ANTON EMERYVILLE, LLC

1415 L Street, Suite 450, Sacramento, CA 95814
Office 916-400-2080

February 26, 2015

RECEIVED
By Alameda County Environmental Health at 9:16 am, Mar 13, 2015

Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Attention: Mr. Mark Detterman, Senior Hazardous Materials Specialist

Transmittal Letter
Environmental Considerations Associated with Geotechnical Investigation
6701 – 6707 Shellmound Street
Emeryville, California

Dear Mr. Detterman:

Submitted herewith for your review is *Environmental Considerations Associated with Geotechnical Investigation, 6701 – 6707 Shellmound Street, Emeryville, California* dated February 26, 2015, prepared by PES Environmental, Inc.

I declare, under penalty of perjury, that the information contained in the above-referenced report for the subject property are true and correct to the best of my knowledge.

Very truly yours,

ANTON EMERYVILLE, LLC

R. Green

Rachel Green
Development Manager

PES Environmental, Inc.
Engineering & Environmental Services

February 26, 2015

1448.001.01.001

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Attention: Mr. Mark Detterman

Environmental Considerations Associated with Geotechnical Investigation
6701 – 6707 Shellmound Street
Emeryville, California

Dear Mr. Detterman:

PES Environmental, Inc. (PES) has prepared this letter on behalf of Anton Emeryville, LLC (Anton) regarding the property located at 6701 – 6707 Shellmound Street, Emeryville, California (subject property or site). Anton is considering acquisition of the site and conducted a geotechnical investigation as part of their pre-acquisition due diligence. This letter provides an assessment of environmental considerations associated with the geotechnical investigation conducted at the site in January 2015 by EEI on behalf of Anton.

On January 7, 2015, EEI advanced five boreholes using a Cone Penetrometer Test (CPT) drill rig and two boreholes using a truck-mounted drill rig equipped with hollow-stem augers. A copy of the site plan with the drilling locations is attached. Copies of the boring logs and CPT soundings produced during the drilling are also attached.

Site Geology, Hydrogeology and Background Information

Based on the results of investigations performed on the subject property and in the vicinity, the site is underlain by imported fill material overlying deposits of native silts and clays known locally as Old Bay Mud. Beneath the Old Bay Mud deposits are deposits of stiffer sand, silts, and clays that likely represent alluvial deposits of the Temescal Formation (URS, 2005)[1]. During the later part of the 1930s through the early to mid-1950s, the subject property and vicinity were filled in by non-native soils to create buildable land. The fill extends to the west of the site where the current I-80 and Ashby Avenue interchange exists. The fill material

[1] URS, 2005. Final Report, Geotechnical Characterization, 6701 Shellmound/Bay Street, Emeryville, California. October 7.

generally consists of coarse-grained sands and gravels that contain varying amounts of fines, and fine-grained silts and clays. Debris fill[2] has been encountered throughout the site (PES, 2014)[3].

Previous investigations have shown that the fill materials at the site and other similarly filled properties in the vicinity contain residual contamination with related impacts to shallow groundwater.

The fill material ranges from 10 to 19 feet thick. Fill material debris has been encountered throughout the site, but is generally most abundant on the western half of the site and at depths below approximately 8 to 10 feet bgs. Fine-grained soils have been encountered directly below the fill material. These soils generally consisted of very dark greenish gray to greenish gray clays and occasional silts that are soft to medium stiff. These soils represent Old Bay Mud deposits.

Groundwater was encountered at the site at approximately 11 to 13 feet below ground surface (bgs) in November 2013 (PES, 2014).

Geotechnical Investigation

EEI conducted their geotechnical investigation on January 7, 2015. A copy of the site plan with the boring locations and the boring logs and CPT soundings are attached.

During the geotechnical investigation conducted in January 2105, fill material was encountered in borings B-1 and B-2 at a depth of approximately 10 feet bgs. Old Bay Mud deposits were encountered beneath the fill material. Groundwater was encountered at approximately 10 feet bgs in borings B-1 and B-2. Soil cuttings were containerized in three 55-gallon drums and were stored temporarily on-site pending off-site disposal.

Prior to conducting the geotechnical investigation permits were obtained by EEI from Alameda County. Five CPT soundings (CPT-01A, -02A, -03, -04A, and -05a) were advanced to depths of approximately 13.5 to 50 feet bgs using a CPT hydraulic direct push drill rig. Upon completion of the logging, the CPT boreholes were tremie-grouted from the bottom of the borehole to the ground surface in accordance with the guidelines of Alameda County Health Services Division.

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[2] Debris material includes brick, wood, concrete rubble, asphalt, metal debris, glass, fabric, and rubber.

[3] PES, 2014. *Supplemental Subsurface Investigation Report, 6701, 6705, and 6707 Shellmound Street, Emeryville, California.* January 13.

Boreholes B-1 and B-2 were drilled with a truck-mounted drill rig equipped with hollow-stem augers. The total depth of each borehole was 51.5 feet bgs. Soil samples were collected from relatively undisturbed soil beneath the lead auger using a Modified California Sampler or Standard Penetration Test sampler. Upon completion of the sampling, the boreholes were tremie-grouted from the bottom of the borehole to the ground surface in accordance with the guidelines of Alameda County Health Services Division.

