PACIFIC
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February 15, 2010

Ms. Barbara Jakub
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: **Site Investigation Report**

Site: **76 Station No. 5191**
449 Hegenberger Road
Oakland, California
Fuel Leak Case No. RO0000219

Dear Ms. Jakub;

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call:

Liz Bermudez
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Sincerely,

PACIFIC CONVENIENCE & FUEL

Liz Bermudez

LIZ BERMUDEZ
Senior Paralegal

Attachment

February 15, 2010

Ms. Barbara Jakub
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Site Investigation Report
76 Station No. 5191
449 Hegenberger Road
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DELTA

Dear Ms. Jakub:

Delta Consultants (Delta), has prepared this report presenting the results of the advancement of two borings at the above-referenced site. The work was performed as proposed in our *Work Plan – Additional Site Assessment* dated June 4, 2009, as requested by the Alameda County Health Care Services Agency (ACHCSA) in a letter dated April 3, 2009. A copy of the letter is presented as Attachment A.

The investigation consisted of the advancement of two borings (B-4 and B-5) advance to depths of 20 feet below ground surface (bgs) and 32 feet bgs, respectively, to assess the potential petroleum hydrocarbon impact to the soil and groundwater in the vicinity of former monitoring wells MW-1 and MW-2 at the site located at 449 Hegenberger Road, Oakland, California. The site location is shown on Figure 1.

SITE DESCRIPTION

The site is an active 76 station located on the southwest corner of Hegenberger Road and Edgewater Drive in Oakland, California. The site contains four fuel dispensers on two islands under a single canopy, three fuel underground storage tanks (USTs) on the north side of the site, a carwash facility on the west side of the property, and a station building in the central portion of the site. The current site features are shown on Figure 2.

PREVIOUS ASSESSMENT

October 1991 - Four soil samples were collected from the product pipe trenches at depths of approximately 3 feet below ground surface (bgs) during a dispenser island modification. The

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product pipe trenches were subsequently excavated to the groundwater depth at 4 to 4.5 feet bgs.

February 1992 - Three monitoring wells, MW-1 through MW-3, were installed at the site to depths ranging from 13.5 to 15 feet bgs.

August 1992 - Three additional monitoring wells, MW-4 through MW-6, were installed at the site to a depth of 13.5 feet bgs.

September 1994 - One 280-gallon waste-oil UST was removed from the site. The UST was made of steel, and no apparent holes or cracks were observed in the UST. One soil sample was collected from beneath the former UST at a depth of approximately 9 feet bgs. No petroleum hydrocarbons were reported.

January 1995 - Two additional monitoring wells, MW-7 and MW-8, were installed off-site to the south and east on the neighboring property to a depth of 13 feet bgs. In addition, two existing monitoring wells were destroyed in order to accommodate the construction of a car wash at the site. Monitoring wells MW-4 and MW-5 were fully drilled out and backfilled with neat cement.

March 1995 - Two 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST were removed from the site. Groundwater was encountered in the tank cavity at a depth of approximately 8.5 feet bgs. Soil samples contained total petroleum hydrocarbons as diesel (TPHd) and benzene, and TPH as gasoline (TPHg). Approximately 125,000 gallons of groundwater were pumped from the site for remediation and properly disposed off-site. Four dispenser islands and associated product piping were also removed. Based on the results of the confirmation samples, the product dispenser islands were over excavated to approximately 6 feet bgs. Soil analytical results are presented in Table 1.

March-April 1995 - During demolition activities of the former station building, soil samples were collected from two excavations, which were subsequently over excavated. Confirmation samples contained petroleum hydrocarbons. An additional area on the south side of the former station building was excavated based on photoionization detector (PID) readings. Two monitoring wells, MW-1 and MW-2, were destroyed in order to allow for over excavation activities to extend to an area adjacent to the dispenser islands in the southeastern quadrant of the site. The excavated areas were subsequently backfilled with clean-engineered fill. Soil analytical results are presented in Table 1.

April 1997 - Two additional monitoring wells, MW-9 and MW-10, were installed to depths of 13 and 15 feet bgs. In addition, monitoring well MW-3, which was damaged during the UST cavity over excavation in 1995, was fully drilled out and reconstructed in the same borehole. Soil analytical results are presented in Table 1.

October 2003 - Site environmental consulting responsibilities were transferred to TRC.

April 8-9, 2005 - TRC conducted a 24-hour dual phase extraction (DPE) test at the site using monitoring well MW-6. The 24-hour DPE test was moderately successful at removing vapor-phase petroleum hydrocarbons from the subsurface; therefore, TRC recommended DPE no longer be considered a viable remedial alternative for the site.

October 2007 - Site environmental consulting responsibilities were transferred to Delta Consultants.

SENSITIVE RECEPTORS

April 24, 2006 TRC completed a sensitive receptor survey for the site. According to the Department of Water Resources (DWR) records, three water supply wells are located within one-half mile of the site. In addition, two surface water bodies were observed within a one-half mile radius of the site. San Leandro Creek is located approximately 1,400 feet southwest of the site and flows into the San Leandro Bay. Elmhurst Creek is located approximately 2,220 feet north of the site and also flows into the San Leandro Bay.

SITE GEOLOGY AND HYDROGEOLOGY

The site is underlain by Holocene-age Bay Mud. The Bay Mud typically consists of unconsolidated, saturated clay and sandy clay that is rich in organic material. The Bay Mud locally contains lenses and stringers of well-sorted silt, sand, gravel, and beds of peat.

The most recent monitoring and sampling event was conducted at the site on December 17, 2009. The measured depth to groundwater ranged from 1.52 feet to 3.14 feet below top of casing (TOC). The groundwater flow direction was southwest with a hydraulic gradient of 0.008 foot per foot.

SITE INVESTIGATION

Pre-Field Activities

A utility survey was conducted prior to the field investigation. Underground Services Alert (USA) was notified prior to drilling and a private utility locator was retained to minimize the risk of damage to underground utilities. Additionally, the first five feet of each boring was cleared using an air-knife to further minimize the risk of damage to underground utilities.

Delta prepared a site-specific Health and Safety Plan (HASP) in accordance with Title 8, Section 5192 of the California Code of Regulations. The HASP contained a list of emergency contacts, as well as a hospital route map to the nearest emergency facility.

A drilling permit was obtained from the Alameda County Public Works Agency (ACPWA) prior to drilling. A copy of the drilling permit is presented as Attachment B.

Utility Survey

On December 17, 2009, Cruz Brothers Locators, under the supervision of Delta field staff, conducted a site utility survey. The survey was conducted in order to assess the location and approximate depth of on-site underground utilities. Underground utilities can act as preferential pathways for groundwater. Utility locations and approximate depths are shown on Figure 3.

Boring Advancement

On December 17, 2009, Gregg Drilling (Gregg), under supervision of a Delta field geologist, advanced two borings (B-4 and B-5). The borings were advanced to a depth

of 20 feet bgs (B-4) and 32 feet bgs (B-5) using a direct push-rig equipped with 2-inch diameter push rods. The soils encountered in the borings were logged using the Unified Soil Classification System (USCS) for lithologic interpretation and field screened using a pre-calibrated PID. Soil samples were collected for lithologic interpretation and field screened continuously beginning at 5 feet bgs. Grab-groundwater samples were collected from each boring. Copies of the boring logs are presented as Attachment C. The boring locations are shown on Figure 2.

Soil samples collected at depths of approximately 6, 15, and 20 feet bgs from boring B-4 and at depths of approximately 8, 17.5, 26.5, and 32 feet bgs from boring B-5 were retained for laboratory analysis. The seven soil samples collected and submitted for analysis from the two borings were analyzed by Pace Analytical Services, Inc. (PACE) in Seattle Washington a State-certified laboratory for TPHd by Environmental Protection Agency (EPA) Method 8015B and silica gel treated, TPHg by EPA Method 8015B, benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary amyl-methyl ether (TAME), tertiary-butyl alcohol (TBA), 1,2-dichloroethane (1,2-DCA), ethylene di-bromide (EDB), and ethanol by EPA Method 8260. Soil analytical results are presented in Table 1.

Disposal of Drill Cuttings and Wastewater

Drill cuttings were placed into properly labeled 55-gallon Department of Transportation (DOT) approved steel drums and temporarily stored on-site. Samples of the drill cuttings were collected, properly labeled, placed on ice, and transported to PACE with chain-of-custody documentation. The samples were analyzed for TPHg, BTEX and MTBE by EPA Method 8260, and total lead by EPA Method 6010B. The drummed drill cuttings are currently being profiled for transportation to and disposal at an approved facility. The laboratories analytical report is presented as Attachment D.

RESULTS OF THE INVESTIGATION

Soil Sampling

The subsurface materials encountered in the borings consisted of predominately clay, with some sand, and occasional silt and gravel. A copy of the boring logs is presented as Attachment C. A geologic cross-section is presented as Figure 4.

Contaminants of Concern

- **TPHg**: TPHg was above the laboratory's indicated reporting limit in the soil samples collected and submitted for analysis from borings B-4 at 6 feet bgs at a concentration of 20.4 milligrams per kilogram (mg/kg) and B-5 at 8 feet bgs, 17.5 feet bgs, and 26.5 feet bgs at concentrations of 1,060 mg/kg, 136 mg/kg, and 1,570 mg/kg, respectively.

- **TPHd**: TPHd was above the laboratory's indicated reporting limit in the soil samples collected and submitted for analysis from borings B-4 at 6 feet bgs at a concentration of 11.4 mg/kg (10.1 mg/kg silica gel) and B-5 at 8 feet bgs, 17.5 feet bgs, and 26.5 feet bgs at concentrations of 285 mg/kg (269 mg/kg silica gel), 27.8 mg/kg (26.9 mg/kg silica gel), and 338 mg/kg (346 mg/kg silica gel), respectively.

- **Benzene:** Benzene was above the laboratory's indicated reporting limit in the soil samples collected and submitted for analysis from borings B-4 at 6 feet bgs and 15 feet bgs at concentrations of 0.046 mg/kg and 0.0036 mg/kg, respectively, and B-5 at 8 feet bgs, 17.5 feet bgs, 26.5 feet bgs, and 32 feet bgs at concentrations of 6.2 mg/kg, 0.55 mg/kg, 16.2 mg/kg, and 0.007 mg/kg, respectively.

- **MTBE:** MTBE was above the laboratory's indicated reporting limit in soil samples collected and submitted for analysis from borings B-4 at 6 feet bgs and 15 feet bgs at concentrations of 0.061 mg/kg and 0.0081 mg/kg, respectively, and B-5 at 26.5 feet bgs at a concentration of 0.02 mg/kg.

Additionally, toluene was above the laboratory's indicated reporting limits in the soil samples collected and submitted for analysis from borings B-4 and B-5 with a maximum concentration of 73.5 mg/kg (B-5 at 26.5 feet bgs). Ethylbenzene was above the laboratory's indicated reporting limits in soil samples collected and submitted for analysis from borings B-4 and B-5 with a maximum concentration of 52.8 mg/kg (B-5 at 26.5 feet bgs). Total xylenes were above the laboratory's indicated reporting limits in soil samples collected and submitted for analysis from borings B-4 and B-5 with a maximum concentration of 255 mg/kg (B-5 at 26.5 feet bgs). TBA was above the laboratory's indicated reporting limits in soil samples collected and submitted for analysis from B-4 and B-5 with a maximum concentration of 0.11 mg/kg (B-5 at 26.5 feet bgs). TAME was above the laboratory's indicated reporting limits in the soil sample collected and submitted for analysis from boring B-5 at 6 feet bgs at a concentration of 0.068 mg/kg. Soil analytical results are presented in Table 1. The laboratories analytical report is presented as Attachment D.

Groundwater Sampling

Grab-groundwater samples were collected and retained for laboratory analysis at a depth of 20 feet bgs from boring B-4 and at depths of 20 feet bgs and 32 feet bgs from boring B-5. The groundwater samples collected and submitted for analysis were analyzed by PACE for TPHd by EPA Method 8015B and silica gel treated, TPHg by EPA Method 8015B, BTEX, MTBE, DIPE, ETBE, TAME, TBA, 1,2-DCA, EDB, and ethanol by EPA Method 8260. Groundwater analytical results are presented in Table 2.

Contaminants of Concern

- **TPHg:** TPHg was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from borings B-4 at a concentration of 97,100 micrograms per liter (µg/L) and B-5 at 20 feet bgs and 32 feet bgs at concentrations of 23,500,000 µg/L and 422,000 µg/L, respectively.

- **TPHd**: TPHd was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from borings B-4 at a concentration of 11,300 µg/L (13,500 µg/L silica gel treated) and B-5 at 20 and 32 feet bgs at concentrations of 19,900,000 µg/L (20,400,000 µg/L silica gel treated) and 294,000 µg/L (291,000 µg/L silica gel treated), respectively.

- **Benzene:** Benzene was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from borings B-4 at a

concentration of 6,960 µg/L and B-5 at 20 and 32 feet bgs at concentrations of 324,000 µg/L and 8,100 µg/L, respectively.

- **MTBE:** MTBE was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from borings B-4 at a concentration of 241 µg/L and B-5 at 32 feet bgs at a concentration of 632 µg/L.

Additionally, toluene was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from borings B-4 and B-5 at a maximum concentration of 1,050,000 µg/L (B-5 at 20 feet bgs). Ethyl-benzene was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from borings B-4 and B-5 at a maximum concentration of 918,000 µg/L (B-5 at 20 feet bgs). Total xylenes were above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from borings B-4 and B-5 at a maximum concentration of 4,120,000 µg/L (B-5 at 20 feet bgs). TBA was above the laboratory's indicated reporting limit in the groundwater sample collected from B-4 at an estimated concentration of 167 µg/L. 1,2-DCA was above the laboratory's indicated reporting limit in the groundwater sample collected and submitted for analysis from boring B-5 at 32 feet bgs at a concentration of 511 µg/L. The groundwater analytical results are presented in Table 2.

DISCUSSION

In borings B-4 and B-5 first water was encountered at depths ranging from 3 feet bgs to 5 feet bgs; however, static water levels were measured at depths of 13 feet bgs and 18 feet bgs, respectively. This may indicate perched water is present at 3 feet bgs to 5 feet bgs.

As indicated above a utility survey was conducted during this investigation. Based on the information obtained from this utility survey the underground utilities beneath the site may be acting as a preferential pathway for the dissolved phase petroleum hydrocarbons in the groundwater. However, based on the elevated concentrations reported in the groundwater samples collected and submitted for analysis from boring B-5 and the concentrations reported in monitoring well MW-10 this does not appear to be true. There is an electrical line in close proximity to boring B-5 and monitoring well MW-10; however, the reported petroleum hydrocarbon concentrations do not appear to indicate a preferential pathway between the two. Utility locations and approximate depths are shown on Figure 3.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical results from the soil samples collected during this investigation it appears that the soil has been vertically assessed in the vicinity of these two borings. In boring B-4, petroleum hydrocarbon impacted soil was reported above 15 feet bgs and in boring B-5 petroleum hydrocarbon impacted soil was reported above 32 feet bgs.

Analytical results from the groundwater samples collected from borings B-4 and B-5 contained elevated concentrations of TPHd, TPHg, BTEX, and MTBE with some TBA and 1,2-DCA. The elevated concentrations of benzene, toluene, ethylbenzene, and total

xylenes and the lower concentrations of MTBE and TBA appear to indicate that this is an old release.

Based on the elevated concentrations of petroleum hydrocarbons reported in the groundwater and the notations in the boring logs it appears that there is currently separate phase hydrocarbons in the groundwater beneath the site. Therefore, Delta recommends that four monitoring wells be installed, one in the vicinity of each of the two borings (B-4 and B-5), one in the southeast corner of the site, and one in Hegenberger Road, east of the site. This additional investigation is necessary to assess the horizontal extent of impacted soil and groundwater in the vicinity of the site, the presence of a perched water table, and the possibility of preferential pathways transporting the impacted groundwater. Therefore, Delta recommends that a work plan be prepared, under a separate cover outlining the additional site investigation.

REMARKS/SIGNATURES

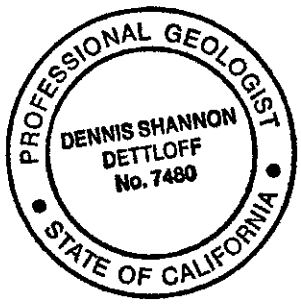
The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report will be performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no expressed or implied warranty as to the contents of this report.

If you have any questions regarding this project, please contact Dennis Dettloff at (916) 503-1261.

