index	Passing -200 (%)	Mean Hydraulic Conductivity (cm/sec)
TP-1	3	I	Horizontal	FAT CLAY (CH), red-brown with calc nods	46	28	64.5	9.55E-07
TP-1	6	I	Horizontal	LEAN CLAY with SAND (CL)	25	6	26.9	2.01E-06
TP-1	9.5	II	Horizontal	FAT CLAY (CH)	69	32	98.6	4.78E-07
TP-1	11.5	II	Horizontal	FAT CLAY (CH)	55	23	99.7	3.78E-07
TP-1	12	III	Horizontal	FAT CLAY (CH)	60	29	99.3	4.50E-07
TP-2	13	III	Horizontal	FAT CLAY (CH)	64	35	97.9	7.97E-07
TP-2	20	IV	Horizontal	FAT CLAY (CH), gray	57	33	96.4	8.30E-07
TP-2	22	IV	Vertical	FAT CLAY (CH), gray	51	22	95.4	1.23E-07
TP-2	22	IV	Horizontal	FAT CLAY (CH), gray	63	40	98.8	5.54E-09

	Rancho Viejo Webb County							R-K Pro	oject #	:A	SF09	-192-03
Me	ASTM D5084 hthod A; hthod D;	Method B; Method E;		thod C; rmeant	Cell No. Liquid Used:		2 Deaired W	ater		ific Gravit		2.69 Assumed
	1		asagran	Rer X Hor de" Lath	Ta molded T izontal ne ; Cu	ampe Tamp itting	nt Effort er Weight (I per Force (I Shoe ; Wir	bf): Wire S e Saw & S	aw; traight	Drop Othe	of Laye in Inch er Wir	ers: nes: re Saw
	Vater tent (W)	Ini Top (W1		rimming ottom (W	Location 2) Sides (W	(2)	Final, W		al Soil Heigh			its (inches) Diameter
	Container	_) 6	A22	Z) Sides (W	3)	(see pelot	W) H ₁		542	D ₁	2.818
Mass Mois	st Soil + Container)	111.07			1247.00			541	D ₂	2.812
Mass Dr	y Soil + Container	(g) 304.73	,	95.67			999.96	H ₃	5.	541	D_3	2.816
	Mass Container	(g) 208.08	}	39.35			155.77	H ₄	5.	542	D_4	2.815
	ATER CONTENT			27.34			29.26		je Heig		Ĩ	e Diameter
Avg. Initial	l Water Content, W4	(%) 29.03		Final V	V _{at} : Slice ;	Х	Whole Spec	:. (in)	5.	542	(in)	2.815
See attache	ed data sheet(s) fo	or additional wate	r conten	ts				(cm)	14	.075	(cm)	7.151
Mass Moi Mass D	Container No. st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g)	- 1082.10 12 844.19 9 0.00 1	Final - 247.00 99.96 55.77 091.23	l	Initial Ar nitial Total Volur nitial Mass Mois Mass Dry tial Moisture Cor	rea (ci me (ci st Soil y Soil	m ³) 565.2 (g) 1082. (g) 844.1	60 65 10 19	Initial Initial M	Dry Unit W loist Unit W	/eight (Void R uration	(pcf) 119.51 Patio 0.80 (%) 94.51
Mean Hy	draulic Cond	uctivity, cm/s	sec				Piston	Sai	mple	Obser	ved	Sample
	9.55E-	07			liter Saturation Ph Consolidation Ph End of	nase	Height (in 8.362 8.305 8.280 8.268	14. 14. 14.	075 053 043 038	Δ Volume 0 -0.3 -4.3 -0.3	3	Area (cm²) 40.160 40.203 39.932 39.931
	Eff. Conso			flow:	Outflow	Не	ead Loss	% of Init	ial I	Hydraulic		Hydraulic
Trial	Top	Bottom		low	(pore	'	(cm)	Head Lo		Gradient		Conductivity
8	(psi) 9.11	(psi) 13.59		atio 03	volumes) 0.34		334.54 320.14	95.70		23.83 22.80		(cm/sec) 1.07E-06
9	9.10	13.59	1.	04	0.36	;	335.25 321.15	95.79		23.88 22.88		1.05E-06
10	9.04	13.52	0.	88	0.39	,	334.44 322.04	96.29		23.82 22.94		9.22E-07
11	8.87	13.32	1.	00	0.41		332.34 321.94	96.87		23.67 22.93		7.76E-07



TBPE Firm Registration No. F-3257

Summary	Summary of End-of-Test Soil Properties											
Final Area (cm²)	39.931	Final Dry Unit Weight (pcf)	94.01									
Final Total Volume (cm³)	560.565	Final Moist Unit Weight (pcf)	121.53									
Final Mass Moist Soil (g)	1091.23	Final Void Ratio	0.79									
Mass Dry Soil (g)	844.19	Final Degree of Saturation (%)	100.00									
Final Moisture Content (%)	29.26	Final Pore Volume (cm ³)	247.03									

PROJECT ASF09-192-03 Elapsed Time, min 0 500 1000 1500 2000 2500 3000 0.006 0.003 Flow Rate, cm³/sec 0 -0.003-0.006 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 500 1000 1500 2000 2500 3000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 3 to 4 feet ATTERBERG LIMITS: LL = 46; PL = 18; PI = 28

ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 9.55E-07 cm/sec

MATERIAL DESCRIPTION: Sandy Lean Clay (CL), red-brown with calcarous nodules

FIGURE B-3



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

	Rancho Viejo							R-K Projec	A+ #+·	A S E O O	-192-03
Location.	vvebb County	y, Texas					-	IX-IX F TOJEC	,ι <i>π</i>	ASI US	- 192-03
Me	ASTM D5084 ethod A; ethod D;	Method B; Method E;		thod C; rmeant	Cell No. Liquid Used:		_ d Wate		ecific Grav		2.78 Assumed
	3	· · · —	asagran	Rem X Hori	Tanolded Tan	nstant Effor amper Weig Famper For tting Shoe ;	ght (lbf): ce (lbf):		Drop Oth	of Laye in Inch	ers:
	Nater			imming	Location	Fina	I, W _{at}	Initial S	Soil Measu	remen	ts (inches)
Con	itent (W)	Top (W1) Bo	ottom (W2		3) (see	below)		ight		Diameter
	Container			A53	A54	-		H ₁	4.281	D_1	1.910
	st Soil + Containe			199.97	182.09		4.84	H ₂	4.301	D_2	1.926
Mass Dr	ry Soil + Containe		,	175.08	159.69		1.36	H ₃	4.300	D ₃	1.915
	Mass Container	(0)		39.25	38.79		1.36	H ₄	4.296	D_4	1.910
	ATER CONTENT	` '		18.32	18.53).99	Average H	-	_	e Diameter
Avg. Initia	l Water Content, W4	19.07		Final W	at: Slice ;	X Whole S	Spec.	(in)	4.295	(in)	1.915
See attache	ed data sheet(s) for	or additional wate	r conten	ts				(cm)	10.908	(cm)	4.865
<u> </u>	-										
Soil N	/lasses	Initial	Final						roperties		1
Mass Mo Mass D	Container No. ist Soil + Tare (g) by Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g)	- 422.70 6 350.00 5 0.00 2	Final - 24.84 51.36 01.36 23.48	lr	Initial Ar itial Total Volur iitial Mass Mois Mass Dr al Moisture Cor	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3	9 of In 8.587 02.747 22.70 850.00 20.77	In Initi	itial Dry Unit \ al Moist Unit \ Initia Degree of Sa	Weight (Il Void R	pcf) 130.15 atio 0.61 (%) 94.69
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) bry Soil + Tare (g) Mass Tare (g)	- 422.70 6. 350.00 5. 0.00 2 422.70 4	- 24.84 51.36 01.36 23.48	lr	itial Total Volur nitial Mass Mois Mass Dry	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2	8.587 02.747 22.70 350.00	In Initi	itial Dry Unit \ al Moist Unit \ Initia Degree of Sa Pore Vo	Weight (Il Void R Ituration olume (c	pcf) 130.15 atio 0.61 (%) 94.69
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) bry Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g)	- 422.70 6. 350.00 5. 0.00 2 422.70 4	- 24.84 51.36 01.36 23.48	lr	itial Total Volur nitial Mass Mois Mass Dry	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 / Soil (g) 3 ntent (%) 2	8.587 02.747 22.70 350.00 20.77 ston	In Initi Initial	altial Dry Unit \ al Moist Unit \ Initia Degree of Sa Pore Vo	Weight (al Void R aturation blume (c	pcf) 130.15 latio 0.61 (%) 94.69 cm³) 76.78
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) by Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) rdraulic Cond	- 422.70 6. 350.00 5. 0.00 2. 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48	Initi	itial Total Volur nitial Mass Mois Mass Dry al Moisture Cor	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig	8.587 02.747 22.70 350.00 20.77 ston ht (in)	Initial Initial Sample Length (ci	Itial Dry Unit \ al Moist Unit \ Initial Degree of Sa Pore Vo	Weight (all Void R aturation colume (colume) erved are (cm³)	pcf) 130.15 atio 0.61 (%) 94.69 cm³) 76.78 Sample Area (cm²) 18.587
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) bry Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g)	- 422.70 6. 350.00 5. 0.00 2. 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48	Initi	itial Total Volur nitial Mass Mois Mass Dry al Moisture Cor Il er Saturation Ph	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig nitial 6.9	8.587 02.747 22.70 350.00 20.77 ston lht (in) 974	Initial Initial Sample Length (ci 10.908 10.903	Itial Dry Unit \ al Moist Unit \ Initial Degree of Sa Pore Vo Obse M Volum -1	Weight (all Void R aturation colume (colume (cm³)2	pcf) 130.15 atio 0.61 (%) 94.69 cm³) 76.78 Sample Area (cm²) 18.587 18.486
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) by Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) rdraulic Cond	- 422.70 6. 350.00 5. 0.00 2. 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48	Initi	itial Total Volur itial Mass Mois Mass Dry al Moisture Cor Il er Saturation Pr Consolidation Pr	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig nitial 6.9 nase 6.9	8.587 02.747 22.70 350.00 20.77 ston ht (in) 974 961	Sample Length (cr 10.908 10.903 10.901	olitial Dry Unit \ al Moist Unit \ Initial Degree of Sa Pore Vo Obse m) Δ Volum -1 -1	Weight (all Void R attraction blume (co erved are (cm³)2 .3	pcf) 130.15 atio 0.61 (%) 94.69 m³) 76.78 Sample Area (cm²) 18.587 18.486 18.369
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) by Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) rdraulic Cond	- 422.70 6. 350.00 5. 0.00 2. 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48	Initi	itial Total Volur nitial Mass Mois Mass Dry al Moisture Cor Il er Saturation Ph	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig nitial 6.9 nase 6.9	8.587 02.747 22.70 350.00 20.77 ston lht (in) 974	Initial Initial Sample Length (ci 10.908 10.903	olitial Dry Unit \ al Moist Unit \ Initial Degree of Sa Pore Vo Obse m) Δ Volum -1 -1	Weight (all Void R attraction blume (co erved are (cm³)2 .3	pcf) 130.15 atio 0.61 (%) 94.69 cm³) 76.78 Sample Area (cm²) 18.587 18.486
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) bry Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) rdraulic Cond	- 422.70 6. 350.00 5. 0.00 2. 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48	Initi	itial Total Volur itial Mass Mois Mass Dry al Moisture Cor Il er Saturation Pr Consolidation Pr	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig nase 6.9 Test 6.9	8.587 02.747 22.70 350.00 20.77 ston ht (in) 974 961 957	Sample Length (ci 10.908 10.903 10.901	Itial Dry Unit \ al Moist Unit \ Initial Degree of Sa Pore Vo Obse Obse A Volum -1 -1 -0	Weight (Il Void R turation blume (c erved ale (cm³)2 .3 .8	pcf) 130.15 atio 0.61 (%) 94.69 m³) 76.78 Sample Area (cm²) 18.587 18.486 18.369
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) bry Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) rdraulic Cond	- 422.70 6. 350.00 5. 0.00 2 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48 sec	Initi Afte After C	itial Total Volur itial Mass Mois Mass Dry al Moisture Cor Il er Saturation Ph Consolidation Ph End of	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig nase 6.9 Test 6.9 Head Lo	8.587 02.747 22.70 350.00 20.77 ston ht (in) 974 961 957 957	In Initial Initial Sample Length (cr 10.908 10.903 10.901 10.901 6 of Initial	Itial Dry Unit \ Initial Dry Unit \ Initial Degree of Sa Pore Vo Obse M) \(\Delta \text{Volum} \) -1 -1 -0 Hydrauli	Weight (Il Void R It void	pcf) 130.15 atio 0.61 (%) 94.69 76.78 Sample Area (cm²) 18.587 18.486 18.369 18.296
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) iry Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) rdraulic Cond	- 422.70 6. 350.00 5. 0.00 2 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48 sec	Initi After C	itial Total Volur itial Mass Mois Mass Dry al Moisture Cor In er Saturation Pr Consolidation Pr End of	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig nase 6.9 Test 6.9 Head Lo (cm)	8.587 02.747 22.70 350.00 20.77 ston ht (in) 974 961 957 957	Sample Length (ci 10.908 10.903 10.901	olitial Dry Unit \ al Moist Unit \ Initial Degree of Sa Pore Vo Obse m) Δ Volum -1 -1 -0 Hydraulii Gradien	Weight (Il Void R It void	pcf) 130.15 atio 0.61 (%) 94.69 76.78 Sample Area (cm²) 18.587 18.486 18.369 18.296 Hydraulic
Mass Mo Mass D Mass Moist	Container No. ist Soil + Tare (g) bry Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) trace Cond 2.01E- Eff. Conso	- 422.70 6. 350.00 5. 0.00 2. 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48 sec Outf	Initi After Co	itial Total Volur itial Mass Mois	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Pis Heig nase 6.9 Test 6.9 Head Lo (cm) 365.07	8.587 02.747 22.70 550.00 20.77 ston (ht (in) 974 961 957 957	In Initial Initial Sample Length (cr 10.908 10.903 10.901 10.901 6 of Initial	Itial Dry Unit \ Initial Dry Unit \ Initial Degree of Sa Pore Vo Company A Volum -1 -1 -0 Hydraulii Gradien 33.49 33.07	Weight (Il Void R It void	pcf) 130.15 atio 0.61 (%) 94.69 76.78 Sample Area (cm²) 18.587 18.486 18.369 18.296 Hydraulic Conductivity
Mass Mo Mass Moist Mean Hy Trial	Container No. ist Soil + Tare (g) ist Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) rdraulic Cond 2.01E- Eff. Conso Top (psi)	- 422.70 6. 350.00 5. 0.00 2 422.70 4 uctivity, cm/s	- 24.84 51.36 01.36 23.48 Sec Outf Infl Ra	After Coflow:	uitial Total Volur iitial Mass Mois	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 y Soil (g) 3 ntent (%) 2 Heig nase 6.9 Test 6.9 Head Lo (cm) 365.07	8.587 02.747 22.70 350.00 20.77 ston ht (in) 974 961 957 957	Sample Length (ci 10.908 10.903 10.901 10.901 6 of Initial	Itial Dry Unit \ Initial Dry Unit \ Initial Degree of Sa Pore Vo Obse M) \(\Delta \text{Volum} \) -1 -1 -0 Hydrauli Gradien 33.49	Weight (Il Void R It void	pcf) 130.15 atio 0.61 (%) 94.69 76.78 Sample Area (cm²) 18.587 18.486 18.369 18.296 Hydraulic Conductivity (cm/sec)
Mass Mo Mass D Mass Moist Mean Hy Trial 36	Container No. ist Soil + Tare (g) by Soil + Tare (g) Mass Tare (g) t Soil, M _i or M _f (g) t Araulic Cond 2.01E- Eff. Conso Top (psi) 7.89	- 422.70 6. 350.00 5. 0.00 2 422.70 4 uctivity, cm/s O6 Pressure Bottom (psi) 12.79	- 24.84 51.36 01.36 23.48 sec Outf Infl Ra 0.4	After Co	itial Total Volur itial Mass Mois	ea (cm²) 1 ne (cm³) 20 t Soil (g) 4 7 Soil (g) 3 ntent (%) 2 Heig nase 6.9 Test 6.9 Head Lo (cm) 365.07 360.47	8.587 02.747 22.70 350.00 20.77 ston ht (in) 974 961 957 957	In Initial Sample Length (cr 10.908 10.903 10.901 10.901 6 of Initial lead Loss 98.74	Itial Dry Unit \ Initial Dry Unit \ Initial Degree of Sa Pore Vo Company A Volum -1 -1 -1 -0 Hydrauli Gradien 33.49 33.07 33.68	Weight (Il Void R It void	pcf) 130.15 atio 0.61 (%) 94.69 76.78 Sample Area (cm²) 18.587 18.486 18.369 18.296 Hydraulic Conductivity (cm/sec) 2.03E-06