The drummed soil cuttings were transported off-site for disposal on January 29, 2015, as non-RCRA hazardous waste under Uniform Hazardous Waste Manifest to U.S. Ecology, Nevada Operations in Beatty, Nevada. A copy of the waste disposal documentation is attached.

Assessment of Environmental Considerations

The geotechnical investigation was conducted under permit issued by Alameda County. Five CPT soundings were drilled to depths ranging from approximately 13.5 to 50 feet bgs using a CPT hydraulic direct push drill rig. CPT soundings are advanced using dual-cylinders and the outer cylinder acts as a casing to keep the borehole sealed thereby minimizing the potential for vertical communication of fluids or soil. Upon completion of the logging, the CPT boreholes were sealed from the bottom of the borehole to the ground surface as required by the permit.

Boreholes B-1 and B-2 were drilled with a truck-mounted drill rig equipped with hollow-stem augers. The total depth of each borehole was 51.5 feet bgs. During the drilling and soil sampling the hollow-stem augers were not removed from the borehole and therefore functioned as a casing which materially reduced the potential for vertical migration of fluids and soil. Upon completion of the sampling, the boreholes were sealed from the bottom of the borehole to the ground surface as required by the permit.

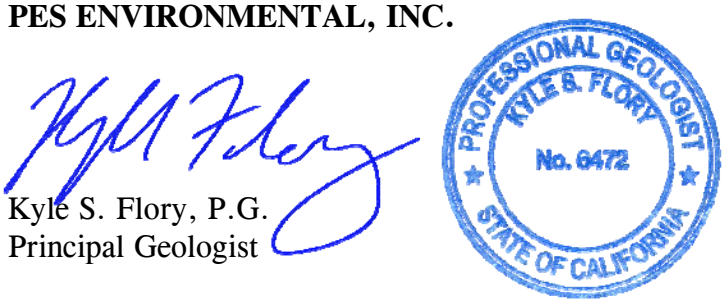
Based on the lithology in the boring logs, it appears the borings were terminated in the Old Bay Mud deposits and vertical conduits were not created through deeper units such as the Temescal formation. The entire geotechnical investigation was conducted in one day and the boreholes were sealed with auger flights or outer casing of the CPT rods; therefore, each boring was conducted over a short period of time and the augers and casing acted as a mechanism to minimize the potential for vertical migration of fluids or soil.

Based on our review of the geotechnical investigation work scope and the manner in which the work was conducted, our assessment concludes that impact to the environment as a result of the geotechnical investigation is minimal and further evaluation is not required and none is recommended at this time.

Should you require additional information or have questions concerning this letter please contact me at (415) 899-1600.

Very truly yours,

PES ENVIRONMENTAL, INC.

