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By Alameda County Environmental Health 11:19 am, Feb 04, 2016

February 3, 2016

Ms. Karel Detterman  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

**Re: Shallow Well Installation and Sampling Report Addendum  
Former Penske Truck Leasing Facility  
725 Julie Ann Way, Oakland, California  
Alameda County Site ID R00000354  
Stantec PN: 185702640.200.0003**

Dear Ms. Detterman:

Enclosed with this cover letter is the Shallow Well Installation and Sampling Report Addendum for the above-referenced former Penske Truck Leasing location.

As an authorized representative of Penske Truck Leasing Co, LP, I offer the following statement:

I, Chris Hawk, declare, under penalty of perjury, that the information and/or recommendations contained in the enclosed Report are true and correct to the best of my knowledge

Should you have any questions, please contact me at 610-775-6123.

Best Regards,

Chris Hawk  
Environmental Engineer

Penske Truck Leasing  
Rt. 10 Green Hills, PO Box 7635  
Reading, PA 19603-7635

Penske Truck Leasing  
Rt. 10 Green Hills, PO Box 7635  
Reading, PA 19603-7635

Tel 610 775 6298  
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Fax 610 775 6442  
GoPenske.com



**Stantec**

**Stantec Consulting Services Inc.**

1340 Treat Boulevard, Suite 300, Walnut Creek CA 94597-7966

February 3, 2016  
File: 185702858.200.0003

Ms. Karel Detterman  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

**Reference: Shallow Well Installation and Sampling Report Addendum  
Former Penske Truck Leasing Facility 725 Julie Ann Way, Oakland, California  
Alameda County Site ID RO0000354**

Dear Ms. Detterman:

Stantec Consulting Services Inc. (Stantec), on behalf of Penske Truck Leasing Company (Penske), has prepared this *Shallow Well Installation and Sampling Report Addendum (Addendum)* for the Former Penske Truck Leasing Facility (the Site) located at 725 Julie Ann Way in Oakland, California (see Figure 1). This Addendum was prepared in response the Alameda County Environmental Health Services (ACEHS) December 23, 2015 electronic mail (email) to Christopher Hawk at Penske. The December 23, 2015 email requested submittal of an Addendum to Stantec's November 13, 2015 *Shallow Well Installation and Sampling Report (Report)* to facilitate completion of their review and appropriateness of recommendations. The six items requested in the email are copied below and Stantec's response is indented and italicized below each item.

- 1. Groundwater Sample Collection:** A summary table with information verifying the time of sample collection relative to the water level in the Flood Control Channel, and the times of high and low tides on July 24, 2015 (date of sampling of MW-9, MW-10, MW-11, and MW-12) and January 15, 2015 (date of sampling of SB-9, SB-10, SB-11, SB-12, SB-13, and SB-14).

*Table 3 (attached) presents a summary of sample collection times relative to the time of high and low tides on January 15, 2015, and July 24, 2015. On January 15, 2015, sample collection times ranged from 1.6 hours prior to low tide at SB-14 to 4 minutes after low tide at SB-9. On July 24, 2015 sample collection times ranged from 1.1 hours to 4.6 hours after low tide. The time required for sample collection on July 24, 2015 was prolonged due to the slow recharge rate and the relatively large volume of water required to fill the required laboratory analytical bottles. Measurement of the water level in the Flood Control Channel was not part of the approved work plan but water was only observed in the base of the channel at approximately 8 feet below the ground surface of the Site.*

- 2. Soil Sample Analysis:** Rationale why soil samples collected on July 23, 2015 from soil borings for MW-9, MW-10, MW-11, and MW-12 were analyzed for gasoline-range organics (GRO), VOC, SVOCs, but not for Diesel-range organics (DRO).