TBPE Firm R	eaistration	No.	F-3257
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Summary	/ of End-c	Summary of End-of-Test Soil Properties										
Final Area (cm²)	18.296	Final Dry Unit Weight (pcf)	109.55									
Final Total Volume (cm³)	199.447	Final Moist Unit Weight (pcf)	132.55									
Final Mass Moist Soil (g)	423.48	Final Void Ratio	0.58									
Mass Dry Soil (g)	350.00	Final Degree of Saturation (%)	100.00									
Final Moisture Content (%)	20.99	Final Pore Volume (cm ³)	73.48									

Figure B-4

PROJECT ASF09-192-03 Elapsed Time, min 0 500 1000 1500 2000 2500 3000 0.008 0.004 Flow Rate, cm³/sec 0 -0.004-0.008 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 500 1000 1500 2000 2500 3000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 6 to 7 feet ATTERBERG LIMITS: LL = 25; PL = 19; PI = 6
ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 2.01E-06 cm/sec

MATERIAL DESCRIPTION: Lean Clay with SAND (CL)

FIGURE B-5



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

	Rancho Viejo Webb County							R-K F	rojec	t #:	ASF09	-192-03
Me	ASTM D5084 thod A;	Method B; Method E;		thod C; rmeant L	Cell No. iquid Used:	3 Dea	aired Wa	ater		ecific Grav	·	2.78 Assumed
	10	· · —	asagran	Remo X Horizo de" Lathe	Ta olded T ontal ; Cut	Tamper	Veight (II Force (II oe <u>;</u>	of): of): Wire e Saw &	Saw;		of Layon in Inch	ers:
	Vater			imming L			inal, Wa					nts (inches)
Con	tent (W)	Top (W1) Bo	ottom (W2)		3) (s	see below			ght		Diameter
Mass Mais	Container t Soil + Container		1	M17 148.85	M7 142.80	`	356.08	H ₁	_	2.880	D ₁	1.454 1.455
	Soil + Container Soil + Container			123.60	119.12		317.70	H ₃	_	2.879	D_2 D_3	1.454
Wass Dry	Mass Container	(0)		38.86	39.15	-	205.14	H ₄		2.880	D_3 D_4	1.455
\MA	ATER CONTENT	,0,		29.80	29.61		34.10		·			ge Diameter
	Water Content, W4	` '					2.880	(in)				
	d data sheet(s) fo	` '	er conten		(ooo ,	Χ	olo opoo.		(cm) 7.314			3.694
						C				roperties	(cm)	
3011 14	Soil Masses Initial Final Container No. - Mass Moist Soil + Tare (g) 147.00 356.08 Mass Dry Soil + Tare (g) 112.56 317.70 Mass Tare (g) 0.00 205.14											
Mass Di	st Soil + Tare (g) ry Soil + Tare (g)	112.56 3 0.00 2	17.70	Init	Initial Are ial Total Volun tial Mass Moist Mass Dry I Moisture Con	ea (cm²) ne (cm³) t Soil (g) / Soil (g)	10.72 78.40 147.0 112.5	0 4 0 6	Ini Initia	tial Dry Unit al Moist Unit Initia Degree of Sa	Weight (al Void R	(pcf) 117.05 Ratio 0.94 (%) 90.69
Mass Di	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g)	112.56 3 0.00 2 147.00 1	17.70 05.14 50.94	Init	ial Total Volun tial Mass Moist Mass Dry	ea (cm²) ne (cm³) t Soil (g) / Soil (g)	10.72 78.40 147.0 112.5 30.60	0 4 0 6 0	Ini Initia Initial	tial Dry Unit al Moist Unit Initia Degree of Sa Pore V	Weight (al Void R aturation olume (d	(pcf) 117.05 Ratio 0.94 (%) 90.69 cm³) 37.97
Mass Di	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g)	112.56 3 0.00 2 147.00 1 uctivity, cm/s	17.70 05.14 50.94	Initia After	ial Total Volun tial Mass Moist Mass Dry I Moisture Con	ea (cm²) ne (cm³) t Soil (g) / Soil (g) tent (%) hitial hase	10.72 78.40 147.0 112.5	0 4 0 6 0 Exercise 1	Ini Initia	tial Dry Unit Al Moist Unit Initia Degree of Sa Pore V Obse A Volun (-4 -3	Weight (all Void Raturation (olume (olume)	(pcf) 117.05 Ratio 0.94 (%) 90.69
Mass Di Mass Moist Mean Hy	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.78E-	112.56 3 0.00 2 147.00 1 uctivity, cm/s	17.70 05.14 50.94 sec	Initia Initia After After Co	ial Total Volun tial Mass Moist Mass Dry I Moisture Con Ir Saturation Phonsolidation Ph	ea (cm²) ne (cm³) t Soil (g) r Soil (g) tent (%) hittial hase hase	10.72 78.40 147.0 112.5 30.60 Piston Height (in 5.610 5.601 5.585 5.439	0 4 0 6 0 1 S Ler	Initial Initial ample gth (cr. 7.314 7.310 7.304 7.247	tial Dry Unit Initial Dry Unit Initial Degree of Sa Pore V Obse Obse O) A Volun (-4 -3	Weight (Mean Property of Control	(pcf) 117.05 Ratio 0.94 (%) 90.69 cm³) 37.97 Sample Area (cm²) 10.720 10.109 9.666 10.875 Hydraulic
Mass Di	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.78E-0 Eff. Conso	112.56 3 0.00 2 147.00 1 uctivity, cm/s	17.70 05.14 50.94 sec	Initia After After Co	ial Total Volun tial Mass Moist Mass Dry I Moisture Con Ir Saturation Ph End of T Outflow (pore	ea (cm²) ne (cm³) t Soil (g) / Soil (g) tent (%) hittial hase lase Test Head	10.72 78.40 147.0 112.5 30.60 Piston leight (in 5.610 5.601 5.585 5.439	0 4 0 6 D S Ler	Initial Initia	tial Dry Unit Initial Moist Unit Initial Degree of Sa Pore V Obse Obse Obse -4 -3 8 Hydrauli	Weight (all Void R aturation colume (colume (colume (colume)) by the column (column) column ((pcf) 117.05 Ratio 0.94 (%) 90.69 cm³) 37.97 Sample Area (cm²) 10.720 10.109 9.666 10.875 Hydraulic Conductivity
Mass Di Mass Moist Mean Hy	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.78E-	112.56 3 0.00 2 147.00 1 uctivity, cm/s	17.70 05.14 50.94 sec	Initia After After Co	ial Total Volun tial Mass Moist Mass Dry I Moisture Con Ir Saturation Ph End of T	ea (cm²) ne (cm³) t Soil (g) r Soil (g) tent (%) hittial hase hase Test Head (CI	10.72 78.40 147.0 112.5 30.60 Piston Height (in 5.610 5.601 5.585 5.439	0 4 0 6 0 1 S Ler	Initial Initia	tial Dry Unit Initial Moist Unit Initial Degree of Sa Pore V Obse Obse 1	Weight (all Void R aturation colume (colume (colume (colume)) by the column (column) column ((pcf) 117.05 Ratio 0.94 (%) 90.69 cm³) 37.97 Sample Area (cm²) 10.720 10.109 9.666 10.875 Hydraulic
Mass Di Mass Moist Mean Hy	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.78E-0 Eff. Conso	112.56 3 0.00 2 147.00 1 uctivity, cm/s	17.70 05.14 50.94 sec Outf	Initia After After Co	ial Total Volun tial Mass Moist Mass Dry I Moisture Con Ir Saturation Ph End of T Outflow (pore	ea (cm²) ne (cm³) t Soil (g) / Soil (g) / Soil (g) hittial hase lase Test Head (ci 399 396	10.72 78.40 147.0 112.5 30.60 Piston leight (in 5.610 5.601 5.585 5.439 Loss m) 0.92 6.12	0 4 0 6 D S Ler	Initial Initia	tial Dry Unit Initial Degree of Sa Pore V Obse A Volun (-4 -3 8 Hydrauli Gradier 55.15 54.62	Weight (all Void R aturation colume (colume (colume (colume)) by the column (column) column ((pcf) 117.05 Ratio 0.94 (%) 90.69 cm³) 37.97 Sample Area (cm²) 10.720 10.109 9.666 10.875 Hydraulic Conductivity
Mass Di Mass Moist Mean Hy Trial	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.78E-0 Eff. Conso Top (psi)	112.56 3 0.00 2 147.00 1 uctivity, cm/s 07	17.70 05.14 50.94 sec Outtl Infl Ra 0.4	Initia After After Co flow: Iow Itio	ial Total Voluntial Mass Moist Mass Dry I Moisture Con Ir Saturation Ph End of Outflow (pore volumes)	ea (cm²) ne (cm³) t Soil (g) t Soil (g) t Soil (g) tent (%) tent (%) Hnitial hase hase Test Head (cl 399 400 396	10.72 78.40 147.0 112.5 30.60 Piston Height (in) 5.610 5.601 5.585 5.439 Loss m) 0.92 6.12 0.63 6.73	0 4 0 6 D S Ler	Initial Initia	tial Dry Unit Initial Moist Unit Initial Degree of Sa Pore V Obse A Volun -4 -3 8 Hydrauli Gradier	Weight (all Void R aturation colume (colume (colume (colume)) by the column (column) column ((pcf) 117.05 Ratio 0.94 (%) 90.69 Cm³) 37.97 Sample Area (cm²) 10.720 10.109 9.666 10.875 Hydraulic Conductivity (cm/sec)
Mass Di Mass Moist Mean Hy Trial 29	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.78E-0 Eff. Conso Top (psi) 6.41	112.56 3 0.00 2 147.00 1 uctivity, cm/s 1 Pressure Bottom (psi) 11.82	05.14 50.94 Sec Outf Infl Ra 0.4	After Co	ial Total Voluntial Mass Moist Mass Dry I Moisture Con Ir Saturation Ph End of Outflow (pore volumes) 3.03	ea (cm²) ne (cm³) t Soil (g) / Soil (g) / Soil (g) hittial hase lase Test Head (ci 399 396 400 396	10.72 78.40 147.0 112.5 30.60 Piston leight (in 5.610 5.601 5.585 5.439 Loss m) 9.92 6.12 0.63	0 4 0 6 D S Ler 99.0	Initial Initia	tial Dry Unit Initial Degree of Sa Pore V Obse Obse A Volun (-4 -3 8 Hydrauli Gradier 55.15 54.62 55.25	Weight (all Void R aturation colume (colume (colume (colume)) by the column (column) column ((pcf) 117.05 Ratio 0.94 (%) 90.69 cm³) 37.97 Sample Area (cm²) 10.720 10.109 9.666 10.875 Hydraulic Conductivity (cm/sec) 5.07E-07



TBPE Firm Registration No. F-3257

Summary of End-of-Test Soil Properties										
Final Area (cm²)	10.875	Final Dry Unit Weight (pcf)	89.16							
Final Total Volume (cm³)	78.808	Final Moist Unit Weight (pcf)	119.57							
Final Mass Moist Soil (g)	150.94	Final Void Ratio	0.95							
Mass Dry Soil (g)	112.56	Final Degree of Saturation (%)	100.00							
Final Moisture Content (%)	34.10	Final Pore Volume (cm ³)	38.38							

Figure B-6

PROJECT ASF09-192-03 Elapsed Time, min 0 1000 2000 3000 4000 5000 6000 0.008 0.004 Flow Rate, cm³/sec 0 -0.004-0.008 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 1000 2000 3000 4000 5000 6000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 9.5 to 10 feet ATTERBERG LIMITS: LL = 69; PL = 37; PI = 32
ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 4.78E-07 cm/sec

MATERIAL DESCRIPTION: Fat Clay (CH)