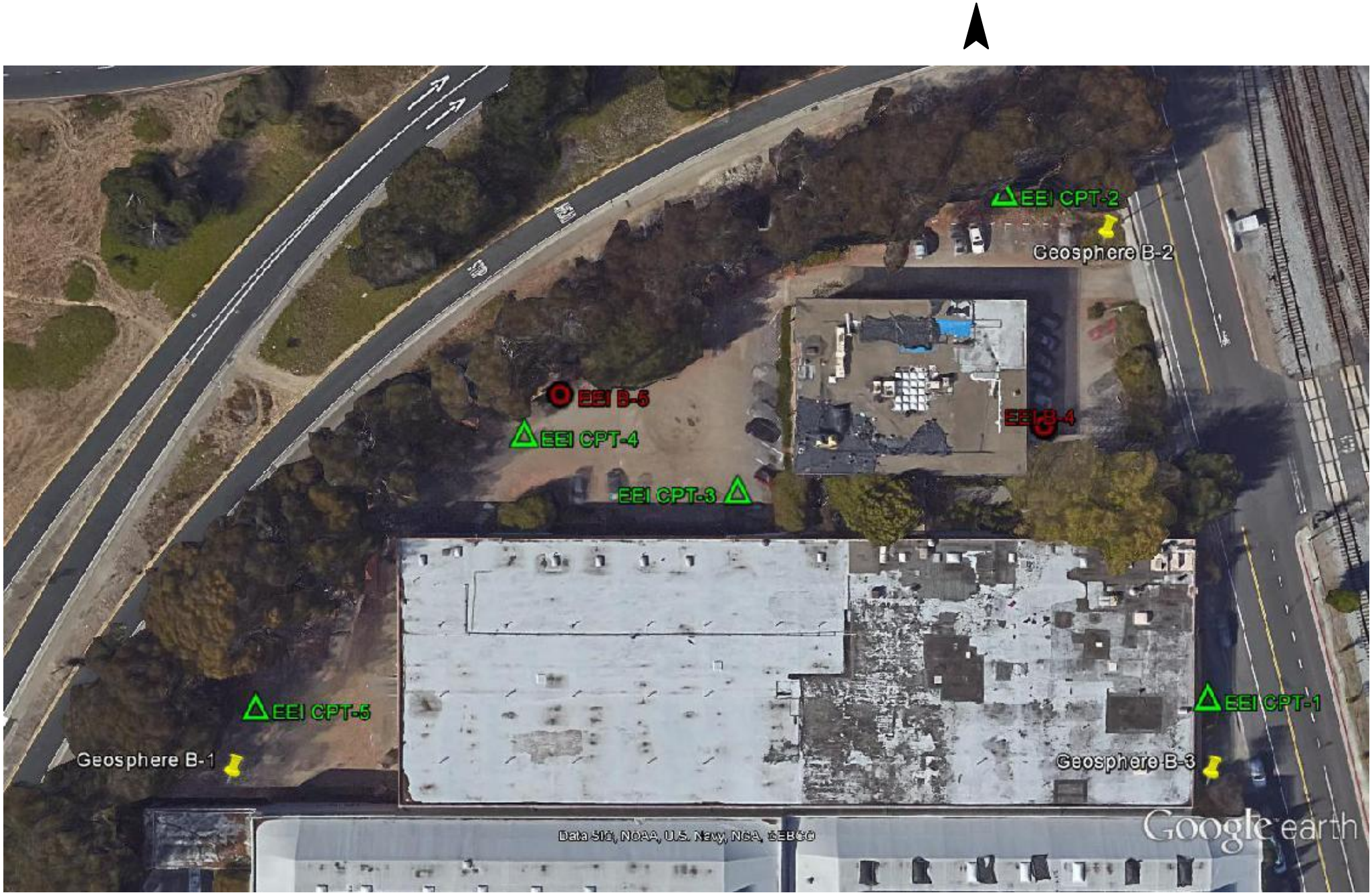


Kyle S. Flory, P.G.
Principal Geologist

Attachment: Site Plan – Geotechnical Borehole Locations
Boring Logs
Waste Disposal Documentation

cc: Rachel Green – Anton

ATTACHMENTS


EEI CPT-2
Geosphere B-2
EEI B-5
EEI CPT-4
EEI B-4
EEI CPT-3
EEI CPT-5
Geosphere B-1
EEI CPT-1
Geosphere B-3
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Google earth

BOREHOLE LOG

Number: B-1

Client: Anton Development Co.

Sheet: 1 of 2

Location: 6701 Shellmound Street, Emeryville, California

Date Started:	Date Finished:	Drill Rig/Sampling Method:	Borehole Diameter:
1/7/2015	1/7/2015	Truck Mounted / 8" Hollow Stem Auger 140 lbs Auto Hammer	8-inch

EEI Rep: MH

Project No.: ANT-72035.4

SAMPLE LOG								BOREHOLE LOG
Bulk	Sample Type	Blows Per 6"	Dry Unit Wt. (pcf)	Moisture (%)	Depth In Feet	USCS Symbol	Graphic Log	Geologic Description (SoilType, Color, Grain, Minor Soil Component, Moisture, Density, Odor, Etc.)
					1			8" A/C over 4" BASE
					2	SC		**FILL** CLAYEY-SAND, dark brown to black, abundant gravels, moist, dense; trace debris
	MC	13 23 20			3			
					4			
	MC	4 1 1			5			
					6			
					7	CL		CLAY, dark brown to dark grayish brown, some sand, moist to very moist, soft
	MC	3 3 4			8			
					9			
					10	SP		**BAY MUD DEPOSITS** @ 9.5' SAND, gray, fine to medium grained with trace silt, poorly graded, moist to wet, medium dense
	MC	6 7 10			11			
					12			
					13			
					14			
	SPT	2 2 2			15			
					16			@ 16' SAND becomes loose
					17			
					18			
					19			@ 20' No recovery with modified Cal Sampler; retrieved sample with SPT
	MC	5 6 9			20			
					21			@ 21' CLAY, gray and light orange brown mottled, some sand, moist, stiff
					22			
					23			
					24			
	SPT	5 5 11			25			
					26	CL		@ 26' CLAY, light brown, light gray and orange mottled, very moist, very stiff
					27			
					28			
					29			
	MC	8 9 16			30			
					31			@ 30' CLAY, grayish brown with iron staining, wet, very stiff

BOREHOLE LOG ANT-72035.4.GPJ EEI.GDT 1/8/15

BOREHOLE LOG

Number: B-1

Client: Anton Development Co.

Sheet: 2 of 2

Location: 6701 Shellmound Street, Emeryville, California

Date Started:	Date Finished:	Project No.:	Drill Rig/Sampling Method:	Borehole Diameter:
1/7/2015	1/7/2015	ANT-72035.4	Truck Mounted / 8" Hollow Stem Auger 140 lbs Auto Hammer	8-inch

EEI Rep: MH

SAMPLE LOG								BOREHOLE LOG
Bulk	Sample Type	Blows Per 6"	Dry Unit Wt. (pcf)	Moisture (%)	Depth In Feet	USCS Symbol	Graphic Log	Geologic Description (SoilType, Color, Grain, Minor Soil Component, Moisture, Density, Odor, Etc.)
	SPT	6 7 10			35	CL		@ 35' CLAY, gray, wet, very stiff; some decayed organics
	MC	9 15 30			40	SC		@ 40' CLAYEY-SAND, brown, medium to coarse grained, wet, dense
	SPT	9 10 10			45	CH		@ 45' CLAY, light gray, some coarse grained sand and shells, wet, very stiff
	MC	10 12 23			50			@ 50' CLAY becomes orange and grayish brown mottled, wet, very stiff
					52			Total depth: 51.5-feet Groundwater encountered at aproximatley 10-feet MC=Modified California Sampler SPT=Standard Penetration Test Backfilled with 18ft^3 of grout on 1/7/2014

BOREHOLE LOG ANT-72035.4.GPJ EEI.GDT 1/8/15

BOREHOLE LOG

Number: B-2

Client: Anton Development Co.