Design with community in mind



**Reference:**        **Shallow Well Installation and Sampling Report Addendum**  
                         **Former Penske Truck Leasing Facility 725 Julie Ann Way, Oakland, California**  
                         **Alameda County Site ID RO0000354**

*The groundwater investigation was conducted in accordance with Stantec's November 20, 2014, Data Gap Investigation Work Plan (Work Plan), approved by the ACEHS in a letter dated December 5, 2014. The Work Plan did not require collection of soil samples; however, Penske agreed with Stantec's recommended option to analyze soil samples to collect data which could potentially be used in the event that a risk assessment was necessary in the future. Collection of the soil samples during boring advancement was an incremental cost less than a second field effort to collect soil data after groundwater results were evaluated. The evaluation of risk is primarily driven by individual chemical constituents profiled in the volatile organic compound (VOC) and semi-volatile organic compound (SVOC) analysis. TPHg was added to the analytical suite to provide additional screening for volatile components.*

- 3. Total Dissolved Solids (TDS):** Please discuss the significance of TDS levels in the groundwater samples collected from SB-9, SB-10, SB-11, SB-12, SB-13, SB-14, MW-9, MW-10, MW-11, and MW-12 with respect to the type of water the TDS levels are indicative of (fresh or salt water).

*Total dissolved solids (TDS) analysis was only performed on the groundwater samples collected in July 2015 due to the limited amount of water which could be collected from the temporary borehole in January 2015. TDS values reported for groundwater samples from MW-9 through MW-12 ranged from 1,430 mg/L to 1,730 mg/L. The United States Environmental Protection Agency (U.S. EPA) has established a secondary water quality standard of 500 mg/L to provide for the palatability of drinking water. The California Department of Public Health (CDPH) has established TDS secondary maximum contaminant level (SMCL) drinking water standards for public water supplies. SMCLs are ranges set by CDPH for taste and odor thresholds: for TDS the recommended SMCL is 500 mg/L and the upper SMCL is 1,000 mg/L. The average TDS for seawater is 35,000 mg/L. As such the groundwater in monitoring wells MW-9 through MW-12 is considered slightly saline or brackish. Brackish water does not have an exact definition, but it is typically defined as distastefully salty but less saline than seawater with a TDS value between 1,000 to 10,000 mg/L.*

- 4. Figure 4 Revision:** Please revise Figure 4 of the Report to additionally include the groundwater analytical data from soil borings SB-9, SB-10, SB-11, SB-12, SB-13, and SB-14.

*An updated Figure 4 with analytical data from the January 2015 and July 2015 groundwater sampling events is attached.*

- 5. Tables 1 and 2 Revisions:** Please revise Tables 1 and 2 of the Report to additionally include the soil analytical data from soil borings SB-9, SB-10, SB-11, SB-12, SB-13, and SB-14.



February 3, 2016  
Page 3 of 3

**Reference:       Shallow Well Installation and Sampling Report Addendum  
Former Penske Truck Leasing Facility 725 Julie Ann Way, Oakland, California  
Alameda County Site ID RO0000354**

*Soil sample analysis was not part of the approved Work Plan and as such soil analysis was not performed and Table 1 has not been updated. Table 2 (attached) has been updated to include the January and July 2015 analytical data.*

- 6. Boring Logs Revision:** Please revise boring logs MW-9, MW-10, MW-11, and MW-12 of the Report to show the depths of the soil samples and all PID readings.

*Updated boring logs for MW-9, MW-10, MW-11, and MW-12 showing the depths of the soil samples and all PID readings are attached.*

If you have any questions regarding this document, please contact the undersigned.

Regards,

**STANTEC CONSULTING SERVICES INC.**

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Project Manager  
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[neil.doran@stantec.com](mailto:neil.doran@stantec.com)

cc: Mr. Christopher Hawk, Penske Truck Leasing, Reading PA



**List of Attachments**

- Table 1 – Soil Sample Analytical Results
- Table 2 – Groundwater Sample Analytical Results
- Table 3 – Groundwater Sample Time Relative to Tidal Data
- Figure 4 – 2015 Groundwater Sample Results
- Updated Boring Logs for MW-9 through MW-12

Design with community in mind

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 FORMER PENSKE TRUCK LEASING FACILITY  
 725 Julie Ann Way, Oakland, California