Sincerely,
DELTA CONSULTANTS

FOR
Edward T. Weyrens, G.I.T.
Staff Geologist

Dennis S. Dettloff, P.G.
Senior Project Manager
California Registered Professional Geologist No. 7480

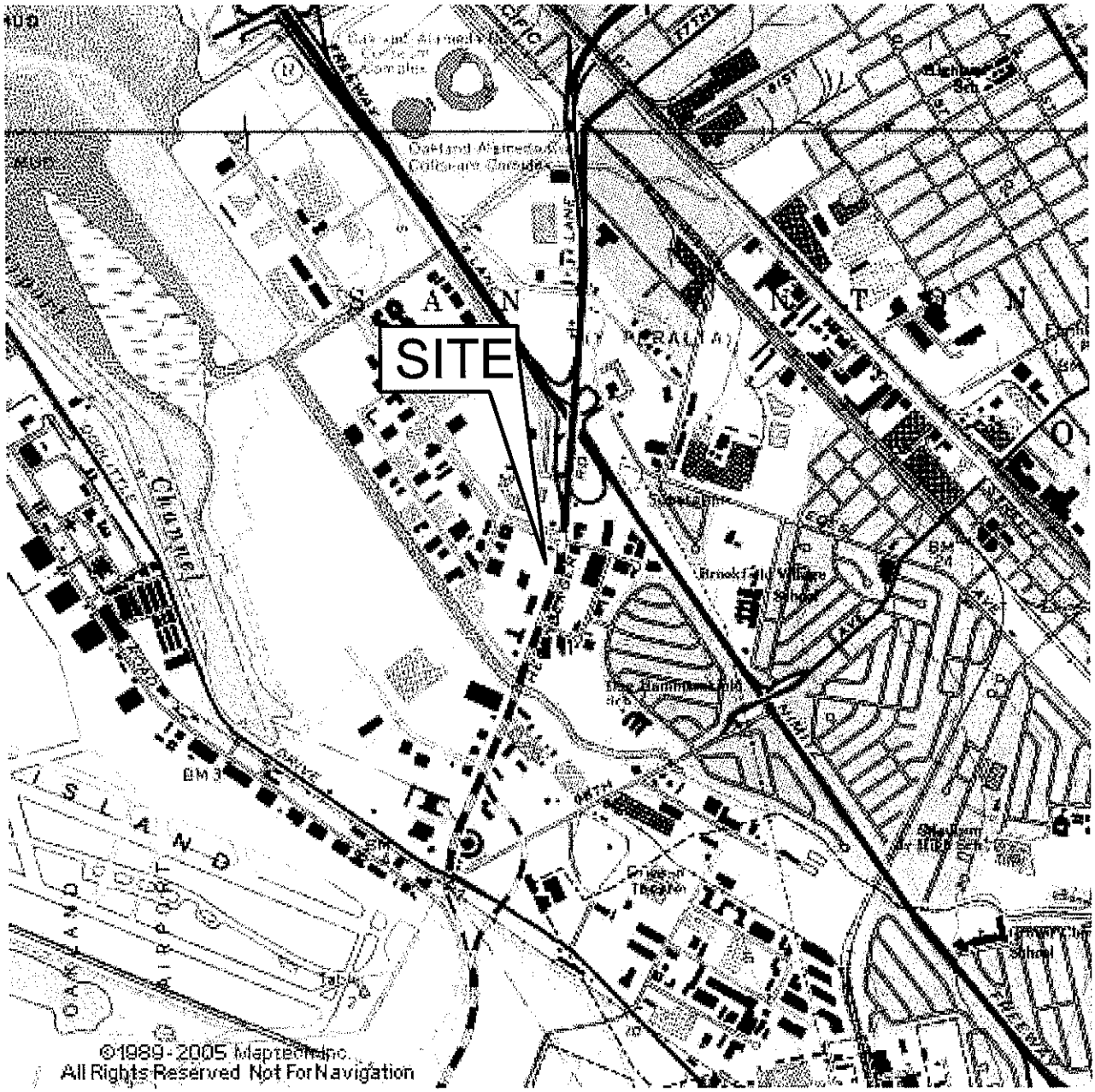


Figures:
- Figure 1 – Site Location Map
- Figure 2 – Site Plan with Historic Sample Locations
- Figure 3 – Site Map with Utilities
- Figure 4 – Geologic Cross Section A – A'

Table:
- Table 1 – Soil Analytical Results
- Table 2 – Groundwater Analytical Results

Attachments:
- Attachment A – ACHCSA Letter
- Attachment B – Boring Permit
- Attachment C – Boring Logs
- Attachment D – Analytical Report with Chain-of-Custody Documentation

Figures



North

0 900 1800 FT

SCALE

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE (1973)

FIGURE 1
SITE LOCATION MAP

76 STATION NO. 5191
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	DR/JH
DATE	REVIEWED BY	FILE NAME
02/10/10	DD	5043-SiteLocator

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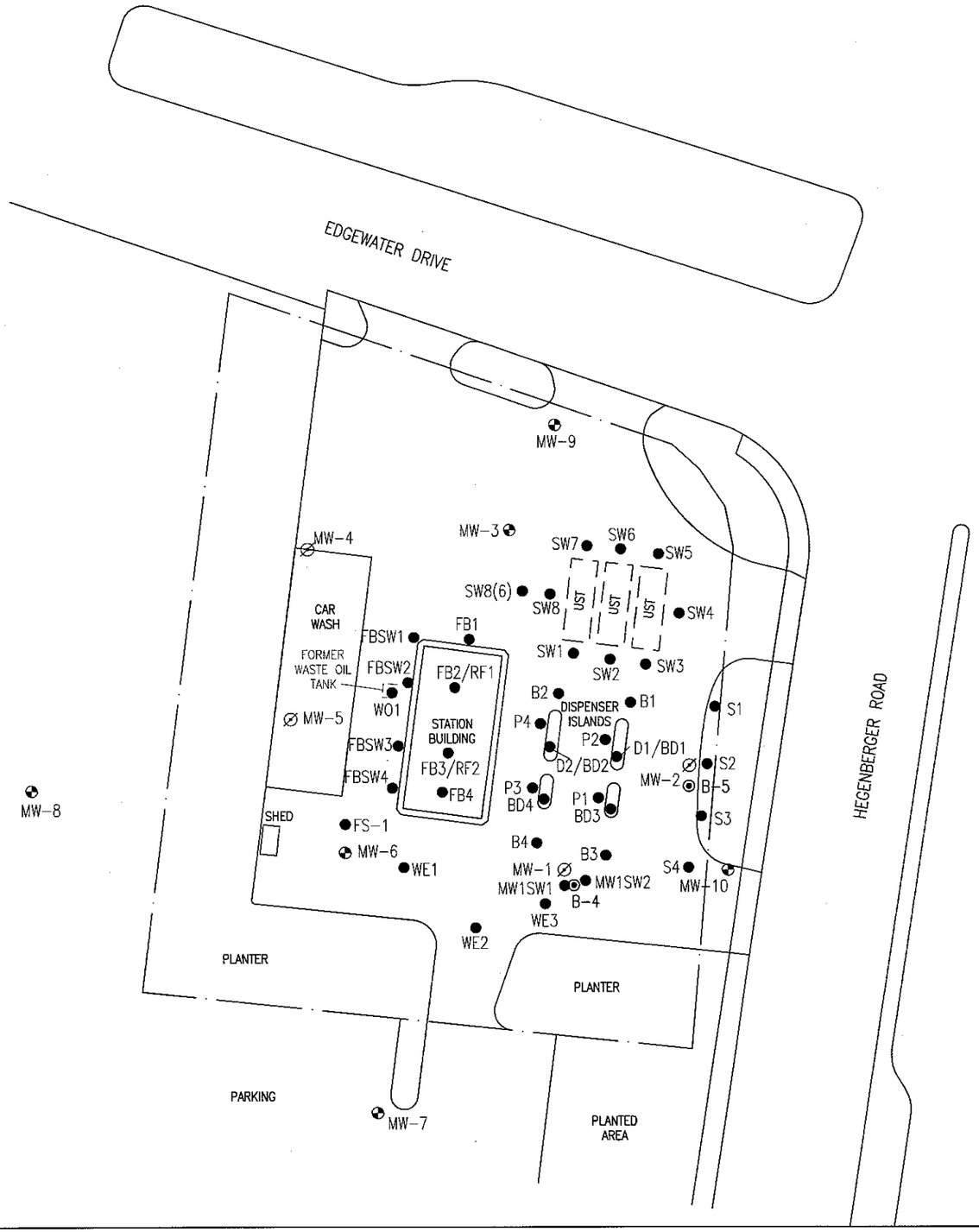
LEGEND

APPROXIMATE PROPERTY LINE
MW-- MONITORING WELL
MW- ABANDONED MONITORING WELL
B-4 BORING LOCATION
SOIL SAMPLE LOCATION



North

0 40

SCALE IN FEET

FIGURE 2
SITE MAP WITH HISTORIC SAMPLE LOCATIONS

76 STATION NO. 5191
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	DR/JH
DATE	REVIEWED BY	FILE NAME
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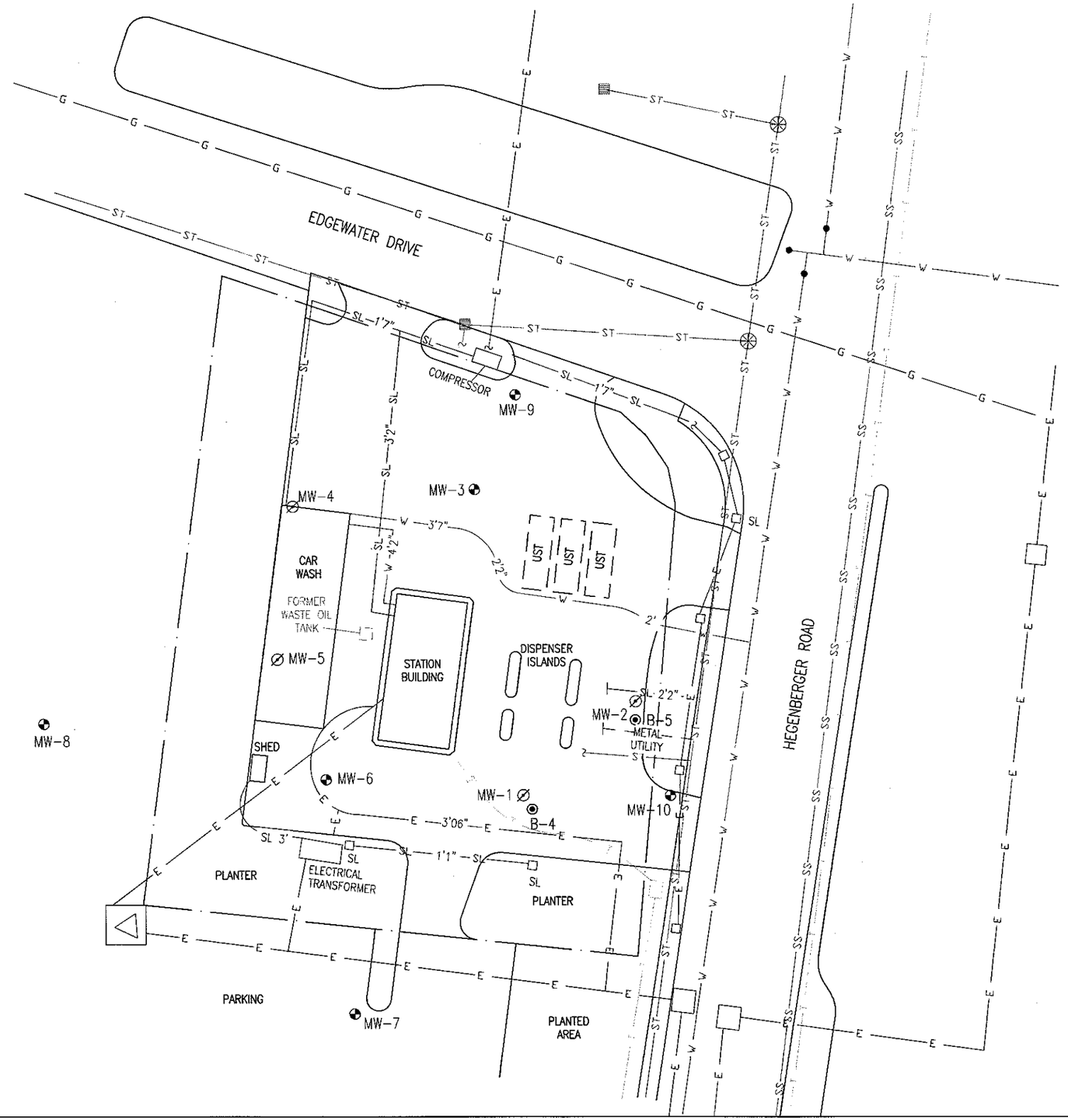

LEGEND

- APPROXIMATE PROPERTY LINE
- MW- MONITORING WELL
- MW- ABANDONED MONITORING WELL
- B-4 BORING LOCATION
- T TELEPHONE
- SS SEWER
- W WATER
- ST STORM DRAIN
- E ELECTRIC
- G GAS
- SL STREET LIGHT

North

0 40

SCALE IN FEET

FIGURE 3
SITE MAP WITH UTILITIES

76 STATION NO. 5191
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
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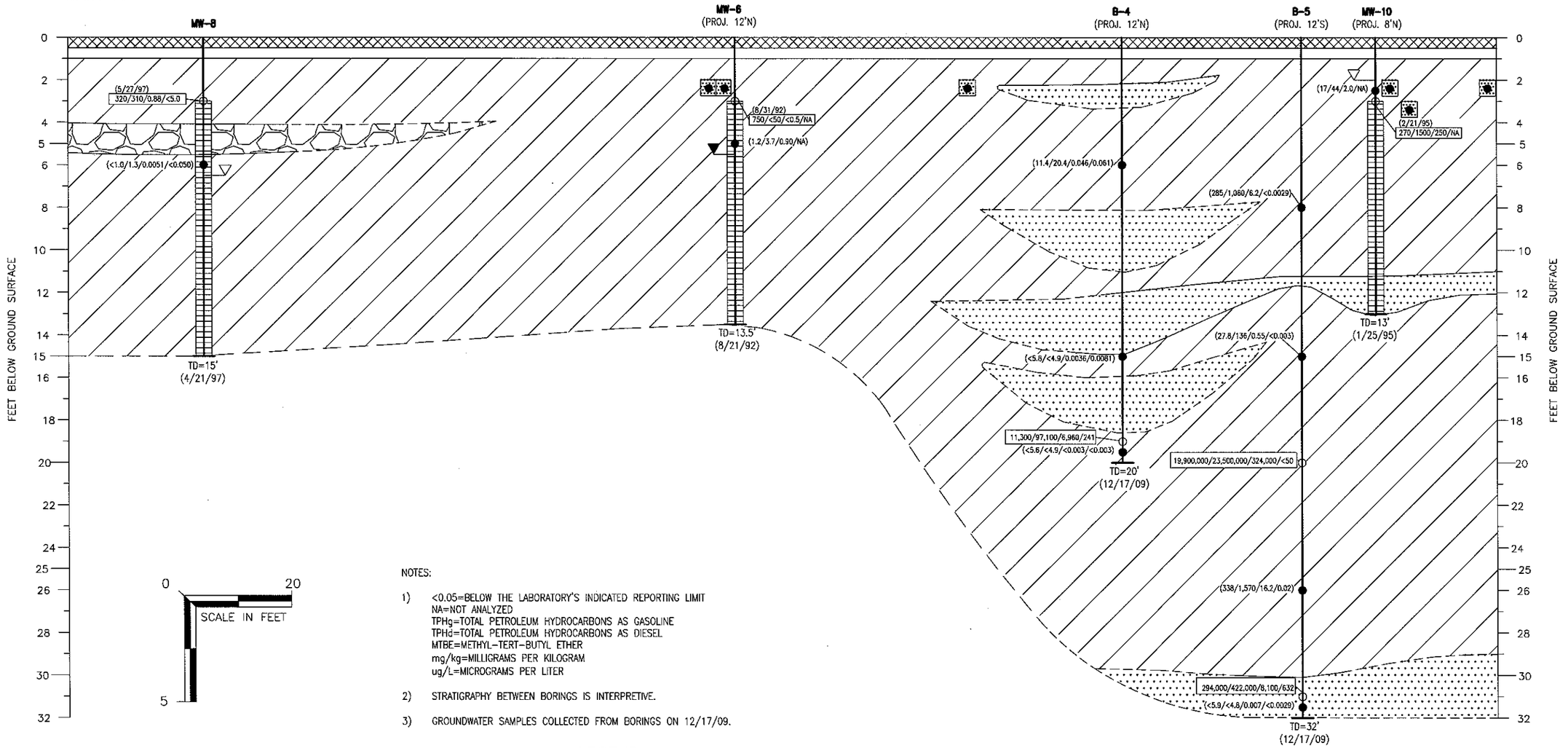
WEST A

EAST A'

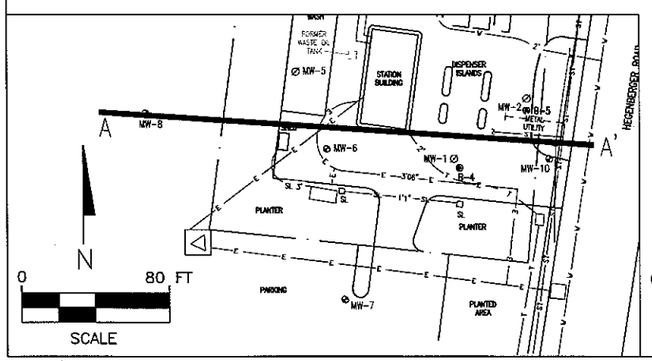


NOTES:

1) <0.05=BELOW THE LABORATORY'S INDICATED REPORTING LIMIT
NA=NOT ANALYZED
TPHg=TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
TPHd=TOTAL PETROLEUM HYDROCARBONS AS DIESEL
MTBE=METHYL-TERT-BUTYL ETHER
mg/kg=MILLIGRAMS PER KILOGRAM
ug/L=MICROGRAMS PER LITER

2) STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.