Sheet: 1 of 2

Location: 6701 Shellmound Street, Emeryville, California

Date Started:	Date Finished:	Drill Rig/Sampling Method:	Borehole Diameter:
1/7/2015	1/7/2015	Truck Mounted / 8" Hollow Stem Auger 140 lbs Auto Hammer	8-inch

EEI Rep: MH

Project No.: ANT-72035.4

SAMPLE LOG								BOREHOLE LOG
Bulk	Sample Type	Blows Per 6"	Dry Unit Wt. (pcf)	Moisture (%)	Depth In Feet	USCS Symbol	Graphic Log	Geologic Description (SoilType, Color, Grain, Minor Soil Component, Moisture, Density, Odor, Etc.)
	MC	17 28 26			1–4	SW-SM		**FILL** SILTY-SAND, dark brown to black, some clay and gravels, slightly moist, dense
	MC	19 14 20			5–9	SW-SM		@ 5' Becomes medium dense
	MC	22 23 29			8–9	SW-SM		@ 9' Becomes dense, wet
	MC	6 9 9			10–14	SP		**BAY MUD DEPOSITS** @ 10' SAND, black , fine to coarse, some silt, poorly graded, medium dense, wet
	SPT	4 5 9			15–20	SC-SM		@ 15' CLAYEY-SAND, gray, some clay, medium dense, saturated
	MC	9 12 16			21–25	CL		@ 21' CLAY, gray, orange brown and black mottled, slightly moist, very stiff
	SPT	4 5 5			26–29	CL		@ 26' CLAY, grayish-brown, some fine sand, moist, stiff
	MC	9 14 20			30–31	CL		@ 30' CLAY, orange and grayish-brown mottled, moist, very stiff

BOREHOLE LOG ANT-72035.4.GPJ EEI.GDT 1/8/15

BOREHOLE LOG

Number: B-2

Client: Anton Development Co.

Sheet: 2 of 2

Location: 6701 Shellmound Street, Emeryville, California

Date Started:	Date Finished:	Drill Rig/Sampling Method:	Borehole Diameter:
1/7/2015	1/7/2015	Truck Mounted / 8" Hollow Stem Auger 140 lbs Auto Hammer	8-inch

EEI Rep:	Project No.:
MH	ANT-72035.4

SAMPLE LOG								BOREHOLE LOG
Bulk	Sample Type	Blows Per 6"	Dry Unit Wt. (pcf)	Moisture (%)	Depth In Feet	USCS Symbol	Graphic Log	Geologic Description (SoilType, Color, Grain, Minor Soil Component, Moisture, Density, Odor, Etc.)
					33	CL		@ 30' CLAY, orange and grayish-brown mottled, moist, very stiff
	SPT	11 15 26			35	SP		@ 35' SAND, gray and brown, fine to medium grained, poorly-graded, some silt, wet, dense
	MC	13 29 50-5"			40	CL		@ 40' CLAY, dark gray, very moist, hard
	SPT	12 15 19			45	CL		@ 45' CLAY, blue-gray with trace iron staining, moist, hard
	MC	6 12 20			49	CH		@ 49' CLAY, gray and orange brown mottled, some coarse sand and shell fragments, moist, very stiff
					52			Total depth: 51.5-feet Groundwater encountered at aproximatley 10-feet MC=Modified California Sampler SPT=Standard Penetration Test Backfilled with 18ft^3 of grout on 1/7/2014