Sample Location	Sample Date	Sample Depth (ft bgs)	TPHg	Acetone	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	Phenanthrene	Pyrene
MW-9	07/24/15	5.5	349	47.6	ND<64	ND<64	ND<64	ND<64	ND<64	68	ND<320	ND<320	ND<64	ND<320	ND<320	ND<320
MW-10	07/24/15	6.0	971	39.1	14.8	20.4	25.3	27.9	14.8	30.6	ND<64	154	21.8	366	247	ND<64
MW-11	07/24/15	4.5	23,100	ND<2100	36	ND<33	ND<33	ND<33	ND<33	53	ND<170	516	ND<33	ND<170	721	ND<170
MW-12	07/24/15	5.0	2,090	ND<33	47.1	22.4	31.7	14.1	23.1	61.2	44.3	110	13.7	ND<33	144	89.7
ESLs - soil leaching			770,000	500	12,000	130,000	46,000	27,000	37,000	23,000	60,000	8,900	15,000	1,200*	11,000	85,000

Notes:

All results reported in micrograms per kilogram (µg/kg).

ft bgs - feet below ground surface

TPHg - Total Petroleum Hydrocarbons as gasoline

TDS Total Dissolved Solids

ND - Not detected at or above the laboratory detection limit

< - Indicates constituent not detected at or above specified reporting limit

ESLs Regional Water Quality Control Board, San Francisco Bay Region, Environmental Screening Levels, Soil Leaching Screening Levels, Drinking Water Resource (Table G), presented in *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* December 2013).

\* ESL for naphthalene used for screening since not established for 1-Methylnaphthalene

**Bold** text indicates that the value exceeds the ESL.

**TABLE 2**  
**GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
 FORMER PENSKE TRUCK LEASING FACILITY  
 725 Julie Ann Way, Oakland, California

Sample Location	Sample Date	Sample Depth (ft bgs)	TDS (mg/L)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	Acenaphthene (µg/L)	Fluorene (µg/L)	1-Methyl-naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
<b>Grab Groundwater Sample from Soil Boring - January 2015</b>															
SB-9	01/15/15	4.7	--	--	ND <200	ND <2.0	8.3	ND <2.0	ND <2.0	ND <8.0	--	--	--	--	--
SB-10	01/15/15	5.5	--	--	ND < 710	ND <7.1	ND <7.1	ND <7.1	ND <7.1	ND <29	--	--	--	--	--
SB-11	01/15/15	4.8	--	--	ND <170	ND <1.7	8.2	ND <1.7	ND <1.7	ND <6.7	--	--	--	--	--
SB-12	01/15/15	4.6	--	--	<b>1,700<sup>(a)</sup></b>	ND <0.5	22	ND <0.5	ND <0.5	ND <2.0	--	--	--	--	--
SB-13	01/15/15	4.5	--	--	<b>890<sup>(a)</sup></b>	ND <0.5	6.3	ND <0.5	ND <0.5	ND <2.0	--	--	--	--	--
SB-14	01/15/15	4.4	--	--	ND <200	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <8.0	--	--	--	--	--
<b>Groundwater Sample from Shallow Monitoring Well - July 2015</b>															
MW-9	07/24/15	5.1	1,520	382	ND <50	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <0.51	ND <0.51	ND <0.51	2.7	ND <0.51	ND <0.51
MW-10	07/24/15	5.1	1,730	<b>3,600</b>	120	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <0.51	1.0	<b>4.2</b>	8.2	3.0	ND <0.51
MW-11	07/24/15	4.8	1,430	622	ND <50	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <0.48	0.76	2.1	2.0	0.97	ND <0.48
MW-11 Duplicate	07/24/15	4.8	1,340	624	51.5	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <0.48	0.78	2.0	1.7	0.92	ND <0.48
MW-12	07/24/15	4.9	1,610	<b>2,170</b>	ND <50	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <0.48	0.6	2.1	ND <0.48	1.2	ND <0.48
ESLs			NE	640	500	46	40	30	100	21	20	3.9	NE	4.6	2.0

Notes:

