Appendix F

Post Remediation Letters and Report, June 2021

This page is intentionally left blank.

PARTNER
Engineering and Science, Inc.

June 7, 2021

Andy T. Uk
Anaheim Planning & Building Department
200 South Anaheim Boulevard | Suite 162
Anaheim, CA 92805

SUBJECT: 898-914 W LINCOLN AVE, ANAHEIM (LINCOLN COLONY APARTMENT PROJECT) - NO FURTHER ACTION NEEDED

Dear Mr. Uk:

Partner Engineering and Science, Inc. (Partner) has been asked to review the "Vapor Extraction Well Installation, Post Remediation Vapor Extraction Test, And Request For No Further Action" report prepared by Frey Environmental in 2016 (Frey Report); and the "Final No Further Action/Closure Letter for the Former Anaheim Car Wash" report issued by the Regional Water Quality Control Board (RWQCB) in 2018 (Closure Letter) to determine if further soil vapor surveys would be desirable to consider the Lincoln Colony Apartment project.

The property located at 898-914 W Lincoln Avenue, is a vacant site that was formally improved with a full-service carwash. The Lincoln Colony Apartment project proposes a 43-unit apartment complex. In February 2000, three 10,000-gallon underground storage tanks were removed. Contaminated soils were removed from the site in 2003 and soil vapor extraction began in 2007.

The Frey Report documented the installation of a vapor extraction well and the results of a post remediation vapor extraction test. The Frey Report concluded that any residual soil vapor met the State of California Water Resources Control Board (SWRCB) criteria outlined in the "Low-Threat Underground Storage Tank Case Closure Policy", which was adopted by the SWRCB in August 2012, for Petroleum Vapor Intrusion to Indoor Air Media Specific Criteria and for Direct Contact and Outdoor Air Exposure. had been met. As a result of the Frey Report, the RWQCB issued the Closure Letter for unrestricted land uses.

Soil that remains impacted is at depths greater than 40 feet, which would not be encountered by the project as excavations would not occur to these depths. Accordingly, Partner concurs with the findings that residual hydrocarbons from the former underground storage tanks do not pose a significant risk to human health, safety, or the environment. Partner further concurs that no additional assessment of the site is needed.

I can be reached at 310-622-8855 or dstott@partneresi.com if you have any questions.

Sincerely,

Debbie Stott, P.G.
Principal

June 25, 2018

Mr. Amir Lankarani
Former Anaheim Car Wash
3013 Los Feliz Boulevard
Los Angeles, CA 90039

SUBJECT: FINAL NO FURTHER ACTION/CLOSURE LETTER
FORMER ANAHEIM CAR WASH
900 WEST LINCOLN AVENUE, ANAHEIM
UST #083003742T

Dear Mr. Lankarani:

As you are aware, the *Well Abandonment Report* submittal was delayed due to payment issues between you and your environmental consultant, Frey Environmental, Inc. (Frey). It is our understanding that Frey has received payment for services rendered and this report was uploaded to the GeoTracker Database on June 13, 2018 prior to the issuance of a final closure letter.

This letter confirms the completion of site investigation and remediation of the former underground storage tanks (USTs) and associated piping areas of the above-referenced site. A copy of the *Case Closure Summary* is enclosed. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning this release and repair are greatly appreciated.

Based on the information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at the above-referenced UST site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum releases(s) at the site is required.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code.

Please be aware that claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund (Fund) more than 365 days after the date of

this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or

- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

If you should have any questions, please contact Kenneth R. Williams or Nancy Olson-Martin at (951) 782-4496 or 4497, respectively or via email at Ken.Williams@waterboards.ca.gov or Nancy.Olson-Martin@waterboards.ca.gov, respectively.

Sincerely,

Hope A. Smythe
Executive Officer

Enclosure: Draft Case Closure Summary (14 Pages)

cc w/enclosure:
SWRCB-Benjamin Heningburg (Benjamin.Heningburg@waterboards.ca.gov)
SWRCB-Kirk Larson (Kirk.Larson@waterboards.ca.gov)
Orange County Water District-Roy Herndon (RHerndon@ocwd.com)
Orange County Water District-David Bolin (DBolin@ocwd.com)
Anaheim Public Works Department-Ralph McCaffrey (Rmccaffrey@anaheim.net)
Frey Environmental, Inc.-Joe Frey (joefrey@freyinc.com)
Frey Environmental, Inc.-Kent Tucker (kenttucker@freyinc.com)
Frey Environmental, Inc.-Mollie Banh (molliebanh@freyinc.com)
Pacific Coast Asset Management, LLC (Current Property Owner)-Jerry Zomorodian
The Michael K. Daskalakis Trust-Michael K. Daskalakis (870-888 Lincoln Avenue)
The Steven D. White Revocable Trust-Steven D. White (115 South Ohio Street)

CASE CLOSURE SUMMARY

I. AGENCY INFORMATION

DATE: JUNE 25, 2018

AGENCY NAME: CRWQCB – Santa Ana Region (#8)	**ADDRESS:** 3737 Main Street, Suite 500
CITY/STATE/ZIP: Riverside, CA 92501-3348	**PHONE:** (951) 782-4497 or (951) 782-4130
STAFF: Nancy Olson-Martin	**TITLE:** Sanitary Engineering Associate

II. CASE INFORMATION

SITE NAME:	Anaheim Car Wash (Former)
LOCATION:	900 West Lincoln, Anaheim
RB CASE #:	UST #083003742T

CONTACT/BUSINESS NAME	**ADDRESS**	**E-MAIL ADDRESS**
Mr. Amir Lankarani Anaheim Car Wash	3013 Los Feliz Boulevard Los Angeles, CA 90039	Unknown

TANK NO.	SIZE IN GALLONS	CONTENTS	CLOSED IN-PLACE REMOVED?	DATE
#1	10,000-gallon, single-walled, steel UST	Gasoline	Removed	February 29, 2000
#2	See Above	Gasoline	Removed	February 29, 2000
#3	See Above	Gasoline	Removed	February 29, 2000

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

CAUSE & TYPE OF RELEASE: Former UST and associated piping.	
SITE CHARACTERIZATION COMPLETE: YES [X] NO [ ]	
MONITORING WELLS INSTALLED: Yes	**PROPER SCREENED INTERVAL:** YES [X] NO [ ]
HIGHEST GW DEPTH BELOW GROUNDWATER SURFACE (bgs): 72.35 feet bgs (MW3 in April 2007)	**LOWEST DEPTH:** 105 feet bgs (MW1 in December 2009)
FLOW DIRECTION: South/southwest	**NEAREST/AFFECTED SW NAME:** NA
MOST SENSITIVE CURRENT GW USE: MUN	**OFF-SITE BENEFICIAL USE IMPACTS:** NA
GROUNDWATER MANAGEMENT ZONE: Orange County	**REPORT(S) FILED:** California Regional Water Quality Control Board
REPORT(S) ON FILE? Yes, and uploaded on the SWRCB's GeoTracker Database: https://geotracker.waterboards.ca.gov	3737 Main Street, Suite 500, Riverside, CA 92501-3348 and uploaded to SWRCB's GeoTracker Database: https://geotracker.waterboards.ca.gov

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

MATERIAL	AMOUNT	ACTION TREATMENT OR DISPOSAL W/DESTINATION	DATE
TANKS/PIPING AND SOIL	Three USTs and 125 Gallons Liquid (Non-RCRA Hazardous Waste)	A total of three underground storage tanks (USTs) were removed. Each UST consisted of a 10,000-gallon single-walled, steel, tank that contained gasoline product. The USTs were removed and soils were excavated by Ocean Blue Engineers and stockpiled on the site. The liquid wastes were transported by Able Environmental to the Crosby and Overton Recycling and Disposal facility located in Long Beach, California. The UST removal, excavation, and sampling activities were witness by a City of Anaheim Fire Department Inspector.	February 28-29, 2000

Continued:

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

MATERIAL	AMOUNT	ACTION TREATMENT OR DISPOSAL W/DESTINATION	DATE
SOIL AND/OR GROUNDWATER	37.78 Tons (Soil)	Able Tank and Pump transported the contaminated soils to TPS Technologies Inc., a permitted treatment and recycling facility located in Adelanto, California.	May 8, 9, and 14, 2003
	75.51 Pounds (Hydrocarbons)	On April 19, 2007, two soil vapor extraction (SVE) tests were conducted on dual-nested wells VE1a and VE1b, which were screened from 20 to 50 feet and 60 to 90 feet bgs, respectively.	April 19, 2007
	4,551 Pounds (Hydrocarbons)	On February 7, 2014, the SVE system was activated. Wells MW1, MW2, MW3, VE7, VE8, VE9, and dual-nest wells VE1s, VE1d, VE2s, VE2d, VE5s, VE5d, VE6s, and VE6d were used as extraction wells. The system was deactivated due to the expired SCAQMD permit and the asymptotic concentrations of the effluent vapor results.	February 7, 2014 through April 17, 2015
	14.96 Pounds (Hydrocarbons)	Two-step SVE tests (two 10-hour tests that used vacuums of 50 in-H20 and 80 in-H20) were completed to evaluate the post-remediation hydrocarbons that remained in the fine-grained soil located beneath the site at approximately 30 to 60 feet bgs. A mobile SVE unit, permitted under a SCAQMD various locations permit, operated at the site. Well VE10 was used as the extraction well and wells VE1s, VE1d, VE2s, VE2d, VE6s, VE6d, VE7 through VE9, and MW1 through MW3 were used as observations wells.	August 23-24, 2016
		Groundwater and post-remedial monitoring and sampling events were completed.	April 2003 through July 15, 2015

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS – BEFORE & AFTER CLEANUP

	SOIL - Maximum (mg/kg or ppm)			*WATER – Maximum (µg/l or ppb)*	
	Before Remediation		After Remediation		
CONTAMINANT	February 2000 UST/Piping Removal	Site Assessments [1]2003 & [2]2006	[3]12/15 Soil Con-formation Borings & [4]8/16 Boring VE10	Historical Maximum Concentrations April 2003 – July 2015	Latest Event [5,6]July 15, 2015
Total Petroleum Hydrocarbons-gasoline (TPH-g)	**5,600** (#T6)	[1]**3,700** (B1-45') [2]**230** (B9-25')	[3]**36,000** (CB2-55') [4]**3,400** (VE10-45')	**520** (MW3-9/13)	**ND<100**

[1]In April 2003, borings/wells B1/VE1, B2/MW1, B3/MW2, B4/VE2, B5/MW3, B6/VE4, and B7/VE3 were installed and sampled.

[2]In November 2006, borings/wells B8/VE5, B9, B10, and B11/VE6 were installed and sampled.

[3]Confirmation soil borings (CB1 through CB5) samples were analyzed by EPA Method 8260b for total purgeable petroleum hydrocarbons (TPPH).

[4]ND = Compound was not detected at or above laboratory detection limits and NA = compound was not analyzed.

[5]On July 15, 2015, wells VE1 through VE3 were dry.

[6]Other volatile organic compounds (VOCs) were analyzed during the September 2014, February 2015, and July 2015 events for wells MW1 through MW3.

Table – continued:

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS – BEFORE & AFTER CLEANUP					
	SOIL - Maximum (mg/kg or ppm)			*WATER – Maximum (µg/l or ppb)*	
	Before Remediation		After Remediation		
CONTAMINANT	February 2000 UST/Piping Removal	Site Assessments [1]2003 & [2]2006	[3]12/15 Soil Con-formation Borings & [4]8/16 Boring VE10	Historical Maximum Concentrations April 2003 – July 2015	Latest Event [5,6]July 15, 2015
Ethanol	**NA**	[1,2]**NA**	**NA**	**220** (MW3-12/06)	**ND<100**
Benzene	**22.10** (#T3)	[1]**58** (B1-25') [2]**1.1** (B9-25')	[3]**290** (CB2-55') [4]**0.035** (VE10-55')	**11** (MW1-4/03)	**ND<0.50**
Toluene	**210** (#T6)	[1]**500** (B1-25') [2]**5.7** (B9-25')	[3]**3,100** (CB2-55') [4]**72** (VE10-50')	**9.2** (MW3-6/06)	**ND<1.0**
Ethylbenzene	**260** (#T6)	[1]**160** (B4-20') [2]**3.3** (B9-25')	[3]**590** (CB2-55') [4]**26** (VE10-50')	**11.5** (MW2-3/03)	**ND<1.0**
Total Xylenes	**450** (#T6)	[1]**920** (B4-20') [2]9.7 (B9-25')	[3]**3,900** (CB2-55') [4]**510** (VE-45')	**56** (MW1-5/03)	**ND<1.0**
Methyl tertiary butyl ether (MTBE)	**62** (#T5)	[1]**32** (B2-35') [2]**6.4** (B8-30')	[3]**67** (CB2-55') [4]**5.9** (VE10-50')	**280** (VE1-9/07)	**ND<1.0**
Tert-butyl alcohol (TBA)	**NA**	[1]**1.2** (B5-30') [2ND]	[3]**0.76** (CB3-50') [4]**0.150** (VE10-55')	**74** (VE1-9/07)	**ND<10**
Tetrachloroethene	**NA**	[1,2]**NA**	[3,4]**ND**	**6.0** (MW3-7/15)	**6.0** (MW3)
n-butylbenzene	**NA**	[1,2]**NA**	[3]**72** (CB2-55') [4]**22** (VE10-45')	**ND**	**ND**
sec-butylbenzene	**NA**	[1,2]**NA**	[3]**0.21** (CB2-10' [4]**ND**	**ND**	**ND**
Isopropylbenzene	**NA**	[1,2]**NA**	[3]**36** (CB5-45') [4]**ND**	**ND**	**ND**
p-isopropyltoluene	**NA**	[1,2]**NA**	[3]**0.010** (CB2-10') [4]**ND**	**ND**	**ND**
Naphthalene	**NA**	[1,2]**NA**	[3]**0.13** (CB2-25') [4]**ND**	**ND**	**ND**
n-propylbenzene	**NA**	[1,2]**NA**	[3]**160** (CB2-55') [4]**15** (VE10-45')	**ND**	**ND**

[1]In April 2003, borings/wells B1/VE1, B2/MW1, B3/MW2, B4/VE2, B5/MW3, B6/VE4, and B7/VE3 were installed and sampled.

[2]In November 2006, borings/wells B8/VE5, B9, B10, and B11/VE6 were installed and sampled.

[3]Confirmation soil borings (CB1 through CB5) samples were analyzed by EPA Method 8260b for total purgeable petroleum hydrocarbons (TPPH).

[4]ND = Compound was not detected at or above laboratory detection limits and NA = compound was not analyzed.

[5]On July 15, 2015, wells VE1 through VE3 were dry.

[6]Other volatile organic compounds (VOCs) were analyzed during the September 2014, February 2015, and July 2015 events for wells MW1 through MW3.

Table – continued:

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS – BEFORE & AFTER CLEANUP					
	SOIL - Maximum (mg/kg or ppm)			*WATER – Maximum (µg/l or ppb)*	
	Before Remediation		After Remediation		
[1]*CONTAMINANT*	February 2000 UST/Piping Removal	Site Assessments [1]2003 & [2]2006	[3]12/15 Soil Con-formation Borings & [4]8/16 Boring VE10	Historical Maximum Concentrations April 2003 – July 2015	Latest Event [5,6]July 15, 2015
1,2,4-trimethylbenzene	**NA**	[1,2]**NA**	[3]**1,200** (CB2-55') [4]**310** (VE10-45')	**ND**	**ND**
1,3,5-trimethylbenzene	**NA**	[1,2]**NA**	[3]**310** (CB2-55') [4]**96** (VE10-45')	**ND**	**ND**

[1]Refer to footnotes on pages 2 and 3 of this table.

IV. CLOSURE

Does completed corrective action protect beneficial uses per the Regional Board Basin Plan? YES [X] NO [ ]
Does the corrective action protect public health for current land use? YES [X] NO [ ] Note: Any change to Residential Land Use may require a Human Health Risk Assessment (HHRA).

The December 2015 and August 2016 confirmation borings (CB1 through CB5 and VE10) revealed ND results for the 5.0 and 10-foot samples that were collected and analyzed for benzene and naphthalene. Ethylbenzene was detected in sample CB2-10' at 0.073 ppm. All other ethylbenzene results were ND. PAH sampling was not required for this site. Therefore, all benzene, ethylbenzene, and naphthalene results were below the State of California Water Resources Control Board (SWRCB) Low-Threat Underground Storage Tank Case Closure Policy (LTCP), Table 1 (*Concentrations of Petroleum Constituents in Soil that Will Have No Significant Risk of Adversely Affecting Human Health).*

V. ADDITIONAL COMMENTS, DATA, ETC.

CURRENT LAND USE

An active tunnel car wash facility operates at the subject site. This facility is located at the southwest corner of the intersection of Lincoln Avenue and Ohio Street in the City of Anaheim. Lincoln Avenue and commercial businesses are located to the north of the site. Anaheim High School is located to the northeast and residential areas are located to the northwest, southwest, south, and southeast of the site, respectively. Additional commercial and industrial land use is located to the west and east of the site. A closed underground storage tank (UST) case, former Texaco Service Station, was located approximately 657 feet west of the site at 1131 W. Lincoln Avenue, Anaheim.

2000

From February 28-30, 2000, three (3) USTs were removed. Petroleum hydrocarbon-impacted soils were excavated and stockpiled. The excavated USTs were transported to a permitted recycling facility for disposal. A City of Anaheim Fire Department inspector witnessed the UST removal, excavation, and sampling activities. A total of 15 piping (P1 through P15) and six UST (T1 through T6) soil samples were collected and analyzed for total petroleum hydrocarbons-gasoline (TPH-g), benzene, toluene, ethylbenzene, total xylenes (BTXE), and methyl tert-butyl ether (MTBE). TPH-g concentrations were detected in eight samples (P4, P6, and T1 through T6) and concentrations ranged from 1.1 ppm (P6) to 5,600 ppm (T6). Benzene and MTBE concentrations were detected in nine and 20 of the 21 soil samples, respectively. Benzene and MTBE concentrations ranged from 0.015 ppm (P13) to 17 ppm (T6) and 0.09 ppm (P1) to 62 ppm (T5), respectively.

The highest toluene, ethylbenzene, and total xylenes concentrations were also detected in the T6 samples at 210 ppm, 260 ppm, and 450 ppm, respectively.

Generally, the highest contaminant concentrations were detected in the samples collected from tanks T3 through T6. The former UST area was located at the southeastern corner of the property. Tank T4 and T6 soil samples were collected at the northern end of these tanks. Tank T3 and T5 samples were collected at the southern end of the tanks.

2003-2006

Site assessment included the installation of borings and/or wells in the following areas of the site:

Within the Former UST Area: Boring/well B1/VE1 was advanced (April 2003) within the mid-point area of former eastern UST.
East of the Former UST Area:

1. Boring/well B2/MW1 was advanced (April 2003) to the east of the former UST area and near Ohio Street.
2. Boring B9 was advanced (November 2006) off-site within the right-of-way of Ohio Street and east of the former UST area and well MW1.

V. ADDITIONAL COMMENTS, DATA, ETC. – Continued:

West of the Former UST Area:

1. Boring/well B3/MW2 was advanced (April 2003) to the west of the former UST area.
2. Boring/dual-nested wells B11/well VE6s and VE6d was advanced (November 2006) to the west of well MW2 and the former UST area.

North of the Former UST Area:

1. Boring/dual-nested wells B4/VE2s and VE2d were advanced (April 2003) to the north of the former UST area.
2. Boring/dual-nested wells B6/VE4s and VE4d were advanced (April 2003) within the former northern piping area, north of the former UST, and near sample #P4.
3. Boring/dual-nested wells B7/VE3s and VE3d were advanced (April 2003) within the former northern piping area and adjacent to sample #P13.
4. Boring/dual-nested wells B8/VE5s and VE5d were advanced (November 2006) to the northeast corner of the former UST area and well VE2.

South of the Former UST Area:

1. Boring/well B5/MW3 was advanced south of the former UST area.
2. Boring B10 was advanced (November 2006) to the south of the former UST area and MW3; along the southern property line.

The borings were drilled to depths of 71.5 feet (B9), 76.5 feet (B10), 81.5 feet (B8/VE5s/VE5d and B11/wellVE6s/VE6d), 95-95.5 feet (B4/VE2 and B6/VE4), 96.5 feet (B7/VE3), 98 feet (B1/VE1), and 110 feet (B2/MW1, B3/MW2, and B5/MW3) bgs. Several of the borings were converted to wells and dual-nested vapor extraction (VE) wells. Single-casing wells (B3/MW1, B2/MW2, and B5/MW3) were screened from 80-80.5 to 110-110.5 feet bgs. The dual-nested wells were screened from 18-28 to 40-60 feet (B8/VE5), 20-50 and 60-65.5 to 90-95 feet (B1/VE1 and B4/VE2), 10-30 to 40-70 feet (B7/VE3), 15-45 to 75 feet (B6/VE4), and 38-65 to 75 feet (B11/VE6) bgs.

Soils consisted primarily of fine-grained sand, stiff silt, medium-grained sand, coarse-grained sand, hard clay, and hard silt. Depth to groundwater ranged from approximately 68 feet (B9) to 97 feet (B3//VE2, B2/MW1, and B4/VE2) bgs. A groundwater gradient flow direction to the south/southwest at 0.005 ft/ft was established.

Generally, soil samples were collected at five-foot intervals from 5 or 15 feet to 90 feet bgs. Approximately 180 soil samples were collected from 2003 through 2006. Moderate to elevated petroleum hydrocarbons were generally detected in samples collected from 20 to 45 feet bgs in borings B1 through B5. Maximum TPH-g, BTEX, and MTBE concentrations were detected in sample B1-45' and B4-20' up to 3,700 ppm, 58 ppm, 500 ppm, 160 ppm, 920 ppm, and 29 ppm, respectively. In addition, tert-butyl alcohol (TBA) concentrations were detected in sample B5-35' at 1.2 ppm. ND to low-level petroleum hydrocarbon concentrations were detected from 5-10 to 15 and 50 to 90 feet bgs.

Trace to low-level petroleum hydrocarbon concentrations were detected in borings B6 (between 40 to 65 feet bgs), B7 (40 to 60 feet bgs), B8 (10 to 60 feet) bgs, B9 (15 to 65 feet bgs), B10 (20 to 70 feet bgs), and B11 (5-10, 25-35, and 50-80 fee bgs). Most of the soil samples collected above or below these depths were generally ND or below 1.0 ppm.

Therefore, elevated petroleum hydrocarbons were detected within or surrounding the former UST area. The soil results for boring B1 revealed the maximum vertical and lateral petroleum hydrocarbons that were detected during these investigations. In addition, the November 2006 investigation satisfactorily defined the vertical and lateral extent of petroleum hydrocarbons.

On May 7-8, 2003, a total of approximately 37.78 tons of stockpiled soil was transported to TPS Technologies Inc., a permitted treatment and recycling facility located in Adelanto, California. The initial 2003 and 2006 groundwater results revealed low-level petroleum hydrocarbons detected in the groundwater samples collected from well MW1, which was advanced east of the UST area. Maximum TPH-g, BTEX, MTBE, and tert-butyl alcohol (TBA) concentrations were detected in sample MW1 at 190 ppb, 11 ppb, 2.2 ppb, 9.7 ppb, 56 ppb, 71 ppb, and 20 ppb, respectively. Groundwater results for the other fuel oxygenates were all ND.

The initial groundwater results for wells MW2 and MW3 revealed ND or trace-level contaminant concentrations. Also, the initial groundwater results for wells VE1 and VE2 were ND except for ethanol concentrations that were detected at 130 ppb and 160 ppb, respectively. Subsequent December 2006 groundwater monitoring revealed that ethanol concentrations were also detected at 190 ppb (MW1) and 220 ppb (MW3), respectively.

2007

On April 19, 2007, two soil vapor extraction (SVE) tests were conducted on dual-nested vapor extraction wells VE1a and VE1b. A total of 75.51 pounds of hydrocarbons were recovered on that day. Also, a radius of influence (ROI) for VE1a was calculated at 66 feet. The tests revealed that SVE would be a feasible remedial option for the subject site.

On October 5, 2007, a Corrective Action Plan (CAP) was submitted to Regional Board staff. A vapor extraction system (VES) was proposed to remediate the site.

2013

On January 4, 2013, additional VE wells VE7, VE8, and VE9 were drilled to total depths of approximately 61.5 feet (VE7) and 21.5 feet (VE8 and VE9) bgs. The wells were installed in the following locations:

1. Well VE7 was installed near the southwest corner of the former UST area and in proximity to well MW3.
2. Well VE8 was installed between well MW2 and along the western excavation boundary of the former UST area.
3. Well VE9 was installed within the former UST excavation cavity and in proximity to well VE1.

V. ADDITIONAL COMMENTS, DATA, ETC. – continued:

No groundwater was encountered during the drilling activities. Based on the boring logs, slight to strong petroleum hydrocarbon odors were detected in each borehole. The borings were converted to remediation wells. Well VE7 was screened from 30 to 60 feet bgs while wells VE8 and VE9 were screened from 10 to 20 feet bgs. No soil samples were collected and analyzed due to proximity to previously sampled borings.

2014-2016

On February 7, 2014, the SVE system was activated. A total of 14 wells (MW1 through MW3, VE1s, VE1d, VE2s, VE2d, VE5s, VE5d, VE6s, VE6d, and VE7 through VE89) were used for extraction. On April 17, 2015, the various locations South Coast Air Quality Management District (SCAQMD) permit expired and the SVE was deactivated.

From February 7, 2014 through April 17, 2015, the SVE system recovered approximately 4,551 pounds of hydrocarbons. During the last quarter of operation, only 80 pounds of hydrocarbons were recovered. The consultant calculated a mass removal rate of approximately 12 lbs/day with selected wells open on April 10, 2015. The average mass removal rate with various wells open/closed configurations for the period of operation in the second quarter (207 hours) was approximately 9.3 lbs/day.

Since the system was deactivated due to the expiration of the SCAQMD permit, no rebound samples were collected. However, the April 17, 2015 wellhead vapor results for the 14 extraction wells confirmed that TPH-g concentrations in vapor were all below 100 ppmv except for wells VE-6s and VE7, which revealed low-level TPH-g concentrations in vapor at 340 ppmv and 310 ppmv, respectively. In addition, the BTEX, MTBE, and TBA results for the 14 extraction wells were all ND or below 10 ppmv, except for well VE-6S. A total xylenes concentration of 11 ppmv was detected in the vapor samples collected from this well. Regional Board staff concluded that completion of a rebound test would not be cost-effective based on the following conditions:

1. The SVE's low recovery rates during the last quarter of operation.
2. The ND to low-level vapor TPH-g, BTEX, MTBE, and TBA results during the last quarter of operation.
3. The costs and time required to go through SCAQMD's site-specific permit process and required public notification process due to the nearby school.

Regional Board staff recommended soil confirmation borings to determine the effectiveness of the SVE as well as confirm the residual contaminant concentrations that remained beneath the site. In July 2015, groundwater samples were collected and analyzed. The TPH-g and full-scan VOC results were all ND except for 6.0 ppb of tetrachloroethene (PCE), which was detected in well MW3.

On December 10, 2015, a total of five soil confirmation borings (CB1 through CB5) were each advanced to a total depth of 100-100.5 feet bgs. Groundwater was encountered at approximately 90 feet (CB2 through CB5) and 100 feet (CB1) bgs. Soils encountered consisted primarily of silt, sand, and clay, fine-grained silty sand, silty with minor or trace clay, and clayey silt. Silt and clay layers were located between 30 and 55 feet bgs. Soil samples were collected from each boring at five-foot intervals from 5 to 100 feet bgs. In total, 100 soil samples were collected and analyzed during this investigation. The borings were advanced in the following locations:

1. Boring CB1 was advanced west of the UST cavity area in proximity to well MW-2.

2. Boring CB2 was advanced within the former UST cavity area located north/northwest of former Tank #1 (southern row of former USTs #1, #3, and #5).

3. Boring CB3 was advanced east of the former UST cavity area and in proximity to well MW-1. The boring log noted a slight petroleum hydrocarbon odor was detected at approximately 30 to 40 and 55 to 60 feet bgs.

4. Boring CB4 was advanced in proximity to former USTs #T4 and #T6 (the highest contaminant concentrations were detected in the #T6 sample) and vapor extraction well VE2.

5. Boring CB5 was advanced south of the UST cavity area and in proximity to wells MW3 and VE7; near the southern boundary line of the site. The boring log noted slight, moderate, or strong petroleum hydrocarbon odors were detected from approximately 5 to 25 feet and 35 to 94 feet bgs in this boring.

Maximum compound concentrations detected in the VE10 soil samples are also summarized in the table presented on pages 2 through 4 of this summary. General observations noted for this investigation are summarized below:

1. Maximum Concentrations - The highest TPH-g, BTXE, and MTBE concentrations were detected in sample CB2-55' at 36,000 ppb, 290 ppb, 3,100 ppb, 3,100 ppb, 590 ppb, 3,900 ppb, and 67 ppb, respectively. This boring was advanced within the former UST cavity area located north of former UST Tank #1.

2. Shallow 5.0 and 10-Foot Samples – The 5.0 and 10-foot soil samples were all ND for benzene and naphthalene. Sample CB2-10' revealed an ethylbenzene concentration at 0.073 ppm. However, this ethylbenzene concentration was detected below the State Water Resources Control Board's Underground Storage Tank Low Threat Cleanup Policy's Table 1 (*Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health*) for concentrations impacting Residential, Commercial/Industrial, and Utility Worker Land Use.

V. ADDITIONAL COMMENTS, DATA, ETC. – continued:

3. Vertical Assessment - From 5 to 25 feet bgs, the soil results were generally ND with a few traces to minor TPH-g or VOC concentrations. Soil samples collected from the 60 to 100-foot depths were all ND for borings CB3 and CB4. In addition, the soil samples collected from the 80-85 to 100-foot depths were all ND for borings CB1, CB2, and CB5. With respect to borings CB1, CB2, and CB5, samples collected from the 65 to 80-foot depths revealed only a few TPH-g and VOCs concentrations that were detected at or below 1.4 ppm and 0.121 ppm, respectively. Based on these confirmation results, it appears that this investigation satisfactorily defined the vertical extent of contamination.

4. Residual Remaining Contamination and Comparison of Pre- and Post-Remediation - Based on the results, moderate to elevated TPH-g and VOCs (BTEX, MTBE, and TBA) concentrations were generally detected in borings CB1, CB2, CB3, and CB5 at the 30-35 to 50-55-foot depths. The soil results revealed only a few trace detections except for 9.9 ppm of MTBE detected in sample CB4-55. However, the MTBE results from CB4-55 to CB4-100 feet bgs were all ND.

   The confirmation borings revealed that the SVE was successful in the remediation of contaminant concentrations present from approximately 5 to 20 and 60 to 90 feet bgs. The residual contamination appeared to remain in an alluvium zone (30 to 60 feet bgs), which included interbedded clays and silts.

During a June 8, 2016 meeting between the project consultants and Regional Board staff, it was agreed that an additional VE well be completed in the proximity of boring VE8 and that a limited SVE test be completed on this well to determine recovery rates achieved and determine whether residual contaminant concentrations remain primarily in the clay or sand unit. If recovery rates were low, this would indicate that the residual contaminants remained in the clays and would likely not migrate. If so, this would provide justification for closure and this office would proceed with site closure. However, if recovery rates were higher, additional SVE would be warranted.

On August 6, 2016, one SVE extraction well (VE10) was advanced to approximately 60 feet below bgs in proximity to existing shallow well VP8. Boring VE10 was also advanced approximately eight (8) feet to the southwest of boring CB2, the confirmation boring that revealed the maximum contaminant concentrations. During drilling activities, soils primarily consisted of silty sand or poorly-graded fine grained sand, silt, silty sand, and a layer of clay (33 to 38 feet bgs). Boring VE10 was screened from approximately 30 to 60 feet bgs. Groundwater was not encountered during boring/well drilling and installation activities. Historically, depth to groundwater has ranged from 72.35 feet to 105 feet bgs beneath the site.

On August 5, 2016, soil samples were collected at five-foot intervals from 5 feet to 60 feet bgs and analyzed for TPH-g and VOCs. The soil samples collected from the 5.0, 10, 15, 20, 25, and 60-foot depths were all ND for TPH-g and VOCs. TPH-g concentrations were detected in four of the 12 soil samples and ranged from 0.60 ppm (55') to 3,400 ppm (45'). Benzene and TBA results were ND except for the 55-foot depth sample, which revealed concentrations at 0.035 ppm and 0.150 ppm, respectively. MTBE concentrations were detected in two of the 12 samples at 5.9 ppm (50') and 0.870 ppm (55'). Toluene, ethylbenzene, and total xylenes concentrations were detected in five, four, and six of the 12 samples, respectively. Maximum concentrations of these compounds were detected up to 72 ppm (50'), 26 pm (50'), and 510 ppm (45'), respectively.

In addition, n-butylbenzene, n-propylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethybenzene concentrations were detected in three, two, six, and six of the 12 samples collected and analyzed, respectively. Maximum concentrations of these compounds were detected in sample VE10-45' at 22 ppm, 15 ppm, 310 ppm, and 96 ppm, respectively.

On August 23-24, 2016, a two-step vapor extraction test (VET) was conducted, which used well VE10 as the extraction well and wells VE1s, VE1d, VE2s, VE2d, VE6s, VE6d, VE7 through VE9, and MW1 through MW3 as observation wells. A mobile SVE unit operated under a SCAQMD various locations permit. Each step of the two-step VET was performed for a total of 10 hours.

Step 1 VET started on August 23, 2016 at 6:66 AM to 4:55 PM. The influent hydrocarbon concentrations ranged in VE10 from 170 ppmv (initial 7:00 AM reading) to 370 ppmv (the last 4:55 PM reading). A total of 6.90 pounds (1.14 gallons) of hydrocarbons were collected during this 10-hour period. The two-step test used vacuums of 50 in-H20 and 80 in-H20. On August 24, 2016, the Step 2 VET was conducted on VE10 from 6:00 AM to 4:00 PM. The influent hydrocarbon concentrations ranged from 215 ppmv (1 :30 PM) to 570 ppmv (4:00 PM). During this 10-hour period, a total of 8.06 pounds (1.33 gallons) of hydrocarbons were recovered. Over the entire 2-day VET period, a total of 14.96 pounds (2.47 gallons) of hydrocarbons were recovered.

Soil vapor samples were collected in tedlar bags at the beginning, middle, and end of each 10-hour VET event. Vapor samples were analyzed for TPH-g BTEX, and fuel oxygenates. During the Step 1 VET period, TPH-g, BTEX and MTBE concentrations in vapors ranged from 170 to 370 ppmv, 3.4 to 7.2 ppmv, 6.6 to 16 ppmv, 0.20 to 1.1 ppmv, 1.2 to 15 ppmv, and 3.9 to 10 ppmv for the start and end samples, respectively. All three TBA results were al ND.

During the Step 2 VET period, TPH-g, BTEX, and MTBE concentrations in vapors ranged from 250 (start sample) to 570 ppmv (end sample), 3.4 (middle sample) to 5.3 ppmv (end sample), 5.3 (middle sample) to 8.2 ppmv (start sample), 0.22 (start sample) to 0.94 ppmv (end sample), 1.5 (start sample) to 3.2 ppmv (middle sample), and 7.2 (end sample) to 11 ppmv (start sample), respectively. All three (3) TBA samples were ND.

SENSITIVE RECEPTOR SURVEY- Based on the January 9, 2015 *Sensitive Receptor Survey Report*, the following sensitive receptors were identified within a 1.0-mile radius of the site:

- Groundwater Supply Wells and Surface Water Bodies: There are multiple groundwater supply wells located within a one-mile radius of the site. However, only two of the wells are currently active and are located greater than 0.75-mile from the site. These include:

V. ADDITIONAL COMMENTS, DATA, ETC. – continued:

1. The City of Anaheim #49 (Groundwater Supply) is screened from 580 feet to 1,450 feet bgs and site is located 0.75-mile from the site.
2. The City of Anaheim #54 (Groundwater Supply) is screened from 680 feet to 1,450 feet bgs and site is located 0.75-mile from the site.

The nearest surface water bodies are Carbon Creek (located 1.0-mile to the northwest of the site) and the Santa Ana River (located 3.5-miles east of the site.

- Wetland or Wildlife Habitat – No wetland or wildlife habitats were located within a 1.0-mile radius of the site.
- Nearest Resident – Approximately 34,270 people live within a 1.0-mile radius of the site. The nearest residence is located across the alley located south (down-gradient) of the site.
- Schools – There are 13 schools located within a 1.0-mile radius of the site. There are two (2) schools that are located within 1,000 feet of the site: Anaheim High School (811 West Lincoln Avenue) is located approximately 200 feet north (upgradient) of the site across West Lincoln Avenue and Fairmont Citron Campus (121 South Citron Street) is located 250 feet west (cross-gradient) of the site.
- Day Care Centers - There are 38 child day-care centers located within a 1.0-mile radius of the site. One day-care center (Fairmont Schools, Inc.) is located at 121 Citron Street, Anaheim, approximately 250 feet to the west (cross-gradient) of the site.
- Nursing Homes – There is one (1) nursing home located with a 1.0-mile radius. This nursing home is located at 861 South Harbor Boulevard and is located 4,050 feet south-southeast of the site.
- Hospitals and Clinics – There are 27 medical hospitals and clinics located within a 1.0-mile radius of the site. There are no hospitals or clinics located within 1,000 feet of the site. The closest hospital or clinic is a clinic located at 200 North Harbor Boulevard 1,900 feet east/northeast (upgradient) of the site.
- Retirement Homes/Convalescent Facilities - There are no retirement homes/convalescent facilities located within a 1.0-mile radius of the site.

CLOSURE

Closure is recommended for the subject site based on the following factors:

- In February 2000, three USTs were removed from the site. Approximately 125 gallons of liquids (non-RCRA hazardous waste) were recovered and transported to an appropriate off-site recycling and disposal facility. In May 2003, approximately 37.78 tons of contaminated soil was excavated and transported to an appropriate recycling and disposal facility.
- On April 19, 2007, SVE tests recovered 75.51 pounds of hydrocarbons. From February 7, 2014 through April 17, 2015, the SVE system operated and recovered an additional 4,551 pounds of hydrocarbons. In August 2016, SVE tests were conducted on VE10 and several extraction wells. Approximately 14.96 pounds of hydrocarbons were recovered. In 2007, and from 2013 through 2016, SVE tests and remediation recovered a total of 4641.47 pounds of hydrocarbons.
- The contamination plume was satisfactorily defined both laterally and vertically.
- In 2015 and 2016, confirmation borings CB1 through CB5 and VE10 revealed ND results for the 5 and 10-foot samples that were collected and analyzed for benzene and naphthalene. Ethylbenzene was detected in sample CB2-10' at 0.073 ppm. All other ethylbenzene results were ND. Therefore, all benzene, ethylbenzene, and naphthalene results were below the State of California Water Resources Control Board (SWRCB) Low-Threat Underground Storage Tank Case Closure Policy (LTCP), Table 1 (*Concentrations of Petroleum Constituents in Soil that Will Have No Significant Risk of Adversely Affecting Human Health).*
- The last groundwater sampling event occurred at this site in July 2015. The groundwater results were all ND except for 6.0 ppb of tetrachloroethene (PCE), which was detected in the sample collected from well MW3. Although low-level PCE concentrations were detected in historical samples collected from this well, there is no evidence that PCE was used at this site.

  From 2003 through July 2015, maximum TPH-g, ethanol, BTEX, MTBE, and TBA concentrations were detected up to 520 ppb, 220 ppb, 11 ppb 9.2 ppb, 11.5 ppb, 56 ppb, 280 ppb, and 74 ppb, respectively. The historical results for other VOCs were all ND except for the PCE concentrations that were noted in well MW3 samples.

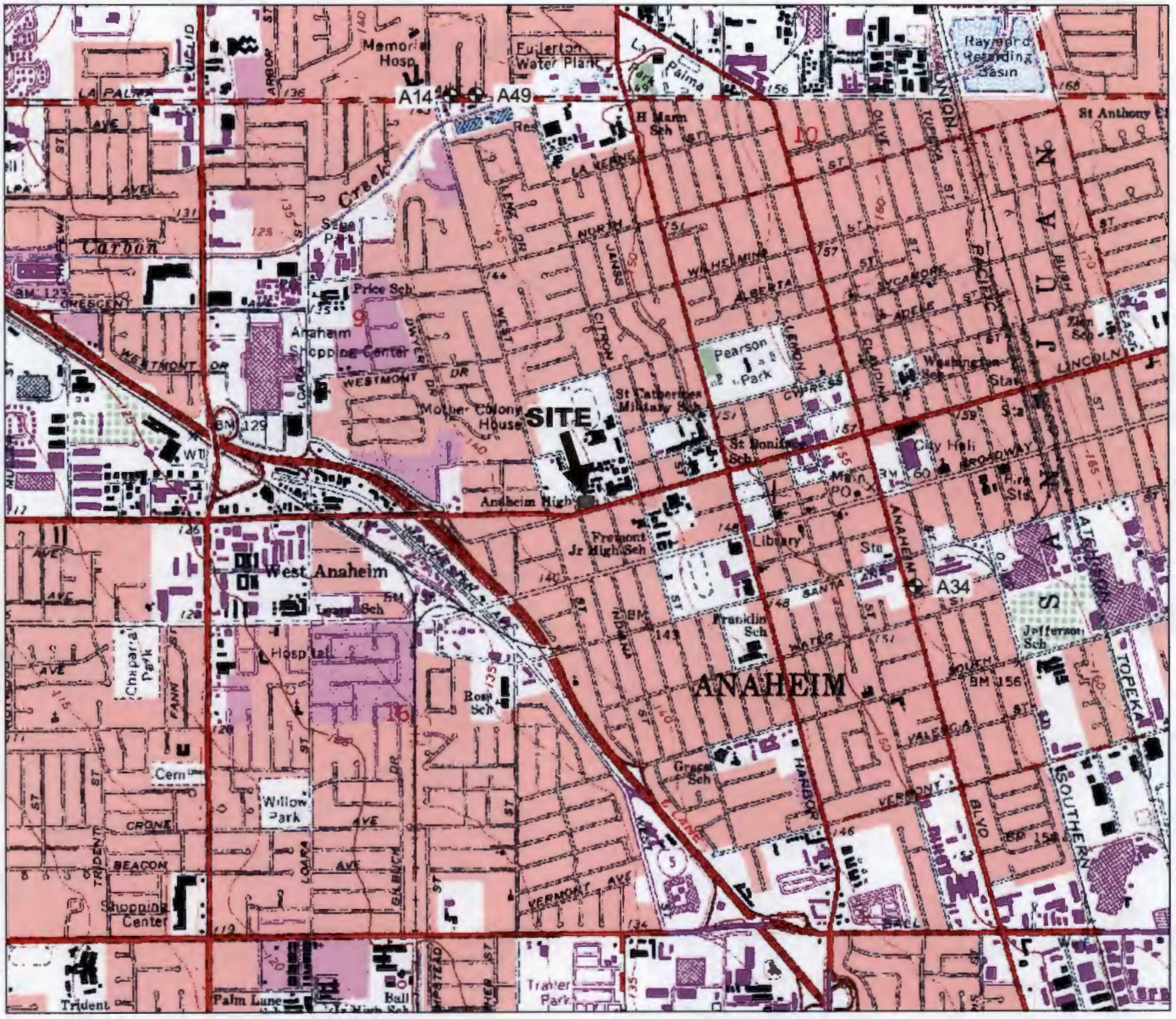
Based on the confirmation soil borings and VE10 soil sample results, as well as the 12-year low-level to ND groundwater contamination results, the remaining soil contamination appears to be restricted to the fine-grained soils beneath the site and likely not to migrate. Also, the historical and latest groundwater results confirm that BTEX, MTBE, and TBA concentrations were below the Drink Water Maximum Contaminant Levels (MCLs) or Notification Levels (NLs). Therefore, no further soil or groundwater site assessment, remediation, or further post-remedial groundwater monitoring and sampling is warranted for the subject site.

This closure summary does not include all of the data for this cleanup. It was prepared by the Santa Ana Regional Water Quality Control Board (Regional Board) for the purpose of providing a brief summary for case closure evaluation. All environmental reports pertaining to this cleanup site as well as the Regional Board case file should be reviewed in their entirety to obtain further details regarding this cleanup.

VI. REGIONAL BOARD REPRESENTATIVE DATA

RWQCB SUPERVISOR: Kenneth R. Williams	**TITLE:** UST Section Chief, Senior Engineering Geologist
SIGNATURE: Kenneth R Williams	**DATE:** 6/25/2018

NOM/Anaheim Car Wash_900 West Lincoln Ave_Anaheim_Draft Case Closure Summary.062518



A14 City of Anaheim Municipal Well

APPROXIMATE SCALE IN MILES

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Client: AMIR LANKARANI

Project No.: 469-01

NOTES:

1) All locations and dimensions are approximate.
2) Base map from USGS 7.5 minute Anaheim (dated 1965, photorevised 1981) California topographic quadrangle.
3) City of Anaheim well locations are approximate.

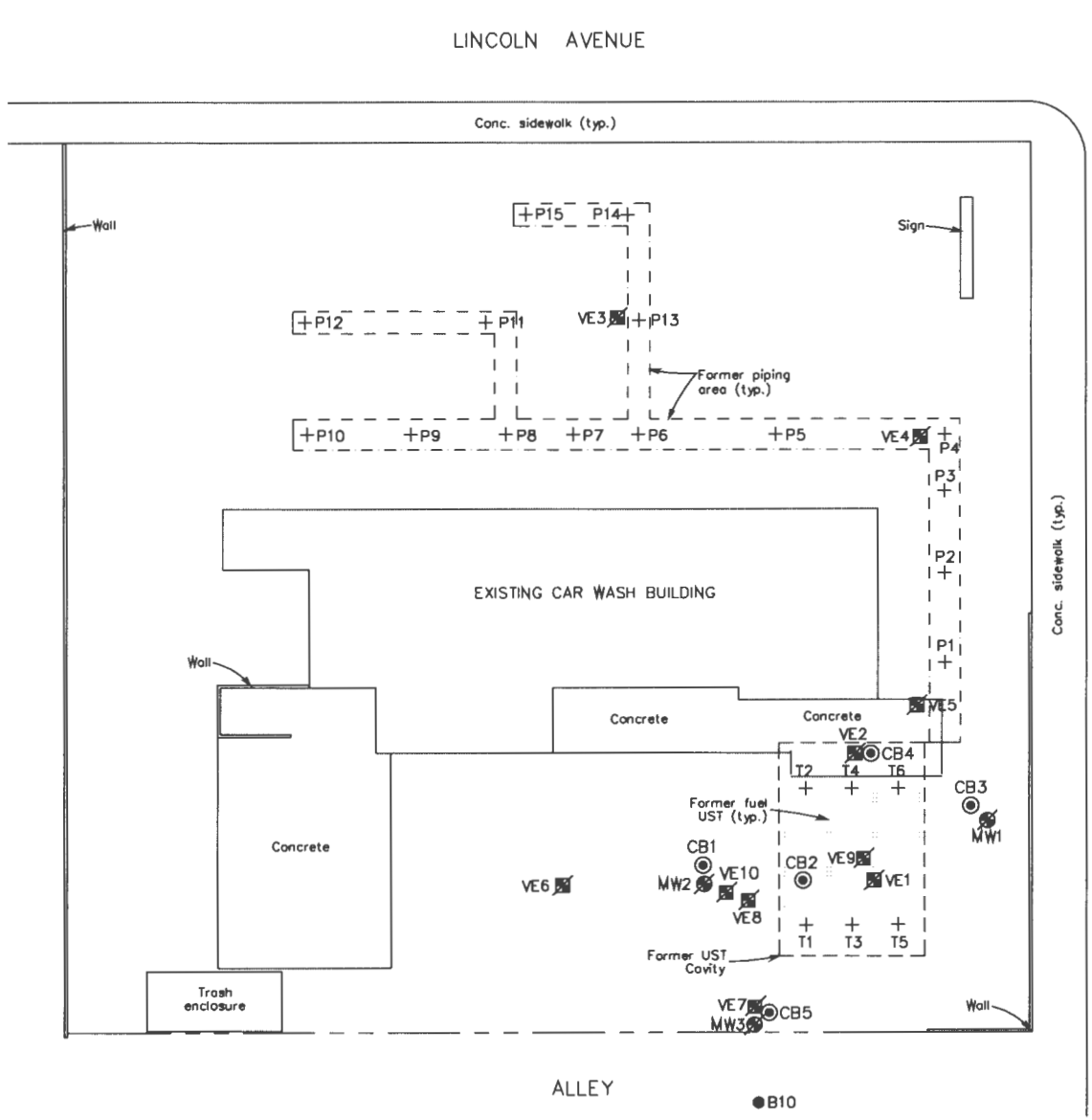
FREY ENVIRONMENTAL, INC.

SITE LOCATION MAP

Date: MAY 2013

Figure 1

708-01-SL



EXPLANATION

+ T1	FORMER SOIL SAMPLE LOCATION
● B9	SOIL BORING LOCATION
■ VE1	ABANDONED VAPOR EXTRACTION WELL LOCATION
⊘ MW1	ABANDONED GROUNDWATER MONITORING WELL LOCATION
◉ CB1	CONFIRMATION SOIL BORING LOCATION

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Ocean Blue Engineers, Inc. titled "Property Plot Plan", drawing no. 1, job no. 1272.2000.02-02, not dated.
3) Well locations were surveyed by RdM Surveying Inc. on 12/20/2006, job no. 2-66.

NORTH

0 20 40

APPROXIMATE SCALE IN FEET

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

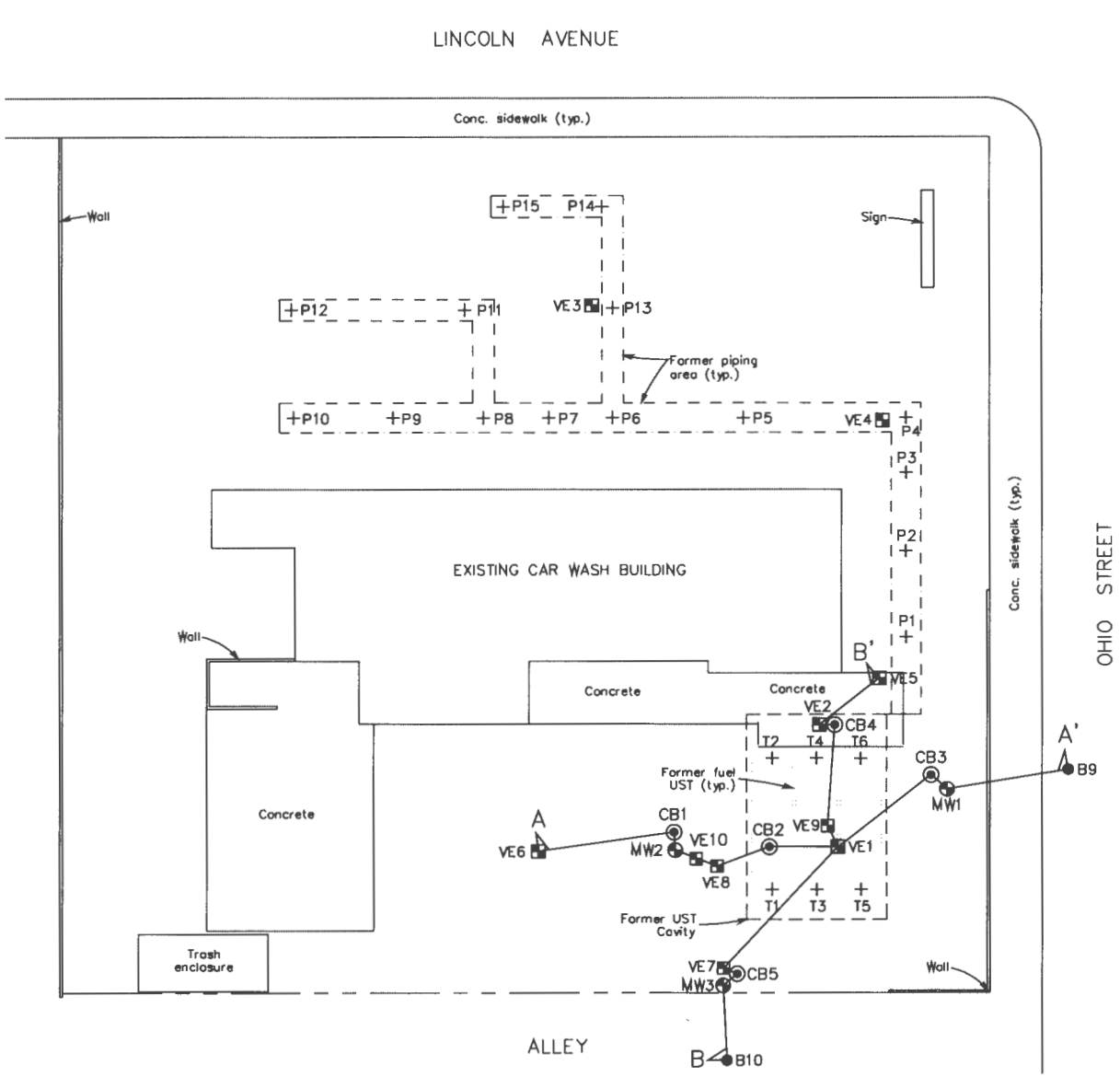
Client: AMIR LANKARANI Project No.: 469-01

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING
SOIL BORING, ABANDONED VAPOR EXTRACTION WELL, AND ABANDONED GROUNDWATER MONITORING WELL LOCATIONS

Date: MAY 2017 Figure 2

469-01-ST



EXPLANATION

+ T1	FORMER SOIL SAMPLE LOCATION
● B9	SOIL BORING LOCATION
▣ VE1	VAPOR EXTRACTION WELL LOCATION
⊕ MW1	GROUNDWATER MONITORING WELL LOCATION
◉ CB1	CONFIRMATION SOIL BORING LOCATION
A A'	GEOLOGIC CROSS SECTION LOCATION

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Ocean Blue Engineers, Inc. titled "Property Plot Plan", drawing no. 1, job no. 1272.2000.02-02, not dated.
3) Well locations were surveyed by RdM Surveying Inc. on 12/20/2006, job no. 2-66.

NORTH

0 20 40

APPROXIMATE SCALE IN FEET

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

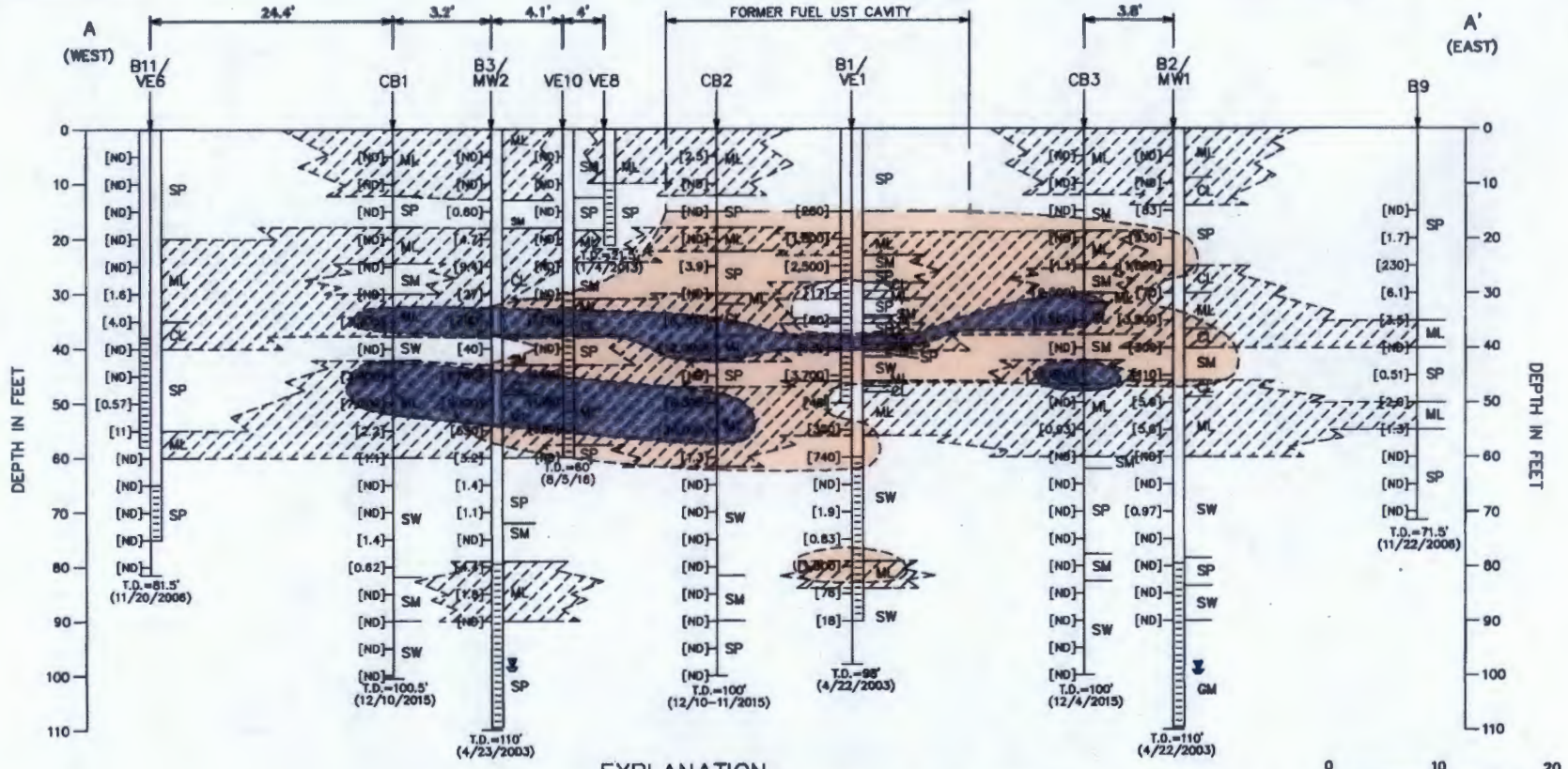
Client: AMIR LANKARANI Project No.: 469-01

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING
GEOLOGIC CROSS SECTION LOCATIONS
A-A' AND B-B'

Date: SEPTEMBER 2016 Figure 3

469-01-ST



EXPLANATION

- GM — SILTY GRAVEL
- SW — WELL-GRADED SAND
- SP — POORLY GRADED SAND
- SM — SILTY SAND
- SC — CLAYEY SAND
- ML — SILT
- CL — CLAY

(Coarse-grained soils / Fine-grained soils)

GROUNDWATER DEPTH AS MEASURED ON JULY 17, 2015

[930] CONCENTRATION OF TOTAL PETROLEUM HYDROCARBONS PRIOR TO REMEDIATION (EPA 8015 gasoline, in mg/kg; ND=not detected above laboratory detection limit)

ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED 2013 AND PRIOR)

ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED DECEMBER 10-14, 2015 AND AFTER)

WELL SCREEN LOCATION

0 10 20

HORIZONTAL SCALE IN FEET

NOTES:

1) The subsurface conditions shown are for the boring locations only. Subsurface conditions between borings may be different than shown.
2) USCS descriptions are based on field classification.
3) See boring logs for additional details.

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

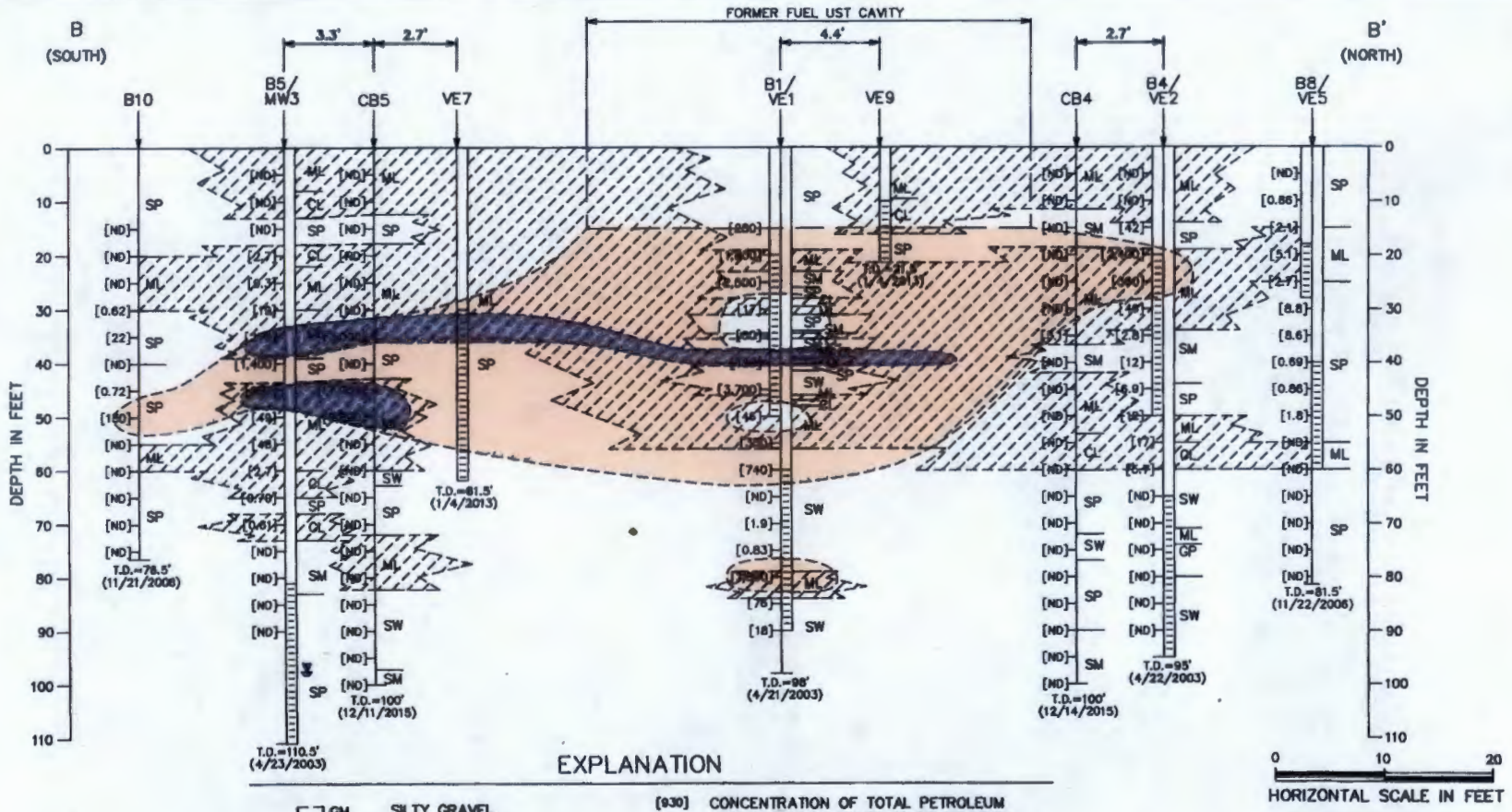
Client: AMIR LANKARANI Project No.: 469-01

FREY ENVIRONMENTAL, INC.

SUBSURFACE GEOLOGIC SECTION
A-A'

Date: OCTOBER 2016 Figure 4

469-01/XSEC-AA'.dgn



EXPLANATION

- GM — SILTY GRAVEL
- SW — WELL-GRADED SAND
- SP — POORLY GRADED SAND
- SM — SILTY SAND
- SC — CLAYEY SAND
- ML — SILT
- CL — CLAY

(Coarse-grained soils / Fine-grained soils)

- GROUNDWATER DEPTH AS MEASURED ON JULY 17, 2015
- [930] CONCENTRATION OF TOTAL PETROLEUM HYDROCARBONS PRIOR TO REMEDIATION (EPA 8015 gasoline, in mg/kg; ND=not detected above laboratory detection limit)
- ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED 2013 AND PRIOR)
- ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED DECEMBER 10–14, 2015 AND AFTER)
- WELL SCREEN LOCATION

NOTES:

1) The subsurface conditions shown are for the boring locations only. Subsurface conditions between borings may be different than shown.
2) USCS descriptions are based on field classification.
3) See boring logs for additional details.

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Client: AMIR LANKARANI Project No.: 469-01

FREY ENVIRONMENTAL, INC.

SUBSURFACE GEOLOGIC SECTION
B–B'

Date: OCTOBER 2016 Figure 5

State Water Resources Control Board

REVIEW SUMMARY REPORT – CONCUR WITH CLOSURE
FIRST REVIEW – SEPTEMBER 2017

Case Information

Cleanup Fund (Fund) Claim No.: 15855	GeoTracker Global ID: T0605999123
Site Name (Site): Former Anaheim Car Wash	Site Address: 900 Lincoln Avenue Anaheim, CA 92801
Responsible Party: Amir Lankarani	Address: 900 Lincoln Avenue Anaheim, CA 92801
Fund Expenditures to Date: $436,639	Number of Years Case Open: 17
Fund Budget Category: Unassigned	

Agency Information

Agency Name: Santa Ana Regional Water Quality Control Board (Regional Water Board)	Address: 3737 Main Street, Suite 500 Riverside, CA 92501
Agency Caseworker: Nancy Olson-Martin	Case No.: 083003742T

Consultant History

Consultant: Frey Environmental, Inc. Signatory: Joe Frey, PG	Years: 2005 - Present Office Phone: (949) 723-1645

This Review Summary Report is based on documents available in GeoTracker. To view all public documents for this case available on GeoTracker use the following URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605999123

Summary

The Low-Threat Underground Storage Tank (UST) Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Policy. This case meets all of the required criteria of the Policy. Highlights of the case follow:

This Site is a former commercial petroleum fueling facility and currently developed as a car wash. An unauthorized release was reported in May 2000 following the removal of three gasoline USTs. Reportedly, 38 tons of impacted soil was excavated and transported offsite in May 2003. Soil vapor extraction (SVE) pilot test was conducted for two days in April 2007, which removed 76 pounds of vapor-phase petroleum hydrocarbons. SVE was conducted between March 2009 and April 2015, which removed 4,566 pounds of vapor-phase petroleum hydrocarbons. SVE pilot tests were conducted in July 2016 in which the extraction rate was 15 pounds of petroleum hydrocarbons per day. Active remediation has not been conducted at the Site for the past year. Since 2003, three groundwater monitoring wells and vapor extraction wells have been installed and monitored. According to groundwater data, water quality objectives (WQO) have been achieved or nearly achieved for all constituents.

The petroleum release is limited to the soil and shallow groundwater. The unauthorized release is located within the service area of a public water system, as defined in the Policy. The affected shallow groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected shallow groundwater will be used as a source of drinking water in the foreseeable future. Other designated beneficial uses of impacted groundwater are not threatened, and it is highly unlikely that they will be, considering these factors in the context of the site setting. Remaining petroleum hydrocarbon constituents are limited and stable, and concentrations are decreasing. Corrective actions have been implemented and additional corrective actions are not necessary. Any remaining petroleum hydrocarbon constituents do not pose a significant risk to human health, safety or the environment.

Rationale for Closure under the Policy

General Criteria

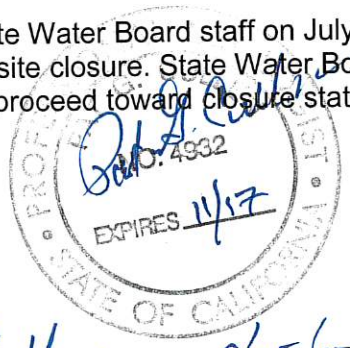
- Site **meets all eight General Criteria** under the Policy.

Media-Specific Criteria

- Groundwater: Site meets the criteria in **Class 1**. The contaminant plume that exceeds WQO is less than 100 feet in length. There is no free product. The nearest existing water supply well or surface water body is greater than 250 feet from the defined plume boundary.
- Petroleum Vapor Intrusion to Indoor Air: Site meets **Criteria 2 (a), Scenario 3**. As applicable, concentrations of total petroleum hydrocarbons as gasoline and diesel combined in soil, and dissolved concentrations of benzene in groundwater meet the Policy.
- Direct Contact and Outdoor Air Exposure: Site meets **Criteria 3 (a)**. Maximum concentrations of petroleum constituents in soil from confirmation soil samples are less than or equal to those listed in Table 1 of the Policy. Waste oil was not managed onsite and therefore poly-aromatic hydrocarbons (PAHs) soil data are not necessary to assess direct contact.

Status

In an email exchange between Regional Water Board staff and State Water Board staff on July 7, 2017, Regional Water Board staff stated they are in the process of site closure. State Water Board staff concurs that this site meets Policy closure criteria and should proceed toward closure status.



9/25/2017

Kirk Larson, PG Date
Engineering Geologist
Technical Unit III
(916) 341-5663

9/25/17

Pat G. Cullen, PG #4932 Date
Senior Engineering Geologist
Chief, Technical Unit III
(916) 341-5684

FREY ENVIRONMENTAL, INC

Environmental Geologist, Engineers, Assessors
2817 A Lafayette Avenue
Newport Beach, CA 92663
(949) 723-1645
Fax (949) 723-1854
Email: freyinc@freyinc.com

October 25, 2016
469-01

Ms. Nancy Olson-Martin
Regional Water Quality Control Board
Santa Ana Region
3737 S. Main Street #500
Riverside, CA 92501-3348

VAPOR EXTRACTION WELL INSTALLATION,
POST REMEDIATION VAPOR EXTRACTION TEST,
AND REQUEST FOR NO FURTHER ACTION
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA
GLOBAL ID # T0605999123

Dear Ms. Olson-Martin:

This report has been prepared by FREY Environmental, Inc. (FREY) to document and present the installation of a vapor extraction well and results of a post remediation vapor extraction test conducted at the Former Anaheim Car Wash located at 900 W. Lincoln Avenue, in Anaheim, California (Site)(Figure 1 & 2). The work was performed in accordance with the scope of work outlined in a workplan prepared by FREY, entitled, "Workplan, Post Remediation Soil Vapor Extraction Test...," dated June 13, 2016 (FREY, 2016). The scope of work outlined in the workplan above was approved the Santa Ana Regional Water Quality Control Board (RWQCB) in a letter dated June 20, 2016 (Appendix A).

OBJECTIVES

The objectives of the vapor extraction well installation and post remediation soil vapor extraction test were to evaluate post-remediation petroleum hydrocarbon concentrations in soils and soil vapor and petroleum hydrocarbon mass removal rates from a vapor extraction well screened in primarily fine grained soils which occur beneath the Site from approximately 30 feet below ground surface (bgs) to 60 feet bgs.

SCOPE OF WORK

The scope of work, designed to provide the information needed to meet the objectives of the investigation, was as follows:

- Procure a well installation permit from the Anaheim Public Utilities;
- Notify the RWQCB, Anaheim Public Utilities, and other interested parties of proposed field activities prior to initiating field work;
- Drill and sample one (1) soil boring (VE10) to a depth of approximately 60 feet bgs;
- Install a soil vapor extraction well in soil boring VE10;
- Conduct soil vapor extraction tests (VETs) on vapor extraction well VE10;
- Survey newly-installed vapor extraction well VE10;
- Evaluate data and prepare a report documenting and presenting the above scope of work.

All activities related to the field investigation was conducted under the direction of a State of California Certified Engineering Geologist and/or Professional Geologist in accordance with accepted engineering practice and protocol. The Anaheim Public Utilities well permit is attached as Appendix B.

WELL INSTALLATION FIELD INVESTIGATION

Pre-field Activities

Prior to the commencement of field work, FREY obtained a permit (Permit No. 1540) from Anaheim Public Utilities to install a vapor extraction well at the Site. Additionally, FREY personnel visited the Site prior to drilling activities to mark the proposed vapor extraction well location for Underground Service Alert (USA) notification. FREY notified the RWQCB, Anaheim Public Utilities, and other interested parties prior to the conduct of drilling operations.

Drilling and Sampling of Soil Boring VE10

On August 6, 2016, Soil boring VE10 was drilled to a final depth of approximately 60 feet bgs using a CME-75 truck mounted drill rig equipped with 8-inch outside diameter hollow stem augers. Prior to the drilling, the boring was hand excavated with a post-hole digger to approximately 5 feet bgs in order to locate and avoid any subsurface utilities.

Soil samples were collected from the soil boring at approximate 5-foot depth intervals from approximately 5 feet bgs to the bottom of the boring. Soil samples and soil cuttings were examined in order to characterize the soil lithology and to look for evidence of the presence of petroleum hydrocarbons. Soil lithology was documented utilizing the Unified Soil Classification System (USCS). The soil samples and soil cuttings were screened in the field for undifferentiated volatile organic compounds (UVOCs) using a photo ionization detector (PID), as explained in Appendix C.

Construction of Vapor Extraction Well VE10

Vapor extraction well VE10 was constructed of 2-inch diameter schedule 40 PVC casing, screened from approximately 30 to 60 feet bgs. Vapor extraction well construction procedures are presented in Appendix C.

Soil Sample Laboratory Analyses

Soil samples were analyzed for petroleum hydrocarbons modified for gasoline (TPHg) in general accordance with EPA Method No. 8015 and for volatile organic compounds (VOCs) in general accordance with EPA Method No. 8260B. The laboratory analyses of soil samples were performed by Eurofins Calscience, a State-certified hazardous waste testing laboratory located in Garden Grove, California.

A summary of historical soil sample laboratory results is presented in Table 1. A copy of the laboratory analytical report and laboratory quality assurance/quality control report is attached as Appendix D.

Disposal of Soil Cuttings

Soil cuttings generated during the conduct of drilling operations were temporarily stored on-Site in a soil bin. The soil bin was removed by Robert's Waste and Recycling Service of Santa Ana, California, and was profiled and transported to Soil Safe, located in Adelanto, California, for recycling. The soil disposal manifest is attached as Appendix E.

Well Survey

Newly-installed vapor extraction well VE10 was surveyed for elevation, relative to a county benchmark on September 8, 2016. Well VE10 and confirmation borings CB1 through CB5 were also surveyed for location on September 8, 2016 using GPS methodology. The wells were surveyed by RDM Surveying, Inc., a California Registered Land Surveyor located in Laguna Hills, CA. The survey was conducted in accordance with State Water Resources Control Board's (SWRCB) Geotracker standards. A copy of the surveyor's report is included in Appendix F.

WELL INSTALLATION RESULTS

Subsurface Conditions

Subsurface materials encountered beneath the Site during the drilling of VE10 consisted primarily of silty sand or poorly graded fine grained sand from just below the ground surface to the bottom of the boring (60 feet bgs). Layers of silt or sandy silt were encountered from approximately 18 to 23 feet bgs, 30 to 33 feet bgs, and 43 to 58 feet bgs and a layer of clay was encountered from approximately 33 feet bgs to 38 feet bgs. Groundwater was not encountered during drilling or well installation activities.

The soil lithologies encountered drilling well VE10 are depicted on the boring log included in Appendix D. A Site sketch showing geologic cross section locations is presented in Figure 3. Cross sections depicting subsurface lithologies appear as Figures 4 and 5.

UVOC concentrations greater than 9,999 parts per million (ppm) were detected in some of the field-screened soil samples collected from boring VE10. UVOC concentration readings are recorded on the boring log presented in Appendix G.

Laboratory Results

- Concentrations of TPHg were detected in soil samples collected from VE10 at depths of 35, 45, 50, and 55 feet bgs, at concentrations ranging from 0.60 milligrams per kilogram (mg/kg) (VE10-55) to 3,400 mg/kg (VE10-45).

- Benzene was detected in one soil sample collected from VE10, at concentrations of 0.035 at 55 feet bgs.

- Toluene was detected in soil samples collected from VE10 at depths of 30, 35, 45, 50, and 55 feet bgs, at concentrations ranging from 0.029 mg/kg (VE10-55) to 72 mg/kg (VE10-50).

- Ethylbenzene was detected in soil samples collected from VE10 at depths of 30, 35, 45, and 50 feet bgs, at concentrations ranging from 0.010 mg/kg (VE10-30) to 26 mg/kg (VE10-50).

- Total xylenes were detected in soil samples collected from VE10 at depths of 30, 35, 40, 45, 50, and 55 feet bgs, at concentrations ranging from 0.0063 mg/kg (VE10-40) to 510 mg/kg (VE10-45).

- MTBE was detected in soil samples collected from VE10 at depths of 50 and 55 feet bgs at concentrations of 5.9 mg/kg and 0.870 mg/kg, respectively.

- TBA was only detected in one soil sample collected from VE10 at a depth of 55 feet bgs, at a concentration of 0.150 mg/kg.

- Additional detected VOCs included n-butyl benzene, sec-butyl benzene, n-propylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene in soil samples collected from VE10 at depths of 30, 35, 40, 45, 50, and 55 feet bgs.

The soil sample laboratory results for the current investigation are summarized in Tables 1 and 2. Soil laboratory and quality assurance/quality control reports appear in Appendix D.

VAPOR EXTRACTION TEST FIELD INVESTIGATION

Vapor Extraction Test Equipment

FREY conducted VETs on August 23 and 24, 2016, using equipment designed to extract soil vapor at variable extraction flow rates and applied vacuums. The vapor extraction equipment utilized to conduct the VETs consisted of a mobile vapor extraction system (VES) consisting of a 10 horsepower, 250 standard cubic feet per minute (scfm) positive displacement blower, a knock out pot, and two, 400 lb carbon vessels to treat extracted vapors. Extraction was initiated by imparting an applied vacuum to the wellhead of each extraction well with the extraction blower. The applied vacuum was adjusted by closing the VES dilution valve, as required. The mobile trailer-mounted VES was operated under a various locations permit from the South Coast Air Quality Management District (SCAQMD).

A Horiba model MEXA-554JU infra-red gas analyzer (Horiba) was utilized to measure concentrations of UVOCs, oxygen (O2), and carbon dioxide (CO2). Magnehelic differential pressure gauges were used to measure vacuums, and in combination with pitot tubes, were used to measure flow rates. The vapor extraction unit included dilution valves and required instrumentation.

The VETs provided information for the assessment of achievable vapor extraction flow rates, the radius of influence of vapor extraction wells, and petroleum hydrocarbon mass removal rates.

Pre-Field Test Activities

Prior to initiation of the VETs, PVC slip caps, fitted with brass valves, were placed on each observation well to allow for vacuum response measurements during conduct of the VETs. Baseline vacuum readings in all on-Site wells were measured and recorded using Magnehelic differential pressure gauges prior to test startup.

Vapor Extraction Testing

On August 23 and 24, 2016, FREY conducted a two-step soil VET using newly installed vapor extraction well VE10 as the extraction well (Figure 2). Wells VE1s, VE1d, VE2s, VE2d, VE6s, VE6d, VE7, VE8, VE9, MW1, MW2, and MW3 were used as observation wells. Observation wells for the VET were selected based on their radial proximity to extraction wells and their screened interval depths within alternate lithologic units.

Well construction details and boring logs for the vapor extraction well and observation wells are presented in Table 6 and Appendix G, respectively.

The VES was used to impart an applied vacuum on the vapor extraction wellhead. Each step of the two-step VET was conducted by increasing the vacuum on the extraction well. Each step of the VET was conducted for a total of 10 hours. During each test, vacuum responses were monitored at each observation well. Applied vacuums, vapor extraction flow rates, and influent UVOC concentrations were monitored at the extraction well with the Horiba.

Soil vapor samples were collected in tedlar bags from each extraction well after the start, during the middle, and prior to the end of each step in the VET. Soil vapor samples were submitted Baseline Analytical, a State-certified hazardous waste testing laboratory located in Huntington Beach, California for chemical analysis. The vapor samples were analyzed for TPHg in accordance with EPA Method No. 8015M and benzene, toluene, ethylbenzene, and total xylenes (BTEX) and fuel oxygenates, in accordance with EPA Method No. 8260B. Copies of the laboratory analytical reports are included in Appendix H.

VAPOR EXTRACTION TESTING RESULTS

On August 23, 2016, FREY conducted Step 1 of the VET. A vacuum of approximately 50 inches of water (in-H2O) was applied to the wellhead of vapor extraction well VE10. The corresponding flow rate at the wellhead of VE10 ranged from approximately 135 scfm to 144 scfm. Vacuum response was observed in all observation wells. Maximum observed vacuum responses ranged from 0.52 in-H2O (VE8) to 3.70 in-H2O (VE6s) during Step 1 of the VET. Oxygen percentage measured in the influent vapor ranged from 7.04% to 15.70%. TPHg concentrations in the influent samples were detected at 170 ppmv at the start of Step 1, 310 ppmv during the middle of Step 1, and 370 ppmv at the end of Step 1. Hydrocarbon removal rates estimated with measured flow rates and influent petroleum hydrocarbon concentrations averaged 0.69 pounds per hour (lbs/hr) during Step 1 of the VET.

Step 2 of the VET was conducted on August 24, 2016, utilizing a vacuum of approximately 80 in-H2O. The corresponding flow rate for the wellhead of VE10 ranged from approximately 182 scfm to 188 scfm. Vacuum response was observed in all observation wells. Maximum observed vacuum responses in each well ranged from 0.32 in-H2O (VE8) to 4.40 in-H2O (VE6s) during Step 2 of the VET. Oxygen percentage measured in the influent vapor ranged from 15.20% to 18.54%. TPHg concentrations in the influent samples were detected at 250 ppmv at the start of Step 2, 430 ppmv during the middle of Step 2, and 570 ppmv at the end of Step 2 of the VET. Hydrocarbon removal rates estimated with measured flow rates and influent petroleum hydrocarbon concentrations averaged 0.81 lbs/hr during Step 2 of the VET.

Utilizing vapor influent concentrations and estimated mass removal rates, a total of 14.96 pounds (2.47 gallons) of hydrocarbons were removed during the 16 hours of vapor extraction conducted during the VET.

A summary of vapor extraction data is presented as Table 3. An estimate of hydrocarbon mass removal rates during the VET including oxygen percentage is presented as Table 4. A table summarizing chemical analyses of VET vapor samples is presented as Table 5.

CONCLUSIONS

Based on the laboratory results of soil samples collected during the drilling and installation of vapor extraction well VE10, it appears that residual concentrations of petroleum hydrocarbons are present in the fine grained soil located at 35 feet bgs and between 45 to 50 feet bgs.

Based on the results of the post remediation VET, vapor extraction remediation is able to extract residual petroleum hydrocarbons from the subsurface at average removal rates of 0.69 and 0.81 lbs/hr, utilizing vacuums of 50 in-H2O and 80 in-H2O, respectively. However, based on the relatively low remaining petroleum hydrocarbon concentrations in soils, and the relatively low vapor influent concentrations collected during the VET, continuation of vapor extraction remediation at the Site would not be expected to remove any significant mass of petroleum hydrocarbons from subsurface vadose zone soils. Additionally, based on the relatively high oxygen percentages measured from the influent vapors during the VET, residual petroleum hydrocarbons in the subsurface soils would be expected to naturally attenuate over time.

LOW THREAT CLOSURE EVALUATION

To evaluate whether the Site meets the State of California Water Resources Control Board (SWRCB) Low-Threat Case Closure criteria, FREY evaluated general and media specific criteria items given in the SWRCB document entitled "Low-Threat Underground Storage Tank Case Closure Policy", adopted by the SWRCB in August, 2012, using the checklist referenced in Policy (SWRCB, 2012). Using available Site data, sensitive receptor information, and information collected during post remediation (confirmation) sampling events, FREY completed the checklist and found that the Site complies with the Policy. A copy of the Policy checklist is included in Appendix I.

General Criteria

The Site meets the following general criteria presented under the Policy:

a. The unauthorized release is located within the service area of a public water system (Anaheim Public Utilities);
b. The unauthorized release consists only of petroleum hydrocarbons (see Tables 1 and 2);
c. The unauthorized ("primary") release from the UST system has been stopped (USTs and related piping have been removed);
d. Free product has been removed to the maximum extent practicable (free product has never been reported);
e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed;

f. Secondary source has been removed to the maximum extent practicable by vapor extraction remediation conducted at the Site. Vapor extraction was operated for a total of 9,131 hours at the Site between February 7, 2014 and April 17, 2015, and is estimated to have removed approximately 4,551 pounds (752 gallons) of vapor phase petroleum hydrocarbons from subsurface soils;
g. Soil and groundwater have been tested for MTBE and the results have been reported to the RWQCB herein in accordance with Health and Safety Code section 25296.15 (Tables 1 and 2); and,
h. Nuisance as defined by Water Code section 13050 does not exist at the Site.

Media Specific Criteria

Releases from USTs can impact human health and the environment through contact with any or all off the following media: groundwater, surface water, soil, and soil vapor. Although this contact can occur through ingestion, dermal contact, or inhalation of the various media, the most common drivers of health risk are ingestion of groundwater from drinking water wells, inhalation of vapors accumulated in buildings, contact with near surface contaminated soil, and inhalation of vapors in the outdoor environment (SWRCB, 2012).

The Site meets the media-specific criteria presented under the Policy (the following sections coincide with those letters and numbers specified in the Policy) as described in the following sections.

1. Groundwater-Specific Criteria

State Water Board Resolution 92-49, the policy for water quality control as it applies to UST cleanup cases, directs that water affected by an unauthorized release needs to attain either background water quality or the maximum reasonable water quality that can be achieved if background water quality cannot be restored. Any alternative level of water quality less stringent than background quality must be consistent with the maximum benefit to the people of the State, not unreasonably affect current and anticipated beneficial use of affected water, and not result in water quality less than that prescribed in the water quality control plan for the basin within which the site is located. Water quality control plans generally establish background water quality as a restorative endpoint. General groundwater cleanup goals for the Site are the State drinking water maximum contaminant level (MCL) or action level (AL) as follows:

Constituent	MCL or AL (ug/L)	Proposed Cleanup Levels (ug/L)
MTBE	13 (MCL)	13
TBA	12 (AL)	12
Benzene	1 (MCL)	1
Toluene	150 (MCL)	150
Ethylbenzene	700 (MCL)	700
Total Xylenes	1,750 (MCL)	1,750

The current concentrations of residual MTBE, TBA, and BTEX in groundwater are below the water quality objectives presented above.

Sites with soil that does not contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria in this policy shall be considered low-threat sites for the groundwater medium. For older releases, the absence of current groundwater impact is often a good indication that residual concentrations present in the soil are not a source for groundwater pollution. As such, in our professional judgment, the Site meets the LTCP's groundwater-specific criteria for low threat case closure.

2. Petroleum Vapor Intrusion to Indoor Air

Based on the results of confirmation soil sampling, the Site meets the Petroleum Vapor Intrusion to Indoor Air Media Specific Criteria. The site-specific conditions at the Site satisfies all of the characteristics and criteria of scenarios 1 through 3 of the LTCP as applicable.

3. Direct Contact and Outdoor Air Exposure

Results of confirmation soil sampling have also demonstrated that the Media Specific Criteria for Direct Contact and Outdoor Air Exposure have been met.

Benzene, ethylbenzene, and naphthalene concentrations were less than or equal to the maximum concentrations of petroleum constituents in soil listed in Table 1 of the LTCP for the specified depth below ground surface. Soils were not tested for PAH as sampling and analysis for PAH is only necessary where soil is affected by either waste oil or Bunker C fuel.

REQUEST FOR NO FURTHER ACTION

- Data from 13 years of groundwater monitoring and sampling demonstrate that the limited very low concentrations of petroleum hydrocarbons in groundwater have been mitigated (FREY, 2015). Based on the high oxygen content measured in the influent vapor during the VET, it is expected that natural attenuation will further reduce the remaining residual petroleum hydrocarbons in soil from reaching groundwater.

- Review of the LTCP indicates that migration pathways and exposure routes for potential sensitive receptors are incomplete.

- In-situ remediation was conducted using soil vapor extraction remediation for approximately 14 months between February 2014 and April 2015. It is estimated that approximately 4,551 lbs of petroleum hydrocarbon were extracted from beneath the Site. Additionally, 14.96 lbs of petroleum hydrocarbons were extracted from subsurface soils at the Site during the current VET. However, based on the relatively low remaining

petroleum hydrocarbon concentrations in soils and the relatively low vapor influent concentrations collected during the VET, continuation of vapor extraction remediation at the Site would not be expected to remove any significant mass of petroleum hydrocarbons from subsurface vadose zone soils.

- Based on this post remediation vapor extraction well installation and vapor extraction test, past remedial action and site assessments, it is FREY's professional judgement that no further action is warranted for this Site.

If you have any questions regarding the information presented in this report please contact us at (831) 464-1634.

Sincerely,
FREY Environmental, Inc.

Joe Frey
Principal Certified
Engineering Geologist
CEG #1500

Kent Tucker
Senior Project Geologist
PG #7584

Mollie Banh
Staff Engineer

References

FREY (FREY Environmental, Inc.), 2016, *Workplan Post Remediation Soil Vapor Extraction Test, Former Anaheim Carwash, 900 W. Lincoln Avenue, Anaheim, California*, dated June 13, 2016.

Attachments

Table 1	Historical Chemical Analyses of Soil Samples
Table 2	Additional Detected VOCs
Table 3	Summary of Vapor Extraction Data
Table 4	Estimate of Hydrocarbon Mass Removal Rates
Table 5	Chemical Analyses of Vapor Samples
Table 6	Well Construction Summary
Figure 1	Site Location Map
Figure 2	Site Sketch Showing Soil Boring, Vapor Extraction Well, and Groundwater Monitoring Well Locations
Figure 3	Site Sketch Showing Geologic Cross Section Locations A-A' and B-B'
Figure 4	Subsurface Geologic Section A-A'
Figure 5	Subsurface Geologic Section B-B'
Appendix A	RWQCB Approval Letter
Appendix B	Well Installation Permit
Appendix C	Field Procedures
Appendix D	Soil Sampling Laboratory Report
Appendix E	Soil Disposal Manifest
Appendix F	Surveyor's Report
Appendix G	Boring Logs
Appendix H	Vapor Influent Sampling Laboratory Report
Appendix I	LTCP Checklist
Appendix J	Example Calculation of Petroleum Hydrocarbon Mass Removal

cc: Mr. Amir Lankarani – Anaheim Car Wash
State Water Resources Control Board – UST Clean Up Fund (Geotracker)

TABLES

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
OCEAN BLUE ENGINEERS, INC.									
P1	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.09	--
P2	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.15	--
P3	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.15	--
P4	NM	02/29/2000	7.2	0.02	0.47	0.19	1.40	5	--
P5	NM	02/29/2000	ND<0.5	ND<0.005	0.010	ND<0.005	ND<0.01	0.14	--
P6	NM	02/29/2000	1.1	0.021	0.220	0.042	0.340	1.9	--
P7	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	0.017	0.16	--
P8	NM	02/29/2000	ND<0.5	0.003	0.009	ND<0.005	ND<0.01	0.17	--
P9	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.24	--
P10	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.15	--
P11	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.17	--
P12	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.13	--
P13	NM	02/29/2000	ND<0.5	0.015	0.022	ND<0.005	0.095	4.5	--
P14	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	0.027	--
P15	NM	02/29/2000	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.01	--
T1	NM	02/29/2000	23	ND<0.005	0.21	0.13	1.30	0.27	--
T2	NM	02/29/2000	580	0.65	32.00	22.50	130.00	21	--
T3	NM	02/29/2000	2,400	22.10	120.00	65.00	150.00	47	--
T4	NM	02/29/2000	1,200	4.90	90.00	120.00	250.00	30	--
T5	NM	02/29/2000	760	3.60	77.00	38.20	230.00	62	--
T6	NM	02/29/2000	5,600	17.00	210.00	260.00	450.00	36.5	--
FREY ENVIRONMENTAL, INC.									
(Vapor extraction well VE1 was installed in boring B1)									
B1	15	04/21/2003	280	0.42	15	13	95	0.75	--
	20	04/21/2003	1,800	7.0	90	65	230	**11**	**ND<0.50**
	25	04/21/2003	2,500	58	500	150	890	**20**	**ND<0.50**
	30	04/21/2003	17	0.50	1.37	0.59	2.2	11	--
	35	04/21/2003	60	0.29	2.5	1.6	8.8	1.5	--
	40	04/21/2003	130	0.25	3.0	3.9	23	0.81	--
	45	04/21/2003	3,700	25	46	25	160	**29**	**0.89**
	50	04/21/2003	46	4.7	7.1	0.74	4.5	**9**	**ND<0.50**
	55	04/21/2003	350	2.7	9.7	6.9	16	9.9	--
	60	04/21/2003	740	5.1	7.9	2.0	24	**9.7**	**ND<0.50**
	65	04/21/2003	ND<0.50	ND<0.0050	0.014	ND<0.0050	0.02	0.14	--
	70	04/21/2003	1.9	0.11	0.12	0.15	0.21	0.25	--
	75	04/21/2003	0.83	0.025	0.17	0.0118	0.095	0.23	--
	80	04/21/2003	1,800	11	250	120	670	8.5	--
	85	04/21/2003	76	0.73	11	1.7	26	0.60	--
	90	04/21/2003	18	0.081	1.9	0.37	5.5	0.10	--

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
(Groundwater monitoring well MW1 was installed in boring B2)									
B2	5	04/22/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	10	04/22/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	15	04/22/2003	83	0.11	0.92	1.2	8.5	0.10	--
	20	04/22/2003	930	1.9	25	21	79	5.3	--
	25	04/22/2003	1,000	12	56	31	110	**17**	**ND<0.50**
	30	04/22/2003	70	3.1	5.8	0.39	4.2	**11**	**ND<0.50**
	35	04/22/2003	3,500	26	46	13	130	**32**	**0.56**
	40	04/22/2003	300	1.5	9.8	9.4	34	**5.5**	**ND<0.25**
	45	04/22/2003	110	2.2	6.3	4.1	14	**9.6**	**0.63**
	50	04/22/2003	5.9	0.33	0.63	0.18	0.96	1.2	--
	55	04/22/2003	5.6	0.74	0.015	0.04	0.71	2.9	--
	60	04/22/2003	ND<0.50	0.018	0.031	0.0041	0.021	0.055	--
	65	04/22/2003	ND<0.50	0.031	0.044	ND<0.0050	0.016	0.17	--
	70	04/22/2003	0.97	0.085	0.21	0.024	0.13	0.32	--
	75	04/22/2003	ND<0.50	0.040	0.063	ND<0.0050	0.019	0.023	--
	80	04/22/2003	ND<0.50	0.0096	0.022	ND<0.0050	0.012	0.025	--
	85	04/22/2003	ND<0.50	0.019	0.049	ND<0.0050	0.026	0.16	--
	90	04/22/2003	ND<0.50	0.011	0.058	0.011	0.063	0.15	--
(Groundwater monitoring well MW2 was installed in boring B3)									
B3	5	04/23/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.026	--
	10	04/23/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.016	--
	15	04/23/2003	0.60	0.025	0.012	0.0063	0.036	0.45	--
	20	04/23/2003	4.7	0.28	0.41	0.057	0.61	3.4	--
	25	04/23/2003	9.4	0.63	1.4	0.17	1.8	4.1	--
	30	04/23/2003	27	2.1	3.9	0.49	3.0	**12**	**ND<0.25**
	35	04/23/2003	790	18	100	16	270	**19**	**0.38**
	40	04/23/2003	40	0.51	3.0	0.92	10	1.6	--
	45	04/23/2003	1,700	29	260	110	590	**17**	**ND<0.50**
	50	04/23/2003	1,200	35	210	74	390	**26**	**0.69**
	55	04/23/2003	530	3.8	72	0.29	190	**14**	**ND<0.25**
	60	04/23/2003	3.2	0.034	0.083	0.014	0.091	2.7	--
	65	04/23/2003	1.4	0.014	0.046	0.010	0.068	1.1	--
	70	04/23/2003	1.1	0.013	0.040	0.0065	0.04	0.86	--
	75	04/23/2003	ND<0.50	ND<0.0050	0.011	ND<0.0050	0.017	0.15	--
	80	04/23/2003	4.4	0.0097	0.025	0.0093	0.18	4.0	--
	85	04/23/2003	1.8	0.047	0.28	0.0641	0.44	0.77	--
	90	04/23/2003	ND<0.50	ND<0.0050	0.0056	ND<0.0050	0.0080	0.37	--
(Vapor extraction well VE2 was installed in boring B4)									
B4	5	04/22/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	10	04/22/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	15	04/22/2003	42	0.021	0.94	1.2	8.8	0.46	--
	20	04/22/2003	2,400	17	290	160	920	**16**	**0.570**
	25	04/22/2003	360	1.4	21	4.0	65	4.4	--
	30	04/22/2003	46	1.7	3.7	0.45	2.5	**20**	**ND<0.25**
	35	04/22/2003	2.8	0.15	0.40	0.078	0.40	1.0	--
	40	04/22/2003	12	0.28	0.36	0.042	0.20	**9.4**	**ND<0.25**
	45	04/22/2003	6.9	0.026	0.13	0.2	0.99	0.93	--
	50	04/22/2003	12	0.58	0.88	0.15	0.80	**6.5**	**ND<0.25**
	55	04/22/2003	17	2.7	0.47	0.33	1.8	**8.8**	**ND<0.25**
	60	04/22/2003	5.7	0.19	0.53	0.18	0.88	0.97	--
	65	04/22/2003	ND<0.50	0.031	0.040	ND<0.0050	0.021	0.28	--
	70	04/22/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.17	--
	75	04/22/2003	ND<0.50	0.0083	0.010	ND<0.0050	ND<0.0050	0.033	--
	80	04/22/2003	ND<0.50	ND<0.0050	0.0050	ND<0.0050	ND<0.0050	0.0071	--
	85	04/22/2003	ND<0.50	0.0057	0.0093	ND<0.0050	0.0059	0.049	--
	90	04/22/2003	ND<0.50	ND<0.0050	0.0069	ND<0.0050	0.0067	0.0088	--

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
(Groundwater monitoring well MW3 was installed in boring B5)									
B5	5	04/23/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.015	--
	10	04/23/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.013	--
	15	04/23/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.022	--
	20	04/23/2003	2.7	0.32	0.12	0.097	0.27	1.2	--
	25	04/23/2003	9.3	0.76	1.3	0.20	0.85	4.1	--
	30	04/23/2003	19	1.2	2.7	0.33	1.6	**9.5**	**ND<0.25**
	35	04/23/2003	270	7.3	19	9.4	31	**25**	**1.2**
	40	04/23/2003	1,400	8.1	66	47	150	9.4	--
	45	04/23/2003	590	4.7	35	24	79	**17**	**0.34**
	50	04/23/2003	49	4.2	11	0.93	4.9	**19**	**0.43**
	55	04/23/2003	48	4.9	8.7	0.90	4.7	**21**	**ND<0.25**
	60	04/23/2003	2.7	0.078	0.20	0.043	0.23	1.6	--
	65	04/23/2003	0.70	0.033	0.068	0.013	0.070	0.36	--
	70	04/23/2003	0.61	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.61	--
	75	04/23/2003	ND<0.50	ND<0.0050	0.0082	ND<0.0050	0.0097	0.19	--
	80	04/23/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.058	--
	85	04/23/2003	ND<0.50	0.022	0.070	0.011	0.065	0.17	--
	90	04/23/2003	ND<0.50	0.018	0.085	0.014	0.083	0.15	--
(Vapor extraction well VE4 was installed in boring B6)									
B6	5	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	10	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	15	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	20	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	25	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	30	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	35	04/24/2003	ND<0.50	0.026	ND<0.0050	ND<0.0050	0.011	**0.0098**	**ND<0.025**
	40	04/24/2003	ND<0.50	0.019	0.011	ND<0.0050	0.013	**0.12**	**ND<0.025**
	45	04/24/2003	ND<0.50	0.014	0.0051	ND<0.0050	0.0078	**0.08**	**ND<0.025**
	50	04/24/2003	ND<0.50	0.024	0.023	ND<0.0050	0.019	0.0064	--
	55	04/24/2003	4.2	1.1	0.58	0.14	0.63	**1.5**	**ND<0.025**
	65	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	**0.023**	**ND<0.025**
	70	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.0060	--
	75	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.013	--
	80	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.0077	--
	90	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	95	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
(Vapor extraction well VE3 was installed in boring B7)									
B7	5	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	10	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	15	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	20	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	25	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	30	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	35	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	40	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	45	04/24/2003	ND<0.50	ND<0.0050	0.0057	ND<0.0050	0.0066	**0.013**	**ND<0.025**
	50	04/24/2003	ND<0.50	0.0055	ND<0.0050	ND<0.0050	ND<0.0050	**0.0091**	**ND<0.025**
	55	04/24/2003	ND<0.50	0.020	0.0062	ND<0.0050	0.0096	**0.0072**	**ND<0.025**
	60	04/24/2003	ND<0.50	0.090	0.019	ND<0.0050	0.020	**0.011**	**ND<0.025**
	70	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	75	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	80	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	85	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	90	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--
	95	04/24/2003	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	--

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
(Vapor extraction well VE5 was installed in boring B8)									
B8	5	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.037	ND<0.025
	10	11/22/2006	0.86	ND<0.0050	0.014	ND<0.0050	0.015	0.56	ND<0.025
	15	11/22/2006	2.1	0.016	0.029	0.0059	0.04	1.5	ND<0.025
	20	11/22/2006	5.1	0.080	0.16	0.0053	0.12	3.2	ND<0.025
	25	11/22/2006	2.7	0.013	0.036	ND<0.0050	0.068	1.6	ND<0.025
	30	11/22/2006	8.8	0.14	0.38	0.013	0.42	6.4	ND<0.025
	35	11/22/2006	8.6	0.68	0.92	0.12	0.72	3.4	ND<0.025
	40	11/22/2006	0.69	ND<0.0050	0.016	ND<0.0050	0.015	0.65	ND<0.025
	45	11/22/2006	0.86	ND<0.0050	0.027	ND<0.0050	0.034	0.46	ND<0.025
	50	11/22/2006	1.8	0.019	0.018	ND<0.0050	0.0097	1.4	ND<0.025
	55	11/22/2006	ND<0.50	ND<0.0050	0.0057	ND<0.0050	0.0063	0.33	ND<0.025
	60	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.082	ND<0.025
	65	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	70	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	75	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	80	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
B9	15	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.010	ND<0.025
	20	11/22/2006	1.7	0.013	0.067	0.0097	0.078	1.2	ND<0.025
	25	11/22/2006	230	1.1	5.7	3.3	9.7	0.85	ND<0.025
	30	11/22/2006	6.1	0.026	0.060	0.0052	0.0052	4.8	ND<0.025
	35	11/22/2006	3.5	0.13	0.059	0.0098	0.12	2.6	ND<0.025
	40	11/22/2006	ND<0.50	ND<0.0050	0.018	ND<0.0050	0.015	0.083	ND<0.025
	45	11/22/2006	0.51	ND<0.0050	0.025	ND<0.0050	0.023	0.092	ND<0.025
	50	11/22/2006	2.0	0.0068	0.029	0.0056	0.051	1.3	ND<0.025
	55	11/22/2006	1.3	ND<0.0050	ND<0.0050	ND<0.0050	0.0064	0.15	ND<0.025
	60	11/22/2006	ND<0.50	ND<0.0050	0.022	ND<0.0050	0.022	0.047	ND<0.025
	65	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	0.014	0.012	ND<0.025
	70	11/22/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
B10	15	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	20	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	25	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	30	11/21/2006	0.62	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.44	ND<0.025
	35	11/21/2006	22	0.078	0.32	0.072	0.58	2.0	ND<0.025
	40	11/21/2006	ND<0.50	ND<0.0050	0.0069	ND<0.0050	0.012	0.025	ND<0.025
	45	11/21/2006	0.72	0.019	0.021	ND<0.0050	0.022	0.41	ND<0.025
	50	11/21/2006	130	0.69	4.7	2.6	14	4.9	ND<0.025
	55	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	0.013	0.24	ND<0.025
	60	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.11	ND<0.025
	65	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.012	ND<0.025
	70	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.010	ND<0.025
	75	11/21/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
(Vapor extraction well VE6 was installed in boring B11)									
B11	5	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.032	ND<0.025
	10	11/20/2006	ND<0.50	ND<0.0050	0.021	ND<0.0050	0.023	0.054	ND<0.025
	15	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	20	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.025
	25	11/20/2006	ND<0.50	ND<0.0050	0.0052	ND<0.0050	ND<0.0050	0.083	ND<0.025
	30	11/20/2006	1.6	ND<0.0050	0.052	0.0076	0.05	0.84	ND<0.025
	35	11/20/2006	4.0	0.070	0.15	0.029	0.58	1.2	ND<0.025
	40	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.050	ND<0.025
	45	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.087	ND<0.025
	50	11/20/2006	0.57	ND<0.0050	0.021	ND<0.0050	0.032	0.30	ND<0.025
	55	11/20/2006	11	0.84	1.2	0.12	0.68	2.6	ND<0.025
	60	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	0.0063	0.013	ND<0.025
	65	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.031	ND<0.025
	70	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.027	ND<0.025
	75	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.022	ND<0.025
	80	11/20/2006	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.035	ND<0.025
CB1	5	12/10/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	10	12/10/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	15	12/10/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	20	12/10/2015	ND<0.48	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048
	25	12/10/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	30	12/10/2015	ND<0.49	ND<0.0049	0.0051	ND<0.0049	0.0049	ND<0.0049	ND<0.049
	35	12/10/2015	3,200	ND<9.7	16	11	340	ND<9.7	ND<97
	40	12/10/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	0.0062	ND<0.0049	ND<0.049
	45	12/10/2015	3,800	ND<9.9	ND<9.9	ND<9.9	218	ND<9.9	ND<99
	50	12/10/2015	2,000	ND<4.8	58	19	228	ND<4.8	ND<48
	55	12/10/2015	2.2	0.018	0.062	0.0088	0.10	0.56	0.26
	60	12/10/2015	1.1	ND<0.0049	0.022	0.0079	0.115	0.0054	ND<0.049
	65	12/10/2015	ND<0.49	ND<0.0049	0.025	ND<0.0049	0.035	0.0096	ND<0.049
	70	12/10/2015	ND<0.49	0.0093	0.031	ND<0.0049	0.0274	0.010	ND<0.049
	75	12/10/2015	1.4	0.0063	0.055	0.011	0.121	0.018	ND<0.049
	80	12/10/2015	0.62	ND<0.0049	0.029	0.0061	0.066	ND<0.0049	ND<0.049
	85	12/10/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	0.0144	ND<0.0049	ND<0.049
	90	12/10/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	0.0131	ND<0.0049	ND<0.049
	95	12/10/2015	ND<0.48	ND<0.0048	ND<0.0048	ND<0.0048	0.0165	ND<0.0048	ND<0.048
	100	12/10/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
CB2	5	12/10/2015	2.5	ND<0.0048	ND<0.0048	ND<0.0048	0.025	ND<0.0048	ND<0.048
	10	12/10/2015	ND<50	ND<0.0051	ND<0.0051	0.073	ND<0.50	ND<0.0051	ND<0.051
	15	12/10/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	20	12/10/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	25	12/10/2015	3.9	ND<0.0049	0.046	0.014	0.217	0.016	0.070
	30	12/10/2015	ND<48	ND<0.48	ND<0.48	ND<0.48	ND<0.48	2.5	ND<4.8
	35	12/10/2015	6,200	ND<10	100	40	860	ND<10	ND<100
	40	12/10/2015	12,000	ND<24	200	70	1,680	ND<24	ND<240
	45	12/10/2015	ND<0.48	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048
	50	12/10/2015	8,300	25	430	150	1,020	ND<20	ND<200
	55	12/10/2015	36,000	290	3,100	590	3,900	67	ND<510
	60	12/10/2015	1.3	0.015	0.078	0.017	0.151	0.076	ND<0.050
	65	12/10/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	0.0084	ND<0.0049	ND<0.049
	70	12/10/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	75	12/10/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	80	12/10/2015	ND<0.50	ND<0.0050	0.0060	ND<0.0050	0.0077	ND<0.0050	ND<0.050
	85	12/11/2015	ND<0.50	ND<0.0050	0.0052	ND<0.0050	0.033	ND<0.0050	ND<0.050
	90	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	95	12/11/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	100	12/11/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
CB3	5	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	10	12/14/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	15	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	20	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	25	12/14/2015	1.1	ND<0.0048	0.0075	ND<0.0048	0.049	ND<0.0048	ND<0.048
	30	12/14/2015	2,500	ND<4.9	11	19	194	ND<4.9	ND<49
	35	12/14/2015	1,200	5.8	56	18	125	6.3	ND<25
	40	12/14/2015	ND<0.50	ND<0.50	0.0064	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	45	12/14/2015	12,000	ND<19	540	240	1,560	ND<19	ND<190
	50	12/14/2015	ND<50	0.062	1.2	0.043	0.50	1.7	0.76
	55	12/14/2015	0.93	0.047	0.0082	ND<0.0050	ND<0.0050	0.73	0.064
	60	12/14/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	65	12/14/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	70	12/14/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	75	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	80	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	85	12/14/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	90	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	95	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	100	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
CB4	5	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	10	12/11/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	15	12/11/2015	ND<0.48	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048
	20	12/11/2015	ND<0.48	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048
	25	12/11/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	30	12/11/2015	ND<50	ND<0.0048	ND<0.0048	ND<0.0048	0.144	0.16	ND<5.0
	35	12/11/2015	3.1	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	0.72	ND<5.0
	40	12/11/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	45	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	50	12/11/2015	ND<50	0.022	0.098	0.025	0.30	ND<0.50	0.46
	55	12/11/2015	ND<48	2.1	1.8	ND<0.48	1.2	9.9	ND<4.8
	60	12/11/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	65	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	70	12/14/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	75	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	80	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	85	12/14/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	90	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
	95	12/14/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	100	12/14/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
CB5	5	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	10	12/11/2015	ND<0.52	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052
	15	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	20	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	25	12/11/2015	ND<0.52	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052
	30	12/11/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	0.035	ND<0.049
	35	12/11/2015	3,000	ND<5.0	34	5.7	270	ND<5.0	ND<50
	40	12/11/2015	ND<0.50	ND<0.0050	0.0053	ND<0.0050	0.0059	ND<0.0050	ND<0.050
	45	12/11/2015	17,000	ND<25	620	320	2,340	ND<25	ND<250
	50	12/11/2015	8,800	44	550	140	1,110	ND<25	ND<250
	55	12/11/2015	ND<0.52	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	0.046	ND<0.052
	60	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	65	12/11/2015	ND<48	ND<0.0049	ND<0.0049	0.0051	0.079	ND<0.0049	ND<0.049
	70	12/11/2015	ND<0.48	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048
	75	12/11/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051
	80	12/11/2015	ND<0.50	ND<0.0050	0.0072	0.0051	0.0097	ND<0.0050	ND<0.050
	85	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	90	12/11/2015	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	95	12/11/2015	ND<0.49	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	100	12/11/2015	ND<0.51	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051

TABLE 1
HISTORICAL CHEMICAL ANALYSES OF SOIL SAMPLES
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	TPHG [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2,3]	TBA [3]
VE10	5	08/05/2016	ND<0.51	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052
	10	08/05/2016	ND<0.51	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	15	08/05/2016	ND<0.50	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049
	20	08/05/2016	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	25	08/05/2016	ND<0.51	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
	30	08/05/2016	ND<0.50	ND<0.0052	0.041	0.010	0.069	ND<0.0052	ND<0.052
	35	08/05/2016	2,700	ND<11	67	14	420	ND<11	ND<110
	40	08/05/2016	ND<0.51	ND<0.0050	ND<0.0050	ND<0.0050	0.0063	ND<0.0050	ND<0.050
	45	08/05/2016	3,400	ND<9.7	45	17	510	ND<9.7	ND<97
	50	08/05/2016	1,300	ND<4.9	72	26	255	5.9	ND<49
	55	08/05/2016	0.60	0.035	0.029	ND<0.0050	0.063	0.870	0.150
	60	08/05/2016	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050

NOTES:
Soil sampled by Ocean Blue Engineers, Inc. analyzed for Total Petroleum Hydrocarbons as Gasoline (TPHg) by EPA Method No. 8015M. and BTEX and MTBE by EPA Method No. 8020.
[1] TPHg analyzed by EPA Method No. 8015M.
[2] BTEX and MTBE analyzed by EPA Method No. 8021B before 11/20/06, thereafter by EPA Method No. 8260B.
[3] Bold numbers before 11/20/06 indicate fuel oxygenates analyzed by EPA Method No. 8260B.
feet-bgs = Feet below the ground surface
ND<0.50 = Not detected at or above the given laboratory detection limits.
NM = Not measured
-- = Not analyzed

TABLE 2
ADDITIONAL DETECTED VOC'S
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	n-butyl benzene [1]	sec-butyl benzene [1]	isopropyl benzene [1]	p-isopropyl toluene [1]	Naphthalene [1]	n-propyl benzene [1]	1,2,4-trimethyl benzene [1]	1,3,5-trimethyl benzene [1]
CB1	5	12/10/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	10	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	15	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	20	12/10/2015	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	ND<0.0048	ND<0.0048
	25	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	30	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	35	12/10/2015	12	ND<9.7	ND<9.7	ND<9.7	ND<97	14	200	55
	40	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	45	12/10/2015	18	ND<9.9	ND<9.9	ND<9.9	ND<99	ND<9.9	260	76
	50	12/10/2015	7.6	ND<4.8	ND<4.8	ND<4.8	ND<48	11	120	29
	55	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	0.046	0.022
	60	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	0.080	0.020
	65	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	0.015	ND<0.0049
	70	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	0.012	ND<0.0049
	75	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	0.068	0.015
	80	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	0.036	0.0085
	85	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	0.0093	ND<0.0049
	90	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	0.0060	ND<0.0049
	95	12/10/2015	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	0.012	ND<0.0048
	100	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
CB2	5	12/10/2015	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	0.018	0.010
	10	12/10/2015	0.084	0.021	0.036	0.010	ND<0.051	0.14	ND<0.50	ND<0.50
	15	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	20	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	25	12/10/2015	0.012	ND<0.0049	ND<0.0049	ND<0.0049	0.13	0.0062	0.18	0.056
	30	12/10/2015	ND<0.48	ND<0.48	ND<0.48	ND<0.48	ND<4.8	ND<0.48	ND<0.48	ND<0.48
	35	12/10/2015	19	ND<10	ND<10	ND<10	ND<100	24	340	86
	40	12/10/2015	35	ND<24	ND<24	ND<24	ND<240	41	630	160
	45	12/10/2015	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	ND<0.0048	ND<0.0048
	50	12/10/2015	22	ND<20	ND<20	ND<20	ND<200	48	370	95
	55	12/10/2015	72	ND<51	ND<51	ND<51	ND<510	160	1,200	310
	60	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	0.0053	0.071	0.017
	65	12/10/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	70	12/10/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	75	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	80	12/10/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	85	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	0.018	ND<0.0050
	90	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	95	12/11/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	100	12/11/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051

TABLE 2
ADDITIONAL DETECTED VOC'S
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	n-butyl benzene [1]	sec-butyl benzene [1]	isopropyl benzene [1]	p-isopropyl toluene [1]	Naphthalene [1]	n-propyl benzene [1]	1,2,4-trimethyl benzene [1]	1,3,5-trimethyl benzene [1]
CB3	5	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	10	12/14/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	15	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	20	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	25	12/14/2015	0.0083	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	0.068	0.022
	30	12/14/2015	13	ND<4.9	ND<4.9	ND<4.9	ND<49	17	170	43
	35	12/14/2015	3.5	ND<2.5	ND<2.5	ND<2.5	ND<25	7.5	63	16
	40	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.050	ND<0.0050	ND<0.0050
	45	12/14/2015	39	ND<19	26	ND<19	ND<190	93	580	170
	50	12/14/2015	0.019	ND<0.0051	ND<0.0051	ND<0.0051	0.12	0.016	0.69	0.083
	55	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	60	12/14/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	65	12/14/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	70	12/14/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	75	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	80	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	85	12/14/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	90	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	95	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	100	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
CB4	5	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	10	12/11/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	15	12/11/2015	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	ND<0.0048	ND<0.0048
	20	12/11/2015	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	ND<0.0048	ND<0.0048
	25	12/11/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	30	12/11/2015	0.0064	ND<0.0048	ND<0.0048	ND<0.0048	ND<5.0	ND<0.0048	0.088	0.032
	35	12/11/2015	0.0080	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	ND<0.0048	0.021
	40	12/11/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	45	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	50	12/11/2015	0.015	ND<0.0049	ND<0.0049	ND<0.0049	0.12	0.010	ND<0.50	0.065
	55	12/11/2015	ND<0.480	ND<0.480	ND<0.480	ND>0.480	ND<4.8	ND<0.480	ND<0.480	ND<0.480
	60	12/11/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	65	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	70	12/14/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	75	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	80	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	85	12/14/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	90	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	95	12/14/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	100	12/14/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050

TABLE 2
ADDITIONAL DETECTED VOC'S
FORMER ANAHEIM CAR WASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(Laboratory results in mg/kg- soil)

SAMPLE NUMBER	DEPTH (feet-bgs)	DATE SAMPLED	n-butyl benzene [1]	sec-butyl benzene [1]	isopropyl benzene [1]	p-isopropyl toluene [1]	Naphthalene [1]	n-propyl benzene [1]	1,2,4-trimethyl benzene [1]	1,3,5-trimethyl benzene [1]
CB5	5	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	10	12/11/2015	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052	ND<0.0052	ND<0.0052	ND<0.0052
	15	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	20	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	25	12/11/2015	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052	ND<0.0052	ND<0.0052	ND<0.0052
	30	12/11/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	35	12/11/2015	12	ND<5.0	ND<5.0	ND<5.0	ND<50	ND<5.0	160	45
	40	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	45	12/11/2015	63	ND<25	36	ND<25	ND<250	140	980	290
	50	12/11/2015	ND<25	ND<25	ND<25	ND<25	ND<250	41	380	93
	55	12/11/2015	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052	ND<0.0052	ND<0.0052	ND<0.0052
	60	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	65	12/11/2015	0.017	ND<0.0049	ND<0.0049	ND<0.0049	0.077	0.015	ND<0.48	0.065
	70	12/11/2015	ND<0.0048	ND<0.0048	ND<0.048	ND<0.0048	ND<0.048	ND<0.0048	ND<0.0048	ND<0.0048
	75	12/11/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
	80	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	85	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	90	12/11/2015	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	95	12/11/2015	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	100	12/11/2015	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.0051	ND<0.0051	ND<0.0051
VE10	5	08/05/2016	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052	ND<0.0052	ND<0.0052	ND<0.0052
	10	08/05/2016	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	15	08/05/2016	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.0049	ND<0.0049	ND<0.0049
	20	08/05/2016	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	25	08/05/2016	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050
	30	08/05/2016	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.052	ND<0.0052	0.024	0.0063
	35	08/05/2016	16	ND<11	ND<11	ND<11	ND<110	ND<11	260	79
	40	08/05/2016	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	0.0076	0.0063
	45	08/05/2016	22	ND<9.7	ND<9.7	ND<9.7	ND<97	15	310	96
	50	08/05/2016	8.2	ND<4.9	ND<4.9	ND<4.9	ND<49	14	120	33
	55	08/05/2016	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	0.043	0.037
	60	08/05/2016	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	ND<0.0050	ND<0.0050

NOTES:
[1] VOCs analyzed by EPA Method No. 8260B.
feet-bgs = Feet below the ground surface
ND<0.50 = Not detected at or above the given laboratory detection limits.
NM = Not measured
-- = Not analyzed

Table 3
Summary of Vapor Extraction Data
900 West Lincoln Avenue
Anaheim, California

Extraction Well Information									Observation Well Information and Measurements			
Extraction Well	Test No., Step No.	Date	Well Diameter (inches)	Screened Interval (feet)	Max. Applied Vacuum (inches H2O)	Maximum Flow (scfm)	UVOCs (ppmv) Start	UVOCs (ppmv) End	Well Name	Screened Interval (feet)	Distance from Extraction Well (feet)	Max. Observed Vacuum Response (in. H2O)
VE10	Test 1, Step 1	08/23/2016	2	30-60	50	144	244	341	VE8	10-20	4.9	0.52
									MW2	79.5-109.5	5.0	1.00
									VE7	30-60	18.8	3.40
									VE9	10-20	22.3	0.50
									MW3	80.5-110.5	22.6	0.96
									VE1s	20-50	24.2	2.20
									VE1d	60-90	24.2	2.00
									VE6s	38-58	29.1	3.70
									VE6d	65-75	29.1	0.70
									VE2s	20-50	31.2	2.70
									VE2d	65-95	31.2	1.70
									MW1	80-110	45.2	1.00
	Test 1, Step 2	08/24/2016	2	30-60	80	188	272	249	VE8	10-20	4.9	0.32
									MW2	79.5-109.5	5.0	0.62
									VE7	30-60	18.8	3.80
									VE9	10-20	22.3	0.40
									MW3	80.5-110.5	22.6	0.60
									VE1s	20-50	24.2	2.50
									VE1d	60-90	24.2	1.40
									VE6s	38-58	29.1	4.40
									VE6d	65-75	29.1	0.41
									VE2s	20-50	31.2	2.60
									VE2d	65-95	31.2	1.20
									MW1	80-110	45.2	0.62

scfm	standard cubic feet per minute
ppmv	parts per million (volume)
inches H2O	inches of water
--	information not available

TABLE 4
ESTIMATE OF HYDROCARBON MASS REMOVAL RATES
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Date	Clock Time	Time Since Start (Minutes)	Difference From Previous Reading (Minutes)	Influent Concentration (ppmv)[1]	Influent Concentration (mg/L)[1]	Vacuum [3] (in. H2O)	Oxygen (%)	Influent Flow Rate [3] (scfm)	Removal Rate Average [2] (lbs/hour)	Cumulative Hydrocarbons Removed [2] (Pounds)	Cumulative Hydrocarbons Removed [2] (gallons)
STEP 1 - VE10											
08/23/2016	06:55	0	0	--	--	--	--	--	--	--	--
"	07:00	5	5	**170**	**0.59**	50	14.32	144	0.3	0.03	0.00
"	07:05	10	5	260	1.06	50	12.20	143	0.6	0.07	0.01
"	07:10	15	5	288	1.18	50	11.04	142	0.6	0.13	0.02
"	07:15	20	5	331	1.35	50	9.86	141	0.7	0.19	0.03
"	07:20	25	5	335	1.37	50	9.66	140	0.7	0.25	0.04
"	07:25	30	5	346	1.41	50	9.28	138	0.7	0.31	0.05
"	07:40	45	15	348	1.42	50	10.58	139	0.7	0.49	0.08
"	07:55	60	15	351	1.43	50	11.10	139	0.7	0.68	0.11
"	08:10	75	15	318	1.30	50	9.80	138	0.7	0.84	0.14
"	08:25	90	15	343	1.40	50	10.60	138	0.7	1.03	0.17
"	08:40	105	15	347	1.42	50	10.00	138	0.7	1.21	0.20
"	08:55	120	15	356	1.46	50	9.64	138	0.8	1.40	0.23
"	09:25	150	30	368	1.50	50	9.26	135	0.8	1.78	0.29
"	09:55	180	30	364	1.49	50	9.00	136	0.8	2.15	0.36
"	10:25	210	30	368	1.50	50	7.94	136	0.8	2.54	0.42
"	10:55	240	30	369	1.51	50	7.84	136	0.8	2.92	0.48
"	11:25	270	30	358	1.46	50	7.58	136	0.7	3.29	0.54
"	11:55	300	30	**310**	**1.10**	50	7.28	136	0.6	3.57	0.59
"	12:25	330	30	345	1.41	50	7.04	136	0.7	3.93	0.65
"	12:55	360	30	305	1.25	50	15.70	136	0.6	4.25	0.70
"	01:25	390	30	312	1.28	50	15.41	136	0.6	4.57	0.76
"	01:55	420	30	310	1.27	50	15.08	136	0.6	4.89	0.81
"	02:25	450	30	306	1.25	50	14.66	136	0.6	5.21	0.86
"	02:55	480	30	311	1.27	50	14.92	135	0.6	5.53	0.91
"	03:25	510	30	322	1.32	50	14.74	136	0.7	5.87	0.97
"	03:55	540	30	317	1.30	50	14.84	135	0.7	6.19	1.02
"	04:25	570	30	358	1.46	50	15.00	136	0.7	6.57	1.09
"	04:55	600	30	**370**	**1.30**	50	15.06	136	0.7	6.90	1.14

TABLE 4
ESTIMATE OF HYDROCARBON MASS REMOVAL RATES
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Date	Clock Time	Time Since Start (Minutes)	Difference From Previous Reading (Minutes)	Influent Concentration (ppmv)[1]	Influent Concentration (mg/L)[1]	Vacuum [3] (in. H2O)	Oxygen (%)	Influent Flow Rate [3] (scfm)	Removal Rate Average [2] (lbs/hour)	Cumulative Hydrocarbons Removed [2] (Pounds)	Cumulative Hydrocarbons Removed [2] (gallons)
STEP 2 - VE10											
08/24/2016	06:00	0	0	--	--	--	--	--	--	--	--
"	06:05	5	5	**250**	**0.87**	80	16.16	182	0.6	0.05	0.01
"	06:10	10	5	316	1.29	80	15.20	183	0.9	0.12	0.02
"	06:15	15	5	309	1.26	80	15.40	184	0.9	0.20	0.03
"	06:30	30	15	326	1.33	80	15.56	187	0.9	0.43	0.07
"	06:45	45	15	324	1.32	80	15.60	187	0.9	0.66	0.11
"	07:00	60	15	320	1.31	80	15.66	187	0.9	0.89	0.15
"	07:15	75	15	316	1.29	80	15.38	187	0.9	1.11	0.18
"	07:30	90	15	311	1.27	80	16.14	187	0.9	1.34	0.22
"	07:45	105	15	308	1.26	80	16.16	187	0.9	1.56	0.26
"	08:00	120	15	301	1.23	80	16.20	187	0.9	1.77	0.29
"	08:30	150	30	284	1.16	80	16.48	187	0.8	2.18	0.36
"	09:00	180	30	288	1.18	80	16.66	187	0.8	2.59	0.43
"	09:30	210	30	282	1.15	80	16.72	186	0.8	2.99	0.49
"	10:00	240	30	260	1.06	80	17.38	185	0.7	3.36	0.55
"	10:30	270	30	258	1.05	80	17.06	185	0.7	3.72	0.62
"	11:00	300	30	**430**	**1.50**	80	17.30	184	1.0	4.24	0.70
"	11:30	330	30	261	1.07	80	17.26	189	0.8	4.62	0.76
"	12:00	360	30	254	1.04	80	17.34	187	0.7	4.98	0.82
"	12:30	390	30	255	1.04	80	17.68	187	0.7	5.34	0.88
"	01:00	420	30	234	0.96	80	17.80	188	0.7	5.68	0.94
"	01:30	450	30	215	0.88	80	18.26	187	0.6	5.99	0.99
"	02:00	480	30	224	0.92	80	18.54	184	0.6	6.30	1.04
"	02:30	510	30	272	1.11	80	17.60	186	0.8	6.69	1.11
"	03:00	540	30	227	0.93	80	18.38	186	0.6	7.01	1.16
"	03:30	570	30	248	1.01	80	18.16	186	0.7	7.36	1.22
"	04:00	600	30	**570**	**2.00**	80	18.04	186	1.4	8.06	1.33

TOTAL HYDROCARBONS REMOVED (STEPS 1 & 2)

Steps 1 and 2: **14.96 lbs** **2.47 gal**

AVERAGE HYDROCARBON REMOVAL RATES [4]

Step 1: **0.69 lbs/hr** **0.11 gal/hr**

Step 2: **0.81 lbs/hr** **0.13 gal/hr**

Notes:

1.) Horiba field readings and laboratory results (shown in boldface type) are used for calculation of hydrocarbon removal.

2.) Example calculation for removal rate average and hydrocarbon mass removal estimate is included in Appendix J.

3.) Total vacuum and flow were measured at wellhead for Tests 1 and 2.

4.) Average hydrocarbon removal rate for each test calculated by dividing total pounds of hydrocarbons removed during test by total time of test in hours.

TABLE 5
CHEMICAL ANALYSES OF VAPOR SAMPLES
FORMER ANAHEIM CARWASH
900 W. LINCOLN AVENUE
ANAHEIM, CALIFORNIA

(measurements in parts per million per volume)

TEST 1										
SAMPLE	TEST No.	DATE SAMPLED	TIME SAMPLED	TPHg [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2]	TBA [2]
VE10-Start	1	8/23/2016	6:56 AM	170	3.4	6.6	0.20	1.2	3.9	ND<0.50
VE10-Middle	1	8/23/2016	11:56 AM	310	5.3	11	0.83	10	8.8	ND<0.50
VE10-End	1	8/23/2016	4:55 PM	370	7.2	16	1.1	15	10	ND<0.50
TEST 2										
SAMPLE	TEST No.	DATE SAMPLED	TIME SAMPLED	TPHg [1]	BENZENE [2]	TOLUENE [2]	ETHYL BENZENE [2]	TOTAL XYLENES [2]	MTBE [2]	TBA [2]
VE10-Start	2	8/24/2016	6:01 AM	250	5.3	8.2	0.22	1.5	11	ND<0.50
VE10-Middle	2	8/24/2016	11:00 AM	430	3.4	5.3	0.25	3.2	7.4	ND<0.50
VE10-End	2	8/24/2016	4:00 AM	570	4.1	5.6	0.94	2.1	7.2	ND<0.50

NOTES:

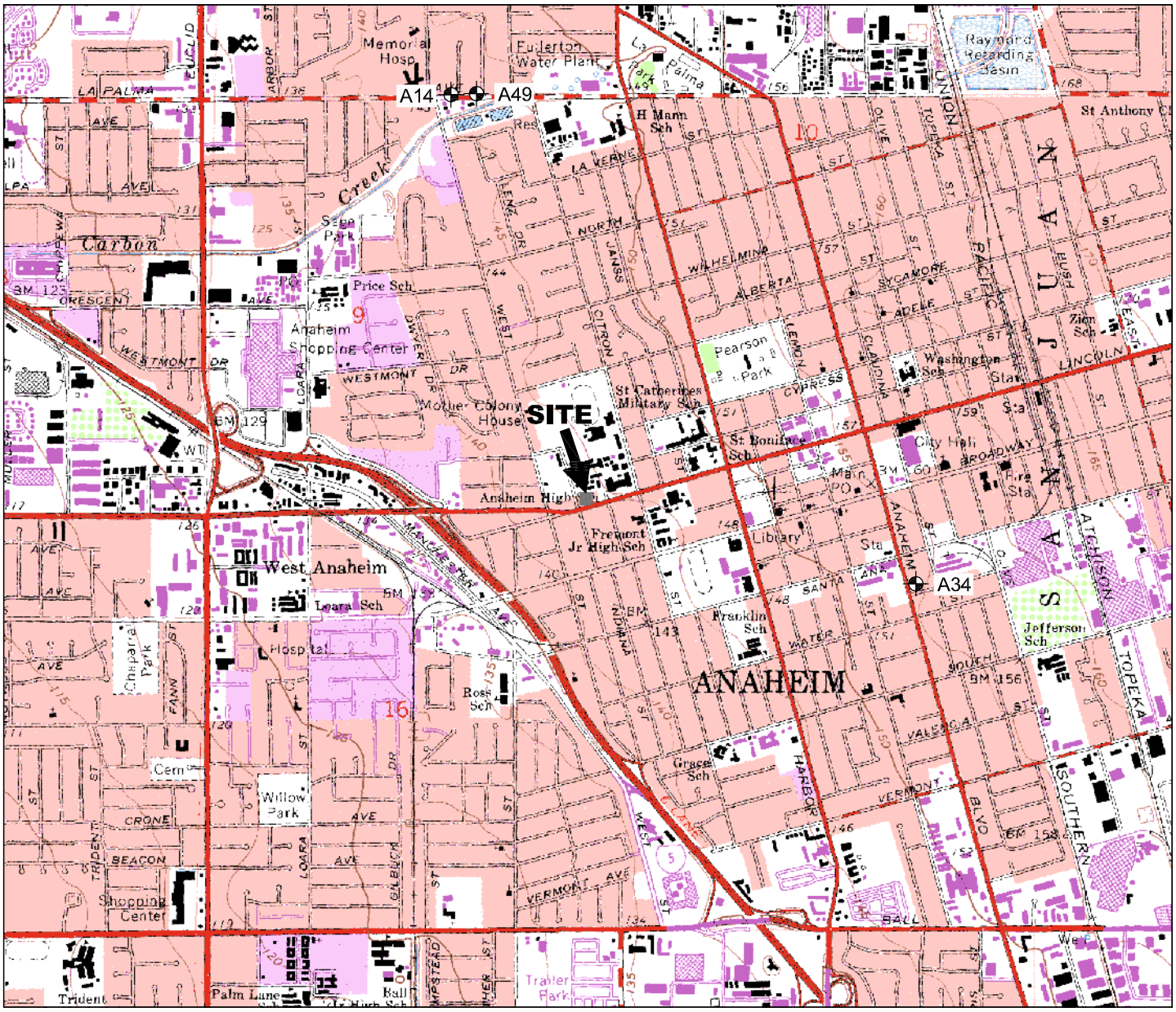
[1] Total Petroleum Hydrocarbons as gasoline (TPHg) analyzed in accordance with EPA Method No. 8015M.

[2] Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and fuel oxygenates analyzed in accordance with EPA Method No. 8260B.

Table 6
Well Construction Summary
Former Anaheim Car Wash
900 West Lincoln Avenue
Anaheim, California

Well No.	Installation Date	Well Diameter (inches)	Bottom of Boring (feet)	Top of Sand Pack (feet)	Screen Interval (feet)
Existing Wells					
MW1	04/22/2003	4	110	77.5	80-110
MW2	04/23/2003	4	110	77	79.5-109.5
MW3	04/23/2003	4	110	78	80.5-110.5
VE1	04/21/2003	2	98	18 and 58	20-50, 60-90
VE2	04/22/2003	2	95	18 and 63	20-50, 65-95
VE3	04/24/2003	2	96.5	8 and 38	10-30, 40-70
VE4	04/24/2003	2	96.5	13 and 43	15-35, 45-75
VE5	11/22/2006	2	81.5	16 and 38	18-28, 40-60
VE6	11/20/2006	2	81.5	36 and 63	38-58, 65-75
VE7	01/04/2013	2	61.5	28	30-60
VE8	01/04/2013	2	21.5	8	10-20
VE9	01/04/2013	2	21.5	8	10-20
VE10	08/05/2016	2	60	28	30-60

FIGURES



A14 City of Anaheim Municipal Well

NORTH

0 1/2 1

APPROXIMATE SCALE IN MILES

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Client: AMIR LANKARANI

Project No.: 469-01

NOTES:

1) All locations and dimensions are approximate.
2) Base map from USGS 7.5 minute Anaheim (dated 1965, photorevised 1981) California topographic quadrangle.
3) City of Anaheim well locations are approximate.

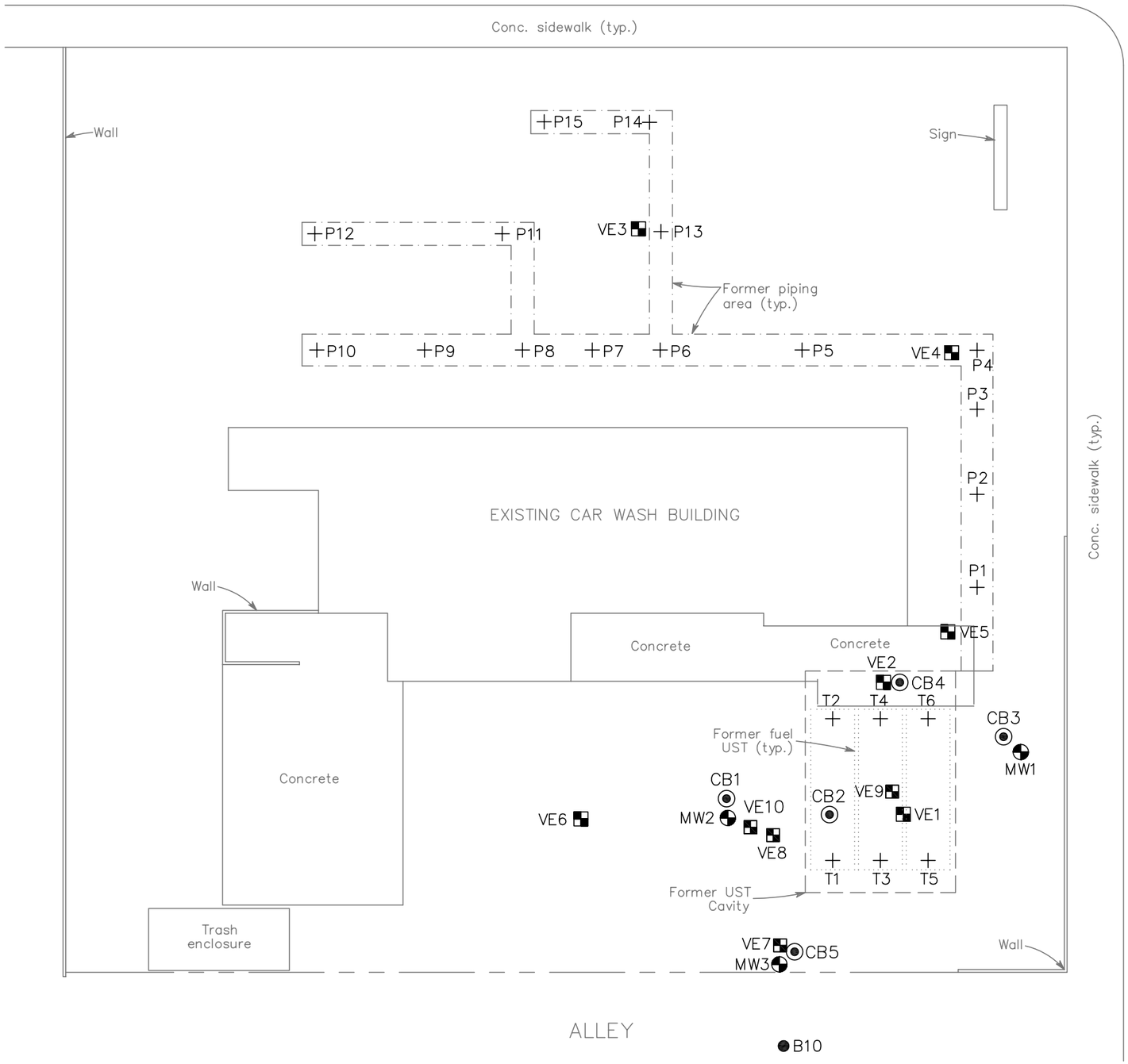
FREY ENVIRONMENTAL, INC.

SITE LOCATION MAP

Date: MAY 2013

Figure 1

708-01-SL



EXPLANATION

+ T1	FORMER SOIL SAMPLE LOCATION
● B9	SOIL BORING LOCATION
■ VE1	VAPOR EXTRACTION WELL LOCATION
◕ MW1	GROUNDWATER MONITORING WELL LOCATION
◉ CB1	CONFIRMATION SOIL BORING LOCATION

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Ocean Blue Engineers, Inc. titled "Property Plot Plan", drawing no. 1, job no. 1272.2000.02–02, not dated.
3) Well locations were surveyed by RdM Surveying Inc. on 12/20/2006, job no. 2–66.

NORTH

0 20 40

APPROXIMATE SCALE IN FEET

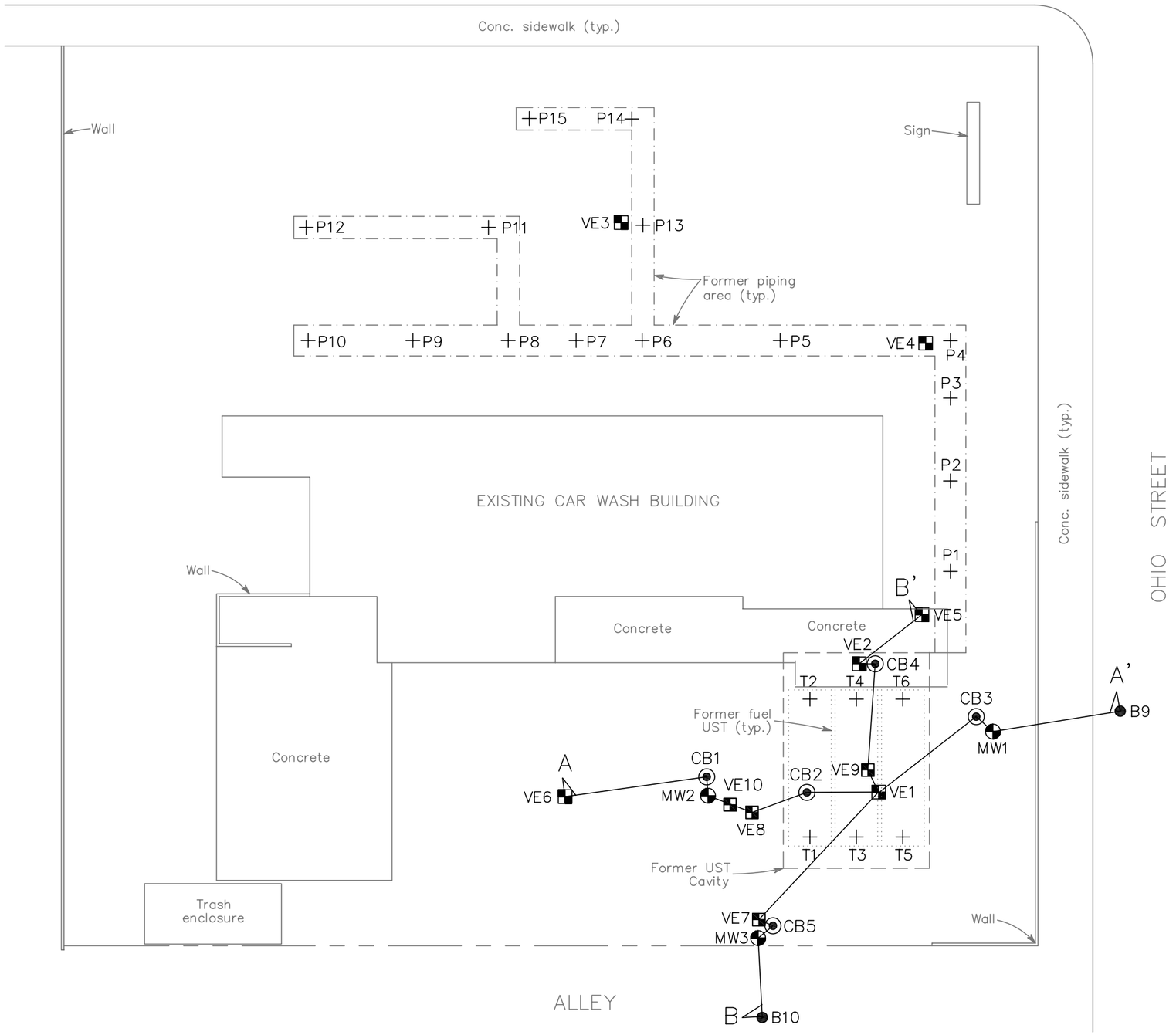
FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Client: AMIR LANKARANI Project No.: 469–01

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING
SOIL BORING, VAPOR EXTRACTION WELL,
AND GROUNDWATER MONITORING
WELL LOCATIONS

Date: SEPTEMBER 2016 Figure 2



EXPLANATION

+ T1	FORMER SOIL SAMPLE LOCATION
● B9	SOIL BORING LOCATION
■ VE1	VAPOR EXTRACTION WELL LOCATION
◓ MW1	GROUNDWATER MONITORING WELL LOCATION
◉ CB1	CONFIRMATION SOIL BORING LOCATION
A A'	GEOLOGIC CROSS SECTION LOCATION

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Ocean Blue Engineers, Inc. titled "Property Plot Plan", drawing no. 1, job no. 1272.2000.02–02, not dated.
3) Well locations were surveyed by RdM Surveying Inc. on 12/20/2006, job no. 2–66.

NORTH

0 20 40

APPROXIMATE SCALE IN FEET

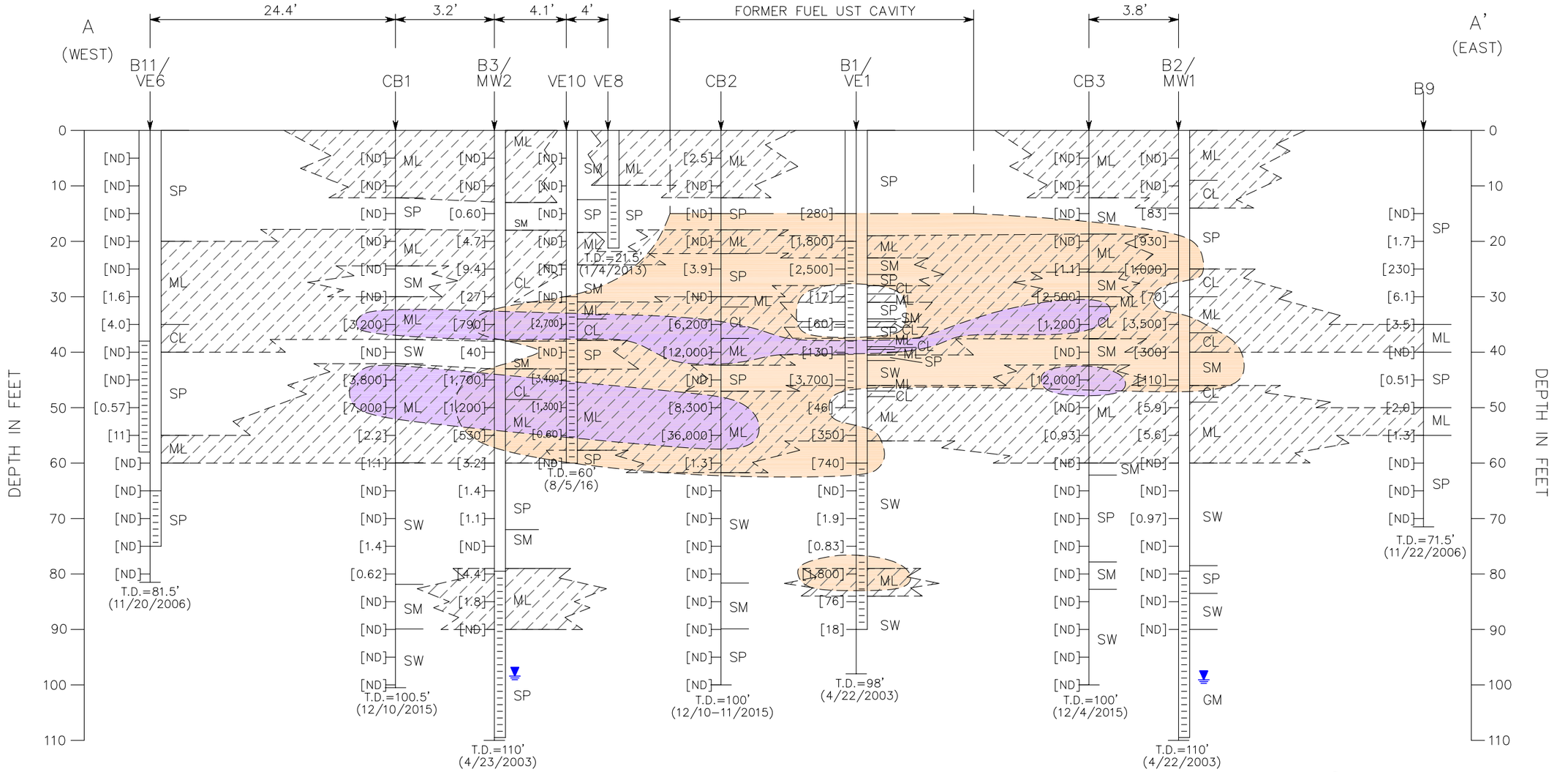
FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Client: AMIR LANKARANI Project No.: 469–01

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING
GEOLOGIC CROSS SECTION LOCATIONS
A–A' AND B–B'

Date: SEPTEMBER 2016 Figure 3



EXPLANATION

- GM — SILTY GRAVEL
- SW — WELL–GRADED SAND
- SP — POORLY GRADED SAND
- SM — SILTY SAND
- SC — CLAYEY SAND
- ML — SILT
- CL — CLAY

(Coarse–grained soils; Fine–grained soils)

GROUNDWATER DEPTH AS MEASURED ON JULY 17, 2015

[930] CONCENTRATION OF TOTAL PETROLEUM HYDROCARBONS PRIOR TO REMEDIATION (EPA 8015 gasoline, in mg/kg; ND=not detected above laboratory detection limit)

ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED 2013 AND PRIOR)

ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED DECEMBER 10–14, 2015 AND AFTER)

WELL SCREEN LOCATION

NOTES:

1) The subsurface conditions shown are for the boring locations only. Subsurface conditions between borings may be different than shown.
2) USCS descriptions are based on field classification.
3) See boring logs for additional details.

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

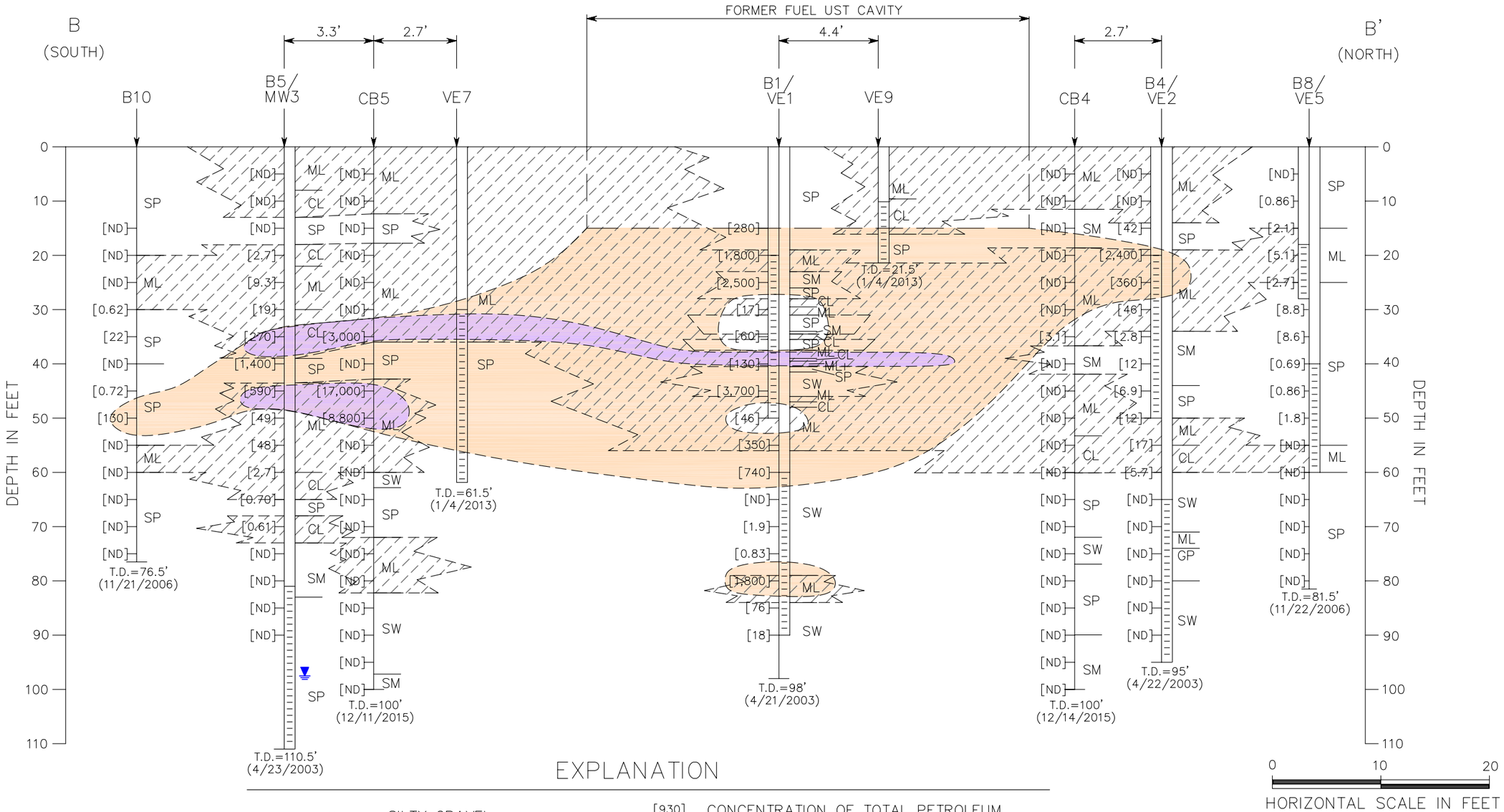
Client: AMIR LANKARANI Project No.: 469–01

FREY ENVIRONMENTAL, INC.

SUBSURFACE GEOLOGIC SECTION A–A'

Date: OCTOBER 2016 Figure 4

469–01/46901–AA2.dgn



EXPLANATION

- GM — SILTY GRAVEL
- SW — WELL-GRADED SAND
- SP — POORLY GRADED SAND
- SM — SILTY SAND
- SC — CLAYEY SAND
- ML — SILT
- CL — CLAY

(Coarse-grained soils; Fine-grained soils)

GROUNDWATER DEPTH AS MEASURED ON JULY 17, 2015

[930] CONCENTRATION OF TOTAL PETROLEUM HYDROCARBONS PRIOR TO REMEDIATION (EPA 8015 gasoline, in mg/kg; ND=not detected above laboratory detection limit)

ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED 2013 AND PRIOR)

ESTIMATED LIMITS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL >100 mg/kg (EPA Method No. 8015) (SAMPLED DECEMBER 10-14, 2015 AND AFTER)

WELL SCREEN LOCATION

NOTES:

1) The subsurface conditions shown are for the boring locations only. Subsurface conditions between borings may be different than shown.
2) USCS descriptions are based on field classification.
3) See boring logs for additional details.

FORMER ANAHEIM CARWASH
900 WEST LINCOLN AVENUE
ANAHEIM, CALIFORNIA

Client: AMIR LANKARANI Project No.: 469-01

FREY ENVIRONMENTAL, INC.

SUBSURFACE GEOLOGIC SECTION
B-B'

Date: OCTOBER 2016 Figure 5

469-01/46901-BB.dgn

APPENDIX A

RWQCB APPROVAL LETTER

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Santa Ana Regional Water Quality Control Board

June 20, 2016

Mr. Amir Lankarani
Former Anaheim Car Wash
900 W. Lincoln Avenue
Anaheim, CA 92806

SUBJECT: WORKPLAN FOR POST REMEDIATION SOIL VAPOR EXTRACTION TEST FORMER ANAHEIM CAR WASH 900 WEST LINCOLN AVENUE, ANAHEIM

Dear Mr. Lankarani,

The June 13, 2016 report titled *Workplan Post Remediation Soil Vapor Extraction Test* was submitted and reviewed for the subject Site. Your environmental consultant, Frey Environmental, Inc. (Frey), prepared the workplan in accordance to our June 8, 2016 meeting.

One (1) vapor extraction well (VE10) is proposed to evaluate post-remediation petroleum mass that remains in the fine-grained soil located at approximately 30 to 60 feet below the ground surface (bgs). Proposed boring/well VE10 will be constructed with 2-inch diameter 40 PVC casing and drilled to approximately 60 feet bgs. This boring will be advanced in proximity to existing shallow well VP8 and located approximately eight (8) feet to the southwest of boring CB2. Well VE10 will be screened from approximately 30 to 60 feet bgs.

Soil samples will be collected at five (5) foot intervals from 5 feet to the bottom of the boring. Soil samples will be analyzed by USEPA Methods 8015M and full-scan 8260B for total petroleum hydrocarbons-gasoline (TPH-g) and volatile organic compounds (VOCs), respectively.

Once installed, two (2) 10-hour soil vapor extraction tests (VET) will be conducted on well VE10 using a mobile SVE unit permitted under the South Coast Air Quality Management District's (SCAQMD) various locations general permit. Wells VE1-shallow, VE1-deep, VE2-shallow, VE2-deep, VE6-shallow, VE6-deep, VE7, VE8, VE9, MW1, MW2, and MW3 will be used as observation wells during the SVE events.

According to page 4 of the work plan, soil vapor samples will also be collected in tedlar bags at the beginning, middle, and end of each 10-hour VET event. Vapor samples will also be analyzed for purgeable petroleum hydrocarbons and VOCs by USEPA Method 8260B.

This letter constitutes Regional Board approval of the work plan. Please submit the well installation and SVE tests results report to this office by **September 12, 2016**.

If you should have any questions, please contact me at (951) 782-4497 or via email at Nancy.Olson-Martin@waterboards.ca.gov.

Sincerely,

Nancy Olson-Martin

Nancy Olson-Martin
Sanitary Engineering Associate
Underground Storage Tanks Section

cc: Frey Environmental, Inc. – Joe Frey (joefrey@freyinc.com)
Frey Environmental, Inc. – Kent Tucker (kenttucker@freyinc.com)

NOM/Anaheim Car Wash_900 West Lincoln_Anaheim_Letter.062016

APPENDIX B

WELL INSTALLATION PERMIT

ANAHEIM PUBLIC UTILITIES

WELL/BORING PERMIT

THIS PERMIT IS NOT VALID FOR DRILLING IN CITY RIGHT-OF-WAY UNLESS ACCOMPANIED BY A RIGHT-OF-WAY CONSTRUCTION PERMIT

PERMIT TYPE: ☐ BORINGS ☒ WELL INSTALLATION ☐ WELL DESTRUCTION **PERMIT NO:** 1540

ADDRESS OR CROSS STREET OF WELL LOCATION: (ATTACH SITE PLAN) 900 W. Lincoln Avenue	WELL OWNER NAME (INDIVIDUAL NAME) Amir Lankerani
SITE/PROJECT NAME: Anaheim Car Wash	COMPANY: (IF APPLICABLE) Anaheim Car Wash
APPLICANT NAME: Mollie Banh	ADDRESS: 900 W. Lincoln Avenue
COMPANY: FREY Environmental, Inc.	CITY: Anaheim STATE/ZIP CA / 92805
ADDRESS: 2817A Lafayette Avenue	
CITY: Newport Beach STATE/ZIP CA / 92663	PHONE: (714) 533-2202 EMAIL: lilalank@yahoo.com
PHONE: (949) 723-1645 EMAIL: molliebanh@freyinc.com	**NOTIFY WATER INSPECTOR AT LEAST 48 HOURS PRIOR TO START AT (714) 765-4591**
I HEREBY AGREE TO COMPLY WITH ALL ORDINANCES, RULES AND REGULATIONS OF THE CITY OF ANAHEIM AND THE STATE OF CALIFORNIA PERTAINING TO WELL CONSTRUCTION AND DESTRUCTION. I ATTEST THAT I AM AUTHORIZED TO SIGN ON BEHALF OF THE PROPERTY OWNER AND/OR WELL OWNER. ☒ AGREE SIGNATURE	APPLICANT MUST SUBMIT A COPY OF THE WELL COMPLETION REPORT TO THE ANAHEIM PUBLIC UTILITIES AT THE ADDRESS LISTED ABOVE WITHIN 60 DAYS OF COMPLETION OF WORK OR EMAIL TO MNEWLAND@ANAHEIM.NET **INJECTION WELLS ARE REQUIRED TO BE REGISTERED WITH USEPA AT** HTTP://WWW.EPA.GOV/REGION9/WATER/GROUNDWATER/INJECTION-WELLS-REGISTER.HTML FAX OR EMAIL A COPY OF COMPLETED REGISTRATION FORM TO ANAHEIM PUBLIC UTILITIES AT (714) 765-4135 OR EMAIL TO MNEWLAND@ANAHEIM.NET

PLEASE DESCRIBE WELLS/BORINGS BELOW: (ATTACH ADDITIONAL SHEETS, IF NECESSARY) (USE THE FOLLOWING ACRONYM FOR WELL TYPE: **B** = BORING; **PW** = PRODUCTION WELL; **MW** = MONITORING WELL; **DW** = DEWATERING WELL **IJ** = INJECTION WELL; **VE** = VAPOR EXTRACTION; **VP** = VAPOR PROBE)

WELL ID	TYPE	DIAM (IN.)	DEPTH (FT.)	SCREEN INTERVALS	EST. DATE OF DESTRUCTION
VE10	Vapor Extraction	2	61.5	30-60 ft.	Unknown

ADMINISTRATIVE USE ONLY:

WELL FEE = $131 APPLICATION FEE + $80 X 1 (NO. OF WELLS)

TOTAL FEE DUE: 211.00

PAYMENT RECEIVED AND PERMIT AUTHORIZED BY:

Marie Mulvaney DATE 7.28.16

ADMINISTRATIVE USE ONLY:

WELL INSPECTED BY:

INSPECTOR NAME DATE

WELL COMPLETION REPORT RECEIVED ☐ YES

ESTIMATED START OF WORK:

201 S. Anaheim Blvd., Suite 1101, Anaheim, CA
92805 714.765.4166, Fax: 714.765.4135

APPENDIX C

FIELD PROCEDURES

APPENDIX C
FIELD PROCEDURES

C.1 DRILLING PROCEDURES

1. The soil boring was drilled with a truck-mounted drilling rig using nominal 8-inch outside diameter hollow stem augers.

2. The augers were steam-cleaned prior to use at the Site.

3. Soil descriptions, sample type and depth, and related drilling information were recorded on a boring log and reviewed by a State-Registered Engineering Geologist from FREY.

4. Soil samples were collected using a split-barrel modified California sampler.

5. The sampler was cleaned between sample intervals using a brush and tap water rinse, followed by a brush and TSP solution rinse, a tap water rinse, and a deionized water rinse. The sampler was dried by air or with a towel prior to sampling.

6. Soil samples were collected in 2-inch inside diameter and 6-inch long stainless steel or brass tubes. Three six inch tubes are generally enclosed in the sampler. Prior to initial use, the sample tubes were cleaned, rinsed, and dried using the procedures described above

7. The sampler was driven into the soil using a 140-pound hammer dropped approximately 30 inches. The number of blows (blow count) required to advance the sampler 18 inches was recorded on the boring log for each 6-inch increment.

8. Following retrieval of the sampler, one of the two lower 6-inch tubes within the sampler will be removed from the sampler, and given sample recovery, the ends covered with aluminum foil and capped with PVC end caps. Each sample will be labeled with the sample number, sample depth, date, and project number.

9. The soil in the remaining sample tubes were used to describe the soil and for field head space analysis.

10. The samples will be placed in bags, and chilled in an ice chest with ice.

11. The samples were delivered to the laboratory following collection. Sample handling, transport, and delivery to the laboratory were documented using Chain-of-Custody procedures, including the use of Chain-of-Custody forms.

C.2 HEAD SPACE ANALYSIS

1. Soils were extruded directly into a mason jar which was then immediately sealed.

2. The sample was allowed to equilibrate, then it was connected to a photo ionization detector/organic vapor analyzer (PID/OVA), and the concentration was read as parts per million by volume (ppmv).

C.3 VAPOR EXTRACTION WELL INSTALLATION PROCEDURES

1. The vapor extraction well was constructed of 2-inch diameter, threaded, flush-jointed, Schedule 40 PVC pipe. Slot openings are 0.02 inch in width.

2. The well screen extends from approximately 30 feet to 60 feet bgs. Blank casing was placed from the top of the screen to just below the ground surface.

3. The annulus around the screened interval of the wells was backfilled with a screened-washed sand (6x16 mesh). Sand backfill material was placed to a depth of approximately 3 feet above the screened interval of the well.

4. A hydrated bentonite seal, approximately two-feet thick, was placed immediately above the sandpack. The annulus above the bentonite seal was backfilled with a bentonite grout.

5. A traffic-bearing well box was placed above the well casing and set in concrete. The well box is raised slightly above the ground surface to minimize surface water infiltration.

C.4 VAPOR EXTRACTION TEST FIELD PROCEDURES

1. During the VET, soil gas was extracted from the extraction well at a steady vacuum and flow. The extraction well was monitored for applied vacuum (with a Magnahelic pressure gage), and for flow rate (with a pitot tube and Magnahelic pressure gage). Various observation wells were monitored for any field observed vacuum response that occurred in these wells during the test with the use of Magnahelic pressure gages. The vacuum was increased during each step of the VET.

2. The test was conducted for approximately ten (10) hours. Vacuum measurements were recorded on surrounding vapor extraction and groundwater monitoring wells during the conduct of the VET.

3. Soil vapor samples were collected from the extraction well at the beginning, middle, and end of each Step of the VET. The soil vapor samples were collected from the influent vapor stream in Tedlar bags with the use of a sample pump and quarter-inch Teflon tubing. Samples will be screened in the field using a Horiba model MEXA-554JU infrared gas analyze

APPENDIX D

SOIL SAMPLING LABORATORY REPORT

eurofins | Calscience

WORK ORDER NUMBER: 16-08-0515

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Frey Environmental, Inc.

Client Project Name: Anaheim Car Wash / 469-01

Attention: Kent Tucker
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Approved for release on 08/17/2016 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

eurofins | Calscience

Contents

Client Project Name: Anaheim Car Wash / 469-01
Work Order Number: 16-08-0515

1 Work Order Narrative. 3

2 Sample Summary. 4

3 Detections Summary. 5

4 Client Sample Data. 7
4.1 EPA 8015B (M) TPH Gasoline (Solid). 7
4.2 EPA 8260B Volatile Organics + Oxygenates (Solid). 10

5 Quality Control Sample Data. 58
5.1 MS/MSD. 58
5.2 LCS/LCSD. 63

6 Sample Analysis Summary. 70

7 Glossary of Terms and Qualifiers. 71

8 Chain-of-Custody/Sample Receipt Form. 72

eurofins | Calscience

Work Order Narrative

Work Order: 16-08-0515 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 08/08/16. They were assigned to Work Order 16-08-0515.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Return to Contents

eurofins | Calscience

Sample Summary

Client:	Frey Environmental, Inc. 2817-A Lafayette Avenue Newport Beach, CA 92663-3715	Work Order:	16-08-0515
		Project Name:	Anaheim Car Wash / 469-01
		PO Number:	
		Date/Time Received:	08/08/16 12:38
		Number of Containers:	12
Attn:	Kent Tucker		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
VE10-5	16-08-0515-1	08/05/16 09:10	1	Solid
VE10-10	16-08-0515-2	08/05/16 09:16	1	Solid
VE10-15	16-08-0515-3	08/05/16 09:22	1	Solid
VE10-20	16-08-0515-4	08/05/16 09:26	1	Solid
VE10-25	16-08-0515-5	08/05/16 09:30	1	Solid
VE10-30	16-08-0515-6	08/05/16 09:35	1	Solid
VE10-35	16-08-0515-7	08/05/16 09:43	1	Solid
VE10-40	16-08-0515-8	08/05/16 09:50	1	Solid
VE10-45	16-08-0515-9	08/05/16 09:55	1	Solid
VE10-50	16-08-0515-10	08/05/16 10:10	1	Solid
VE10-55	16-08-0515-11	08/05/16 10:22	1	Solid
VE10-60	16-08-0515-12	08/05/16 10:25	1	Solid

Return to Contents

eurofins | Calscience

Detections Summary

Client:	Frey Environmental, Inc.	Work Order:	16-08-0515
	2817-A Lafayette Avenue	Project Name:	Anaheim Car Wash / 469-01
	Newport Beach, CA 92663-3715	Received:	08/08/16
Attn:	Kent Tucker		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
VE10-30 (16-08-0515-6)						
Ethylbenzene	10		5.2	ug/kg	EPA 8260B	EPA 5030C
Toluene	41		5.2	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	24		5.2	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	6.3		5.2	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	48		5.2	ug/kg	EPA 8260B	EPA 5030C
o-Xylene	21		5.2	ug/kg	EPA 8260B	EPA 5030C
VE10-35 (16-08-0515-7)						
TPH as Gasoline	2700	HD	53	mg/kg	EPA 8015B (M)	EPA 5030C
n-Butylbenzene	16000		11000	ug/kg	EPA 8260B	EPA 5030C
Ethylbenzene	14000		11000	ug/kg	EPA 8260B	EPA 5030C
Toluene	67000		11000	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	260000		11000	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	79000		11000	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	290000		11000	ug/kg	EPA 8260B	EPA 5030C
o-Xylene	130000		11000	ug/kg	EPA 8260B	EPA 5030C
VE10-40 (16-08-0515-8)						
1,2,4-Trimethylbenzene	7.6		5.0	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	6.3		5.0	ug/kg	EPA 8260B	EPA 5030C
VE10-45 (16-08-0515-9)						
TPH as Gasoline	3400	HD	49	mg/kg	EPA 8015B (M)	EPA 5030C
n-Butylbenzene	22000		9700	ug/kg	EPA 8260B	EPA 5030C
Ethylbenzene	17000		9700	ug/kg	EPA 8260B	EPA 5030C
n-Propylbenzene	15000		9700	ug/kg	EPA 8260B	EPA 5030C
Toluene	45000		9700	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	310000		9700	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	96000		9700	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	340000		9700	ug/kg	EPA 8260B	EPA 5030C
o-Xylene	170000		9700	ug/kg	EPA 8260B	EPA 5030C

Return to Contents

* MDL is shown

eurofins | Calscience

Detections Summary

Client:	Frey Environmental, Inc.	Work Order:	16-08-0515
	2817-A Lafayette Avenue	Project Name:	Anaheim Car Wash / 469-01
	Newport Beach, CA 92663-3715	Received:	08/08/16
Attn:	Kent Tucker		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
VE10-50 (16-08-0515-10)						
TPH as Gasoline	1300	HD	19	mg/kg	EPA 8015B (M)	EPA 5030C
n-Butylbenzene	8200		4900	ug/kg	EPA 8260B	EPA 5030C
Ethylbenzene	26000		4900	ug/kg	EPA 8260B	EPA 5030C
n-Propylbenzene	14000		4900	ug/kg	EPA 8260B	EPA 5030C
Toluene	72000		4900	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	120000		4900	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	33000		4900	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	180000		4900	ug/kg	EPA 8260B	EPA 5030C
o-Xylene	75000		4900	ug/kg	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	5900		4900	ug/kg	EPA 8260B	EPA 5030C
VE10-55 (16-08-0515-11)						
TPH as Gasoline	0.60	HD	0.50	mg/kg	EPA 8015B (M)	EPA 5030C
Benzene	35		5.0	ug/kg	EPA 8260B	EPA 5030C
Toluene	29		5.0	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	43		5.0	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	37		5.0	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	27		5.0	ug/kg	EPA 8260B	EPA 5030C
o-Xylene	36		5.0	ug/kg	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	870		520	ug/kg	EPA 8260B	EPA 5030C
Tert-Butyl Alcohol (TBA)	150		50	ug/kg	EPA 8260B	EPA 5030C

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Project: Anaheim Car Wash / 469-01

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-5	**16-08-0515-1-A**	**08/05/16 09:10**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 15:29**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	74	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-10	**16-08-0515-2-A**	**08/05/16 09:16**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 16:02**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-15	**16-08-0515-3-A**	**08/05/16 09:22**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 16:35**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-20	**16-08-0515-4-A**	**08/05/16 09:26**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 17:08**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	72	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-25	**16-08-0515-5-A**	**08/05/16 09:30**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 17:42**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	72	42-126	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: mg/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-30	**16-08-0515-6-A**	**08/05/16 09:35**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 18:14**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-35	**16-08-0515-7-A**	**08/05/16 09:43**	**Solid**	**GC 24**	**08/08/16**	**08/12/16 00:51**	**160812L012**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	2700	53	105	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	122	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-40	**16-08-0515-8-A**	**08/05/16 09:50**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 18:47**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-45	**16-08-0515-9-A**	**08/05/16 09:55**	**Solid**	**GC 24**	**08/08/16**	**08/12/16 01:57**	**160812L012**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	3400	49	97.3	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	145	42-126	2,7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-50	**16-08-0515-10-A**	**08/05/16 10:10**	**Solid**	**GC 24**	**08/08/16**	**08/12/16 03:03**	**160812L012**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	1300	19	39.0	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	151	42-126	2,7

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Project: Anaheim Car Wash / 469-01

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-55	**16-08-0515-11-A**	**08/05/16 10:22**	**Solid**	**GC 24**	**08/10/16**	**08/12/16 00:18**	**160812L011**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	0.60	0.50	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-60	**16-08-0515-12-A**	**08/05/16 10:25**	**Solid**	**GC 24**	**08/10/16**	**08/11/16 23:45**	**160812L011**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-571-3181**	**N/A**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 11:25**	**160810L014**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	72	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-571-3184**	**N/A**	**Solid**	**GC 24**	**08/11/16**	**08/11/16 22:39**	**160812L011**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-571-3186**	**N/A**	**Solid**	**GC 24**	**08/11/16**	**08/11/16 23:12**	**160812L012**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	4.0	8.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene - FID	73	42-126	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-5	**16-08-0515-1-A**	**08/05/16 09:10**	**Solid**	**GC/MS OO**	**08/08/16**	**08/08/16 18:00**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 2 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	
Tert-Butyl Alcohol (TBA)	ND	52	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 3 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	100	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-10	**16-08-0515-2-A**	**08/05/16 09:16**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 00:03**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 5 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	49	1.00	
Diisopropyl Ether (DIPE)	ND	9.8	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.8	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.8	1.00	
Ethanol	ND	240	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 6 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	100	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-15	**16-08-0515-3-A**	**08/05/16 09:22**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 00:31**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 8 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	49	1.00	
Diisopropyl Ether (DIPE)	ND	9.8	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.8	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.8	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 9 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	91	62-146	
Toluene-d8	100	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-20	**16-08-0515-4-A**	**08/05/16 09:26**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 00:58**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 11 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	9.9	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.9	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.9	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Anaheim Car Wash / 469-01			Page 12 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	100	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-25	**16-08-0515-5-A**	**08/05/16 09:30**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 01:25**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 14 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	9.9	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.9	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.9	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 15 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	100	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-30	**16-08-0515-6-A**	**08/05/16 09:35**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 01:52**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 17 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	10	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	41	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	24	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	6.3	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	48	5.2	1.00	
o-Xylene	21	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	
Tert-Butyl Alcohol (TBA)	ND	52	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 18 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	94	62-146	
Toluene-d8	102	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-35	**16-08-0515-7-A**	**08/05/16 09:43**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 08:12**	**160808L037**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	260000	1000	
Benzene	ND	11000	1000	
Bromobenzene	ND	11000	1000	
Bromochloromethane	ND	11000	1000	
Bromodichloromethane	ND	11000	1000	
Bromoform	ND	11000	1000	
Bromomethane	ND	53000	1000	
2-Butanone	ND	110000	1000	
n-Butylbenzene	16000	11000	1000	
sec-Butylbenzene	ND	11000	1000	
tert-Butylbenzene	ND	11000	1000	
Carbon Disulfide	ND	110000	1000	
Carbon Tetrachloride	ND	11000	1000	
Chlorobenzene	ND	11000	1000	
Chloroethane	ND	11000	1000	
Chloroform	ND	11000	1000	
Chloromethane	ND	53000	1000	
2-Chlorotoluene	ND	11000	1000	
4-Chlorotoluene	ND	11000	1000	
Dibromochloromethane	ND	11000	1000	
1,2-Dibromo-3-Chloropropane	ND	21000	1000	
1,2-Dibromoethane	ND	11000	1000	
Dibromomethane	ND	11000	1000	
1,2-Dichlorobenzene	ND	11000	1000	
1,3-Dichlorobenzene	ND	11000	1000	
1,4-Dichlorobenzene	ND	11000	1000	
Dichlorodifluoromethane	ND	11000	1000	
1,1-Dichloroethane	ND	11000	1000	
1,2-Dichloroethane	ND	11000	1000	
1,1-Dichloroethene	ND	11000	1000	
c-1,2-Dichloroethene	ND	11000	1000	
t-1,2-Dichloroethene	ND	11000	1000	
1,2-Dichloropropane	ND	11000	1000	
1,3-Dichloropropane	ND	11000	1000	
2,2-Dichloropropane	ND	11000	1000	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 20 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	11000	1000	
c-1,3-Dichloropropene	ND	11000	1000	
t-1,3-Dichloropropene	ND	11000	1000	
Ethylbenzene	14000	11000	1000	
2-Hexanone	ND	110000	1000	
Isopropylbenzene	ND	11000	1000	
p-Isopropyltoluene	ND	11000	1000	
Methylene Chloride	ND	110000	1000	
4-Methyl-2-Pentanone	ND	110000	1000	
Naphthalene	ND	110000	1000	
n-Propylbenzene	ND	11000	1000	
Styrene	ND	11000	1000	
1,1,1,2-Tetrachloroethane	ND	11000	1000	
1,1,2,2-Tetrachloroethane	ND	11000	1000	
Tetrachloroethene	ND	11000	1000	
Toluene	67000	11000	1000	
1,2,3-Trichlorobenzene	ND	21000	1000	
1,2,4-Trichlorobenzene	ND	11000	1000	
1,1,1-Trichloroethane	ND	11000	1000	
1,1,2-Trichloroethane	ND	11000	1000	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	110000	1000	
Trichloroethene	ND	11000	1000	
1,2,3-Trichloropropane	ND	11000	1000	
1,2,4-Trimethylbenzene	260000	11000	1000	
Trichlorofluoromethane	ND	110000	1000	
1,3,5-Trimethylbenzene	79000	11000	1000	
Vinyl Acetate	ND	110000	1000	
Vinyl Chloride	ND	11000	1000	
p/m-Xylene	290000	11000	1000	
o-Xylene	130000	11000	1000	
Methyl-t-Butyl Ether (MTBE)	ND	11000	1000	
Tert-Butyl Alcohol (TBA)	ND	110000	1000	
Diisopropyl Ether (DIPE)	ND	21000	1000	
Ethyl-t-Butyl Ether (ETBE)	ND	21000	1000	
Tert-Amyl-Methyl Ether (TAME)	ND	21000	1000	
Ethanol	ND	530000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 21 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	101	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-40	**16-08-0515-8-A**	**08/05/16 09:50**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 02:19**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 23 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	7.6	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	6.3	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 24 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	101	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-45	**16-08-0515-9-A**	**08/05/16 09:55**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 08:39**	**160808L037**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	240000	1000	
Benzene	ND	9700	1000	
Bromobenzene	ND	9700	1000	
Bromochloromethane	ND	9700	1000	
Bromodichloromethane	ND	9700	1000	
Bromoform	ND	9700	1000	
Bromomethane	ND	49000	1000	
2-Butanone	ND	97000	1000	
n-Butylbenzene	22000	9700	1000	
sec-Butylbenzene	ND	9700	1000	
tert-Butylbenzene	ND	9700	1000	
Carbon Disulfide	ND	97000	1000	
Carbon Tetrachloride	ND	9700	1000	
Chlorobenzene	ND	9700	1000	
Chloroethane	ND	9700	1000	
Chloroform	ND	9700	1000	
Chloromethane	ND	49000	1000	
2-Chlorotoluene	ND	9700	1000	
4-Chlorotoluene	ND	9700	1000	
Dibromochloromethane	ND	9700	1000	
1,2-Dibromo-3-Chloropropane	ND	19000	1000	
1,2-Dibromoethane	ND	9700	1000	
Dibromomethane	ND	9700	1000	
1,2-Dichlorobenzene	ND	9700	1000	
1,3-Dichlorobenzene	ND	9700	1000	
1,4-Dichlorobenzene	ND	9700	1000	
Dichlorodifluoromethane	ND	9700	1000	
1,1-Dichloroethane	ND	9700	1000	
1,2-Dichloroethane	ND	9700	1000	
1,1-Dichloroethene	ND	9700	1000	
c-1,2-Dichloroethene	ND	9700	1000	
t-1,2-Dichloroethene	ND	9700	1000	
1,2-Dichloropropane	ND	9700	1000	
1,3-Dichloropropane	ND	9700	1000	
2,2-Dichloropropane	ND	9700	1000	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 26 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	9700	1000	
c-1,3-Dichloropropene	ND	9700	1000	
t-1,3-Dichloropropene	ND	9700	1000	
Ethylbenzene	17000	9700	1000	
2-Hexanone	ND	97000	1000	
Isopropylbenzene	ND	9700	1000	
p-Isopropyltoluene	ND	9700	1000	
Methylene Chloride	ND	97000	1000	
4-Methyl-2-Pentanone	ND	97000	1000	
Naphthalene	ND	97000	1000	
n-Propylbenzene	15000	9700	1000	
Styrene	ND	9700	1000	
1,1,1,2-Tetrachloroethane	ND	9700	1000	
1,1,2,2-Tetrachloroethane	ND	9700	1000	
Tetrachloroethene	ND	9700	1000	
Toluene	45000	9700	1000	
1,2,3-Trichlorobenzene	ND	19000	1000	
1,2,4-Trichlorobenzene	ND	9700	1000	
1,1,1-Trichloroethane	ND	9700	1000	
1,1,2-Trichloroethane	ND	9700	1000	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	97000	1000	
Trichloroethene	ND	9700	1000	
1,2,3-Trichloropropane	ND	9700	1000	
1,2,4-Trimethylbenzene	310000	9700	1000	
Trichlorofluoromethane	ND	97000	1000	
1,3,5-Trimethylbenzene	96000	9700	1000	
Vinyl Acetate	ND	97000	1000	
Vinyl Chloride	ND	9700	1000	
p/m-Xylene	340000	9700	1000	
o-Xylene	170000	9700	1000	
Methyl-t-Butyl Ether (MTBE)	ND	9700	1000	
Tert-Butyl Alcohol (TBA)	ND	97000	1000	
Diisopropyl Ether (DIPE)	ND	19000	1000	
Ethyl-t-Butyl Ether (ETBE)	ND	19000	1000	
Tert-Amyl-Methyl Ether (TAME)	ND	19000	1000	
Ethanol	ND	490000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 27 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	89	62-146	
Toluene-d8	101	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-50	**16-08-0515-10-A**	**08/05/16 10:10**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 21:35**	**160809L023**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120000	500	
Benzene	ND	4900	500	
Bromobenzene	ND	4900	500	
Bromochloromethane	ND	4900	500	
Bromodichloromethane	ND	4900	500	
Bromoform	ND	4900	500	
Bromomethane	ND	24000	500	
2-Butanone	ND	49000	500	
n-Butylbenzene	8200	4900	500	
sec-Butylbenzene	ND	4900	500	
tert-Butylbenzene	ND	4900	500	
Carbon Disulfide	ND	49000	500	
Carbon Tetrachloride	ND	4900	500	
Chlorobenzene	ND	4900	500	
Chloroethane	ND	4900	500	
Chloroform	ND	4900	500	
Chloromethane	ND	24000	500	
2-Chlorotoluene	ND	4900	500	
4-Chlorotoluene	ND	4900	500	
Dibromochloromethane	ND	4900	500	
1,2-Dibromo-3-Chloropropane	ND	9700	500	
1,2-Dibromoethane	ND	4900	500	
Dibromomethane	ND	4900	500	
1,2-Dichlorobenzene	ND	4900	500	
1,3-Dichlorobenzene	ND	4900	500	
1,4-Dichlorobenzene	ND	4900	500	
Dichlorodifluoromethane	ND	4900	500	
1,1-Dichloroethane	ND	4900	500	
1,2-Dichloroethane	ND	4900	500	
1,1-Dichloroethene	ND	4900	500	
c-1,2-Dichloroethene	ND	4900	500	
t-1,2-Dichloroethene	ND	4900	500	
1,2-Dichloropropane	ND	4900	500	
1,3-Dichloropropane	ND	4900	500	
2,2-Dichloropropane	ND	4900	500	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 29 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4900	500	
c-1,3-Dichloropropene	ND	4900	500	
t-1,3-Dichloropropene	ND	4900	500	
Ethylbenzene	26000	4900	500	
2-Hexanone	ND	49000	500	
Isopropylbenzene	ND	4900	500	
p-Isopropyltoluene	ND	4900	500	
Methylene Chloride	ND	49000	500	
4-Methyl-2-Pentanone	ND	49000	500	
Naphthalene	ND	49000	500	
n-Propylbenzene	14000	4900	500	
Styrene	ND	4900	500	
1,1,1,2-Tetrachloroethane	ND	4900	500	
1,1,2,2-Tetrachloroethane	ND	4900	500	
Tetrachloroethene	ND	4900	500	
Toluene	72000	4900	500	
1,2,3-Trichlorobenzene	ND	9700	500	
1,2,4-Trichlorobenzene	ND	4900	500	
1,1,1-Trichloroethane	ND	4900	500	
1,1,2-Trichloroethane	ND	4900	500	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49000	500	
Trichloroethene	ND	4900	500	
1,2,3-Trichloropropane	ND	4900	500	
1,2,4-Trimethylbenzene	120000	4900	500	
Trichlorofluoromethane	ND	49000	500	
1,3,5-Trimethylbenzene	33000	4900	500	
Vinyl Acetate	ND	49000	500	
Vinyl Chloride	ND	4900	500	
p/m-Xylene	180000	4900	500	
o-Xylene	75000	4900	500	
Methyl-t-Butyl Ether (MTBE)	5900	4900	500	
Tert-Butyl Alcohol (TBA)	ND	49000	500	
Diisopropyl Ether (DIPE)	ND	9700	500	
Ethyl-t-Butyl Ether (ETBE)	ND	9700	500	
Tert-Amyl-Methyl Ether (TAME)	ND	9700	500	
Ethanol	ND	240000	500	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 30 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	91	62-146	
Toluene-d8	100	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-55	**16-08-0515-11-A**	**08/05/16 10:22**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 02:46**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	35	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	29	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	43	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	37	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	27	5.0	1.00	
o-Xylene	36	5.0	1.00	
Tert-Butyl Alcohol (TBA)	150	50	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	95	63-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Anaheim Car Wash / 469-01			Page 33 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	100	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-55	**16-08-0515-11-A**	**08/05/16 10:22**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 20:22**	**160809L023**

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	870	520	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	101	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VE10-60	**16-08-0515-12-A**	**08/05/16 10:25**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 05:57**	**160808L036**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 35 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 36 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	91	62-146	
Toluene-d8	99	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-11550**	**N/A**	**Solid**	**GC/MS OO**	**08/08/16**	**08/08/16 17:05**	**160808L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 38 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 39 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	101	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-11559**	**N/A**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 05:02**	**160808L036**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 41 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 42 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	93	62-146	
Toluene-d8	99	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-11560**	**N/A**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 05:29**	**160808L037**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 44 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	
Tert-Butyl Alcohol (TBA)	ND	5000	50.0	
Diisopropyl Ether (DIPE)	ND	1000	50.0	
Ethyl-t-Butyl Ether (ETBE)	ND	1000	50.0	
Tert-Amyl-Methyl Ether (TAME)	ND	1000	50.0	
Ethanol	ND	25000	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 45 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	99	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.
2817-A Lafayette Avenue
Newport Beach, CA 92663-3715

Date Received: 08/08/16
Work Order: 16-08-0515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Anaheim Car Wash / 469-01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-11561**	**N/A**	**Solid**	**GC/MS OO**	**08/09/16**	**08/09/16 16:55**	**160809L023**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 47 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	
Tert-Butyl Alcohol (TBA)	ND	5000	50.0	
Diisopropyl Ether (DIPE)	ND	1000	50.0	
Ethyl-t-Butyl Ether (ETBE)	ND	1000	50.0	
Tert-Amyl-Methyl Ether (TAME)	ND	1000	50.0	
Ethanol	ND	25000	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

eurofins | Calscience

Analytical Report

Frey Environmental, Inc.	Date Received:	08/08/16
2817-A Lafayette Avenue	Work Order:	16-08-0515
Newport Beach, CA 92663-3715	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Anaheim Car Wash / 469-01		Page 48 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	93	62-146	
Toluene-d8	100	80-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: Anaheim Car Wash / 469-01			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-08-0634-2	**Sample**	**Solid**	**GC 24**	**08/09/16**	**08/10/16 12:31**	**160810S004**
16-08-0634-2	**Matrix Spike**	**Solid**	**GC 24**	**08/09/16**	**08/10/16 13:37**	**160810S004**
16-08-0634-2	**Matrix Spike Duplicate**	**Solid**	**GC 24**	**08/09/16**	**08/10/16 14:10**	**160810S004**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	10.73	107	8.602	86	48-114	22	0-23	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: Anaheim Car Wash / 469-01			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-08-0904-2	**Sample**	**Solid**	**GC 24**	**08/12/16**	**08/12/16 11:10**	**160812L012**
16-08-0904-2	**Matrix Spike**	**Solid**	**GC 24**	**08/12/16**	**08/12/16 13:55**	**160812L012**
16-08-0904-2	**Matrix Spike Duplicate**	**Solid**	**GC 24**	**08/12/16**	**08/12/16 14:28**	**160812L012**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	9.832	98	8.465	85	48-114	15	0-23	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Anaheim Car Wash / 469-01			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
VE10-5	**Sample**	**Solid**	**GC/MS OO**	**08/08/16**	**08/08/16 18:00**	**160808S010**
VE10-5	**Matrix Spike**	**Solid**	**GC/MS OO**	**08/08/16**	**08/08/16 18:27**	**160808S010**
VE10-5	**Matrix Spike Duplicate**	**Solid**	**GC/MS OO**	**08/08/16**	**08/08/16 18:54**	**160808S010**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	43.49	87	44.46	89	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	41.37	83	41.62	83	51-135	1	0-29	
Chlorobenzene	ND	50.00	41.33	83	43.05	86	57-123	4	0-20	
1,2-Dibromoethane	ND	50.00	42.72	85	46.68	93	64-124	9	0-20	
1,2-Dichlorobenzene	ND	50.00	41.23	82	43.46	87	35-131	5	0-25	
1,2-Dichloroethane	ND	50.00	39.44	79	41.07	82	80-120	4	0-20	3
1,1-Dichloroethene	ND	50.00	42.64	85	43.01	86	47-143	1	0-25	
Ethylbenzene	ND	50.00	42.32	85	42.52	85	57-129	0	0-22	
Toluene	ND	50.00	43.31	87	44.94	90	63-123	4	0-20	
Trichloroethene	ND	50.00	44.11	88	45.61	91	44-158	3	0-20	
Vinyl Chloride	ND	50.00	57.95	116	61.05	122	49-139	5	0-47	
p/m-Xylene	ND	100.0	83.30	83	85.03	85	70-130	2	0-30	
o-Xylene	ND	50.00	41.80	84	42.72	85	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	47.49	95	50.38	101	57-123	6	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	231.8	93	239.3	96	30-168	3	0-34	
Diisopropyl Ether (DIPE)	ND	50.00	46.64	93	48.63	97	57-129	4	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	46.43	93	48.82	98	55-127	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	44.93	90	47.50	95	58-124	6	0-20	
Ethanol	ND	500.0	469.5	94	460.7	92	17-167	2	0-47	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Anaheim Car Wash / 469-01			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
VE10-60	**Sample**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 05:57**	**160808S021**
VE10-60	**Matrix Spike**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 06:24**	**160808S021**
VE10-60	**Matrix Spike Duplicate**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 06:51**	**160808S021**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	46.33	93	48.27	97	61-127	4	0-20	
Carbon Tetrachloride	ND	50.00	38.36	77	41.87	84	51-135	9	0-29	
Chlorobenzene	ND	50.00	44.00	88	43.63	87	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	45.78	92	44.73	89	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	42.38	85	42.59	85	35-131	0	0-25	
1,2-Dichloroethane	ND	50.00	39.21	78	40.42	81	80-120	3	0-20	3
1,1-Dichloroethene	ND	50.00	43.27	87	44.65	89	47-143	3	0-25	
Ethylbenzene	ND	50.00	44.01	88	44.98	90	57-129	2	0-22	
Toluene	ND	50.00	47.79	96	49.34	99	63-123	3	0-20	
Trichloroethene	ND	50.00	49.02	98	51.46	103	44-158	5	0-20	
Vinyl Chloride	ND	50.00	59.12	118	63.16	126	49-139	7	0-47	
p/m-Xylene	ND	100.0	90.20	90	91.17	91	70-130	1	0-30	
o-Xylene	ND	50.00	46.29	93	46.59	93	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	51.25	103	51.35	103	57-123	0	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	240.1	96	235.6	94	30-168	2	0-34	
Diisopropyl Ether (DIPE)	ND	50.00	48.60	97	49.85	100	57-129	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	49.08	98	49.66	99	55-127	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	47.06	94	46.98	94	58-124	0	0-20	
Ethanol	ND	500.0	491.5	98	453.7	91	17-167	8	0-47	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Anaheim Car Wash / 469-01			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-08-0633-1	**Sample**	**Solid**	**GC/MS OO**	**08/09/16**	**08/09/16 18:05**	**160809S011**
16-08-0633-1	**Matrix Spike**	**Solid**	**GC/MS OO**	**08/09/16**	**08/09/16 19:27**	**160809S011**
16-08-0633-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS OO**	**08/09/16**	**08/09/16 19:54**	**160809S011**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	34.94	70	37.18	74	61-127	6	0-20	
Carbon Tetrachloride	ND	50.00	32.63	65	35.84	72	51-135	9	0-29	
Chlorobenzene	ND	50.00	30.95	62	32.50	65	57-123	5	0-20	
1,2-Dibromoethane	ND	50.00	24.49	49	26.11	52	64-124	6	0-20	3
1,2-Dichlorobenzene	ND	50.00	27.36	55	29.21	58	35-131	7	0-25	
1,2-Dichloroethane	ND	50.00	24.39	49	25.91	52	80-120	6	0-20	3
1,1-Dichloroethene	ND	50.00	35.81	72	39.50	79	47-143	10	0-25	
Ethylbenzene	ND	50.00	33.82	68	35.43	71	57-129	5	0-22	
Toluene	ND	50.00	35.68	71	38.25	76	63-123	7	0-20	
Trichloroethene	ND	50.00	35.61	71	38.39	77	44-158	8	0-20	
Vinyl Chloride	ND	50.00	54.49	109	52.20	104	49-139	4	0-47	
p/m-Xylene	ND	100.0	66.38	66	68.88	69	70-130	4	0-30	3
o-Xylene	ND	50.00	32.01	64	33.28	67	70-130	4	0-30	3
Methyl-t-Butyl Ether (MTBE)	ND	50.00	26.77	54	28.88	58	57-123	8	0-21	3
Tert-Butyl Alcohol (TBA)	ND	250.0	104.4	42	105.3	42	30-168	1	0-34	
Diisopropyl Ether (DIPE)	ND	50.00	31.93	64	34.53	69	57-129	8	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	29.72	59	31.46	63	55-127	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	26.78	54	28.67	57	58-124	7	0-20	3
Ethanol	ND	500.0	234.0	47	231.6	46	17-167	1	0-47	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: Anaheim Car Wash / 469-01			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-571-3181	**LCS**	**Solid**	**GC 24**	**08/10/16**	**08/10/16 10:52**	**160810L014**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	10.00	8.532	85	70-124	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: Anaheim Car Wash / 469-01			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-571-3184	**LCS**	**Solid**	**GC 24**	**08/11/16**	**08/11/16 22:06**	**160812L011**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	10.00	10.22	102	70-124	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: Anaheim Car Wash / 469-01			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-571-3186	**LCS**	**Solid**	**GC 24**	**08/11/16**	**08/11/16 22:06**	**160812L012**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	10.00	10.22	102	70-124	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Anaheim Car Wash / 469-01			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-11550	**LCS**	**Solid**	**GC/MS OO**	**08/08/16**	**08/08/16 15:59**	**160808L017**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	55.42	111	78-120	71-127	
Carbon Tetrachloride	50.00	58.04	116	49-139	34-154	
Chlorobenzene	50.00	53.35	107	79-120	72-127	
1,2-Dibromoethane	50.00	54.11	108	80-120	73-127	
1,2-Dichlorobenzene	50.00	52.85	106	75-120	68-128	
1,2-Dichloroethane	50.00	48.30	97	80-120	73-127	
1,1-Dichloroethene	50.00	55.18	110	74-122	66-130	
Ethylbenzene	50.00	55.22	110	76-120	69-127	
Toluene	50.00	56.10	112	77-120	70-127	
Trichloroethene	50.00	55.05	110	80-120	73-127	
Vinyl Chloride	50.00	62.67	125	68-122	59-131	ME
p/m-Xylene	100.0	108.6	109	75-125	67-133	
o-Xylene	50.00	54.40	109	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	58.38	117	77-120	70-127	
Tert-Butyl Alcohol (TBA)	250.0	299.3	120	68-122	59-131	
Diisopropyl Ether (DIPE)	50.00	60.17	120	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	50.00	60.05	120	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	50.00	56.82	114	75-120	68-128	
Ethanol	500.0	544.1	109	56-140	42-154	

Total number of LCS compounds: 19
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Anaheim Car Wash / 469-01			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-11559	**LCS**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 04:08**	**160808L036**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	51.62	103	78-120	71-127	
Carbon Tetrachloride	50.00	43.90	88	49-139	34-154	
Chlorobenzene	50.00	49.26	99	79-120	72-127	
1,2-Dibromoethane	50.00	51.30	103	80-120	73-127	
1,2-Dichlorobenzene	50.00	48.55	97	75-120	68-128	
1,2-Dichloroethane	50.00	43.57	87	80-120	73-127	
1,1-Dichloroethene	50.00	46.93	94	74-122	66-130	
Ethylbenzene	50.00	49.08	98	76-120	69-127	
Toluene	50.00	51.53	103	77-120	70-127	
Trichloroethene	50.00	49.54	99	80-120	73-127	
Vinyl Chloride	50.00	53.05	106	68-122	59-131	
p/m-Xylene	100.0	96.36	96	75-125	67-133	
o-Xylene	50.00	48.76	98	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	53.90	108	77-120	70-127	
Tert-Butyl Alcohol (TBA)	250.0	274.7	110	68-122	59-131	
Diisopropyl Ether (DIPE)	50.00	54.02	108	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	50.00	54.86	110	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	50.00	53.32	107	75-120	68-128	
Ethanol	500.0	570.2	114	56-140	42-154	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Anaheim Car Wash / 469-01			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-11560	**LCS**	**Solid**	**GC/MS OO**	**08/08/16**	**08/09/16 04:08**	**160808L037**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	51.62	103	78-120	71-127	
Carbon Tetrachloride	50.00	43.90	88	49-139	34-154	
Chlorobenzene	50.00	49.26	99	79-120	72-127	
1,2-Dibromoethane	50.00	51.30	103	80-120	73-127	
1,2-Dichlorobenzene	50.00	48.55	97	75-120	68-128	
1,2-Dichloroethane	50.00	43.57	87	80-120	73-127	
1,1-Dichloroethene	50.00	46.93	94	74-122	66-130	
Ethylbenzene	50.00	49.08	98	76-120	69-127	
Toluene	50.00	51.53	103	77-120	70-127	
Trichloroethene	50.00	49.54	99	80-120	73-127	
Vinyl Chloride	50.00	53.05	106	68-122	59-131	
p/m-Xylene	100.0	96.36	96	75-125	67-133	
o-Xylene	50.00	48.76	98	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	53.90	108	77-120	70-127	
Tert-Butyl Alcohol (TBA)	250.0	274.7	110	68-122	59-131	
Diisopropyl Ether (DIPE)	50.00	54.02	108	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	50.00	54.86	110	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	50.00	53.32	107	75-120	68-128	
Ethanol	500.0	570.2	114	56-140	42-154	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Frey Environmental, Inc.		Date Received:	08/08/16
2817-A Lafayette Avenue		Work Order:	16-08-0515
Newport Beach, CA 92663-3715		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Anaheim Car Wash / 469-01			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-11561	**LCS**	**Solid**	**GC/MS OO**	**08/09/16**	**08/09/16 15:33**	**160809L023**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	49.65	99	78-120	71-127	
Carbon Tetrachloride	50.00	45.87	92	49-139	34-154	
Chlorobenzene	50.00	47.46	95	79-120	72-127	
1,2-Dibromoethane	50.00	49.77	100	80-120	73-127	
1,2-Dichlorobenzene	50.00	47.32	95	75-120	68-128	
1,2-Dichloroethane	50.00	42.80	86	80-120	73-127	
1,1-Dichloroethene	50.00	47.69	95	74-122	66-130	
Ethylbenzene	50.00	48.06	96	76-120	69-127	
Toluene	50.00	49.45	99	77-120	70-127	
Trichloroethene	50.00	47.68	95	80-120	73-127	
Vinyl Chloride	50.00	49.52	99	68-122	59-131	
p/m-Xylene	100.0	94.35	94	75-125	67-133	
o-Xylene	50.00	47.66	95	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	46.32	93	77-120	70-127	
Tert-Butyl Alcohol (TBA)	250.0	255.4	102	68-122	59-131	
Diisopropyl Ether (DIPE)	50.00	52.47	105	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	50.00	52.44	105	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	50.00	50.19	100	75-120	68-128	
Ethanol	500.0	511.4	102	56-140	42-154	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Sample Analysis Summary Report

Work Order: 16-08-0515 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 5030C	715	GC 24	2
EPA 8260B	EPA 5030C	849	GC/MS OO	2

Return to Contents

eurofins | Calscience

Glossary of Terms and Qualifiers

Work Order: 16-08-0515 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Return to Contents

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 8/5/16

Page 1 of 2

LABORATORY CLIENT: FREY ENVIRONMENTAL, INC.

ADDRESS: 2817-A LAFAYETTE AVENUE

CITY: NEWPORT BEACH, STATE: CA ZIP: 92663-3715

TEL: 949/723-1645 FAX: 949/723/1854 E-Mail: Kent Tucker @freyinc.com

CLIENT PROJECT NAME / NUMBER: Anaheim Car Wash / 4169-01

PROJECT CONTACT: Kent Tucker

SAMPLER(S): (PRINT) John Song

P.O. NO.:

LAB USE ONLY: 16-08-0515

COELT LOG CODE: ☐☐☐☐

COOLER RECEIPT TEMP= °C

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☒ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS:
GID # T0605999123
EDF Requested

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G) 8015M	TPH (D) or	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	BTEX / OXYGENATES	VOCs (8260B)	VOCs+(5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8181A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)
1		Grab VG10-5	8/5/16	9:10	S	1	X					X								
2		-10		9:16																
3		-15		9:22																
4		-20		9:26																
5		-25		9:30																
6		-30		9:35																
7		-35		9:43																
8		-40		9:50																
9		-45		9:55																
10		-50		10:10																

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 8-8-16	Time: 1200
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 8-8-16	Time: 1238
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the green and yellow copies respectively.

05/01/07 Revision

Return to Contents

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 8/5/16

LABORATORY CLIENT: FREY ENVIRONMENTAL, INC.		CLIENT PROJECT NAME / NUMBER: Anaheim Car Wash / 1169-01	P.O. NO.:
ADDRESS: 2817-A LAFAYETTE AVENUE		PROJECT CONTACT: Kent Tuckfield	LAB USE ONLY 08-0515
CITY: NEWPORT BEACH,	STATE: CA / ZIP: 92663-3715	SAMPLER(S): (PRINT) John Song	COELT LOG CODE ☐☐☐☐
TEL: 949/723-1645	FAX: 949/723/1854	E-Mail: ~~Jtucker~~ KentTucker@freyinc.com	COOLER RECEIPT TEMP= °C

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) ☒ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS: See page 1

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G) 8015M	TPH (D) or	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	BTEX / OXYGENATES	VOCs (8260B)	VOCs+(5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8181A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)
11		VG10-55	8/5/16	10:22	S	1	X					X								
12		↓ -60	↓	10:25	↓	↓	↓					↓								

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 8-8-16	Time: 1200
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 8-8-16	Time: 1230
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the green and yellow copies respectively.

05/01/07 Revision

Return to Contents

eurofins | Calscience

WORK ORDER NUMBER: 16-08-0515

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Frey Env'l.

DATE: 08 / 08 / 2016

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC2A (CF: 0.0°C); Temperature (w/o CF): 3.2 °C (w/ CF): 3.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 836

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 836

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: **(Trip Blank Lot Number: _____)**

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☑ Sleeve (S) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 836

Reviewed by: WDG

Return to Contents

APPENDIX E

SOIL DISPOSAL MANIFEST

Manifest

SOIL SAFE OF CA – TPST
Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transport Truck #:	Facility #:	Approval Number:	Load #
	Consultant			04-4371	1

Generator and/or Consultant

Generator's Name and Billing Address:
900 SOUTH LINCOLN STREET PAD INVESTORS,
111 MAIN STREET,,
STE 500
VANCOUVER, WA 92660

Generator's Phone #:
Person to Contact:
FAX#:
Customer Account Number

Consultant's Name and Billing Address:
FREY ENVIRONMENTAL
2817 A LAFAYETTE AVE,
NEWPORT BEACH, CA 92663

Consultant's Phone #: (949) 723-1645
Person to Contact: email invoice to uyen1@freyi
FAX#:
Customer Account Number 1000850

Generation Site (Transport from): *(name & address)*
900 WEST LINCOLN AVENUE
900 WEST LINCOLN AVENUE
ANAHEIM, CA 92801

Site Phone #:
Person to Contact:
FAX#:

Designated Facility (Transport to): *(name & address)*
SOIL SAFE OF CALIFORNIA, INC
12328 HIBISCUS AVE
ADELANTO, CA 92301

Facility Phone #: (760) 246-8001
Person to Contact: JOE PROVANSAL
FAX#: (760) 246-8004

Transporter Name and Mailing Address:
ROBERT'S WASTE & RECYCLING SERVICE
PO BOX 10610
SANTA ANA, CA 92711

Transporter's Phone #: 7145572533
Person to Contact: JESUS
FAX#: 7ROBWAT
Customer Account Number

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑	4 tons		46740	39100	7640
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑					3.82

List any exception to items listed above: Scale Ticket # 186366

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ❑ Consultant ❑ | Signature and date: | Month | Day | Year

Transporter

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Jorge Mendez | Signature and date: | Month | Day | Year

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: J. PROVANSAL / B. BISHOP / B. MEEK | Signature and date: 10-12-16

Please print or type.

FACILITY COPY

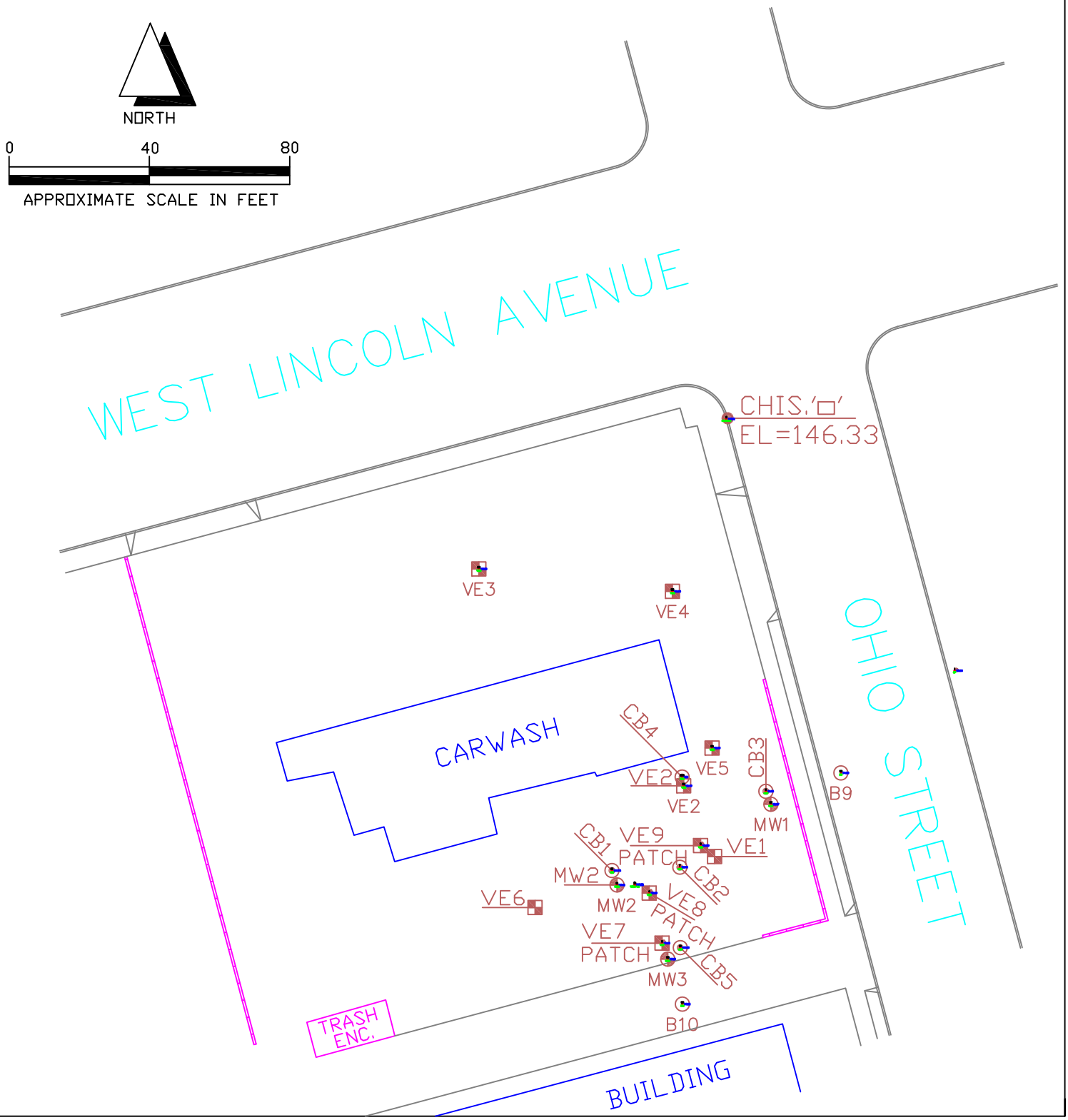
APPENDIX F

SURVEYOR'S REPORT

MONITORING WELLS

RdM Surveying Inc
23016 Lake Forest Drive#409
Laguna Hills, CA 92653
(949) 858-2924
RDMSURVEYING@COX.NET

ADDRESS PROJECT: 900 WEST LINCOLN AVE., ANAHEIM
JOB: (2-66)
DATE: 12/20/2006, 03/04/2012, 9/8/2016



MONITORING WELLS

RdM Surveying Inc
23016 Lake Forest Drive#409
Laguna Hills, CA 92653
(949) 858-2924
RDMSURVEYING@COX.NET

ADDRESS PROJECT:900 WEST LINCOLN AVE., ANAHEIM
JOB:(2-66)
DATE: 12/20/2006, 03/04/2012, 9/8/2016

WELL #	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV. (PVC)	ELEV. (RIM)
B9	2,250,674.29	6,053,164.14	33.8326155	-117.9244859	N/A	N/A
B10	2,250,608.38	6,053,118.95	33.8324324	-117.9246313	N/A	N/A
MW1	2,250,665.36	6,053,144.19	33.8325901	-117.9245512	146.91	147.29
MW2	2,250,642.35	6,053,100.33	33.8325249	-117.9246944	146.16	146.64
MW3	2,250,621.22	6,053,114.80	33.8324675	-117.9246456	144.98	145.81
VE1	2,250,650.44	6,053,128.13	33.8325484	-117.9246033	146.34 (D)	146.73
VE1					146.33 (S)	
VE2	2,250,670.61	6,053,119.33	33.8326034	-117.9246333	147.04 (D)	147.47
VE2					147.02 (S)	
VE3	2,250,732.44	6,053,060.94	33.8327707	-117.9248288	146.50 (D)	146.81
VE3					146.33 (S)	
VE4	2,250,726.04	6,053,116.12	33.8327556	-117.9246468	146.13 (D)	146.65
VE4					146.16 (S)	
VE5	2,250,681.40	6,053,127.43	33.8326334	-117.9246072	146.85 (S)	147.58
VE5					146.64 (D)	
VE6	2,250,636.31	6,053,076.85	33.8325073	-117.9247714	146.17 (S)	146.61
VE6					146.11 (D)	

COUNTY OF ORANGE BENCH MARK NUMBER 1A-142-90 BEING AN ALUMINUM BENCHMARK DISK STAMPED "1A-142-90", SET IN THE SOUTHEASTERLY CORNER OF A 4 FT. BY 6 FT. CONCRETE CATCH BASIN. MONUMENT IS LOCATED IN THE SOUTHEASTERLY CORNER OF THE INTERSECTION OF CITRON STREET AND BROADWAY, 50 FT. SOUTHERLY OF CENTERLINE OF BROADWAY AND 25 FT. EASTERLY OF CENTERLINE OF CITRON STREET. MONUMENT IS SET LEVEL WITH THE SIDEWALK WITH AN ELEVATION OF 145.176 GRRY ABOVE MEAN SEA LEVEL USING NAVD 88 DATUM.

METHODOLOGY: MEASURED USING CONVENTIONAL DIFFERENTIAL LEVELING WITH A NON-DIGITAL, (FEDERAL GEODETIC CONTROL SUBCOMMITTEE, THIRD ORDER) BASED ON A MINIMUM OF 1 GEODETIC CONTROL POINT.

USING A THALES GPS RECEIVER AND POST PROCESSING DATA USING REFERENCE STATIONS CHAB AND PIN1 TO GET SUB-METER ACCURACY ON MONITORING WELLS.

METHOD: USING REAL-TIME KINEMATIC (RTK) GPS SURVEY TECHNIQUE WITH 2 GEODETIC CONTROL POINTS BASED ON CALIFORNIA SPATIAL REFERENCE SYSTEM HORIZONTAL (CSRS-H). DATA COLLECTED IN REAL TIME.

MONITORING WELLS

RdM Surveying Inc
23016 Lake Forest Drive#409
Laguna Hills, CA 92653
(949) 858-2924
RDMSURVEYING@COX.NET

ADDRESS PROJECT:900 WEST LINCOLN AVE., ANAHEIM
JOB:(2-66)
DATE: 12/20/2006, 03/04/2012, 9/8/2016

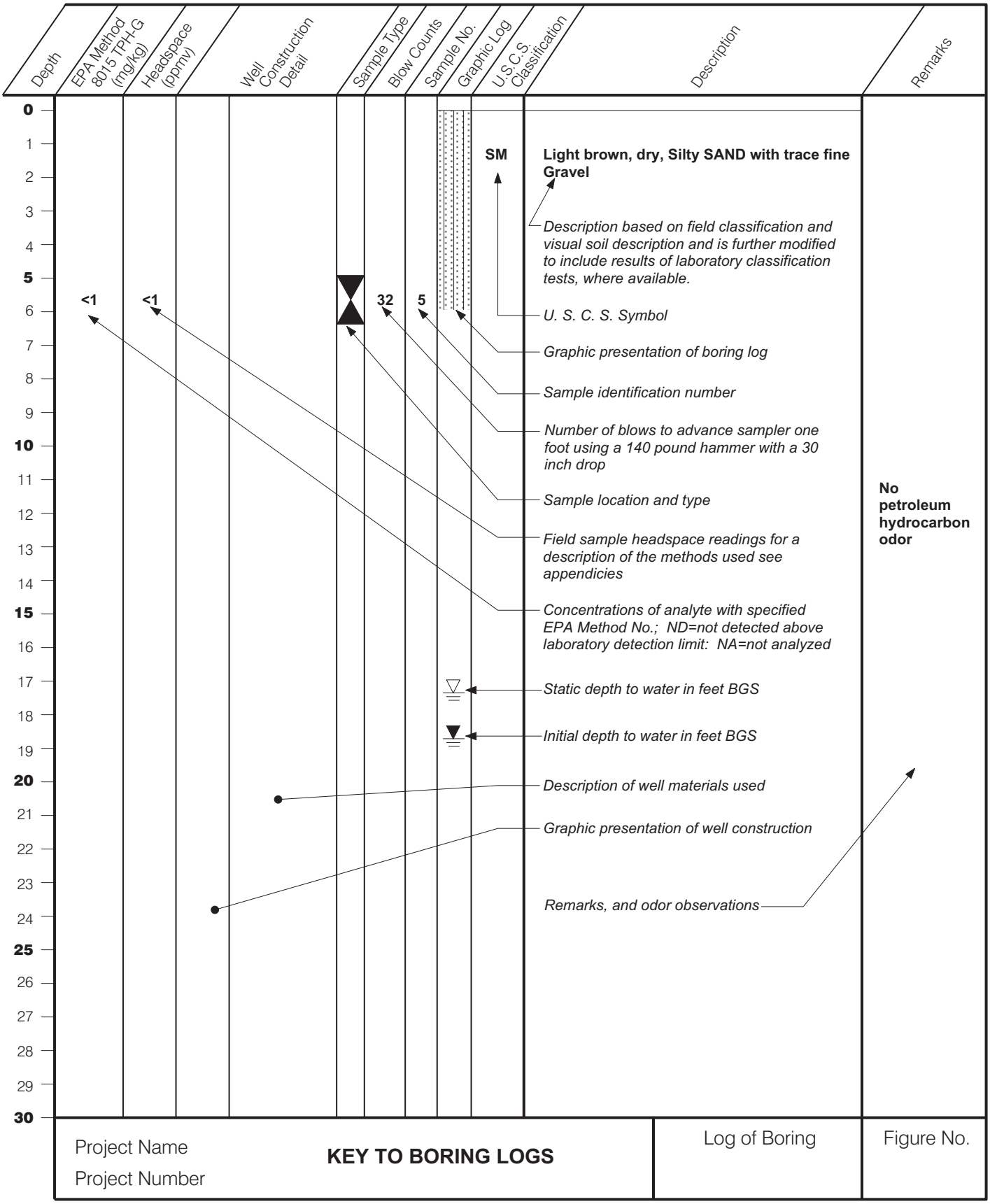
WELL #	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV. (PVC)	ELEV. (RIM)
VE7	2,250,625.76	6,053,113.17	33.8324798	-117.9246512	N/A	N/A
VE8	2,250,640.04	6,053,109.50	33.8325189	-117.9246641	N/A	N/A
VE9	2,250,653.57	6,053,124.14	33.8325567	-117.9246165	N/A	N/A
CB1	2250646.47	6053098.89	33.8325362	117.9246993	N/A	N/A
CB2	2250647.41	6053118.24	33.8325396	117.9246357	N/A	N/A
CB3	2250669.05	6053142.76	33.8326001	117.9245561	N/A	N/A
CB4	2250673.11	6053118.89	33.8326103	117.9246349	N/A	N/A
CB5	2250624.49	6053118.36	33.8324766	117.9246341	N/A	N/A
VE10	2250642.35	6053105.43	33.8325251	117.9246776	146.29	146.60

APPENDIX G

BORING LOGS

Date drilled/completed _____
Geologist _____
Drilling equipment _____
Surface elevation _____
Top of casing elevation _____

Boring depth _____
Initial depth to water _____
Static depth to water _____
Well screen depth _____
Borehole diameter _____



Project Name Project Number	**KEY TO BORING LOGS**	Log of Boring	Figure No.

FREY ENVIRONMENTAL, INC.

SOIL DESCRIPTION

MOISTURE CONTENT	
DRY	No perceptible moisture
DAMP	Some perceptible moisture, no moisture remains on hands sfter squeezing
MOIST	Perceptible moisture, moisture remains on hands after squeezing
WET	Some pore/voids filled with liquid, typical of capillary fringe
SATURATED	All pores/voids filled with liquid, free liquid visible, typical of below ground water table

CONSISTENCY AND DENSITY
(assumes Modified Standard Penetration Test)

Fine-grained soils (consistency)	
-	blows/foot
very soft	0 - 2
soft	2 - 4
firm	4 - 8
stiff	8 - 16
very stiff	16 - 32
hard	>32

Coarse-grained soil (relative density)	
-	blows/foot
very loose	0 - 4
loose	4 - 10
medium-dense	10 - 30
dense	30 - 50
very dense	over 50

GRADING

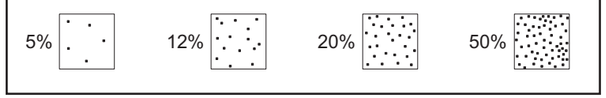
Well Graded
Wide range of grain sizes and substantial amounts of all intermediate particle sizes

Poorly Graded
Predominantly one grain size or is obviously missing intermediate grain sizes

MODIFIERS

trace	<5%
minor	5 -12%
some	12 - 20%

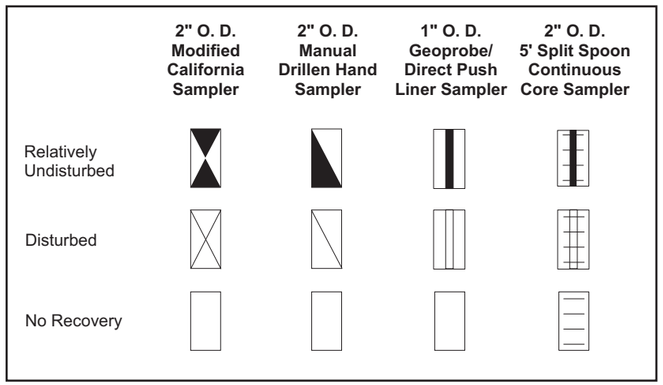
PERCENTAGES



UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)

MAJOR DIVISIONS			Group Symbol	Graphic Symbol	GROUP NAME
Coarse-grained Soils More than 50% retained on no. 200 sieve	Gravels 50% or more of coarse fraction retained on no. 4 sieve	Clean Gravels	GW		Well-graded GRAVEL Well-graded GRAVEL with Sand
		Gravels with fines	GP		Poorly-graded GRAVEL Poorly-graded GRAVEL with Sand
			GM		Silty GRAVEL Silty GRAVEL with Sand
			GC		Clayey GRAVEL Clayey GRAVEL with Sand
	Sands More than 50% of coarse fraction passes no. 4 sieve	Clean Sands	SW		Well-graded SAND Well-graded SAND with Gravel
			SP		Poorly-graded SAND Poorly-graded SAND with Gravel
		Sands with fines	SM		Silty SAND / Clayey SAND with Gravel
			SC		Silty SAND / Clayey SAND with Gravel
Fine-grained Soils 50% or more passes no. 200 sieve	Silts and Clays Liquid limit 50% or less		ML		SILT / SILT with Sand or Gravel Sandy SILT / Sandy SILT with Gravel Gravelly SILT / Gravelly SILT with Sand
			CL		Lean CLAY / Lean CLAY with Sand or Gravel Sandy lean CLAY / Sandy lean Clay with Gravel Gravelly lean CLAY / Gravelly lean CLAY with Sand
			OL		Organic SILTS or organic CLAYS of low plasticity
	Silts and Clays Liquid limit greater than 50%		MH		Elastic SILT / Elastic SILT with Sand or Gravel Sandy elastic SILT / Sandy elastic SILT with Gravel Gravelly elastic SILT / Gravelly elastic SILT with Sand
			CH		Fat CLAY / Fat CLAY with Sand or Gravel Sandy fat CLAY / Sandy fat CLAY with Gravel Gravelly fat CLAY / Gravelly fat CLAY with Sand
			OH		Organic CLAYS or organic SILTS of medium to high plasticity
Highly Organic Soils			PT		PEAT, MUCK and other highly organic soils

SAMPLE TYPES

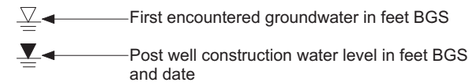


NOTES:

1) Subsurface information from boring and test pit logs depict conditions only at the specific locations and dates indicated. Soil conditions and water levels at other locations may differ from conditions at these locations. Also the conditions at these locations may change with time.

2) Blow counts on logs are the number of blows to drive the sampler 12 inches with a 140 pound hammer falling 30 inches unless otherwise specified.

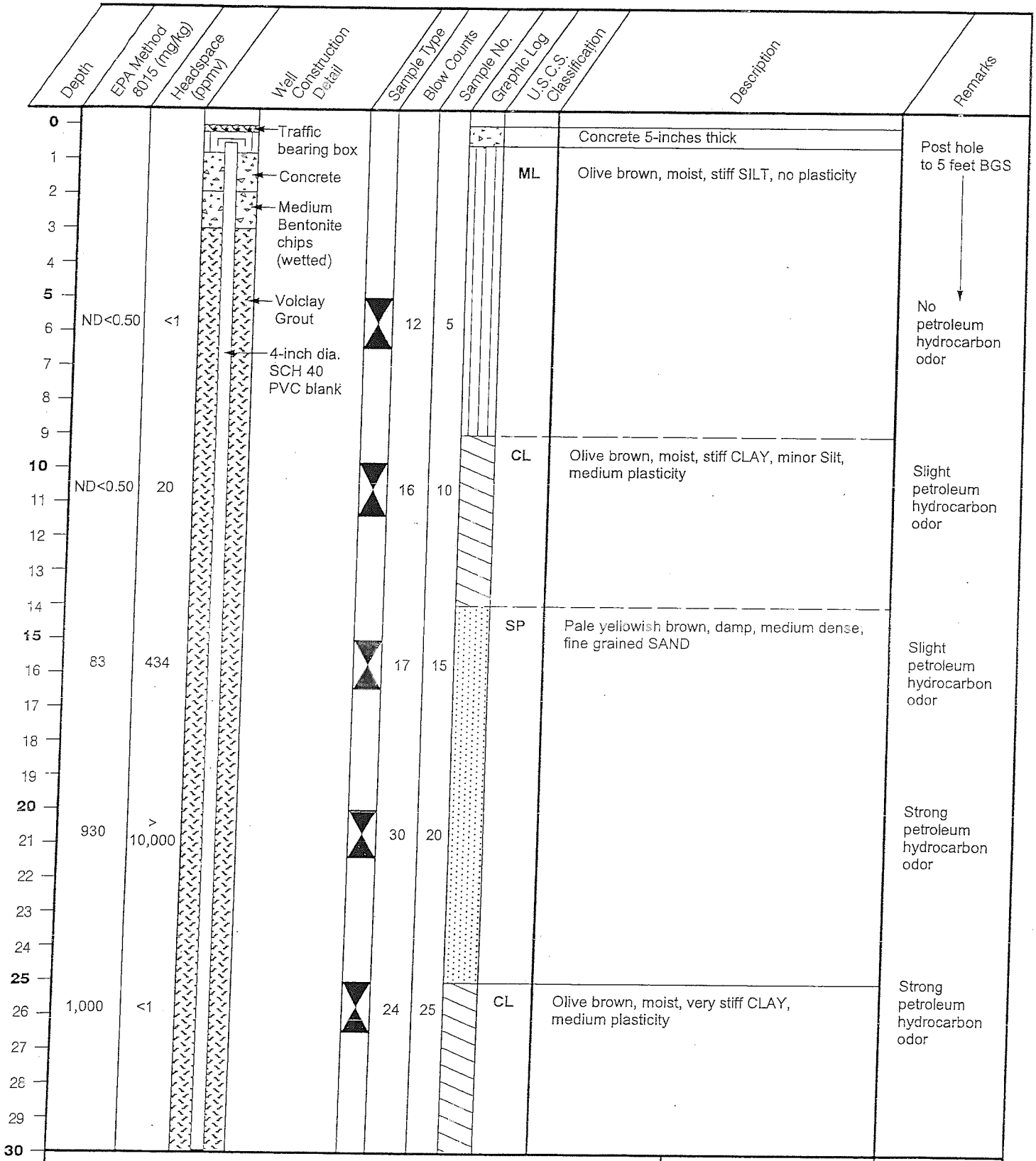
3) USCS soil classification reference = ASTM Standard D2487-85.



FREY ENVIRONMENTAL, INC.

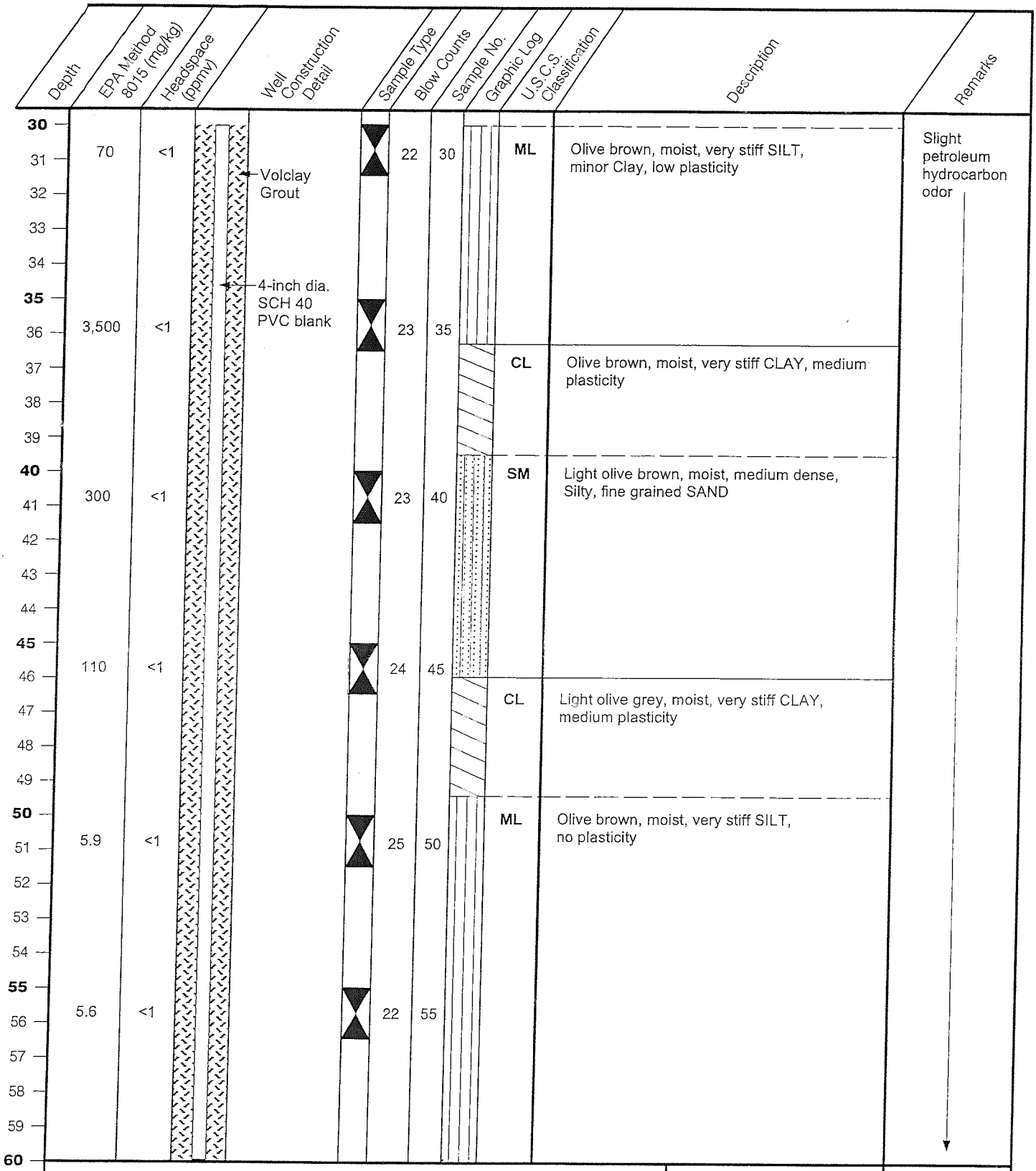
BORING LOG LEGEND AND UNIFIED SOIL CLASSIFICATION SYSTEM

Date drilled/completed	April 22, 2003	Top of casing elevation	144.56 feet MSL
Geologist	D. Parcells	Boring depth	Approx. 110 feet BGS
Drilling equipment	CME 85	Water depth	Approx. 93 feet BGS
Surface elevation	144.93 feet MSL	Well screen depth	80 to 110 feet BGS



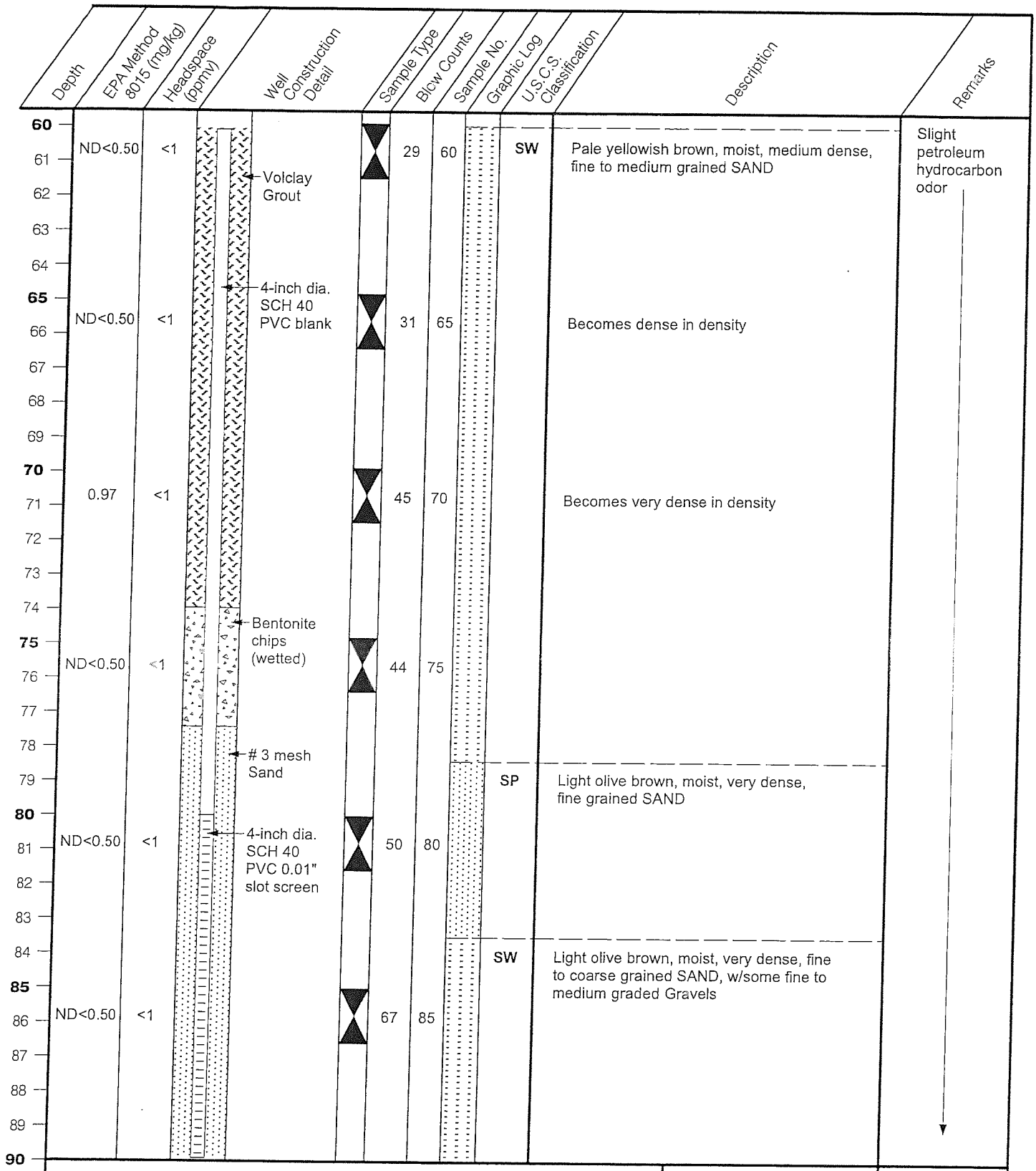
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B2/MW1	1

FREY ENVIRONMENTAL, INC.



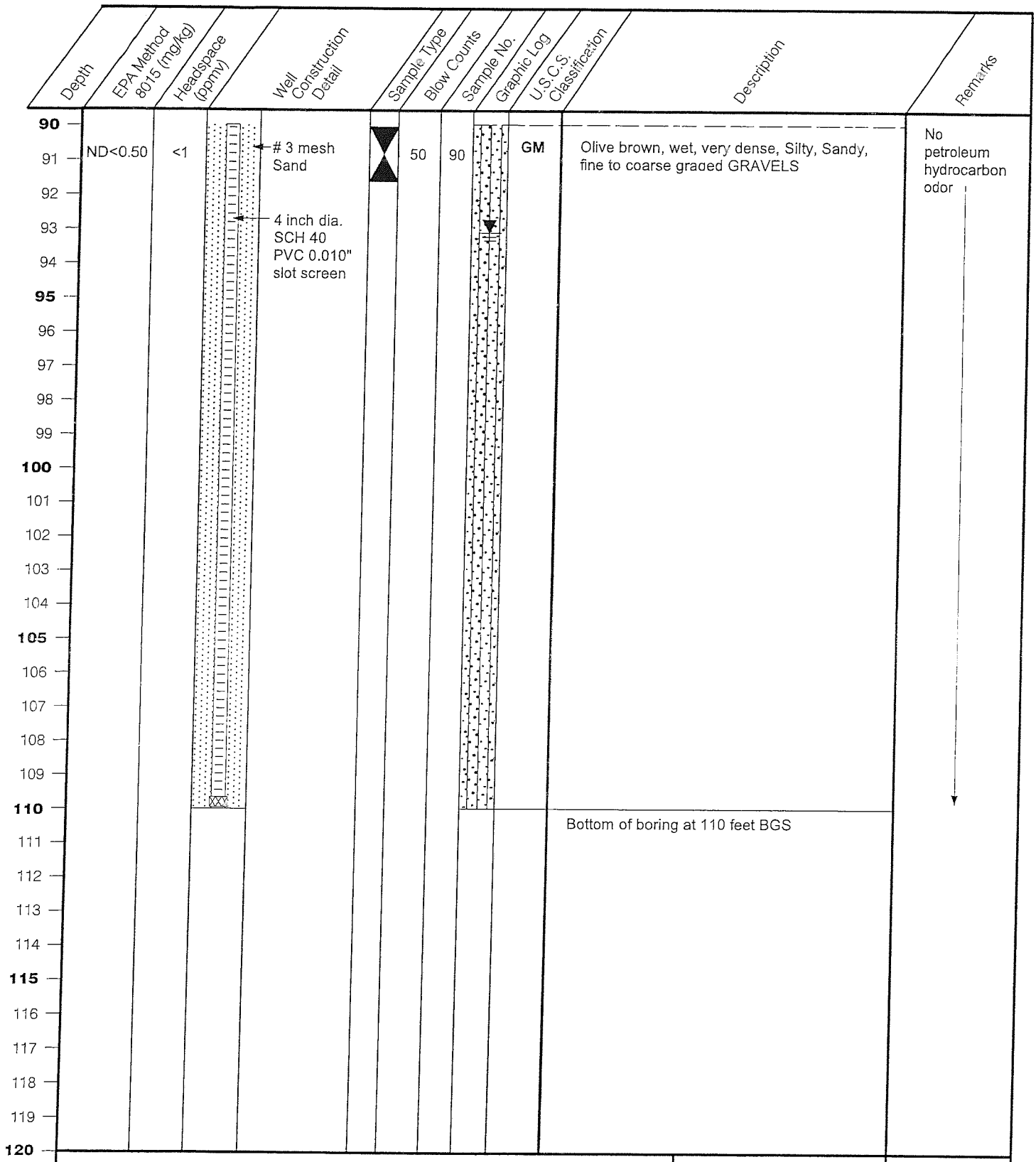
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B2/MW1	2

FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B2/MW1	3

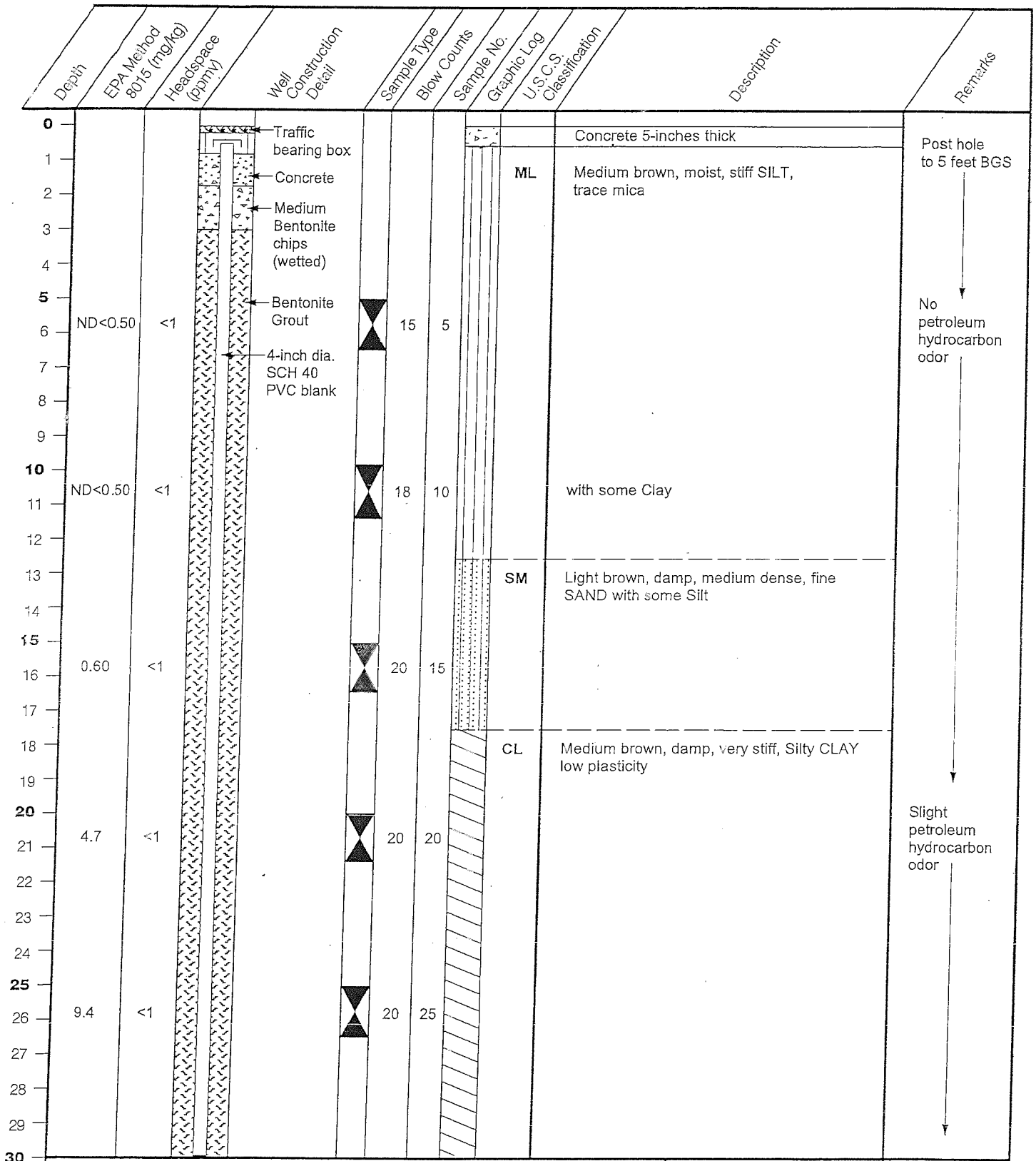
FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B2/MW1	4

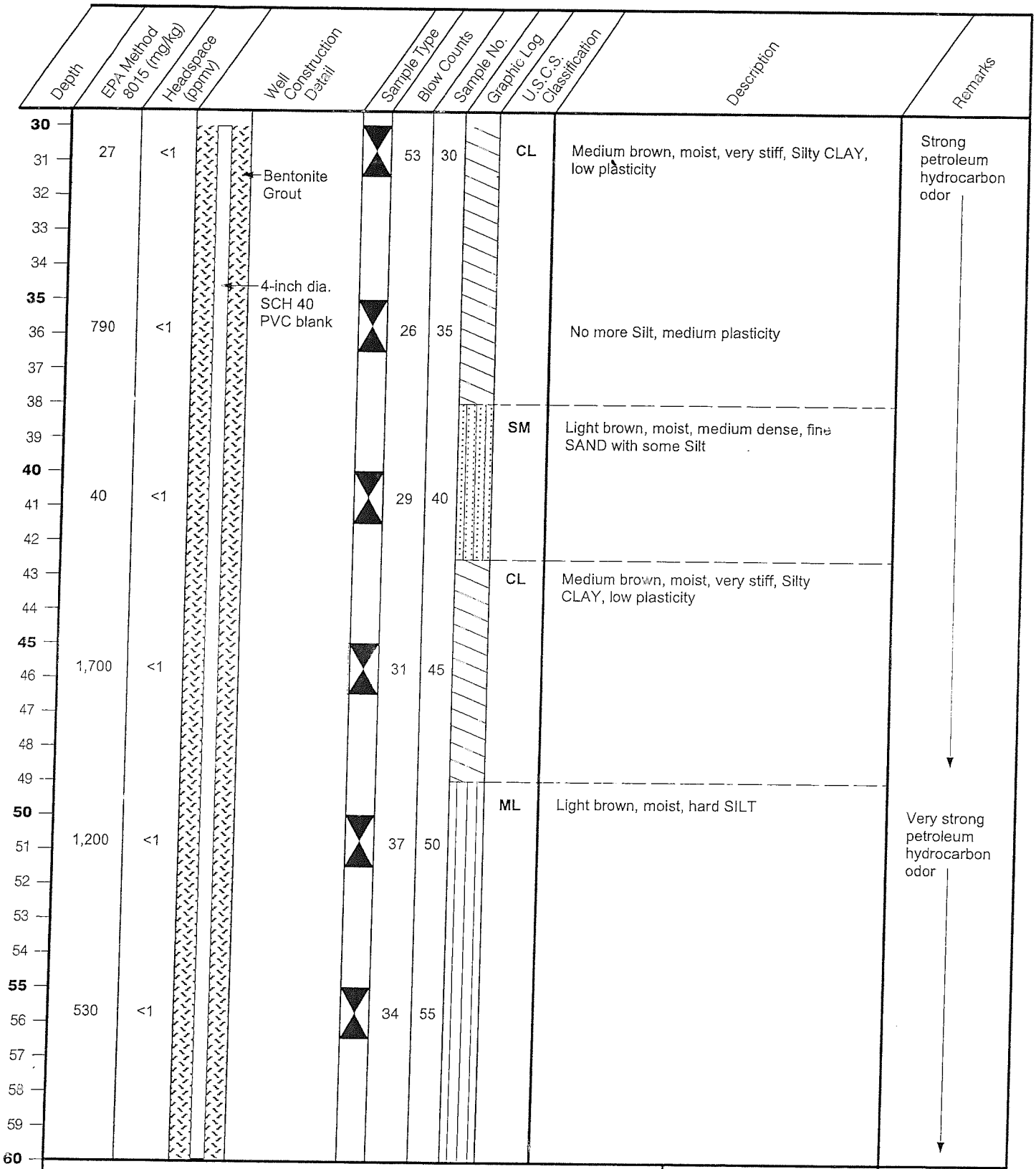
FREY ENVIRONMENTAL, INC.

Date drilled/completed	April 23, 2003	Top of casing elevation	143.80 feet MSL
Geologist	D. Reed	Boring depth	Approx. 110 feet BGS
Drilling equipment	CME 85	Water depth	Approx. 97 feet BGS
Surface elevation	144.28 feet MSL	Well screen depth	79.5 to 109.5 feet BGS



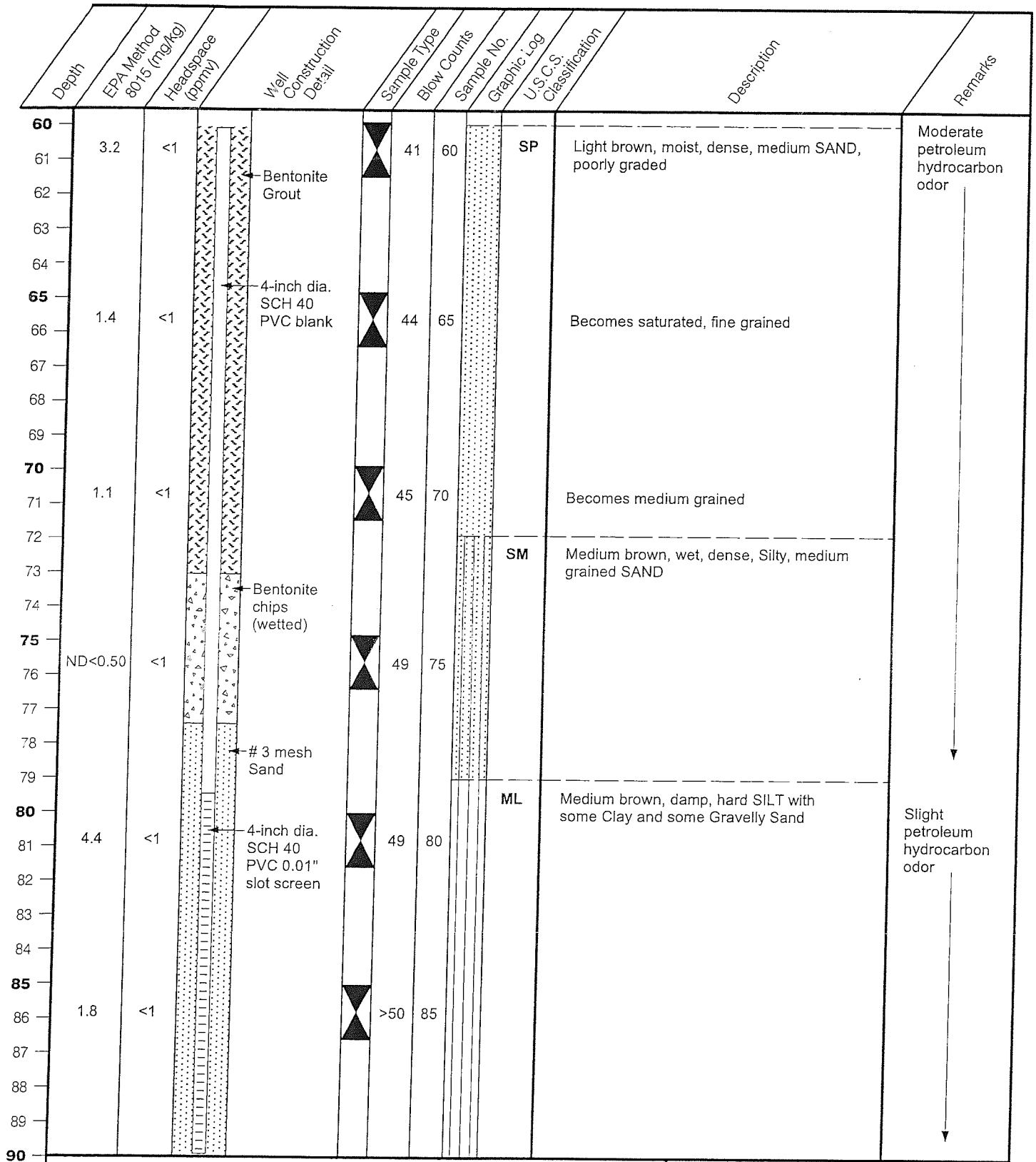
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B3/MW2	1

FREY ENVIRONMENTAL, INC.



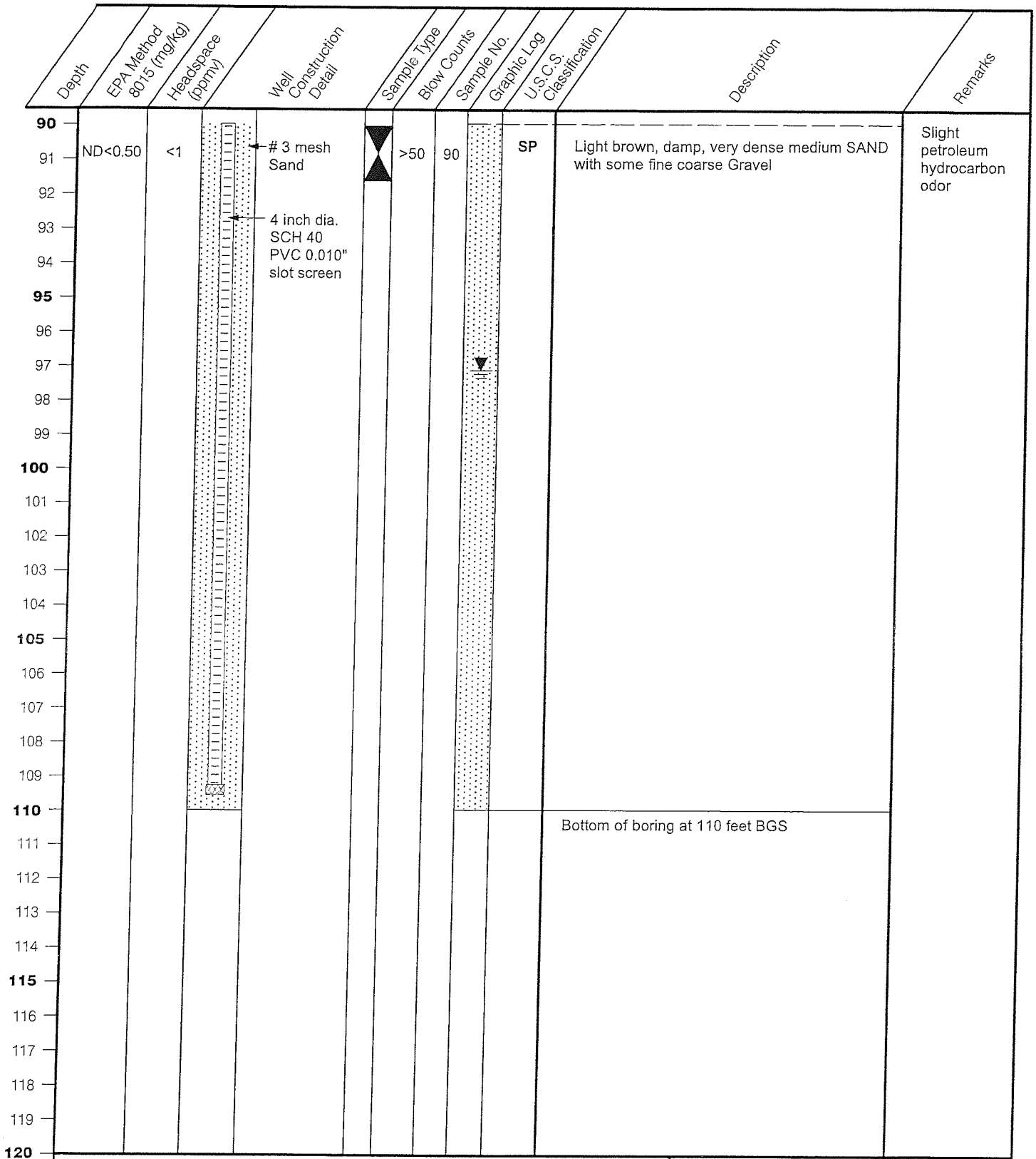
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B3/MW2	2

FREY *ENVIRONMENTAL, INC.*



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B3/MW2	3

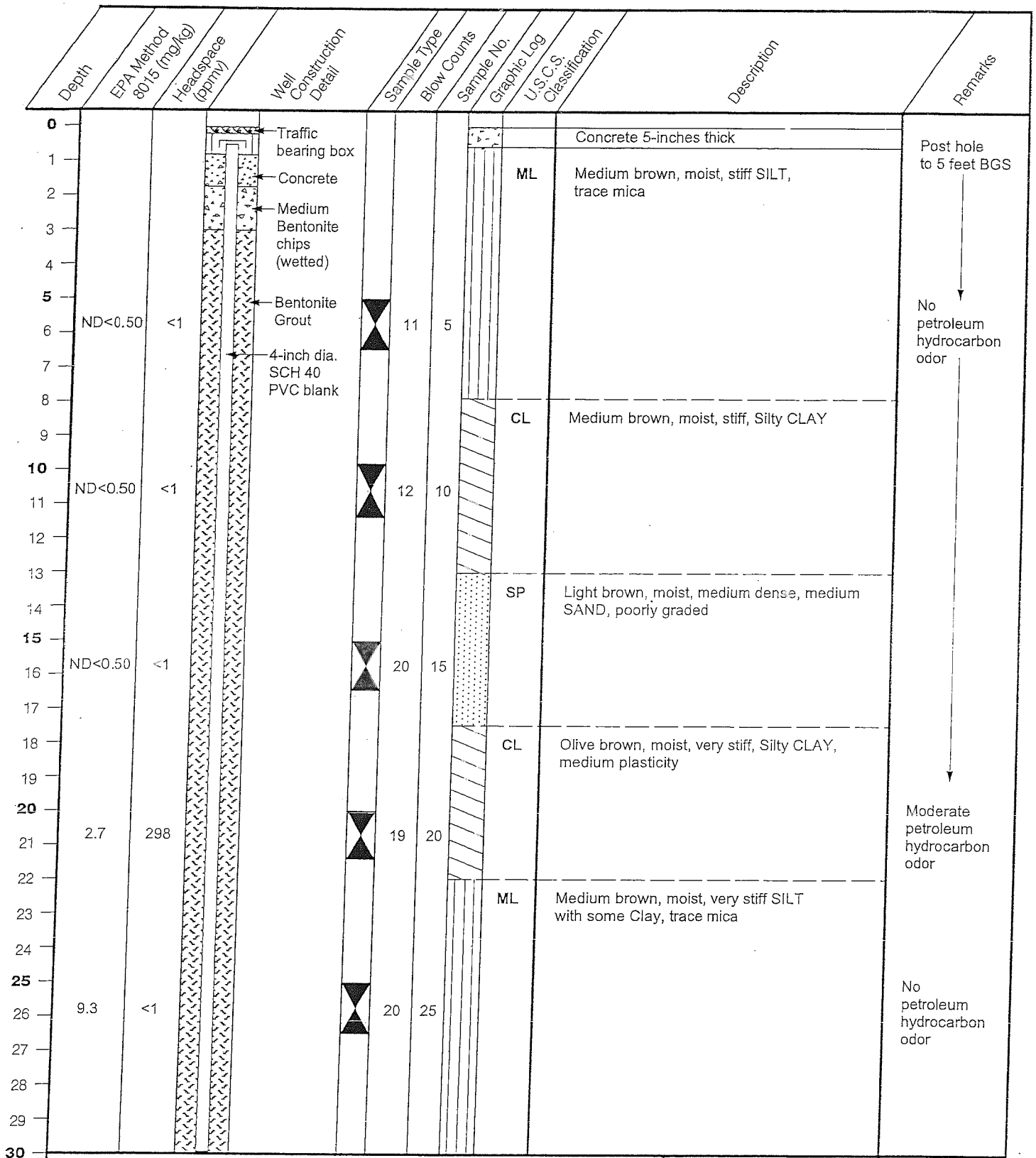
FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B3/MW2	4

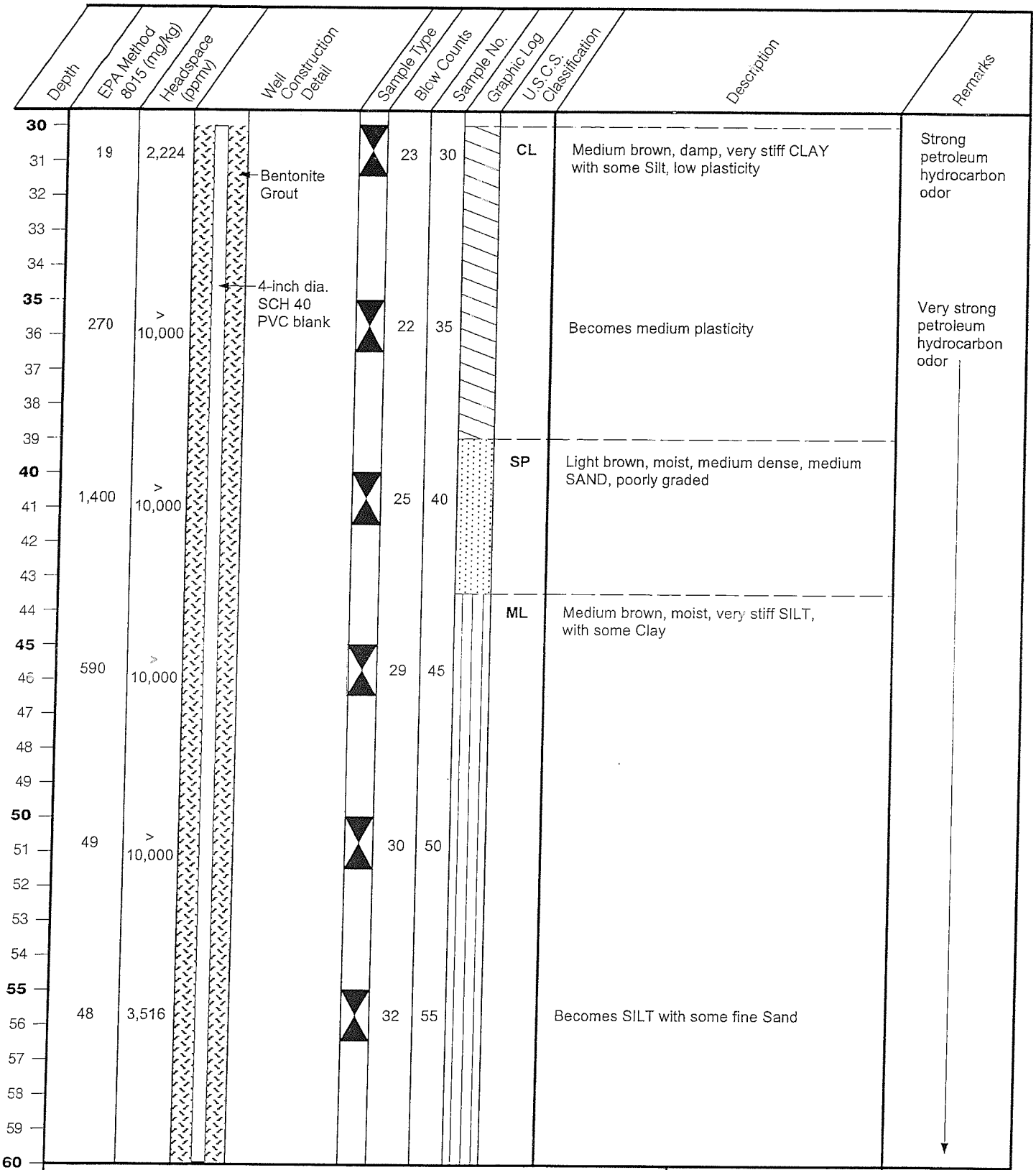
FREY ENVIRONMENTAL, INC.

Date drilled/completed	April 23, 2003	Top of casing elevation	142.63 feet MSL
Geologist	D. Reed	Boring depth	Approx. 110 feet BGS
Drilling equipment	CME 85	Water depth	Approx. 97 feet BGS
Surface elevation	143.44 feet MSL	Well screen depth	80.5 to 110.5 feet BGS



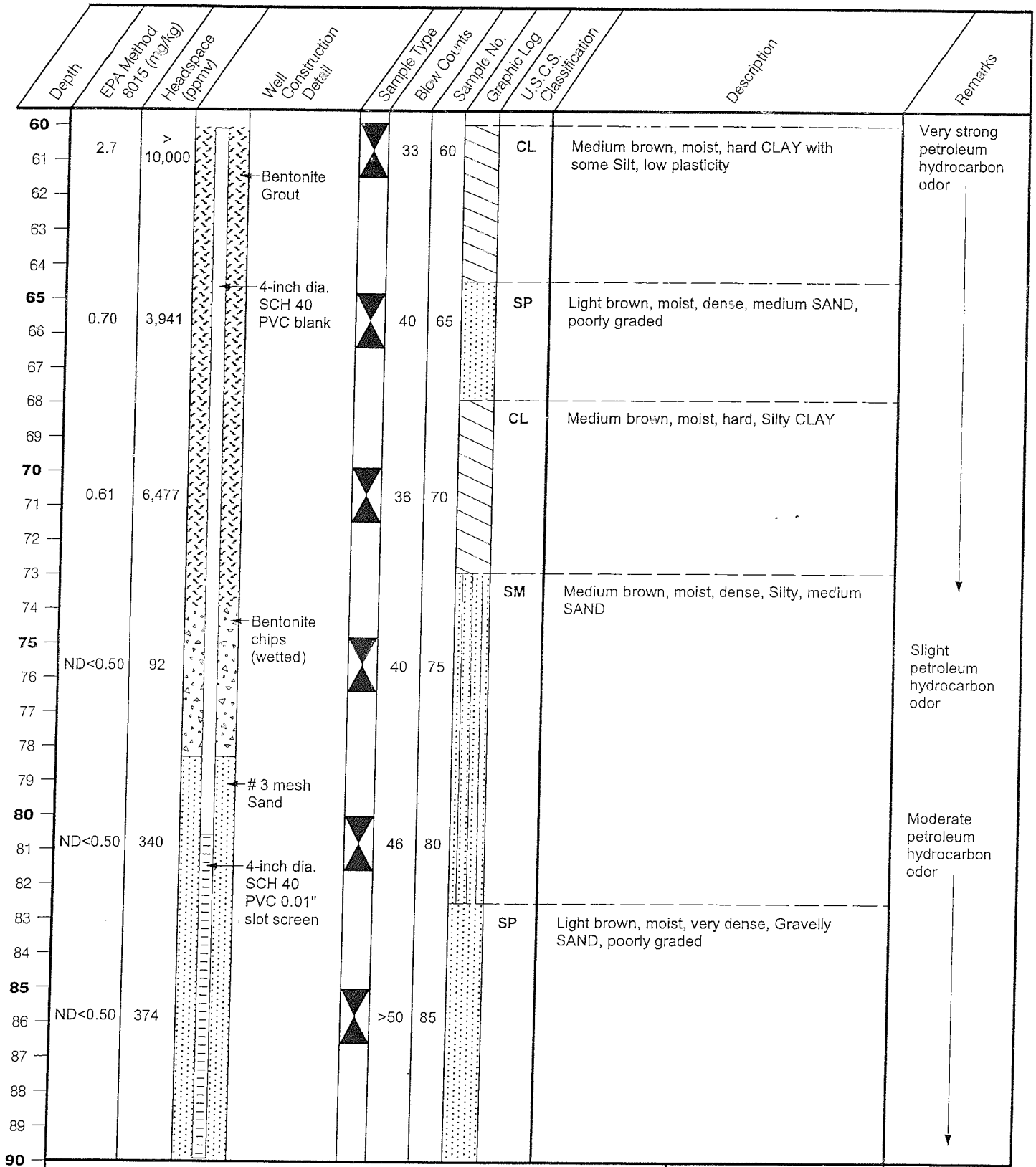
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B5/MW3	1

FREY ENVIRONMENTAL, INC.



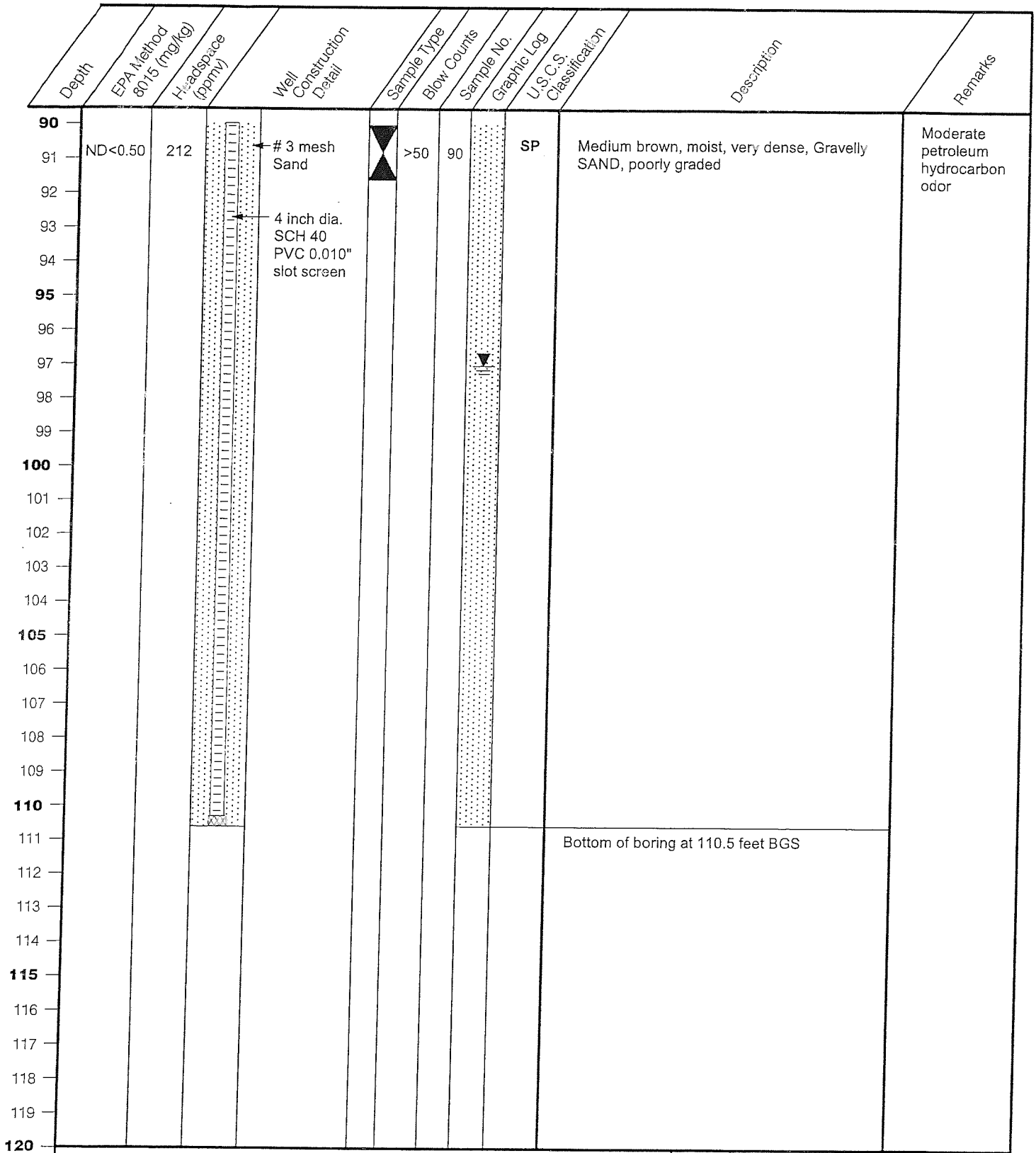
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B5/MW3	2

FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B5/MW3	3

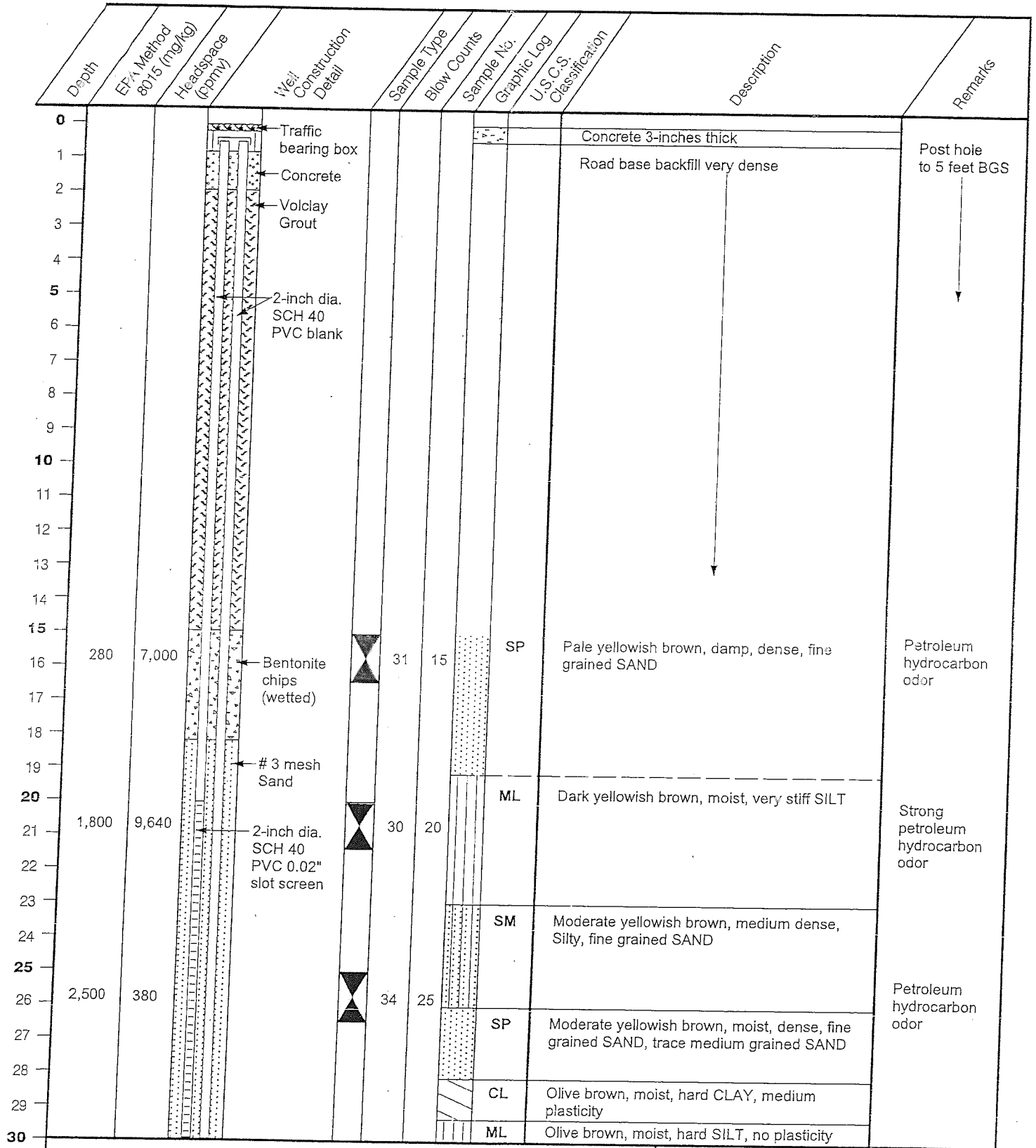
FREY *ENVIRONMENTAL, INC.*



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B5/MW3	4

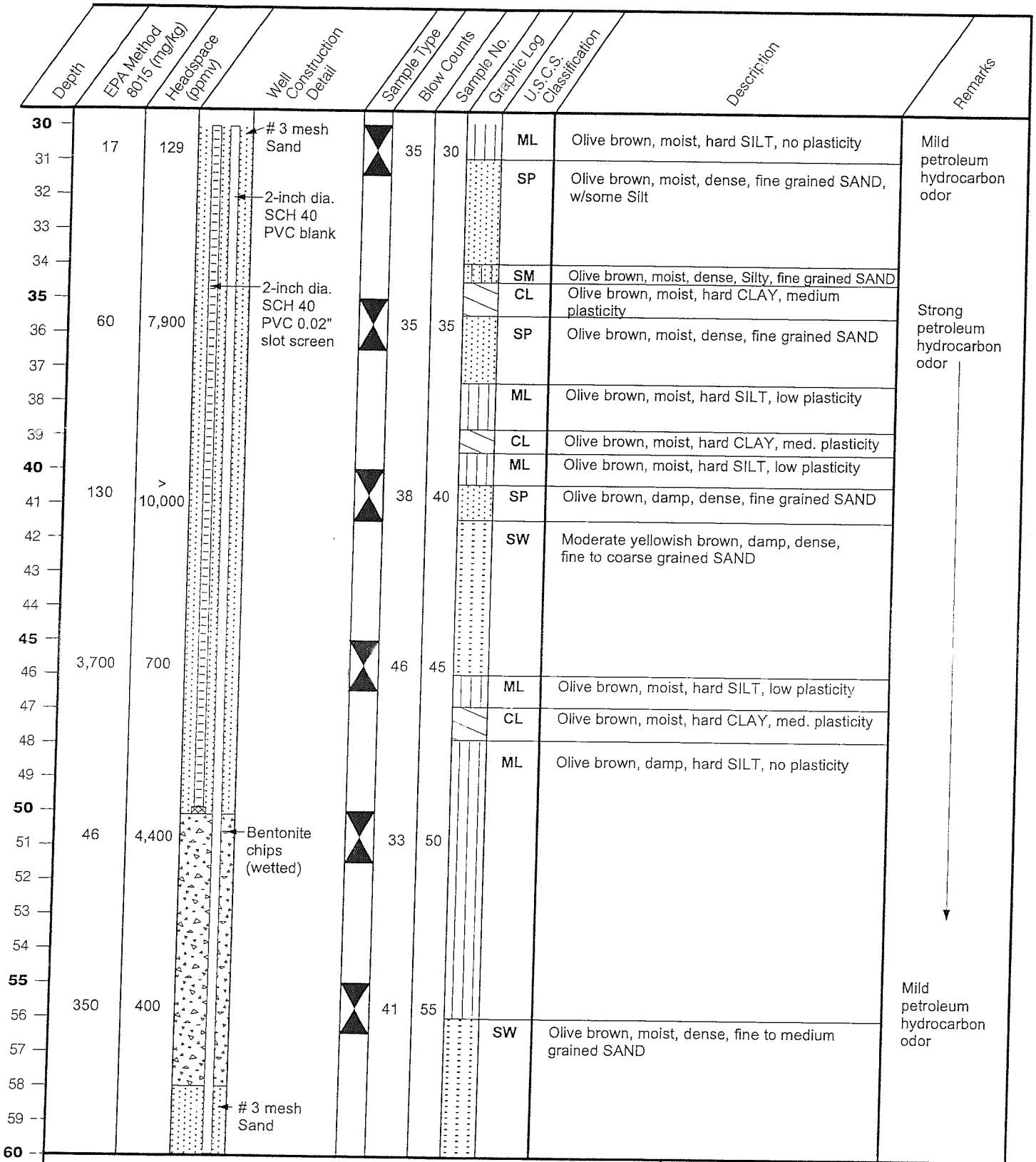
FREY ENVIRONMENTAL, INC.

Date drilled/completed	April 21, 2003	Top of casing elevation	143.97 feet MSL
Geologist	D. Parcells	Boring depth	Approx. 98 feet BGS
Drilling equipment	CME 85	Water depth	Approx. 93 feet BGS
Surface elevation	144.36 feet MSL	Well screen depth	20 to 50 and 60 to 90 feet BGS



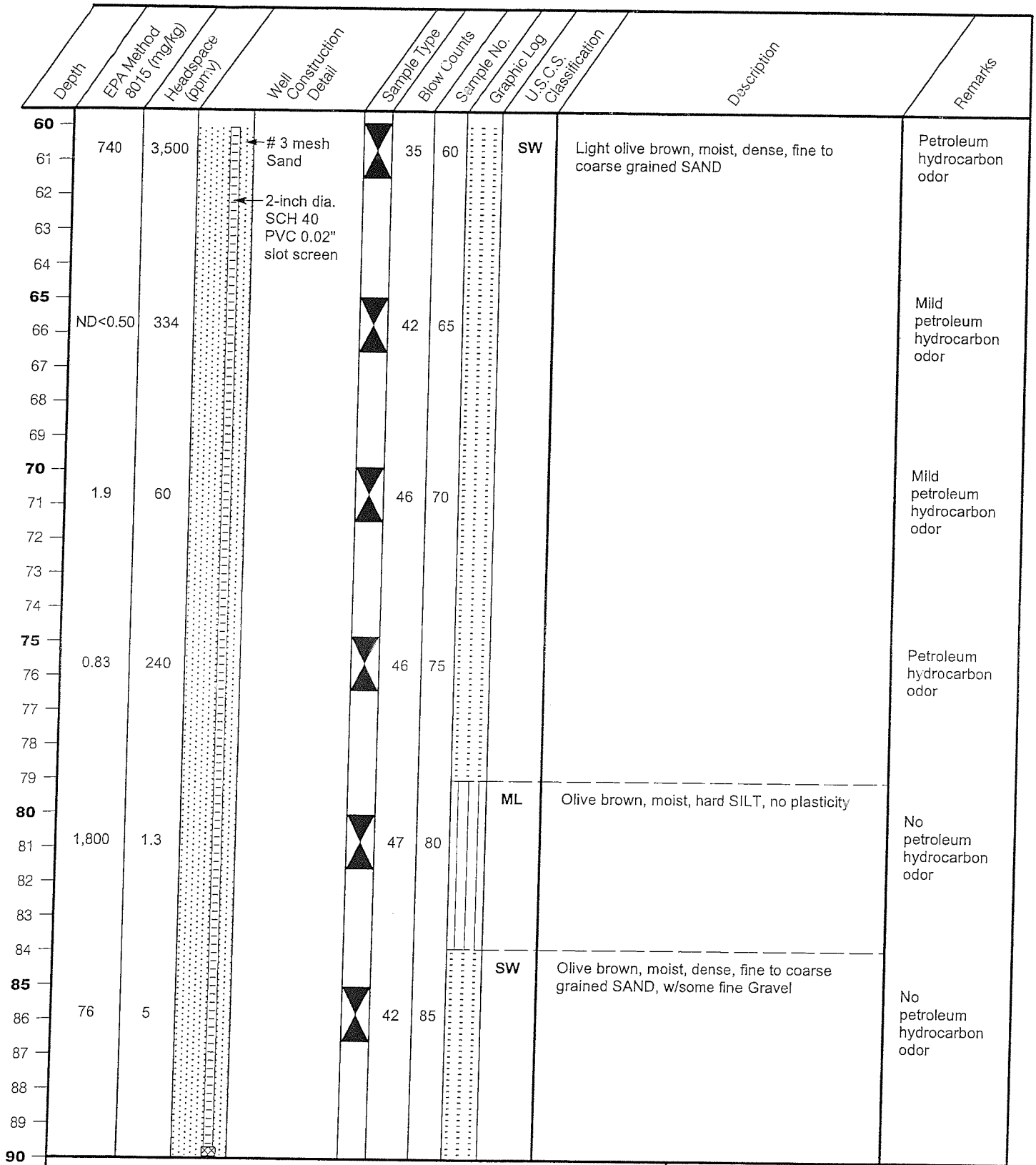
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B1/VE1	1

FREY ENVIRONMENTAL, INC.



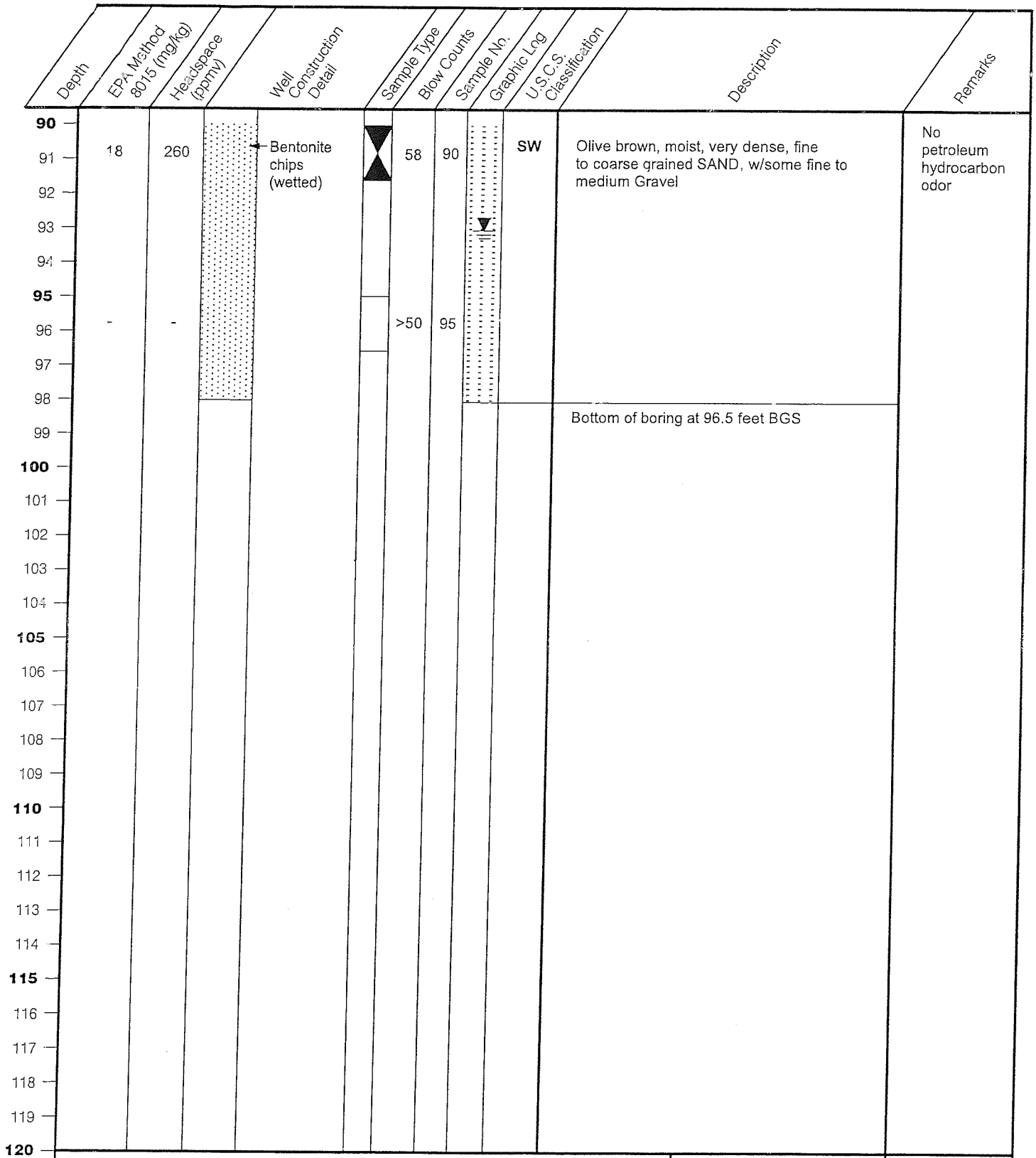
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B1/VE1	2

FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B1/VE1	3

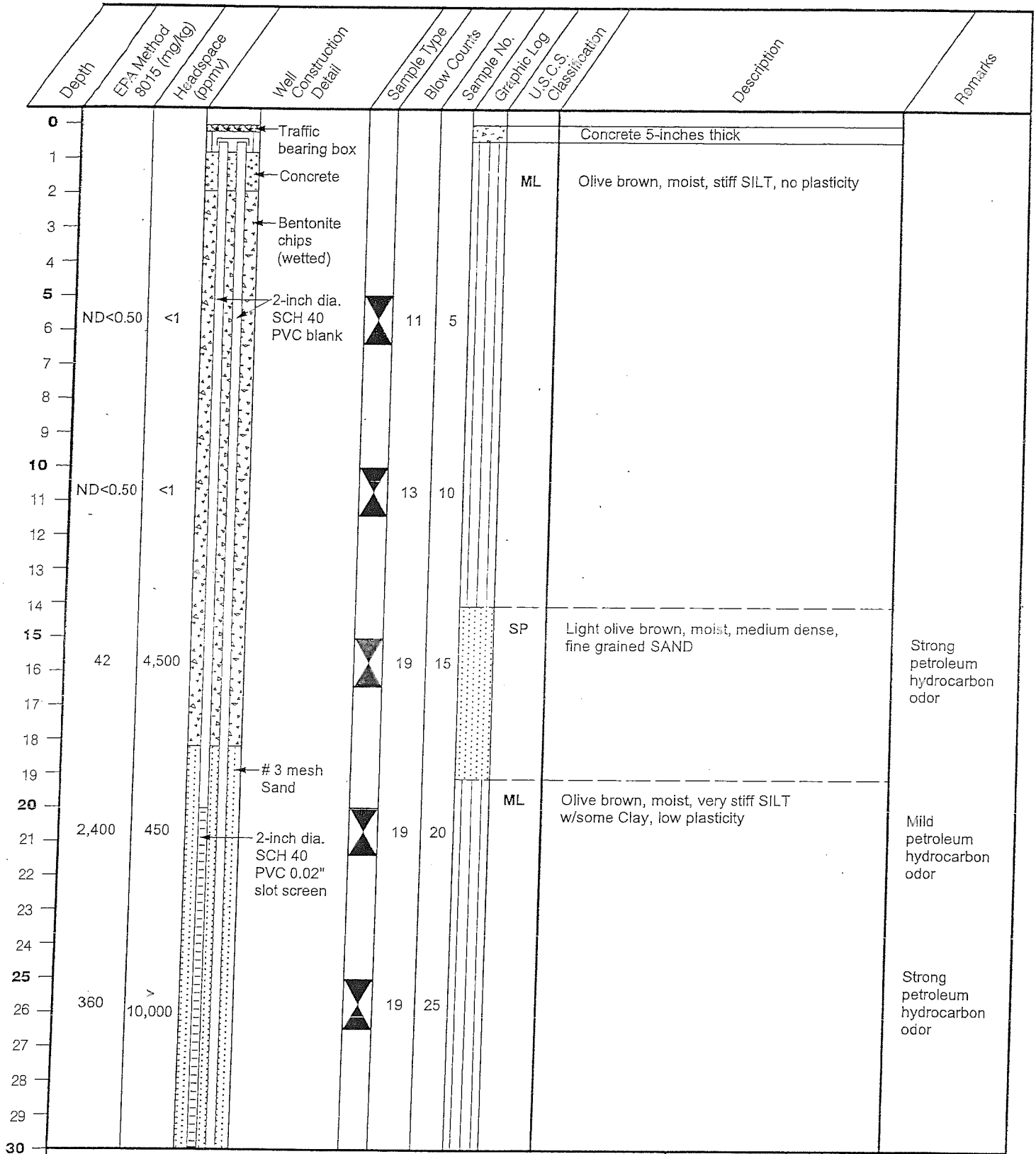
FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B1/VE1	4

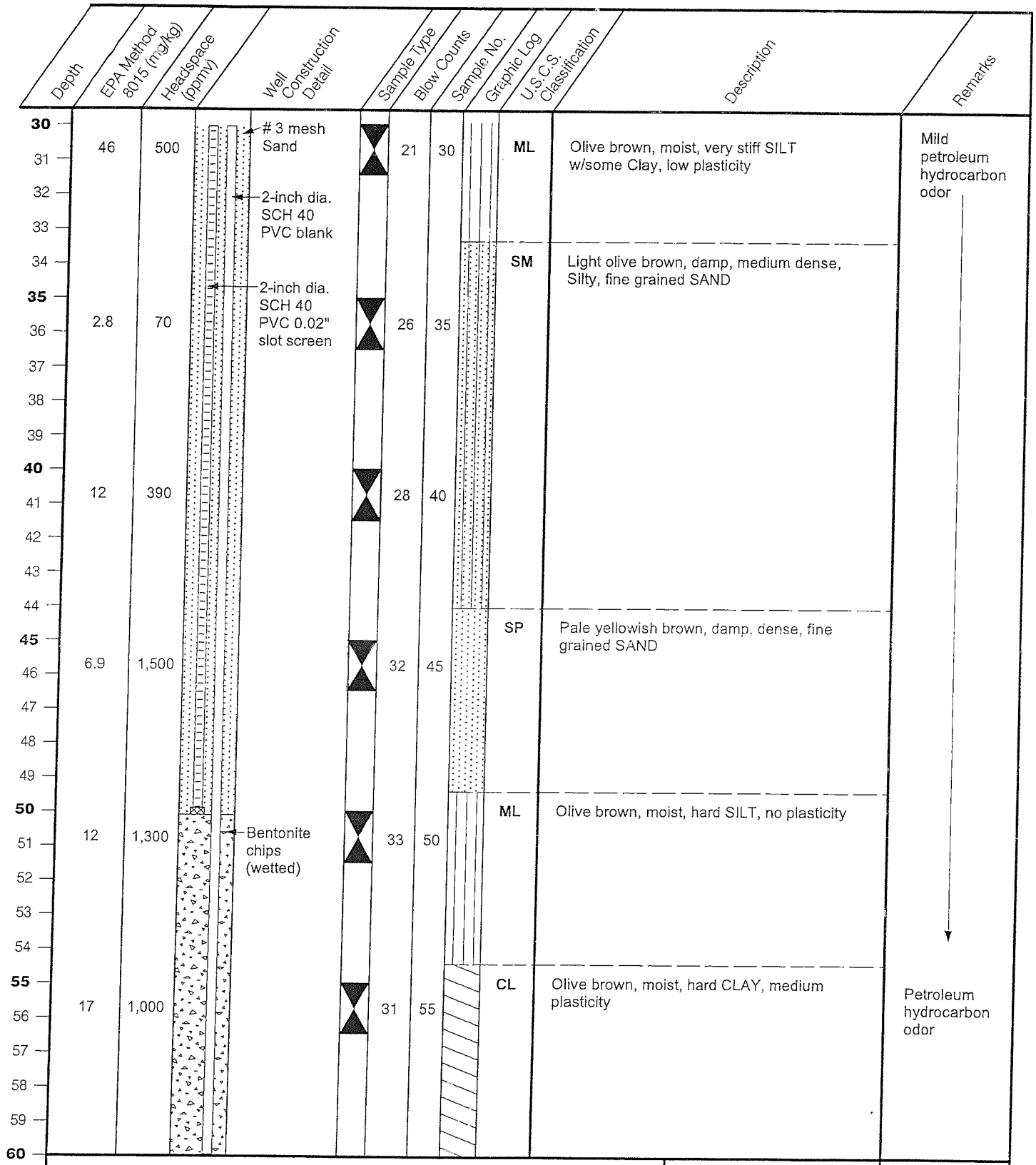
FREY ENVIRONMENTAL, INC.

Date drilled/completed	April 22, 2003	Top of casing elevation	144.67 feet MSL
Geologist	D. Parcells	Boring depth	Approx. 95 feet BGS
Drilling equipment	CME 85	Water depth	Approx. 93 feet BGS
Surface elevation	145.11 feet MSL	Well screen depth	20 to 50 and 65 to 95 feet BGS



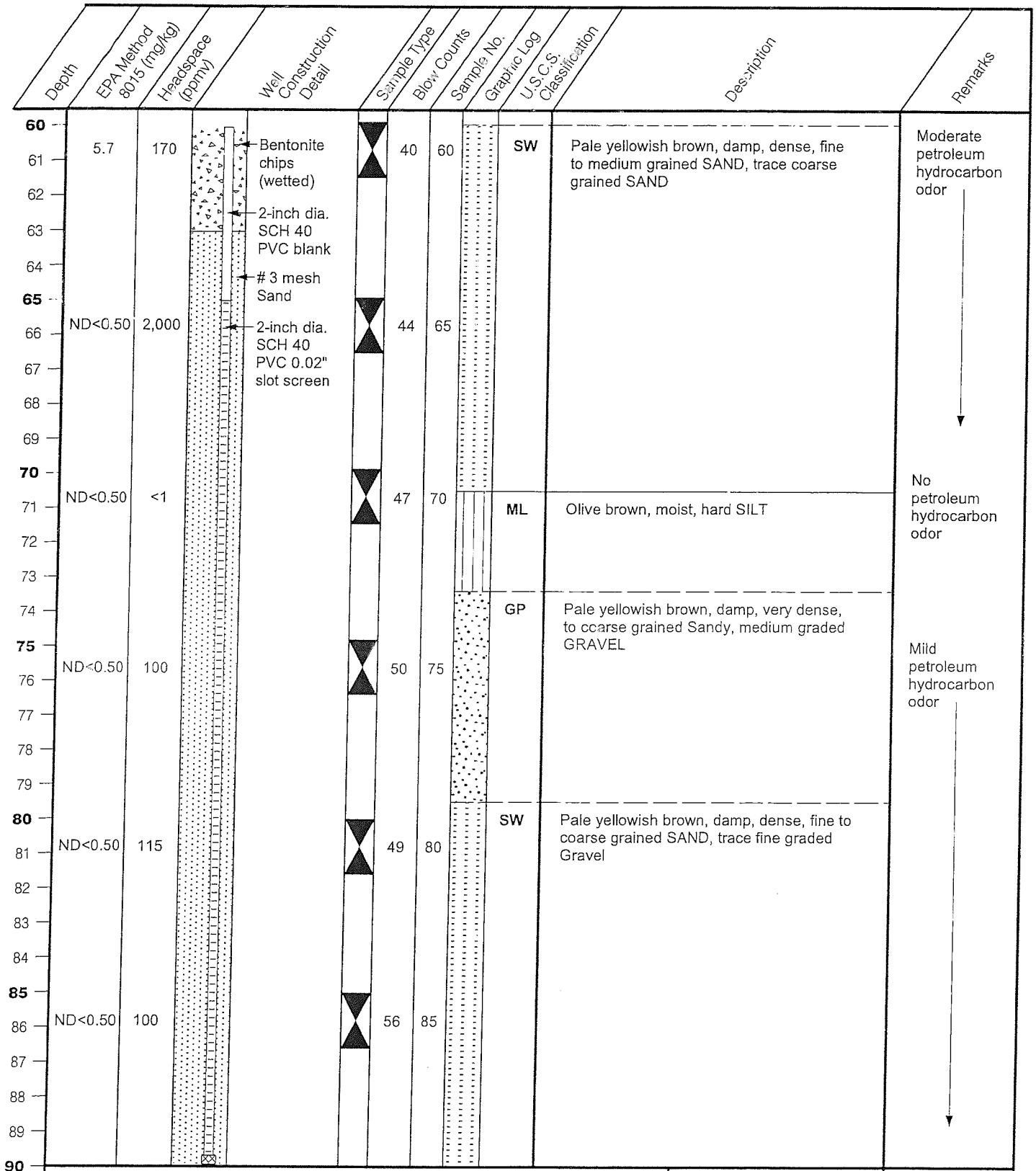
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B4/VE2	1

FREY ENVIRONMENTAL, INC.

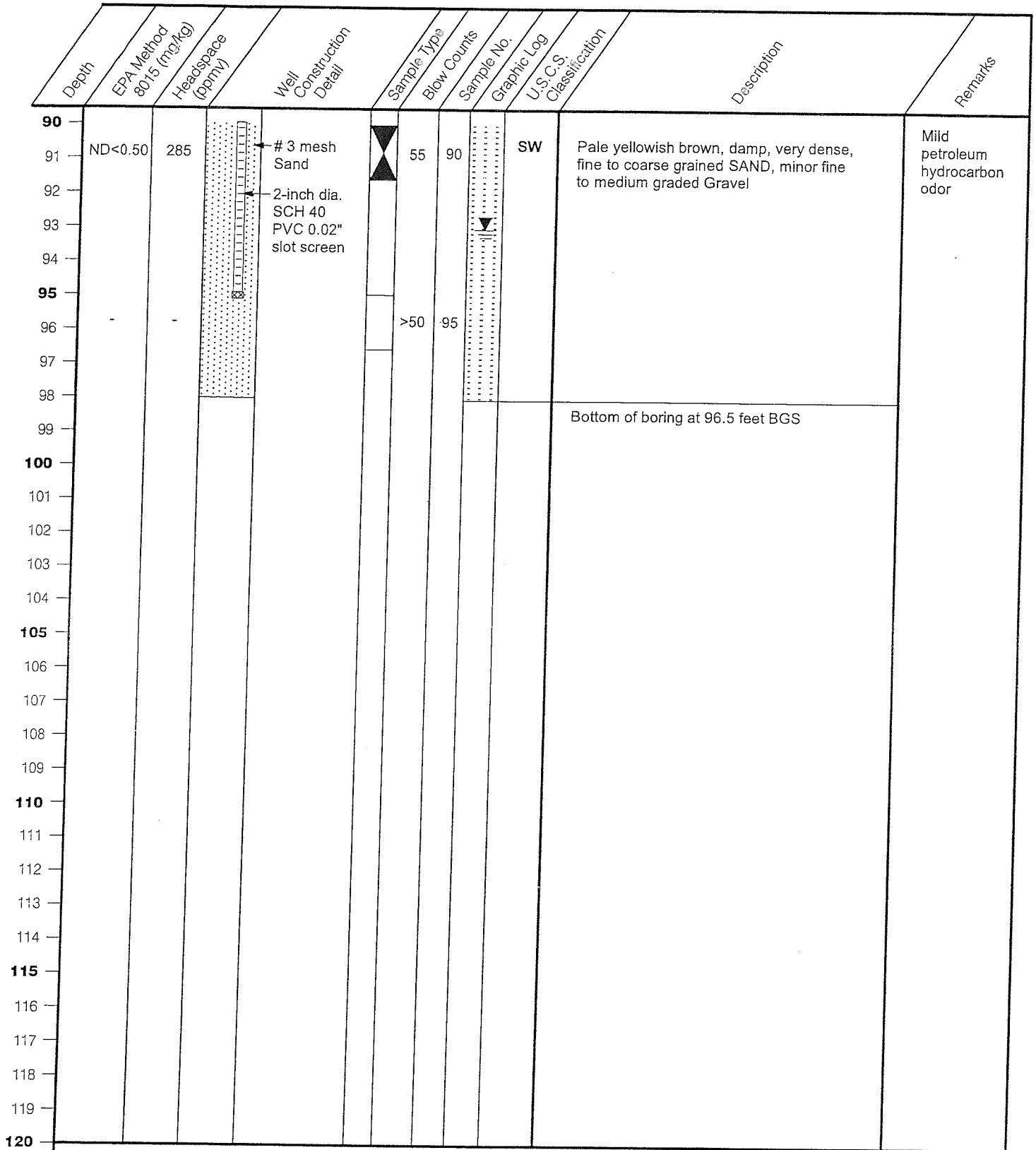


Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B4/VE2	2

FREY ENVIRONMENTAL, INC.



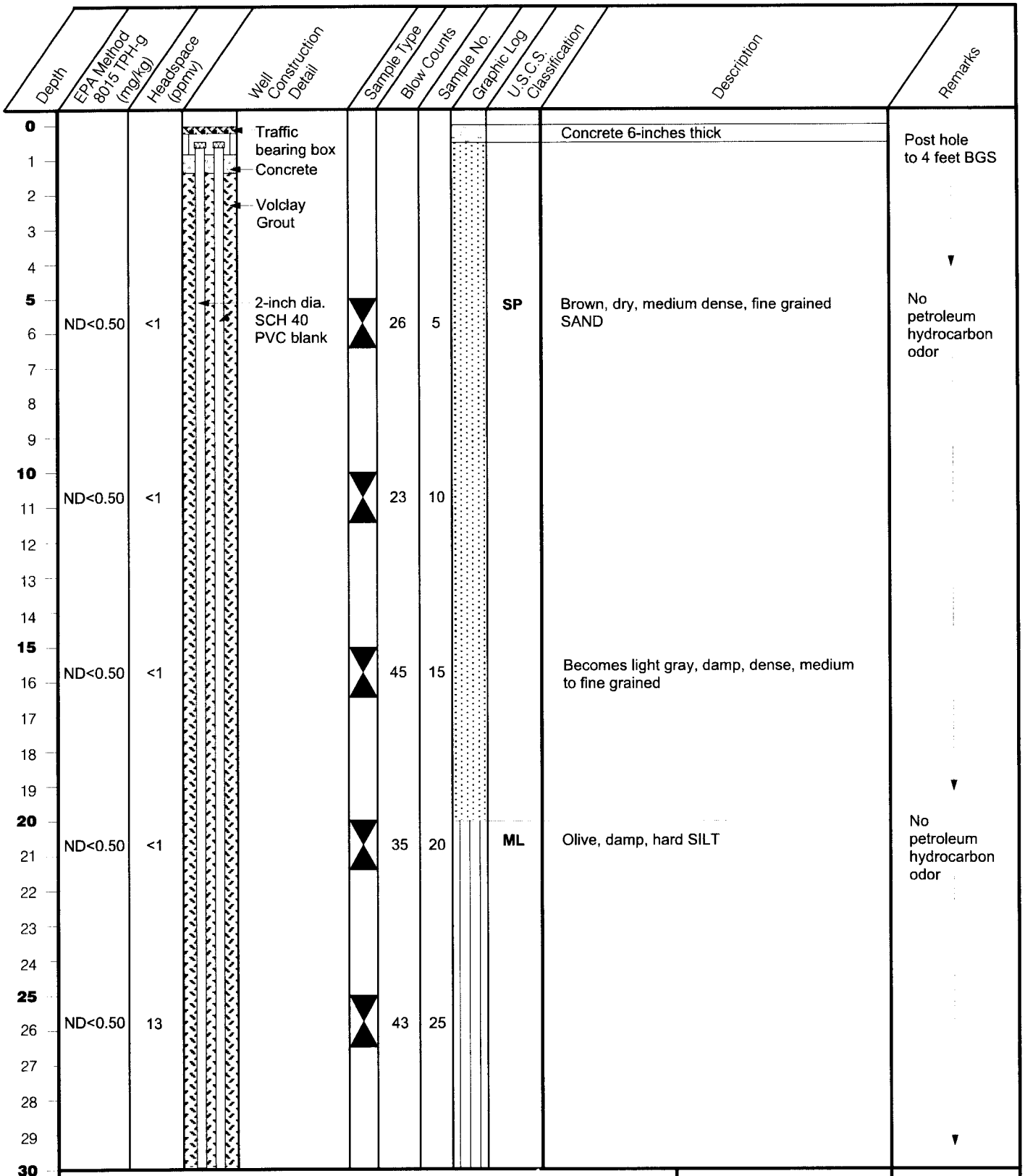
Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B4/VE2	3



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B4/VE2	4

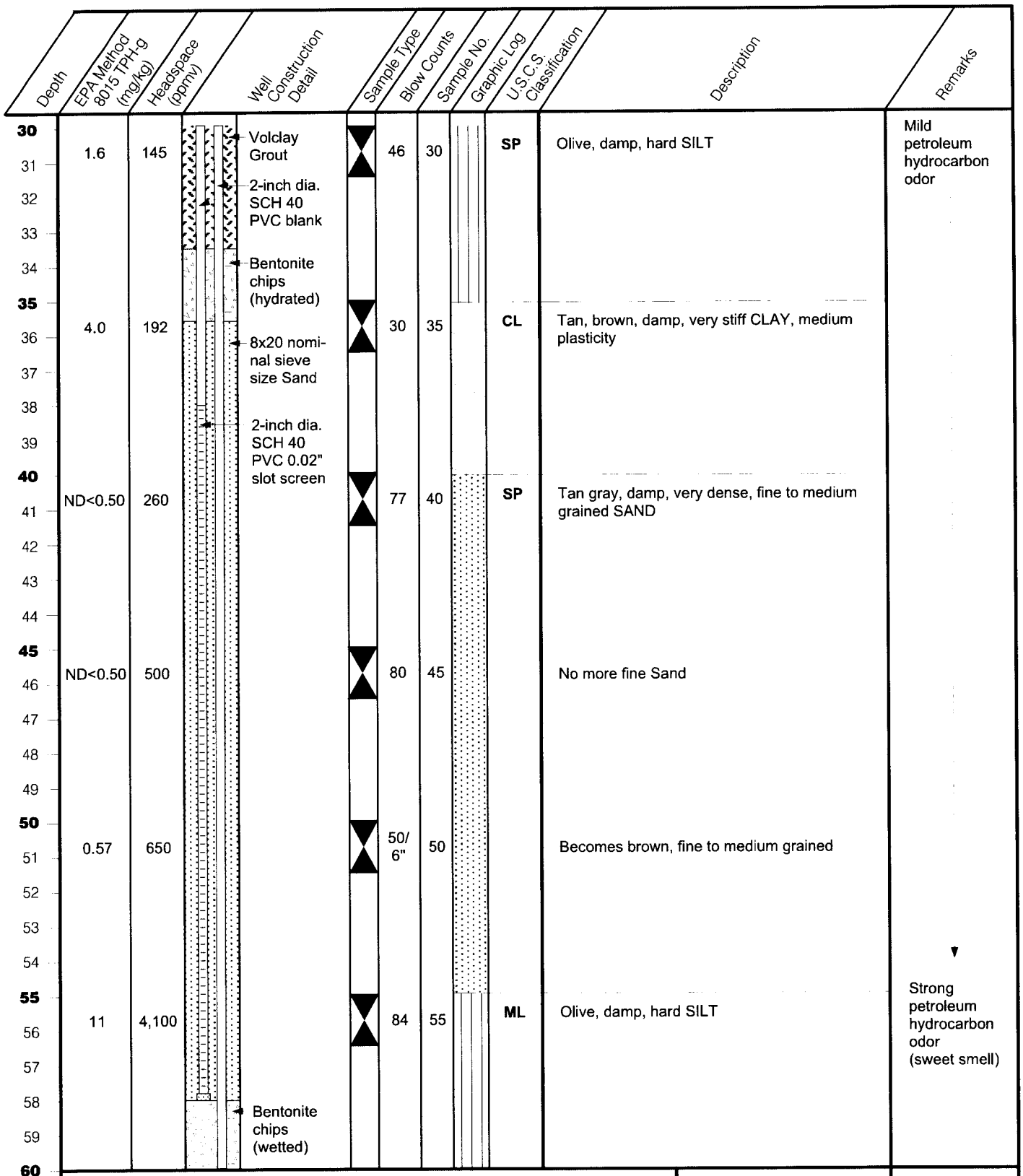
FREY ENVIRONMENTAL, INC.

Date drilled/completed	November 20, 2006	Top of casing elevation	146.17 feet MSL
Geologist	J. Moeller	Boring depth	Approx. 81.5 feet BGS
Drilling equipment	CME 75 HSA 8" O. D.	Water depth	Approx. 73 feet BGS
Surface elevation	146.61 feet MSL	Well screen depth	38 to 58 and 65 to 75 feet BGS



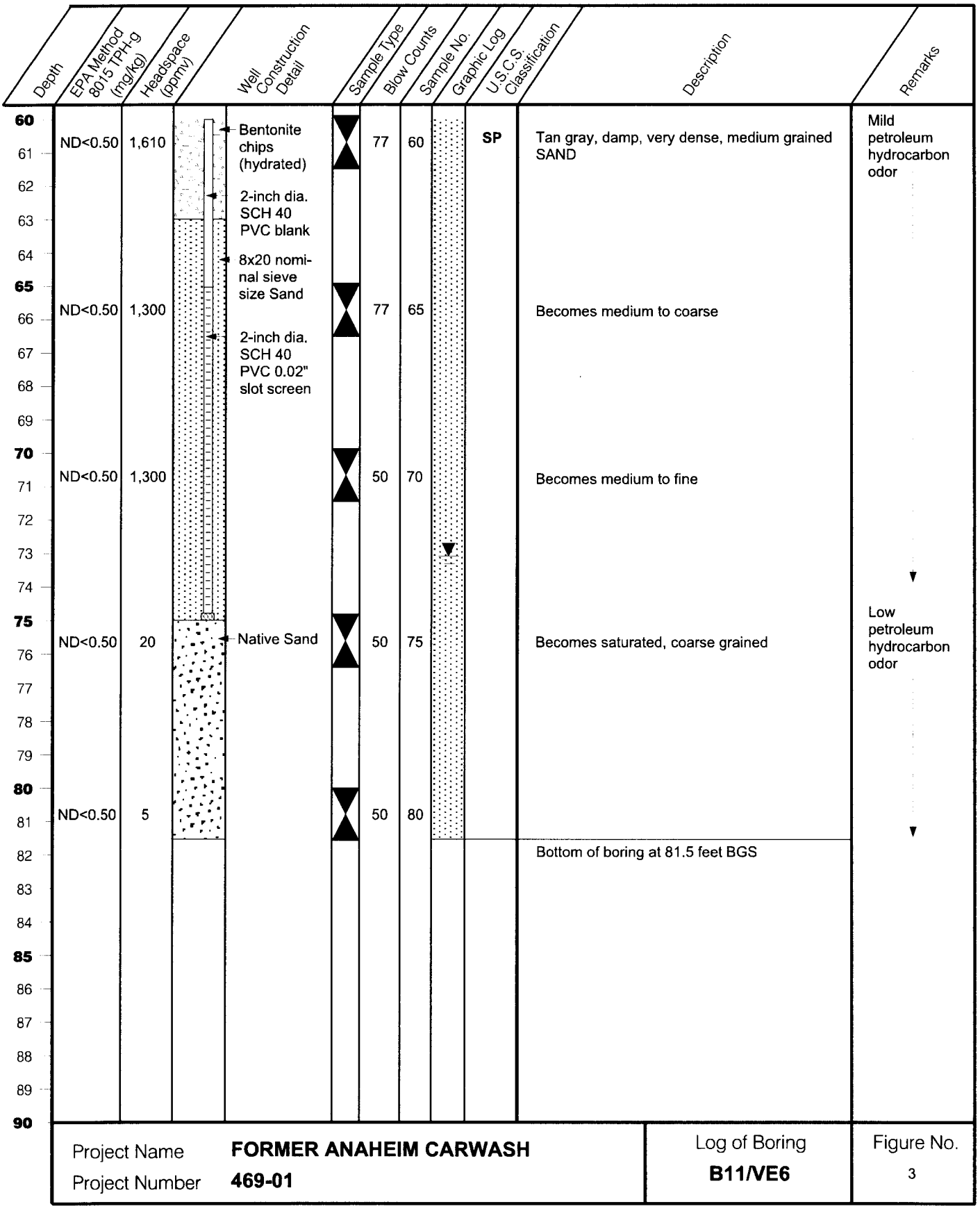
Project Name	**FORMER ANAHEIM CARWASH**	Log of Boring	Figure No.
Project Number	**469-01**	**B11/VE6**	1

FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	B11/VE6	2

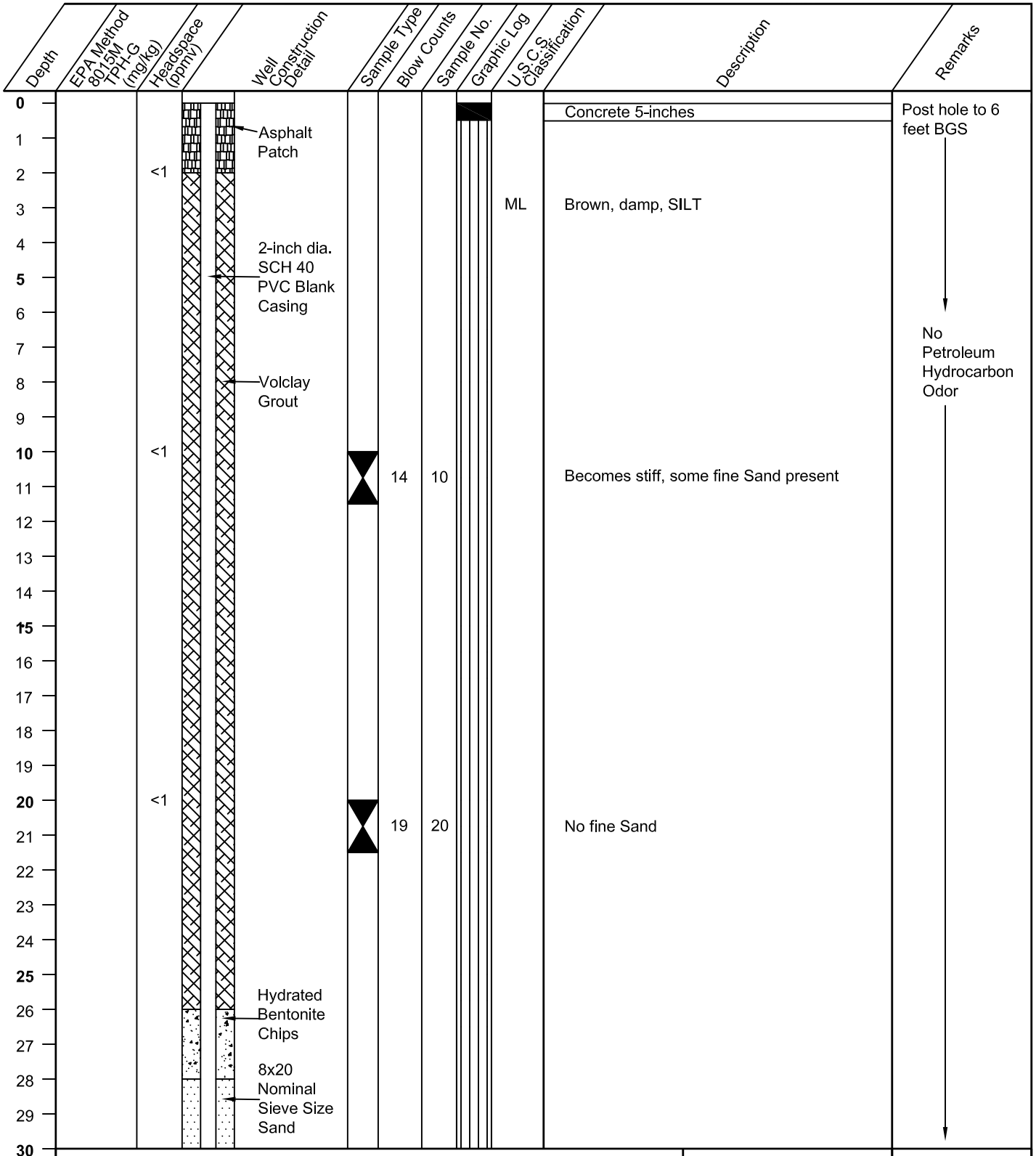
FREY ENVIRONMENTAL, INC.



Project Name	**FORMER ANAHEIM CARWASH**	Log of Boring	Figure No.
Project Number	**469-01**	**B11/VE6**	3

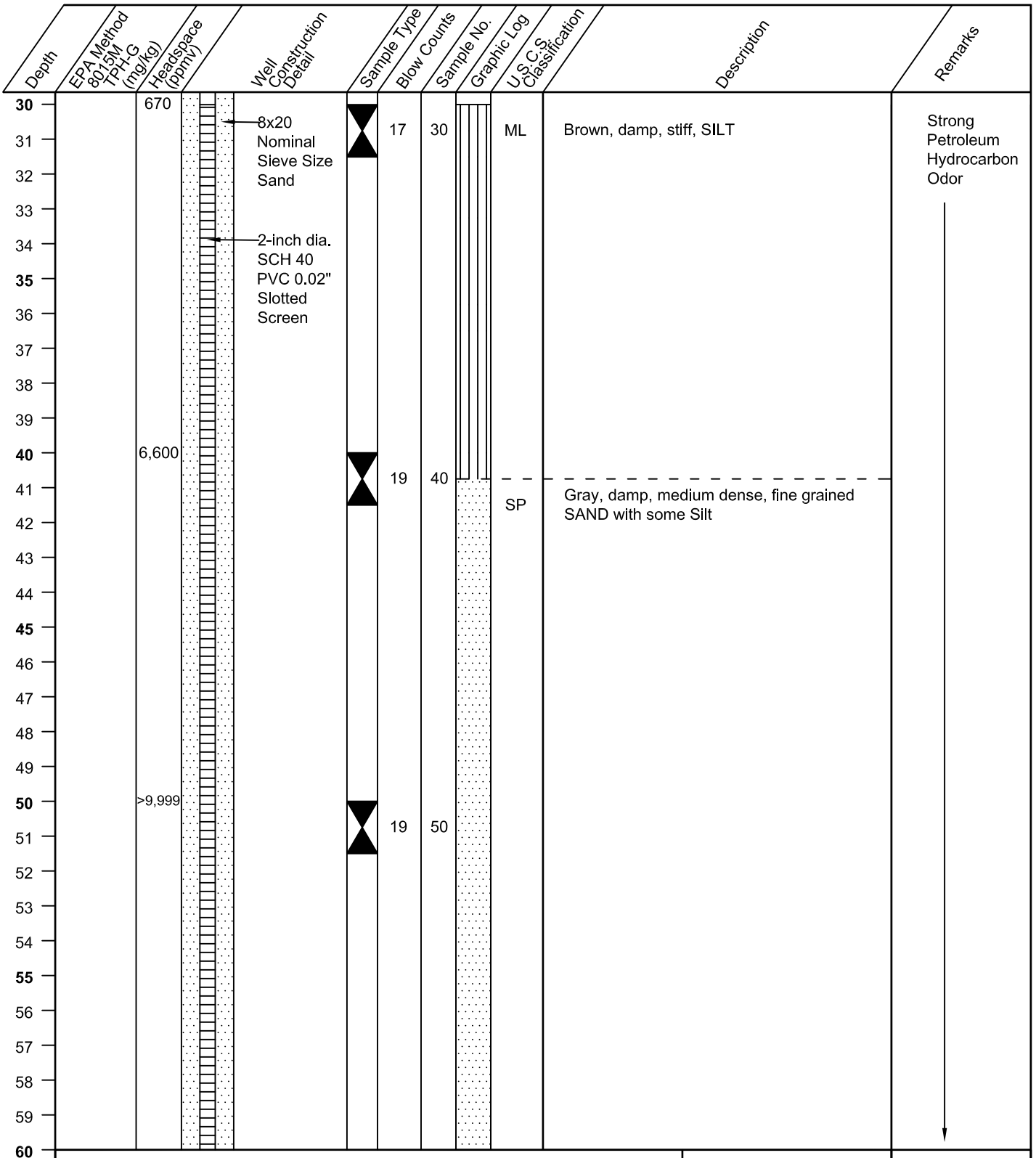
FREY ENVIRONMENTAL, INC.

Date drilled/completed	January 4, 2013	Boring depth	Approx. 61.5 feet BGS
Geologist	J. Moeller	Initial depth to water	Not Encountered
Drilling equipment	CME 85 w/ HSA	Static depth to water	Not Encountered
Surface elevation	TBD	Well screen depth	30 to 60 feet BGS
Top of casing elevation	TBD	Borehole diameter	8-inches



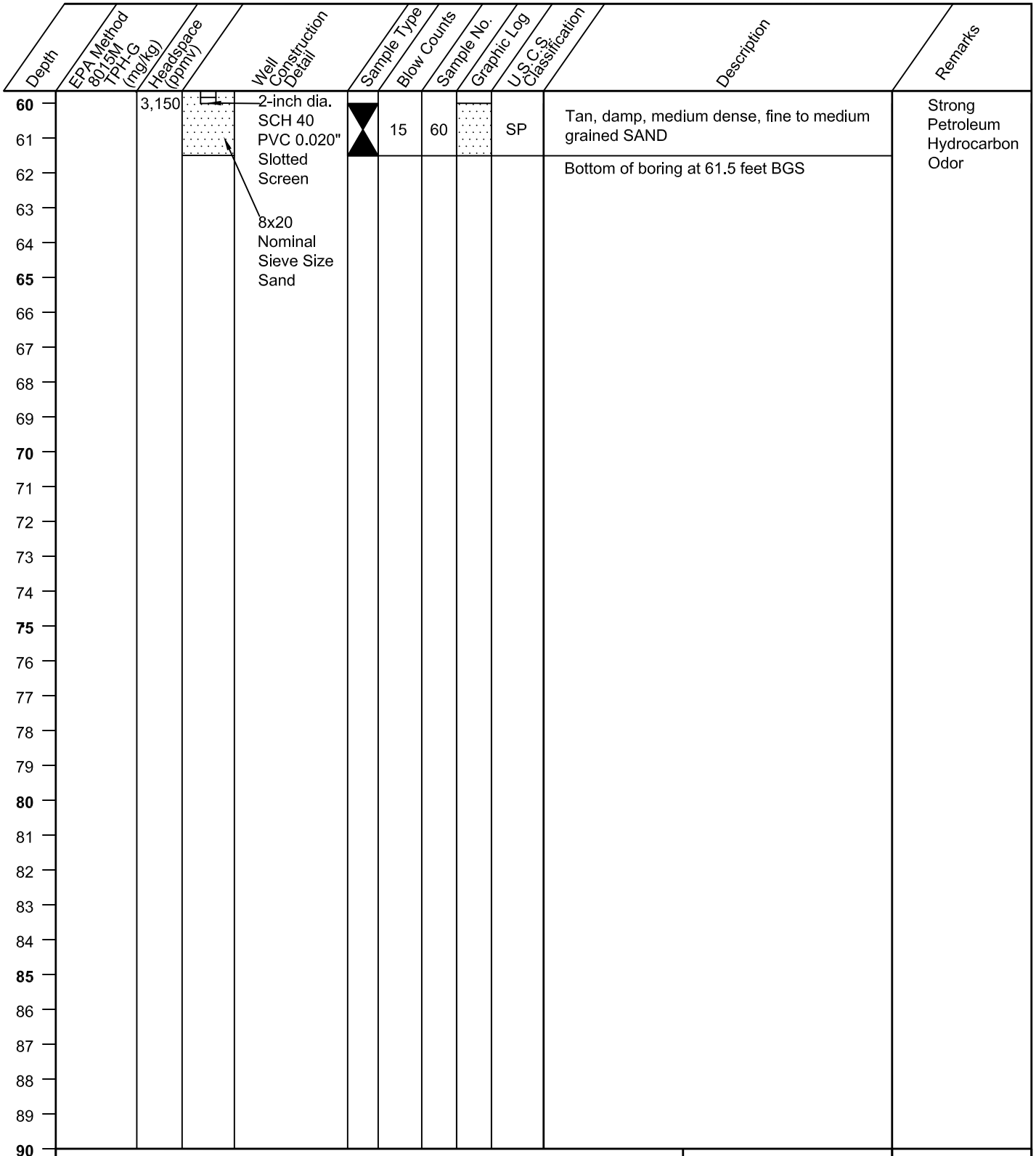
Project Name	**FORMER ANAHEIM CAR WASH**	Log of Boring	Figure No.
Project Number	**469-01**	**VE7**	1

FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CAR WASH	Log of Boring	Figure No.
Project Number	469-01	VE7	2

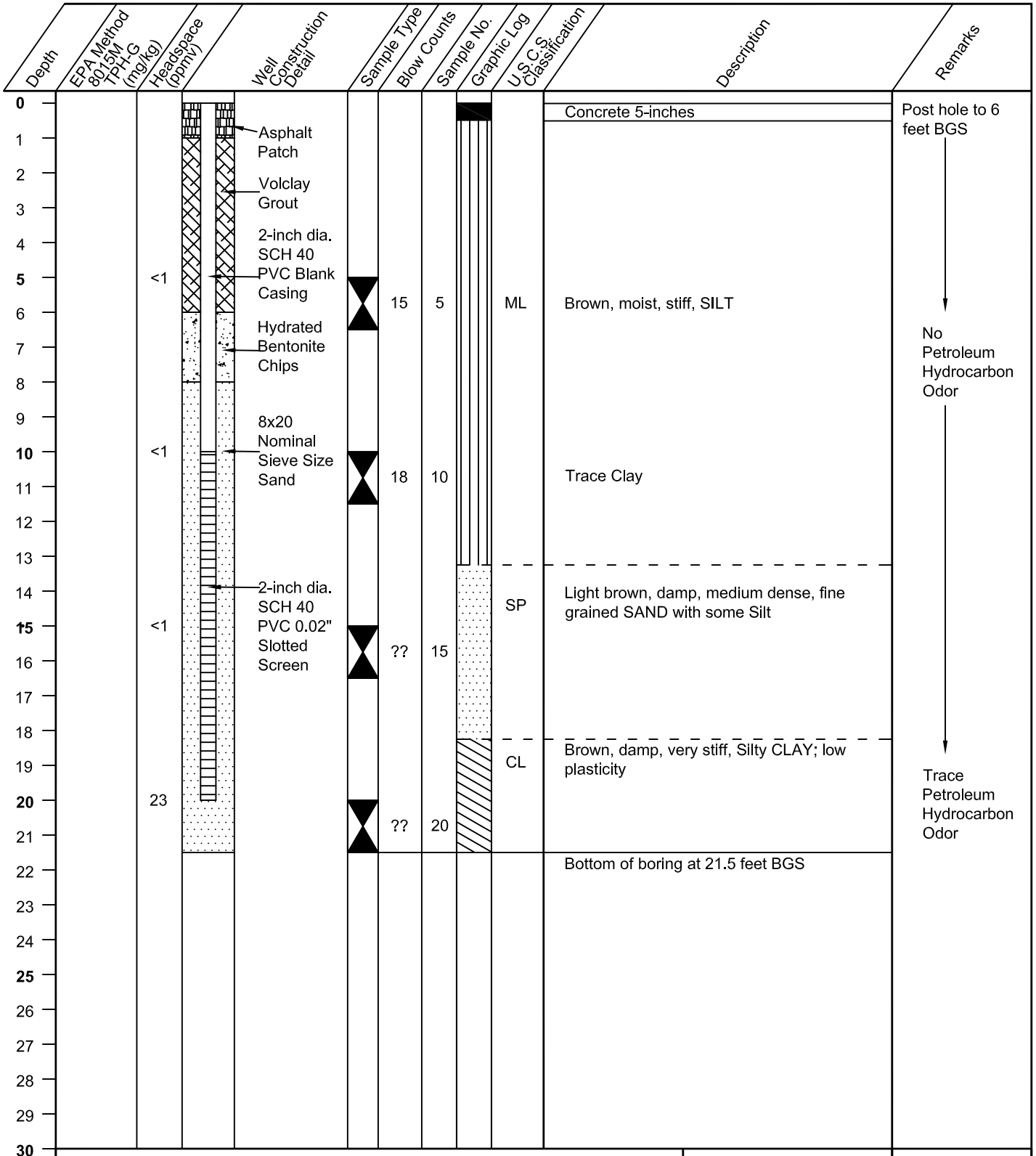
FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CAR WASH	Log of Boring	Figure No.
Project Number	469-01	VE7	3

FREY ***ENVIRONMENTAL, INC.***

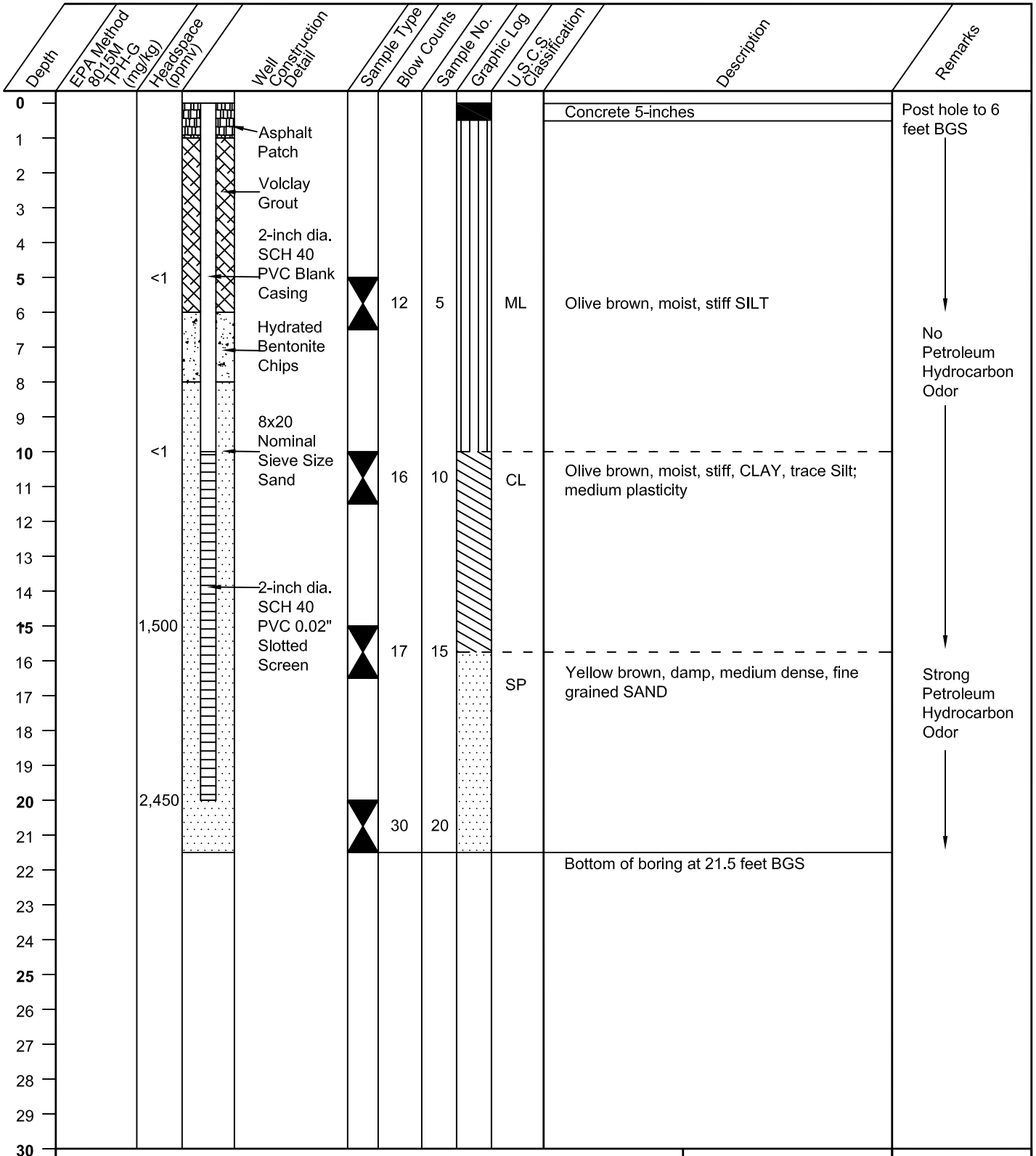
Date drilled/completed	January 4, 2013	Boring depth	Approx. 21.5 feet BGS
Geologist	J. Moeller	Initial depth to water	Not Encountered
Drilling equipment	CME 85 w/ HSA	Static depth to water	Not Encountered
Surface elevation	TBD	Well screen depth	10 to 20 feet BGS
Top of casing elevation	TBD	Borehole diameter	8-inches



Project Name	**FORMER ANAHEIM CAR WASH**	Log of Boring	Figure No.
Project Number	**469-01**	**VE8**	1

FREY ENVIRONMENTAL, INC.

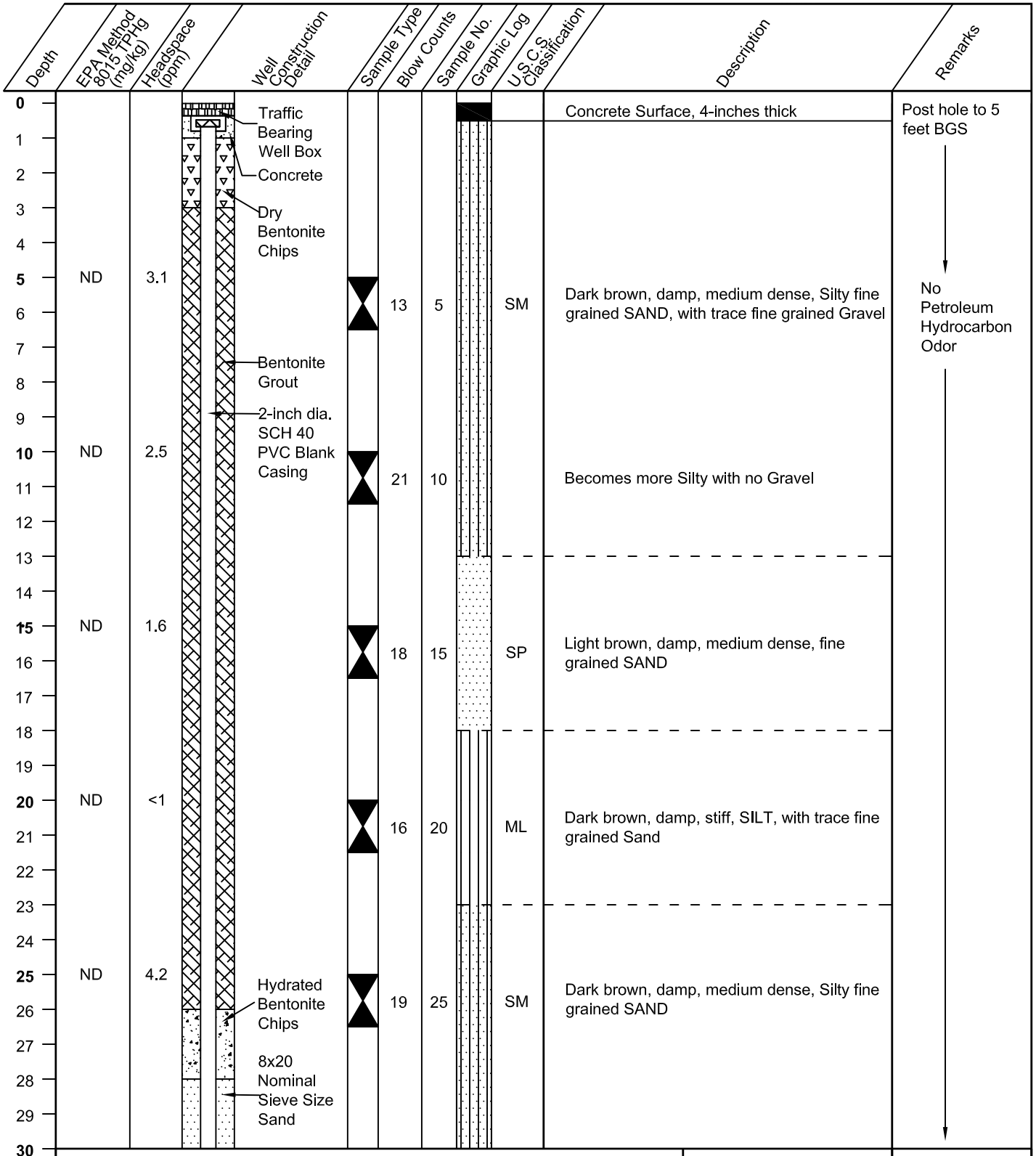
Date drilled/completed	January 4, 2013	Boring depth	Approx. 21.5 feet BGS
Geologist	J. Moeller	Initial depth to water	Not Encountered
Drilling equipment	CME 85 w/ HSA	Static depth to water	Not Encountered
Surface elevation	TBD	Well screen depth	10 to 20 feet BGS
Top of casing elevation	TBD	Borehole diameter	8-inches



Project Name	**FORMER ANAHEIM CAR WASH**	Log of Boring	Figure No.
Project Number	**469-01**	**VE9**	1

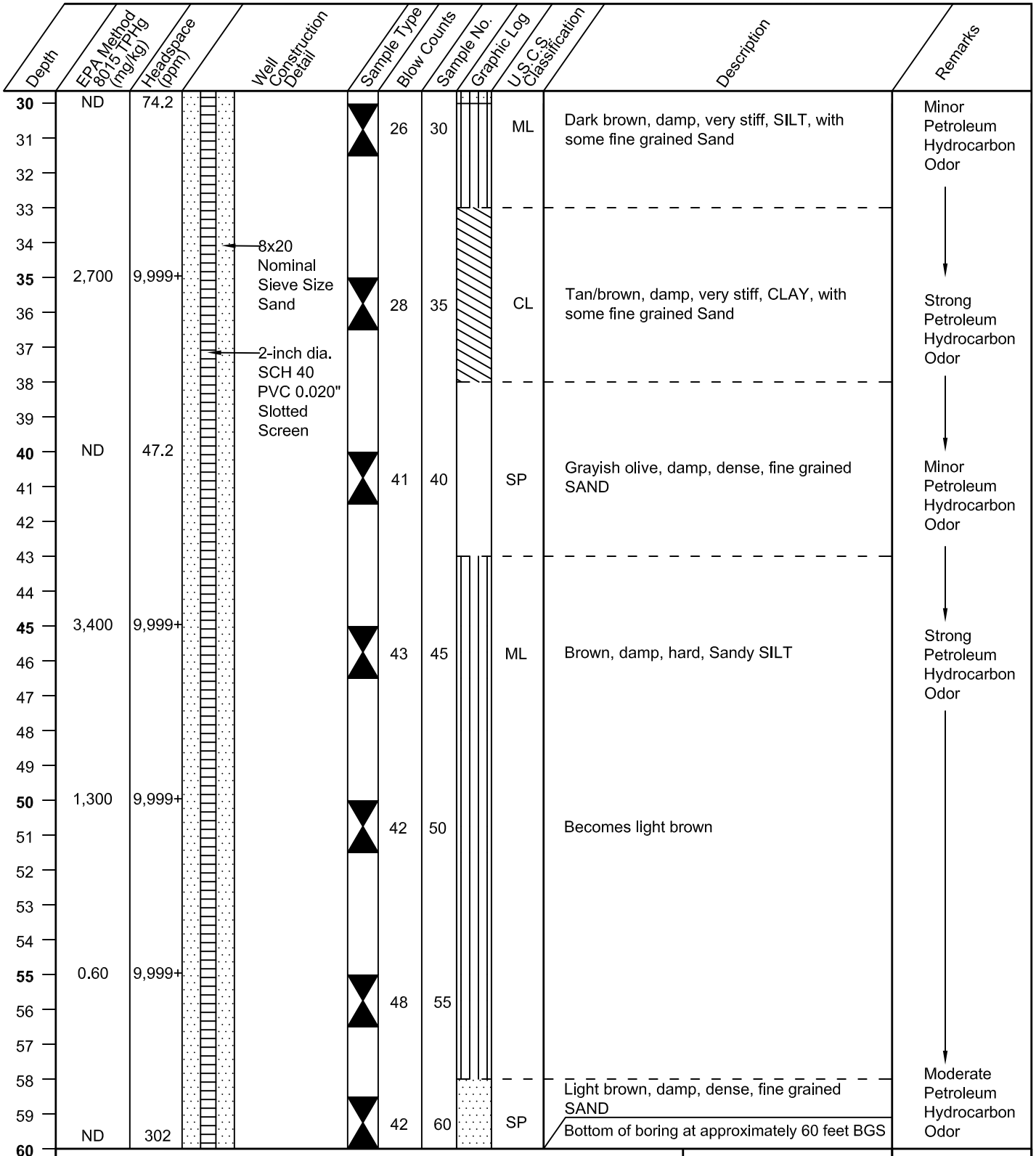
FREY ENVIRONMENTAL, INC.

Date drilled/completed	August 5, 2016	Boring depth	Approx. 60 feet BGS
Geologist	J. Song	Initial depth to water	Not Encountered
Drilling equipment	CME 75	Static depth to water	TBD
Surface elevation	146.60 feet amsl	Well screen depth	30 to 60 feet BGS
Top of casing elevation	146.29 feet amsl	Borehole diameter	8-inches



Project Name	FORMER ANAHEIM CARWASH	Log of Boring	Figure No.
Project Number	469-01	VE10	1

FREY ENVIRONMENTAL, INC.



Project Name	FORMER ANAHEIM CAR WASH	Log of Boring	Figure No.
Project Number	469-01	VE10	2

FREY ENVIRONMENTAL, INC.

APPENDIX H

VAPOR INFLUENT SAMPLING LABORATORY REPORT

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Report Date: 8/30/16
Lab Project Number: 16292
Client Project Number: 469-01

Dates Sampled: 8/23/16
Dates Received: 8/23/16
Dates Analyzed: 8/24/16
Sample Matrix: Vapor

Analyses Requested:

1. **EPA 8015M – TPH as Gasoline**
2. **EPA 8260B – Volatile Aromatic Compounds (BTEX) and Fuel Oxygenates**

Baseline received vapor samples collected from the project shown above. A Chain-of-Custody Record (COC) is attached.

The samples were analyzed for the parameters shown above per the COC. In this report, *Baseline* presents the results and a QA/QC summary for this analysis.

Approved
Brian K. Kato, Laboratory Manager

BASELINE ON-SITE ANALYSIS™

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Report Date: 8/30/16
Lab Project Number: 16292
Client Project Number: 469-01

Dates Sampled: 8/23/16
Dates Received: 8/23/16
Dates Analyzed: 8/24/16
Sample Matrix: Vapor

TPH as Gasoline (TPH-G), Volatile Aromatic Compounds (BTEX), and Fuel Oxygenates Results

Sample ID:		VE10 Start	VE10 Middle	VE10 End		Method Blank
Units:		PPMV	PPMV	PPMV		PPMV
Dilution Factor:		1	1	1		1
Compound Name	EPA Method					
TPH as Gasoline	8015M	170	310	370		ND<5.0
Volatile Organic Compounds						
Benzene	8260B	3.4	5.3	7.2		ND<0.050
Toluene	8260B	6.6	11	16		ND<0.050
Ethylbenzene	8260B	0.20	0.83	1.1		ND<0.050
Total Xylenes	8260B	1.2	10	15		ND<0.050
Fuel Oxygenates						
Methyl t-Butyl Ether (MTBE)	8260B	3.9	8.8	10		ND<0.050
t-Butanol (TBA)	8260B	ND<0.50	ND<0.50	ND<0.50		ND<0.50
Di-Isopropyl Ether (DIPE)	8260B	ND<0.050	ND<0.050	ND<0.050		ND<0.050
Ethyl t-Butyl Ether (ETBE)	8260B	ND<0.050	ND<0.050	ND<0.050		ND<0.050
t-Amyl Methyl Ether (TAME)	8260B	ND<0.050	ND<0.050	ND<0.050		ND<0.050
Ethanol	8260B	ND<5.0	ND<5.0	ND<5.0		ND<5.0

ND: Not detected at the indicated method detection limit; PPMV: Parts per Million by Volume

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Report Date: 8/30/16
Lab Project Number: 16292
Client Project Number: 469-01

Dates Sampled: 8/23/16
Dates Received: 8/23/16
Dates Analyzed: 8/24/16
Sample Matrix: Vapor

Quality Control Summary

Constituent:	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes
Method:	8015M	8260B	8260B	8260B	8260B	8260B
QC Parameter						
Result (PPMv)	370	10	7.2	16	1.1	15
Dup. Result (PPMv)	360	9.7	6.9	15	1.2	13
RPD (%)	3	3	4	8	6	11
QC Limits (%)	0-30	0-30	0-30	0-30	0-30	0-30

QC Sample ID: VE10 End

MS: Matrix Spike; MSD: Matrix Spike Duplicate; RPD: Relative Percent Difference
LCS/LCSD: Lab Control Sample/Duplicate

BASELINE ON-SITE ANALYSIS™

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report (Units: µg/L)

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Report Date: 8/30/16
Lab Project Number: 16292
Client Project Number: 469-01

Dates Sampled: 8/23/16
Dates Received: 8/23/16
Dates Analyzed: 8/24/16
Sample Matrix: Vapor

TPH as Gasoline (TPH-G), Volatile Organic Compounds (VOC's), and Fuel Oxygenates Results

Sample ID:		VE10 Start	VE10 Middle	VE10 End		Method Blank
Units:		µg/L	µg/L	µg/L		µg/L
Dilution Factor:		1	1	1		1
Compound Name	EPA Method					
TPH as Gasoline	8015M	590	1100	1300		ND<25
Volatile Organic Compounds						
Benzene	8260B	11	17	23		ND<0.30
Toluene	8260B	25	41	61		ND<0.30
Ethylbenzene	8260B	0.85	3.6	4.9		ND<0.30
Total Xylenes	8260B	5.4	45	63		ND<0.30
Fuel Oxygenates						
Methyl t-Butyl Ether (MTBE)	8260B	14	32	37		ND<0.30
t-Butanol (TBA)	8260B	ND<10	ND<10	ND<10		ND<10
Di-Isopropyl Ether (DIPE)	8260B	ND<2.0	ND<2.0	ND<2.0		ND<2.0
Ethyl t-Butyl Ether (ETBE)	8260B	ND<2.0	ND<2.0	ND<2.0		ND<2.0
t-Amyl Methyl Ether (TAME)	8260B	ND<2.0	ND<2.0	ND<2.0		ND<2.0
Ethanol	8260B	ND<50	ND<50	ND<50		ND<50

ND: Not detected at the indicated reporting limit; units of µg/L is equivalent to mg/m^3

FREY Environmental, Inc.	Project Name: ANAHEIM CARWASH
2817-A Lafayette Avenue	Project Address: ~~900~~ 900 W. Lincoln Ave.
Newport Beach, California 92663	Anaheim, CA 92805
Phone: 949.723.1645; FAX: 949.723.1854	Project Number: 469-01
Contact: Kent Tucker	

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Laboratory Project #: 16292

Sample ID	Sample Location	Sampling Date	Sampling Time	Lab ID	Soil (S), Water (W), Vapor (V)	Number of Containers	Requested Analyses: 8015 (G)	Requested Analyses: 8260B VOCs	Comments
VE10 - Start		8/23/16	6:56		V	1	X	X	
VE10 - Middle		8/23/16	~~11~~:56		V	1	X	X	
VE10 - End		8/23/16	4:55		V	1	X	X	

1. Relinquished by

signature: X

Date/Time: 8-23-16

2. Received by

signature: X

Date/Time: 8/23/16, 1930

3. Relinquished by

signature: X

Date/Time:

4. Received by

signature: X

Date/Time:

Turnaround Time:

Special Instructions/Notes:

Sample Condition: Sealed? Y / N

Chilled? Y / N

BASELINE ON-SITE ANALYSIS™

P. O. Box 2243
Huntington Beach, California 92647

Telephone: (714) 273-2955

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Report Date: 8/30/16
Lab Project Number: 16293
Client Project Number: 469-01

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Dates Sampled: 8/24/16
Dates Received: 8/25/16
Dates Analyzed: 8/25/16
Sample Matrix: Vapor

Analyses Requested:

1. **EPA 8015M – TPH as Gasoline**
2. **EPA 8260B – Volatile Aromatic Compounds (BTEX) and Fuel Oxygenates**

Baseline received vapor samples collected from the project shown above. A Chain-of-Custody Record (COC) is attached.

The samples were analyzed for the parameters shown above per the COC. In this report, *Baseline* presents the results and a QA/QC summary for this analysis.

Brian K. Kato

Approved
Brian K. Kato, Laboratory Manager

BASELINE ON-SITE ANALYSIS™

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Report Date: 8/30/16
Lab Project Number: 16293
Client Project Number: 469-01

Dates Sampled: 8/24/16
Dates Received: 8/25/16
Dates Analyzed: 8/25/16
Sample Matrix: Vapor

TPH as Gasoline (TPH-G), Volatile Aromatic Compounds (BTEX), and Fuel Oxygenates Results

Sample ID:		VE10 Start	VE10 Middle	VE10 End		Method Blank
Units:		PPMV	PPMV	PPMV		PPMV
Dilution Factor:		1	1	1		1
Compound Name	EPA Method					
TPH as Gasoline	8015M	250	430	570		ND<5.0
Volatile Organic Compounds						
Benzene	8260B	5.3	3.4	4.1		ND<0.050
Toluene	8260B	8.2	5.3	5.6		ND<0.050
Ethylbenzene	8260B	0.22	0.25	0.94		ND<0.050
Total Xylenes	8260B	1.5	3.2	2.1		ND<0.050
Fuel Oxygenates						
Methyl t-Butyl Ether (MTBE)	8260B	11	7.4	7.2		ND<0.050
t-Butanol (TBA)	8260B	ND<0.50	ND<0.50	ND<0.50		ND<0.50
Di-Isopropyl Ether (DIPE)	8260B	ND<0.050	ND<0.050	ND<0.050		ND<0.050
Ethyl t-Butyl Ether (ETBE)	8260B	ND<0.050	ND<0.050	ND<0.050		ND<0.050
t-Amyl Methyl Ether (TAME)	8260B	ND<0.050	ND<0.050	ND<0.050		ND<0.050
Ethanol	8260B	ND<5.0	ND<5.0	ND<5.0		ND<5.0

ND: Not detected at the indicated method detection limit; PPMV: Parts per Million by Volume

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Report Date: 8/30/16
Lab Project Number: 16293
Client Project Number: 469-01

Dates Sampled: 8/24/16
Dates Received: 8/25/16
Dates Analyzed: 8/25/16
Sample Matrix: Vapor

Quality Control Summary

Constituent:	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes
Method:	8015M	8260B	8260B	8260B	8260B	8260B
QC Parameter						
Result (PPMv)	570	7.2	4.1	5.6	0.94	2.1
Dup. Result (PPMv)	550	6.9	4.0	5.3	0.87	1.9
RPD (%)	4	4	2	5	8	8
QC Limits (%)	0-30	0-30	0-30	0-30	0-30	0-30

QC Sample ID: VE10 End

MS: Matrix Spike; MSD: Matrix Spike Duplicate; RPD: Relative Percent Difference
LCS/LCSD: Lab Control Sample/Duplicate

BASELINE ON-SITE ANALYSIS™

Baseline Analytical Services
P. O. Box 2243
Huntington Beach, CA 92647 Telephone: 714.273.2955

Laboratory Report (Units: µg/L)

Client: FREY Environmental, Inc.
Client Address: 2817-A Lafayette Avenue
Newport Beach, California 92663

Project Name: Anaheim Car Wash
Project Address: 900 N. Lincoln Avenue
Anaheim, California
Contact: Kent Tucker

Report Date: 8/30/16
Lab Project Number: 16293
Client Project Number: 469-01

Dates Sampled: 8/24/16
Dates Received: 8/25/16
Dates Analyzed: 8/25/16
Sample Matrix: Vapor

TPH as Gasoline (TPH-G), Volatile Organic Compounds (VOC's), and Fuel Oxygenates Results

Sample ID:		VE10 Start	VE10 Middle	VE10 End		Method Blank
Units:		µg/L	µg/L	µg/L		µg/L
Dilution Factor:		1	1	1		1
Compound Name	EPA Method					
TPH as Gasoline	8015M	870	1500	2000		ND<25
Volatile Organic Compounds						
Benzene	8260B	17	11	13		ND<0.30
Toluene	8260B	31	20	21		ND<0.30
Ethylbenzene	8260B	0.94	1.1	4.1		ND<0.30
Total Xylenes	8260B	6.5	14	8.9		ND<0.30
Fuel Oxygenates						
Methyl t-Butyl Ether (MTBE)	8260B	41	27	26		ND<0.30
t-Butanol (TBA)	8260B	ND<10	ND<10	ND<10		ND<10
Di-Isopropyl Ether (DIPE)	8260B	ND<2.0	ND<2.0	ND<2.0		ND<2.0
Ethyl t-Butyl Ether (ETBE)	8260B	ND<2.0	ND<2.0	ND<2.0		ND<2.0
t-Amyl Methyl Ether (TAME)	8260B	ND<2.0	ND<2.0	ND<2.0		ND<2.0
Ethanol	8260B	ND<50	ND<50	ND<50		ND<50

ND: Not detected at the indicated reporting limit; units of µg/L is equivalent to mg/m^3

FREY Environmental, Inc.	Project Name: Anaheim Carwash
2817-A Lafayette Avenue	Project Address:
Newport Beach, California 92663	
Phone: 949.723.1645; FAX: 949.723.1854	Project Number: 469-01
Contact: Kent Tucker	

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Laboratory Project #: 16293

Sample ID	Sample Location	Sampling Date	Sampling Time	Lab ID	Soil (S), Water (W), Vapor (V)	Number of Containers	Requested Analyses: 8015 (G)	Requested Analyses: 8260 (B) BTEX + Oxys	Comments
VE10 Start		8-24-16	6:01		V	1	X	X	
VE10 Middle		↓	11:00		↓	↓	↓	↓	
VE10 End		↓	5:00		↓	↓	↓	↓	

1. Relinquished by	2. Received by	Turnaround Time:
signature: X	signature: X	Special Instructions/Notes:
Date/Time: 8-24-16	Date/Time: 8/25/16 1:44	
3. Relinquished by	4. Received by	
signature: X	signature: X	Sample Condition: Sealed? Y / N; Chilled? Y / N
Date/Time:	Date/Time:	

BASELINE ON-SITE ANALYSIS™
P. O. Box 2243
Huntington Beach, California 92647
Telephone: (714) 273-2955

APPENDIX I

LTCP CHECKLIST

Site Name: FORMER ANAHEIM CARWASH
Site Address: 900 W. LINCOLN AV., ANAHEIM

Site meets the criteria of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.[1]

General Criteria General criteria that must be satisfied by all candidate sites:	
Is the unauthorized release located within the service area of a public water system?	☒ Yes ☐ No
Does the unauthorized release consist only of petroleum?	☒ Yes ☐ No
Has the unauthorized ("primary") release from the UST system been stopped?	☒ Yes ☐ No
Has free product been removed to the maximum extent practicable?	☒ Yes ☐ No ☐ NA
Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?	☒ Yes ☐ No
Has secondary source been removed to the extent practicable?	☒ Yes ☐ No
Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?	☒ Yes ☐ No
Does nuisance as defined by Water Code section 13050 exist at the site?	☐ Yes ☒ No
Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?	☐ Yes ☒ No
Media-Specific Criteria Candidate sites must satisfy all three of these media-specific criteria: **1. Groundwater:** To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:	
Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?	☐ Yes ☐ No ☒ NA
Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites?	☐ Yes ☐ No ☒ NA
If YES, check applicable class: ☐ **1** ☐ **2** ☐ **3** ☐ **4** ☐ **5**	

[1] Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

Site Name: FORMER ANAHEIM CARWASH
Site Address: 900 W. LINCOLN AV., ANAHEIM

For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?	☐ Yes ☒ No ☐ NA
2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies. **Is the site an active commercial petroleum fueling facility?** Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk.	☐ Yes ☒ No
a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4? If YES, check applicable scenarios: ☒ **1** ☒ **2** ☒ **3** ☐ **4**	☒ Yes ☐ No ☐ NA
b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?	☐ Yes ☐ No ☒ NA
c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?	☐ Yes ☐ No ☒ NA
3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c).	
a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?	☒ Yes ☐ No ☐ NA
b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?	☐ Yes ☐ No ☒ NA
c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?	☐ Yes ☐ No ☒ NA

APPENDIX J

EXAMPLE CALCULATION
OF PETROLEUM HYDROCARBON MASS REMOVAL

EXAMPLE CALCULATIONS OF PETROLEUM HYDROCARBON MASS REMOVAL

The estimated hydrocarbon removal rate from wells used for vapor extraction can be calculated using the formula:

R = C Q where;
R= Removal Rate (mg/min)
C = Concentration (mg/l)
Q = Flow Rate (l/min)

Average Influent Concentration (C) - Conversion from ppmv to mg/l

The [mg/l] and [ppm gasoline] units are related by the equation:

$$C\text{= (mg/l)} = \frac{\text{(ppmv gasoline)(100,000 mg gasoline/mole gasoline)(1E-6)}}{\text{(0.0821-atm/deg. K-mole)(298 deg. K)}}$$

ppmv	mg/l
350	1.431

Measured Flow Rate (Q) - Conversion from CFM to liters/min

CFM	liters/min
161	4,559

Calculated Removal Rate (R=CQ) -

R= **6,522** mg/min
9.39 kg/day
20.66 lbs/day
3.42 gallons/day
0.86 lbs/hour

Given:
1 gallon gasoline = 6.05 pounds (avg.)
1 kilogram = 2.2 pounds
Q = 220 CFM = 6,230 liters/min

Example Estimation of Total Mass Removed for a Given Operation Period:

For Operation Period = 20 Hours

17	**lbs removed in**	**20**	**hours**
3	**Gal removed in**	**20**	**hours**