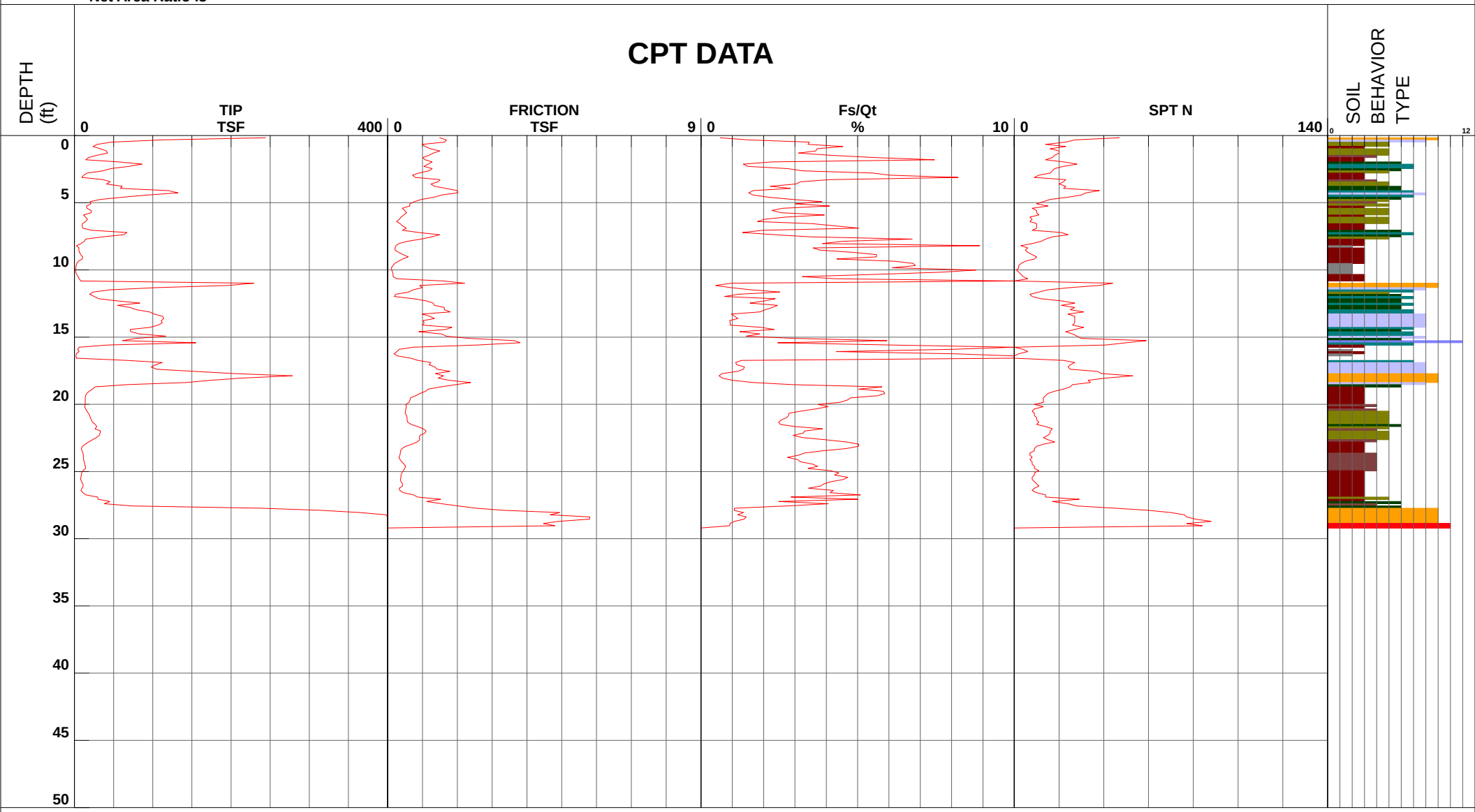
BOREHOLE LOG ANT-72035.4.GPJ EEI.GDT 1/8/15

EEI

Project	Emeryville	Operator	CB-BH	Filename	SDF(082).cpt
Job Number	ANT-72035-4	Cone Number	DDG1268	GPS	
Hole Number	CPT-01A	Date and Time	1/7/2015 10:47:58 AM	Maximum Depth	29.36 ft
EST GW Depth During Test		10.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

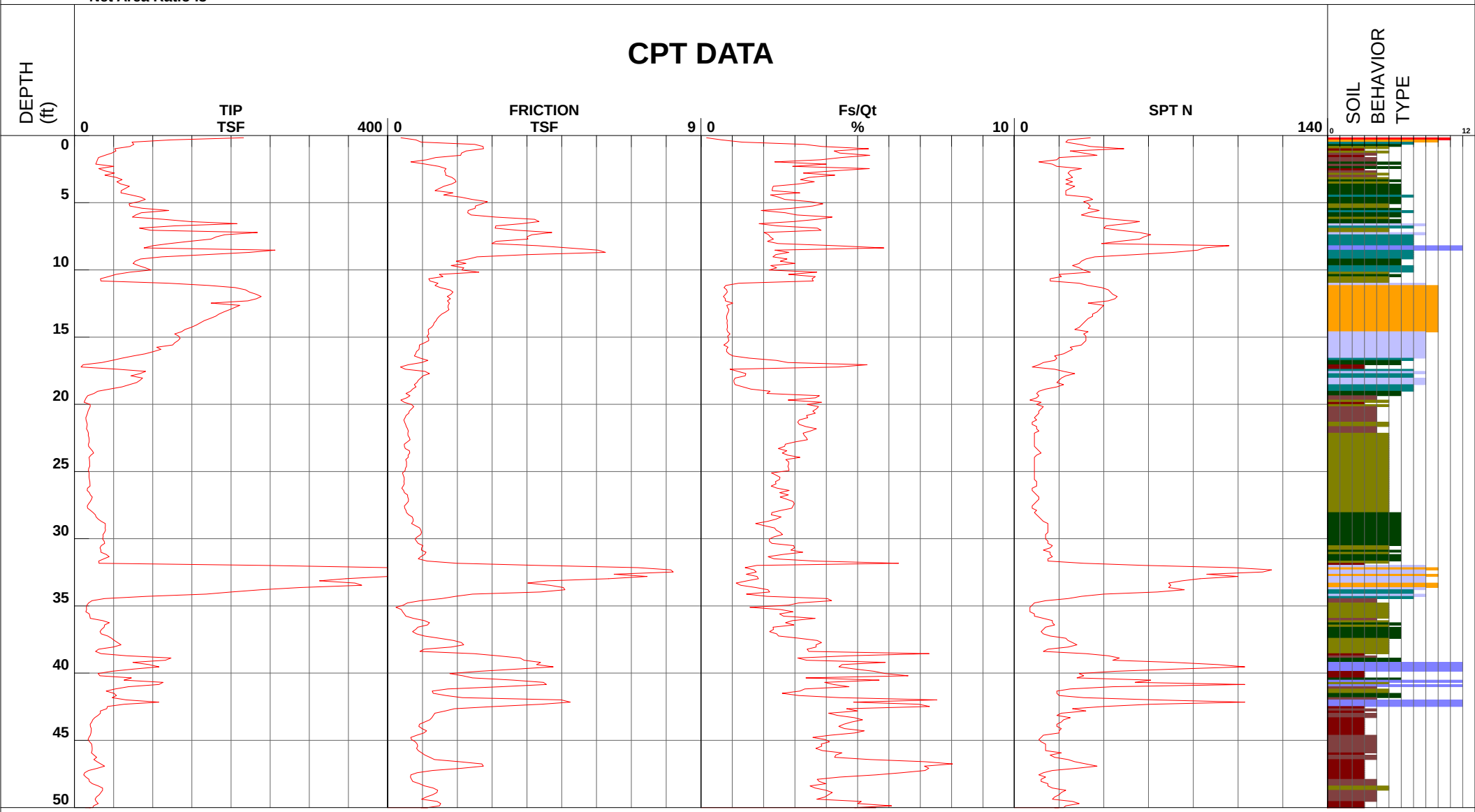
S*Soil behavior type and SPT based on data from UBC-1983