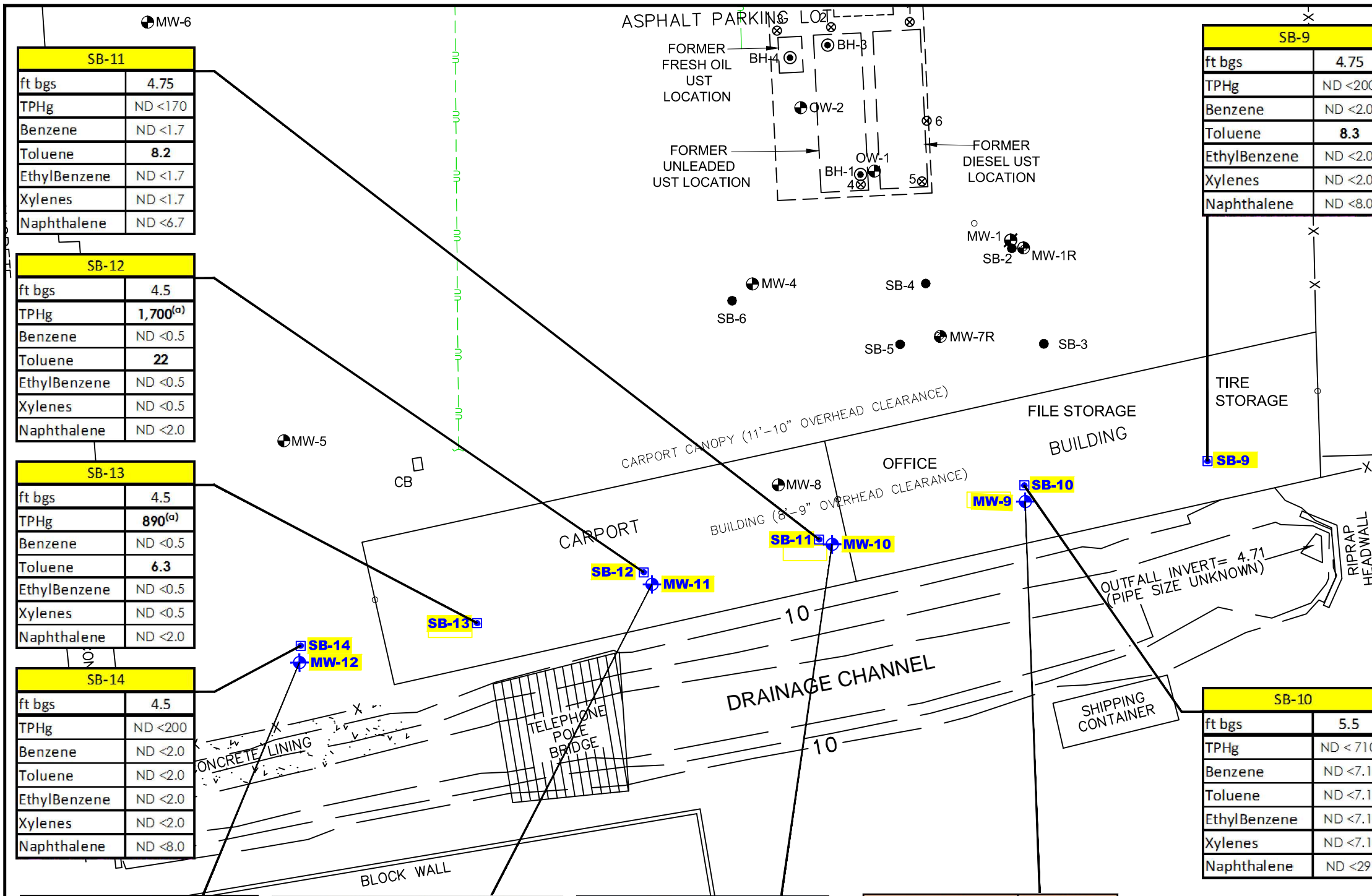
mg/L - milligrams per liter  
 µg/L - micrograms per liter  
 ft bgs - feet below ground surface  
 TPHg - Total Petroleum Hydrocarbons as gasoline  
 TPHd - Total Petroleum Hydrocarbons as diesel  
 TDS Total Dissolved Solids  
 ESLs Regional Water Quality Control Board, San Francisco Bay Region, Environmental Screening Levels, Table F-2c, Surface Water Screening Levels, Estuary Habitats, (Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater December 2013.