3) GROUNDWATER SAMPLES COLLECTED FROM BORINGS ON 12/17/09.



LEGEND

MW-7
TD=13'
(4/21/97)
MONITORING WELL
WELL CASING
SOIL SAMPLE LOCATION
WELL SCREEN
TOTAL DEPTH
DATE INSTALLED

DEPTH TO FIRST ENCOUNTERED GROUNDWATER

DEPTH TO STATIC GROUNDWATER

(2.6/1.7/0.016/NA) SOIL SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, TPHd, BENZENE, MTBE (mg/kg)

(2/21/95)
71/70/<0.0050/NA (DATE SAMPLED)
GROUNDWATER SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, TPHd, BENZENE, MTBE (ug/L)

UNDERGROUND UTILITY

ASPHALT

AGREGATE BASE (FILL)

GRAVEL

FINE GRAINED SILT AND/OR CLAY

SAND

APPROXIMATE STRATIGRAPHIC BOUNDARY

FIGURE 4
GEOLOGIC CROSS SECTION A-A'

76 STATION NO. 5191
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	DR/JH
DATE	REVIEWED BY	FILE NAME
02/10/10	DD	C10504300sm

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Tables

TABLE 1

HISTORICAL SOIL ANALYTICAL RESULTS
76 Station No. 5191
449 Hegenberger Raod, Oakland, California

Sample ID	Date	Sample Depth (feet)	TPHg (mg/kg)	TPHd (mg/kg)	TPHd* (mg/Kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	TAME (mg/kg)
P1	10/25/1991	3	**3,200**	**420**	NA	**33**	**120**	**110**	**540**	NA	NA	NA
P2	10/25/1991	3	**9,000**	**8,400**	NA	**46**	**120**	**330**	**1,500**	NA	NA	NA
P3	10/25/1991	3	**7,100**	**1,100**	NA	**48**	**410**	**220**	**1,200**	NA	NA	NA
P4	10/25/1991	3	**370**	**460**	NA	**7.4**	**39**	**12**	**77**	NA	NA	NA
MW1(2.5)	2/5/1992	2.5	**14,000**	**1,200**	NA	**160**	**680**	**470**	**2,400**	NA	NA	NA
MW2(3.5)	2/5/1992	3.5	**9,000**	**2,400**	NA	**74**	**440**	**280**	**1,400**	NA	NA	NA
MW2(4.5)	2/5/1992	4.5	**31**	**29**	NA	**2.4**	**0.14**	**3**	**9**	NA	NA	NA
MW3(3)	2/5/1992	3	<1.0	**49**	NA	<0.005	<0.005	<0.005	**0.011**	NA	NA	NA
MW3(4.5)	2/5/1992	4.5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
MW4(5)	8/21/1992	5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	**0.0066**	NA	NA	NA
MW5(6)	8/21/1992	6	**340**	**43**	NA	**1.1**	**1.2**	**7.8**	**13**	NA	NA	NA
MW6(5)	8/21/1992	5	**3.7**	**1.2**	NA	**0.9**	<0.005	**1**	**0.05**	NA	NA	NA
MW9(3)	1/25/1995	3	**1.7**	**2.6**	NA	**0.016**	<0.005	<0.005	<0.005	NA	NA	NA
MW10(2.5)	1/25/1995	2.5	**44**	**17**	NA	**2**	**1.5**	**2.3**	**5.4**	NA	NA	NA
SW1	3/10/1995	8	**11**	NA	NA	**2.8**	<0.005	**1.6**	**0.067**	NA	NA	NA
SW2	3/10/1995	8	**11**	NA	NA	**3.8**	<0.005	**0.79**	**0.034**	NA	NA	NA
SW2(4)	3/10/1995	4	**2,000**	**140**	NA	<0.005	**53**	**42**	**240**	NA	NA	NA
SW3	3/10/1995	8	**1**	<1.0	NA	**0.009**	**0.006**	**0.007**	**0.014**	NA	NA	NA
SW4	3/10/1995	8	<1.0	**1.8**	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
SW5	3/10/1995	8	<1.0	**1.4**	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
SW6	3/10/1995	8	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
SW7	3/10/1995	8	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
SW8	3/10/1995	8	**140**	NA	NA	**2.6**	**5.3**	**2.7**	**12**	NA	NA	NA
D1	3/24/1995	3	**760**	**46**	NA	**1.5**	**19**	**15**	**73**	NA	NA	NA
D2	3/24/1995	3	**1,200**	**97**	NA	**1.6**	**16**	**22**	**110**	NA	NA	NA
B1	3/28/1995	6	<1.0	<1.0	NA	**0.13**	**0.026**	**0.0088**	**0.059**	NA	NA	NA
B2	3/28/1995	6	**3.4**	<1.0	NA	**2.8**	**0.041**	**0.19**	**0.28**	NA	NA	NA
B3	3/28/1995	6	<1.0	<1.0	NA	<0.005	**0.01**	<0.005	**0.017**	NA	NA	NA
B4	3/28/1995	6	<1.0	<1.0	NA	<0.005	**0.017**	<0.005	**0.032**	NA	NA	NA
BD1	3/28/1995	6	<1.0	<1.0	NA	**0.21**	**0.011**	**0.018**	**0.038**	NA	NA	NA
BD2	3/28/1995	6	**12**	**4.8**	NA	**2.6**	**0.68**	**0.56**	**1.7**	NA	NA	NA
BD3	3/28/1995	6	<1.0	<1.0	NA	**0.012**	**0.014**	**0.012**	**0.043**	NA	NA	NA
BD4	3/28/1995	6	<1.0	<1.0	NA	<0.005	**0.011**	**0.0072**	**0.037**	NA	NA	NA
S1	3/28/1995	4	**110**	<1.0	NA	**3.5**	**0.61**	**7**	**13**	NA	NA	NA
S2	3/28/1995	4	**1.4**	**9.4**	NA	**0.028**	**0.012**	**0.015**	**0.019**	NA	NA	NA
S3	3/28/1995	4	**22**	**2.9**	NA	**1.2**	**1.2**	**0.65**	**1.9**	NA	NA	NA

TABLE 1

HISTORICAL SOIL ANALYTICAL RESULTS
76 Station No. 5191
449 Hegenberger Raod, Oakland, California

Sample ID	Date	Sample Depth (feet)	TPHg (mg/kg)	TPHd (mg/kg)	TPHd* (mg/Kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	TAME (mg/kg)
S4	3/28/1995	4	**150**	**5.8**	NA	**6.8**	**5.6**	**5.3**	**27**	NA	NA	NA
RF1	3/31/1995	3	**2,000**	**330**	NA	**8.8**	**68**	**55**	**280**	NA	NA	NA
RF2	3/31/1995	3	**3,300**	**230**	NA	**18**	**160**	**110**	**550**	NA	NA	NA
SW8(6)	4/3/1995	8	<1.0	<1.0	NA	**0.0085**	<0.005	**0.0084**	**0.011**	NA	NA	NA
FB1	4/3/1995	4.5	**25**	**8.6**	NA	**2.1**	**0.058**	**2.2**	**1.3**	NA	NA	NA
FB2	4/3/1995	4.5	**7.1**	**1.6**	NA	**0.4**	**0.018**	**0.81**	**1.7**	NA	NA	NA
FB3	4/3/1995	4.5	**1.6**	<1.0	NA	**0.028**	<0.005	**0.13**	**0.26**	NA	NA	NA
FB4	4/3/1995	4.5	**1.4**	<1.0	NA	**0.23**	**0.022**	**0.05**	**0.15**	NA	NA	NA
FBSW1	4/3/1995	3	**7.4**	**1.3**	NA	**0.066**	**0.021**	**1**	**<0.005**	NA	NA	NA
FBSW2	4/3/1995	3	**70**	**7.6**	NA	**0.11**	**0.096**	**2.1**	**6.7**	NA	NA	NA
FBSW3	4/3/1995	3	**2.3**	**7.8**	NA	**0.012**	**0.01**	**0.018**	**0.012**	NA	NA	NA
FBSW4	4/3/1995	3	**9**	**3.7**	NA	**0.25**	**0.036**	**0.93**	**0.062**	NA	NA	NA
MW1SW1	4/5/1995	5	**25**	**2.8**	NA	**2.1**	**0.025**	**2.4**	**0.19**	NA	NA	NA
MW1SW2	4/5/1995	5	**4.2**	**1.2**	NA	**0.17**	**0.01**	**0.68**	**0.048**	NA	NA	NA
WE1	4/5/1995	4.5	**26**	**3.4**	NA	**0.31**	**0.3**	**0.59**	**2.6**	NA	NA	NA
WE2	4/5/1995	4.5	**2.7**	**5.1**	NA	**0.0054**	**0.0065**	**0.038**	**0.17**	NA	NA	NA
WE3	4/5/1995	4.5	**8.2**	**1.6**	NA	**0.21**	**0.074**	**1.6**	**0.0076**	NA	NA	NA
FS-1	4/5/1995	4	**12**	<1.0	NA	**0.28**	<0.005	**1.5**	**0.016**	NA	NA	NA
MW8(6)	4/21/1997	6	**1.3**	<1.0	NA	**0.0051**	<0.005	**0.015**	**0.041**	<0.005	NA	NA
B-4@6	12/17/2009	6	**20.4**	**11.4**	**10.1**	**0.046**	**0.18**	**1**	**4.2**	**0.061**	**0.091**	<0.0029
B-4@15	12/17/2009	15	<4.9	<5.8	<5.8	**0.0036**	**0.0069**	**0.011**	**0.049**	**0.0081**	**0.036**	<0.003
B-4@20	12/17/2009	20	<4.9	<5.6	<5.6	<0.003	<0.003	<0.003	<0.006	<0.003	<0.015	<0.003
B-5@8	12/17/2009	8	**1,060**	**285**	**269**	**6.2**	**21.6**	**30.9**	**143**	<0.0029	**0.079**	**0.068**
B-5@17.5	12/17/2009	17.5	**136**	**27.8**	**26.9**	**0.55**	**1.4**	**2.7**	**15.8**	<0.003	**0.035**	<0.003
B-5@26.5	12/17/2009	26.5	**1,570**	**338**	**346**	**16.2**	**73.5**	**52.8**	**255**	**0.02**	**0.11**	<0.0028
B-5@32	12/17/2009	32	<4.8	<5.9	<5.9	**0.007**	**0.0087**	**0.0057**	**0.031**	<0.0029	<0.015	<0.0029

Notes:
TPHg = total petroleum hydrocarbons as gasoline by EPA Method 8015
TPHd = total petroleum hydrocarbons as diesel by EPA Method 8015
BTEX = benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
MTBE = methyl tertiary-butyl ether by EPA Method 8260
TBA = tertiary-butyl alcohol by EPA Method 8260
TAME = tert-amyl methyl ether by EPA Method 8260
* = Silica Gel Treated
mg/kg = milligrams per kilogram
NA = not applicable

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
76 Station No. 5191
449 Hegenberger Road, Oakland, California

Sample ID	Date	Sample Depth	TPHg (µg/L)	TPHd (µg/L)	TPHd* (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)
B-4	12/17/2009	20	**97,100**	**11,300**	**13,500**	**6,960**	**8,310**	**6,420**	**26,000**	**241**	**167**	<50
B-5@20W	12/17/2009	20	**23,500,000**	**19,900,000**	**20,400,000**	**324,000**	**1,050,000**	**918,000**	**4,120,000**	<50	<500	<100
B-5@32W	12/17/2009	32	**422,000**	**294,000**	**291,000**	**8,100**	**20,200**	**9,580**	**60,800**	**632**	<250	**511**

Notes:
TPHg = total petroleum hydrocarbons as gasoline by EPA Method 8015
TPHd = total petroleum hydrocarbons as diesel by EPA Method 8015
BTEX = benzene, toluene, ethyl-benzene, total xylenes by EPA Method 8260
MTBE = methyl tertiary-butyl ether by EPA Method 8260
1,2-DCA = 1,2-Dichlorethane by EPA Method 8260
* = TPHd (silica gel treated)
µg/L = micrograms per liter
# = Estimated value
NA = not applicable

Attachment A

ACHCSA *Letter*

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

RECEIVED
APR 13 2009

April 3, 2009

Mr. Terry Grayson
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Subject: Fuel Leak Case No. RO00000219 and Geotracker Global ID T0600101476, Unocal #5043, 449 Hegenberger Rd., Oakland, CA 94621

Dear Mr. Grayson:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the document entitled, *Work Plan for Hydrogen Peroxide Injection*, dated January 6, 2009 prepared by Delta. The work plan recommends injecting hydrogen peroxide into well MW-6 and monitoring well MW-7 and MW-8 for performance monitoring purposes. ACEH does not concur with injection into a monitoring well that is not designed for remediation and without an adequate performance monitoring network. Additionally, it appears that the extent of the plume has not been defined since previously installed wells MW-1 and MW-2 contained free product and had high contamination concentrations, respectively. The two wells were decommissioned in 1995 and never replaced leaving the area with the highest concentrations unmonitored. Therefore, we cannot approve your work plan. Additional work to define the extent of contamination is required before any remediation test can be approved. We request that you address the following technical comments, perform the proposed work, and send us the reports requested below.

TECHNICAL COMMENTS

1. **Extent of Groundwater Contamination Plume** – In 1995 two wells (MW-1 and MW-2) located near the dispenser islands were decommissioned to allow for overexcavation of the dispenser islands. Prior to destruction, MW-1 contained free product and MW-2 had high contamination concentrations and as such contained the highest contamination levels on the site. No wells were reinstalled in this area to determine the post excavation dissolved contaminant concentrations. Please present your plan to assess groundwater in report requested below.

2. **Vertical Extent of Contamination** – Soil samples collected at the site from the soil borings were collected only from depths between 2.5 to 6 feet below ground surface (bgs). Maximum concentrations of 14,000 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg) and 160 mg/kg benzene were detected in MW-1 from 2.5 feet bgs. No additional samples were collected to determine if contaminants have migrated vertically. In

addition, confirmation soil samples from the overexcavation performed in 1995 have not been submitted to the ACEH ftp site. Please address this data gap in the work plan requested below and submit results of confirmation sampling after overexcavation by the dates requested below.

3. **Site Conceptual Model** –At this juncture, it may be advantageous to develop a site conceptual model (SCM), which synthesizes all the analytical data and evaluates all potential exposure pathways and potential receptors that may exist at the site, including identifying or developing site cleanup objectives and goals. At a minimum, the SCM should include:

   (1) Local and regional plan view maps placed on a base map which shows an aerial photograph that illustrates the location of sources (former facilities, piping, tanks, etc.) extent of contamination, direction and rate of groundwater flow, potential preferential pathways, and locations of receptors;
   (2) Geologic cross section maps that illustrate subsurface features, man-made conduits, and lateral and vertical extent of contamination;
   (3) Regional and local geology and hydrogeology;
   (4) Plots of chemical concentrations versus time;
   (5) Plots of chemical concentrations versus distance from the source;
   (6) Summary tables of chemical concentrations in different media (i.e. soil, groundwater, and soil vapor); and
   (7) Well logs, boring logs, and well survey maps;
   (8) Discussion of likely contaminant fate and transport.

   If data gaps (i.e. potential contaminant volatilization to indoor air or contaminant migration along preferential pathways, etc.) are identified in the SCM, please include a proposed scope of work to address those data gaps in the work plan due by the date specified below. Please note that the work plan must address all technical comments presented in our December 11, 2006 correspondence and all data gaps identified in the SCM.

4. **Utility Survey.** The utility survey presented did not include the depth of many of the utilities such as storm drains. Please include updated maps and cross-sections with the utility depths in the report requested below.