EEI

Project	Emeryville	Operator	CB-BH	Filename	SDF(074).cpt
Job Number	ANT-72035-4	Cone Number	DDG1268	GPS	
Hole Number	CPT-02A	Date and Time	1/7/2015 8:16:14 AM	Maximum Depth	50.69 ft
EST GW Depth During Test	10.00 ft				

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

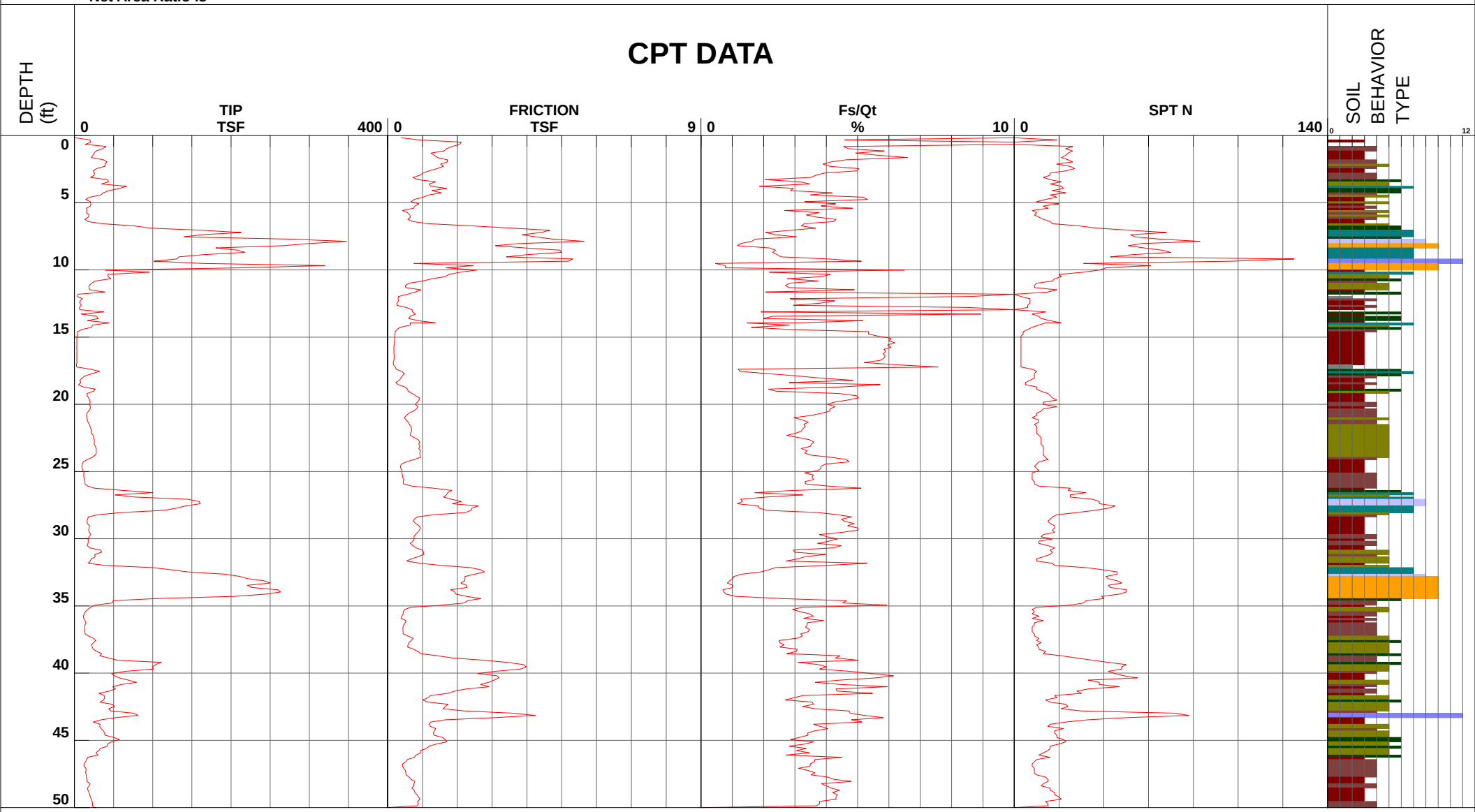
S*Soil behavior type and SPT based on data from UBC-1983