ND < - Indicates constituent not detected at or above specified reporting limit  
 (a) - Sample exhibits chromatographic pattern that does not resemble standard.  
 -- Not analyzed  
 NE Not established  
**Bold** text indicates that the value exceeds the ESL.

**TABLE 3**  
**GROUNDWATER SAMPLE TIME RELATIVE TO TIDAL DATA**  
 FORMER PENSKE TRUCK LEASING FACILITY  
 725 Julie Ann Way, Oakland, California

Sample Location	Sample Date	High Tide Time <sup>(1)</sup>	Low Tide Time <sup>(1)</sup>	Sample Collection Time
<b>Grab Groundwater Sample from Soil Boring - January 2015</b>				
SB-9	01/15/15	0712	1416	1420
SB-10	01/15/15	0712	1416	1410
SB-11	01/15/15	0712	1416	1400
SB-12	01/15/15	0712	1416	1350
SB-13	01/15/15	0712	1416	1340
SB-14	01/15/15	0712	1416	1320
<b>Groundwater Sample from Shallow Monitoring Well - July 2015</b>				
MW-9	07/24/15	1907	1147	1420
MW-10	07/24/15	1907	1147	1330
MW-11	07/24/15	1907	1147	1240
MW-11 Duplicate	07/24/15	1907	1147	1240
MW-12	07/24/15	1907	1147	1210

(1) NOAA Tide Predictions, Oakland Inner Harbor, California, 2015  
 Station ID: 9414764



SB-11	
ft bgs	4.75
TPHg	ND <170
Benzene	ND <1.7
Toluene	<b>8.2</b>
EthylBenzene	ND <1.7
Xylenes	ND <1.7
Naphthalene	ND <6.7

SB-12	
ft bgs	4.5
TPHg	<b>1,700<sup>(a)</sup></b>
Benzene	ND <0.5
Toluene	<b>22</b>
EthylBenzene	ND <0.5
Xylenes	ND <0.5
Naphthalene	ND <2.0

SB-13	
ft bgs	4.5
TPHg	<b>890<sup>(a)</sup></b>
Benzene	ND <0.5
Toluene	<b>6.3</b>
EthylBenzene	ND <0.5
Xylenes	ND <0.5
Naphthalene	ND <2.0

SB-14	
ft bgs	4.5
TPHg	ND <200
Benzene	ND <2.0
Toluene	ND <2.0
EthylBenzene	ND <2.0
Xylenes	ND <2.0
Naphthalene	ND <8.0

SB-9	
ft bgs	4.75
TPHg	ND <200
Benzene	ND <2.0
Toluene	<b>8.3</b>
EthylBenzene	ND <2.0
Xylenes	ND <2.0
Naphthalene	ND <8.0

SB-10	
ft bgs	5.5
TPHg	ND <710
Benzene	ND <7.1
Toluene	ND <7.1
EthylBenzene	ND <7.1
Xylenes	ND <7.1
Naphthalene	ND <29

Analyte	MW-12
TDS	<b>1610</b>
TPHd	<b>2,170</b>
TPHg	ND <50
Benzene	ND <1.0
Toluene	ND <1.0
Ethyl Benzene	ND <1.0
Xylenes	ND <2.0
Naphthalene	ND <0.48

Analyte	MW-11
TDS	<b>1430/1340</b>
TPHd	<b>622/624</b>
TPHg	ND <50/51.5
Benzene	ND <1.0/ND <1.0
Toluene	ND <1.0/ND <1.0
Ethyl Benzene	ND <1.0/ND <1.0
Xylenes	ND <2.0/ND <2.0
Naphthalene	ND <0.48/ND <0.48

Analyte	MW-10
TDS	<b>1730</b>
TPHd	<b>3,600</b>
TPHg	<b>120</b>
Benzene	ND <1.0
Toluene	ND <1.0
Ethyl Benzene	ND <1.0
Xylenes	ND <2.0
Naphthalene	ND <0.51