REQUEST FOR INFORMATION

ACEH's case file for the subject site contains only the electronic files listed on our website at http://www.acgov.org/aceh/index.htm. You are requested to submit copies of all other reports and correspondence related to environmental investigations for this property (including Phase I reports) by **May 8, 2009.**

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Barbara Jakub), according to the following schedule:

- **June 5, 2009** –SCM with Work Plan

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,

Barbara Jakub

Barbara Jakub, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: John Reay, Delta, 11050 White Rock Rd., Suite 110, Rancho Cordova, CA, 94670
Donna Drogos, ACEH
Barbara Jakub, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** July 5, 2005
	REVISION DATE: March 27, 2009
	PREVIOUS REVISIONS: December 16, 2005, October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection.** (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         Or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for.**

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload.** (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Attachment B

Boring Permit

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/03/2009 By jamesy

Permit Numbers: W2009-1068
Permits Valid from 12/17/2009 to 12/17/2009

Application Id: 1259778468870
City of Project Site: Oakland
Site Location: 449 Hegenberger Rd, Oakland, CA
Project Start Date: 12/17/2009
Completion Date: 12/17/2009
Assigned Inspector: Contact Ron Smalley at (510) 670-5407 or ronaldws@acpwa.org

Applicant: Delta - Delta Consultants
11050 White Rock Rd, Ste 110, Rancho Cordova, CA 95670
Phone: 916-288-0154

Property Owner: The PC&F
22026 68th Ave, South, Kent, WA 98023
Phone: 253-437-5980

Client: ** same as Property Owner **

	Total Due:	$265.00
Receipt Number: WR2009-0431	**Total Amount Paid:**	$265.00
Payer Name : Delta	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Geotechnical Study/CPT's - 2 Boreholes
Driller: Gregg Drilling, Inc - Lic #: 485165 - Method: DP

Work Total: $265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2009-1068	12/03/2009	03/17/2010	2	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

5. Applicant shall contact Ron Smalley for an inspection time at 510-670-5407 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Attachment C

Boring Logs

Delta Consultants

Project No:	I42705191	Client:	ELT
Logged By:	E. Weyrens	Location:	449 Hegenberger Rd.
Driller:	Gregg	Date Drilled:	12/17/2009
Drilling Method:	Direct Push	Hole Diameter:	2"
Sampling Method:		Hole Depth:	20'
Casing Type:	NA	Well Diameter:	NA
Slot Size:	NA	Well Depth:	NA
Gravel Pack:	NA	▼ First Water Depth:	3'
		▽ Static Water Depth:	13'
Elevation:		Northing:	Easting:

Boring No. B-4
Page 1 of 1

Location Map

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									4" of Asphalt
									6" of Aggregate Base
					1			CL	Lean Clay, 95% clay, 5% fine sand, olive green, moist
					2			SM	Silty Sand w/ gravel, 60% sand, 25% silt, 15% gravel, medium sand, olive green, loose, moist
		▼			3			CL	Lean Clay, 95% clay, 5% fine sand, olive green, wet, strong odor
					4				
					5	X			
						X			
			15.6	B-4@6 10:50	6	X	0		
					7	X			
						X			
						X			
			37.5		8	X	0	SC	Clayey Sand, 80% fine sand, 20% clay, black wet, loose
					9	X			
						X			
						X			
					10	X			
						X			
					11	X		CL	Lean Clay, 95% clay, 5% fine sand, black, medium stiff, wet, root particles
			2.4		12	X	0		
						X		SC	Clayey Sand, 85% fine sand, 15% clay, black, Loose, wet
		▽			13	X			
						X			
					14	X			
						X			
					15	X			
			38.4	B-4@15 11:05		X	0	CL	Lean Clay, 95% clay, 5 % fine sand, olive green, medium stiff, wet
					16	X		SC	Clayey Sand, 85% fine sand, 15% clay, black, loose, wet
					17	X			
						X			
						X			
					18	X		CL	Lean Clay, 95% clay, 5% fine sand, olive green, wet, medium stiff
					19	X			
						X			
			2.0	B-4@20 11:13	20	X	0	CL	Lean Clay, 95% clay, 5% fine sand, light brown medium stiff, moist
									Boring terminated at 20 feet bgs.
					21				
					22				

Delta
Consultants

Project No:	I42705191	Client:	ELT
Logged By:	E. Weyrens	Location:	449 Hegenberger Rd
Driller:	Gregg	Date Drilled:	12/17/2009
Drilling Method:	Direct Push	Hole Diameter:	2"
Sampling Method:		Hole Depth:	32'
Casing Type:	NA	Well Diameter:	NA
Slot Size:	NA	Well Depth:	NA
Gravel Pack:	NA	▼ First Water Depth:	5'
		▽ Static Water Depth:	18'

Boring No: B-5
Page 1 of 2

Location Map

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									4" of Asphalt
					1			SM	Silty Sand, 60% sand, 40% silt, brown, moist
								CL	Lean Clay, 95% clay, 5% fine sand, moist,
					2				black
					3				
					4				odor encountered at 4 fbg
		▼	25.4		5	X	0		Lean Clay, 95% clay, 5% fine sand, moist,
					6	X			black, soft
					7	X			
			885	B-5@8 12:59	8	X	0		Oily substance on soil at 8 fbg
					9	X			
					10	X			
					11	X		SC	Clayey Sand, 65% fine sand, 35% clay, olive
					12	X		CL	brown, loose, wet
			89.5			X			Lean Clay, 95% Clay, 5 % fine sand, olive brown
					13	X			to black, soft, wet, plant material
						X			more oily substance at 13.5 fbg
			265		14	X	0		color and density change at 14 fbg
					15	X			light olive green color, medium stiff
						X			Lean Clay w/ sand 75% clay, 25% fine sand
					16	X			moist
					17	X			
		▽	710	B-5@17.5 13:20	18	X	0		Lean Clay, 90% clay, 10% fine sand, light brown,
						X			very stiff, moist, no plant material
					19	X			
			149		20	X	0		
						X			Lean Clay w/ sand, 75% clay, 25% fine sand,
					21	X			light brown, soft, wet, strong odor
					22	X			

Delta
Consultants

Project No:	I42705191	Client:	ELT
Logged By:	E. Weyrens	Location:	449 Hegenberger Rd.
Driller:	Gregg	Date Drilled:	12/17/2009
Drilling Method:	Direct Push	Hole Diameter:	2"
Sampling Method:		Hole Depth:	32'
Casing Type:	NA	Well Diameter:	NA
Slot Size:	NA	Well Depth:	NA
Gravel Pack:	NA	▼ First Water Depth:	5'
		▽ Static Water Depth:	18'

Boring No: B-5
Page 2 of 2

Location Map

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					23	X		CL	Lean Clay, 90% clay, 10% fine sand, dark grey,
						X			moist
			384		24	X	0		Lean Clay, 90% clay, 10% fine sand, light brown,
						X			stiff, moist
					25	X			Black, strong odor
						X			
						X			
			942	B-5@26.5	26	X	0		Lean Clay w/ sand, 75% clay, 25% fine sand,
				15:05	27	X			light brown, wet, soft
						X			Stiff, 95% clay, 5% sand
						X			
			137		28	X	0		
						X			
					29	X			
						X			
					30	X		SC	Clayey Sand, 65% fine sand, 35% clay, brown,
						X			moist, medium density
					31	X			
			92.4	B-5@32	32	X	0		
				15:25					Boring terminated at 32 feet bgs.
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

Attachment D

Analytical Report

With

Chain-of-Custody Documentation

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January 05, 2010

Dennis Dettloff
ELT_Delta Consultants Sacramen
11050 White Rock Rd. #110
Rancho Cordova, CA 95670

RE: Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Dear Dennis Dettloff:
Enclosed are the analytical results for sample(s) received by the laboratory on December 22, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heidi Geri for
Regina SteMarie
regina.stemarie@pacelabs.com
Project Manager

Enclosures

cc: Tara Bosch, ELT_Delta Consultants Sacramento
Jonathon Fillingame, ELT_Delta Consultants Sacramento
Josh Mahoney, ELT_Delta Consultants San Jose
Tony Perini, ELT_Delta Consultants San Jose
Don Pinkerton, ELT_Delta Consultants Sacramento
David Sowle, ELT_Delta Consultants Sacramento
Doug Umland, ELT_Delta Consultants San Jose
Ed Weyrens, ELT_Delta Consultants San Jose

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CERTIFICATIONS

Project: 142705191 449 Hegenberger
Pace Project No.: 252711

Washington Certification IDs
940 South Harney Street Seattle, WA 98108
Washington Certification #: C1229
Oregon Certification #: WA200007
Alaska CS Certification #: UST-025
California Certification #: 01153CA
Alaska Drinking Water Micro Certification #: WA01230
Alaska Drinking Water VOC Certification #: WA01-09
Florida/NELAP Certification #: E87617

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SAMPLE ANALYTE COUNT

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
252711001	**B-4@6_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 8015B	ATH	3	PASI-S
		EPA 8260	LNH	6	PASI-S
		EPA 8260	LNH	14	PASI-S
252711002	**B-4@15_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 8015B	LNH	3	PASI-S
		EPA 8260	LNH	16	PASI-S
252711003	**B-4@20_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 8015B	LNH	3	PASI-S
		EPA 8260	LNH	16	PASI-S
252711004	**B-4_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8015B	ATH	3	PASI-S
		EPA 8260	LNH	15	PASI-S
252711005	**B-5@8_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 8015B	ATH	3	PASI-S
		EPA 8260	LNH	8	PASI-S
		EPA 8260	LNH	12	PASI-S
252711006	**B-5@17.5_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 8015B	ATH	3	PASI-S
		EPA 8260	LNH	8	PASI-S
		EPA 8260	LNH	12	PASI-S
252711007	**B-5@26.5_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 8015B	ATH	3	PASI-S
		EPA 8260	LNH	8	PASI-S
		EPA 8260	LNH	12	PASI-S
252711008	**B-5@32_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 8015B	LNH	3	PASI-S
		EPA 8260	LNH	16	PASI-S
252711009	**B-5@20W_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8015B	ATH	3	PASI-S
		EPA 8260	LNH	15	PASI-S
252711010	**B-5@32W_20091217**	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8015B	ATH	3	PASI-S
		EPA 8260	LNH	15	PASI-S
252711011	**Waste_20091217**	EPA 6010	BGA	1	PASI-S
		EPA 8260	LNH	8	PASI-S
		EPA 8260	LNH	5	PASI-S

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SAMPLE ANALYTE COUNT

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		CA LUFT	LNH	2	PASI-S

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8015B**
Description: 8015B CA Diesel Range Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
7 samples were analyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/1759

9n: Sample result is from silica -gel treated extract.

- B-4@15_20091217 (Lab ID: 252711002)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- B-4@20_20091217 (Lab ID: 252711003)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8015B**
Description: 8015B CA Diesel Range Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

Analyte Comments:

QC Batch: OEXT/1759

9n: Sample result is from silica -gel treated extract.

- B-4@6_20091217 (Lab ID: 252711001)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- B-5@17.5_20091217 (Lab ID: 252711006)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- B-5@26.5_20091217 (Lab ID: 252711007)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- B-5@32_20091217 (Lab ID: 252711008)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- B-5@8_20091217 (Lab ID: 252711005)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- BLANK (Lab ID: 17948)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- LCS (Lab ID: 17949)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- MS (Lab ID: 17950)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- MSD (Lab ID: 17951)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8015B**
Description: 8015B CA TPH DRO
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
3 samples were analyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 Modified with any exceptions noted below.

QC Batch: OEXT/1754

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
- B-5@20W_20091217 (Lab ID: 252711009)

QC Batch: OEXT/1755

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
- B-5@20W_20091217 (Lab ID: 252711009)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/1754

S4: Surrogate recovery not evaluated against control limits due to sample dilution.
- B-5@20W_20091217 (Lab ID: 252711009)
  - o-Terphenyl (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - o-Terphenyl (S)

QC Batch: OEXT/1755

S4: Surrogate recovery not evaluated against control limits due to sample dilution.
- B-5@20W_20091217 (Lab ID: 252711009)
  - o-Terphenyl (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - o-Terphenyl (S)

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: EPA 8015B
Description: 8015B CA TPH DRO
Client: ELT_Delta Sacramento
Date: January 05, 2010

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/1754

11n: Surrogate recovery outside control limits due to sample matrix, sample extract unable to be concentrated to routine final volume.

- B-5@20W_20091217 (Lab ID: 252711009)
  - n-Octacosane (S)

QC Batch: OEXT/1755

10n: Surrogate recovery outside control limits due to matrix interference, sample extract could not concentrated to routine final volume.

- B-5@20W_20091217 (Lab ID: 252711009)
  - n-Octacosane (S)

8n: Result is from silica gel treated extract. DT 01-05-2010

- B-4_20091217 (Lab ID: 252711004)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- B-5@20W_20091217 (Lab ID: 252711009)
  - n-Octacosane (S)
  - TPH-DRO (C10-C24)
  - o-Terphenyl (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- BLANK (Lab ID: 17941)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- LCS (Lab ID: 17942)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)
- LCSD (Lab ID: 17943)
  - TPH-DRO (C10-C24)
  - n-Octacosane (S)
  - o-Terphenyl (S)

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: EPA 8015B
Description: Gasoline Range Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
7 samples were analyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: GCV/1395

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- B-5@26.5_20091217 (Lab ID: 252711007)
  - 4-Bromofluorobenzene (S)
- DUP (Lab ID: 18116)
  - 4-Bromofluorobenzene (S)
- MS (Lab ID: 18115)
  - 4-Bromofluorobenzene (S)

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: GCV/1386

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 17937)
  - TPH-GRO

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8015B**
Description: Gasoline Range Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

QC Batch: GCV/1392

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 18074)
  - TPH-GRO

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: GCV/1386

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 252711008

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 18043)
  - TPH-GRO

QC Batch: GCV/1395

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 252711007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 18115)
  - TPH-GRO

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: GCV/1386

13n: This sample was evaluated from C5-C12.

- B-4@15_20091217 (Lab ID: 252711002)
  - TPH-GRO
- B-5@32_20091217 (Lab ID: 252711008)
  - TPH-GRO
- BLANK (Lab ID: 17936)
  - TPH-GRO
- DUP (Lab ID: 18042)
  - TPH-GRO
- LCS (Lab ID: 17937)
  - TPH-GRO
- MS (Lab ID: 18043)
  - TPH-GRO

QC Batch: GCV/1392

13n: This sample was evaluated from C5-C12.

- B-4@20_20091217 (Lab ID: 252711003)
  - TPH-GRO

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8015B**
Description: Gasoline Range Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

Analyte Comments:

QC Batch: GCV/1392

13n: This sample was evaluated from C5-C12.

- BLANK (Lab ID: 18073)
  - TPH-GRO
- LCS (Lab ID: 18074)
  - TPH-GRO
- LCSD (Lab ID: 18075)
  - TPH-GRO

QC Batch: GCV/1395

12n: TPH-GRO was evaluated from C5-C12.

- B-4@6_20091217 (Lab ID: 252711001)
  - TPH-GRO
- B-5@17.5_20091217 (Lab ID: 252711006)
  - TPH-GRO
- B-5@26.5_20091217 (Lab ID: 252711007)
  - TPH-GRO
- B-5@8_20091217 (Lab ID: 252711005)
  - TPH-GRO
- BLANK (Lab ID: 18113)
  - TPH-GRO
- DUP (Lab ID: 18116)
  - TPH-GRO
- LCS (Lab ID: 18114)
  - TPH-GRO
- MS (Lab ID: 18115)
  - TPH-GRO

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 5030B/8015B**
Description: Gasoline Range Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
3 samples were analyzed for EPA 5030B/8015B. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.
- B-4_20091217 (Lab ID: 252711004)
- B-5@20W_20091217 (Lab ID: 252711009)
- B-5@32W_20091217 (Lab ID: 252711010)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: GCV/1394

12n: TPH-GRO was evaluated from C5-C12.
- B-4_20091217 (Lab ID: 252711004)
  - TPH-GRO
- B-5@20W_20091217 (Lab ID: 252711009)
  - TPH-GRO

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 5030B/8015B**
Description: Gasoline Range Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

Analyte Comments:

QC Batch: GCV/1394

12n: TPH-GRO was evaluated from C5-C12.
- B-5@32W_20091217 (Lab ID: 252711010)
  - TPH-GRO
- BLANK (Lab ID: 18109)
  - TPH-GRO
- DUP (Lab ID: 18112)
  - TPH-GRO
- LCS (Lab ID: 18110)
  - TPH-GRO
- MS (Lab ID: 18111)
  - TPH-GRO

2n: Analysis was conducted outside of the 7-day EPA method holding time for un-preserved vials.
- B-4_20091217 (Lab ID: 252711004)
  - TPH-GRO
- B-5@20W_20091217 (Lab ID: 252711009)
  - TPH-GRO

3n: Analysis was conducted outside the 7-day EPA method holding time for un-preserved vials.
- B-5@32W_20091217 (Lab ID: 252711010)
  - TPH-GRO

4n: Due to large amounts of sediment in the VOA vials, two vials were combined prior to analysis.
- B-4_20091217 (Lab ID: 252711004)
  - TPH-GRO
- B-5@20W_20091217 (Lab ID: 252711009)
  - TPH-GRO
- B-5@32W_20091217 (Lab ID: 252711010)
  - TPH-GRO

6n: Headspace was present in VOA vials upon arrival to the lab.
- B-4_20091217 (Lab ID: 252711004)
  - TPH-GRO
- B-5@20W_20091217 (Lab ID: 252711009)
  - TPH-GRO

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 6010**
Description: 6010 MET ICP
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: MSV/1825

CL: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

- B-4_20091217 (Lab ID: 252711004)
  - Ethanol
- B-5@20W_20091217 (Lab ID: 252711009)
  - Ethanol
- B-5@32W_20091217 (Lab ID: 252711010)
  - Ethanol
- BLANK (Lab ID: 17956)
  - Ethanol
- LCS (Lab ID: 17957)
  - Ethanol
- LCSD (Lab ID: 18158)
  - Ethanol

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/1825

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 17957)
  - Ethanol

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: ELT_Delta Sacramento
Date: January 05, 2010

QC Batch: MSV/1825

R1: RPD value was outside control limits.
- LCSD (Lab ID: 18158)
  - tert-Butyl Alcohol

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/1825

3n: Analysis was conducted outside the 7-day EPA method holding time for un-preserved vials.
- B-4_20091217 (Lab ID: 252711004)
  - Toluene-d8 (S)
- B-5@20W_20091217 (Lab ID: 252711009)
  - Toluene-d8 (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - Toluene-d8 (S)

4n: Due to large amounts of sediment in the VOA vials, two vials were combined prior to analysis.
- B-4_20091217 (Lab ID: 252711004)
  - Toluene-d8 (S)
- B-5@20W_20091217 (Lab ID: 252711009)
  - Toluene-d8 (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - Toluene-d8 (S)

5n: Due to the high concentration of target analytes present in the sample and the risk of instrument contamination, a less diluted aliquot of sample was not analyzed.
- B-4_20091217 (Lab ID: 252711004)
  - Toluene-d8 (S)
- B-5@20W_20091217 (Lab ID: 252711009)
  - Toluene-d8 (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - Toluene-d8 (S)

6n: Headspace was present in VOA vials upon arrival to the lab.
- B-4_20091217 (Lab ID: 252711004)
  - Toluene-d8 (S)
- B-5@20W_20091217 (Lab ID: 252711009)
  - Toluene-d8 (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - Toluene-d8 (S)

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: ELT_Delta Sacramento
Date: January 05, 2010

Analyte Comments:

QC Batch: MSV/1825

7n: Post-analysis pH measurement indicates insufficient VOA sample preservation.