FIGURE B- 7



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

	Rancho Viejo Webb County							R-K Pro	oject #	: <i>P</i>	\SF09-	-192-03
	ASTM D5084 hod A;	Method B; Method E;		thod C; rmeant L	Cell No. Liquid Used:		8 Deaired Wa	ater		ific Gravit		2.84 Assumed
	11	· · · —	asagran	Rem X Horiz de" Lathe	Ta olded T zontal e ; Cu	amper Fampe	er Force (I Sh <u>oe ;</u>	bf): bf): X Wire S re Saw & Si	aw;	Drop Othe	of Laye	ers:
	ater				Location		Final, W	<u> </u>				ts (inches)
Cont	ent (W)	Top (W	I) Bo	ottom (W2		3)	(see belov		Heigh			Diameter
Mana Majat	Container			911 105.32	M11 116.43	,	644.26	H ₁		.081	D ₁	2.062 2.011
	Soil + Container Soil + Container			92.29	101.17		641.26 546.35	H ₂		.078	D_2	2.011
Wass Dry	Mass Container			39.14	39.19		202.83	H ₄		.079	D_3 D_4	2.043
\Λ/Δ	TER CONTENT	,0,		24.52	24.62		27.63		·			e Diameter
	Water Content, W4	, ,							.078	(in)	2.035	
	I data sheet(s) fo				al. Olice ,	\ \ \ \	Whole opec	(m)	` ′		(cm)	5.168
						_					(0111)	0.100
Mass Dry	Container No. t Soil + Tare (g) Soil + Tare (g) Mass Tare (g) Mass Tare (g) Mosoil, Mi or Mf (g)	- 431.71 6 343.52 5 0.00 2	Final - 41.26 46.35 02.83 38.43	In	Initial Ar itial Total Volur itial Mass Mois Mass Dry al Moisture Cor	ea (cm ne (cm t Soil (y Soil (n²) 20.97 n³) 217.20 (g) 431.7 (g) 343.5	60 71 52 Ir	Initial Initial M	Dry Unit W Moist Unit W	/eight (Void R uration	pcf) 124.05 atio 0.80 (%) 91.46
Mean Hyd	Iraulic Cond	uctivitv. cm/	sec				Piston	Sar	nple	Obser	ved	Sample
Mean Hydraulic Conductivity, cm/sec 3.78E-07					Piston Height (in)			1) Lengt 10. 10.	Sample Obser Length (cm) Δ Volume 10.359 0 10.360 -2. 10.358 -2. 10.358 0.3		e (cm³) 4 5	Area (cm²) 20.974 20.740 20.501 20.521
	Eff. Conso		Out	flow:	Outflow	Нα	ad Loss	% of Init	ial I	Hydraulic		Hydraulic
Trial	Тор	Bottom		low	(pore		(cm)	Head Lo		Gradient		Conductivity
	(psi)	(psi)	Ra	atio	volumes)		` ′				_	(cm/sec)
18	7.48	12.58	0.	84	1.56	3	379.13 374.53	98.79		36.60 36.16		3.89E-07
19	7.50	12.52	0.	86	1.58	3	373.51 369.41	98.90		36.06 35.66		3.87E-07
20	7.45	12.55	0.	90	1.60		379.13 375.13	98.94		36.60 36.22		3.72E-07
						ı ~						

R	A	E	3 /	4		
K					E	R

TBPE Firm R	eaistration	No.	F-3257
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Summary	/ of End-c	of-Test Soil Properties	
Final Area (cm²)	20.521	Final Dry Unit Weight (pcf)	100.89
Final Total Volume (cm³)	212.560	Final Moist Unit Weight (pcf)	128.76
Final Mass Moist Soil (g)	438.43	Final Void Ratio	0.76
Mass Dry Soil (g)	343.52	Final Degree of Saturation (%)	103.47
Final Moisture Content (%)	27.63	Final Pore Volume (cm ³)	91.72

Figure B-8

PROJECT ASF09-192-03 Elapsed Time, min 0 500 1000 1500 2000 2500 3000 0.008 0.004 Flow Rate, cm³/sec 0 -0.004-0.008 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 500 1000 1500 2000 2500 3000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 11.5 to 12 feet ATTERBERG LIMITS: LL = 55; PL = 32; PI = 23
ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 3.78E-07 cm/sec

MATERIAL DESCRIPTION: Fat Clay (CH)

FIGURE B-9



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

Location:	Rancho Viejo Webb County						F	R-K Proj	ect #:	A	SF09	-192-03
Me	ASTM D5084 ethod A;	Method B; Method E;		thod C; rmeant L	Cell No. iquid Used:	7 Deaired V	Vater	<u> </u>		fic Gravit asured		2.86 Assumed
	16		asagran	Remo	Ta olded T contal e; Cut	nstant Effort mper Weight amper Force ting Shoe ; ge; \	(lbf):	Wire Sa aw & Stra	w; aight E	Drop i Othe	of Laye n Inch r Wir	ers: nes: re Saw
	Vater tent (W)	Ini Top (W1		imming Lottom (W2)		Final, V			I Soil Height			its (inches) Diameter
	Container) 60	A08	A03	(see bei	OW)	H ₁		071	<u>L</u>	1.982
Mass Mois	st Soil + Container)	155.76	144.19	633.7	5	H ₂		060	D ₂	1.968
	y Soil + Container		,	133.05	123.54	544.1	4	H ₃	4.0	050	D_3	2.001
	Mass Container	(g) 39.33		39.16	38.75	205.1	4	H ₄	4.0	092	D_4	2.000
WA	ATER CONTENT	(%) 24.42		24.19 24.35 26.43 A					Heigh	nt A	verag	je Diameter
Avg. Initial	l Water Content, W4	(%) 24.32		Final W _{at} : Slice; X Whole Spec.				(in)	4.0	068	(in)	1.988
See attache	ed data sheet(s) fo	or additional wate	r conten	ts				(cm)	10.	333	(cm)	5.049
Soil N	Soil Masses Initial Final Summary of Ir Container No. - - Initial Area (cm²) 20.021 Mass Moist Soil + Tare (g) 421.72 633.75 Initial Total Volume (cm³) 206.882 Mass Dry Soil + Tare (g) 339.00 544.14 Initial Mass Moist Soil (g) 421.72 Mass Tare (g) 0.00 205.14 Mass Dry Soil (g) 339.00						of Ini	tial Soil	l Prop	erties		
Mass D	st Soil + Tare (g) ry Soil + Tare (g)	339.00 5 0.00 2	44.14	lni	tial Total Volum tial Mass Moist	ea (cm²) 20.0 ne (cm³) 206. Soil (g) 421 Soil (g) 339	021 882 .72 .00		nitial M	Dry Unit W oist Unit W	/eight (Void R uration	(%) 127.26 (%) 93.67
Mass D Mass Moist	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g)	339.00 5 0.00 2 421.72 4	44.14 05.14 28.61	lni	tial Total Volum tial Mass Moist Mass Dry	ea (cm²) 20.0 ne (cm³) 206. Soil (g) 421 Soil (g) 339	021 882 .72 .00 40		nitial Mo	Dry Unit W oist Unit W Initial ree of Satu	eight (Void Ruration ume (c	(%) 127.26 (%) 127.26 (%) 93.67
Mass D Mass Moist	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g)	339.00 5 0.00 2 421.72 4 uctivity, cm/s	44.14 05.14 28.61	Initia Initia Afte After Co	tial Total Volum tial Mass Moist Mass Dry al Moisture Con	ea (cm²) 20.0 (ne (cm³) 206.0 (soil (g) 421 (soil (g) 339 (tent (%) 24.0 (height (itial 6.80) ase 6.79 (soil (g) 6.80) (soil (021 882 .72 .00 40	Init	ple (cm) 33 32	Dry Unit W oist Unit W Initial ree of Satu Pore Vol	Veight (Void Ruration ume (coved e (cm³)	(%) 93.67 (m³) 88.30
Mass D Mass Moist Mean Hy	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.50E-	339.00 5. 0.00 2. 421.72 4 uctivity, cm/s	44.14 05.14 28.61 sec	Initia Afte After Co	tial Total Volum tial Mass Moist	ea (cm²) 20.0 ne (cm³) 206. Soil (g) 421 Soil (g) 339 tent (%) 24. Pistor Height (6.800 ase 6.790 fest 6.991	021 882 .72 .00 40	Sam Length 10.3 10.3 10.3	ple (cm) 33 32 30 06	Dry Unit W Initial ree of Satu Pore Vol Obsen \(\Delta \) Volume 0 -1.6 -2.0 4.9	reight (Void Ruration ume (curation (cm³))	127.26 1
Mass D Mass Moist	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.50E-0 Eff. Conso Top	339.00 5. 0.00 2. 421.72 4 uctivity, cm/s 07	05.14 28.61 Sec Outf	Afte After Co	tial Total Volum tial Mass Moist	ea (cm²) 20.0 (ne (cm³) 206.0 (soil (g) 421 (soil (g) 339 (tent (%) 24.0 (height (itial 6.80) ase 6.79 (soil (g) 6.80) (soil (021 882 .72 .00 40 (in) 6 3 8	Sam Length 10.3 10.3	ple (cm) 33 32 30 06	Dry Unit W oist Unit W Initial ree of Satu Pore Vol Obsen Δ Volume 0 -1.6 -2.6	Veight (Void Ruration ume (Coved (cm³))	127.26 1
Mass D Mass Moist Mean Hy	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.50E-	339.00 5. 0.00 2. 421.72 4 uctivity, cm/s	05.14 28.61 Sec Outf Infl	Initia Afte After Co	tial Total Volum tial Mass Moist	ea (cm²) 20.0 ne (cm³) 206. Soil (g) 421 Soil (g) 339 tent (%) 24. Pistor Height 6.800 ase 6.790 est 6.991 Head Loss	021 882 .72 .00 40 (in) 6 3 8	Sam Length 10.3 10.3 10.4 of Initia	ple (cm) 33 32 30 06	Dry Unit W oist Unit W Initial ree of Satu Pore Vol Obsen Δ Volume 0 -1.6 -2.0 4.9	Veight (Void Ruration ume (Coved (cm³))	127.26 1
Mass D Mass Moist Mean Hy Trial	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.50E-(339.00 5. 0.00 2. 421.72 4 uctivity, cm/s 07 I Pressure Bottom (psi)	05.14 05.14 28.61 Sec Outf Infl Ra 0.4	After After Co	tial Total Volum tial Mass Moist	ea (cm²) 20.0 he (cm³) 206. Soil (g) 421 Soil (g) 339 tent (%) 24. Pistor Height 6.800 ase 6.790 est 6.991 Head Loss (cm) 402.33	021 882 .72 .00 40 (in) 6 3 8	Sam Length 10.3 10.3 10.4 of Initial	ple (cm) 33 32 30 06	Dry Unit W oist Unit W Initial ree of Satu Pore Vol Obsen \(\Delta \) Volume -1.6 -2.0 4.9 Hydraulic Gradient 38.73	Veight (Void Ruration ume (Coved (cm³))	pcf) 127.26 datio 0.74 (%) 93.67 cm³) 88.30 Sample Area (cm²) 20.021 19.868 19.678 20.006 Hydraulic Conductivity (cm/sec)
Mass D Mass Moist Mean Hy Trial	st Soil + Tare (g) ry Soil + Tare (g) Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 4.50E-0 Eff. Conso Top (psi) 11.02	339.00 5. 0.00 2. 421.72 4 uctivity, cm/s O7 I Pressure Bottom (psi) 16.45	0.3 05.14 05.14 28.61 Sec Outf Infl Ra 0.3	After Co	tial Total Volum tial Mass Moist	ea (cm²) 20.0 le (cm³) 206. Soil (g) 421 Soil (g) 339 tent (%) 24. Pistor Height 6.80 ase 6.79 est 6.99 Head Loss (cm) 402.33 396.73 393.89	021 882 .72 .00 40 (in) 6 3 8	Sam Length 10.3 10.3 10.4 of Initial ead Los	ple (cm) 33 32 30 06	Dry Unit Wooist U	Veight (Void Ruration ume (Coved (cm³))	127.26 1



TBPE Firm R	eaistration	No.	F-3257
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Summary	/ of End-c	of-Test Soil Properties	
Final Area (cm²)	20.006	Final Dry Unit Weight (pcf)	101.65
Final Total Volume (cm³)	208.187	Final Moist Unit Weight (pcf)	128.52
Final Mass Moist Soil (g)	428.61	Final Void Ratio	0.76
Mass Dry Soil (g)	339.00	Final Degree of Saturation (%)	100.00
Final Moisture Content (%)	26.43	Final Pore Volume (cm ³)	89.61

Figure B-10

PROJECT ASF09-192-03 Elapsed Time, min 0 500 1000 1500 2000 2500 3000 0.008 0.004 Flow Rate, cm³/sec 0 -0.004-0.008 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 500 1000 1500 2000 2500 3000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 12 to 14 feet ATTERBERG LIMITS: LL = 60; PL = 31; PI = 29
ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 4.50E-07 cm/sec

MATERIAL DESCRIPTION: Fat Clay (CH)

FIGURE B-11



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

Location:	Rancho Viejo Webb County	, Texas					_	R-K Proj	ect #:_	AS	SF09-	192-03
Me		Method B; Method E;		thod C; rmeant L	Cell No. .iquid Used:	1 Deaii	red Wat			c Gravity sured		2.80 Assumed
	3	X Field Extru Remolded Vertical Ohery: "Ca	asagran	Remo	Ta olded T contal e; Cut	amper Fo	eight (lbf orce (lbf e ;	Wire Sa Saw & Str	w; [aight Ed		f Laye	es: es:
	Vater tent (W)	Ini Top (W1		imming I ottom (W2)		_	nal, W _{at} e below)		I Soil I Height	/leasure		ts (inches) Diameter
	Container)	A53	EL1	(36		H ₁	2.93	38	D ₁	1.459
Mass Mois	t Soil + Container	(g) 129.99)	151.77	360.83	3	54.06	H ₂	2.9		D ₂	1.446
Mass Dry	y Soil + Container			128.15	331.31		16.65	H ₃	2.94		D_3	1.446
	Mass Container			39.26	214.89		204.74	H ₄	2.9		D_4	1.463
	ATER CONTENT								Height			e Diameter
	Water Content, W4			Final W _{at} : Slice; X Whole Spec.			(in)	2.9		(in)	1.454	
See attache	ed data sheet(s) fo	r additional wate	er conten	ts				(cm)	7.49	•	(cm)	3.692
Mass Mois	Soil Masses Initial Final Summary of Initial Area (cm²) 10.705 Mass Moist Soil + Tare (g) 142.48 354.06 Initial Total Volume (cm³) 80.247 Mass Dry Soil + Tare (g) 111.91 316.65 Initial Mass Moist Soil (g) 142.48 Mass Tare (g) 0.00 204.74 Mass Dry Soil (g) 111.91					j	Initial Dry Unit Weight (pcf) 87.06 Initial Moist Unit Weight (pcf) 110.84 Initial Void Ratio 1.01 Initial Degree of Saturation (%) 75.84					
		0.00 2	16.65	lni	tial Mass Moist	Soil (g) Soil (g)	142.48	3		Initial V ee of Satur	oid R ation	atio 1.01 (%) 75.84
Mass Moist	Mass Tare (g) Soil, M_i or M_f (g)	0.00 2 142.48 1	16.65 04.74 49.32	lni	tial Mass Moist Mass Dry	Soil (g) Soil (g) tent (%)	142.48 111.91	3	ial Degre	Initial V ee of Satur	oid R ration me (c	1.01 (%) 75.84 m³) 40.31
Mass Moist	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 7.97E-0	0.00 2 142.48 1 uctivity, cm/s	16.65 04.74 49.32 sec	Initia Initia Afte After Co	tial Mass Moist Mass Dry al Moisture Con In r Saturation Ph bnsolidation Ph End of T	Soil (g) Soil (g) tent (%) He itial ase ase	142.48 111.91 27.32	Init	ple (cm) 206 93	Initial V ee of Satur Pore Volu	oid R ration me (c ed (cm³)	atio 1.01 (%) 75.84
Mass Moist Mean Hy	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 7.97E-0	0.00 2 142.48 1 uctivity, cm/s	16.65 04.74 49.32 sec	Initia Afte After Co	Itial Mass Moist Mass Dry Al Moisture Con In r Saturation Ph bonsolidation Ph End of T	Soil (g) Soil (g) tent (%) He itial 5 ase 5 ase 5	142.48 1111.91 27.32 Piston eight (in) 5.666 5.657 5.650	Sam Length 7.49 7.49 7.49	ple (cm) 296 93 90 90	Initial Vee of Satur Pore Volume Observe Δ Volume 0 -1.2 -1.6 -0.1	ration me (coed (cm³)	atio 1.01 (%) 75.84 m³) 40.31 Sample Area (cm²) 10.705 10.550 10.340 10.327 Hydraulic
Mass Moist	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 7.97E-0 Eff. Consol	0.00 2 142.48 1 uctivity, cm/s	16.65 04.74 49.32 sec	Afte After Co	Itial Mass Moist Mass Dry Al Moisture Con In r Saturation Ph bonsolidation Ph End of T Outflow (pore	Soil (g) Soil (g) tent (%) He itial ase ase	142.48 111.91 27.32 Piston eight (in) 5.666 5.657 5.650	Sam Length 7.49 7.49	pple (cm) 2006 900 900 H	Initial Vee of Satur Pore Volume Observed Volume 0 -1.2 -1.6	ration me (coed (cm³)	atio 1.01 (%) 75.84 m³) 40.31 Sample Area (cm²) 10.705 10.550 10.340 10.327 Hydraulic Conductivity
Mass Moist Mean Hy	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 7.97E-0	0.00 2 142.48 1 uctivity, cm/s	16.65 04.74 49.32 sec Outt	Initia Afte After Co	Itial Mass Moist Mass Dry Al Moisture Con In r Saturation Ph bonsolidation Ph End of T	Soil (g) Soil (g) tent (%) tent (%) He itial ase ase est Head L	142.48 1111.91 27.32 Piston eight (in) 5.666 5.657 5.650 5.650	Sam Length 7.49 7.49 7.49 7.49	pple (cm) / 2000 000 000 000 000 000 000 000 000	Initial Vee of Satur Pore Volume Observed Volume 0 -1.2 -1.6 -0.1	ration me (coed (cm³)	atio 1.01 (%) 75.84 m³) 40.31 Sample Area (cm²) 10.705 10.550 10.340 10.327 Hydraulic
Mass Moist Mean Hy Trial	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 7.97E-0 Eff. Conso Top (psi)	0.00 2 142.48 1 uctivity, cm/s	16.65 04.74 49.32 sec Outtl Infl Ra	Afte After Co	Itial Mass Moist Mass Dry Al Moisture Con In r Saturation Ph bonsolidation Ph End of The Outflow (pore volumes)	Soil (g) Soil (g) tent (%) tent (%) He ase ase est Head L (cm	142.48 111.91 27.32 Piston eight (in) 5.666 5.657 5.650 -oss 1)	Sam Length 7.49 7.49 7.49 7.49 4 Head Los	ple (cm) 2000	Initial Vee of Satur Pore Volume Observed Volume 0 -1.2 -1.6 -0.1	ration me (coed (cm³)	atio (%) 75.84 75.84 40.31 Sample Area (cm²) 10.705 10.550 10.340 10.327 Hydraulic Conductivity (cm/sec)
Mass Moist Mean Hy Trial	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 7.97E-(Eff. Conso Top (psi) 11.33	0.00 2: 142.48 1 uctivity, cm/s Pressure Bottom (psi) 14.35	16.65 04.74 49.32 sec Outti Infil Ra 0.	Afte After Co	Itial Mass Moist Mass Dry Mass Dry In Saturation Phonsolidation Ph	Soil (g) Soil (g) tent (%) I He itial ase ase Cest Head L (cm 231.2 227.5	142.48 1111.91 27.32 Piston eight (in) 5.666 5.657 5.650 5.650 21 91 29 69 18	Sam Length 7.49 7.49 7.49 % of Initia Head Los	ple (cm) / Per (cm) /	Observed Volume of 1.2 -1.6 -0.1 vydraulic radient 30.87 39.69	ration me (coed (cm³)	atio (%) 75.84 75.84 40.31 Sample Area (cm²) 10.705 10.550 10.340 10.327 Hydraulic Conductivity (cm/sec) 7.23E-07



TBPE Firm R	eaistration	No.	F-3257
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Summary of End-of-Test Soil Properties								
Final Area (cm²)	10.327	Final Dry Unit Weight (pcf)	90.32					
Final Total Volume (cm³)	77.347	Final Moist Unit Weight (pcf)	120.52					
Final Mass Moist Soil (g)	149.32	Final Void Ratio	0.94					
Mass Dry Soil (g)	111.91	Final Degree of Saturation (%)	100.00					
Final Moisture Content (%)	33.43	Final Pore Volume (cm ³)	37.41					

Figure B-12

PROJECT ASF09-192-03 Elapsed Time, min 0 500 1000 1500 2000 2500 3000 0.008 0.004 Flow Rate, cm³/sec -0.004-0.008 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 500 1000 1500 2000 2500 3000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 13 to 14 feet ATTERBERG LIMITS: LL = 64; PL = 29; PI = 35
ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 7.97E-07 cm/sec

MATERIAL DESCRIPTION: Fat Clay (CH)

FIGURE B-13



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

Location:	Rancho Viejo Webb County							R-K Pro	ject #:	: .	ASF09-	-192-03
_	hod A;	4 Method B; Method E;		thod C; rmeant L	Cell No. iquid Used:		3 eaired Wa	ater		ific Grav		2.87 Assumed
	TP-2 Tu 6 20-21 of trimming peri	X Field Extru Remolded Vertical phery: "Ca	asagran	Remo	Ta olded T contal	Гатре tting S	Weight (II r Force (II h <u>oe ;</u>	bf): bf): X Wire S e Saw & St	aw;	Drop Oth	of Laye in Inch	ers:
	ater		-	imming l			Final, Wa					ts (inches)
Cont	ent (W)	Top (W1) Bo	ottom (W2)		3)	(see belov		Height			Diameter
Mana Maint	Container	_	,		A54 122.75		 E02.46	H ₁		677 684	D ₁	1.960 1.963
	Soil + Container Soil + Container				112.75		502.46 459.22	H ₂		690	D ₂	1.903
Mass Dry	Mass Container	(0)			38.80		200.63	H ₄		694	D_3 D_4	1.984
\/\A	TER CONTENT	(0)			13.22		16.72	Averag				e Diameter
	Water Content, W4	, ,		Final W _a		Y \//	hole Spec			686	(in)	1.969
	d data sheet(s) fo		er conten		gi. Olice ,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	поис орсс	(cm)		823	(cm)	5.002
								, ,			(0)	0.002
Soil Mass Mois Mass Dry	Container No. st Soil + Tare (g)	- 294.78 5	Final CC1 02.46	Ini	Initial Ard	ea (cm²	²) 19.65		Initial	Dry Unit \		
	Mass Tare (g) Mass Tare (g) Soil, M _i or M _f (g)	0.00 2	59.22 00.63 01.83	lni	tial Mass Mois Mass Dry Il Moisture Cor	t Soil (g / Soil (g	294.7 (g) 258.5	78 19 In		gree of Sa	l Void R	(%) 82.55
Mass Moist	Mass Tare (g) Soil, M _i or M _f (g)	0.00 2 294.78 3	00.63 01.83	lni	tial Mass Mois Mass Dry	t Soil (g / Soil (g	294.7 g) 258.5 h) 14.00	78 19 10 10	itial Deg	Initia gree of Sa Pore Vo	Il Void R turation olume (c	(%) 82.55 cm³) 43.84
Mass Moist	Mass Tare (g)	0.00 2 294.78 3 uctivity, cm/s	00.63 01.83	Initia Initia	tial Mass Mois Mass Dry al Moisture Cor	t Soil (gy Soil (gontent (%))	294.7 (g) 258.5	Sar Lengt 6.8 6.8		Initia gree of Sa	Il Void R turation clume (cerved ne (cm³) 0	(%) 82.55
Mass Moist S	Mass Tare (g) Soil, M _i or M _f (g) draulic Cond	0.00 2 294.78 3 uctivity, cm/s	00.63 01.83 sec	Initia Afte After Co	tial Mass Mois Mass Dry al Moisture Con Ir r Saturation Pr onsolidation Pr	t Soil (g y Soil (g ntent (%	294.7 258.5 14.00 Piston Height (in 5.174 5.176 5.175	(8) Sar Lengt 6.8 6.8 6.8	nple h (cm) 323 324 323	Initia gree of Sa Pore Vo Obse Δ Volum C 00	Il Void R turation blume (c erved he (cm³) 0 0 .5	atio 0.49 (%) 82.55 cm³) 43.84 Sample Area (cm²) 19.650 19.648 19.575 19.561 Hydraulic
Mass Moist	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 8.30E-0 Eff. Conso	0.00 2 294.78 3 uctivity, cm/s 1 Pressure Bottom	00.63 01.83 sec Outf	Afte After Co	tial Mass Mois Mass Dry al Moisture Cor Ir r Saturation Pr consolidation Pr End of Outflow (pore	t Soil (g y Soil (g nitial nase nase Test Hea	294.7 258.5 3) 258.5 14.00 Piston Height (in 5.174 5.176 5.175 5.175	Sar (2) Sar (3) Lengt (6.8) 6.8 (6.8) 6.8	nple h (cm) 323 324 323 323	Initia gree of Sa Pore Vo Obse Δ Volum C -0 -0 Hydraulie	Il Void R turation blume (c erved ne (cm³) 0 0 .5 .1	(%) 82.55 (m³) 43.84 Sample Area (cm²) 19.650 19.648 19.575 19.561 Hydraulic Conductivity
Mass Moist S	Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 8.30E-0	0.00 2 294.78 3 uctivity, cm/s	00.63 01.83 sec Outf	Initia Afte After Co	tial Mass Mois Mass Dry al Moisture Cor Ir r Saturation Pr consolidation Pr End of	t Soil (graph of Soil	294.7 258.5 14.00 Piston Height (in 5.174 5.176 5.175 5.175	(8) Sar Lengt 6.8 6.8 6.8	nple h (cm) 323 324 323 323	Initia gree of Sa Pore Vo Obse Δ Volum 000 Hydraulic Gradien	Il Void R turation blume (c erved ne (cm³) 0 0 .5 .1	atio 0.49 (%) 82.55 cm³) 43.84 Sample Area (cm²) 19.650 19.648 19.575 19.561 Hydraulic
Mass Moist S	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 8.30E-0 Eff. Conso	0.00 2 294.78 3 uctivity, cm/s 1 Pressure Bottom	00.63 01.83 sec Outt	Afte After Co	tial Mass Mois Mass Dry al Moisture Cor Ir r Saturation Pr consolidation Pr End of Outflow (pore	t Soil (gy Soil (gy Soil (gy Soil (gy Intent (%)))) nitial mase mase Test Hea (1)	Piston Height (in 5.174 5.175 5.175 dd Loss cm) 48.45 41.65	Sar (2) Sar (3) Lengt (6.8) 6.8 (6.8) 6.8	nple h (cm) 323 324 323 323	Obse A Volum O. -0 Hydraulic Gradien 51.07	Il Void R turation blume (c erved ne (cm³) 0 0 .5 .1	(%) 82.55 (m³) 43.84 Sample Area (cm²) 19.650 19.648 19.575 19.561 Hydraulic Conductivity
Mass Moist S Mean Hyc	Mass Tare (g) Soil, M _i or M _f (g) draulic Cond 8.30E-0 Eff. Conso Top (psi)	0.00 2 294.78 3 uctivity, cm/s 1 Pressure Bottom (psi)	00.63 01.83 sec Outt Infl Ra	Afte After Co	Itial Mass Mois Mass Dry Moisture Cor Ir T Saturation Pr End of Outflow (pore volumes)	t Soil (g/2 Soil	Piston Height (in 5.174 5.175 5.175 d Loss cm) 48.45 41.65 62.17 49.77	Sar Lengt 6.8 6.8 6.8 % of Initi	nple h (cm) 323 324 323 323	Obse Δ Volum -0 -0 -0 Hydrauli Gradien 51.07 53.08 51.26	Il Void R turation blume (c erved ne (cm³) 0 0 .5 .1	(%) 82.55 (m³) 43.84 Sample Area (cm²) 19.650 19.648 19.575 19.561 Hydraulic Conductivity (cm/sec)
Mass Moist s Mean Hyo Trial	Mass Tare (g) Soil, M _i or M _f (g) draulic Condu 8.30E-0 Eff. Conso Top (psi) 6.82	0.00 2 294.78 3 uctivity, cm/s I Pressure Bottom (psi) 11.64	00.63 01.83 sec Outfl Infl Ra 1.4	Afte After Co	Itial Mass Mois Mass Dry Mass Dry Moisture Cor Ir T Saturation Pr End of Outflow (pore volumes) 0.87	t Soil (grant /	Piston Height (in 5.174 5.175 5.175 dd Loss cm) 48.45 41.65	(8 8 9 In (1) Sar (1) Lengt (1) 6.8 6.8 6.8 W of Initi Head Lo 98.05	nple h (cm) 323 324 323 323	Obse Δ Volum -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0	Il Void R turation blume (c erved ne (cm³) 0 0 .5 .1	Sample Area (cm²) 19.650 19.648 19.575 19.561 Hydraulic Conductivity (cm/sec) 9.56E-07

R	A	E	3 /	4		
K		S	T	N	E	R

TBPE Firm Registration No. F-3257

Summary of End-of-Test Soil Properties								
Final Area (cm²)	19.561	Final Dry Unit Weight (pcf)	120.95					
Final Total Volume (cm³)	133.472	Final Moist Unit Weight (pcf)	141.17					
Final Mass Moist Soil (g)	301.83	Final Void Ratio	0.48					
Mass Dry Soil (g)	258.59	Final Degree of Saturation (%)	100.00					
Final Moisture Content (%)	16.72	Final Pore Volume (cm ³)	43.24					

Figure B-14

PROJECT ASF09-192-03 Elapsed Time, min 0 500 1000 1500 2000 2500 3000 0.008 0.004 Flow Rate, cm³/sec 0 -0.004-0.008 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 500 1000 1500 2000 2500 3000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 20 to 21 feet ATTERBERG LIMITS: LL = 57; PL = 24; PI = 33
ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 8.30E-07 cm/sec

MATERIAL DESCRIPTION: Fat Clay (CH), gray

FIGURE B-15



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

Project: Rar Location: We		, Texas						R-K P	oject #	t:/	ASF09-	-192-03
Test Type AS Method	A;	I Method B; Method E;		thod C; rmeant	Cell No. Liquid Used:		1 Deaired Wa	ater		ific Gravi		2.75 Assumed
Sample Boring No: TP-2 Tube: Spoon: Constant Effort Blows/Tamps per Layer: Sample No: 9-V X Field Extruded Tamper Weight (lbf): No. of Layers: Depth (ft): 22-24 Remolded Remolded Tamper Force (lbf): Drop in Inches: Method of trimming periphery: "Casagrande" Lathe; Cutting Shoe; X Wire Saw; Other Method of trimming ends: X Wire Saw & Sharp (knife) Straight Edge; Wire Saw & Straight Edge; Wire Saw												
Wate			-		Location	0)	Final, W					ts (inches)
Content	Container I	Top (W ²	I) B	ottom (W: A15	2) Sides (W M17	3)	(see belov	V) H ₁	Heigh	.121	D ₁	Diameter 1.881
Mass Moist Soil			3	166.36	162.57	7	400.00	H ₂		.118	D ₁	1.876
Mass Dry Soil		,		147.06	143.88	3	340.00	H ₃	4.	.119	D_3	1.862
Ma	ss Container	(g) 39.11		39.02	38.85		0.00	H ₄	4.	.120	D_4	1.840
WATER	CONTENT (%) 17.76		17.86	17.79		17.65	Avera	Average Height		Average Diameter	
Avg. Initial Wate	er Content, W4	(%) 17.80		Final W	V _{at} : Slice ;	ΧV	Vhole Spec	. (ir	1) 4	.120	(in)	1.865
See attached dat	ta sheet(s) fo	r additional wat	er conten	ts				(cm) 10	0.464	(cm)	4.736
Mass Moist So Mass Dry So	ontainer No. oil + Tare (g) oil + Tare (g) ass Tare (g)	341.53 3 0.00	Final - - - - - - - - - - - - - - - - - - -	Summary of Initial				20 64 32 53	Initial Dry Unit Weig Initial Moist Unit Weig Initial Moist Unit Weig Initial Vo Initial Degree of Satura Pore Volum		Veight (Void R uration	pcf) 136.23 atio 0.48 (%) 101.02
Mean Hydrau	ulic Condu	ıctivity, cm/	sec				Piston		ample	Obser		Sample
1.23E-07			Height (in) L			10	Length (cm) Δ Volume (cm) 10.464 0 10.465 -20.8 10.467 -1.8 10.467 1.6		.8 8	17.620		
	Eff. Consol			flow:	Outflow	He	ad Loss	% of In	itial	Hydraulio		Hydraulic
Trial	Top (psi)	Bottom (psi)		low atio	(pore volumes)		(cm)	Head L		Gradient		Conductivity (cm/sec)
43	5.55	10.09	0.	88	3.41	3	338.66 327.56	96.72	2 -	32.36 31.30		1.30E-07
44	5.57	10.19	0.	85	3.49	3	344.29 337.09	97.9 ⁻		32.89 32.21		1.32E-07
45	5.64	10.22	1.	00	3.62	3	341.57 331.57	97.07		32.63 31.68		1.15E-07
46	5.67	10.26	0.	90	3.73		342.28 332.38	97.1 ²		32.70 31.76		1.14E-07

R	A	\ E	3 /	4		
K	1	S	T	N	E	R

TBPE Firm Registration No. F-3257

Summary of End-of-Test Soil Properties								
Final Area (cm²)	15.608	Final Dry Unit Weight (pcf)	129.93					
Final Total Volume (cm³)	163.364	Final Moist Unit Weight (pcf)	152.86					
Final Mass Moist Soil (g)	400.00	Final Void Ratio	0.32					
Mass Dry Soil (g)	340.00	Final Degree of Saturation (%)	151.00					
Final Moisture Content (%)	17.65	Final Pore Volume (cm ³)	39.73					

Figure B-16

PROJECT ASF09-192-03 Elapsed Time, min 0 3000 6000 9000 12000 15000 18000 0.008 0.004 Flow Rate, cm³/sec 0 -0.004 -0.008 0.0001 Hydraulic Conductivity, cm/sec 1E-005 1E-006 1E-007 0 3000 6000 9000 12000 15000 18000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER
DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 22 to 24 feet ATTERBERG LIMITS: LL = 51; PL = 29; PI = 22
ORIENTATION: Vertical HYDRAULIC CONDUCTIVITY: 1.23E-07 cm/sec

MATERIAL DESCRIPTION: Fat Clay (CH), gray

FIGURE B-17



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HYDRAULIC CONDUCTIVITY TEST DATA

NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter

	Rancho Viejo Webb County							R-K Pro	ject #:	:	SF09	-192-03
Me	ASTM D5084 thod A; thod D;	Method B; Method E;		thod C; rmeant L	Cell No. Liquid Used:		2 Deaired Wa			fic Gravit	·	2.70 Assumed
Boring No: TP-2 Tube: Spoon: Constant Effort Blows/Tamps per Layer: Sample No: 9 X Field Extruded Tamper Weight (lbf): No. of Layers: Depth (ft): 22-24 Remolded Remolded Tamper Force (lbf): Drop in Inches: Wethod of trimming periphery: "Casagrande" Lathe; Cutting Shoe; X Wire Saw; Other Method of trimming ends: X Wire Saw & Sharp (knife) Straight Edge; Wire Saw & Straight Edge; Wire Saw												
					rimming Location ottom (W2) Sides (W3)				Initial Soil Measurer			
Con	Content (W) Top (W1) Container No. EG1			A42	M13	3)	(see below	W) H ₁	Height H₁ 5.556		Diameter 2.885	
Mass Mois	Mass Moist Soil + Container (g) 315.90				84.83		1623.50		•		D ₂	2.905
Mass Dry	y Soil + Containe			95.80	78.79		1404.40	Ū		522	D_3	3.320
	Mass Container (g) 208.90)	39.38	39.10		159.00		•		D_4	3.333
	WATER CONTENT (%) 15.65			16.16	15.22	L v	17.59		Average Height (in) 5.533		Average Diameter	
Avg. Initial Water Content, W4 (%) 15.68 See attached data sheet(s) for additional water conte				Final W	Slice ;	X	Whole Spec				(in)	
				ts				(cm)		.054	(cm)	7.901
Soil Masses Initial Final Container No. - - Mass Moist Soil + Tare (g) 1451.10 1623.50 Mass Dry Soil + Tare (g) 1245.40 1404.40 Mass Tare (g) 0.00 159.00 Mass Moist Soil, M _i or M _f (g) 1451.10 1464.50				Initial Area (cm²) 49.033 Initial Total Volume (cm³) 689.099 Initial Mass Moist Soil (g) 1451.10 Mass Dry Soil (g) 1245.40 Initial Moisture Content (%) 16.52				33 99 10 40 In	tial Soil Properties Initial Dry Unit Weight (pcf) 112.82 Initial Moist Unit Weight (pcf) 131.46 Initial Void Ratio 0.49 Initial Degree of Saturation (%) 90.22 Pore Volume (cm³) 227.99			
Mean Hy	draulic Cond	uctivity, cm/s	sec				Piston	San	nple	Obser	ved	Sample
5.54E-09				Initial After Saturation Phase After Consolidation Phase End of Test			Height (in 8.386 8.385 8.381 8.382	14.0 14.0 14.0	Length (cm) Δ Volum 14.054 0 14.053 -4 14.052 -3 14.052 -1		0	Area (cm²) 49.033 48.750 48.520 48.405
		l Pressure	4	flow:	Outflow	Не	ad Loss	% of Initi	al F	Hydraulic		Hydraulic
Trial	Top (psi)	Bottom (psi)		ow itio	(pore volumes)		(cm)	Head Los		Gradient		Conductivity (cm/sec)
12	6.16	11.35	0.8	86	0.05	- ;	385.26 383.96	99.66		27.42 27.32		5.46E-09
13	6.08	11.38	0.8	86	0.05	- ;	392.99 391.69	99.67		27.97 27.87		5.45E-09
14	6.01	11.34	0.9	92	0.06	- ;	395.20 392.70	99.37		28.12 27.95		5.56E-09
15	5.98	11.34	0.9	90	0.06		397.31 395.41	99.52		28.27 28.14		5.68E-09



Summary of End-of-Test Soil Properties										
Final Area (cm²)	48.405	Final Dry Unit Weight (pcf)	114.30							
Final Total Volume (cm ³)	680.199	Final Moist Unit Weight (pcf)	134.41							
Final Mass Moist Soil (g)	1464.50	Final Void Ratio	0.48							
Mass Dry Soil (g)	1245.40	Final Degree of Saturation (%)	100.00							
Final Moisture Content (%)	17.59	Final Pore Volume (cm ³)	219.09							

Figure B-18

PROJECT ASF09-192-03 Elapsed Time, min 0 5000 10000 15000 20000 25000 30000 0.001 0.0005 Flow Rate, cm³/sec 0 -0.0005-0.001 1E-007 Hydraulic Conductivity, cm/sec 1E-008 1E-009 1E-010 0 5000 10000 15000 20000 25000 30000 Elapsed Time, min

MEASUREMENT OF HYDRAULIC CONDUCTIVITY OF SATURATED POROUS MATERIALS USING A FLEXIBLE WALL PERMEAMETER

METHOD C: FALLING HEAD RISING TAIL WATER DE-AIRED TAP WATER AS PERMEANT FLUID

DEPTH: 22 to 24 feet ATTERBERG LIMITS: LL = 63; PL = 23; PI = 40 ORIENTATION: Horizontal HYDRAULIC CONDUCTIVITY: 5.54E-09 cm/sec