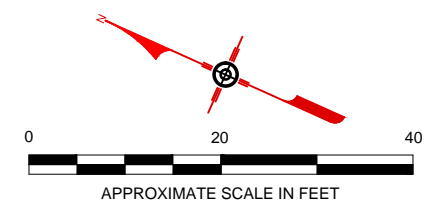
Analyte	MW-9
TDS	<b>1520</b>
TPHd	<b>382</b>
TPHg	ND <50
Benzene	ND <1.0
Toluene	ND <1.0
Ethyl Benzene	ND <1.0
Xylenes	ND <2.0
Naphthalene	ND <0.51

- LEGEND:**
- UNDIFFERENTIATED NONMETALLIC UTILITY LINE
  - UNDIFFERENTIATED METALLIC UTILITY LINE
  - FENCE
  - APPROXIMATE EXTENT OF FORMER TANK EXCAVATION
  - CATCH BASIN
  - SOIL BORING LOCATION (2015)
  - EXISTING MONITORING WELL LOCATION
  - ABANDONED MONITORING WELL LOCATION
  - SOIL BORING LOCATION (2009)
  - SOIL SAMPLE LOCATION (1989)
  - SOIL BORING LOCATION (1990 & 1994)
  - SHALLOW WELL 2015 ( TD = 8 ft bgs)

Analyte	Unit
TDS	(mg/L)
TPHd	(µg/L)
TPHg	(µg/L)
Benzene	(µg/L)
Toluene	(µg/L)
Ethyl Benzene	(µg/L)
Xylenes	(µg/L)
Naphthalene	(µg/L)

- ABBREVIATIONS:**
- mg/L = milligrams per liter
  - µg/L = micrograms per liter
  - ft bgs = feet below ground surface
  - TPHd = Total Petroleum Hydrocarbons as diesel
  - TPHg = Total Petroleum Hydrocarbons as gasoline
  - ND = Not detected at or above the laboratory reporting limit
  - < = Indicates constituent not detected at or above specified reporting limit
  - BOLD** = Detected above laboratory reporting limit
  - (a) = SAMPLE EXHIBITS CHROMATOGRAPHIC PATTERN THAT DOES NOT RESEMBLE STANDARD
  - J = Estimated value
  - 622/624 = Primary/Duplicate

- NOTES:**
- GROUNDWATER MONITORING WELL SAMPLES COLLECTED ON JULY 24, 2015.
  - GRAB GROUNDWATER SAMPLES COLLECTED FROM OPEN BORING ON JANUARY 15, 2015.



**REFERENCE:**  
 UTILITIES BASED ON FIGURE PROVIDED BY NORCAL GEOPHYSICAL CONSULTANTS INC.  
 PLATE 1; DECEMBER 2008; BY G. RANDALL; JOB # 008-903.05

ALL SITE FEATURES AND WELL LOCATIONS, EXCEPT THE FORMER USTs, SURVEYED BY MID COAST ENGINEERS FEBRUARY AND APRIL 2011 JOB#10018X DATED APRIL 27, 2011;  
 TITLED "MONITORING WELL LOCATION MAP FOR PENSKE"  
 ALL GROUND SPOT ELEVATIONS AND SURFACE CONTOURS BY MID COAST ENGINEERS - FIGURE 1 TITLED "TOPOGRAPHIC MAP FOR PENSKE" JOB#10018TP DATED DECEMBER 4, 2014  
 SITE COORDINATE SYSTEM: CA STATE PLANE; ZONE III; NAD 83 VERTICLE DATUM; NAVD 88

 1340 Treat Boulevard, Suite 300 Walnut Creek, CA 94597 PHONE: (925) 941-1400 FAX: (925) 941-1401	FOR:	PENSKE 725 JULIE ANN WAY OAKLAND, CALIFORNIA		FIGURE:	<b>4</b>
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	
	185702850.200.0001	RRR/STA	EH	EH	01/22/16



PROJECT: **Penske Oakland**  
 LOCATION: **725 Julie Ann Way, Oakland, CA**  
 PROJECT NUMBER: **185702858**