- B-4_20091217 (Lab ID: 252711004)
  - Toluene-d8 (S)
- B-5@20W_20091217 (Lab ID: 252711009)
  - Toluene-d8 (S)
- B-5@32W_20091217 (Lab ID: 252711010)
  - Toluene-d8 (S)

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: EPA 8260
Description: 8260 MSV 5035A Med Level VOA
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
5 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8260**
Description: 8260/5035A Volatile Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
8 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: MSV/1824

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- B-5@8_20091217 (Lab ID: 252711005)
  - 1,2-Dichloroethane-d4 (S)
  - Dibromofluoromethane (S)

S5: Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

- B-5@26.5_20091217 (Lab ID: 252711007)
  - 4-Bromofluorobenzene (S)
  - Dibromofluoromethane (S)
- Waste_20091217 (Lab ID: 252711011)
  - 1,2-Dichloroethane-d4 (S)
  - Dibromofluoromethane (S)

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **EPA 8260**
Description: 8260/5035A Volatile Organics
Client: ELT_Delta Sacramento
Date: January 05, 2010

QC Batch: MSV/1824

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 252711001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 17926)
  - 1,2-Dibromoethane (EDB)
  - 1,2-Dichloroethane
  - Benzene
  - Ethylbenzene
  - Methyl-tert-butyl ether
  - Toluene
  - Xylene (Total)
  - tert-Amylmethyl ether
- MSD (Lab ID: 17927)
  - 1,2-Dibromoethane (EDB)
  - Ethylbenzene
  - Methyl-tert-butyl ether
  - Toluene
  - Xylene (Total)
  - tert-Butyl Alcohol

R1: RPD value was outside control limits.

- MSD (Lab ID: 17927)
  - Benzene
  - Ethylbenzene
  - Toluene
  - Xylene (Total)

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/1824

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 17926)
  - Ethylbenzene
  - Xylene (Total)
- MSD (Lab ID: 17927)
  - Ethylbenzene
  - Toluene
  - Xylene (Total)

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: **CA LUFT**
Description: CA LUFT MSV GRO
Client: ELT_Delta Sacramento
Date: January 05, 2010

General Information:
1 sample was analyzed for CA LUFT. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/1840

1n: A methanol extract of this sample was analyzed at a dilution of 1:50.

- BLANK (Lab ID: 18128)
  - TPH-Gasoline (C05-C12)
- LCS (Lab ID: 18129)
  - TPH-Gasoline (C05-C12)
- LCSD (Lab ID: 18130)
  - TPH-Gasoline (C05-C12)
- Waste_20091217 (Lab ID: 252711011)
  - TPH-Gasoline (C05-C12)

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PROJECT NARRATIVE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Method: CA LUFT
Description: CA LUFT MSV GRO
Client: ELT_Delta Sacramento
Date: January 05, 2010

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-4@6_20091217 **Lab ID: 252711001** Collected: 12/17/09 10:50 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C24)	**11.4**	mg/kg	5.8	1	12/23/09 10:50	12/29/09 06:44		
TPH-DRO (C10-C24)	**10.1**	mg/kg	5.8	1	12/23/09 10:50	12/29/09 10:30		9n
o-Terphenyl (S)	97	%	50-150	1	12/23/09 10:50	12/29/09 10:30	84-15-1	9n
o-Terphenyl (S)	90	%	50-150	1	12/23/09 10:50	12/29/09 06:44	84-15-1	
n-Octacosane (S)	99	%	50-150	1	12/23/09 10:50	12/29/09 06:44	630-02-4	
n-Octacosane (S)	105	%	50-150	1	12/23/09 10:50	12/29/09 10:30	630-02-4	9n
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	**20.4**	mg/kg	9.9	2	12/29/09 09:00	12/29/09 16:03		12n
a,a,a-Trifluorotoluene (S)	134	%	50-150	2	12/29/09 09:00	12/29/09 16:03	98-08-8	
4-Bromofluorobenzene (S)	123	%	50-150	2	12/29/09 09:00	12/29/09 16:03	460-00-4	
8260 MSV 5035A Med Level VOA	Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B							
Ethylbenzene	**1.0**	mg/kg	0.099	1	12/22/09 16:00	12/28/09 18:10	100-41-4	
Xylene (Total)	**4.2**	mg/kg	0.30	1	12/22/09 16:00	12/28/09 18:10	1330-20-7	
Dibromofluoromethane (S)	98	%	81-114	1	12/22/09 16:00	12/28/09 18:10	1868-53-7	
Toluene-d8 (S)	110	%	84-121	1	12/22/09 16:00	12/28/09 18:10	2037-26-5	
4-Bromofluorobenzene (S)	103	%	78-127	1	12/22/09 16:00	12/28/09 18:10	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	76-115	1	12/22/09 16:00	12/28/09 18:10	17060-07-0	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	mg/kg	0.0029	1		12/23/09 14:40	994-05-8	M0
Benzene	**0.046**	mg/kg	0.0029	1		12/23/09 14:40	71-43-2	M0,R1
tert-Butyl Alcohol	**0.091**	mg/kg	0.015	1		12/23/09 14:40	75-65-0	M0
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0029	1		12/23/09 14:40	106-93-4	M0
1,2-Dichloroethane	ND	mg/kg	0.0029	1		12/23/09 14:40	107-06-2	M0
Diisopropyl ether	ND	mg/kg	0.0029	1		12/23/09 14:40	108-20-3	
Ethanol	ND	mg/kg	0.39	1		12/23/09 14:40	64-17-5	
Ethyl-tert-butyl ether	ND	mg/kg	0.0029	1		12/23/09 14:40	637-92-3	
Methyl-tert-butyl ether	**0.061**	mg/kg	0.0029	1		12/23/09 14:40	1634-04-4	M0
Toluene	**0.18**	mg/kg	0.0029	1		12/23/09 14:40	108-88-3	M0,R1
Dibromofluoromethane (S)	95	%	80-136	1		12/23/09 14:40	1868-53-7	
Toluene-d8 (S)	92	%	80-120	1		12/23/09 14:40	2037-26-5	
4-Bromofluorobenzene (S)	97	%	72-122	1		12/23/09 14:40	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-143	1		12/23/09 14:40	17060-07-0	

Sample: B-4@15_20091217 **Lab ID: 252711002** Collected: 12/17/09 11:05 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C24)	ND	mg/kg	5.8	1	12/23/09 10:50	12/29/09 07:40		
TPH-DRO (C10-C24)	ND	mg/kg	5.8	1	12/23/09 10:50	12/29/09 11:28		9n

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-4@15_20091217 **Lab ID: 252711002** Collected: 12/17/09 11:05 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
o-Terphenyl (S)	109	%	50-150	1	12/23/09 10:50	12/29/09 07:40	84-15-1	
o-Terphenyl (S)	113	%	50-150	1	12/23/09 10:50	12/29/09 11:28	84-15-1	9n
n-Octacosane (S)	119	%	50-150	1	12/23/09 10:50	12/29/09 11:28	630-02-4	9n
n-Octacosane (S)	113	%	50-150	1	12/23/09 10:50	12/29/09 07:40	630-02-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	4.9	1	12/22/09 16:00	12/23/09 16:10		13n
a,a,a-Trifluorotoluene (S)	130	%	50-150	1	12/22/09 16:00	12/23/09 16:10	98-08-8	
4-Bromofluorobenzene (S)	121	%	50-150	1	12/22/09 16:00	12/23/09 16:10	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	mg/kg	0.0030	1		12/23/09 13:38	994-05-8	
Benzene	**0.0036**	mg/kg	0.0030	1		12/23/09 13:38	71-43-2	
tert-Butyl Alcohol	**0.036**	mg/kg	0.015	1		12/23/09 13:38	75-65-0	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0030	1		12/23/09 13:38	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.0030	1		12/23/09 13:38	107-06-2	
Diisopropyl ether	ND	mg/kg	0.0030	1		12/23/09 13:38	108-20-3	
Ethanol	ND	mg/kg	0.40	1		12/23/09 13:38	64-17-5	
Ethylbenzene	**0.011**	mg/kg	0.0030	1		12/23/09 13:38	100-41-4	
Ethyl-tert-butyl ether	ND	mg/kg	0.0030	1		12/23/09 13:38	637-92-3	
Methyl-tert-butyl ether	**0.0081**	mg/kg	0.0030	1		12/23/09 13:38	1634-04-4	
Toluene	**0.0069**	mg/kg	0.0030	1		12/23/09 13:38	108-88-3	
Xylene (Total)	**0.049**	mg/kg	0.0059	1		12/23/09 13:38	1330-20-7	
Dibromofluoromethane (S)	93	%	80-136	1		12/23/09 13:38	1868-53-7	
Toluene-d8 (S)	92	%	80-120	1		12/23/09 13:38	2037-26-5	
4-Bromofluorobenzene (S)	99	%	72-122	1		12/23/09 13:38	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-143	1		12/23/09 13:38	17060-07-0	

Sample: B-4@20_20091217 **Lab ID: 252711003** Collected: 12/17/09 11:13 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C24)	ND	mg/kg	5.6	1	12/23/09 10:50	12/29/09 08:00		
TPH-DRO (C10-C24)	ND	mg/kg	5.6	1	12/23/09 10:50	12/29/09 12:06		9n
o-Terphenyl (S)	98	%	50-150	1	12/23/09 10:50	12/29/09 08:00	84-15-1	
o-Terphenyl (S)	103	%	50-150	1	12/23/09 10:50	12/29/09 12:06	84-15-1	9n
n-Octacosane (S)	100	%	50-150	1	12/23/09 10:50	12/29/09 08:00	630-02-4	
n-Octacosane (S)	107	%	50-150	1	12/23/09 10:50	12/29/09 12:06	630-02-4	9n
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	4.9	1	12/22/09 16:00	12/28/09 22:36		13n
a,a,a-Trifluorotoluene (S)	116	%	50-150	1	12/22/09 16:00	12/28/09 22:36	98-08-8	

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-4@20_20091217 **Lab ID: 252711003** Collected: 12/17/09 11:13 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
4-Bromofluorobenzene (S)	110	%	50-150	1	12/22/09 16:00	12/28/09 22:36	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	mg/kg	0.0030	1		12/30/09 13:27	994-05-8	
Benzene	ND	mg/kg	0.0030	1		12/30/09 13:27	71-43-2	
tert-Butyl Alcohol	ND	mg/kg	0.015	1		12/30/09 13:27	75-65-0	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0030	1		12/30/09 13:27	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.0030	1		12/30/09 13:27	107-06-2	
Diisopropyl ether	ND	mg/kg	0.0030	1		12/30/09 13:27	108-20-3	
Ethanol	ND	mg/kg	0.40	1		12/30/09 13:27	64-17-5	
Ethylbenzene	ND	mg/kg	0.0030	1		12/30/09 13:27	100-41-4	
Ethyl-tert-butyl ether	ND	mg/kg	0.0030	1		12/30/09 13:27	637-92-3	
Methyl-tert-butyl ether	ND	mg/kg	0.0030	1		12/30/09 13:27	1634-04-4	
Toluene	ND	mg/kg	0.0030	1		12/30/09 13:27	108-88-3	
Xylene (Total)	ND	mg/kg	0.0060	1		12/30/09 13:27	1330-20-7	
Dibromofluoromethane (S)	97	%	80-136	1		12/30/09 13:27	1868-53-7	
Toluene-d8 (S)	89	%	80-120	1		12/30/09 13:27	2037-26-5	
4-Bromofluorobenzene (S)	89	%	72-122	1		12/30/09 13:27	460-00-4	
1,2-Dichloroethane-d4 (S)	86	%	80-143	1		12/30/09 13:27	17060-07-0	

Sample: B-4_20091217 **Lab ID: 252711004** Collected: 12/17/09 11:30 Received: 12/22/09 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO	Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified							
TPH-DRO (C10-C24)	**11300**	ug/L	100	1	12/23/09 11:10	01/04/10 13:49		8n
TPH-DRO (C10-C24)	**13500**	ug/L	100	1	12/23/09 11:10	01/04/10 17:38		
o-Terphenyl (S)	91	%	50-150	1	12/23/09 11:10	01/04/10 13:49	84-15-1	8n
o-Terphenyl (S)	87	%	50-150	1	12/23/09 11:10	01/04/10 17:38	84-15-1	
n-Octacosane (S)	106	%	26-152	1	12/23/09 11:10	01/04/10 13:49	630-02-4	8n
n-Octacosane (S)	100	%	26-152	1	12/23/09 11:10	01/04/10 17:38	630-02-4	
Gasoline Range Organics	Analytical Method: EPA 5030B/8015B							
TPH-GRO	**97100**	ug/L	25000	500		12/29/09 15:09		12n,2n, 4n,6n,pH
4-Bromofluorobenzene (S)	96	%	50-150	500		12/29/09 15:09	460-00-4	
a,a,a-Trifluorotoluene (S)	108	%	50-150	500		12/29/09 15:09	98-08-8	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	ug/L	25.0	50		12/29/09 12:00	994-05-8	
Benzene	**6960**	ug/L	25.0	50		12/29/09 12:00	71-43-2	
tert-Butyl Alcohol	**167J**	ug/L	250	50		12/29/09 12:00	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	50		12/29/09 12:00	106-93-4	
1,2-Dichloroethane	ND	ug/L	50.0	50		12/29/09 12:00	107-06-2	

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-4_20091217 **Lab ID: 252711004** Collected: 12/17/09 11:30 Received: 12/22/09 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260							
Diisopropyl ether	ND	ug/L	25.0	50		12/29/09 12:00	108-20-3	
Ethanol	ND	ug/L	12500	50		12/29/09 12:00	64-17-5	CL,L2
Ethylbenzene	**6420**	ug/L	25.0	50		12/29/09 12:00	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	25.0	50		12/29/09 12:00	637-92-3	
Methyl-tert-butyl ether	**241**	ug/L	25.0	50		12/29/09 12:00	1634-04-4	
Toluene	**8310**	ug/L	25.0	50		12/29/09 12:00	108-88-3	
Xylene (Total)	**26000**	ug/L	75.0	50		12/29/09 12:00	1330-20-7	
Toluene-d8 (S)	110	%	80-123	50		12/29/09 12:00	2037-26-5	3n,4n, 5n,6n,7n
4-Bromofluorobenzene (S)	98	%	80-120	50		12/29/09 12:00	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-124	50		12/29/09 12:00	17060-07-0	