EEI

Project	Emeryville	Operator	CB-BH	Filename	SDF(076).cpt
Job Number	ANT-72035-4	Cone Number	DDG1268	GPS	
Hole Number	CPT-03	Date and Time	1/7/2015 9:03:05 AM	Maximum Depth	50.20 ft
EST GW Depth During Test		10.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

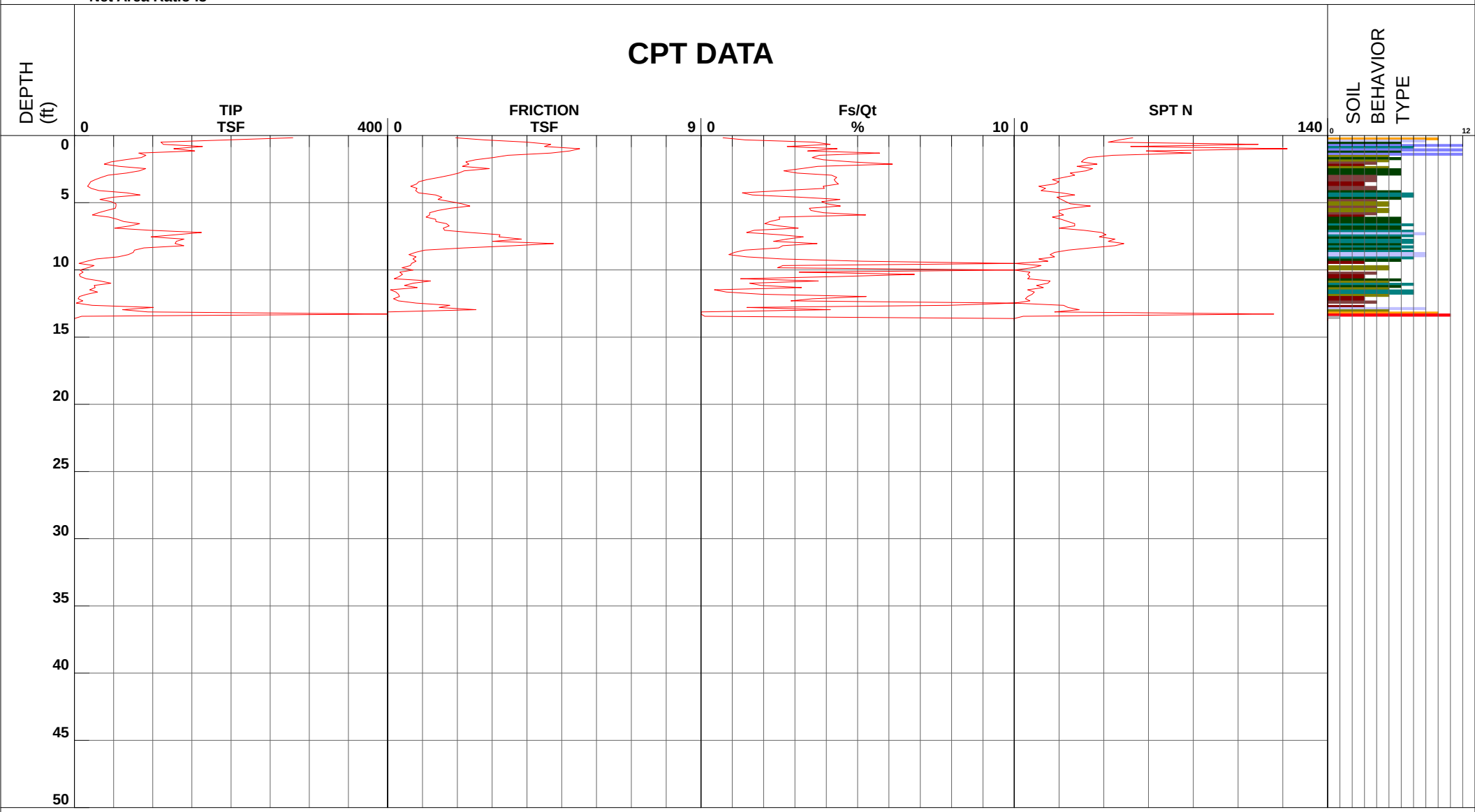
S*Soil behavior type and SPT based on data from UBC-1983

EEI

Project	Emeryville	Operator	CB-BH	Filename	SDF(078).cpt
Job Number	ANT-72035-4	Cone Number	DDG1268	GPS	
Hole Number	CPT-04A	Date and Time	1/7/2015 9:48:10 AM	Maximum Depth	13.78 ft
EST GW Depth During Test		10.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