HAND BORING NO:








**MW-10** PAGE 1 OF 1



INSTALLATION:  
 STARTED **7/23/15** COMPLETED: **7/23/15**  
 EXCAVATION COMPANY: **Gregg Drilling & Testing, Inc.**  
 EQUIPMENT: **Hand Auger**  
 METHOD: **Hand Auger**  
 SAMPLING EQUIPMENT: **Auger Bucket**

NORTHING (ft):  
 LAT:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **5.25**  
 STATIC DTW (ft): **5.1**  
 WELL CASING DIA. (in): ---  
 LOGGED BY: **CM**

EASTING (ft):  
 LONG:  
 TOC ELEV (ft):  
 WELL DEPTH (ft): **8.0**  
 DEPTH (ft): **8.0**  
 BOREHOLE DIA. (in): **5**  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Asphalt							8" well box
		SM	<b>SILTY SAND WITH GRAVEL AND CLAY ; SM; 5Y 4/2 olive gray; fine-grained; dense; dry; fine to coarse angular broken sandstone gravel (fill) (10,55,30,5)</b>						0	Portland cement grout with 3-5% bentonite
			Concrete							1" Sch. 40 Blank PVC casing
		CL-ML	<b>SILTY CLAY WITH SAND AND GRAVEL ; CL-ML; 5Y 3/1 very dark dark gray; medium plasticity; stiff; dry; (10,10,25,55)</b>						1	Bentonite pellets, hydrated
			Bricks and pieces of concrete bricks							
5			Similar to above; wet, strong odor with hydrocarbon sheen						5	#3 Sand
		OH	<b>ORGANIC CLAY ; OH; 5Y 2.5/1 black; high plasticity; soft; moist; peaty organics (0,0,0,100)</b>			0.25			33	0.020" Slotted Screen
			Borehole terminated at 8 feet.							Bottom Cap

PROJECT: **Penske Oakland**  
 LOCATION: **725 Julie Ann Way, Oakland, CA**  
 PROJECT NUMBER: **185702858**

HAND BORING NO:

**MW-11** PAGE 1 OF 1



INSTALLATION:  
 STARTED **7/23/15** COMPLETED: **7/23/15**  
 EXCAVATION COMPANY: **Gregg Drilling & Testing, Inc.**  
 EQUIPMENT: **Hand Auger**  
 METHOD: **Hand Auger**  
 SAMPLING EQUIPMENT: **Auger Bucket**

NORTHING (ft): EASTING (ft):  
 LAT: LONG:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **Not Encountered** WELL DEPTH (ft): **8.0**  
 STATIC DTW (ft): **Not Encountered** DEPTH (ft): **8.0**  
 WELL CASING DIA. (in): --- BOREHOLE DIA. (in): **5**  
 LOGGED BY: **CM** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Asphalt							8" well box
		SM	<b>SILTY SAND WITH GRAVEL AND CLAY ; SM; 5Y 4/2 olive gray; fine-grained; dense; dry; fine to coarse angular broken sandstone gravel (fill) (10,55,30,5)</b>						0	Portland cement grout with 3-5% bentonite
		CL-ML	<b>SILTY CLAY WITH GRAVEL AND SAND ; CL-ML; 5Y 3/1 very dark dark gray; medium plasticity; stiff; dry; (10,10,25,55)</b>						4	1" Sch. 40 Blank PVC casing
5		GM	<b>SILTY GRAVEL WITH SAND AND CLAY ; GM; 5Y 2.5/1 black; fine to coarse-grained; dense; wet; angular rock and brick pieces, oily with strong odor (50,10,30,10)</b>			0.25			35	Bentonite pellets, hydrated
		OH	<b>ORGANIC CLAY ; OH; 5Y 2.5/1 black; high plasticity; soft; moist; zones of peaty organics (0,0,0,100)</b>						5	#3 Sand
									1	0.020" Slotted Screen
									0	Bottom Cap
			Borehole terminated at 8 feet.							

PROJECT: **Penske Oakland**  
 LOCATION: **725 Julie Ann Way, Oakland, CA**  
 PROJECT NUMBER: **185702858**

HAND BORING NO:

**MW-12** PAGE 1 OF 1



INSTALLATION:  
 STARTED **7/23/15** COMPLETED: **7/23/15**  
 EXCAVATION COMPANY: **Gregg Drilling & Testing, Inc.**  
 EQUIPMENT: **Hand Auger**  
 METHOD: **Hand Auger**  
 SAMPLING EQUIPMENT: **Auger Bucket**

NORTHING (ft): EASTING (ft):  
 LAT: LONG:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **Not Encountered** WELL DEPTH (ft): **8.0**  
 STATIC DTW (ft): **Not Encountered** DEPTH (ft): **8.0**  
 WELL CASING DIA. (in): --- BOREHOLE DIA. (in): **5**  
 LOGGED BY: **CM** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Asphalt							8" well box
		SM	<b>SILTY SAND WITH GRAVEL AND CLAY ; SM; 5Y 4/2 olive gray; fine-grained; dense; dry; fine to coarse angular broken sandstone gravel (fill) (10,55,30,5)</b>							Portland cement grout with 3-5% bentonite
		CL-ML	<b>SILTY CLAY WITH SAND AND GRAVEL ; CL-ML; 5Y 3/1 very dark dark gray; medium plasticity; stiff; dry; (10,10,25,55)</b>					0		1" Sch. 40 Blank PVC casing
5		GM	<b>SILTY GRAVEL WITH SAND AND CLAY ; GM; 5Y 2.5/1 black; fine to coarse-grained; dense; wet; angular broken rock, HC sheen, moderate odor (50,10,30,10)</b>			0.25		20	5	Bentonite pellets, hydrated
		OH	<b>ORGANIC CLAY ; OH; 5Y 2.5/1 black; high plasticity; soft; moist; zones of peaty organics (0,0,0,100)</b>					3		#3 Sand
								1		0.020" Slotted Screen
										Bottom Cap
			Borehole terminated at 8 feet.							

PROJECT: **Penske Oakland**  
 LOCATION: **725 Julie Ann Way, Oakland, CA**  
 PROJECT NUMBER: **185702858**

HAND BORING NO:

**MW-9** PAGE 1 OF 1



INSTALLATION:  
 STARTED **7/23/15** COMPLETED: **7/23/15**  
 EXCAVATION COMPANY: **Gregg Drilling & Testing, Inc.**  
 EQUIPMENT: **Hand Auger**  
 METHOD: **Hand Auger**  
 SAMPLING EQUIPMENT: **Auger Bucket**

NORTHING (ft):  
 LAT:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **5.5**  
 STATIC DTW (ft): **5.1**  
 WELL CASING DIA. (in): ---  
 LOGGED BY: **CM**

EASTING (ft):  
 LONG:  
 TOC ELEV (ft):  
 WELL DEPTH (ft): **8.0**  
 DEPTH (ft): **8.0**  
 BOREHOLE DIA. (in): **5**  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Asphalt							8" well box
		SM	<b>SILTY SAND WITH GRAVEL AND CLAY ; SM; 5Y 4/2 olive gray; fine-grained; dense; dry; fine to coarse angular broken sandstone gravel (fill) (10,55,30,5)</b>					0		Portland cement grout with 3-5% bentonite
		CL-ML	<b>SILTY CLAY WITH GRAVEL AND SAND ; CL-ML; 5Y 3/1 very dark dark gray; medium plasticity; stiff; dry; (10,10,25,55)</b>					0		1" Sch. 40 Blank PVC casing
5		GM	<b>SILTY GRAVEL WITH SAND AND CLAY ; GM; 5Y 2.5/1 black; fine to coarse-grained; dense; wet; angular broken rock (50,10,30,10)</b>			0.25		5		Bentonite pellets, hydrated
		OH	<b>ORGANIC CLAY ; OH; 5Y 2.5/1 black; high plasticity; soft; moist; peaty organics (0,0,0,100)</b>							#3 Sand
			Borehole terminated at 8 feet.							0.020" Slotted Screen
										Bottom Cap