Sample: B-5@8_20091217 **Lab ID: 252711005** Collected: 12/17/09 12:59 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C24)	**285**	mg/kg	5.9	1	12/23/09 10:50	12/29/09 08:37		
TPH-DRO (C10-C24)	**269**	mg/kg	5.9	1	12/23/09 10:50	12/29/09 12:25		9n
o-Terphenyl (S)	108	%	50-150	1	12/23/09 10:50	12/29/09 08:37	84-15-1	
o-Terphenyl (S)	109	%	50-150	1	12/23/09 10:50	12/29/09 12:25	84-15-1	9n
n-Octacosane (S)	113	%	50-150	1	12/23/09 10:50	12/29/09 08:37	630-02-4	
n-Octacosane (S)	117	%	50-150	1	12/23/09 10:50	12/29/09 12:25	630-02-4	9n
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	**1060**	mg/kg	47.7	10	12/22/09 16:00	12/29/09 16:52		12n
a,a,a-Trifluorotoluene (S)	120	%	50-150	10	12/22/09 16:00	12/29/09 16:52	98-08-8	
4-Bromofluorobenzene (S)	146	%	50-150	10	12/22/09 16:00	12/29/09 16:52	460-00-4	
8260 MSV 5035A Med Level VOA	Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B							
Benzene	**6.2**	mg/kg	0.95	10	12/22/09 16:00	12/28/09 19:12	71-43-2	
Ethylbenzene	**30.9**	mg/kg	0.95	10	12/22/09 16:00	12/28/09 19:12	100-41-4	
Toluene	**21.6**	mg/kg	0.95	10	12/22/09 16:00	12/28/09 19:12	108-88-3	
Xylene (Total)	**143**	mg/kg	2.9	10	12/22/09 16:00	12/28/09 19:12	1330-20-7	
Dibromofluoromethane (S)	104	%	81-114	10	12/22/09 16:00	12/28/09 19:12	1868-53-7	
Toluene-d8 (S)	113	%	84-121	10	12/22/09 16:00	12/28/09 19:12	2037-26-5	
4-Bromofluorobenzene (S)	107	%	78-127	10	12/22/09 16:00	12/28/09 19:12	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	76-115	10	12/22/09 16:00	12/28/09 19:12	17060-07-0	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
tert-Amylmethyl ether	**0.068**	mg/kg	0.0029	1		12/23/09 16:21	994-05-8	
tert-Butyl Alcohol	**0.079**	mg/kg	0.014	1		12/23/09 16:21	75-65-0	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0029	1		12/23/09 16:21	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.0029	1		12/23/09 16:21	107-06-2	

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-5@8_20091217 **Lab ID: 252711005** Collected: 12/17/09 12:59 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Diisopropyl ether	ND	mg/kg	0.0029	1		12/23/09 16:21	108-20-3	
Ethanol	ND	mg/kg	0.38	1		12/23/09 16:21	64-17-5	
Ethyl-tert-butyl ether	ND	mg/kg	0.0029	1		12/23/09 16:21	637-92-3	
Methyl-tert-butyl ether	ND	mg/kg	0.0029	1		12/23/09 16:21	1634-04-4	
Dibromofluoromethane (S)	149	%	80-136	1		12/23/09 16:21	1868-53-7	S2
Toluene-d8 (S)	88	%	80-120	1		12/23/09 16:21	2037-26-5	
4-Bromofluorobenzene (S)	91	%	72-122	1		12/23/09 16:21	460-00-4	
1,2-Dichloroethane-d4 (S)	183	%	80-143	1		12/23/09 16:21	17060-07-0	S2

Sample: B-5@17.5_20091217 **Lab ID: 252711006** Collected: 12/17/09 13:20 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C24)	**27.8**	mg/kg	6.0	1	12/23/09 10:50	12/29/09 08:56		
TPH-DRO (C10-C24)	**26.9**	mg/kg	6.0	1	12/23/09 10:50	12/29/09 12:44		9n
o-Terphenyl (S)	102	%	50-150	1	12/23/09 10:50	12/29/09 08:56	84-15-1	
o-Terphenyl (S)	100	%	50-150	1	12/23/09 10:50	12/29/09 12:44	84-15-1	9n
n-Octacosane (S)	104	%	50-150	1	12/23/09 10:50	12/29/09 08:56	630-02-4	
n-Octacosane (S)	103	%	50-150	1	12/23/09 10:50	12/29/09 12:44	630-02-4	9n
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	**136**	mg/kg	47.1	10	12/22/09 16:00	12/29/09 16:28		12n
a,a,a-Trifluorotoluene (S)	120	%	50-150	10	12/22/09 16:00	12/29/09 16:28	98-08-8	
4-Bromofluorobenzene (S)	113	%	50-150	10	12/22/09 16:00	12/29/09 16:28	460-00-4	
8260 MSV 5035A Med Level VOA	Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B							
Benzene	**0.55J**	mg/kg	0.94	10	12/22/09 16:00	12/28/09 18:51	71-43-2	
Ethylbenzene	**2.7**	mg/kg	0.94	10	12/22/09 16:00	12/28/09 18:51	100-41-4	
Toluene	**1.4**	mg/kg	0.94	10	12/22/09 16:00	12/28/09 18:51	108-88-3	
Xylene (Total)	**15.8**	mg/kg	2.8	10	12/22/09 16:00	12/28/09 18:51	1330-20-7	
Dibromofluoromethane (S)	101	%	81-114	10	12/22/09 16:00	12/28/09 18:51	1868-53-7	
Toluene-d8 (S)	110	%	84-121	10	12/22/09 16:00	12/28/09 18:51	2037-26-5	
4-Bromofluorobenzene (S)	103	%	78-127	10	12/22/09 16:00	12/28/09 18:51	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	76-115	10	12/22/09 16:00	12/28/09 18:51	17060-07-0	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	mg/kg	0.0030	1		12/23/09 15:00	994-05-8	
tert-Butyl Alcohol	**0.035**	mg/kg	0.015	1		12/23/09 15:00	75-65-0	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0030	1		12/23/09 15:00	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.0030	1		12/23/09 15:00	107-06-2	
Diisopropyl ether	ND	mg/kg	0.0030	1		12/23/09 15:00	108-20-3	
Ethanol	ND	mg/kg	0.40	1		12/23/09 15:00	64-17-5	

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-5@17.5_20091217 **Lab ID: 252711006** Collected: 12/17/09 13:20 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Ethyl-tert-butyl ether	ND	mg/kg	0.0030	1		12/23/09 15:00	637-92-3	
Methyl-tert-butyl ether	ND	mg/kg	0.0030	1		12/23/09 15:00	1634-04-4	
Dibromofluoromethane (S)	98	%	80-136	1		12/23/09 15:00	1868-53-7	
Toluene-d8 (S)	91	%	80-120	1		12/23/09 15:00	2037-26-5	
4-Bromofluorobenzene (S)	77	%	72-122	1		12/23/09 15:00	460-00-4	
1,2-Dichloroethane-d4 (S)	128	%	80-143	1		12/23/09 15:00	17060-07-0	

Sample: B-5@26.5_20091217 **Lab ID: 252711007** Collected: 12/17/09 15:05 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C24)	**338**	mg/kg	5.8	1	12/23/09 10:50	12/29/09 09:15		
TPH-DRO (C10-C24)	**346**	mg/kg	5.8	1	12/23/09 10:50	12/29/09 13:03		9n
o-Terphenyl (S)	102	%	50-150	1	12/23/09 10:50	12/29/09 13:03	84-15-1	9n
o-Terphenyl (S)	97	%	50-150	1	12/23/09 10:50	12/29/09 09:15	84-15-1	
n-Octacosane (S)	91	%	50-150	1	12/23/09 10:50	12/29/09 09:15	630-02-4	
n-Octacosane (S)	95	%	50-150	1	12/23/09 10:50	12/29/09 13:03	630-02-4	9n
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	**1570**	mg/kg	48.5	10	12/22/09 16:00	12/29/09 17:17		12n,M0
a,a,a-Trifluorotoluene (S)	120	%	50-150	10	12/22/09 16:00	12/29/09 17:17	98-08-8	
4-Bromofluorobenzene (S)	152	%	50-150	10	12/22/09 16:00	12/29/09 17:17	460-00-4	S2
8260 MSV 5035A Med Level VOA	Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B							
Benzene	**16.2**	mg/kg	0.97	10	12/22/09 16:00	12/28/09 19:32	71-43-2	
Ethylbenzene	**52.8**	mg/kg	0.97	10	12/22/09 16:00	12/28/09 19:32	100-41-4	
Toluene	**73.5**	mg/kg	0.97	10	12/22/09 16:00	12/28/09 19:32	108-88-3	
Xylene (Total)	**255**	mg/kg	2.9	10	12/22/09 16:00	12/28/09 19:32	1330-20-7	
Dibromofluoromethane (S)	102	%	81-114	10	12/22/09 16:00	12/28/09 19:32	1868-53-7	
Toluene-d8 (S)	113	%	84-121	10	12/22/09 16:00	12/28/09 19:32	2037-26-5	
4-Bromofluorobenzene (S)	108	%	78-127	10	12/22/09 16:00	12/28/09 19:32	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	76-115	10	12/22/09 16:00	12/28/09 19:32	17060-07-0	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	mg/kg	0.0028	1		12/23/09 15:20	994-05-8	
tert-Butyl Alcohol	**0.11**	mg/kg	0.014	1		12/23/09 15:20	75-65-0	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0028	1		12/23/09 15:20	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.0028	1		12/23/09 15:20	107-06-2	
Diisopropyl ether	ND	mg/kg	0.0028	1		12/23/09 15:20	108-20-3	
Ethanol	ND	mg/kg	0.38	1		12/23/09 15:20	64-17-5	
Ethyl-tert-butyl ether	ND	mg/kg	0.0028	1		12/23/09 15:20	637-92-3	
Methyl-tert-butyl ether	**0.020**	mg/kg	0.0028	1		12/23/09 15:20	1634-04-4	

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-5@26.5_20091217 **Lab ID: 252711007** Collected: 12/17/09 15:05 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	49	%	80-136	1		12/23/09 15:20	1868-53-7	S5
Toluene-d8 (S)	97	%	80-120	1		12/23/09 15:20	2037-26-5	
4-Bromofluorobenzene (S)	294	%	72-122	1		12/23/09 15:20	460-00-4	S5
1,2-Dichloroethane-d4 (S)	85	%	80-143	1		12/23/09 15:20	17060-07-0	

Sample: B-5@32_20091217 **Lab ID: 252711008** Collected: 12/17/09 15:25 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C24)	ND	mg/kg	5.9	1	12/23/09 10:50	12/29/09 09:33		
TPH-DRO (C10-C24)	ND	mg/kg	5.9	1	12/23/09 10:50	12/29/09 13:22		9n
o-Terphenyl (S)	101	%	50-150	1	12/23/09 10:50	12/29/09 09:33	84-15-1	
o-Terphenyl (S)	99	%	50-150	1	12/23/09 10:50	12/29/09 13:22	84-15-1	9n
n-Octacosane (S)	109	%	50-150	1	12/23/09 10:50	12/29/09 13:22	630-02-4	9n
n-Octacosane (S)	105	%	50-150	1	12/23/09 10:50	12/29/09 09:33	630-02-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	4.8	1	12/22/09 16:00	12/23/09 11:40		13n,M0
a,a,a-Trifluorotoluene (S)	138	%	50-150	1	12/22/09 16:00	12/23/09 11:40	98-08-8	
4-Bromofluorobenzene (S)	130	%	50-150	1	12/22/09 16:00	12/23/09 11:40	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	mg/kg	0.0029	1		12/23/09 14:19	994-05-8	
Benzene	**0.0070**	mg/kg	0.0029	1		12/23/09 14:19	71-43-2	
tert-Butyl Alcohol	ND	mg/kg	0.015	1		12/23/09 14:19	75-65-0	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0029	1		12/23/09 14:19	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.0029	1		12/23/09 14:19	107-06-2	
Diisopropyl ether	ND	mg/kg	0.0029	1		12/23/09 14:19	108-20-3	
Ethanol	ND	mg/kg	0.39	1		12/23/09 14:19	64-17-5	
Ethylbenzene	**0.0057**	mg/kg	0.0029	1		12/23/09 14:19	100-41-4	
Ethyl-tert-butyl ether	ND	mg/kg	0.0029	1		12/23/09 14:19	637-92-3	
Methyl-tert-butyl ether	ND	mg/kg	0.0029	1		12/23/09 14:19	1634-04-4	
Toluene	**0.0087**	mg/kg	0.0029	1		12/23/09 14:19	108-88-3	
Xylene (Total)	**0.031**	mg/kg	0.0059	1		12/23/09 14:19	1330-20-7	
Dibromofluoromethane (S)	95	%	80-136	1		12/23/09 14:19	1868-53-7	
Toluene-d8 (S)	96	%	80-120	1		12/23/09 14:19	2037-26-5	
4-Bromofluorobenzene (S)	100	%	72-122	1		12/23/09 14:19	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-143	1		12/23/09 14:19	17060-07-0	

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-5@20W_20091217 **Lab ID: 252711009** Collected: 12/17/09 13:30 Received: 12/22/09 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO	Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified							
TPH-DRO (C10-C24)	**19900000**	ug/L	652000	500	12/23/09 11:10	01/05/10 11:38		8n,P3
TPH-DRO (C10-C24)	**20400000**	ug/L	652000	500	12/23/09 11:10	01/05/10 12:17		P3
o-Terphenyl (S)	0	%	50-150	500	12/23/09 11:10	01/05/10 12:17	84-15-1	S4
o-Terphenyl (S)	0	%	50-150	500	12/23/09 11:10	01/05/10 11:38	84-15-1	8n,S4
n-Octacosane (S)	0	%	26-152	1	12/23/09 11:10	01/04/10 18:16	630-02-4	11n
n-Octacosane (S)	0	%	26-152	1	12/23/09 11:10	01/04/10 14:27	630-02-4	10n,8n
Gasoline Range Organics	Analytical Method: EPA 5030B/8015B							
TPH-GRO	**23500000**	ug/L	500000	10000		12/29/09 15:39		12n,2n, 4n,6n,pH
4-Bromofluorobenzene (S)	120	%	50-150	10000		12/29/09 15:39	460-00-4	
a,a,a-Trifluorotoluene (S)	118	%	50-150	10000		12/29/09 15:39	98-08-8	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	ug/L	50.0	100		12/29/09 12:20	994-05-8	
Benzene	**324000**	ug/L	2500	5000		12/29/09 13:01	71-43-2	
tert-Butyl Alcohol	ND	ug/L	500	100		12/29/09 12:20	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	100	100		12/29/09 12:20	106-93-4	
1,2-Dichloroethane	ND	ug/L	100	100		12/29/09 12:20	107-06-2	
Diisopropyl ether	ND	ug/L	50.0	100		12/29/09 12:20	108-20-3	
Ethanol	ND	ug/L	25000	100		12/29/09 12:20	64-17-5	CL,L2
Ethylbenzene	**918000**	ug/L	2500	5000		12/29/09 13:01	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	50.0	100		12/29/09 12:20	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	50.0	100		12/29/09 12:20	1634-04-4	
Toluene	**1050000**	ug/L	12500	25000		12/29/09 15:05	108-88-3	
Xylene (Total)	**4120000**	ug/L	37500	25000		12/29/09 15:05	1330-20-7	
Toluene-d8 (S)	118	%	80-123	100		12/29/09 12:20	2037-26-5	3n,4n, 5n,6n,7n
4-Bromofluorobenzene (S)	100	%	80-120	100		12/29/09 12:20	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-124	100		12/29/09 12:20	17060-07-0	

Sample: B-5@32W_20091217 **Lab ID: 252711010** Collected: 12/17/09 15:30 Received: 12/22/09 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO	Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified							
TPH-DRO (C10-C24)	**294000**	ug/L	5880	100	12/23/09 11:10	01/05/10 11:19		
TPH-DRO (C10-C24)	**291000**	ug/L	5880	100	12/23/09 11:10	01/05/10 11:57		
o-Terphenyl (S)	0	%	50-150	100	12/23/09 11:10	01/05/10 11:57	84-15-1	S4
o-Terphenyl (S)	0	%	50-150	100	12/23/09 11:10	01/05/10 11:19	84-15-1	8n,S4
n-Octacosane (S)	128	%	26-152	1	12/23/09 11:10	01/04/10 14:08	630-02-4	8n
n-Octacosane (S)	125	%	26-152	1	12/23/09 11:10	01/04/10 17:57	630-02-4	
Gasoline Range Organics	Analytical Method: EPA 5030B/8015B							
TPH-GRO	**422000**	ug/L	25000	500		12/29/09 11:57		12n,3n, 4n,pH

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: B-5@32W_20091217 **Lab ID: 252711010** Collected: 12/17/09 15:30 Received: 12/22/09 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics	Analytical Method: EPA 5030B/8015B							
4-Bromofluorobenzene (S)	111	%	50-150	500		12/29/09 11:57	460-00-4	
a,a,a-Trifluorotoluene (S)	119	%	50-150	500		12/29/09 11:57	98-08-8	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260							
tert-Amylmethyl ether	ND	ug/L	25.0	50		12/29/09 12:41	994-05-8	
Benzene	**8100**	ug/L	125	250		12/29/09 13:23	71-43-2	
tert-Butyl Alcohol	ND	ug/L	250	50		12/29/09 12:41	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	50		12/29/09 12:41	106-93-4	
1,2-Dichloroethane	**511**	ug/L	50.0	50		12/29/09 12:41	107-06-2	
Diisopropyl ether	ND	ug/L	25.0	50		12/29/09 12:41	108-20-3	
Ethanol	ND	ug/L	12500	50		12/29/09 12:41	64-17-5	CL,L2
Ethylbenzene	**9580**	ug/L	25.0	50		12/29/09 12:41	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	25.0	50		12/29/09 12:41	637-92-3	
Methyl-tert-butyl ether	**632**	ug/L	25.0	50		12/29/09 12:41	1634-04-4	
Toluene	**20200**	ug/L	125	250		12/29/09 13:23	108-88-3	
Xylene (Total)	**60800**	ug/L	375	250		12/29/09 13:23	1330-20-7	
Toluene-d8 (S)	110	%	80-123	50		12/29/09 12:41	2037-26-5	3n,4n, 5n,6n,7n
4-Bromofluorobenzene (S)	101	%	80-120	50		12/29/09 12:41	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-124	50		12/29/09 12:41	17060-07-0	

Sample: Waste_20091217 **Lab ID: 252711011** Collected: 12/17/09 15:45 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**7.0**	mg/kg	0.96	1	12/23/09 07:45	12/23/09 15:32	7439-92-1	
8260 MSV 5035A Med Level VOA	Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B							
Benzene	**0.87**	mg/kg	0.094	1	12/22/09 16:00	12/28/09 19:53	71-43-2	
Ethylbenzene	**3.1**	mg/kg	0.094	1	12/22/09 16:00	12/28/09 19:53	100-41-4	
Toluene	**4.0**	mg/kg	0.094	1	12/22/09 16:00	12/28/09 19:53	108-88-3	
Xylene (Total)	**16.1**	mg/kg	0.28	1	12/22/09 16:00	12/28/09 19:53	1330-20-7	
Dibromofluoromethane (S)	99	%	81-114	1	12/22/09 16:00	12/28/09 19:53	1868-53-7	
Toluene-d8 (S)	112	%	84-121	1	12/22/09 16:00	12/28/09 19:53	2037-26-5	
4-Bromofluorobenzene (S)	110	%	78-127	1	12/22/09 16:00	12/28/09 19:53	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	76-115	1	12/22/09 16:00	12/28/09 19:53	17060-07-0	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Methyl-tert-butyl ether	**0.0080**	mg/kg	0.0027	1		12/23/09 16:01	1634-04-4	
Dibromofluoromethane (S)	149	%	80-136	1		12/23/09 16:01	1868-53-7	S5
Toluene-d8 (S)	89	%	80-120	1		12/23/09 16:01	2037-26-5	
4-Bromofluorobenzene (S)	85	%	72-122	1		12/23/09 16:01	460-00-4	
1,2-Dichloroethane-d4 (S)	164	%	80-143	1		12/23/09 16:01	17060-07-0	S5

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ANALYTICAL RESULTS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Sample: Waste_20091217 **Lab ID: 252711011** Collected: 12/17/09 15:45 Received: 12/22/09 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
CA LUFT MSV GRO	Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	**102**	mg/kg	11.7	50		12/28/09 19:53		1n
4-Bromofluorobenzene (S)	110	%	72-122	50		12/28/09 19:53	460-00-4	

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: OEXT/1757 Analysis Method: EPA 8015B
QC Batch Method: EPA 3546 Analysis Description: EPA 8015B CA TPH
Associated Lab Samples: 252711001, 252711002, 252711003, 252711005, 252711006, 252711007, 252711008

METHOD BLANK: 17944 Matrix: Solid
Associated Lab Samples: 252711001, 252711002, 252711003, 252711005, 252711006, 252711007, 252711008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C24)	mg/kg	ND	6.0	12/29/09 06:06	
n-Octacosane (S)	%	111	50-150	12/29/09 06:06	
o-Terphenyl (S)	%	105	50-150	12/29/09 06:06	

LABORATORY CONTROL SAMPLE: 17945

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C24)	mg/kg	250	207	83	56-124	
n-Octacosane (S)	%			111	50-150	
o-Terphenyl (S)	%			102	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17946 17947

Parameter	Units	252711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
TPH-DRO (C10-C24)	mg/kg	10.1	250	249	195	197	74	75	56-124	.7	
n-Octacosane (S)	%						104	92	50-150		
o-Terphenyl (S)	%						93	83	50-150		

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: OEXT/1759 Analysis Method: EPA 8015B
QC Batch Method: EPA 3546 Analysis Description: EPA 8015B CA TPH
Associated Lab Samples: 252711001, 252711002, 252711003, 252711005, 252711006, 252711007, 252711008

METHOD BLANK: 17948 Matrix: Solid
Associated Lab Samples: 252711001, 252711002, 252711003, 252711005, 252711006, 252711007, 252711008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C24)	mg/kg	ND	6.0	12/29/09 09:52	9n
n-Octacosane (S)	%	120	50-150	12/29/09 09:52	9n
o-Terphenyl (S)	%	111	50-150	12/29/09 09:52	9n

LABORATORY CONTROL SAMPLE: 17949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C24)	mg/kg	250	203	81	56-124	9n
n-Octacosane (S)	%			114	50-150	9n
o-Terphenyl (S)	%			103	50-150	9n

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17950 17951

Parameter	Units	252711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
TPH-DRO (C10-C24)	mg/kg	10.1	250	249	197	186	75	71	56-124	6	9n
n-Octacosane (S)	%						108	93	50-150		9n
o-Terphenyl (S)	%						96	84	50-150		9n

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: OEXT/1754 Analysis Method: EPA 8015B
QC Batch Method: EPA 3510 Modified Analysis Description: EPA 8015B
Associated Lab Samples: 252711004, 252711009, 252711010

METHOD BLANK: 17938 Matrix: Water
Associated Lab Samples: 252711004, 252711009, 252711010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C24)	ug/L	ND	40.0	01/04/10 15:06	
n-Octacosane (S)	%	111	26-152	01/04/10 15:06	
o-Terphenyl (S)	%	93	50-150	01/04/10 15:06	

LABORATORY CONTROL SAMPLE & LCSD: 17939 17940

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH-DRO (C10-C24)	ug/L	2500	1980	1870	79	75		6		
n-Octacosane (S)	%				112	113	26-152			
o-Terphenyl (S)	%				101	100	50-150			

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: OEXT/1755 Analysis Method: EPA 8015B
QC Batch Method: EPA 3510 Modified Analysis Description: EPA 8015B
Associated Lab Samples: 252711004, 252711009, 252711010

METHOD BLANK: 17941 Matrix: Water
Associated Lab Samples: 252711004, 252711009, 252711010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C24)	ug/L	ND	40.0	01/04/10 10:52	8n
n-Octacosane (S)	%	110	26-152	01/04/10 10:52	8n
o-Terphenyl (S)	%	90	50-150	01/04/10 10:52	8n

LABORATORY CONTROL SAMPLE & LCSD: 17942 17943

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH-DRO (C10-C24)	ug/L	2500	1870	1740	75	70		7		8n
n-Octacosane (S)	%				112	109	26-152			8n
o-Terphenyl (S)	%				101	96	50-150			8n

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: GCV/1386 Analysis Method: EPA 8015B
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 252711002, 252711008

METHOD BLANK: 17936 Matrix: Solid
Associated Lab Samples: 252711002, 252711008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	5.0	12/22/09 10:29	13n
4-Bromofluorobenzene (S)	%	114	50-150	12/22/09 10:29	
a,a,a-Trifluorotoluene (S)	%	126	50-150	12/22/09 10:29	

LABORATORY CONTROL SAMPLE: 17937

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	12.5	17.0	136	81-124	13n,L3
4-Bromofluorobenzene (S)	%			107	50-150	
a,a,a-Trifluorotoluene (S)	%			115	50-150	

MATRIX SPIKE SAMPLE: 18043

Parameter	Units	252711008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	ND	12	21.4	157	53-141	13n,M0
4-Bromofluorobenzene (S)	%				136	50-150	
a,a,a-Trifluorotoluene (S)	%				146	50-150	

SAMPLE DUPLICATE: 18042

Parameter	Units	252727001 Result	Dup Result	RPD	Qualifiers
TPH-GRO	mg/kg	30.0	29.5	2	13n
4-Bromofluorobenzene (S)	%	130	129	1	
a,a,a-Trifluorotoluene (S)	%	137	142	3	

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: GCV/1392
QC Batch Method: EPA 5035A/5030B
Associated Lab Samples: 252711003

Analysis Method: EPA 8015B
Analysis Description: Gasoline Range Organics

METHOD BLANK: 18073 Matrix: Solid
Associated Lab Samples: 252711003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	5.0	12/28/09 21:47	13n
4-Bromofluorobenzene (S)	%	115	50-150	12/28/09 21:47	
a,a,a-Trifluorotoluene (S)	%	124	50-150	12/28/09 21:47	

LABORATORY CONTROL SAMPLE & LCSD: 18074 18075

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH-GRO	mg/kg	12.5	16.1	15.2	129	122	81-124	5	30	13n,L3
4-Bromofluorobenzene (S)	%				111	104	50-150			
a,a,a-Trifluorotoluene (S)	%				111	105	50-150			

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QUALITY CONTROL DATA

Project: 42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: GCV/1395 Analysis Method: EPA 8015B
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 252711001, 252711005, 252711006, 252711007

METHOD BLANK: 18113 Matrix: Solid
Associated Lab Samples: 252711001, 252711005, 252711006, 252711007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	5.0	12/29/09 14:29	12n
4-Bromofluorobenzene (S)	%	110	50-150	12/29/09 14:29	
a,a,a-Trifluorotoluene (S)	%	123	50-150	12/29/09 14:29	

LABORATORY CONTROL SAMPLE: 18114

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	12.5	14.8	119	81-124	12n
4-Bromofluorobenzene (S)	%			104	50-150	
a,a,a-Trifluorotoluene (S)	%			114	50-150	

MATRIX SPIKE SAMPLE: 18115

Parameter	Units	252711007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	1570	121	2320	612	53-141	12n,M1
4-Bromofluorobenzene (S)	%				182	50-150	S2
a,a,a-Trifluorotoluene (S)	%				126	50-150	

SAMPLE DUPLICATE: 18116

Parameter	Units	252711007 Result	Dup Result	RPD	Qualifiers
TPH-GRO	mg/kg	1570	1910	19	12n
4-Bromofluorobenzene (S)	%	152	154	1	S2
a,a,a-Trifluorotoluene (S)	%	120	108	10	

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: GCV/1394 Analysis Method: EPA 5030B/8015B
QC Batch Method: EPA 5030B/8015B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 252711004, 252711009, 252711010

METHOD BLANK: 18109 Matrix: Water
Associated Lab Samples: 252711004, 252711009, 252711010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	ug/L	ND	50.0	12/29/09 10:09	12n
4-Bromofluorobenzene (S)	%	111	50-150	12/29/09 10:09	
a,a,a-Trifluorotoluene (S)	%	112	50-150	12/29/09 10:09	

LABORATORY CONTROL SAMPLE: 18110

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	250	277	111	79-126	12n
4-Bromofluorobenzene (S)	%			100	50-150	
a,a,a-Trifluorotoluene (S)	%			107	50-150	

MATRIX SPIKE SAMPLE: 18111

Parameter	Units	252711010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	422000	125000	548000	101	62-136	12n
4-Bromofluorobenzene (S)	%				115	50-150	
a,a,a-Trifluorotoluene (S)	%				122	50-150	

SAMPLE DUPLICATE: 18112

Parameter	Units	252711010 Result	Dup Result	RPD	Qualifiers
TPH-GRO	ug/L	422000	402000	5	12n
4-Bromofluorobenzene (S)	%	111	110	.7	
a,a,a-Trifluorotoluene (S)	%	119	115	3	

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: MPRP/1397
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 252711011

METHOD BLANK: 17932 Matrix: Solid
Associated Lab Samples: 252711011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	ND	1.0	12/23/09 15:27	

LABORATORY CONTROL SAMPLE: 17933

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	25	23.5	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17934 17935

Parameter	Units	252711011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Lead	mg/kg	7.0	24	23.4	28.9	28.1	91	90	75-125	3	

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: MSV/1825 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV MO GRO Oxygenates
Associated Lab Samples: 252711004, 252711009, 252711010

METHOD BLANK: 17956 Matrix: Water
Associated Lab Samples: 252711004, 252711009, 252711010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/29/09 11:19	
1,2-Dichloroethane	ug/L	ND	1.0	12/29/09 11:19	
Benzene	ug/L	ND	0.50	12/29/09 11:19	
Diisopropyl ether	ug/L	ND	0.50	12/29/09 11:19	
Ethanol	ug/L	ND	250	12/29/09 11:19	CL
Ethyl-tert-butyl ether	ug/L	ND	0.50	12/29/09 11:19	
Ethylbenzene	ug/L	ND	0.50	12/29/09 11:19	
Methyl-tert-butyl ether	ug/L	ND	0.50	12/29/09 11:19	
tert-Amylmethyl ether	ug/L	ND	0.50	12/29/09 11:19	
tert-Butyl Alcohol	ug/L	ND	5.0	12/29/09 11:19	
Toluene	ug/L	ND	0.50	12/29/09 11:19	
Xylene (Total)	ug/L	ND	1.5	12/29/09 11:19	
1,2-Dichloroethane-d4 (S)	%	107	80-124	12/29/09 11:19	
4-Bromofluorobenzene (S)	%	104	80-120	12/29/09 11:19	
Toluene-d8 (S)	%	110	80-123	12/29/09 11:19	

LABORATORY CONTROL SAMPLE & LCSD: 17957 18158

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	17.0	19.2	85	96	60-140	12	30	
1,2-Dichloroethane	ug/L	20	17.9	20.7	90	103	73-127	14	30	
Benzene	ug/L	20	18.1	20.4	90	102	75-124	12	30	
Diisopropyl ether	ug/L	20	15.8	18.8	79	94	69-130	17	30	
Ethanol	ug/L	400	180J	375	45	94	60-140		30	CL,L0
Ethyl-tert-butyl ether	ug/L	20	15.0	17.7	75	89	67-131	17	30	
Ethylbenzene	ug/L	20	19.0	20.3	95	102	76-124	7	30	
Methyl-tert-butyl ether	ug/L	20	14.7	17.7	74	89	72-130	18	30	
tert-Amylmethyl ether	ug/L	20	15.0	17.4	75	87	67-132	15	30	
tert-Butyl Alcohol	ug/L	100	58.4	94.5	58	95	36-164	47	30	R1
Toluene	ug/L	20	20.2	21.1	101	106	75-124	5	30	
Xylene (Total)	ug/L	60	62.2	65.1	104	108	76-123	5	30	
1,2-Dichloroethane-d4 (S)	%				106	107	80-124			
4-Bromofluorobenzene (S)	%				102	98	80-120			
Toluene-d8 (S)	%				107	107	80-123			

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: MSV/1845 Analysis Method: EPA 8260
QC Batch Method: EPA 5035A/5030B Analysis Description: 8260 MSV 5035A Medium Soil
Associated Lab Samples: 252711001, 252711005, 252711006, 252711007, 252711011

METHOD BLANK: 18300 Matrix: Solid
Associated Lab Samples: 252711001, 252711005, 252711006, 252711007, 252711011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	mg/kg	ND	0.50	12/28/09 14:05	
Ethylbenzene	mg/kg	ND	0.50	12/28/09 14:05	
Toluene	mg/kg	ND	0.50	12/28/09 14:05	
Xylene (Total)	mg/kg	ND	1.5	12/28/09 14:05	
1,2-Dichloroethane-d4 (S)	%	105	76-115	12/28/09 14:05	
4-Bromofluorobenzene (S)	%	102	78-127	12/28/09 14:05	
Dibromofluoromethane (S)	%	98	81-114	12/28/09 14:05	
Toluene-d8 (S)	%	109	84-121	12/28/09 14:05	

LABORATORY CONTROL SAMPLE & LCSD: 18301 18302

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	mg/kg	1	0.87	0.83	87	83	79-127	4	30	
Ethylbenzene	mg/kg	1	0.87	0.85	87	85	77-126	3	30	
Toluene	mg/kg	1	0.91	0.88	91	88	77-124	3	30	
Xylene (Total)	mg/kg	3	2.7	2.7	91	89	77-127	3	30	
1,2-Dichloroethane-d4 (S)	%				102	102	76-115			
4-Bromofluorobenzene (S)	%				103	102	78-127			
Dibromofluoromethane (S)	%				102	101	81-114			
Toluene-d8 (S)	%				107	107	84-121			

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: MSV/1824 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 252711001, 252711002, 252711005, 252711006, 252711007, 252711008, 252711011

METHOD BLANK: 17924 Matrix: Solid
Associated Lab Samples: 252711001, 252711002, 252711005, 252711006, 252711007, 252711008, 252711011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0030	12/23/09 13:18	
1,2-Dichloroethane	mg/kg	ND	0.0030	12/23/09 13:18	
Benzene	mg/kg	ND	0.0030	12/23/09 13:18	
Diisopropyl ether	mg/kg	ND	0.0030	12/23/09 13:18	
Ethanol	mg/kg	ND	0.40	12/23/09 13:18	
Ethyl-tert-butyl ether	mg/kg	ND	0.0030	12/23/09 13:18	
Ethylbenzene	mg/kg	ND	0.0030	12/23/09 13:18	
Methyl-tert-butyl ether	mg/kg	ND	0.0030	12/23/09 13:18	
tert-Amylmethyl ether	mg/kg	ND	0.0030	12/23/09 13:18	
tert-Butyl Alcohol	mg/kg	ND	0.015	12/23/09 13:18	
Toluene	mg/kg	ND	0.0030	12/23/09 13:18	
Xylene (Total)	mg/kg	ND	0.0060	12/23/09 13:18	
1,2-Dichloroethane-d4 (S)	%	93	80-143	12/23/09 13:18	
4-Bromofluorobenzene (S)	%	100	72-122	12/23/09 13:18	
Dibromofluoromethane (S)	%	92	80-136	12/23/09 13:18	
Toluene-d8 (S)	%	97	80-120	12/23/09 13:18	

LABORATORY CONTROL SAMPLE: 17925

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	mg/kg	.04	0.034	85	71-123	
1,2-Dichloroethane	mg/kg	.04	0.035	88	71-124	
Benzene	mg/kg	.04	0.040	100	68-124	
Diisopropyl ether	mg/kg	.04	0.038	95	20-160	
Ethanol	mg/kg	.8	0.77	97	60-140	
Ethyl-tert-butyl ether	mg/kg	.04	0.036	91	70-140	
Ethylbenzene	mg/kg	.04	0.037	93	63-131	
Methyl-tert-butyl ether	mg/kg	.04	0.037	93	68-139	
tert-Amylmethyl ether	mg/kg	.04	0.038	95	74-125	
tert-Butyl Alcohol	mg/kg	.2	0.21	103	49-122	
Toluene	mg/kg	.04	0.035	89	61-126	
Xylene (Total)	mg/kg	.12	0.11	95	68-129	
1,2-Dichloroethane-d4 (S)	%			95	80-143	
4-Bromofluorobenzene (S)	%			95	72-122	
Dibromofluoromethane (S)	%			99	80-136	
Toluene-d8 (S)	%			92	80-120	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17926 17927

Parameter	Units	252711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,2-Dibromoethane (EDB)	mg/kg	ND	.038	.036	0.023	0.023	61	62	71-123	4	M0
1,2-Dichloroethane	mg/kg	ND	.038	.036	0.026	0.026	68	71	71-124	.9	M0
Benzene	mg/kg	0.046	.038	.036	0.055	0.077	24	85	68-124	32	M0,R1
Diisopropyl ether	mg/kg	ND	.038	.036	0.028	0.026	73	71	20-160	7	
Ethanol	mg/kg	ND	.76	.72	0.56	0.52	74	72	60-140	7	
Ethyl-tert-butyl ether	mg/kg	ND	.038	.036	0.027	0.026	71	71	70-140	5	
Ethylbenzene	mg/kg		.038	.036	0.23	0.45	-829	-254	63-131	66	E,M0,R1
Methyl-tert-butyl ether	mg/kg	0.061	.038	.036	0.062	0.062	3	1	68-139	1	M0
tert-Amylmethyl ether	mg/kg	ND	.038	.036	0.029	0.027	73	74	74-125	5	M0
tert-Butyl Alcohol	mg/kg	0.091	.19	.18	0.21	0.19	64	54	49-122	12	M0
Toluene	mg/kg	0.18	.038	.036	0.11	0.18	-162	20	61-126	46	E,M0,R1
Xylene (Total)	mg/kg		.11	.11	1.2	2.4	-1530	-534	68-129	64	E,M0,R1
1,2-Dichloroethane-d4 (S)	%						95	100	80-143		
4-Bromofluorobenzene (S)	%						92	100	72-122		
Dibromofluoromethane (S)	%						99	103	80-136		
Toluene-d8 (S)	%						92	94	80-120		

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: MSV/1837 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 252711003

METHOD BLANK: 18103 Matrix: Solid
Associated Lab Samples: 252711003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0030	12/30/09 13:02	
1,2-Dichloroethane	mg/kg	ND	0.0030	12/30/09 13:02	
Benzene	mg/kg	ND	0.0030	12/30/09 13:02	
Diisopropyl ether	mg/kg	ND	0.0030	12/30/09 13:02	
Ethanol	mg/kg	ND	0.40	12/30/09 13:02	
Ethyl-tert-butyl ether	mg/kg	ND	0.0030	12/30/09 13:02	
Ethylbenzene	mg/kg	ND	0.0030	12/30/09 13:02	
Methyl-tert-butyl ether	mg/kg	ND	0.0030	12/30/09 13:02	
tert-Amylmethyl ether	mg/kg	ND	0.0030	12/30/09 13:02	
tert-Butyl Alcohol	mg/kg	ND	0.015	12/30/09 13:02	
Toluene	mg/kg	ND	0.0030	12/30/09 13:02	
Xylene (Total)	mg/kg	ND	0.0060	12/30/09 13:02	
1,2-Dichloroethane-d4 (S)	%	80	80-143	12/30/09 13:02	
4-Bromofluorobenzene (S)	%	88	72-122	12/30/09 13:02	
Dibromofluoromethane (S)	%	95	80-136	12/30/09 13:02	
Toluene-d8 (S)	%	90	80-120	12/30/09 13:02	

LABORATORY CONTROL SAMPLE & LCSD: 18104 18105

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	mg/kg	.02	0.018	0.016	92	78	71-123	17	30	
1,2-Dichloroethane	mg/kg	.02	0.018	0.015	88	77	71-124	14	30	
Benzene	mg/kg	.02	0.022	0.020	109	100	68-124	8	30	
Diisopropyl ether	mg/kg	.02	0.020	0.018	100	88	20-160	12	30	
Ethanol	mg/kg	.4	.39J	0.41	98	103	60-140		30	
Ethyl-tert-butyl ether	mg/kg	.02	0.020	0.017	101	86	70-140	15	30	
Ethylbenzene	mg/kg	.02	0.018	0.016	90	80	63-131	13	30	
Methyl-tert-butyl ether	mg/kg	.02	0.018	0.015	88	76	68-139	14	30	
tert-Amylmethyl ether	mg/kg	.02	0.020	0.018	102	89	74-125	14	30	
tert-Butyl Alcohol	mg/kg	.1	0.085	0.095	85	95	49-122	11	30	
Toluene	mg/kg	.02	0.019	0.016	93	82	61-126	12	30	
Xylene (Total)	mg/kg	.06	0.058	0.052	97	86	68-129	12	30	
1,2-Dichloroethane-d4 (S)	%				80	85	80-143			
4-Bromofluorobenzene (S)	%				84	84	72-122			
Dibromofluoromethane (S)	%				100	103	80-136			
Toluene-d8 (S)	%				86	86	80-120			

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QUALITY CONTROL DATA

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

QC Batch: MSV/1840
QC Batch Method: CA LUFT
Analysis Method: CA LUFT
Analysis Description: CA LUFT MSV GRO
Associated Lab Samples: 252711011

METHOD BLANK: 18128 Matrix: Solid
Associated Lab Samples: 252711011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	mg/kg	ND	12.5	12/28/09 14:05	1n
4-Bromofluorobenzene (S)	%	102	72-122	12/28/09 14:05	

LABORATORY CONTROL SAMPLE & LCSD: 18129 18130

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH-Gasoline (C05-C12)	mg/kg	25	32.4	30.3	130	121	60-140	7	30	1n
4-Bromofluorobenzene (S)	%				101	99	72-122			

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QUALIFIERS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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LABORATORIES

PASI-S	Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

10n	Surrogate recovery outside control limits due to matrix interference, sample extract could not concentrated to routine final volume.
11n	Surrogate recovery outside control limits due to sample matrix, sample extract unable to be concentrated to routine final volume.
12n	TPH-GRO was evaluated from C5-C12.
13n	This sample was evaluated from C5-C12.
1n	A methanol extract of this sample was analyzed at a dilution of 1:50.
2n	Analysis was conducted outside of the 7-day EPA method holding time for un-preserved vials.
3n	Analysis was conducted outside the 7-day EPA method holding time for un-preserved vials.
4n	Due to large amounts of sediment in the VOA vials, two vials were combined prior to analysis.
5n	Due to the high concentration of target analytes present in the sample and the risk of instrument contamination, a less diluted aliquot of sample was not analyzed.
6n	Headspace was present in VOA vials upon arrival to the lab.
7n	Post-analysis pH measurement indicates insufficient VOA sample preservation.
8n	Result is from silica gel treated extract. DT 01-05-2010
9n	Sample result is from silica -gel treated extract.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
R1	RPD value was outside control limits.

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QUALIFIERS

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

ANALYTE QUALIFIERS

S2	Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
252711001	B-4@6_20091217	EPA 3546	OEXT/1757	EPA 8015B	GCSV/1395
252711001	B-4@6_20091217	EPA 3546	OEXT/1759	EPA 8015B	GCSV/1399
252711002	B-4@15_20091217	EPA 3546	OEXT/1757	EPA 8015B	GCSV/1395
252711002	B-4@15_20091217	EPA 3546	OEXT/1759	EPA 8015B	GCSV/1399
252711003	B-4@20_20091217	EPA 3546	OEXT/1757	EPA 8015B	GCSV/1395
252711003	B-4@20_20091217	EPA 3546	OEXT/1759	EPA 8015B	GCSV/1399
252711005	B-5@8_20091217	EPA 3546	OEXT/1757	EPA 8015B	GCSV/1395
252711005	B-5@8_20091217	EPA 3546	OEXT/1759	EPA 8015B	GCSV/1399
252711006	B-5@17.5_20091217	EPA 3546	OEXT/1757	EPA 8015B	GCSV/1395
252711006	B-5@17.5_20091217	EPA 3546	OEXT/1759	EPA 8015B	GCSV/1399
252711007	B-5@26.5_20091217	EPA 3546	OEXT/1757	EPA 8015B	GCSV/1395
252711007	B-5@26.5_20091217	EPA 3546	OEXT/1759	EPA 8015B	GCSV/1399
252711008	B-5@32_20091217	EPA 3546	OEXT/1757	EPA 8015B	GCSV/1395
252711008	B-5@32_20091217	EPA 3546	OEXT/1759	EPA 8015B	GCSV/1399
252711004	B-4_20091217	EPA 3510 Modified	OEXT/1754	EPA 8015B	GCSV/1397
252711004	B-4_20091217	EPA 3510 Modified	OEXT/1755	EPA 8015B	GCSV/1400
252711009	B-5@20W_20091217	EPA 3510 Modified	OEXT/1754	EPA 8015B	GCSV/1397
252711009	B-5@20W_20091217	EPA 3510 Modified	OEXT/1755	EPA 8015B	GCSV/1400
252711010	B-5@32W_20091217	EPA 3510 Modified	OEXT/1754	EPA 8015B	GCSV/1397
252711010	B-5@32W_20091217	EPA 3510 Modified	OEXT/1755	EPA 8015B	GCSV/1400
252711001	B-4@6_20091217	EPA 5035A/5030B	GCV/1395	EPA 8015B	GCV/1396
252711002	B-4@15_20091217	EPA 5035A/5030B	GCV/1386	EPA 8015B	GCV/1389
252711003	B-4@20_20091217	EPA 5035A/5030B	GCV/1392	EPA 8015B	GCV/1393
252711005	B-5@8_20091217	EPA 5035A/5030B	GCV/1395	EPA 8015B	GCV/1396
252711006	B-5@17.5_20091217	EPA 5035A/5030B	GCV/1395	EPA 8015B	GCV/1396
252711007	B-5@26.5_20091217	EPA 5035A/5030B	GCV/1395	EPA 8015B	GCV/1396
252711008	B-5@32_20091217	EPA 5035A/5030B	GCV/1386	EPA 8015B	GCV/1389
252711004	B-4_20091217	EPA 5030B/8015B	GCV/1394		
252711009	B-5@20W_20091217	EPA 5030B/8015B	GCV/1394		
252711010	B-5@32W_20091217	EPA 5030B/8015B	GCV/1394		
252711011	Waste_20091217	EPA 3050	MPRP/1397	EPA 6010	ICP/1320
252711004	B-4_20091217	EPA 8260	MSV/1825		
252711009	B-5@20W_20091217	EPA 8260	MSV/1825		
252711010	B-5@32W_20091217	EPA 8260	MSV/1825		
252711001	B-4@6_20091217	EPA 5035A/5030B	MSV/1845	EPA 8260	MSV/1846

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: I42705191 449 Hegenberger
Pace Project No.: 252711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
252711005	**B-5@8_20091217**	EPA 5035A/5030B	MSV/1845	EPA 8260	MSV/1846
252711006	**B-5@17.5_20091217**	EPA 5035A/5030B	MSV/1845	EPA 8260	MSV/1846
252711007	**B-5@26.5_20091217**	EPA 5035A/5030B	MSV/1845	EPA 8260	MSV/1846
252711011	**Waste_20091217**	EPA 5035A/5030B	MSV/1845	EPA 8260	MSV/1846
252711001	**B-4@6_20091217**	EPA 8260	MSV/1824		
252711002	**B-4@15_20091217**	EPA 8260	MSV/1824		
252711003	**B-4@20_20091217**	EPA 8260	MSV/1837		
252711005	**B-5@8_20091217**	EPA 8260	MSV/1824		
252711006	**B-5@17.5_20091217**	EPA 8260	MSV/1824		
252711007	**B-5@26.5_20091217**	EPA 8260	MSV/1824		
252711008	**B-5@32_20091217**	EPA 8260	MSV/1824		
252711011	**Waste_20091217**	EPA 8260	MSV/1824		
252711011	**Waste_20091217**	CA LUFT	MSV/1840		

252711

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

21800 / L1-L3

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Delta Consultants	Report To:	Dennis Dettloff	Attention:	Dennis Dettloff
Address:	11050 White Rock Rd. Suite 110	Copy To:		Company Name:	Delta
	Rancho Cordova, CA 95670			Address:	11050 White Rock Rd. Suite 110
Email To:	ddettloff@deltaenv.com	Purchase Order No.	142705191 #49 Hegenberger	Pace Quote Reference:	
Phone:	916-503-1261 Fax: 916-638-8385	Client Project ID:	142705191	Pace Project Manager:	
Requested Due Date/TAT:	10 Day (Default)	Container Order Number:		Pace Profile #:	

Regulatory Agency: Alameda County Health Care Services

State / Location: CA/Alameda County

ITEM#	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TPHd - 8015M	TPHd - Silica Gel	TPHg - 8015M	BTEX/MTBE/7 Oxys* - 8260	TPHg/BTEX/MTBE - 8260	Total Lead - 6010	Residual Chlorine (Y/N)	
1	B-4@6_20091217*	SL	G			12/17/09	10:50		1	X									X	X	X	X				PID - 15.6
2	B-4@15_20091217	SL	G			12/17/09	11:05		1	X									X	X	X	X				PID - 38.4
3	B-4@20_20091217	SL	G			12/17/09	11:13		1	X									X	X	X	X				PID - 2.0
4	B-4_20091217	WT	G			12/17/09	11:30		8	X			X						X	X	X	X				
5	B-5@8_20091217	SL	G			12/17/09	12:59		1	X									X	X	X	X				PID - 885
6	B-5@17.5_20091217	SL	G			12/17/09	13:20		1	X									X	X	X	X				PID - 710
7	B-5@26.5_20091217	SL	G			12/17/09	15:05		1	X									X	X	X	X				PID - 942
8	B-5@32_20091217	SL	G			12/17/09	15:25		1	X									X	X	X	X				PID - 92.4
9	B-5@20W_20091217	WT	G			12/17/09	13:30		4	X			X						X	X	X	X				
10	B-5@32W_20091217	WT	G			12/17/09	15:30		4	X			X						X	X	X	X				
11	Waste_20091217	SL	C			12/17/09	15:45		1	X													X	X		
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
*7 Oxys - MTBE/TBA/DIPE/EDB/1,2-DCA/ETBE/TAME/Ethanol	Delta	12/2/09	13:15		12/22/09	0945	1.5	Y	N	Y
SITE ID ≠ Sample IDs edited to reflect Delta naming Conventions. RSM 12/22/09										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Edward T. Weyrens Ed Weyrens

SIGNATURE of SAMPLER: DATE Signed: 12/17/09

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Sample Condition Upon Receipt

Pace Analytical

Client Name: Delta

Project # 252711

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: 8704 9477 8834

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: Horiba 132013 Type of Ice: (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temperature: 1.5 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 12/22/09 AR

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4. Samples arrived with 2 days left on hold-time
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: Water/Soil		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	Initial when completed / Lot # of added preservative
exceptions: (VOA) coliform, TOC, O&G, WI-DRO (water)	☑Yes ☐No	
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☑Yes ☐No ☐N/A	15. Sample 4 6/6 Sample 9 3/3 Sample 10 2/3
Trip Blank Present:	☐Yes ☑No ☐N/A	16. Vials with headspace
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Field Data Required? Y / N

Client Notification/ Resolution:

Person Contacted: E. Weyrens / D. Dethoff Date/Time: 12/22/09

Comments/ Resolution:

Ed Weyrens said he was unable to collect sample w/o headspace.
Ed said this was noted in Delta's field notes.
Left vmm and email for Dennis Dethoff RBM

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)