MATERIAL DESCRIPTION: Fat Clay (CH), gray, hard

FIGURE B-19

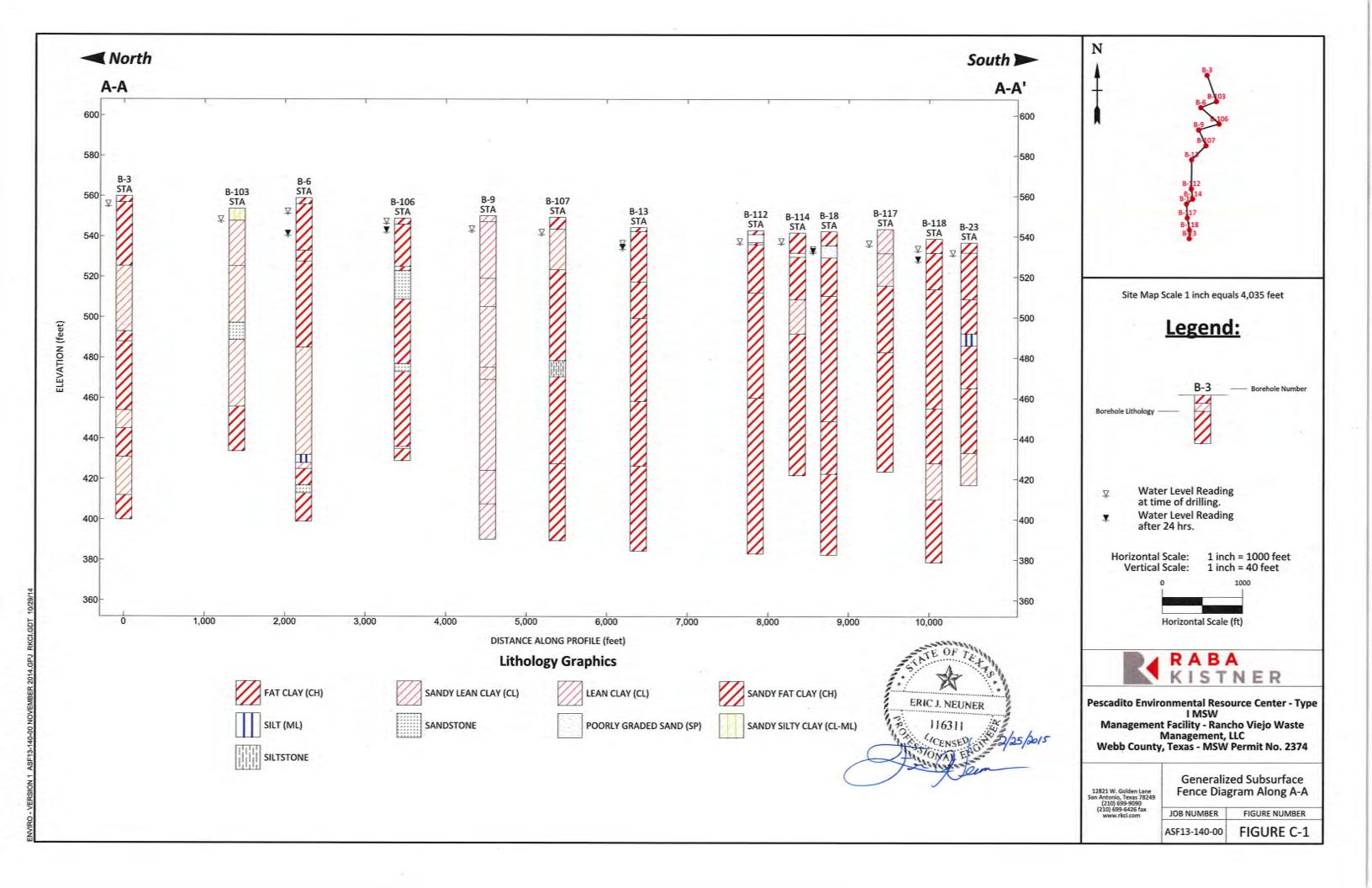


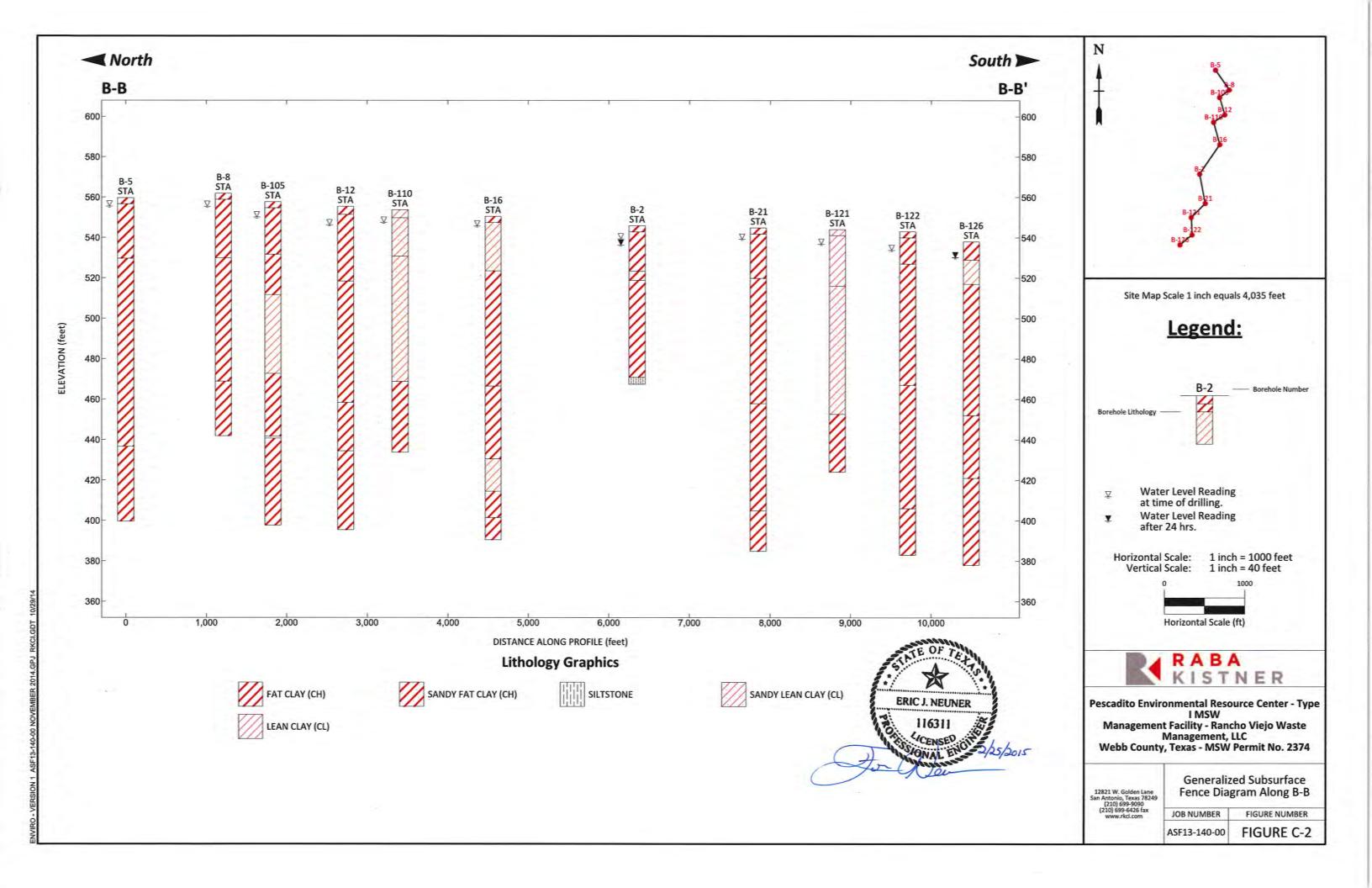
12821 West Golden Lane San Antonio, Texas 78249 (210) 699-9090 TEL (210) 699-6426 FAX www.rkci.com

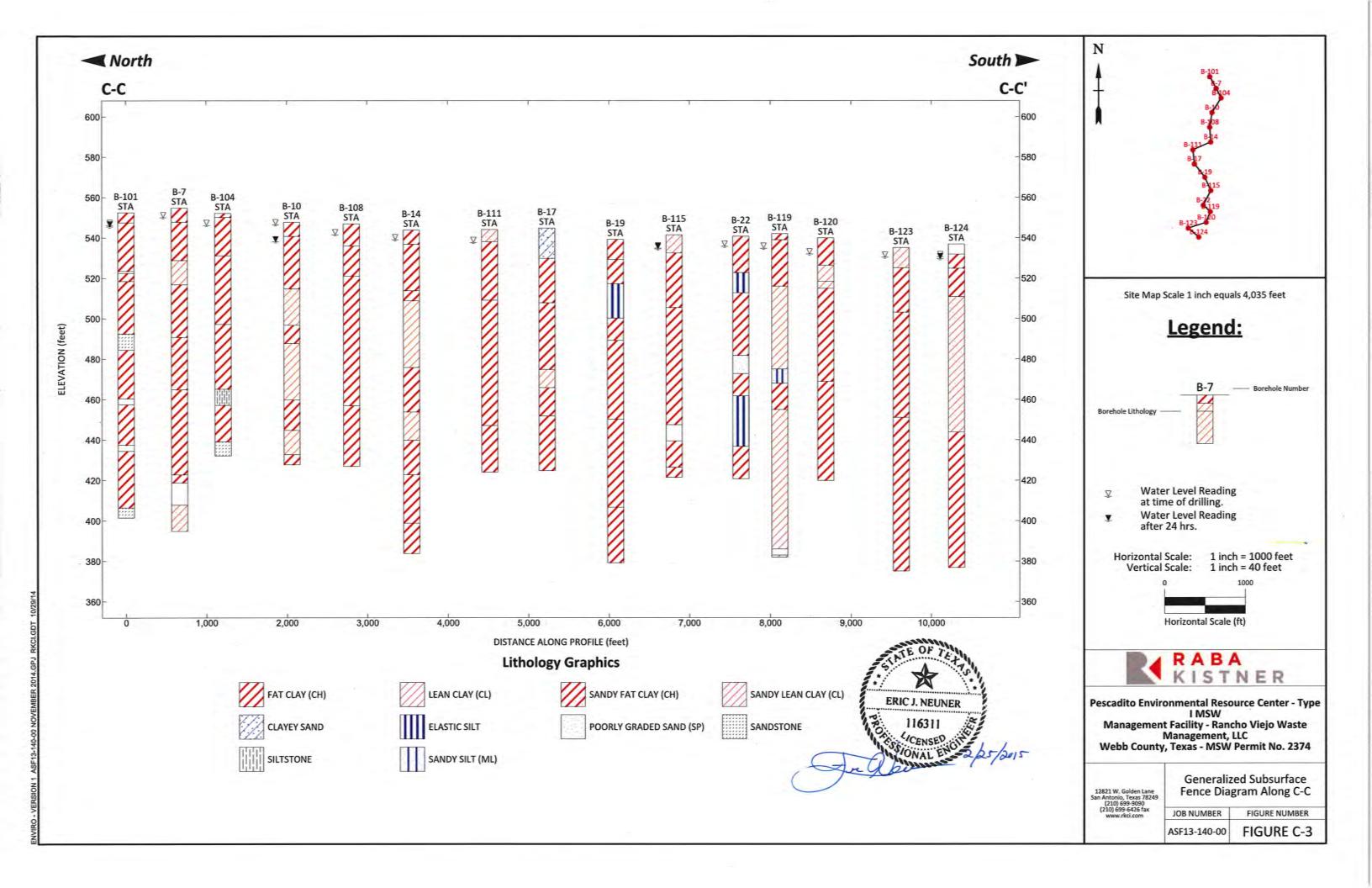
HYDRAULIC CONDUCTIVITY TEST DATA

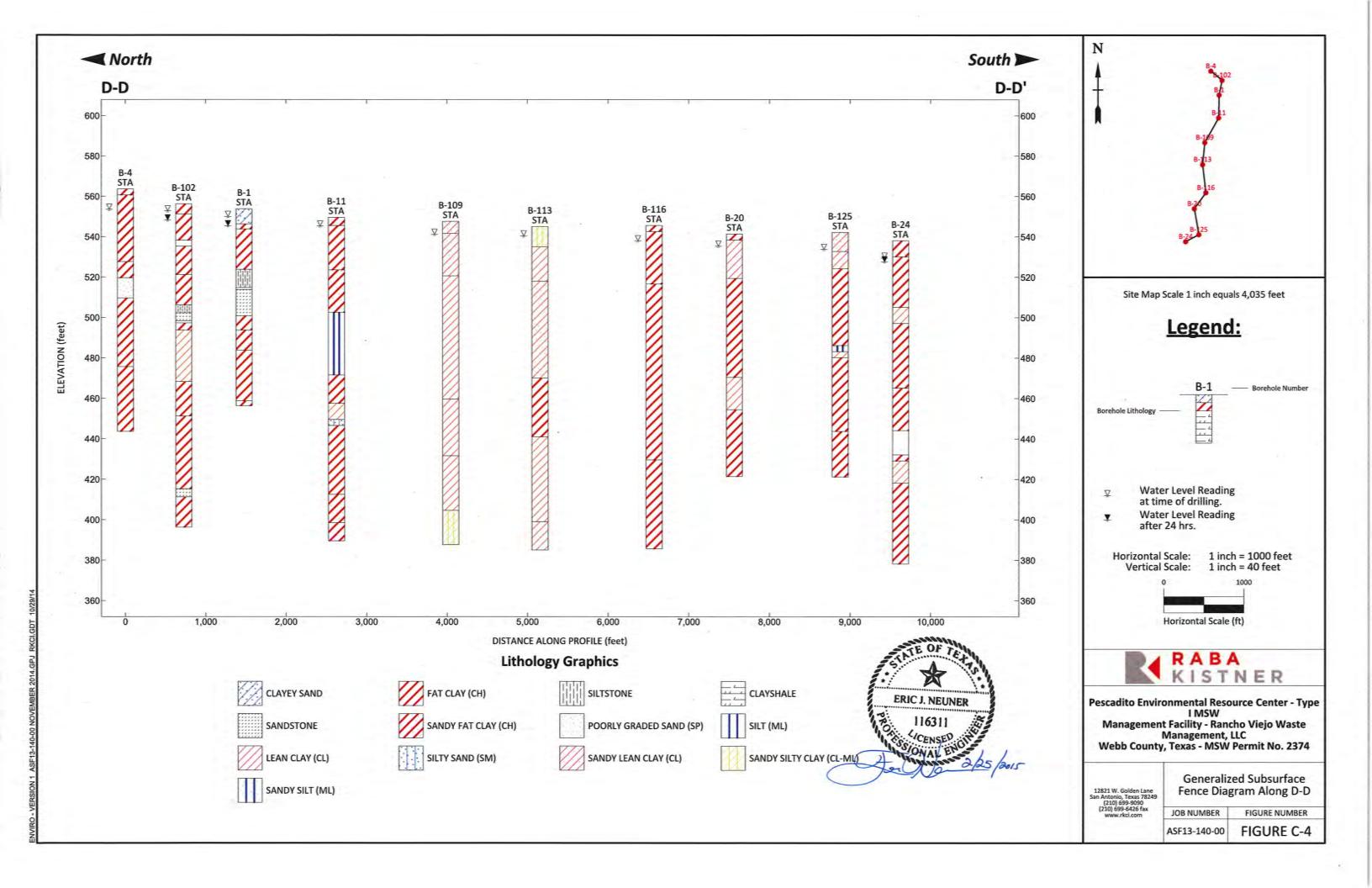
NEW TYPE I MSW LANDFILL FACILITY RANCHO VIEJO WASTE MANGEMENT, LLC LAREDO, WEBB COUNTY, TEXAS

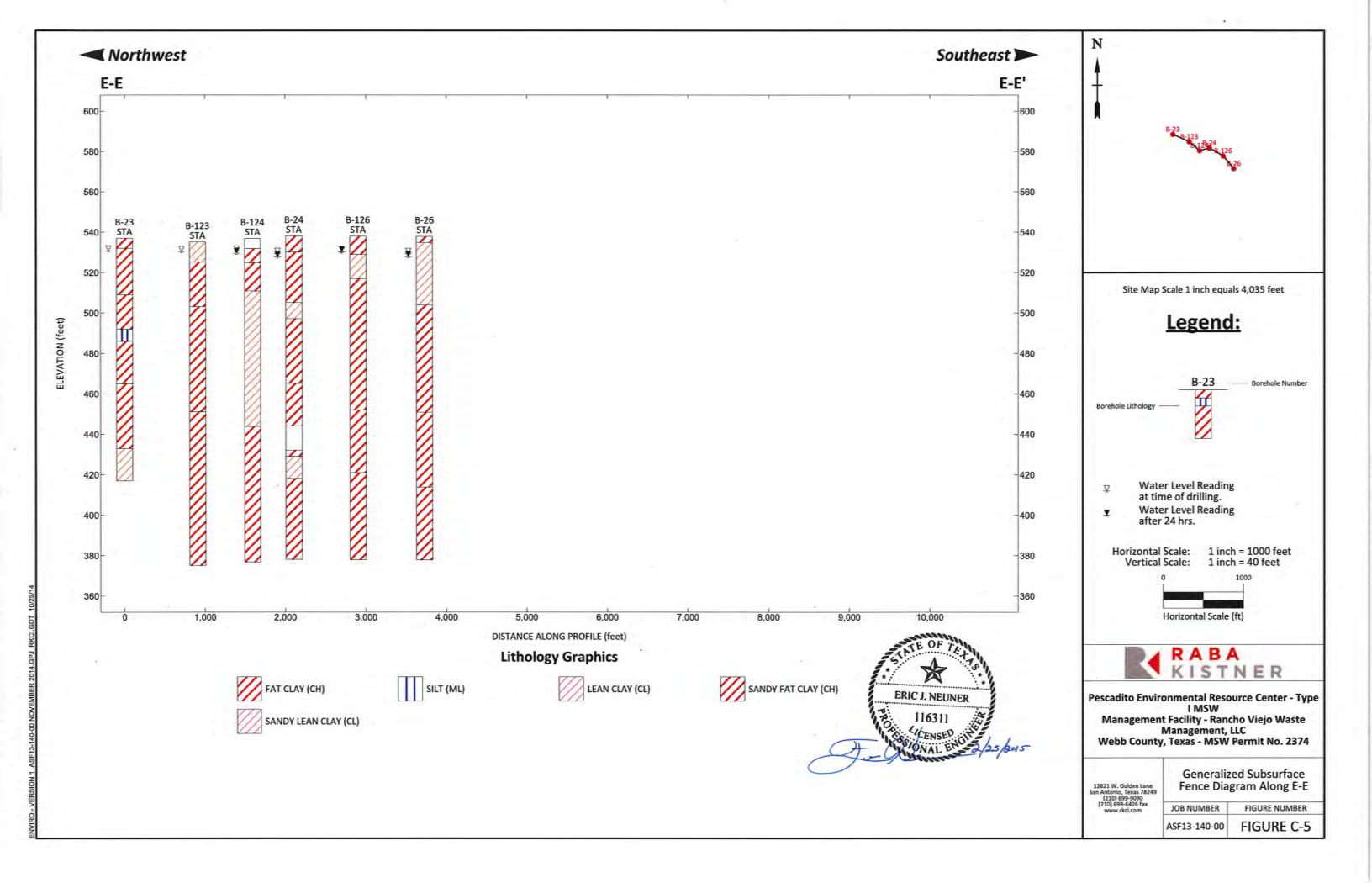


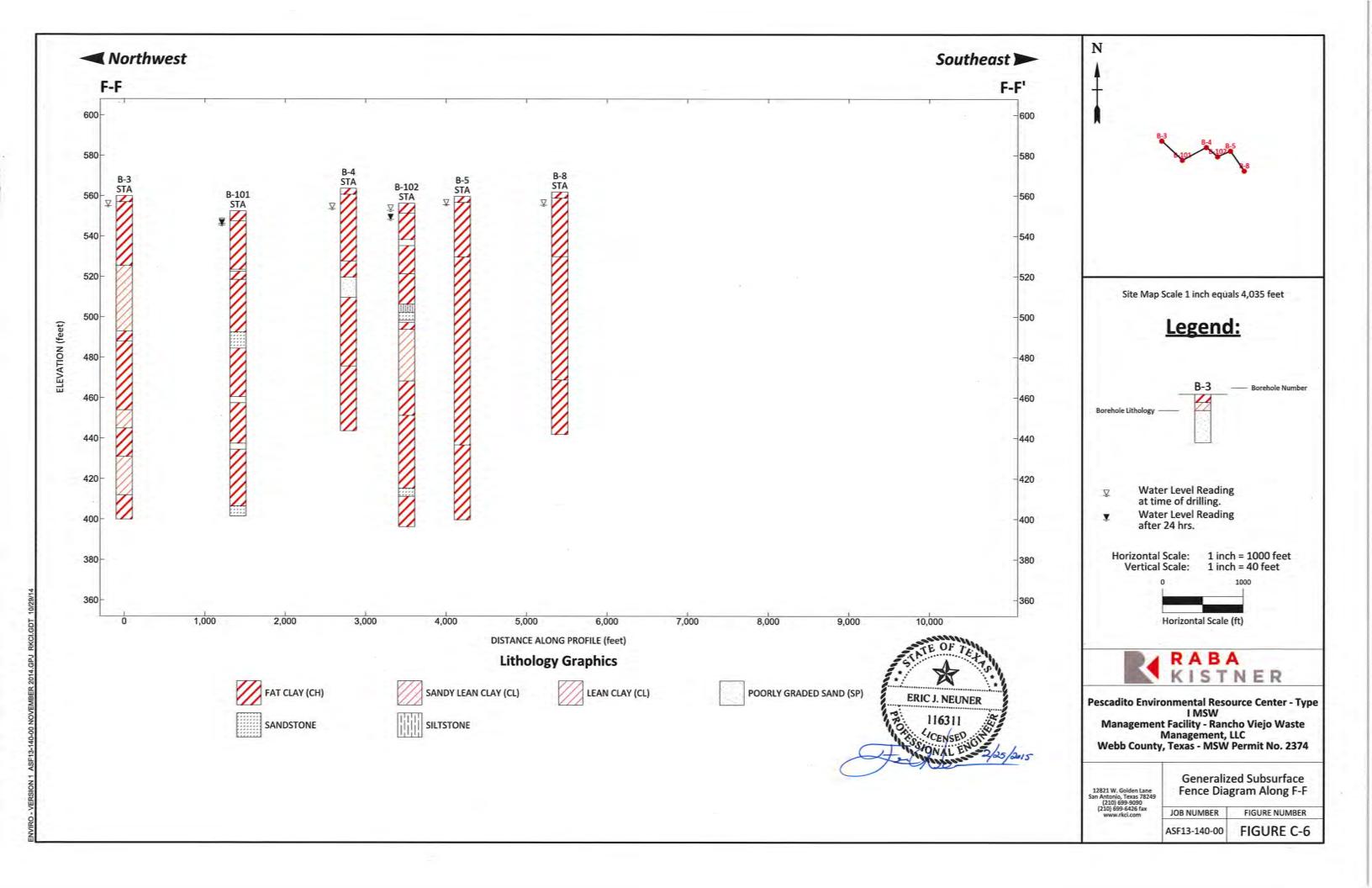


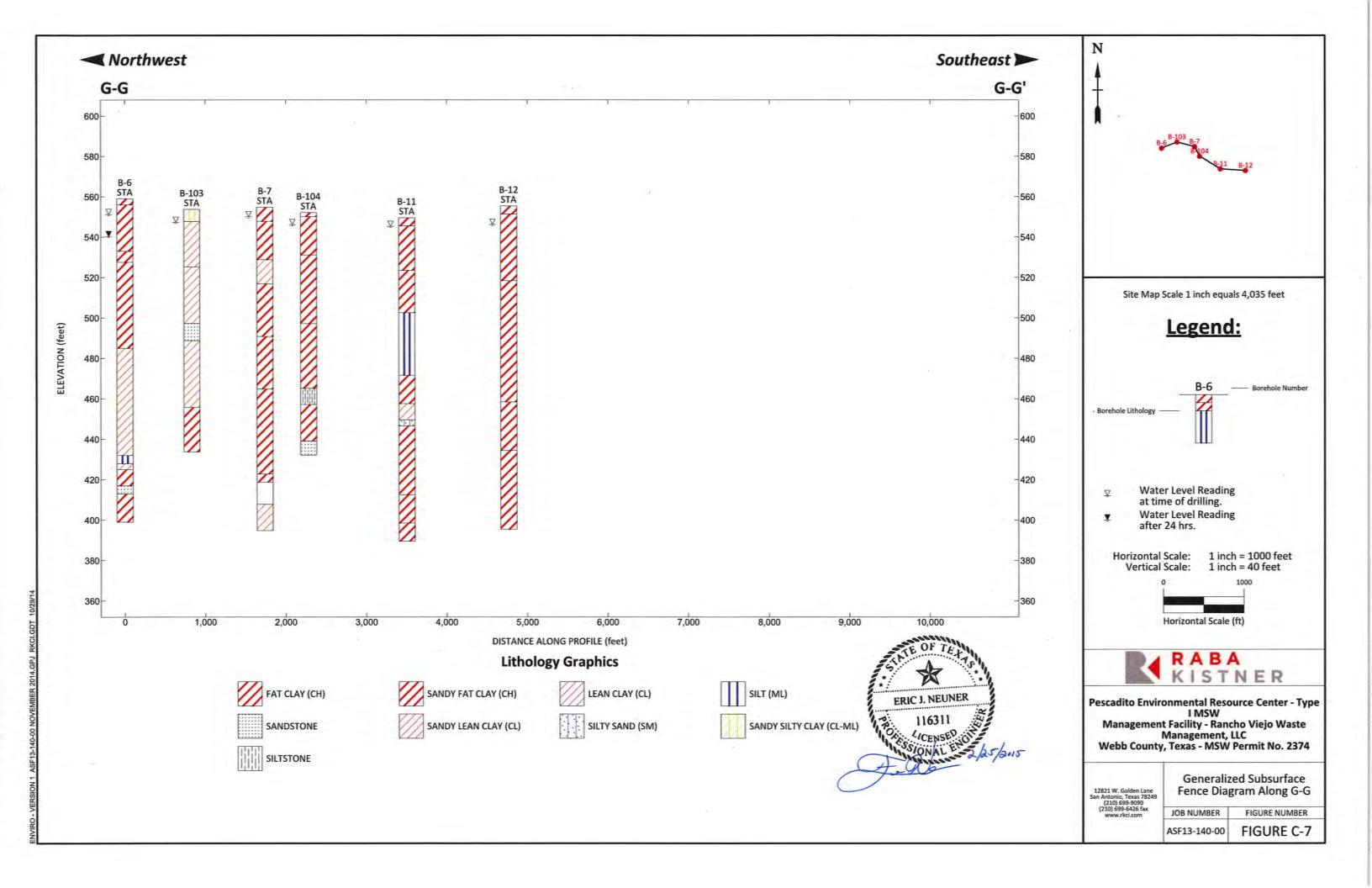


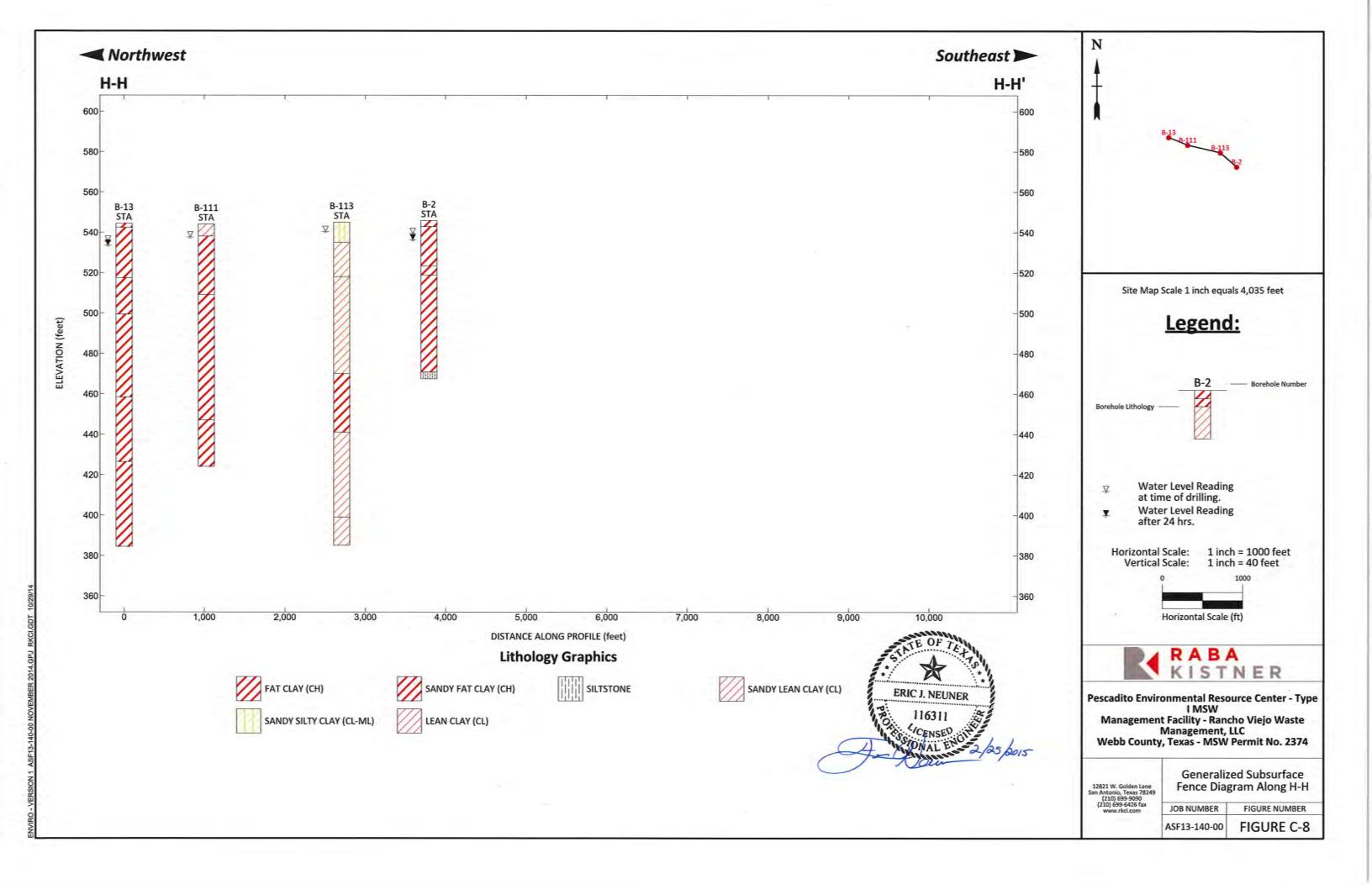


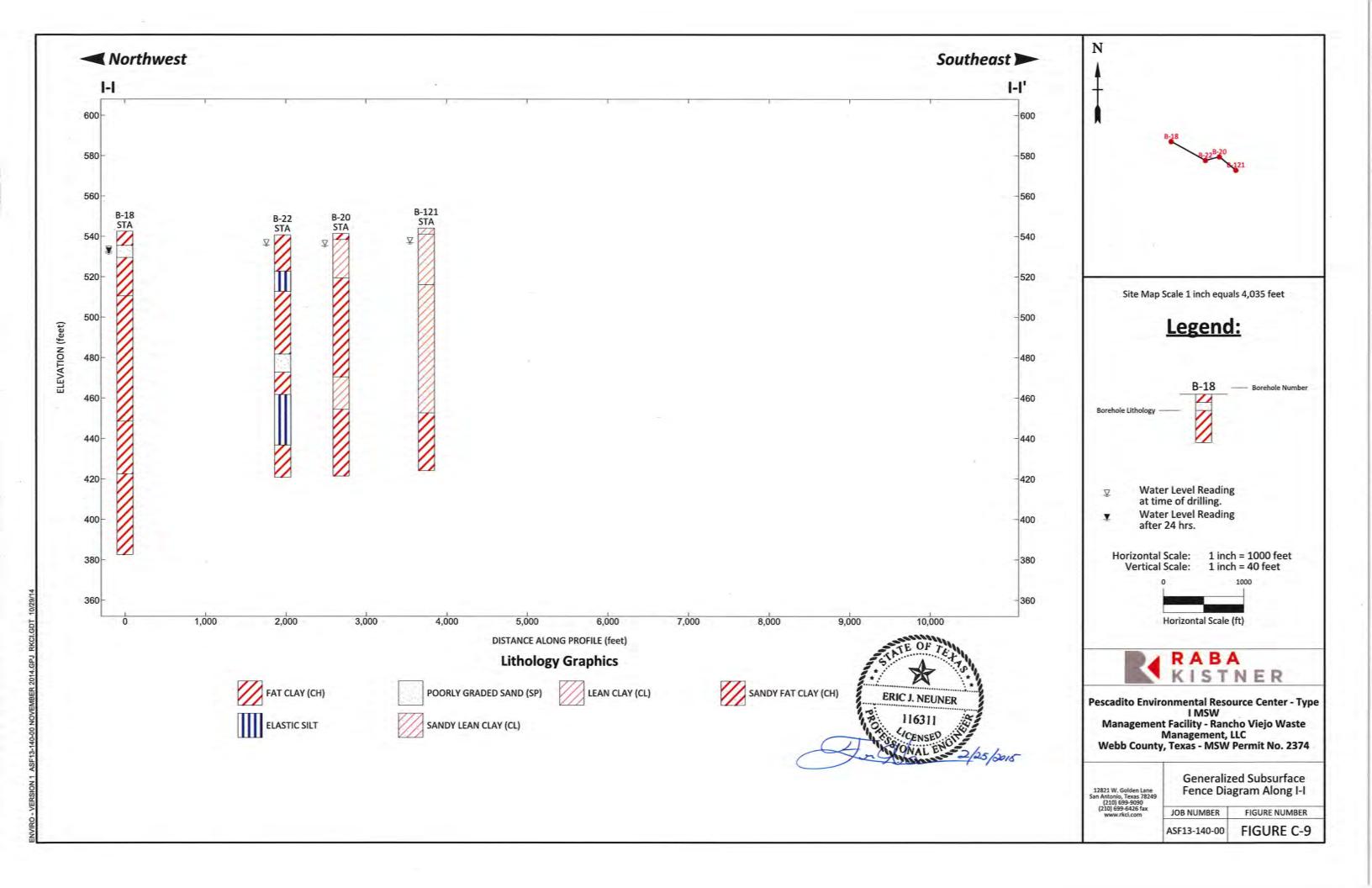


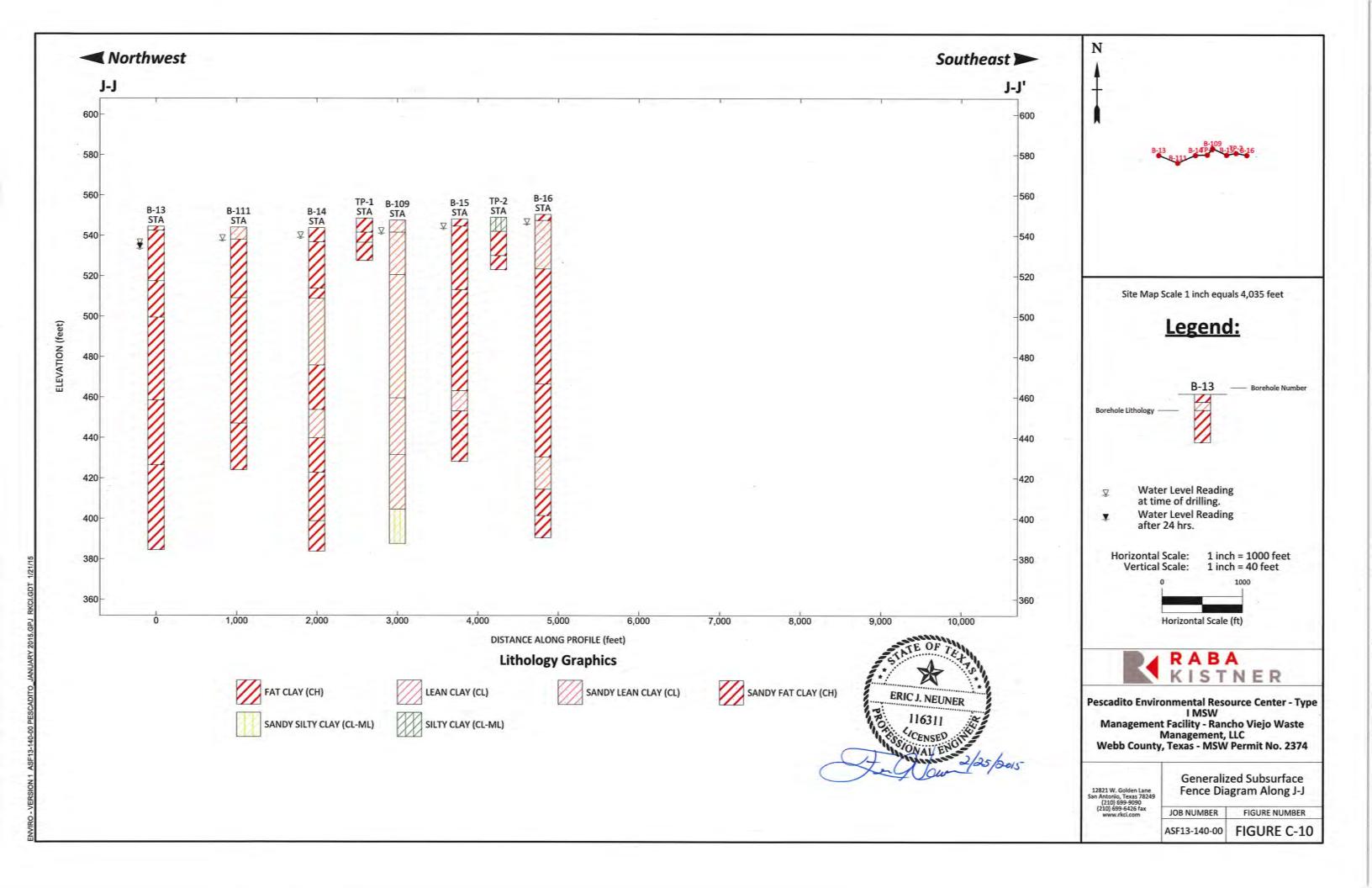


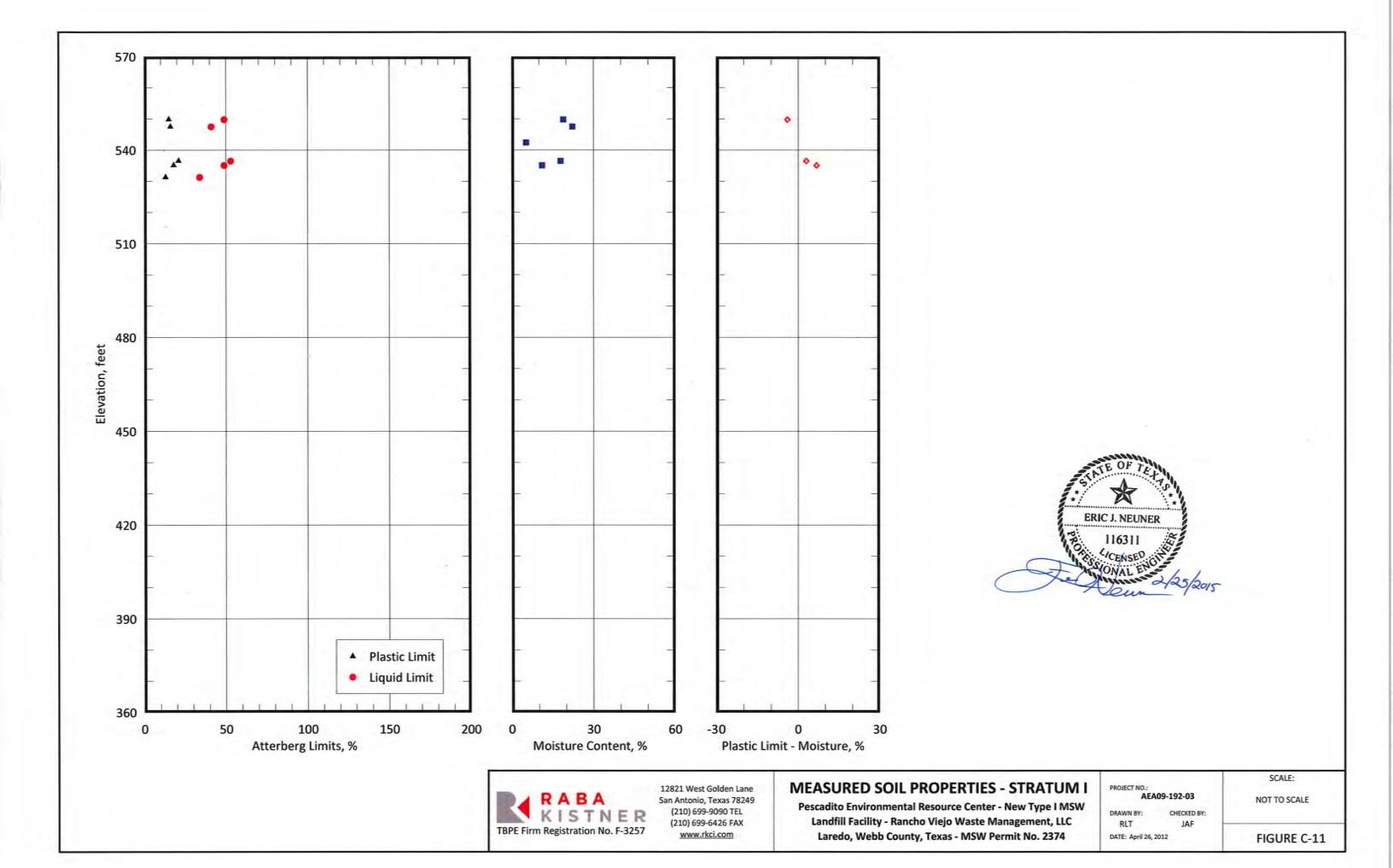


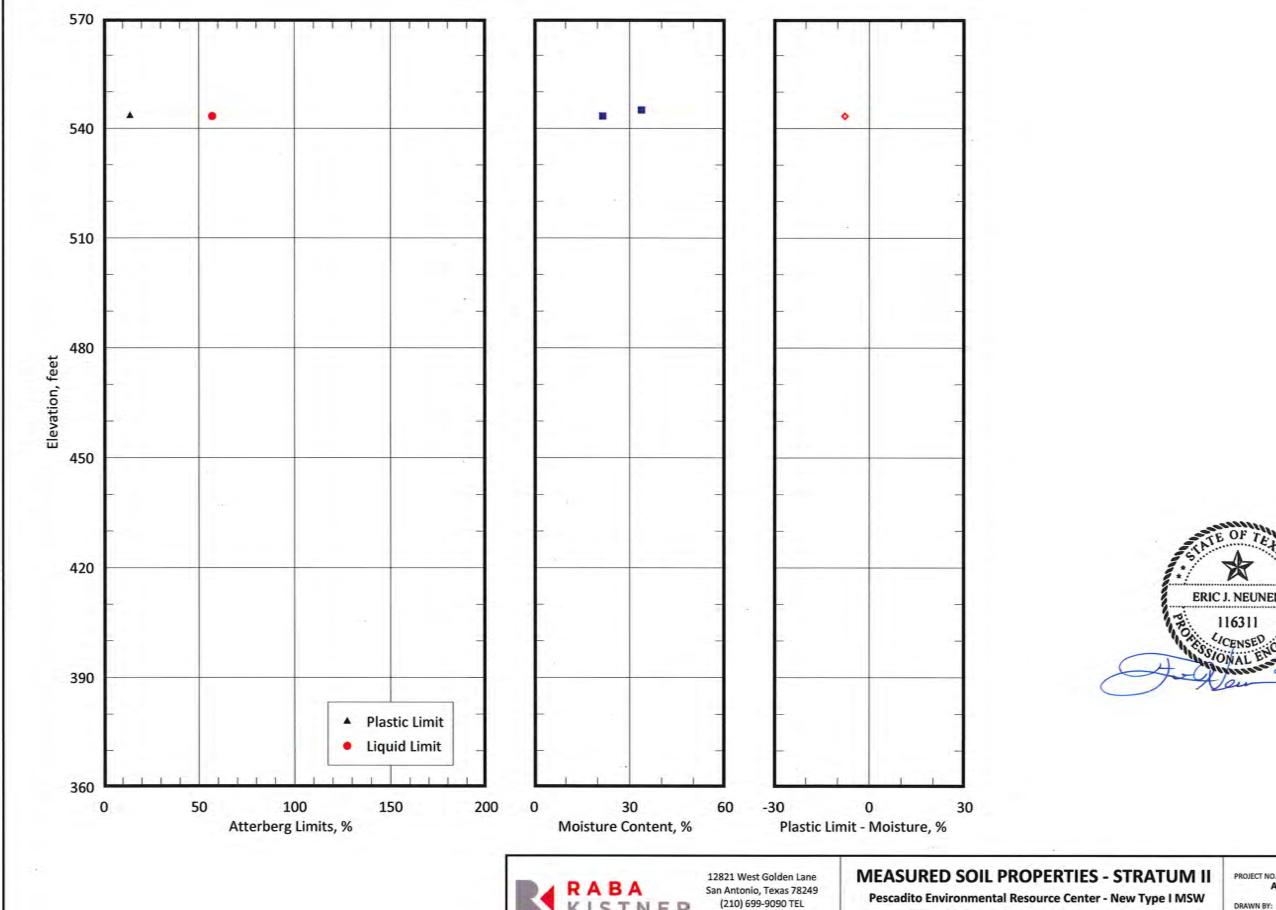


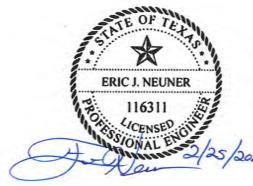












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PROJECT NO.: AEA09-192-03

CHECKED BY: RLT JAF DATE: April 26, 2012

SCALE: NOT TO SCALE

FIGURE C-12