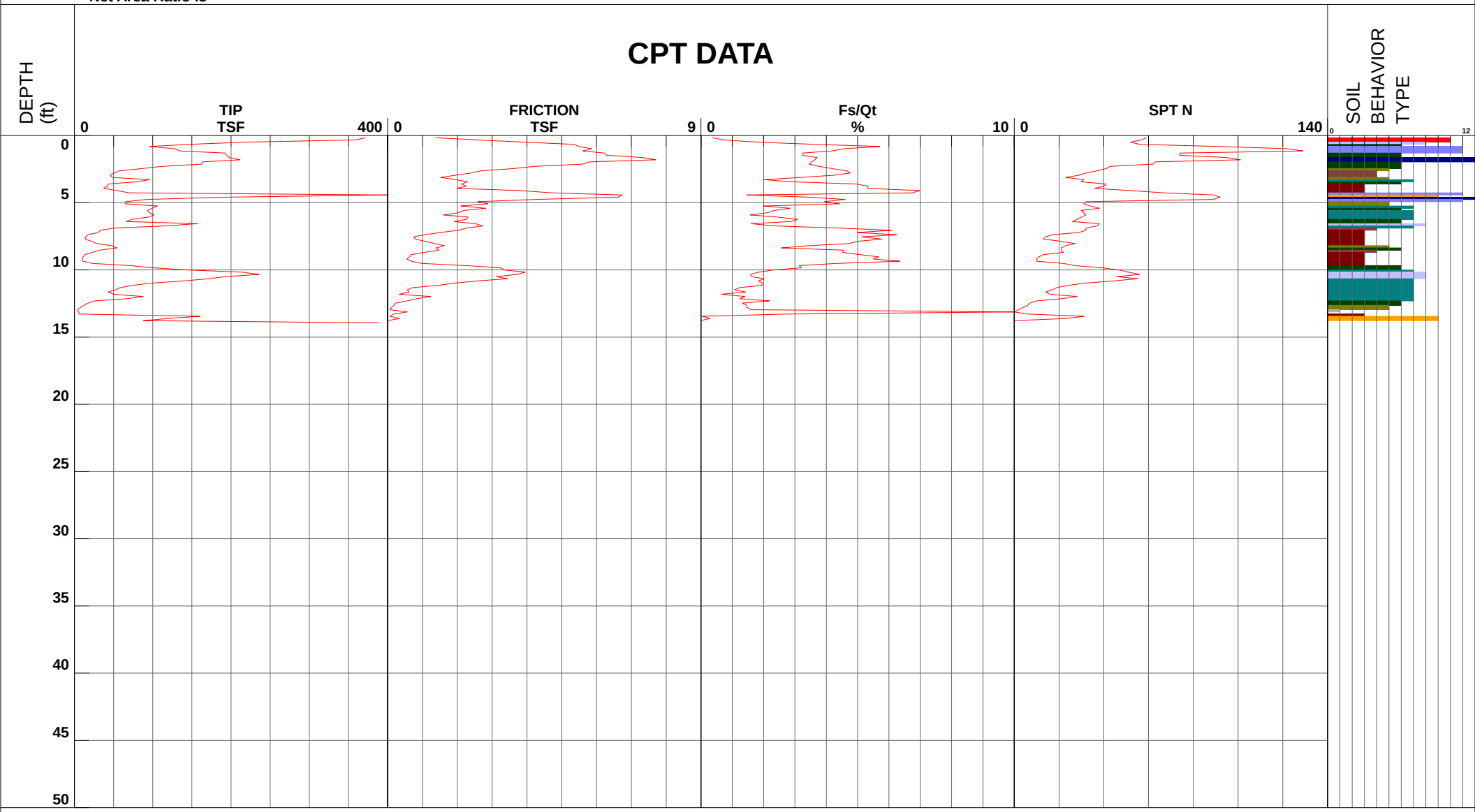
S*Soil behavior type and SPT based on data from UBC-1983

EEI

Project	Emeryville	Operator	CB-BH	Filename	SDF(080).cpt
Job Number	ANT-72035-4	Cone Number	DDG1268	GPS	
Hole Number	CPT-05A	Date and Time	1/7/2015 10:14:24 AM	Maximum Depth	13.94 ft
EST GW Depth During Test		10.00 ft			

Net Area Ratio .8

CPT DATA



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2 - organic material
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4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

S*Soil behavior type and SPT based on data from UBC-1983

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAC002801384 ~~CAC002801384~~ dP
2. Page 1 of: 1
3. Emergency Response Phone: (949) 279-1994
4. Manifest Tracking Number: 007630018 FLE

GENERATOR

5. Generator's Name and Mailing Address
Anton Emeryville, LLC
1415 L Street, Suite 400
Sacramento, CA 95814
Generator's Phone: (916) 444-9887

Generator's Site Address (if different than mailing address)
Anton/Shellmound Street
6701 Shellmound Street
Emeryville, CA 94608

6. Transporter 1 Company Name: BELSHIRE
U.S. EPA ID Number: CAR000183913

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
U.S. Ecology, Nevada Operations
Highway 95, 11 miles S. of Beatty
Beatty, NV 89003
Facility's Phone: (775) 553-2203
U.S. EPA ID Number: NVT330010000

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA Hazardous Waste, Solid	003	DM	2100	P	811
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
ERG #171
9b.1. Soil impacted with metals and TPH
07012B300-110910
WEAR ALL APPROPRIATE PERSONAL PROTECTIVE CLOTHING.
BESI:251362

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: LARRY MOOTHART ON BEHALF OF GENERATOR
Signature:
Month: 01 Day: 29 Year: 15

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: STEVEN E. MENDOZA
Signature:
Month: 01 Day: 29 Year: 15
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Amber Park
Signature:
Month: 01 Day: 29 Year: 15

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR