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May 26, 2006

Mr. Jerry Wickham Alameda County Health Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

#### Re: Soil Boring Assessment Report Delta Project No. C104186031 76 Service Station No. 4186 1771 First Street Livermore, California

Dear Mr. Wickham:

This report has been prepared by Delta Environmental Consultants, Inc. (Delta) on behalf of ConocoPhillips Company (COP) to present the results of the advancement of seven soil borings for the above referenced site. Figure 1 shows the location and vicinity of the site. The purpose of drilling the soil borings was to (1) collect and analyze soil samples to delineate the vertical extent of contamination at the site, particularly in the vicinity of the area surrounding the underground storage tank (UST) area, (2) define the lateral extent of contamination within the sand and gravel units, (3) clearly define subsurface lithology and delineate the upper and lower contacts of the sand and gravel unit. This work was conducted as proposed in Delta's *Work Plan – Soil Boring Assessment* dated January 4, 2006, as approved by the Alameda County Health Services Agency Staff letter dated January 12, 2006. Figure 2 shows site facility details and locations of the soil borings.

#### SITE DESCRIPTION

The subject site is an operating service station located on the southwest corner of First Street and N Street in Livermore, California (Figure 2). The site is bounded on the north by First Street, on the east by N Street, and on the south and west by commercial buildings. The immediate site vicinity is a mix of commercial properties including restaurants, automobile repair shops, and shopping facilities. The site is located at an elevation of 480 feet above mean sea level (MSL).

Current aboveground site facilities consist of four dispenser islands, a canopy and a station building. Two 10,000-gallon gasoline USTs are located in a common pit on the east side of the site.



RECEIVED

By lopprojectop at 11:27 am, May 30, 2006

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#### SITE BACKGROUND AND ACTIVITY

During dispenser and piping replacement activities in June 1996, six soil samples were collected from beneath the fuel dispensers and along the product delivery piping. Analytical results were non-detect (ND) for Total Petroleum Hydrocarbons as gasoline (TPH-G) and benzene, toluene, ethylbenzene and total xylenes (BTEX) for each sample collected from beneath the dispenser islands and product delivery piping.

A soil gas survey was conducted on September 10, 1997, as part of a baseline site evaluation associated with the property transfer from Unocal Corporation to Tosco. Six soil gas probes were advanced and samples collected at 3 or 15 feet bgs in the vicinity of the UST pit, dispenser islands, and product lines. Analytical results of soil gas samples ranged from 41 to 4,500 parts per billion by volume (ppb-v) TPH-G, ND to 110 ppb-v benzene, and ND to 8,000 ppb-v methyl tertiary butyl ether (MTBE). The area of highest soil vapor concentration was localized around the USTs.

Alameda County Zone 7 Water Agency files were reviewed on April 8, 1998, to identify water supply wells located within a one half mile radius of the site. Two municipal wells were identified as present approximately 1,500 feet and 1,800 feet northwest of the site, and two domestic wells were located approximately 1,900 feet and 2,800 feet southwest and west of the site.

On June 16, 1998, three two-inch diameter groundwater monitor wells (U-1 through U-3) were drilled and completed at the site. The wells were installed to depths of 34 feet bgs. Analytical results of soil samples collected from the three well boreholes were reported as ND for TPH-G, benzene, and MTBE.

A site conceptual model (SCM) was completed for the site in May 2000. A groundwater flow velocity was calculated to estimate plume travel time to the nearest downgradient receptor. Groundwater velocity was calculated to be 46 feet per year. It was concluded that hydrocarbon impact to groundwater appears to fluctuate with the rise and fall of the groundwater surface beneath the site.

Two additional two-inch diameter groundwater monitor wells (U-4 and U-5) were installed offsite on February 21, 2001, at the locations shown on Figure 2. The wells were installed to depths of 45 feet (U-4) and 47 feet (U-5). TPH-G, BTEX and MTBE were not detected in soil samples collected from the boreholes during well drilling. TPH-G and benzene were not detected in groundwater samples collected from wells U-4 and U-5. MTBE was detected in the groundwater samples from both wells U-4 and U-5 at concentrations of 38.2 and 55.4 micrograms per liter ( $\mu g/l$ ), respectively.

Monitoring and sampling of the wells at the site was initiated in July 1998, and has continued on a quarterly basis to the present time. Historically, groundwater flow directions have varied from north to southwest. Depth to groundwater has varied from 21.62 feet bgs (U-3) to 46.31 feet bgs (U-5).

On December 5 – 7, 2001, two monitor wells (U-6 and U-7) and eight ozone microsparge points (SP-1 through SP-8) were installed. The monitor wells were installed to 45 feet bgs using 8-inch diameter hollow stem augers. Borings SP-1 through SP-8 were completed as sparge points with the installation of 2-inch diameter KVA sparge

points attached to <sup>3</sup>/<sub>4</sub>-inch diameter blank schedule 80 PVC casing. The sparge points are composed of 30-inch long microporous plastic. Sparge points SP-1 through SP-4 were installed to depths of 45 feet bgs. Sparge points SP-6S and SP-7S were installed to depths of 25 feet bgs. The remaining two sparge locations contained nested sparge points (SP-5, SP-5S, SP-8 and SP-8S) installed to 25 and 45 feet bgs in each boring. With completion of the sparge point installation, an interim remedial measure system was installed consisting of a K-V Associates, Inc. (KVA) "C-Sparge" ozone microsparge system.

#### SITE GEOLOGY AND HYDROGEOLOGY

The subject site is located in the Livermore Valley in the north-central Coast Range and is underlain by interfingered Holocene age alluvial fan and gravel facies. These deposits are composed of semi-consolidated deposits of sand and gravel in a matrix of clayey sand. During this soil boring assessment and previous field investigations, it was determined that the unsaturated (vadose) zone is composed predominantly of gravel with varying amounts of clay, silt and sand. The saturated zone is composed of clay, silty sand, and gravel. Figures 3 and 4, and Attachment A provide cross-sections of the site and near-by subsurface lithology.

Groundwater was initially encountered at depths of 32 to 42 feet bgs during drilling at the site. Historical monitoring data show the static depth to water onsite varies from 23 to 31 feet bgs. The historical groundwater flow direction has varied from north to southwest with an average gradient of 0.02 foot per foot (ft/ft). The nearest surface water to the site is the Arroyo Mocho Creek, located approximately 2,900 feet south of the site. Attachment B shows the historical groundwater flow directions.

#### SCOPE OF WORK

The scope of work included the following activities:

- Conducted utility clearance and obtained a drilling permit from the Zone 7 Water Agency;
- Drilled seven soil borings with the initial five feet cleared with "air-knife" technology;
- Collected soil samples for laboratory analysis;
- Collected depth-discrete grab groundwater samples from each borehole from an upper zone at approximately 41 feet bgs and a lower zone at approximately 61 feet bgs; and
- Uploaded analytical laboratory data into the State of California Geotracker System per requirements of AB 2886.

#### Pre-Field Investigation Activities

A utility survey was completed prior to conducting the field investigation. Underground Services Alert (USA) was notified prior to drilling operations, and a private utility locating company (Cruz Brothers) were also used to reduce the risk of damage to utilities beneath the property. Additionally, the first five feet of each borehole was cleared with air-knife technology before drilling was begun. Delta prepared a site-specific Health and Safety (H&S) plan in accordance Title 8, Section 5192 of the California Code of Regulations. Drilling permit No. 26060 was obtained from the Zone 7 Water Agency prior to scheduling the field work.

#### Soil Boring and Sampling Procedures

The soil borings (Figure 2) were drilled by Gregg Drilling and Testing, Inc., a licensed contractor, using a cone penetrometer testing (CPT) rig. Three boreholes were advanced for each soil boring location. The initial borehole was drilled to provide a CPT log of subsurface lithologies. The second borehole was drilled to collect soil samples for identification and laboratory analysis, and to collect a depth-discrete groundwater sample at approximately 38 feet to 44 feet bgs. The third borehole was drilled to collect a depth-discrete groundwater sample at approximately 57 feet to 65 feet bgs. Soil samples from selected depths were submited for analysis. Each boring was backfilled with grout upon completion.

Soil samples were collected using a direct push piston sampler. A sealed pointed piston was advanced within the core barrel of the CPT to the desired sample depth. The piston was opened and driven to further depth to collect a soil sample at which time the piston assembly was removed and the soil sample recovered. One sample tube from each interval was sealed with Teflon tape and plastic end caps then placed in an ice chest cooled with ice. The remaining soil collected from the sample tubes was used for field screening and lithologic description purposes. Soil samples from each sample interval were field screened for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID). A minimum three soil samples per boring were collected for laboratory analysis: one sample from the coarse-grained unit encountered at a depth of approximately 33 to 39 feet bgs; one sample from the clay unit between the upper and lower coarse units; and one sample from the lower coarse-grained unit encountered approximately 51 to 55 feet bgs. Additional soil samples were submitted for analysis if the PID measurements indicated substantial contamination. The PID measurements were recorded on the soil boring log by the field geologist. Each soil sample was logged using the Unified Soil Classification System (USCS).

Groundwater samples were collected using a closed screen sampler. The assembly was driven with the outer tube casing in place. When the desired groundwater sample depth was reached, the outer casing was retracted to expose the screen to groundwater. A small-diameter bailer was then lowered through the drill casing and a groundwater sample collected. The expendable drive point was left in place when the drill casing and sampling assembly were removed.

Each groundwater sample was placed in an appropriately labeled container, sealed, and stored in an ice chest cooled with ice. The samples were transported to a state-certified laboratory for analysis under chain-of-custody protocol.

#### Subsurface Conditions

A Delta field geologist examined soil samples from each boring in conjunction with the corresponding CPT log when classifying soil type and thickness. Soil encountered during drilling near the surface consisted primarily of gravel with varying amounts of clay and silt, and continued to a depth of approximately 25 feet bgs. A clay unit with various amounts of silt and sand continued from approximately 25 feet to 36 feet bgs. The

"upper unit", a saturated layer generally consisting of silty sand with gravel and comprised of multiple smaller units consisting of various amounts of gravel, sand and silt was encountered at approximately 36 feet bgs and continued to a depth of approximately 43 feet bgs. A clay unit between the "upper" and "lower" units had varying amounts of silt and sand and continued from approximately 43 feet to 55 feet bgs. The "lower unit", generally consisting of silty sand with gravel/gravel with sandy silt and comprised of multiple smaller units consisting of various amounts of gravel and sand, was encountered at a depth of approximately 55 feet bgs and continued to the maximum depths explored. Groundwater was initially encountered between depths of approximately 32 to 42 feet bgs. The CPT log is presented in Attachment C, and boring logs for B-1 through B-7 are presented in Attachment D.

#### Laboratory Analysis and Results

Soil and groundwater samples were submitted under chain of custody protocol to Severn Trent Laboratories, Inc. (STL), a California-certified laboratory. The soil and groundwater samples were analyzed for gasoline range organic compounds (GRO), BTEX, MTBE, di-isopropyl ether (DIPE), tertiary butyl alcohol (TBA), tertiary amyl methyl ether (TAME), and ethanol by United States Environmental Protection Agency EPA Method 8260B. In addition, for waste profiling purposes, one soil sample was analyzed for total lead by EPA Method 6010. Attachment E includes the analytical reports and chain of custody documentation.

#### Soil

Analytical results of soil samples are shown in Table 1. GRO was detected in five upper zone samples (B-1@40', B-1@60', B-4@43', B-6@43', and B-7@39') at concentrations ranging from 6.5 mg/Kg (B-7@39') to 420 mg/Kg (B-6@43'); in six lower zone samples (B-1@62', B-2@61', B-3@62', B-5@65', B-6@63' and B-7@57') at concentrations ranging from 1.4 mg/Kg (B-1@62') to 510 mg/Kg (B-7@57'). MTBE was detected in four upper zone samples (B-4@43', B-5@44', B-6 @43, and B-7@39') at concentrations ranging from 16 mg/Kg (B-4@43') to 1,100 mg/Kg (B-6@63'); in all lower zone samples except B-7@57' at concentrations ranging from 7.9 mg/Kg (B-6@63') to 510 mg/Kg (B-4@63').

#### Water

Analytical results of groundwater samples are shown in Table 2. GRO was detected in each of the 14 groundwater samples at concentrations ranging from 930 µg/l (B2@ 38') to 23,000 µg/l (B-5@44') in the upper zone, and 100 µg/l (B1@ 62') to 26,000 µg/l (B-7@57') in the lower zone. Benzene was detected in five upper zone samples (B-1@41', B-3@38', B-4@43', B-6@43', and B-7@39') at concentrations ranging from 6.5 µg/l (B-7@39') to 420 µg/l (B-6@43'); in six lower zone samples (B-1@62', B-2@61', B-3@62', B-5@65', B-6@63' and B-7@57') at concentrations ranging from 1.4 µg/l (B-1@62') to 510 µg/l (B-7@57'). MTBE was detected in four upper zone samples (B-4@43', B-5@44', B-6 @43', and B-7@39') at concentrations ranging from 16 µg/l (B-4@43') to 1,100 µg/l (B-6@63'); in all lower zone samples except B-7@57' at concentrations ranging from 7.9 µg/l (B-6@63') to 510 µg/l (B-4@63'. Figures 5 through 10 are

isoconcentration maps depicting GRO, benzene, and MTBE concentrations for both the upper and lower groundwater zones.

#### Waste Disposal

Soil cuttings generated during this investigation are temporarily being stored onsite in appropriately labeled 55-gallon Department of Transportation (DOT)-approved drums pending disposal arrangements. The soil will be transported offsite by a licensed waste hauler once an approved destination for the waste is found.

#### Conclusions

Delta concludes the following:

- Coarse lithologic units (upper and lower) provide a path for petroleum hydrocarbon migration. Fine-grained units tend to adsorb petroleum hydrocarbons, thus inhibiting migration.
- Soils within the area of the UST pit have minor impacts of petroleum hydrocarbons.
- Groundwater has been impacted by petroleum hydrocarbons in the vicinity of the USTs in the upper zone and near B-7 in the lower zone; hydrocarbon contamination is migrating in the downgradient direction.
- Petroleum hydrocarbon concentrations detected in the groundwater samples collected from the borings are consistent with historical groundwater concentrations at the site.

#### Recommendations

Delta recommends the following:

- Continue groundwater monitoring and sampling per the existing site groundwater monitoring program.
- Install two groundwater monitor wells upgradient of the site to investigate possible off site sources and to further delineate vertical and lateral groundwater contamination.
- Continue ozone sparge remediation and maintain a high programmed runtime.

#### Remarks/Signatures

The recommendations contained in this letter/report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This letter/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 were performed. This letter/report is intended only for the use of Delta's Client and anyone else specifically listed on this letter/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 express or implied warranty as to the contents of this letter/report.

If you have questions regarding this report, please call us at (916) 503-1260.

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DANIEL J. DAVIS

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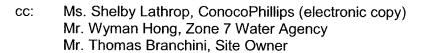
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Sincerely, Delta Environmental Consultants, Inc.

Ben Wright Staff Geologist

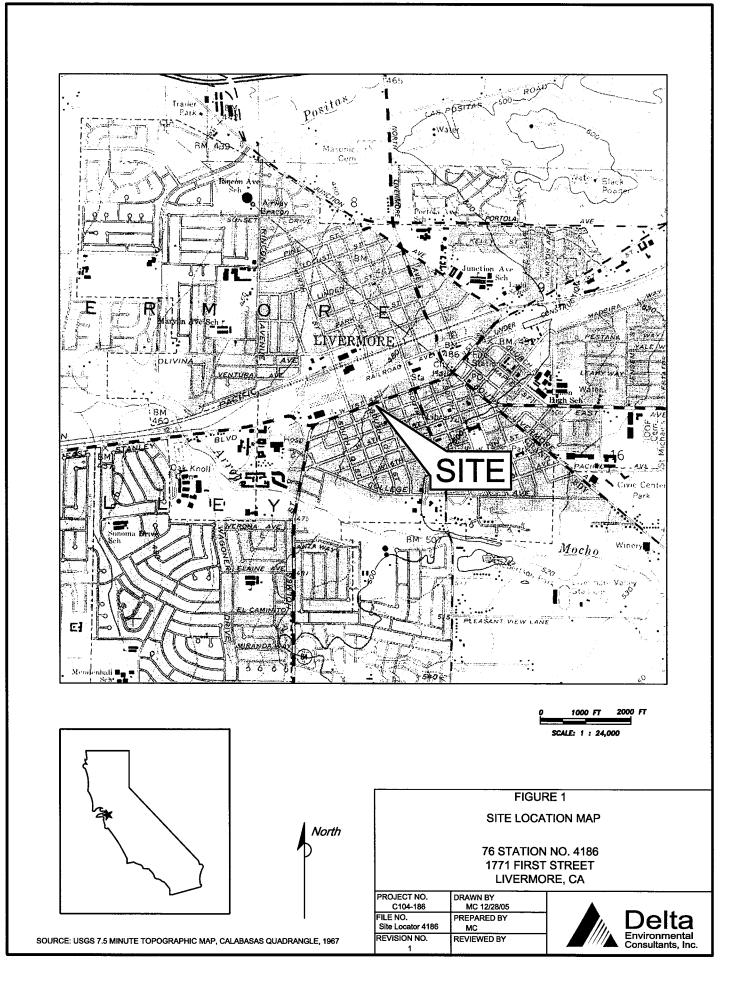
Daniel J. Davis, K.G. Senior Project Manager

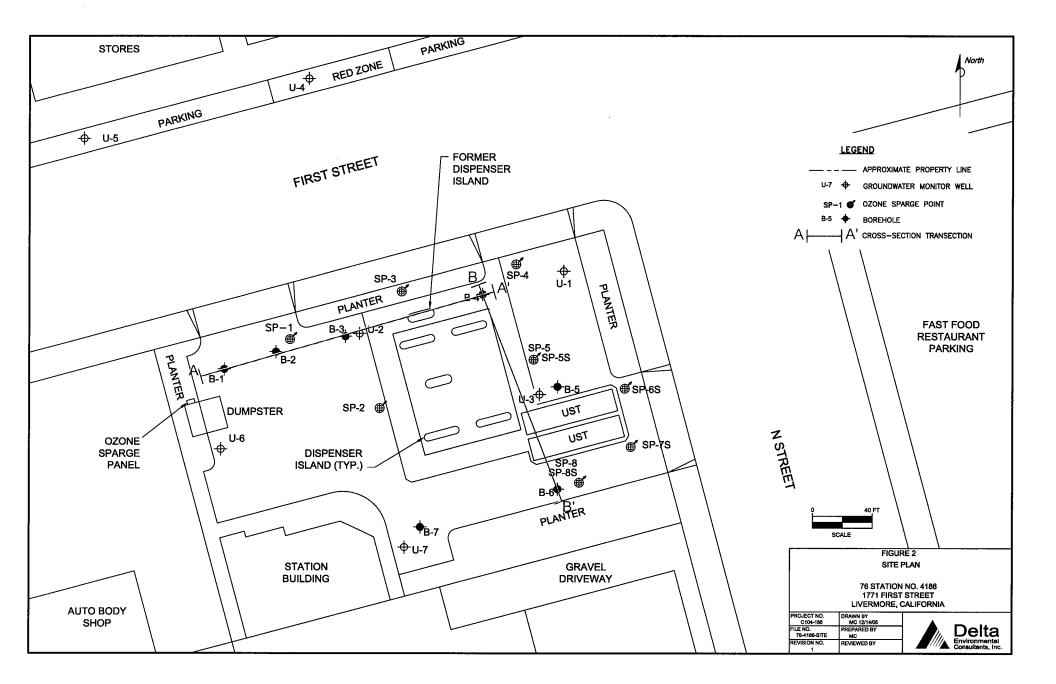


Figures: Figure 1 – Site Location Map Figure 2 – Site Plan Figure 3 – Cross Section A-A' Figure 4 – Cross Section B-B' Figure 5 – Dissolved Phase GRO Concentration Map - Upper Zone Figure 6 – Dissolved Phase Benzene Concentration Map - Upper Zone Figure 7 – Dissolved Phase MTBE Concentration Map - Upper Zone Figure 8 – Dissolved Phase GRO Concentration Map - Lower Zone Figure 9 – Dissolved Phase Benzene Concentration Map - Lower Zone Figure 10 – Dissolved Phase MTBE Concentration Map - Lower Zone
Tables: Table 1 – Soil Analytical Results Table 2 – Groundwater Analytical Results

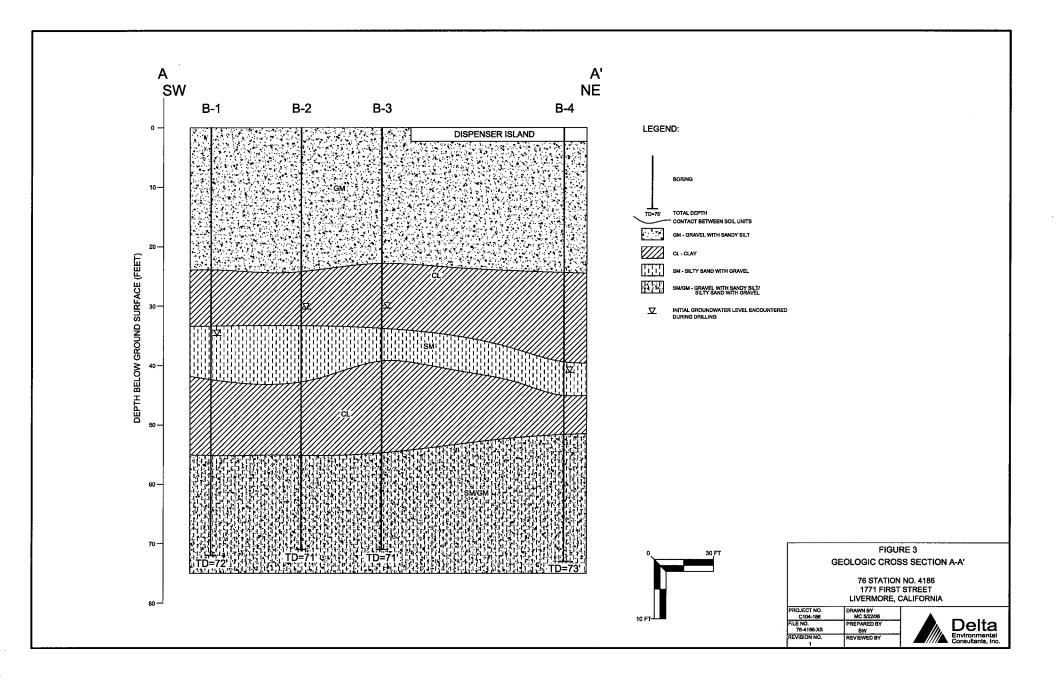
Attachments: Attachment A – ATC Cross Section Map Attachment B – Historical Groundwater Flow Directions Attachment C – CPT Site Investigation Attachment D – Boring Logs Attachment E – Analytical Reports and Chain of Custody Documentation Figures

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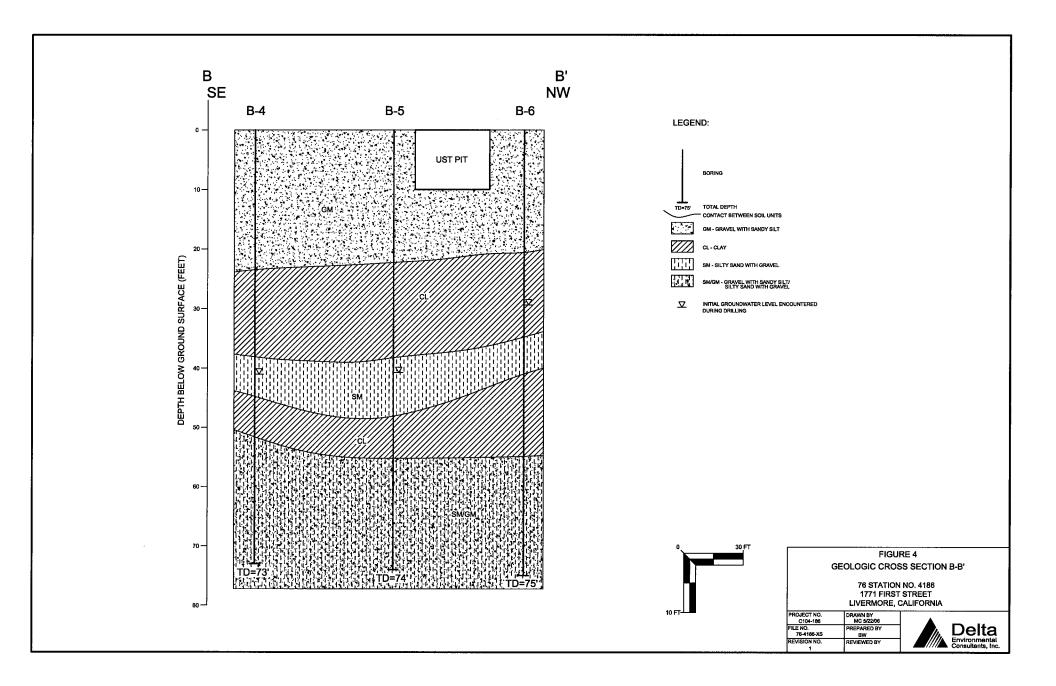


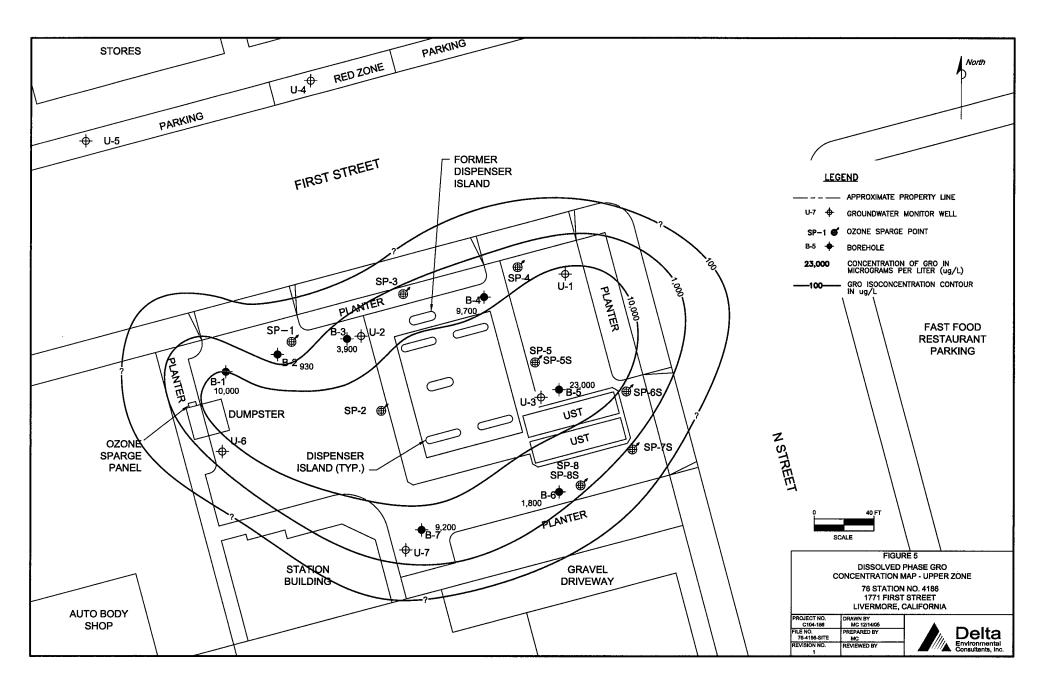


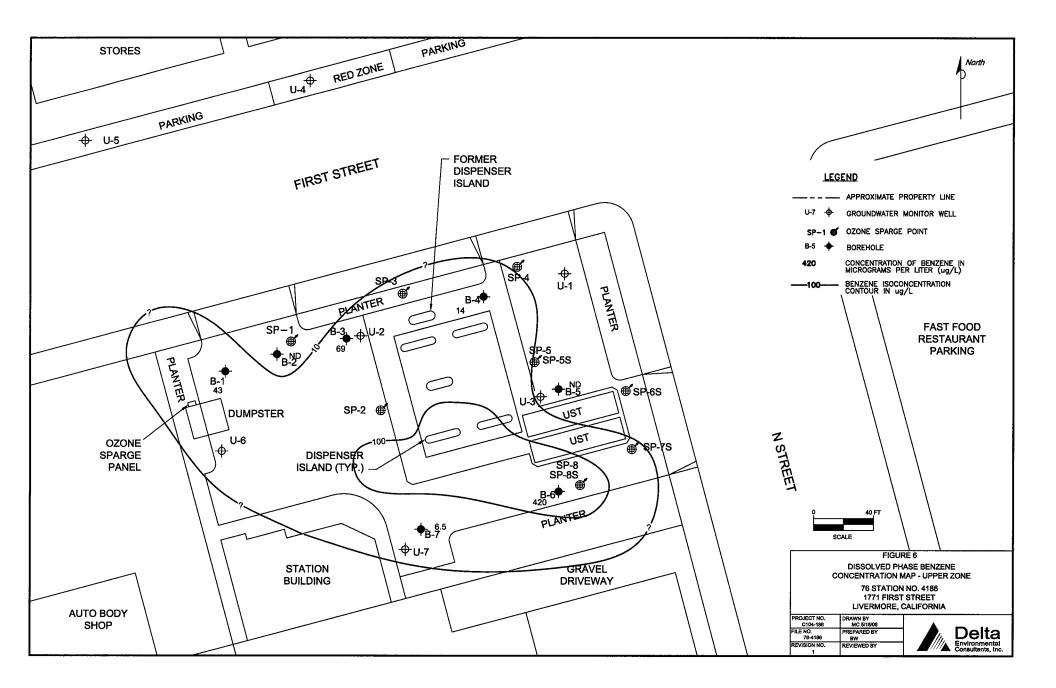
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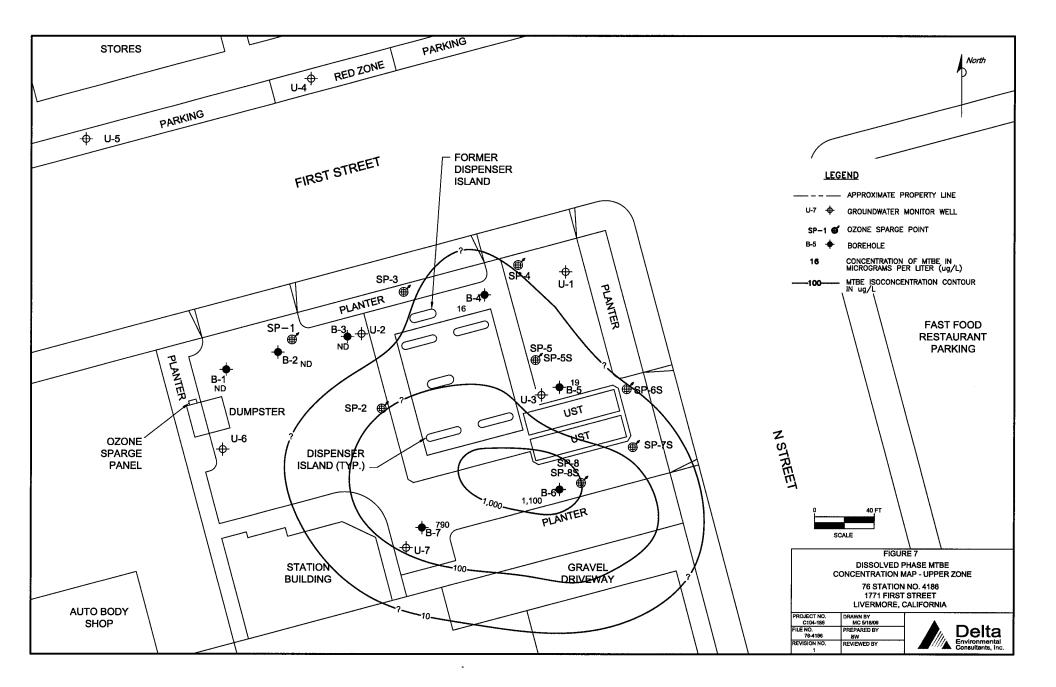
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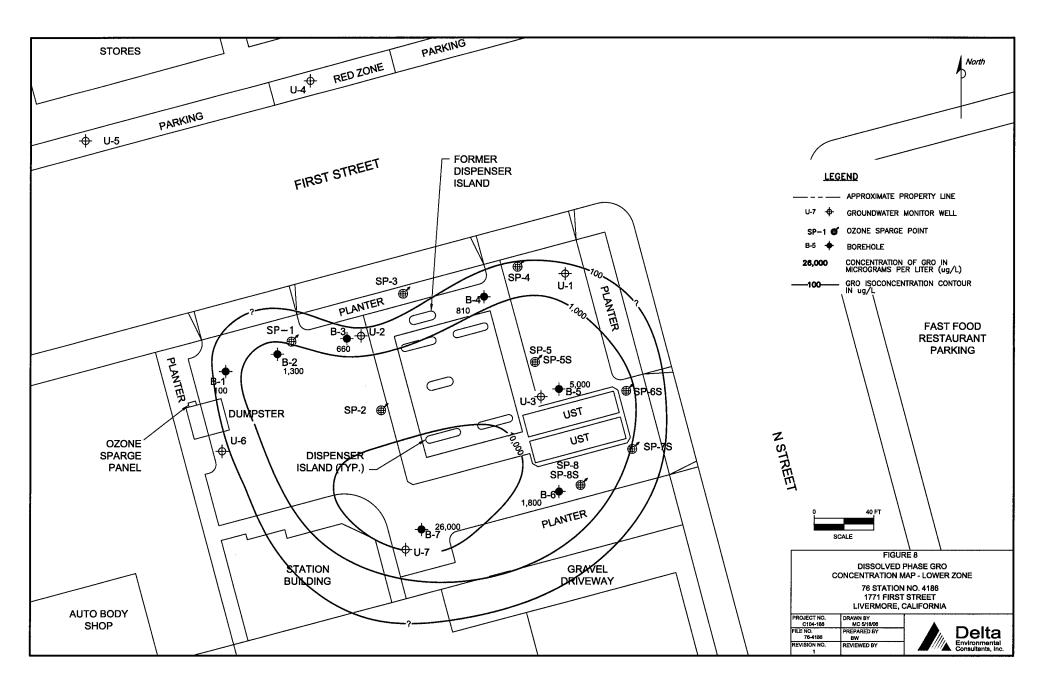


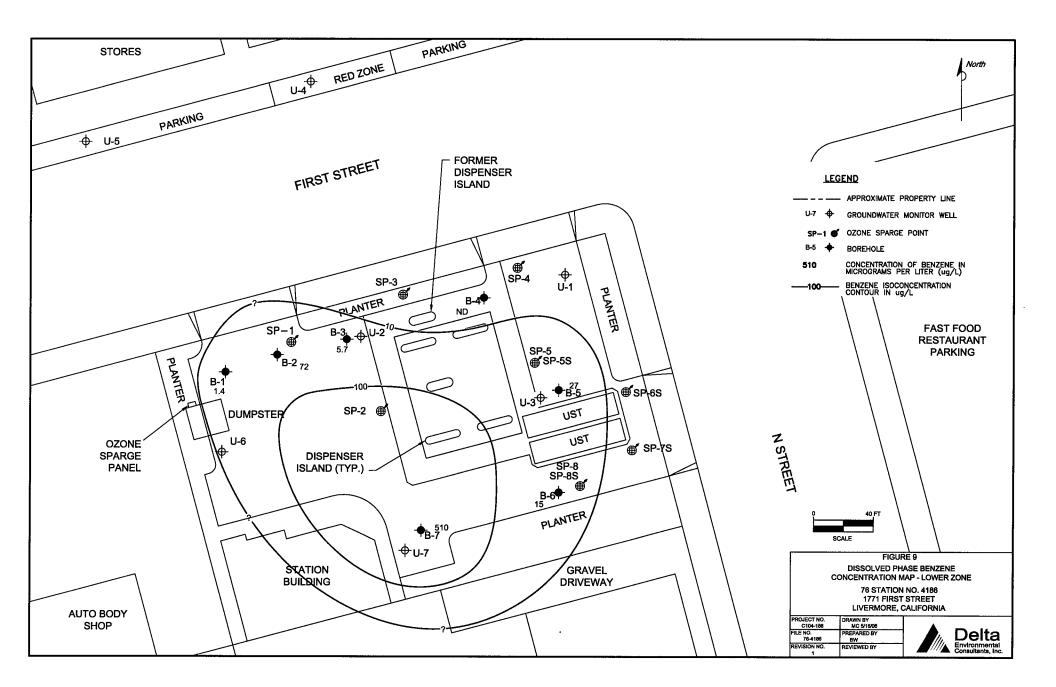


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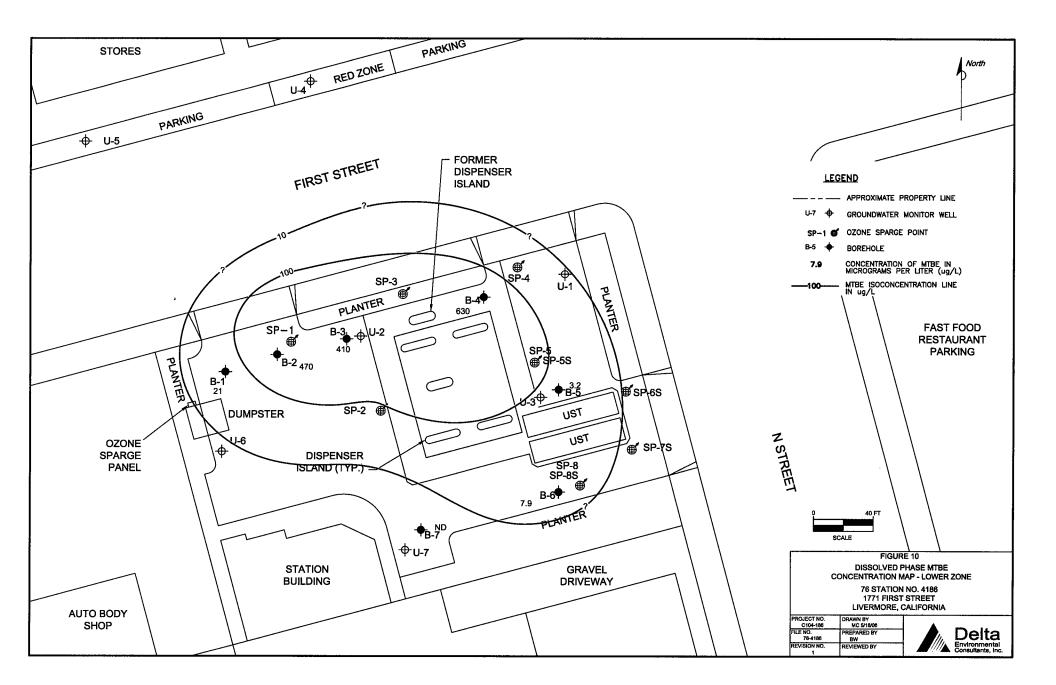


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Tables

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#### Table 1

#### SOIL ANALYTICAL RESULTS Conocophillips Station No. 4186 1771 First Street, Livermore California

Sample ID	Date	Depth	TPH-G	TPH-D	GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	TBA	ETBE	TAME	DIPE	Ethanol	Lead
		(feet)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Soil											(1.5.3/	(	(			
B-1@40'	4/20/2006	40		•••	2,8	ND	ND	0.024	ND	ND	ND	ND	ND	ND	ND	
B-1@45'	4/20/2006	45			450	ND	ND	ND	2,1	ND	ND	ND	ND	ND	ND	
B-1@60'	4/20/2006	60			0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-2@40'	4/19/2006	40			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	64	
B-2@45'	4/19/2006	45			180	ND	ND	ND	ND	ND	ND	ND	ND	ND	58	
B-2@60'	4/19/2006	60			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-3@35'	4/20/2006	35			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-3@40'	4/20/2006	40			30	ND	ND	0.20	0.42	ND	ND	ND	ND	ND	ND	
B-3@65'	4/20/2006	65			ND	ND	ND	0.0069	0.026	ND	ND	ND	ND	ND	ND	
B-4@10'	4/26/2006	10														3.9
B-4@40'	4/26/2006	40			0.35	ND	ND	ND	0.031	0.019	ND	ND	ND	ND	ND	
B-4@50'	4/26/2006	. 50			0.89	ND	ND	ND	0.023	0.088	0.01	ND	ND	ND	ND	
B-4@60'	4/26/2006	60		405	ND	ND	ND	ND	ND	0.02	0.06	ND	ND	ND	ND	
B-5@40'	4/25/2006	40			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-5@50'	4/26/2006	50			4.4	0.015	0.026	0.07	0.19	0.02	ND	ND	ND	ND	ND	
B-5@60'	4/26/2006	60		***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-6@25'	4/25/2006	25			0.54	ND	ND	ND	ND	0.29	0.17	ND	ND	ND	ND	
B-6@35'	4/25/2006	35			ND	ND	ND	ND	ND	0.24	ND	ND	ND	ND	ND	
B-6@46'	4/25/2006	46			1.2	0.069	ND	ND	ND	0.093	0.034	ND	ND	ND	ND	
B-6@55'	4/25/2006	55		•••	190	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	
B-7@35'	4/21/2006	35			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-7@45'	4/21/2006	45			700	1.3	ND	5.6	14	ND	ND	. ND	ND	ND	27	
B-7@55'	4/21/2006	55			1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<u> </u>				·												L

TPH-G = total petroleum hydrocarbons as gasoline TPH-D = total petroleum hydrocarbons as diesel

GRO = gasoline range organics C6-C12 by EPA Method 8260B

BTEX = benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B

MTBE = methyl tertiary butyl ether by EPA Method 8260B TBA = tertiary butyl alcohol by EPA Method 8260B

ETBE = ethyl tertiary butyl ether by EPA Method 8260B

DIPE = di-isopropyl ether by EPA Method 8260B

TAME = tertiary amyl methyl ether by EPA Method 8260B

Ethanol was analyzed by EPA Method 8260B Lead was analyzed by EPA Method 6010

not analyzed = ----

ND = not detected above the laboratory detection limit

- Bold = detected compound concentration
- EPA = US Environmental Protection Agency

#### Table 2

# GROUNDWATER ANALYTICAL RESULTS Conocophillips Station No. 4186 1771 First Street, Livermore California

Sample ID	Date	Depth	TPH-G	TPH-D	GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	ТВА	ETBE	TAME	DIPE	Ethanol	Lead
		(feet)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Upper Zone	)										1					
B-1@41'	4/20/2006	41			10,000	43	ND	830	39	ND	ND	ND	ND	ND	ND	
B-2@38'	4/19/2006	38			930	ND	0.78	ND	1.5	ND	ND	ND	ND	ND	ND	
B-3@38'	4/20/2006	38			3,900	6.9	ND	18	14	ND	ND	ND	ND	ND	ND	
B-4@43'	4/26/2006	43			9,700	14	ND	40	44	16	ND	ND	ND	ND	ND	
B-5@44'	4/26/2006	44		•••	23,000	ND	11	8.2	370	19	250	ND	ND	ND	ND	
B-6@43'	4/25/2006	43		***	1,800	420	ND	35	120	1,100	250	ND	ND	ND	ND	
B-7@39'	4/21/2006	39			9,200	6.5	1.6	90	210	790	180	ND	ND	ND	NĎ	
Lower Zone	)															
B-1@62'	4/20/2006	62			100	1,4	ND	ND	ND	21	ND	ND	ND	ND	ND	
B-2@61'	4/19/2006	61			1,300	72	ND	1.4	ND	470	290	ND	ND	ND	ND	
B-3@62'	4/20/2006	62			660	5.7	ND	4.6	5.1	410	69	ND	ND	ND	ND	
B-4@63'	4/26/2006	63			810	ND	ND	ND	ND	630	170	ND	ND	ND	ND	
B-5@65'	4/25/2006	65			5,000	27	210	120	820	3.2	ND	ND	ND	ND	ND	
B-6@63'	4/25/2006	63			1,800	15	ND	28	21	7.9	ND	ND	ND	ND	ND	
B-7@57'	4/21/2006	57		***	26,000	510	ND	270	250	ND	ND	ND	ND	ND	ND	
															· · · · · · · · · · · · · · · · · · ·	
TPH-G = TPH-D = GRO =	PH-D = total petroleum hydrocarbons as diesel							Ethanol was analyzed by EPA Method 8260B Lead was analyzed byEPA Method 6010								
BTEX =																
11									= not analyzed ND = not detected above the laboratory detection limit							
TBA =									· · · · · · · · · · · · · · · · · · ·							
ETBE =																
	di-isopropyl ether by EPA Method 8260B								EPA = US Environmental Protection Agency Upper zone = 36' to 43'							

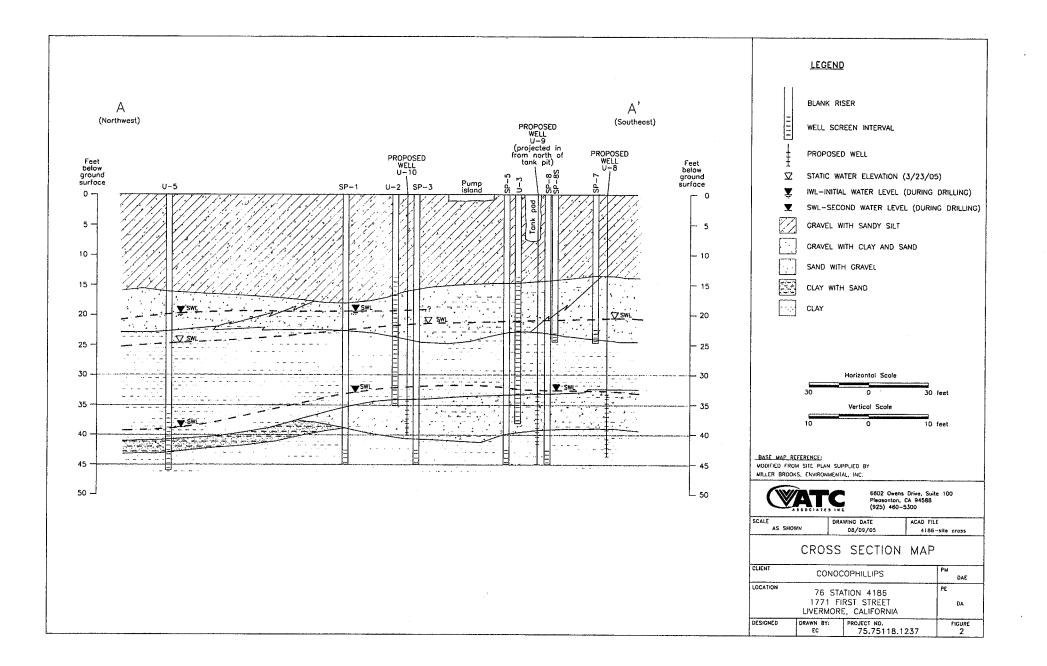
TAME = tertiary amyl methyl ether by EPA Method 8260B

Upper zone = 36' to 43' Lower zone = 55' to maxium depths explored

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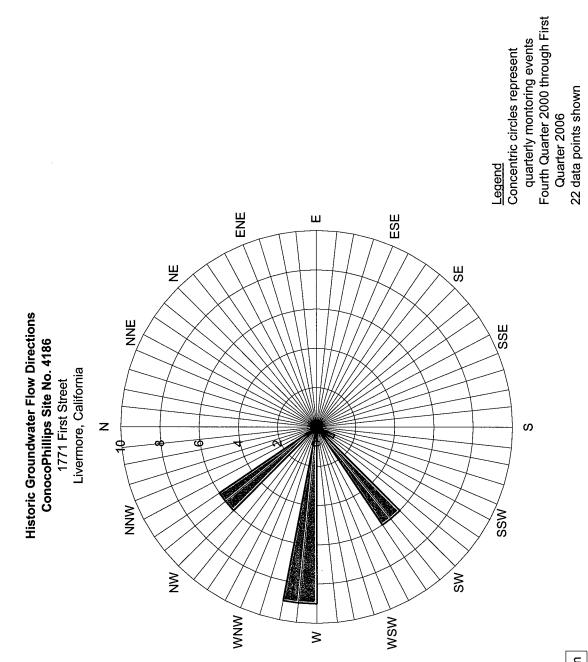
Attachment A

# ATC Cross Section Map



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## **Historical Groundwater Flow Directions**



Groundwater Flow Direction

# Attachment C

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# **CPT Site Investigation**



ENVIRONMENTAL AND GEOTECHNICAL INVESTIGATION SERVICES

May 2, 2006

Delta Environmental Attn: Ben Wright 3164 Gold Camp Road, Suite 200 Rancho Cordova, California 95670

Subject: CPT Site Investigation 1771 1<sup>st</sup> St. Livermore, California GREGG Project Number: 06-145MA

Dear Mr. Wright:

The following report presents the results of GREGG Drilling & Testing's Cone Penetration Test investigation for the above referenced site. The following testing services were performed:

1	Cone Penetration Tests	(CPTU)	$\boxtimes$
2	Pore Pressure Dissipation Tests	(PPD)	$\boxtimes$
3	Seismic Cone Penetration Tests	(SCPTU)	
4	Resistivity Cone Penetration Tests	(RCPTU)	
5	UVIF Cone Penetration Tests	(UVIFCPTU)	
6	Groundwater Sampling	(GWS)	$\boxtimes$
7	Soil Sampling	(SS)	$\boxtimes$
8	Vapor Sampling	(VS)	
9	Vane Shear Testing	(VST)	
10	SPT Energy Calibration	(SPTE)	

A list of reference papers providing additional background on the specific tests conducted is provided in the bibliography following the text of the report. If you would like a copy of any of these publications or should you have any questions or comments regarding the contents of this report, please do not hesitate to contact our office at (925) 313-5800.

Sincerely, GREGG Drilling & Testing, Inc.

Mary Walden Operations Manager



## GREGG DRILLING AND TESTING, INC.

1

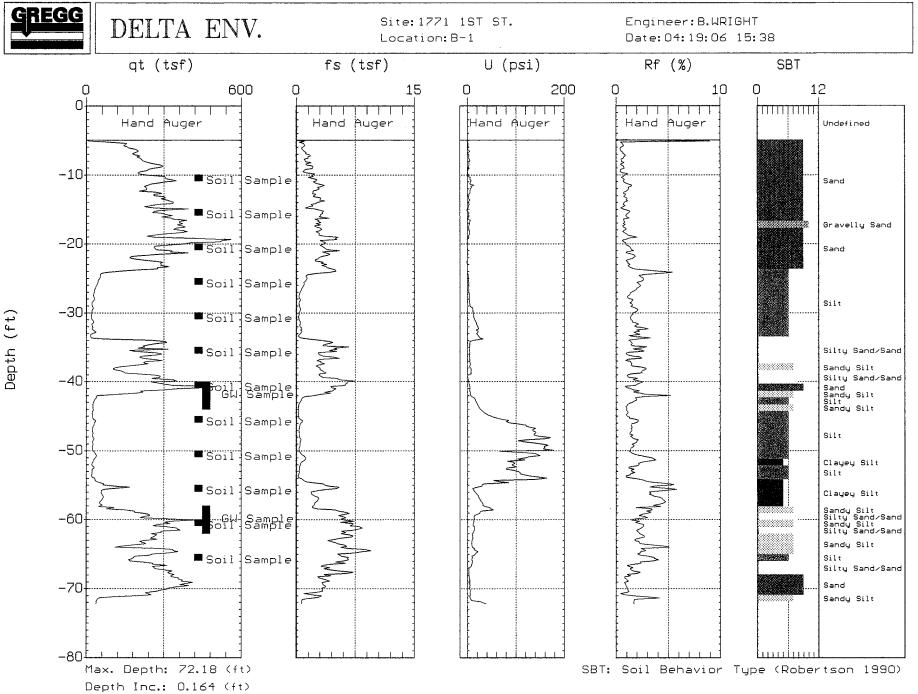
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#### ENVIRONMENTAL AND GEOTECHNICAL INVESTIGATION SERVICES

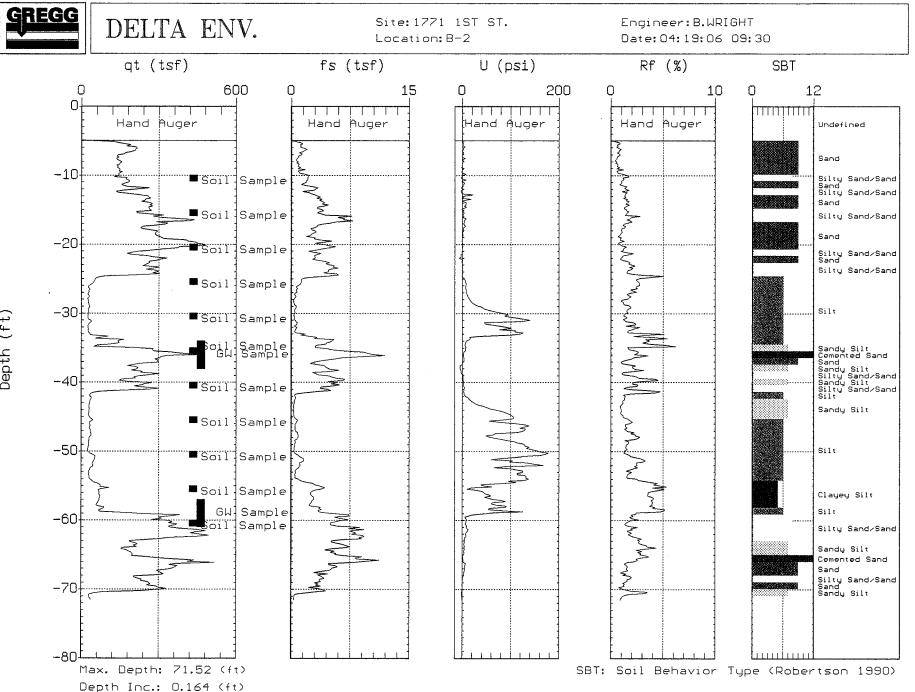
## Cone Penetration Test Sounding Summary

## -Table 1-

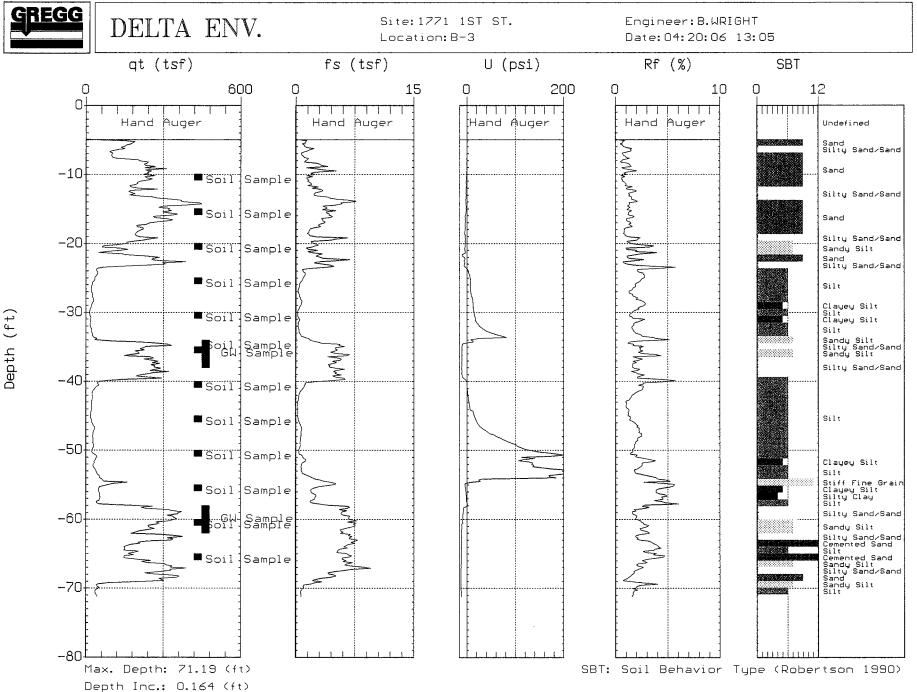
CPT Sounding Identification	Date	Termination Depth (Feet)	Depth of Groundwater Samples (Feet)	Depth of Soil Samples (Feet)	Depth of Pore Pressure Dissipation Tests (Feet)
B-01	4/19/06	72	44, 62	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65	37.9
B-02	4/19/06	71.5	38, 61	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60	37.4
B-03	4/20/06	71	38, 62	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65	•
B-04	4/26/06	73	44, 65	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65	-
B-05	4/25/06	74	44, 65	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65	-
B-06	4/21/06	75	38, 42, 58	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65	-
B-07	4/21/06	80	39, 57	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65	-
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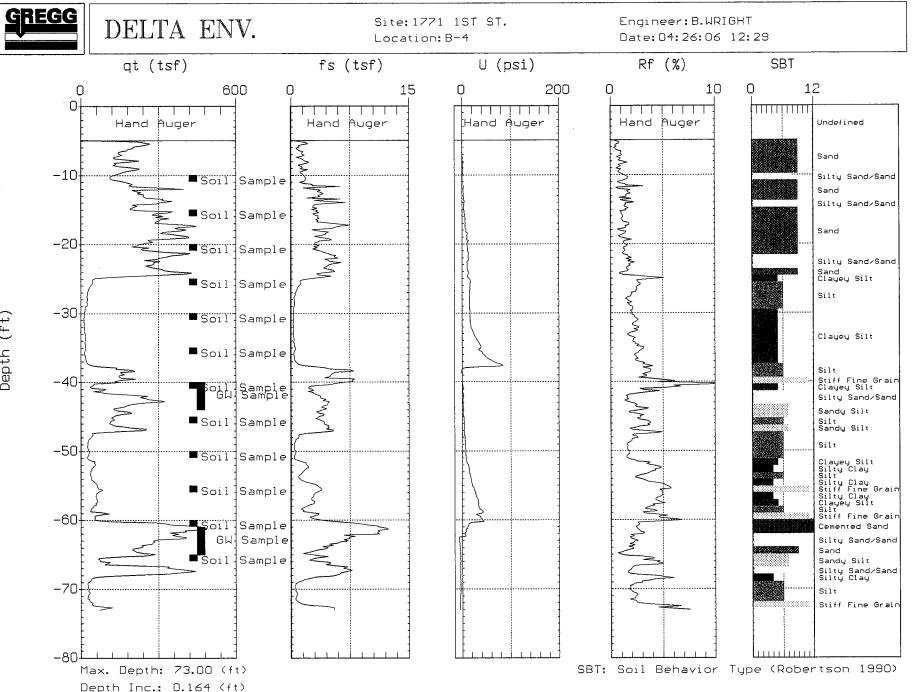


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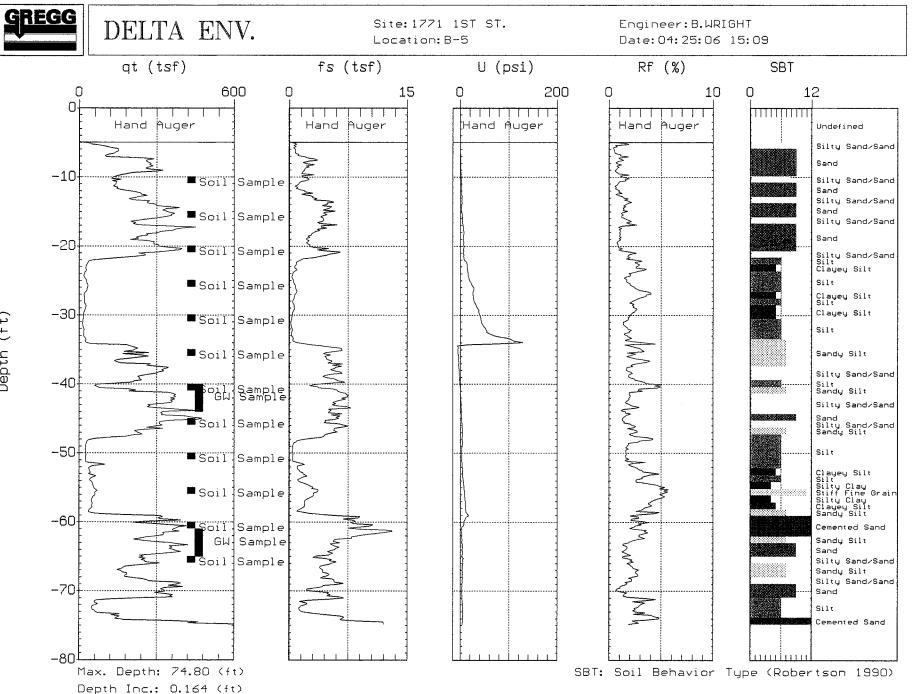


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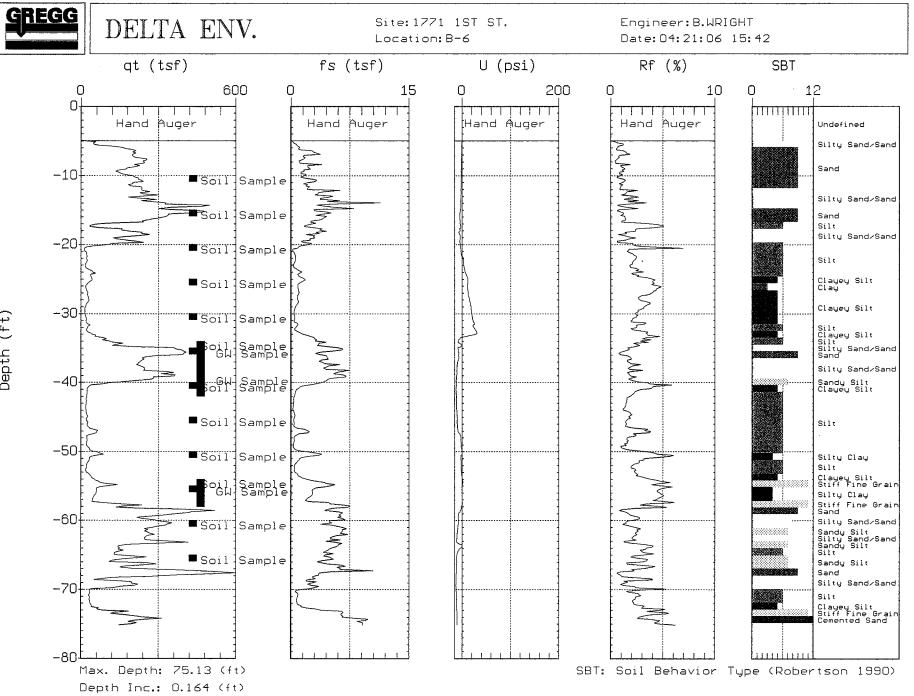




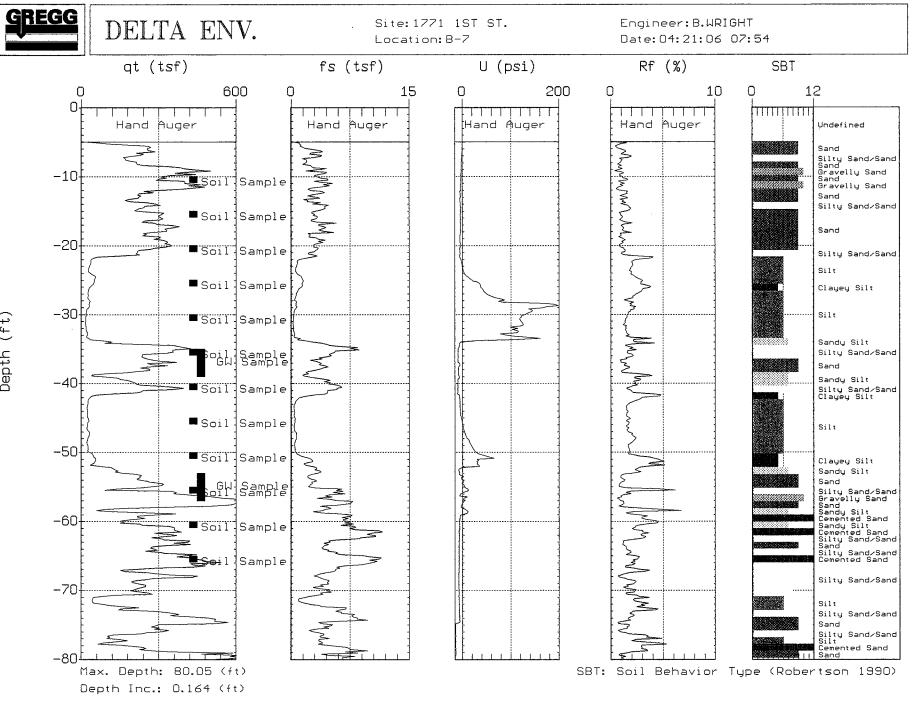
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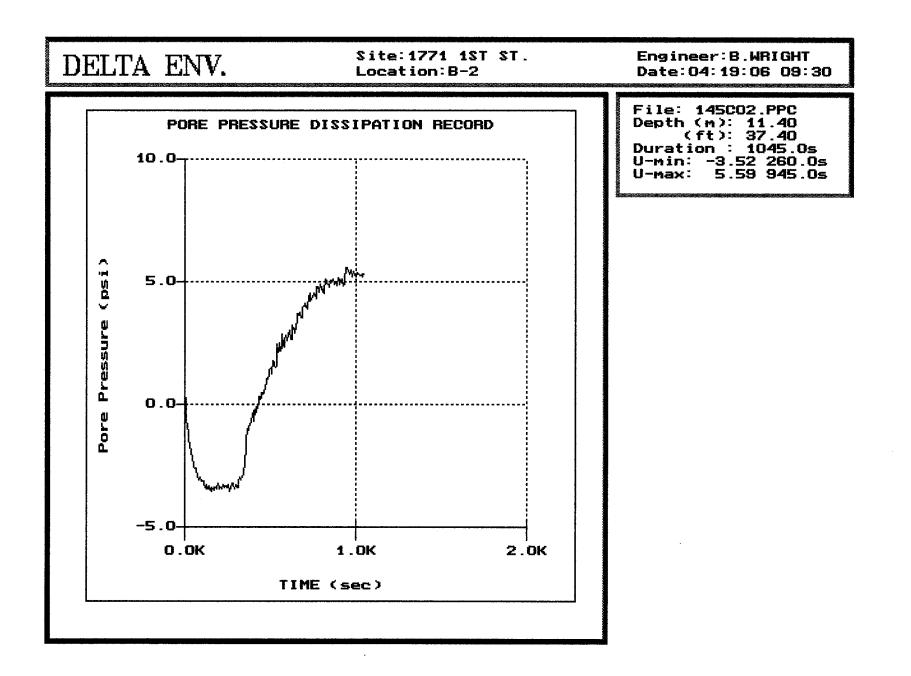


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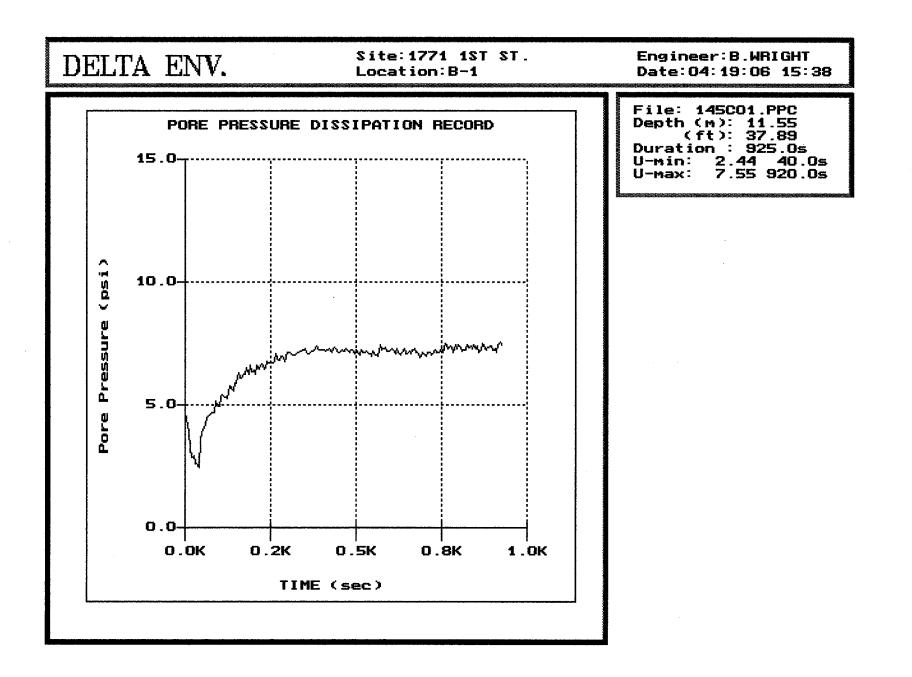


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# **APPENDIX CPT**

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### **Cone Penetration Test Data & Interpretation**

Soil behavior type and stratigraphic interpretation is based on relationships between cone bearing  $(q_c)$ , sleeve friction  $(f_s)$ , and pore water pressure  $(u_2)$ . The friction ratio  $(R_f)$  is a calculated parameter defined by  $100 f_s / q_c$  and is used to infer soil behavior type. Generally: Cohesive soils (clays)

- High friction ratio  $(R_f)$  due to small cone bearing  $(q_c)$
- Generate large excess pore water pressures  $(u_2)$

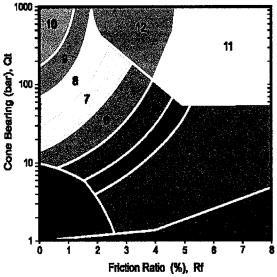
Cohesionless soils (sands)

- Low friction ratio  $(R_f)$  due to large cone bearing  $(q_c)$
- Generate very little excess pore water pressures (u<sub>2</sub>)

A complete set of baseline readings are taken prior to and at the completion of each sounding to determine temperature shifts and any zero load offsets. Corrections for temperature shifts and zero load offsets can be extremely important, especially when the recorded loads are relatively small. In sandy soils, however, these corrections are generally negligible.

The cone penetration test data collected from your site is presented in graphical form in Appendix CPT. The data includes CPT logs of measured soil parameters, computer calculations of interpreted soil behavior types (SBT), and additional geotechnical parameters. A summary of locations and depths is available in Table 1. Note that all penetration depths referenced in the data are with respect to the existing ground surface.

Soil interpretation for this project was conducted using recent correlations developed by Robertson, 1990, Figure SBT. Note that it is not always possible to clearly identify a soil type based solely on  $q_c$ ,  $f_s$ , and  $u_2$ . In these situations, experience, judgment, and an assessment of the pore pressure dissipation data should be used to infer the soil behavior type.



ZONE	Qt/N		SBT					
1	2		Sensitive, fine grained					
2	1		Organic materials					
3	1		Clay					
4	1.5		Silty clay to clay					
5	2		Clayey silt to silty clay					
6	2.5		Sandy silt to clayey silt					
7	3		Silty sand to sandy silt					
8	4		Sand to silty sand					
9	5		Sand					
10	6		Gravely sand to sand					
11	1		Very stiff fine grained*					
12	2	Sand to clayey sand*						
*ove	r conse	olida	lidated or cemented					

Figure SBT

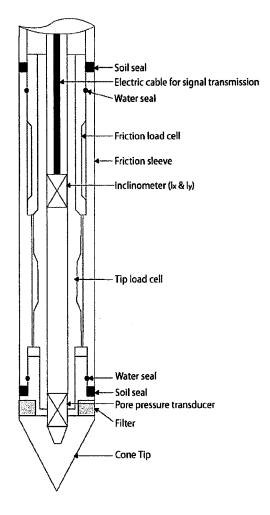


### Cone Penetration Testing Procedure (CPT)

Gregg Drilling & Testing, Inc. carries out all Cone Penetration Tests (CPT) using an integrated electronic cone system, *Figure CPT*. The soundings were conducted using a 20 ton capacity cone with a tip area of 15 cm<sup>2</sup> and a friction sleeve area of 225 cm<sup>2</sup>. The cone is designed with an equal end area friction sleeve and a tip end area ratio of 0.85.

The cone takes measurements of cone bearing  $(q_c)$ , sleeve friction  $(f_s)$  and penetration pore water pressure  $(u_2)$  at 5-cm intervals during penetration to provide nearly continuous а hydrogeologic log. CPT data reduction and interpretation is performed in real time facilitating on-site decision The above mentioned making. parameters are stored on disk for further analysis and reference. All CPT soundings are performed in accordance with revised (2002) ASTM 5778-95). standards (D

The cone also contains a porous filter element located directly behind the cone tip  $(u_2)$ , Figure CPT. It consists of porous plastic and is 5.0mm thick. The filter element is used to obtain penetration pore pressure as the cone is advanced as well as Pore Pressure Dissipation Tests (PPDT's) during appropriate pauses in penetration. It should be noted that prior to element is fully penetration. the saturated with silicon oil under vacuum pressure to ensure accurate and fast dissipation.



When the soundings are complete, the test holes are grouted using a Gregg In Situ support rig. The grouting procedures generally consist of pushing a hollow CPT rod with a "knock out" plug to the termination depth of the test hole. Grout is then pumped under pressure as the tremie pipe is pulled from the hole. Disruption or further contamination to the site is therefore minimized.

**APPENDIX PPDT** 



# **Pore Pressure Dissipation Tests (PPDT)**

Pore Pressure Dissipation Tests (PPDT's) conducted at various intervals measured hydrostatic water pressures and determined the approximate depth of the ground water table. A PPDT is conducted when the cone is halted at specific intervals determined by the field representative. The variation of the penetration pore pressure (u) with time is measured behind the tip of the cone and recorded by a computer system.

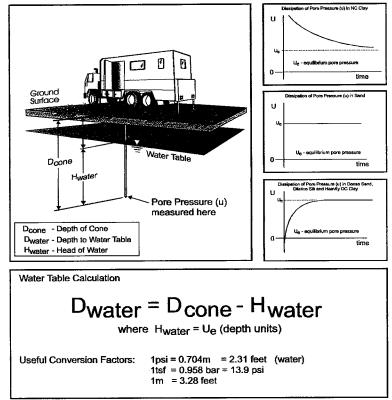
Pore pressure dissipation data can be interpreted to provide estimates of:

- Equilibrium piezometric pressure
- Phreatic Surface
- In situ horizontal coefficient of consolidation (c<sub>h</sub>)
- In situ horizontal coefficient of permeability  $(k_h)$

In order to correctly interpret the equilibrium piezometric pressure and/or the phreatic surface, the pore pressure must be monitored until such time as there is no variation in pore pressure with time, *Figure PPDT*. This time is commonly referred to as  $t_{100}$ , the point at which 100% of the excess pore pressure has dissipated.

A complete reference on pore pressure dissipation tests is presented by Robertson et al. 1992.

A summary of the pore pressure dissipation tests is summarized in Table 1. Pore pressure dissipation data is presented in graphical form in Appendix PPDT.







ENVIRONMENTAL AND GEOTECHNICAL INVESTIGATION SERVICES

# Bibliography

Lunne, T., Robertson, P.K. and Powell, J.J.M., "Cone Penetration Testing in Geotechnical Practice" E & FN Spon. ISBN 0 419 23750, 1997

Roberston, P.K., "Soil Classification using the Cone Penetration Test", Canadian Geotechnical Journal, Vol. 27, 1990 pp. 151-158.

Mayne, P.W., "NHI (2002) Manual on Subsurface Investigations: Geotechnical Site Characterization", available through www.ce.gatech.edu/~geosys/Faculty/Mayne/papers/index.html, Section 5.3, pp. 107-112.

Robertson, P.K., R.G. Campanella, D. Gillespie and A. Rice, "Seismic CPT to Measure In-Situ Shear Wave Velocity", Journal of Geotechnical Engineering ASCE, Vol. 112, No. 8, 1986 pp. 791-803.

Robertson, P.K., Sully, J., Woeller, D.J., Lunne, T., Powell, J.J.M., and Gillespie, D.J., "Guidelines for Estimating Consolidation Parameters in Soils from Piezocone Tests", Canadian Geotechnical Journal, Vol. 29, No. 4, August 1992, pp. 539-550.

Robertson, P.K., T. Lunne and J.J.M. Powell, "Geo-Environmental Application of Penetration Testing", Geotechnical Site Characterization, Robertson & Mayne (editors), 1998 Balkema, Rotterdam, ISBN 90 5410 939 4 pp 35-47.

Campanella, R.G. and I. Weemees, "Development and Use of An Electrical Resistivity Cone for Groundwater Contamination Studies", Canadian Geotechnical Journal, Vol. 27 No. 5, 1990 pp. 557-567.

DeGroot, D.J. and A.J. Lutenegger, "Reliability of Soil Gas Sampling and Characterization Techniques", International Site Characterization Conference - Atlanta, 1998.

Woeller, D.J., P.K. Robertson, T.J. Boyd and Dave Thomas, "Detection of Polyaromatic Hydrocarbon Contaminants Using the UVIF-CPT", 53rd Canadian Geotechnical Conference Montreal, QC October pp. 733-739, 2000.

Zemo, D.A., T.A. Delfino, J.D. Gallinatti, V.A. Baker and L.R. Hilpert, "Field Comparison of Analytical Results from Discrete-Depth Groundwater Samplers" BAT EnviroProbe and QED HydroPunch, Sixth national Outdoor Action Conference, Las Vegas, Nevada Proceedings, 1992, pp 299-312.

Copies of ASTM Standards are available through www.astm.org

## Attachment D

2

## Boring Logs

				No: C10418						coPhillips		B-1		
	_		1	By: Ben Wi						71 First Street, Livermore, C		Page 1 of 3		
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	oletion	Static Water	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)			Type	ПТЫ	OLOGY / DESCRIPTION
Backfill	Lasing	Level	Mois Con	an di Ad	enet (blow	epth	Recovery	Interval	Soil .		OEOGT / DESCRIPTION
	ر 			۵.			Ř	. <u>-</u>			
						23				·····	
Neat						24			:	· ···· ····	
Ceme	nt										
	g		moist	0		25—			CL	Lean CLAY; brown; h	igh plasticity; stiff; no odor;
						26—	B-2@	25'		some sand. (0,10,90)	
						. <u> </u>					
						27 —				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
						28—					
						-					
						29					
			sat	0		30 —			CL	As above: no s	and; saturated. (0,0,100)
			301	0		 31	B-2@	30'			anu, saturateu. (0,0,100)
	·										
						32				•••••••••••••••••••••••••••••••••••••••	
						33				,	· · · · · · · · · · · · · · · · · · ·
											· · · · · · · · · · · · · · · · · · ·
						34 —				·····	
				0		35—					
			moist	0			B-2@	35'			<b>/el</b> ; grayish brown; well graded d sand and gravel; medium dense;
						36 —			0	moist; no odor. (20,6	
						37 —					·····
						38					
						30		X		Groundwater s	ampled @ 38'
						39 —					
						40				······	
			sat	173			B-2@	401	SM	As above; satu	rated; strong odor.
						41	0-200	40%			
						42				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
						_					······································
	· · · · · ·					43				·	· · · · · · · · · · · · · · · · · · ·
						44 —			L		

				No: C10418					ocoPhillips	B-2
		1		By: Ben Wi Gregg Drillir	-	esting		ate Drilled	771 First Street, Livermore, 0 4/19/06	California Page 3 of 3
D	eľ	ta	Drilling N	Method: Co	ne Penel	tration Te		ole Diame		
	ironm			g Method:P Fype: NA	iston Sar	npler/Hyd		ole Depth: /ell Diamet		Soo Site Man
	ultant		Slot Size					/ell Depth:		See Site Map
		-	Gravel F	Pack: NA				asing Stick		
				Elevation			Northing		Easting	
Comp	letion	Static Water	Moisture Content	PID Reading (ppm)	Penetration (biows/6")	Depth (feet)	Sample 같	6	1 171	
Backfill		Level	Mois Con	PID R. (pp	Penet (blow	Depth	Recovery	Soil T		IOLOGY / DESCRIPTION
			sat	157		45		CL		nigh plasticity; medium stiff; some
Neat Cemer	it					46—	B-2@ 4	5'	sand; strong odor; sa	turated. (0,10,90)
						47 —				
						48—			· · · · · · · · · · · · · · · · · · ·	
						49			· · · · · · · · · · · · · · · · · · ·	
			moist	20		50 —			As above; sligh	nt odor.
						51 —	B-2@ 5	0'		
	·					52—			· · · · · · · · · · · · · · · · · · ·	
						53				
	·					54				
			moist	2		55 —			As above; no o	odor. (0,20,80)
						56—	B-2@ 5	5'		
						57 —				
	÷ 					58				
	· · · · · ·		-			59				
	· · · ·		sat	6		60		SM	Silty SAND with grav	vel
						61	B-2@ 6	and the second	Groundwater sampled	d @ 61'
						62			Total Depth = 61.0'	
						63—		_		
						- 64 —				······································
						65				· · · · · · · · · · · · · · · · · · ·
						 66			· · · · · · · · ·	······································

			Project N	lo: C10418	6031			Clien	t: Cono	coPhillips	B-3				
			Logged I	3y: Ben Wi	right					71 First Street, Livermore, 0	California Page 1 of 3				
	I	1	Driller: (	Gregg Drillir	ng and Te	esting				4/20/06	Location Map				
	РI.	ta I		lethod: Co			ting	Hole	Diamete	er: 1.75"					
		<sup>L</sup>		g Method:P				Hole	Depth:	65.5'					
Envi	ronme	ental		ype: NA			·		Diamete		See Site Map				
Consu	ultants	s. Inc.	Slot Size					Well	Depth:	NA	-				
			Gravel P	ack: NA				Casir	ng Stick	up: NA					
				Elevation			Northir	ng		Easting					
We	<del></del>				r						· · · · · · · · · · · · · · · · · · ·				
Comple		Ctatia	م ب	PID Reading (ppm)	5 😭	et)	Sam	ple	e						
		Static Water	Moisture Content	ead om)	Penetration (blows/6")	Depth (feet)			Soil Type	LITHOLOGY / DESCRIPTION					
Backfill Casing		Level	Cor Cor	а В С В С В С В С В С В С В С В С В С В С	ene	spth	Recovery	Interval	Soil		THOLOGY / DESCRIPTION				
မီးပိ			2	Ē	l a e	ă	Rec	Int	0)						
					<b>▲</b>										
			moist			1			GM	Silty GRAVEL with s	and; brown; medium dense;				
Neat					Air					medium to coarse sar	nd; subangular to rounded				
Cemen	t				Knife	2				gravel and sand; no o	dor. (70,15,15)				
						3—									
							ļ				. <u></u>				
						4 —									
							ļ			· · · · · · · · · · · · · · · · · · ·					
					↓	5—									
										• • • • • • • • • • • • • • • • • • • •					
					ļ	6—									
						7—				·····	······································				
						8					· · · · · · · · · · · · · · · · · · ·				
						-									
						9									
	_		moist	0					SM	Silty SAND with grav	<b>/el;</b> brown; well graded sand;				
						10	B-3@	10'			d sand and gravel; dense; moist;				
										no odor. (20,60,20)					
						11									
						12—									
						12	<u> </u>								
						13									
										· · · · · · · · · · · · · · · · · · ·					
						14	<u> </u>								
				_			l								
			moist	0		15	0.00		SM	As above.					
							B-3@	15		· · · · · · · · · · · · · · · · · · ·					
						16	<b></b>								
						_					······································				
						17—									
						-									
						18	<u> </u>								
						-									
						19	1	[							
			wet	0					SM	As above.					
						20 —	B-3@	20'		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				
						21					· · · · · · · · · · · · · · · · · · ·				
				,							· · · · · · · · · · · · · · · · · · ·				
						22									

		-	No: C10418		-			coPhillips	B-3
		1	By: Ben Wi Gregg Drillir	-	etina		ation: 17 e Drilled:	71 First Street, Livermore, C	
De	lta		Aethod: Co	-	-			er: 1.75"	Location Map
	ια	-	g Method:P			-	e Depth:		
Environn			Гуре: NA				I Diamete		See Site Map
Consultar	its, Inc.	Slot Size	e: NA Pack: NA				I Depth: sing Stick		
			Elevation			Northing		Easting	
Well				1		I	1		
Completion	Static	art e	PID Reading (ppm)	Penetration (blows/6")	feet)	Sample	Type		
Backfill Casing	Water Level	Moisture Content	Rea	netra ows.	Depth (feet)	Recovery	Soil T <sub>y</sub>	LITH	OLOGY / DESCRIPTION
Ca: Dac	Levei	≥ 0	OIA	Pe G	Del	Reco	й		
					23—			· · · · ·	· · · · · · · · · · · · · · · · · · ·
Neat									· · · · <del>- · · · · · · · · · · · · · · ·</del>
Cement					24		╆╼╺	+	
		wet	0		25—				high plasticity; stiff; wet; no odor.
						B-3@ 25		(0,0,100)	
	-				26—		1	1. I. I. I.	· · · · · · · · · · · · · · · · · · ·
					27 —		4		
-							4		
					28——		1		
	•••				29—		4		
		sat	0		30 —		] CL	As above; som	e sand; saturated. (0,10,90)
						B-3@ 30	4		
					31		-		· · · · · · · · · · · · · · · · · · ·
					32		]	· · · · · · · · · · · · · · · · · · ·	
							-		· · · · · · · · · · · · · · · · · · ·
					33		1	· · · · · · · ·	
					34 —		-		
		moist	0		35			Silty SAND with Gra	vel; grayish brown; well graded
						B-3@ 35	SM	sand subangular to ro	unded sand and gravel; medium
					36 —		-	moist; no odor. (20,6	0,20)
					37 —		1	· · · · · ·	····· ··· ··· ··· ··· ··· ··· ···
							-		·····
			•		38 —	X		Groundwater s	ampled @38'
					39				······································
		sat	257		-		4		<u> </u>
					40	B-3@ 40	<u>↓</u>	·	
					41				igh plasticity; some sand;
								saturated; odor; medi	um stiff to soft. (0,10,90)
					42		1		a da anti-arte da a Anti-arte da anti-arte da anti-art
					43		-	н — н	
					-		-	· · ·	
					44		1		

-			lo: C10418						ocoPhillips	B-3
			By: Ben Wi	-					71 First Street, Livermore, C	
Delt			Gregg Drillin	-	-				4/20/06	Location Map
	a	-	Aethod: Co			-			er: 1.75"	
			g Method:Pi	ston San	npler/Hyd	ropunch		Depth:		Car Cita Mar
Environmen			ype: NA					Diamete		See Site Map
Consultants,	inc.	Slot Size Gravel P	ack: NA					Depth: ng Stick		
		Claver	Elevation			Northir		ly Olick	Easting	
			Liovation			140141	9		Labing	
Well			p	50	÷	Sam	ala			
	Static	Moisture Content	n) (n	Penetration (blows/6")	Depth (feet)	1		Soil Type		
	Water Level	Cont	Ppi (ppi	netr low:	bt	ovei	Interval	Di T	LITH	OLOGY / DESCRIPTION
CaBa		20	PID Reading (ppm)	Pe (b	De	Recovery	Inte	Ň		
		sat	11			<u> </u>		CL	As above: soft:	slight odor. (0,0,100)
					45	B-3@	45'			
Neat					46					
Cement										
					47					
					_	ļ	ļ			· · · · · · · · · · · · · · · · · · ·
					48					
					49					
		sat	215		_	B-3@	50'	CL		ish brown; some sand; odor.
		34	210		50	0-000	00		(0,10,90)	ish brown, some sand, odor.
									(0,10,00)	
					51	1				
					52 —					
					52—					
					53—					
				;	54 —		<b> </b>			
		cot	42					CL	Ac obsues light	movieh herver eden (0.20.00)
		sat	42		55	B-3@	55'	UL	As above, light	grayish brown; odor. (0,20,80)
					-	10-3(0)	00			
					56	1				
										······································
					57 —				·····	
					 58					
					59 —					
										· · · · · · · · · · · · · · · · · · ·
		wet	7		60 —	<b>D</b> 0 0		SM		<b>rel;</b> brown; well graded sand;
						B-3@	60'			d sand and gravel; medium
					61 —				dense; wet; slight odo	r. (20,60,20)
					62—		x		Groundwater sa	ampled @ 62'
						1				
					63—	1			• • • • • • •	· ····································
					64					· · · · · · · · · · · · · · · · · · ·
		sat	22		65—			SM	As above; odor	; saturated.
						B-3@	65'			
					66	<b> </b>			Total Depth = 65.5'	·····

	Project 1	No: C104186	5031		Client: ConocoPhillips B-4 Location: 1771 First Street, Livermore, California Page 1 of 3								
		By: Ben Wr							California	Page 1 of 3			
		- Gregg Drillin		stina	Date Drilled: 4/26/06     Location Map       Testing     Hole Diameter: 1.75"								
	Drilling	Method: Cor			lina								
Delta	Samplin	g Method:Pi			-								
Environmental		-	Ston San	inplemingun	opunch		Deptri. Diamete			Saa Sita Man			
	1	Type: NA							•	See Site Map			
Consultants, Inc							Depth:						
	Graver	Pack: NA Elevation			Ntauthin		ng Sticki						
		Elevation			Northin	iy.		Easting					
Well		-			1	Comple a							
Completion Station	e te	PID Reading (ppm)	Penetration (blows/6")	Jepth (feet)	Samp	ample v							
	stu ntei	pm	strat vs/i	ц (f	ery								
Wate Wate Wate Wate Wate Wate Wate Wate	Moisture Content	ц d	blo	epti	Recovery								
йÖ		Ē	<u>а</u> ()		Ц. Ц.	Ē							
			•										
	moist			1			GM	Silty GRAVEL with s	and; brow	n; medium dense;			
Neat			Air					medium to coarse sar					
Cement			Knife					sand and gravel; no o	dor. (70,15	5,15)			
				2									
				3									
								·····					
				4									
								···· ···					
			•	5									
					<u> </u>								
				6					• • • • • • • • • •				
								· ··· · · ··· · · · · · · · · · · · ·		· ··· · · · ·			
· · · · · · · · · · · · · · · · · · ·				7—				·······					
				·									
				8									
										······			
				9		· · · · · ·		· · · · · · · · · · · · · · · · · · ·					
	wet	0			S. Marcines		SM	Silty SAND with grav	ol brown:	well graded sand:			
	WCL	v		10	B-4@	10'	OW	subangular to rounde					
				·	U TU			dense; no odor. (20,6		giavei, medium			
				11 ——					,0,20)				
				12 —									
								· · · · · · · · · · · · · · · · · · ·					
· · · · · · · · · · · · · · · · · · ·				13	[								
						· · · · ·		· · · · · · · · · · · · · · · · · · ·					
· · · · · ·				14 —	<u> </u>	$\left  - \right $							
	wat	0		-		<b> </b>	SM						
· · · · · · · · · · · · · · · · · · ·	wet			15	B 4@	15'	SIVI	As above.					
				-	B-4@	10							
				16		$\left  - \right $				· · · · · · · · · · · · · · · · · · ·			
				-				· ··· · · · · · · · · · · · · · · · ·					
· · · · · · · · · · · · · · · · · · ·				17									
				-						· · · · · · · · · · · · · · ·			
				18	<u> </u>								
				-		$\left  - \right $							
				19									
				—									
				20		┣							
						-	CN4	A a abarrer	ioh haarii				
	wet	0		21	DIO	001	SM	As above; gray	ISN Drown.	· · · · · · · · · · · · · · · · · · ·			
	I			_	B-4@	20'							
				22 —									
		ł		I			L						

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		Project N	lo: C10418	36031					coPhillips		B-4			
			By: Ben Wi			Ł	.ocat	ion: 17	71 First Street, Livermore, C	California	Page 2 of 3			
	to	ł	Gregg Drillir	-	-					Location Map				
Del	la	F	/lethod: Co			-			er: 1.75"					
			g Method:P	iston San	npler/Hydr						Coo Cito Man			
Environm Consultan		Slot Size	ype: NA					Diamete Depth:			See Site Map			
Consultan	15, 110.	•	ack: NA						up: NA					
			Elevation			Northing		<u> </u>	Easting					
Well							—							
Completion	Static	e te	PID Reading (ppm)	u (	et)	Sample	e	Ð						
jiji b	Water	Moisture Content	keac pm)	Penetration (blows/6")	Depth (feet)	ery	a	Type	LITH	OLOGY / E	DESCRIPTION			
Backfill Casing	Level	∮ိပိ	Ū d	blor (blor	Dept	Recovery	Interval	Soil						
ш О			۵.	ш. 		L T	-							
					23—									
Neat	-				—				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · ·				
Cement					24						· ···· ·······························			
		moist	0		25			`~.						
					20	B-4@ 2	25'	CL	Lean CLAY; brown; h		ty; stiff; moist; no			
					26				odor; some sand. (0,	15,85)				
						┢───┢								
	-				27 —									
						╞───╁	$\neg$							
	]				28—									
					29—		[							
- 12		wet	0			-		ML	SILT; brown; medium	plasticity:	soft: wet: no odor			
			Ŭ		30	B-4@ 3	30'		(0,0,100).	plactiony, a				
					31									
							-							
	-				32 —									
					-		$\neg$							
	1				33—				· · · · · · · · · · · · · · · · · · ·					
					34									
		wat	0		_			N #1	A					
		wet	0		35	B-4@ 3	25'	ML	As above.					
	-				-				· · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			
					36						·····			
					37 —				· · · · · · · · · · · · · · · · · · ·					
						<u>                                     </u>								
					38	┟───┟	$\dashv$				нь <u>нь нь</u> лучение на противности на			
					39 —				n an					
		sat	12		40				CLAY with sand; me		city; medium stiff;			
					- 1	B-4@ 4	10'	CL	saturated; odor. (0,20	0,80)				
					41 —	<u>├</u>					<u> </u>			
							-							
					42				ан алан алан алан алан алан алан алан а					
					43					· · · · ·	· · · · · · · · · · · · · · · · · · ·			
					-	╞	X		Groundawater	sampled @	43'			
					44 ——	╂┠	<del> </del>							
962		l		I		1								

	Pro	ject No	b: C10418	6031			Clien	t: Conc	ocoPhillips		B-4
			/: Ben Wr				Loca	tion: 17	71 First Street, Livermore, 0	California	Page 3 of 3
	Dril		egg Drillin				Date	Drilled:	4/26/06	Location Map	
Delt	Dril	-	ethod: Co			•			er: 1.75"		
	Sal		Method:Pi	iston Sar	npler/Hyd	ropunch		Depth:			
Environment			pe: NA					Diamete			See Site Map
Consultants, I		t Size:						Depth:			
	Gra		ck: NA Elevation		r	N1		ng Stick	up: NA	-	
		5	Elevation			Northi	ng		Easting	r -	
Well Completion			PID Reading (ppm)	ۍ ۲	et)	Sam	ple	Ø		L	-
. 5	tatic ater s	Content	eadi m)	Penetration (blows/6")	Depth (feet)	1		Soil Type			FRODUCTION
	evel 5	БО Со	D R.	enet	pth	Recovery	Interval			OLUGT/D	ESCRIPTION
မီးပိ			ЫЧ	a ⊂	ă	Rec	Int	0)			
	s	at	92		45				SILT with sand; brow	vn; medium	plasticity; soft;
NI					-	B-4@	45'	ML	saturated; odor. (0,15	5,85)	
Neat Cement					46						
					47 —						
					- / _						
					48—					·	
					49				· · · · · · · · · · · · · · · · · · ·		
		vet	89		-				SILT; clay lenses; bro	wn: mediur	n plasticity: soft to
· · · · · · · · · · · · · · · · · · ·			00		50 —	B-4@	50'	ML	stiff; wet; odor. (0,0,1		
					51 —					· · · · · · -	
					52				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
					_						
					53				· · · · · · · · · · · · · · · · · · ·		
					54 —	<u> </u>					
	s	at	34		 55			CL	Lean CLAY; brown; h	nigh plasticit	y; stiff; saturated;
						B-4@	55'		odor. (0,0,100)	· · · · · · · · · · · · · · · · · · ·	
					56 —				· · · · · · · · · · · · · · · · · · ·		
					57 —						
									··· ·		
							$\left  - \right $		····		· · · ·
					59 —				···· ··· ··· ··· ··· ··· ··· ··· ··· ·		
· · · · · · · · · · · · · · · · · · ·	1	et/	11		60	B-4@	60'	SM	Silty SAND with graves sand; subangular to re		
		-			 61				dense to dense; wet t	o saturated;	odor. (20,60,20)
					-						
					62						
					63		x		Groundwatar	ampled @ (	2 <sup>1</sup>
									Groundwater s	ampieu @ 6	
			10		1	12.95		<b>C1</b> 4	A		
· · · · · · ·	S	at	13		65 —	B-4@	65'	SM	As above; satu	rated; dens	9.
					66				Total Depth = 65.5'		· · · · · · · · · · · · · · · · · · ·
						L					

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		Project N	lo: C10418	6031		· · · ·	Clien	t: Cono	coPhillips		B-5		
		Logged	By: Ben W	right					71 First Street, Livermore, C	California	Page 1 of 3		
		Driller: (	Gregg Drillir	ng and Te	esting				4/26/06	Location Map			
Delt	3		Aethod: Co			tina			er: 1.75"				
	.u		g Method:P					Depth:					
Environmer	ntal		Type: NA	loton ear	npionitya	opunon		Diamete			See Site Map		
Consultants,		Slot Size						Depth:			See Site Map		
Consultants,	, по.		ack: NA					ng Sticki					
		Glaveri	Elevation			Northin		IG SIICK	Easting				
			Lievation			1 VOI (IIII	ig		Lasung				
Well			D	_							· · · · · · · · · · · · · · · · · · ·		
Completion	Static	nt e	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sam	ble	Soil Type					
	Water	istu nte	Rea pm	etra ws/	Ч (f	ery	<u>a</u>	Τζ	LITHO	DLOGY / D	ESCRIPTION		
Backfill Casing	Level	Moisture Content	<u> </u>	enetratior (blows/6")	ept	Recovery	Interval	Soil					
m O			۵.	<u> </u>		ъ В	2						
		moist			1			GM	Silty GRAVEL with s				
Neat				Air					medium to coarse sar	nd; subang	ular to rounded		
Cement				Knife	2				gravel and sand; no o	dor. (70,15	5,15)		
					2								
						1							
					3								
											· · · · · · · · · · · · · · · · · · ·		
					4								
				•	5—								
										· · · · · · · · · · · · · · · · · · ·			
			-		6				······································	· · · · · · · · · · · · · · · · · · ·			
							$\left  \right $						
					7				····				
					-								
					8								
· · · · ·					—		<u>├</u> ───				· · · · · · · · · · · · · · · · · · ·		
					9	<u> </u>				··			
		wet	0		-		$\vdash$	SM	Silty SAND with grav	ali brauni	well graded eards		
		wei	U		10 —	B-5@	10'	Sivi					
					-	0-36	10		no odor. (20,60,20)	u sano ano	gravel; medium dense;		
					11 —								
					12								
					_								
					13								
· · · -						<b></b>							
					14				• • • •••				
			•					~					
		wet	0		15			SM	As above.				
						B-5@	15'						
			ł		16	ļ					· ·· ·· ···		
					_								
					17	ļ							
									· · · · · · · · · · · · · · · · · · ·				
<u> </u>					18 —	ļ	$\square$						
					<u> </u>						· · · · · · · · · · · · · · · · · · ·		
					19	ļ							
		wet	0		20 —			SM	As above.				
						B-5@	20'						
					21 —								
				ł		ļ			· · · · · · · · · · · · · · · · · · ·				
					22—								

			-	No: C10418						coPhillips	B-5
	F.	1 -		By: Ben Wi Gregg Drillir	+	esting				71 First Street, Livermore, C 4/26/06	California Page 2 of 3
	)el	ta		/lethod: Co						er: 1.75"	
	vironme			g Method:P Type: NA	iston Sar	npler/Hydro	opunch		Depth: Diamete		See Site Map
	sultant		Slot Size						Depth:		See Site Map
			Gravel F	ack: NA					ng Stick		
				Elevation			Northir	ng		Easting	
Corr	Vell pletion B U S	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Samı Sacovery Secovery	Interval a	Soil Type	LITH	OLOGY / DESCRIPTION
						23—	<u>ц</u>				· · · · · · · · · · · · · · · · · · ·
Neat				2 - 		24					
Ceme	ent		wet	0		25—	B-5@	25'	CL	Lean CLAY; brown; h no odor. (0,0,100)	nigh plasticity; medium stiff; wet;
						26—					······
						27 —					······································
						28					······
						29—				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
			wet	0		30	B-5@	30'	CL	CLAY with sand; (0,;	20,80)
						31				······································	··· ··· ··· ··· ··· ··· ··· ··· ··· ··
						32				· · · · · · · · · · · · · · · · · · ·	·····
				· ·		33					·······
						34					
			wet	0		35	B-5@	35'	ML	SILT with sand; brow stiff; wet; no odor. (0,3	vn; medium plasticity; medium 30,70)
						36 —					
	· · · · · ·					37—					
				•		38—					
						39 —					· · · · · · · · · · · · · · · · · · ·
			sat	473		40	B-5@	40'	SМ		/el; some clay lenses; well
						41				medium dense to den	ular to rounded sand and gravel; se; saturated; strong odor.
						42				(10,60,30)	······································
						43		]		····	· · · · · · · · · · · · · · · · · · ·
						44		X		Groundwater s	ampled @44'

			-	lo: C10418						coPhillips	D-1/6	B-5		
	11	1		By: Ben Wr Gregg Drillin	-	esting				71 First Street, Livermore, C 4/26/06	Location Map	Page 3 of 3		
De	<u>}</u> [1	a	-	lethod: Co			-			er: 1.75"				
Environ				) Method:Pi ype: NA	iston Sar	npler/Hydr	opunch		Depth: Diamete			See Site Map		
Consulta			Slot Size						Depth:					
			Gravel P	ack: NA					ig Sticki					
				Elevation			Northi	ng		Easting				
Well Completion	n	Statio	e te	gui	u (î	et)	Sam	ple	e					
		Static Water	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	/ery	val	Soil Type	LITH	OLOGY / D	ESCRIPTION		
Backfill Casing		Level	ĕŭ	DI d H)	Pen (błd	Dep	Recovery	Interval	So					
						45—						· · · · · · · · · · · · · · · · · · ·		
Neat	_		sat	30			B-5@	15'	CL	Lean CLAY; brown; h saturated; odor. (0,10		y; medium stiff;		
Cement						46	0-5@	70			,			
						47				· · · · · · · · · · · ·				
	-		-								···· •. ······			
-						48								
						49					سم وجند للمنذ كنته كم			
			sat	135			B-5@	50'	ML	SILT; brown; medium (0,0,100)	plasticity; s	oft; saturated; odor		
- 10						 51	D-0(0)	00		(0,0,100)				
						 52								
	_													
						53								
						54 —								
			wet	144		 55	B-5@	55'	CL	CLAY with sand; me odor. (0,20,80)	dium plastic	city; very stiff; wet;		
						56								
						57								
	-					58					· · · · · · · · · · · · · · · · · · ·			
						59 —								
			wet	96		60	B-5@	60'	SM	Silty SAND with graves graded sand; subang				
						61 —				medium dense to den	se; wet; od	or. (15,70,15)		
						62				· · · · ·		·····		
						63—	<u> </u>				· · · · · · · · · · · · · · · · · · ·	•••••••••••••••••••••••••••••••••••••••		
						64				- · ·		·····		
			sat	73					SM	As above				
			301	10		65	B-5@	65'			······			
						66		X		Groundwater s Total Depth = 65.5'	ampled @ 6	55'		

		Project I	No: C10418	6031			Clien	t: Cono	coPhillips	B-6
		Logged	By: Ben W	right			Locat	tion: 17	71 First Street, Livermore, C	California Page 1 of 3
	1_	Driller: (	Gregg Drillin	ng and Te	esting		Date	Drilled:	4/25/06	Location Map
Del	TA.	Drilling N	Method: Co	ne Penel	ration Tes	ting	Hole	Diamete	er: 1.75"	
	LCA	Samplin	g Method:P	iston Sar	npler/Hydr	opunch	Hole	Depth:	65.5'	
Environm	ental	Casing 1	Гуре: NA				Well	Diamete	er: NA	See Site Map
Consultant	s, Inc.	Slot Size	e: NA				Well	Depth:	NA	
		Gravel F	Pack: NA				Casir	ng Sticki	up: NA	
			Elevation			Northir	ng		Easting	
Well	r	ļ		T						
Completion	0	e + e	ing	5 €	ef)	Sam	ole	Ð		
	Static Water	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)			Soil Type	I ITU	OLOGY / DESCRIPTION
Backfill Casing	Level	Vois Con	а, d	enet olow	pth	ove No	Interval	Iio		OLOGI / DESCRIPTION
မီဆိ		2 -	IId	1 d 2	ď	Recovery	Ē	0		
				1						
		moist						GM	Silty GRAVEL with s	and; brown; medium dense;
Neat				Air	1			••••		nd; subangular to rounded
Cement				Knife					gravel and sand; no o	
					2					
					3					
										· · · · · · · · · · · · · · · · · · ·
					4					
									······································	
					5					
					6					
										· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·					7—				······	
					-					
· · · · · · · · · · · · · · · · · · ·					8				·····	
					-					· · · · · · · · · · · · · · · · · · ·
					9					
		moist	0		-			SM	Silty SAND with gray	<b>vel;</b> grayish brown; well graded
			Ű		10	B-6@	10	0111		bunded sand and gravel; medium
									dense; no odor. (20,6	
					11 —					.0,20)
						<u>.</u>				
· · · · · · · · · · · · · · · · · · ·					12				· · · · · · · · · · · · · · · · · · ·	
· · ·					-					
					13—					
						<u> </u>	$\left  - \right $			
	1				14					
		wet	0					SM	As shows redd	ish brown; wet; medium dense;
					15—	B-6@	15'	OW	some clay.	
						1000			Some day.	
	ł				16	<b> </b>	$\left  - \right $			
	1									
	ł				17	<b> </b>	$\vdash$			
	ł				-	<b> </b>	┝			
	ţ				18	<u> </u>	$\left  - \right $		·····	· · · · · · · · · · · · · · · · · · ·
					-		┝			
					19	<u> </u>	$\vdash$			
		wet	0		i —	B-6@	201	SM	As above: grav	ish brown; some clay; saturated;
	l		Ŭ		20 —	1000		OW	no odor.	ish brown, some day, salulateu,
	l						$\vdash$			
					21 —		┠───┨			· · · · · · · · · · · · · · · · · · ·
	l						$\vdash$			· · · · · · · · · · · · · · · · · · ·
					22—		┟──┨			
	l	L.	L	<u> </u>	I				1	

of 3 e Map PTION
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PTION
moist; odor.
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· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·
nedium dense;
ium stiff; wet; o
· · · · · · · · · · · · · · · · · · ·
· · ·

			-	lo: C10418						coPhillips		В-6		
				By: Ben Wr	-					71 First Street, Livermore, 0	California	Page 3 of 3		
		to	6	Gregg Drillin		-				4/25/06	Location Map			
	er	ta	-	lethod: Co			-	Hole	Diamete	er: 1.75"				
			1	) Method:Pi	iston Sar	npler/Hydi	ropunch	Hole	Depth:	65.5'				
Env	ironm	ental	Casing T	ype: NA				Well	Diamete	er: NA		See Site Map		
Cons	ultant	s, Inc.	Slot Size						Depth:					
			Gravel P	ack: NA				Casir	ng Stick	up: NA				
				Elevation		Ì	Northi	ng		Easting				
	- 11		ļ								<u> </u>			
W Comp				PID Reading (ppm)	5.0	÷	Sam	ole	n					
		Static	Moisture Content	n)	Penetration (biows/6")	Depth (feet)			Soil Type					
kfil	2	Water Level	Sont	Pp Pp	neti low	t;	N N	S	Di J		IOLOGY /	DESCRIPTION		
Backfill Casing	5	Levei	l≥0		(pel	Del	Recovery	Interval	Ň					
	R.							T						
	j					45 —		+						
NI				<u>co</u>		_				A				
Neat	<u>.</u>		wet	60		46	0.00		CL	As above; wet;	odor.			
Cemer	u					_	B-6@	40						
	<u>.</u>				ł	47		$\parallel$			···· · · ····			
	š							<b>├</b>						
	×					48	<u> </u>			· · · · · · · · · · · · · · · · · · ·				
						_	<b>.</b>	<b>↓</b>				· · · · · · · · · · · · · · · · · · ·		
						49—	<u> </u>	<b>↓</b>				an a		
			wet	175		50			CL	As above.				
			<sup>*</sup>				B-6@	50'						
						51					······································			
						<sup>-</sup> _								
						52								
						J2 _								
						53								
						<b>_</b>								
						54 —						·····		
						J4 —								
			wet	195					SC	Clayey SAND with g	ravel; brow	wn; well graded sand;		
						55 —	B-6@	55'		medium plasticity; stif				
										······································		· ·		
						56								
						57 —								
	а. -					58 —		† †		+				
						-	1	┼─┤						
	į					59 —		+						
			sat	21				<u> </u>	SM	Silty SAND with grav	vel: hrown	well graded sand.		
				21		60	B-6@	60				d gravel; medium dense;		
						-	0-0.00	00		saturated; odor. (20,6		u graver, medium dense,		
						61		┼──┨			00,20)	· •••• · · · · ·		
						-		$\left\{ - \right\}$		· · · · · · · · · · · · · · · · · · ·				
						62 —	+	┼──┤				· · · · · · · · · · · · · · · · · · ·		
					1	-	<b> </b>	┼─┤				·····		
					[	63 —		x		Croundurates	omplade			
j. Š						-		┢─┤		Groundwater s	ampied @	σο		
					[	64								
				A A		_	Construction	<b> </b>	<u></u>					
			sat	11		65			SM	As above	··· -			
	10 22					_	B-6@	65						
						66				Total Depth = 65.5'				
l						<u> </u>								

			-	lo: C10418 By: Ben Wi						coPhillips 71 First Street, Livermore, C		3-6 Page 2 of 3
	ł	4		Gregg Drillir	-	esting				4/25/06	Location Map	age 2 01 5
)	$\mathbf{P}$	ta	•	/lethod: Co						er: 1.75"		
		<i>i</i> CA	Sampling	g Method:Pi	ston Sar	npler/Hydr	opunch H	ole De	epth:	65.5'		
Envi	ronme	ental	Casing T	ype: NA			W	/ell Dia	amete	r: NA	Se	e Site Map
Cons	ultants	s, Inc.	Slot Size					/eli De				
			Gravel P	Elevation				asing S	Sticku	ip: NA		
				cievation			Northing			Easting		
We Compl		<b>O</b> 1 11	0 <del>-</del>	PID Reading (ppm)	۔ ۲	et)	Sample		e			
		Static Water	Moisture Content	tead pm)	Penetration (blows/6")	Depth (feet)	≥ .	ā	Soil Type	LITHO	DLOGY / DE	SCRIPTION
Backfill Casing		Level	C Q	ц Ц Ц	ene (blov	epti	Recovery	Interval	Soil			
	8	·····		<u>۵</u>	u		<u> </u>	5				
						23—	<u> </u>	-				
Neat						24		1.				
Cemen	t		moist	48				$\dashv$	CL	Lean CLAY; brown; h	an plasticity	: stiff: maist: adar
l Í			indiot	10		25	B-6@ 2		ÚC.	(0,0,100)	ign plasticity	, 300, 1005, 0007.
						26 —				· · · _ · _ · _ · _ ·		
						27 —						
						28—				·		
						29—		_				
			sat	18		30	B-6@ 3		CL	As above; satu	rated.	
							D-0@ 0				·	
								_			·····	
						32						
						33—						
						34 —					· · · · · · · · · · · · · · · · · · ·	
			sat	6		35 —				Silty SAND; brown; w	ell graded sa	and; medium dense;
							B-6@ 3	<u>5'</u> S	SM	saturated. (10,70,20)	· · · · · · · · · · · · · · · · · · ·	
						36 —				······································		
						37 —		_				····· • ··· • • • • • • • • • • • • • •
						38						
						 39					·····	
				00		_		┈┾╸╸			ioh alesticit	
			wet	23		40	B-6@ 4	0' (	CL	Lean CLAY; brown; h (0,0,100)	iign plasticity	, mealum stiπ; wet; oa
						41					· · · · · · · · · · · · · · · · · · ·	
						42		Ţ				· · · · · · · · · · · · · · · · · · ·
						43		X		Groundwater sa	ampled @ 43	
						+3					·····	· · · · · · · · · · · · · · · · · · ·
						44 —						
2,02202							<u> </u>					

		1 .	No: C10418						ocoPhillips	B-6			
			By: Ben Wi	-					771 First Street, Livermore,	California Page 3 of 3			
Del	40		Gregg Drillin				Date	Drilled:	4/25/06	Location Map			
Del	12		Aethod: Co				Hole	Diamet	er: 1.75"				
	<sup>c</sup>	Sampling	g Method:Pi	iston Sar	npler/Hyd	Iropunch	Hole	Depth:	65.5'				
Environme	ental	Casing T	ype: NA				Well	Diamet	er: NA	See Site Map			
Consultants		Slot Size						Depth:					
	, me.		ack: NA						up: NA				
			Elevation		1	Northi		<u> </u>	Easting	-			
			2/01/4001			Toran	''9		Labing				
Well			n	_		1							
Completion	Static	연 분	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sam	ple	Soil Type					
j je p	Water	stu nte	pm	etra vs/	E -	ery	a	Ту	LITH	HOLOGY / DESCRIPTION			
Backfill Casing	Level	Moisture Content	Цe	blo	epti	Recovery	Interval	Soil					
ы С Ш			ā	<u>م</u> ~	D D	Å	in la						
					45								
					45					· · · · · · · · · · · · · · · · · · ·			
Neat		wet	60		-			CL	As above; wet;	• odor			
Cement					46	B-6@	46'	01		,			
					-		.~						
					47 —		$\vdash$						
						-							
					48—				·				
					-	-							
					49 —								
			475		-								
		wet	175		50 —			CL	As Above.				
						B-6@	50'						
					51 —								
					<sup>.</sup> _								
					52 —								
					52								
					53—								
					55					K			
					54		Γ		<b>†</b> -------				
		wet	195					SC	Clavey SAND with g	ravel; brown; well graded sand;			
					55 —	B-6@	55'			ff; odor; wet. (20,60,20)			
					- 1				modum producity, our	n, odor, wet. (20,00,20)			
					56 —		$\left  - \right $						
					-								
					57 —								
					-		┨───┤						
					58 —		<u>                                     </u>		<b> </b>				
					_		<b> </b>						
					59 —					-			
-													
		sat	21		60 —			SM	Silty SAND with grav	vel; brown; well graded sand;			
						B-6@	60		subangular to rounde	d sand and gravel; medium dense;			
					61 —				saturated; odor. (20,6				
					01-								
									• • • • • • • • • • • • • • •				
8 8 9					62								
					-	<b>-</b>				······································			
					63	1	x		Groundwater s	ampled @ 63'			
									- Croundwater S				
					64		┝──┤						
		s of	11		-		┠──┤	CN4	λο ο ματογο				
		sat	11		65 —	Dee		SM	As above	· ····· · · · · · · · · · · · · · · ·			
<u>208</u>					_	B-6@	00						
					66		$\square$		Total Depth = 65.5'	<b>.</b>			

			Project N	lo: C10418	6031		•.	Clien	t: Cono	coPhillips		B-7
			Logged I	By: Ben Wi	right			Locat	tion: 17	71 First Street, Livermore, C	California	Page 1 of 3
	- 1-		Driller: (	Gregg Drillir	ng and Te	esting		Date	Drilled:	4/21/06	Location Map	
De	<u> -  </u>	[A]	Drilling N	fethod: Co	ne Penet	ration Tes	ting	Hole	Diamete	er: 1.75"		
				g Method:P	iston San	npler/Hydr	opunch	Hole	Depth:	65.5'		
Envir				ype: NA				Well	Diamete	er: NA		See Site Map
Consu	Itants	s, Inc.	Slot Size						Depth:			
			Gravel P						ng Sticki			
				Elevation			Northir	ng		Easting		
Well											l	
Complet	tion	Static	ut le	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sam	ole	be			
liji Dđ		Water	Moisture Content	Rea	etra ws/	L)	/ery	val	Soil Type	LITH	OLOGY / D	ESCRIPTION
Backfill Casing		Level	ഉၓ	<u> </u>	bla	Dept	Recovery	Interval	Soi			
				ш.			<u> </u>					
					I T I	_			CM			
Neat	• · · ·		moist		Δi=	1			GM	Silty GRAVEL with s		
Cement					Air Knife	—				medium and coarse s gravel; no odor. (70,1)		guiar to rounded
Cement						2—				giavel, 10 0001. (70, 1)	5,15)	
			2									······································
						3—				· ·	••• •••	
												· · · · · · · · · · · · · · · · · · ·
						4						
					↓							
						5—						
						6						
						0						
						7						
						·	<b>_</b>					
		-				8—						
						9						
			moist	0					SM	Silty SAND with grav	ol: aray to	brown: well graded
			moist	U		10	B-7@	10'	OW	sand; subangular to re		
						-				no oder. (20,60,20)		a ana graver, aerioc,
						11 —						
						-						
						12—						
						13—						
						14 —	<u> </u>					
				-								····
			wet	0		15	0.70	4.00	SM	As above; redd	lish brown;	wet; medium dense.
						_	B-7@	15		· · · · · · · · · · · · · · · · · ·		·· ·· · · · · · · ····················
						16						
											· · · · · · · · · · · · · · · · · · ·	
						17						
												·····
						18	<u> </u>					
						10 -						· · · · · · · · · · · · · · · · · · ·
						19						
			wet	0		20			SM	As above; gray	ish brown.	
							B-7@	20'				
						21 —		ļ				
							ļ	ļ				
						22 —	<u> </u>					

-

		1 .	No: C10418						coPhillips	· · · · · · · · · · · · · · · · · · ·	B-7
			By: Ben W	-					71 First Street, Livermore, C		Page 2 of 3
De	lta		Gregg Drillir Method: Co			ting			4/21/06 er: 1.75"	Location Map	
	πα	-	g Method:P			-		Depth:			
Environ	nental	1	Type: NA		inpioi/i i ju	opullon		Diamete			See Site Map
Consultar								Depth:			
		Gravel F	Pack: NA					ng Stick			
			Elevation			Northir	ng		Easting		
Well		-	5							l	
Completion	Static	1 3 10	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Samp		Soil Type			
Backfill Casing	Water Level	Cont	P Re	inetr low:	t E	Recovery	Interval	oil T	LITH	OLOGY / D	DESCRIPTION
C B C B		20	L L L	Pe d	ð	Rec	Inte	S			
					23—	l					- 10 <sup>11</sup>
Noch	_								···- ···· · ··· · ··· · · · · · · · · ·		
Neat Cement					24						
Comon		wet	0	}				CL	Lean CLAY; brown; h	niah plastici	tv: medium stiff:
					25—	B-7@	25'		odor. (0,0,100)	<u> </u>	<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
					26—						
											······································
					27 —				· · · · · · · · · · · · · · · · · · ·		
					28—						
					20						
	_				29—						
		wet	0					CL	As above; soft.	·	
-					30	B-7@	30'				
					31						
										·····	
·	·				32						·····
					33—						
					34 —						
		sat	6		-			SM	Silty SAND with grav	vel; gravish	brown; well graded
					35—	B-7@	35'		sand; subangular to re	ounded san	d and gravel; medium
					36 —				saturated; slight odor.	(20.60,20)	)
-					-	l			· ···· ·		
					37 —						
					38						
	4				- 1				····· · · · · · · · · · · · · · · · ·		
					39		x		Groundwater s	ampled @ '	30'
		sat	6								
					40	B-7@	40'	CL	Lean CLAY; brown; h	nigh plastici	ty; soft; saturated;
					41				odor. (0,0,100)		
					-						
-					42						
					43						
					- 1						
					44 —				· · · · · · · · · · · · · · · ·		
3029	J	1		L	l	<u>I.</u>			L		

		Project I	No: C10418	36031			Clien	it: Conc	ocoPhillips		B-7
			By: Ben Wi						71 First Street, Livermore, (	California	Page 3 of 3
<b>n</b> -	11-		Gregg Drillir						4/21/06	Location Map	
De	ITA		Method: Co			-	Hole	Diamet	er: 1.75"		
		Samplin	g Method:P	iston Sar	npler/Hyd	Iropunch	Hole	Depth:	65.5'		
Environ			Гуре: NA					Diamete			See Site Map
Consulta	nts, Inc.	Slot Size						Depth:			
		Gravel F	Pack: NA		1			ng Stick	up: NA	-	
			Elevation			Northir	ıg		Easting		
Well	Penetration Recovery Soil Type Soil Type							<u> </u>	· · · · · · · · · · · · · · · · · · ·		
Completion											
Backfill Casing		oist	Re	ows	닱	Ver	Zal	E I	LITH	OLOGY / [	DESCRIPTION
Bac Cas	Lever	ΣO		per la	Dep	Seco	Inte	, Х			
		sat	214			<u> </u>		CL	As above; stror	na odor	
					45	B-7@	45'			ig odol.	
Neat					46				···· ··· ··· ···· ···· ···· ··· ··· ··		
Cement					40						
					47—						
					" _						
					48						
	-				49—						
25			74		-				Citte CAND with One		
		sat	74		50 —	B-7@	50'	SM	Silty SAND with Gra subangular to rounder	vel; brown	; well graded sand;
					-	0-100	00		(20,60,20)	u sanu anu	gravel, dense, odor.
					51 —						· · · · · · · · · · · · · · · · · · ·
					52						
					53						
					-				· · · · · · · · · · · · · · · · · · ·		
					54 —						
		sat	258		-	31.34 S		SM	As above; gray	ish brown:	strong odor
			200		55 —	B-7@	55'	Civi	715 above, giay	ion brown,	
					-						····
					56 —				· · · · · · · · · · · · · · · · · · ·		· · · ·· ·· · · · · · · · · · · · · ·
					57						
					37		X		Groundwater s	ampled @	57'
					58				· · · · · · · · · · · · · · · · · · ·		·····
1000 B					59—						
	-		450		[ _	1000-660 (Sel			A =		
645		sat	153		60	B-7@	COL		As above.		
						D-1@	00		· · · · · · · · · · · · · · · · · · ·		
					61 —					-	
					-	1			· · · · · · · · · ·		· · · · · <u>-</u> · · · · · · · · · · · · · · · · · · ·
					62				······································		
						1					· ··· · · · · · ·
					63—						
					64 —				· · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
					04 —						
		sat	199		65				As above.		
	_					B-7@	65'				
					66				Total Depth = 65.5'		
·											

Analytical Reports and Chain of Custody Documentation



#### ANALYTICAL REPORT

Job Number: 720-3297-1

Job Description: Conoco Phillips #4186, Livermore

For: Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Attention: Mr. Daniel J Davis

All as.

Dimple Sharma Project Manager I dsharma@stl-inc.com 05/03/2006

cc: Mr. Ben Wright

Project Manager: Dimple Sharma

Severn Trent Laboratories, Inc. STL San Francisco 1220 Quarry Lane, Pleasanton, CA 94566 Tel (925) 484-1919 Fax (925) 484-1096 www.stl-inc.com

#### METHOD SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

Description	Lab Location	Method	Preparation Method	
Matrix: Water			·	
Volatile Organic Compounds by GC/MS	STL-SF	SW846 8260E	3	
Purge-and-Trap	STL-SF		SW846 5030B	

#### LAB REFERENCES:

STL-SF = STL-San Francisco

#### METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### SAMPLE SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

Lab Sample ID	mple ID Client Sample ID Client Matrix		Date/Time Sampled	Date/Time Received		
720-3297-1	B-2@38'	Water	04/19/2006 1240	04/21/2006 1807		
720-3297-2	B-2@61'	Water	04/19/2006 1440	04/21/2006 1807		
720-3297-3	B-1@41'	Water	04/20/2006 0855	04/21/2006 1807		
720-3297-4	B-1@62'	Water	04/20/2006 1115	04/21/2006 1807		
720-3297-5	B-3@38'	Water	04/20/2006 1515	04/21/2006 1807		
720-3297-6	B-3@62'	Water	04/20/2006 1715	04/21/2006 1807		
720-3297-7	B-7@39'	Water	04/21/2006 1050	04/21/2006 1807		
720-3297-8	B-7@57'	Water	04/21/2006 1355	04/21/2006 1807		

Mr. Daniel J Davis Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670	τ.				Lab S Date	lumber: Sample Id: Sampled: Received:	720-3297-1 720-3297-1 04/19/2006 1240 04/21/2006 1807
Client Sample ID: B-2@38'	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	ND	ug/L	0.50	8260B	04/26/2006 1406	04/26/2006 14	1.0
Ethanol	ND	ug/L	100	8260B	04/26/2006 1406	04/26/2006 14	1.0
Ethylbenzene	ND	ug/L	0.50	8260B	04/26/2006 1406	04/26/2006 14	1.0
MTBE	ND	ug/L	0,50	8260B	04/26/2006 1406	04/26/2006 14	1.0
TAME	ND	ug/L	0.50	8260B	04/26/2006 1406	04/26/2006 14	106 1.0
Toluene	0.78	ug/L	0.50	8260B	04/26/2006 1406	04/26/2006 14	1.0
Xylenes, Total	1.5	ug/L	1.0	8260B	04/26/2006 1406	04/26/2006 14	1.0
TBA	ND	ug/L	5.0	8260B	04/26/2006 1406	04/26/2006 14	1.0
DIPE	ND	ug/L	1.0	8260B	04/26/2006 1406	04/26/2006 14	1.0
Gasoline Range Organics (GRO)-C6-C12	930	ug/L	50	8260B	04/26/2006 1406	04/26/2006 14	1.0
Ethyl tert-butyl ether	ND	ug/L	0.50	8260B	04/26/2006 1406	04/26/2006 14	406 1.0
Surrogate					Acceptance Limits		
Toluene-d8	91	%		8260B	77 - 121		
1,2-Dichloroethane-d4	99	%		8260B	73 - 130		

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 Job Number;
 720-3297-1

 Lab Sample Id:
 720-3297-2

 Date Sampled:
 04/19/2006
 1440

 Date Received:
 04/21/2006
 1807

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Client Sample ID: B-2@61'							
	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	72	ug/L	0.50	8260B	04/26/2006 1428	04/26/2006 1428	1.0
Ethanol	ND	ug/L	100	8260B	04/26/2006 1428	04/26/2006 1428	1.0
Ethylbenzene	1.4	ug/L	0.50	8260B	04/26/2006 1428	04/26/2006 1428	1.0
MTBE	470	ug/L	2.0	8260B	04/28/2006 0203	04/28/2006 0203	4.0
TAME	ND	ug/L	0.50	8260B	04/26/2006 1428	04/26/2006 1428	1.0
Toluene	ND	ug/L	0.50	8260B	04/26/2006 1428	04/26/2006 1428	1.0
Xylenes, Total	ND	ug/L	1.0	8260B	04/26/2006 1428	04/26/2006 1428	1.0
TBA	290	ug/L	5.0	8260B	04/26/2006 1428	04/26/2006 1428	1.0
DIPE	ND	ug/L	1.0	8260B	04/26/2006 1428	04/26/2006 1428	1.0
Gasoline Range Organics (GRO)-C6-C12	1300	ug/L	50	8260B	04/26/2006 1428	04/26/2006 1428	1.0
Ethyl tert-butyl ether	ND	ug/L	0.50	8260B	04/26/2006 1428	04/26/2006 1428	1.0
Surrogate					Acceptance Limits		
Toluene-d8	91	%		8260B	77 <del>-</del> 121		
1,2-Dichloroethane-d4	101	%		8260B	73 - 130		

Client Sample ID: B-1@41'

Job Number:	720-3297-1
Lab Sample Id:	720-3297-3
Date Sampled:	04/20/2006 0855
Date Received:	04/21/2006 1807

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
							<u> </u>
GC/MS VOA							
Benzene	43	ug/L	5.0	8260B	05/01/2006 1311	05/01/2006 1311	10
Ethanol	ND	ug/L	1000	8260B	05/01/2006 1311	05/01/2006 1311	10
Ethylbenzene	830	ug/L	5.0	8260B	05/01/2006 1311	05/01/2006 1311	10
MTBE	ND	ug/L	5.0	8260B	05/01/2006 1311	05/01/2006 1311	10
ТАМЕ	ND	ug/L	5.0	8260B	05/01/2006 1311	05/01/2006 1311	10
Toluene	ND	ug/L	5.0	8260B	05/01/2006 1311	05/01/2006 1311	10
Xylenes, Total	39	ug/L	10	8260B	05/01/2006 1311	05/01/2006 1311	10
ТВА	ND	ug/L	50	8260B	05/01/2006 1311	05/01/2006 1311	10
DIPE	ND	ug/L	10	8260B	05/01/2006 1311	05/01/2006 1311	10
Gasoline Range Organics (GRO)-C6-C12	10000	ug/L	500	8260B	05/01/2006 1311	05/01/2006 1311	10
Ethyl tert-butyl ether	ND	ug/L	5.0	8260B	05/01/2006 1311	05/01/2006 1311	10
Surrogate					Acceptance Limits		
Toluene-d8	100	%		8260B	77 - 121		
1,2-Dichloroethane-d4	106	%		8260B	73 - 130		

Client Sample ID: B-1@62'

Job Number:	720-3297-1
Lab Sample Id:	720-3297-4
Date Sampled:	04/20/2006 1115
Date Received:	04/21/2006 1807

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	1.4	ug/L	0.50	8260B	04/26/2006 1511	04/26/2006 1511	1.0
Ethanol	ND	ug/L	100	8260B	04/26/2006 1511	04/26/2006 1511	1.0
Ethylbenzene	ND	ug/L	0.50	8260B	04/26/2006 1511	04/26/2006 1511	1.0
MTBE	21	ug/L	0.50	8260B	04/28/2006 0248	04/28/2006 0248	1.0
TAME	ND	ug/L	0.50	8260B	04/26/2006 1511	04/26/2006 1511	1.0
Toluene	ND	ug/L	0.50	8260B	04/26/2006 1511	04/26/2006 1511	1.0
Xylenes, Total	ND	ug/L	1.0	8260B	04/26/2006 1511	04/26/2006 1511	1.0
TBA	ND	ug/L	5.0	8260B	04/26/2006 1511	04/26/2006 1511	1.0
DIPE	ND	ug/L	1.0	8260B	04/26/2006 1511	04/26/2006 1511	1.0
Gasoline Range Organics (GRO)-C6-C12	100	ug/L	50	8260B	04/26/2006 1511	04/26/2006 1511	1.0
Ethyl tert-butyl ether	ND	ug/L	0.50	8260B	04/26/2006 1511	04/26/2006 1511	1.0
Surrogate					Acceptance Limits		
Toluene-d8	92	%		8260B	77 - 121		
1,2-Dichloroethane-d4	102	%		8260B	73 - 130		

 Job Number:
 720-3297-1

 Lab Sample Id:
 720-3297-5

 Date Sampled:
 04/20/2006
 1515

 Date Received:
 04/21/2006
 1807

Client Sample ID: B-3@38'	Beault/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
	Result/Qualifier	Unit	<u> </u>				
GC/MS VOA							
Benzene	6.9	ug/L	5.0	8260B	04/26/2006 1532	04/26/2006 1532	10
Ethanol	ND	ug/L	1000	8260B	04/26/2006 1532	04/26/2006 1532	10
Ethylbenzene	18	ug/L	5.0	8260B	04/26/2006 1532	04/26/2006 1532	10
MTBE	ND	ug/L	5.0	8260B	04/26/2006 1532	04/26/2006 1532	10
ТАМЕ	ND	ug/L	5.0	8260B	04/26/2006 1532	04/26/2006 1532	10
Toluene	ND	ug/L	5.0	8260B	04/26/2006 1532	04/26/2006 1532	10
Xylenes, Total	14	ug/L	10	8260B	04/26/2006 1532	04/26/2006 1532	10
TBA	ND	ug/L	50	8260B	04/26/2006 1532	04/26/2006 1532	10
DIPE	ND	ug/L	10	8260B	04/26/2006 1532	04/26/2006 1532	10
Gasoline Range Organics (GRO)-C6-C12	3900	ug/L	500	8260B	04/26/2006 1532	04/26/2006 1532	10
Ethyl tert-butyl ether	ND	ug/L	5.0	8260B	04/26/2006 1532	04/26/2006 1532	10
Surrogate					Acceptance Limits		
Toluene-d8	94	%		8260B	77 - 121		
1,2-Dichloroethane-d4	105	%		8260B	73 - 130		

Client Sample ID: B-3@62'

Job Number:	720-3297-1
Lab Sample Id:	720-3297-6
Date Sampled:	04/20/2006 1715
Date Received:	04/21/2006 1807

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Client Sample ID. D-3@02	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	5.7	ug/L	0.50	8260B	04/26/2006 1554	04/26/2006 1554	1.0
Ethanol	ND	ug/L	100	8260B	04/26/2006 1554	04/26/2006 1554	1.0
Ethylbenzene	4.6	ug/L	0.50	8260B	04/26/2006 1554	04/26/2006 1554	1.0
MTBE	410	ug/L	2.0	8260B	04/28/2006 0310	04/28/2006 0310	4.0
ТАМЕ	ND	ug/L	0.50	8260B	04/26/2006 1554	04/26/2006 1554	1.0
Toluene	ND	ug/L	0.50	8260B	04/26/2006 1554	04/26/2006 1554	1.0
Xylenes, Total	5.1	ug/L	1.0	8260B	04/26/2006 1554	04/26/2006 1554	1.0
TBA	69	ug/L	5.0	8260B	04/26/2006 1554	04/26/2006 1554	1.0
DIPE	ND	ug/L	1.0	8260B	04/26/2006 1554	04/26/2006 1554	1.0
Gasoline Range Organics (GRO)-C6-C12	660	ug/L	50	8260B	04/26/2006 1554	04/26/2006 1554	1.0
Ethyl tert-butyl ether	ND	ug/L	0.50	8260B	04/26/2006 1554	04/26/2006 1554	1.0
Surrogate					Acceptance Limits		
Toluene-d8	83	%		8260B	77 - 121		
1,2-Dichloroethane-d4	102	%		8260B	73 - 130		

Client Sample ID: B-7@39'

Job Number:	720-3297-1
Lab Sample Id:	720-3297-7
Date Sampled:	04/21/2006 1050
Date Received:	04/21/2006 1807

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
			· · · · · · · · · · · · · · · · · · ·		······································		
GC/MS VOA							
Benzene	6.5	ug/L	0.50	8260B	04/26/2006 1615	04/26/2006 1615	1.0
Ethanol	ND	ug/L	100	8260B	04/26/2006 1615	04/26/2006 1615	1.0
Ethylbenzene	90	ug/L	0.50	8260B	04/26/2006 1615	04/26/2006 1615	1.0
MTBE	790	ug/L	5.0	8260B	04/28/2006 0332	04/28/2006 0332	10
TAME	ND	ug/L	0.50	8260B	04/26/2006 1615	04/26/2006 1615	1.0
Toluene	1.6	ug/L	0.50	8260B	04/26/2006 1615	04/26/2006 1615	1.0
Xylenes, Total	210	ug/L	1.0	8260B	04/26/2006 1615	04/26/2006 1615	1.0
TBA	180	ug/L	50	8260B	04/28/2006 0332	04/28/2006 0332	10
DIPE	ND	ug/L	1.0	8260B	04/26/2006 1615	04/26/2006 1615	1.0
Gasoline Range Organics (GRO)-C6-C12	9200	ug/L	500	8260B	04/28/2006 0332	04/28/2006 0332	10
Ethyl tert-butyl ether	ND	ug/L	0.50	8260B	04/26/2006 1615	04/26/2006 1615	1.0
Surrogate					Acceptance Limits		
Toluene-d8	95	%		8260B	77 - 121		
1,2-Dichloroethane-d4	91	%		8260B	73 - 130		

Client Sample ID: B-7@57'

Job Number:	720-3297-1
Lab Sample Id:	720-3297-8
Date Sampled:	04/21/2006 1355
Date Received:	04/21/2006 1807

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Client Sample ID. B-r@57							<b>B</b> 11 (1
	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	510	ug/L	25	8260B	04/26/2006 1637	04/26/2006 1637	50
Ethanol	ND	ug/L	5000	8260B	04/26/2006 1637	04/26/2006 1637	50
Ethylbenzene	270	ug/L	25	8260B	04/26/2006 1637	04/26/2006 1637	50
MTBE	ND	ug/L	25	8260B	04/28/2006 0354	04/28/2006 0354	50
ТАМЕ	ND	ug/L	25	8260B	04/26/2006 1637	04/26/2006 1637	50
Toluene	ND	ug/L	25	8260B	04/26/2006 1637	04/26/2006 1637	50
Xylenes, Total	250	ug/L	50	8260B	04/26/2006 1637	04/26/2006 1637	50
TBA	ND	ug/L	250	8260B	04/26/2006 1637	04/26/2006 1637	50
DIPE	ND	ug/L	50	8260B	04/26/2006 1637	04/26/2006 1637	50
Gasoline Range Organics (GRO)-C6-C12	26000	ug/L	2500	8260B	04/28/2006 0354	04/28/2006 0354	50
Ethyl tert-butyl ether	ND	ug/L	25	8260B	04/26/2006 1637	04/26/2006 1637	50
Surrogate					Acceptance Limits		
Toluene-d8	86	%		8260B	77 - 121		
1,2-Dichloroethane-d4	103	%		8260B	73 - 130		

# DATA REPORTING QUALIFIERS

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

Lab Section	Qualifier	Description
GC/MS VOA		
	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits

## Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

- - -

## **QC Association Summary**

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC/MS VOA				
Analysis Batch:720-827	1			
LCS 720-8271/16	Lab Control Spike	Water	8260B	
LCSD 720-8271/15	Lab Control Spike Duplicate	Water	8260B	
MB 720-8271/17	Method Blank	Water	8260B	
720-3218-A-3 MS	Matrix Spike	Water	8260B	
720-3218-A-3 MSD	Matrix Spike Duplicate	Water	8260B	
720-3297-1	B-2@38'	Water	8260B	
720-3297-2	B-2@61'	Water	8260B	
720-3297-4	B-1@62'	Water	8260B	
720-3297-5	B-3@38'	Water	8260B	
720-3297-6	B-3@62'	Water	8260B	
720-3297-7	B-7@39'	Water	8260B	
720-3297-8	B-7@57'	Water	8260B	
Analysis Batch:720-833	2			
LCS 720-8332/19	Lab Control Spike	Water	8260B	
LCSD 720-8332/18	Lab Control Spike Duplicate	Water	8260B	
MB 720-8332/20	Method Blank	Water	8260B	
720-3297-2	B-2@61'	Water	8260B	
720-3297-4	B-1@62'	Water	8260B	
720-3297-6	B-3@62'	Water	8260B	
720-3297-7	B-7@39'	Water	8260B	
720-3297-8	B-7@57'	Water	8260B	
720-3325-A-1 MS	Matrix Spike	Water	8260B	
720-3325-A-1 MSD	Matrix Spike Duplicate	Water	8260B	
Analysis Batch:720-843	2			
LCS 720-8432/21	Lab Control Spike	Water	8260B	
LCSD 720-8432/20	Lab Control Spike Duplicate	Water	8260B	
MB 720-8432/22	Method Blank	Water	8260B	
720-3297-3	B-1@41'	Water	8260B	
720-3297-3MS	Matrix Spike	Water	8260B	
720-3297-3MSD	Matrix Spike Duplicate	Water	8260B	

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

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## Method Blank - Batch: 720-8271

### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8271/17	Analysis Batch: 720-8271	Instrument ID: Varian 3900E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: c:\varianws\data\200604\04
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 04/26/2006 1222		Final Weight/Volume: 10 mL
Date Prepared: 04/26/2006 1222		

Analyte	Result	Qual	RL
	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
ТВА	ND		5.0
DIPE	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50
Surrogate	% Rec	Acceptance L	imits
Toluene-d8	94	77 - 121	
1,2-Dichloroethane-d4	104	73 - 130	

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

04/26/2006 1201

Job Number: 720-3297-1

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### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8271

LCS Lab Sample ID Client Matrix: Dilution: Date Analyzed: Date Prepared:	ELCS 720-8271/16 Water 1.0 04/26/2006 1107 04/26/2006 1107	Analysis Batch: 720-8271 Prep Batch: N/A Units: ug/L	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\04 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed:	ID: LCSD 720-8271/15 Water 1.0 04/26/2006 1201	Analysis Batch: 720-8271 Prep Batch: N/A Units:ug/L	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\042 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

		<u>% Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
	90	89	69 - 129	1	25
MTBE	84	99	65 - 165	17	25
Toluene	91	90	70 - 130	2	25
Surrogate	. An an and a star of the started back	LCS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8		93	92		77 - 121
1,2-Dichloroethane-d4		99	98		73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Date Prepared:

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

#### Matrix Spike/

#### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-8271

## Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3218-A-3 MS Water 1.0 04/26/2006 1323 04/26/2006 1323	Analysis Batch: 720-8271 Prep Batch: N/A	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\( Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3218-A-3 MSD Water 1.0 04/26/2006 1344 04/26/2006 1344	Analysis Batch: 720-8271 Prep Batch: N/A	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\04 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	<u>%</u>	Rec.			
Analyte	MS	MSD	Limit	RPD	RPD Limit MS Qual MSD Qual
Benzene	106	97	69 - 129	8	20
MTBE	106	102	65 - 165	4	20
Toluene	100	94	70 - 130	6	20
Surrogate		MS % Rec	MSD %	Rec	Acceptance Limits
Toluene-d8		97	94		77 - 1 <b>21</b>
1,2-Dichloroethane-d4		109	107		73 - 130

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

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## Method Blank - Batch: 720-8332

#### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8332/20	Analysis Batch: 720-8332	Instrument ID: Varian 3900A
Client Matrix: Water	Prep Batch: N/A	Lab File ID: c:\saturnws\data\200604\04
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 04/27/2006 2052		Final Weight/Volume: 10 mL
Date Prepared: 04/27/2006 2052		

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
ТВА	ND		5.0
DIPE	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50
Surrogate	% Rec	Acceptance Lin	
Toluene-d8	89	77 - 121	
1,2-Dichloroethane-d4	96	73 - 130	

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

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#### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8332

LCS Lab Sample I Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8332/19 Water 1.0 04/27/2006 2008 04/27/2006 2008	Analysis Batch: 720-8332 Prep Batch: N/A Units: ug/L	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\0 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	ID: LCSD 720-8332/18 Water 1.0 04/27/2006 2030 04/27/2006 2030	Analysis Batch: 720-8332 Prep Batch: N/A Units:ug/L	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\042 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	-	<u>% Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	98	95	69 - 129	3	25
MTBE	107	104	65 - 165	3	25
Toluene	97	94	70 - 130	4	25
Surrogate	l	_CS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8	ę	90	91		77 - 121
1,2-Dichloroethane-d4	ę	98	99		73 - 130

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

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## Matrix Spike/

# Matrix Spike Duplicate Recovery Report - Batch: 720-8332

## Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3325-A-1 MS Water 1.0 04/27/2006 2243 04/27/2006 2243	Analysis Batch: 720-8332 Prep Batch: N/A	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\( Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3325-A-1 MSD Water 1.0 04/27/2006 2305 04/27/2006 2305	Analysis Batch: 720-8332 Prep Batch: N/A	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	<u>%</u>	Rec.				
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual MSD Qual
Benzene	88	108	69 - 129	21	20	*
MTBE	97	123	65 - 165	19	20	
Toluene	88	104	70 - 130	17	20	
Surrogate		MS % Rec	MSD %	Rec	Acce	eptance Limits
Toluene-d8		93	93		7	7 - 121
1,2-Dichloroethane-d4		104	108		7:	3 - 130

Job Number: 720-3297-1

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Client: Delta Environmental Consultants, Inc.

Method Blank - Batch: 720-8432

#### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8432/22	Analysis Batch: 720-8432	Instrument ID: Varian 3900C
Client Matrix: Water	Prep Batch: N/A	Lab File ID: c:\saturnws\data\200605\05
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 05/01/2006 1110		Final Weight/Volume: 10 mL
Date Prepared: 05/01/2006 1110		

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
ТВА	ND		5.0
DIPE	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50
Surrogate	% Rec	Acceptance Limit	S
Toluene-d8	99	77 - 121	
1,2-Dichloroethane-d4	112	73 - 130	

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

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Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8432

LCS Lab Sample II Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8432/21 Water 1.0 05/01/2006 0948 05/01/2006 0948	Analysis Batch: 720-8432 Prep Batch: N/A Units: ug/L	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\0 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	ID: LCSD 720-8432/20 Water 1.0 05/01/2006 1016 05/01/2006 1016	Analysis Batch: 720-8432 Prep Batch: N/A Units:ug/L	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\05( Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

		<u>% Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	85	98	69 - 129	14	25
MTBE	97	108	65 - 165	11	25
Toluene	93	101	70 - 130	7	25
Surrogate	l	_CS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8		101	103		77 - 121
1,2-Dichloroethane-d4	9	98	105		73 - 130

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

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## Matrix Spike/

# Matrix Spike Duplicate Recovery Report - Batch: 720-8432

## Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3297-3 Water 10 05/01/2006 1339 05/01/2006 1339	Analysis Batch: 720-8432 Prep Batch: N/A	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\( Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3297-3 Water 10 05/01/2006 1406 05/01/2006 1406	Analysis Batch: 720-8432 Prep Batch: N/A	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\05 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	<u>%</u>	Rec.			
Analyte	MS	MSD	Limit	RPD	RPD Limit MS Qual MSD Qual
Benzene	101	99	69 - 129	1	20
MTBE	107	108	65 - 165	1	20
Toluene	100	101	70 - 130	1	20
Surrogate		MS % Rec	MSD %	Rec	Acceptance Limits
Toluene-d8		98	98		77 - 121
1,2-Dichloroethane-d4		100	99		73 - 130

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# LOGIN SAMPLE RECEIPT CHECK LIST

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3297-1

## Login Number: 3297

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



# ANALYTICAL REPORT

Job Number: 720-3347-1

Job Description: Conoco Phillips #4186, Livermore

For: Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Attention: Mr. Daniel J Davis

Alhar

Dimple Sharma Project Manager I dsharma@stl-inc.com 05/08/2006

cc: Mr. Ben Wright

Project Manager: Dimple Sharma

Severn Trent Laboratories, Inc. STL San Francisco 1220 Quarry Lane, Pleasanton, CA 94566 Tel (925) 484-1919 Fax (925) 484-1096 www.stl-inc.com

## METHOD SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	STL-SF	SW846 8260E	3
Purge-and-Trap	STL-SF		SW846 5030B

### LAB REFERENCES:

STL-SF = STL-San Francisco

#### METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

# SAMPLE SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-3347-1	B-6 @ 43'	Water	04/25/2006 1015	04/26/2006 1216
720-3347-2	B-6 @ 63'	Water	04/25/2006 1250	04/26/2006 1216
720-3347-3	B-5 @ 65'	Water	04/25/2006 1635	04/26/2006 1216
720-3347-4	B-5 @ 44'	Water	04/26/2006 0850	04/26/2006 1216
720-3347-5	B-4 @ 43'	Water	04/26/2006 1500	04/26/2006 1216
720-3347-6	B-4 @ 63'	Water	04/26/2006 1735	04/26/2006 1216

Client Sample ID: B-6 @ 43'

Job Number:	720-3347-1
Lab Sample Id:	720-3347-1
Date Sampled:	04/25/2006 1015
Date Received:	04/26/2006 1216

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	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
<u> </u>							
GC/MS VOA							
Benzene	420	ug/L	5.0	8260B	05/01/2006 1622	05/01/2006 1622	10
Ethanol	ND	ug/L	1000	8260B	05/01/2006 1622	05/01/2006 1622	10
Ethylbenzene	35	ug/L	5.0	8260B	05/01/2006 1622	05/01/2006 1622	10
MTBE	1100	ug/L	5.0	8260B	05/01/2006 1622	05/01/2006 1622	10
ТАМЕ	ND	ug/L	5.0	8260B	05/01/2006 1622	05/01/2006 1622	10
Toluene	ND	ug/L	5.0	8260B	05/01/2006 1622	05/01/2006 1622	10
Xylenes, Total	120	ug/L	10	8260B	05/01/2006 1622	05/01/2006 1622	10
ТВА	250	ug/L	50	8260B	05/01/2006 1622	05/01/2006 1622	10
DIPE	ND	ug/L	1.0	8260B	04/28/2006 1514	04/28/2006 1514	1.0
Gasoline Range Organics (GRO)-C6-C12	1800	ug/L	500	8260B	05/01/2006 1622	05/01/2006 1622	10
Ethyl tert-butyl ether	ND	ug/L	5.0	8260B	05/01/2006 1622	05/01/2006 1622	10
Surrogate					Acceptance Limits		
Toluene-d8	102	%		8260B	77 - 121		
1,2-Dichloroethane-d4	109	%		8260B	73 - 130		

Client Sample ID: B-6 @ 63'

Job Number:	720-3347-1
Lab Sample Id:	720-3347-2
Date Sampled:	04/25/2006 1250
Date Received:	04/26/2006 1216

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	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
<u> </u>							
GC/MS VOA							
Benzene	15	ug/L	0.50	8260B	05/01/2006 1649	05/01/2006 1649	1.0
Ethanol	ND	ug/L	100	8260B	05/01/2006 1649	05/01/2006 1649	1.0
Ethylbenzene	28	ug/L	0.50	8260B	05/01/2006 1649	05/01/2006 1649	1.0
MTBE	7.9	ug/L	0.50	8260B	05/01/2006 1649	05/01/2006 1649	1.0
TAME	ND	ug/L	0.50	8260B	05/01/2006 1649	05/01/2006 1649	1.0
Toluene	ND	ug/L	0.50	8260B	05/01/2006 1649	05/01/2006 1649	1.0
Xylenes, Total	21	ug/L	1.0	8260B	05/01/2006 1649	05/01/2006 1649	1,0
TBA	ND	ug/L	5.0	8260B	05/01/2006 1649	05/01/2006 1649	1.0
DIPE	ND	ug/L	1.0	8260B	04/28/2006 1541	04/28/2006 1541	1.0
Gasoline Range Organics (GRO)-C6-C12	1800	ug/L	50	8260B	05/01/2006 1649	05/01/2006 1649	1.0
Ethyl tert-butyl ether	ND	ug/L	0.50	8260B	05/01/2006 1649	05/01/2006 1649	1.0
Surrogate					Acceptance Limits		
Toluene-d8	100	%		8260B	77 - 121		
1,2-Dichloroethane-d4	123	%		8260B	73 - 130		

Client Sample ID: B-5 @ 65'

Job Number:	720-3347-1
Lab Sample Id:	720-3347-3
Date Sampled:	04/25/2006 1635
Date Received:	04/26/2006 1216

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	11.9	<b>D</b> 1	<b></b>			
Result/Qualifier	Unit	RL	Nethod	Date Prepared	Date Analyzed	Dilution
27	ug/L	2.0	8260B	05/01/2006 1716	05/01/2006 1716	4.0
ND	ug/L	400	8260B	05/01/2006 1716	05/01/2006 1716	4.0
120	ug/L	2.0	8260B	05/01/2006 1716	05/01/2006 1716	4.0
3.2	ug/L	2.0	8260B	05/01/2006 1716	05/01/2006 1716	4.0
ND	ug/L	2.0	8260B	05/01/2006 1716	05/01/2006 1716	4.0
210	ug/L	2.0	8260B	05/01/2006 1716	05/01/2006 1716	4.0
820	ug/L	4.0	8260B	05/01/2006 1716	05/01/2006 1716	4.0
ND	ug/L	20	8260B	05/01/2006 1716	05/01/2006 1716	4.0
ND	ug/L	1.0	8260B	04/28/2006 1608	04/28/2006 1608	1.0
5000	ug/L	200	8260B	05/01/2006 1716	05/01/2006 1716	4.0
ND	ug/L	2.0	8260B	05/01/2006 1716	05/01/2006 1716	4.0
				Acceptance Limits		
101	%		8260B	77 - 121		
120	%		8260B	73 - 130		
	ND 120 3.2 ND 210 820 ND ND 5000 ND	27       ug/L         ND       ug/L         120       ug/L         3.2       ug/L         ND       ug/L         210       ug/L         820       ug/L         ND       ug/L         820       ug/L         ND       ug/L         ND       ug/L         ND       ug/L         100       ug/L	27       ug/L       2.0         ND       ug/L       400         120       ug/L       2.0         3.2       ug/L       2.0         ND       ug/L       2.0         ND       ug/L       2.0         210       ug/L       2.0         820       ug/L       4.0         ND       ug/L       20         ND       ug/L       20         ND       ug/L       200         ND       ug/L       200         ND       ug/L       2.0         101       %	27       ug/L       2.0       8260B         ND       ug/L       400       8260B         120       ug/L       2.0       8260B         3.2       ug/L       2.0       8260B         ND       ug/L       2.0       8260B         3.2       ug/L       2.0       8260B         ND       ug/L       2.0       8260B         210       ug/L       2.0       8260B         820       ug/L       4.0       8260B         ND       ug/L       20       8260B         ND       ug/L       20       8260B         ND       ug/L       2.0       8260B         ND       ug/L       2.0       8260B         ND       ug/L       2.0       8260B         101       %       8260B	27       ug/L       2.0       8260B       05/01/2006       1716         ND       ug/L       400       8260B       05/01/2006       1716         120       ug/L       2.0       8260B       05/01/2006       1716         3.2       ug/L       2.0       8260B       05/01/2006       1716         ND       ug/L       2.0       8260B       05/01/2006       1716         ND       ug/L       2.0       8260B       05/01/2006       1716         ND       ug/L       2.0       8260B       05/01/2006       1716         20       ug/L       2.0       8260B       05/01/2006       1716         210       ug/L       2.0       8260B       05/01/2006       1716         820       ug/L       2.0       8260B       05/01/2006       1716         ND       ug/L       20       8260B       05/01/2006       1716         ND       ug/L       2.0       8260B       05/01/2006       1716         ND       ug/L       2.0       8260B       05/01/2006       1716         ND       ug/L       2.0       8260B       05/01/2006       1716         ND	27         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           ND         ug/L         400         8260B         05/01/2006         1716         05/01/2006         1716           120         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           3.2         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           ND         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           ND         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           210         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           820         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           ND         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716           ND         ug/L         2.0         8260B         05/01/2006         1716         05/01/2006         1716

Client Sample ID: B-5 @ 44'

Job Number:	720-3347-1
Lab Sample Id:	720-3347-4
Date Sampled:	04/26/2006 0850
Date Received:	04/26/2006 1216

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	ND	ug/L	5.0	8260B	05/01/2006 1743	05/01/2006 1743	10
Ethanol	ND	ug/L	1000	8260B	05/01/2006 1743	05/01/2006 1743	10
Ethylbenzene	8.2	ug/L	5.0	8260B	05/01/2006 1743	05/01/2006 1743	10
ЛТВЕ	19	ug/L	5.0	8260B	05/01/2006 1743	05/01/2006 1743	10
AME	ND	ug/L	5.0	8260B	05/01/2006 1743	05/01/2006 1743	10
oluene	11	ug/L	5.0	8260B	05/01/2006 1743	05/01/2006 1743	10
Sylenes, Total	370	ug/L	10	8260B	05/01/2006 1743	05/01/2006 1743	10
BA	250	ug/L	50	8260B	05/01/2006 1743	05/01/2006 1743	10
IPE	ND	ug/L	1.0	8260B	04/28/2006 1636	04/28/2006 1636	1.0
asoline Range Organics (GRO)-C6-C12	23000	ug/L	500	8260B	05/01/2006 1743	05/01/2006 1743	10
thyl tert-butyl ether	ND	ug/L	5.0	8260B	05/01/2006 1743	05/01/2006 1743	10
Surrogate					Acceptance Limits		
oluene-d8	97	%		8260B	77 - 121		
1,2-Dichloroethane-d4	114	%		8260B	73 - 130		

Client Sample ID: B-4 @ 43'

Job Number:	720-3347-1
Lab Sample Id:	720-3347-5
Date Sampled:	04/26/2006 1500
Date Received:	04/26/2006 1216

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA					••••••••••••••••••••••••••••••••••••••	······	<del>n vy 10 ma 201 a vy 2010 a do 2010 a do 2010 a do 2010</del>
Benzene	14	ug/L	5.0	8260B	05/01/2006 1811	05/01/2006 1811	10
Ethanol	ND	ug/L	1000	8260B	05/01/2006 1811	05/01/2006 1811	10
Ethylbenzene	40	ug/L	5.0	8260B	05/01/2006 1811	05/01/2006 1811	10
MTBE	16	ug/L	5.0	8260B	05/01/2006 1811	05/01/2006 1811	10
TAME	ND	ug/L	5.0	8260B	05/01/2006 1811	05/01/2006 1811	10
Toluene	ND	ug/L	5.0	8260B	05/01/2006 1811	05/01/2006 1811	10
Xylenes, Total	44	ug/L	10	8260B	05/01/2006 1811	05/01/2006 1811	10
ТВА	ND	ug/L	50	8260B	05/01/2006 1811	05/01/2006 1811	10
DIPE	ND	ug/L	1.0	8260B	04/28/2006 1703	04/28/2006 1703	1.0
Gasoline Range Organics (GRO)-C6-C12	9700	ug/L	500	8260B	05/01/2006 1811	05/01/2006 1811	10
Ethyl tert-butyl ether	ND	ug/L	5,0	8260B	05/01/2006 1811	05/01/2006 1811	10
Surrogate					Acceptance Limits		
Toluene-d8	98	%		8260B	77 - 121		
1,2-Dichloroethane-d4	117	%		8260B	73 - 130		

Client Sample ID: B-4 @ 63'

Job Number:	720-3347-1
Lab Sample Id:	720-3347-6
Date Sampled:	04/26/2006 1735
Date Received:	04/26/2006 1216

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_	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	ND	ug/L	5.0	8260B	05/01/2006 1838	05/01/2006 1838	10
Ethanol	ND	ug/L	1000	8260B	05/01/2006 1838	05/01/2006 1838	10
Ethylbenzene	ND	ug/L	5.0	8260B	05/01/2006 1838	05/01/2006 1838	10
MTBE	630	ug/L	5.0	8260B	05/01/2006 1838	05/01/2006 1838	10
ТАМЕ	ND	ug/L	5,0	8260B	05/01/2006 1838	05/01/2006 1838	10
Toluene	ND	ug/L	5.0	8260B	05/01/2006 1838	05/01/2006 1838	10
Xylenes, Total	ND	ug/L	10	8260B	05/01/2006 1838	05/01/2006 1838	10
ТВА	170	ug/L	50	8260B	05/01/2006 1838	05/01/2006 1838	10
DIPE	ND	ug/L	1.0	8260B	04/28/2006 1730	04/28/2006 1730	1.0
Gasoline Range Organics (GRO)-C6-C12	810	ug/L	500	8260B	05/01/2006 1838	05/01/2006 1838	10
Ethyl tert-butyl ether	ND	ug/L	5.0	8260B	05/01/2006 1838	05/01/2006 1838	10
Surrogate					Acceptance Limits		
Toluene-d8	100	%		8260B	77 - 121		
1,2-Dichloroethane-d4	113	%		8260B	73 - 130		

# DATA REPORTING QUALIFIERS

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

Lab Section	Qualifier	Description
GC/MS VOA		
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

## Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

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# **QC Association Summary**

Lab Sample ID	Client Sample ID	<b>Client Matrix</b>	Method	Prep Batch
GC/MS VOA			· •	
Analysis Batch:720-8	419	t f Mak Bilan f an ing ang a		ça. <u>.</u>
LCS 720-8419/10	Lab Control Spike	Water	8260B	
LCSD 720-8419/9	Lab Control Spike Duplicate	Water	8260B	
MB 720-8419/11	Method Blank	Water	8260B	
720-3326-A-1 MS	Matrix Spike	Water	8260B	
720-3326-A-1 MSD	Matrix Spike Duplicate	Water	8260B	
720-3347-1	B-6 @ 43'	Water	8260B	
720-3347-2	B-6 @ 63'	Water	8260B	
720-3347-3	B-5 @ 65'	Water	8260B	
720-3347-4	B-5 @ 44'	Water	8260B	
720-3347-5	B-4 @ 43'	Water	8260B	
720-3347-6	B-4 @ 63'	Water	8260B	
Analysis Batch:720-8	432			
LCS 720-8432/21	Lab Control Spike	Water	8260B	
LCSD 720-8432/20	Lab Control Spike Duplicate	Water	8260B	
MB 720-8432/22	Method Blank	Water	8260B	
720-3297-C-3 MS	Matrix Spike	Water	8260B	
720-3297-C-3 MSD	Matrix Spike Duplicate	Water	8260B	
720-3347-1	B-6 @ 43'	Water	8260B	
720-3347-2	B-6 @ 63'	Water	8260B	
720-3347-3	B-5 @ 65'	Water	8260B	
720-3347-4	B-5 @ 44'	Water	8260B	
720-3347-5	B-4 @ 43'	Water	8260B	
720-3347-6	B-4 @ 63'	Water	8260B	

Job Number: 720-3347-1

Client: Delta Environmental Consultants, Inc.

Method Blank - Batch: 720-8419

### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8419/11	Analysis Batch: 720-8419	Instrument ID: Varian 3900C
Client Matrix: Water	Prep Batch: N/A	Lab File ID: c:\saturnws\data\200604\04
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 04/28/2006 0941		Final Weight/Volume: 10 mL
Date Prepared: 04/28/2006 0941		

Analyte	Result	Qual	RL
Benzene	ND	nan an	0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
ТВА	ND		5.0
DIPE	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50
Surrogate	% Rec	Acceptance Lir	nits
Toluene-d8	100	77 - 121	
1,2-Dichloroethane-d4	115	73 - 130	

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

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### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8419

Method: 8260B Preparation: 5030B

LCS Lab Sample I Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8419/10 Water 1.0 04/28/2006 0819 04/28/2006 0819	Analysis Batch: 720-8419 Prep Batch: N/A Units: ug/L	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	HD: LCSD 720-8419/9 Water 1.0 04/28/2006 0846 04/28/2006 0846	Analysis Batch: 720-8419 Prep Batch: N/A Units:ug/L	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200604\042 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	<u>%</u>	<u>Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	94	94	69 - 129	1	25
MTBE	103	105	65 - 165	2	25
Toluene	103	97	70 - 130	6	25
Surrogate	L	CS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8	1(	)5	97		77 - 121
1,2-Dichloroethane-d4	99	Э	99		73 - 130

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

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## Matrix Spike/

# Matrix Spike Duplicate Recovery Report - Batch: 720-8419

## Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3326-A-1 MS Water 10 04/28/2006 1041 04/28/2006 1041	Analysis Batch: Prep Batch: N/A		Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200604\( Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3326-A-1 MSD Water 10 04/28/2006 1108 04/28/2006 1108	Analysis Batch: Prep Batch: N/A	720-8419	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	%	Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	91	94	69 - 129	3	20		
MTBE	150	114	65 - 165	3	20	4	4
Toluene	101	100	70 - 130	0	20		
Surrogate		MS % Rec	MSD %	6 Rec	Acce	ptance Lim	its
Toluene-d8		101	100		77	′ - 121	
1,2-Dichloroethane-d4		100	100		73	8 - 130	

# Calculations are performed before rounding to avoid round-off errors in calculated results.

## Client: Delta Environmental Consultants, Inc.

## Method Blank - Batch: 720-8432

Lab Sample ID: MB 720-8432/22	Analysis Batch: 720-8432	Instrument ID: Varian 3900C
Client Matrix: Water	Prep Batch: N/A	Lab File ID: c:\saturnws\data\2006
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 05/01/2006 1110		Final Weight/Volume: 10 mL
Date Prepared: 05/01/2006 1110		-

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
ТВА	ND		5.0
DIPE	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50
Surrogate	% Rec	Acceptance Lim	its
Toluene-d8	99	77 - 121	
1,2-Dichloroethane-d4	112	73 - 130	

## Method: 8260B Preparation: 5030B

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# Job Number: 720-3347-1

**Quality Control Results** 

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

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#### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8432

LCS Lab Sample II Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8432/21 Water 1.0 05/01/2006 0948 05/01/2006 0948	Analysis Batch: 720-8432 Prep Batch: N/A Units: ug/L	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\0 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	ID: LCSD 720-8432/20 Water 1.0 05/01/2006 1016 05/01/2006 1016	Analysis Batch: 720-8432 Prep Batch: N/A Units:ug/L	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\05( Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

		<u>% Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	85	98	69 - 129	14	25
MTBE	97	108	65 - 165	11	25
Toluene	93	101	70 - 130	7	25
Surrogate		LCS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8		101	103		77 - 121
1,2-Dichloroethane-d4		98	105		73 - 130

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

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### Matrix Spike/

#### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-8432

#### Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3297-C-3 MS Water 10 05/01/2006 1339 05/01/2006 1339	Analysis Batch: 720-8432 Prep Batch: N/A	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\( Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3297-C-3 MSD Water 10 05/01/2006 1406 05/01/2006 1406	Analysis Batch: 720-8432 Prep Batch: N/A	Instrument ID: Varian 3900C Lab File ID: c:\saturnws\data\200605\05 Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	<u>%</u>	<u>Rec.</u>			
Analyte	MS	MSD	Limit	RPD	RPD Limit MS Qual MSD Qual
Benzene	101	99	69 - 129	1	20
MTBE	107	108	65 - 165	1	20
Toluene	100	101	70 - 130	1	20
Surrogate		MS % Rec	MSD %	Rec	Acceptance Limits
Toluene-d8		98	98		77 - 121
1,2-Dichloroethane-d4		100	99		73 - 130

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# LOGIN SAMPLE RECEIPT CHECK LIST

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3347-1

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#### Login Number: 3347

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	out of temperature
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



### ANALYTICAL REPORT

Job Number: 720-3348-1

Job Description: Conoco Phillips #4186, Livermore

For: Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Attention: Mr. Daniel J Davis

Shar

Dimple Sharma Project Manager I dsharma@stl-inc.com 05/08/2006

cc: Mr. Ben Wright

Project Manager: Dimple Sharma

Severn Trent Laboratories, Inc. STL San Francisco 1220 Quarry Lane, Pleasanton, CA 94566 Tel (925) 484-1919 Fax (925) 484-1096 www.stl-inc.com

### METHOD SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

Descript	tion	Lab Location	Method	Preparation Method		
Matrix:	Solid					
Volatile O	rganic Compounds by GC/MS	STL-SF	SW846 8260	)B		
	Purge and Trap for Solids Purge-and-Trap for Aqueous Samples/High	STL-SF STL-SF		SW846 5030B SW846 5030B		
Inductive	y Coupled Plasma - Atomic Emission Spectrometry Acid Digestion of Sediments, Sludges, and Soils	STL-SF STL-SF	SW846 6010	B SW846 3050B		

#### LAB REFERENCES:

STL-SF = STL-San Francisco

#### **METHOD REFERENCES:**

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### SAMPLE SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

ab Sample ID Client Sample ID Client		Client Matrix	Date/Time Sampled	Date/Time Received
720-3348-1	B-6@ 25'	Solid	04/25/2006 0816	04/26/2006 1755
720-3348-2	B-6@ 35'	Solid	04/25/2006 0835	04/26/2006 1755
720-3348-3	B-6@ 46'	Solid	04/25/2006 1045	04/26/2006 1755
720-3348-4	B-6@ 55'	Solid	04/25/2006 1115	04/26/2006 1755
720-3348-5	B-5@ 40'	Solid	04/26/2006 0840	04/26/2006 1755
720-3348-6	B-5@ 50'	Solid	04/26/2006 0940	04/26/2006 1755
720-3348-7	B-5@ 60'	Solid	04/26/2006 1015	04/26/2006 1755
720-3348-8	B-4@ 10'	Solid	04/26/2006 1340	04/26/2006 1755
720-3348-9	B-4@ 40'	Solid	04/26/2006 1445	04/26/2006 1755
720-3348-10	B-4@ 50'	Solid	04/26/2006 1555	04/26/2006 1755
720-3348-11	B-4@ 60'	Solid	04/26/2006 1630	04/26/2006 1755

Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670					Date	Sampled: 04/2	-3348-1 25/2006 0816 26/2006 1755
Client Sample ID: B-6@ 25'							- 11 - 11
	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	ND	mg/Kg	0.0049	8260B	04/27/2006 1545	04/27/2006 1545	1.0
Ethanol	ND	mg/Kg	0.49	8260B	04/27/2006 1545	04/27/2006 1545	1.0
Ethylbenzene	ND	mg/Kg	0.0049	8260B	04/27/2006 1545	04/27/2006 1545	1.0
МТВЕ	0.29	mg/Kg	0.0049	8260B	04/27/2006 1545	04/27/2006 1545	1.0
ТАМЕ	ND	mg/Kg	0.0049	8260B	04/27/2006 1545	04/27/2006 1545	1.0
Toluene	ND	mg/Kg	0.0049	8260B	04/27/2006 1545	04/27/2006 1545	1.0
Xylenes, Total	ND	mg/Kg	0.0098	8260B	04/27/2006 1545	04/27/2006 1545	1.0
ТВА	0.17	mg/Kg	0.0098	8260B	04/27/2006 1545	04/27/2006 1545	1.0
DIPE	ND	mg/Kg	0.0049	8260B	04/27/2006 1545	04/27/2006 1545	1.0
Gasoline Range Organics (GRO)-C6-C12	0.54	mg/Kg	0.25	8260B	04/27/2006 1545	04/27/2006 1545	1.0
Ethyl tert-butyl ether	ND	mg/Kg	0.0049	8260B	04/27/2006 1545	04/27/2006 1545	1.0
Surrogate					Acceptance Limits		
Toluene-d8	97	%		8260B	70 - 130		
1,2-Dichloroethane-d4	99	%		8260B	60 - 140		

Job Number:

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Delta Environmental Consultants, Inc. Lab Sample Id; 720-3348-2 3164 Gold Camp Drive Date Sampled: 04/25/2006 0835 Suite 200 Date Received: 04/26/2006 1755 Rancho Cordova, CA 95670 Client Sample ID: B-6@ 35' Result/Qualifier Unit RL Method **Date Prepared** Date Analyzed Dilution GC/MS VOA Benzene ND mg/Kg 0.0049 8260B 04/27/2006 1606 04/27/2006 1606 1.0 Ethanol ND mg/Kg 0.49 8260B 04/27/2006 1606 04/27/2006 1606 1.0 Ethylbenzene ND mg/Kg 0.0049 8260B 04/27/2006 1606 04/27/2006 1606 1.0 MTBE 0.24 mg/Kg 0.0049 8260B 04/27/2006 1606 04/27/2006 1606 1.0 TAME ND mg/Kg 0.0049 8260B 04/27/2006 1606 04/27/2006 1606 1.0 Toluene ND mg/Kg 0.0049 8260B 04/27/2006 1606 04/27/2006 1606 1.0 Xylenes, Total ND 0.0098 8260B 04/27/2006 1606 mg/Kg 04/27/2006 1606 1.0 TBA ND mg/Kg 0.0098 8260B 04/27/2006 1606 04/27/2006 1606 1.0 DIPE ND 0.0049 8260B mg/Kg 04/27/2006 1606 04/27/2006 1606 1.0 Gasoline Range Organics (GRO)-C6-C12 ND 0.24 mg/Kg 8260B 04/27/2006 1606 04/27/2006 1606 1.0 Ethyl tert-butyl ether ND mg/Kg 0.0049 8260B 04/27/2006 1606 04/27/2006 1606 1.0 Surrogate Acceptance Limits Toluene-d8 99 % 8260B 70 - 130 1,2-Dichloroethane-d4 91 % 60 - 140 8260B

Job Number:

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Mr. Daniel J Davis

Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670					Date	Sampled: 04/	0-3348-3 25/2006 1045 26/2006 1755
Client Sample ID: B-6@ 46'	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
		0111			Bale i repared		Dildton
GC/MS VOA							
Benzene	0.069	mg/Kg	0.0048	8260B	04/27/2006 1627	04/27/2006 1627	1.0
Ethanol	ND	mg/Kg	0.48	8260B	04/27/2006 1627	04/27/2006 1627	1.0
Ethylbenzene	ND	mg/Kg	0.0048	8260B	04/27/2006 1627	04/27/2006 1627	1.0
МТВЕ	0.093	mg/Kg	0.0048	8260B	04/27/2006 1627	04/27/2006 1627	1.0
TAME	ND	mg/Kg	0.0048	8260B	04/27/2006 1627	04/27/2006 1627	1.0
Toluene	ND	mg/Kg	0.0048	8260B	04/27/2006 1627	04/27/2006 1627	1.0
Xylenes, Total	ND	mg/Kg	0.0096	8260B	04/27/2006 1627	04/27/2006 1627	1.0
ТВА	0.034	mg/Kg	0.0096	8260B	04/27/2006 1627	04/27/2006 1627	1.0
DIPE	ND	mg/Kg	0.0048	8260B	04/27/2006 1627	04/27/2006 1627	1.0
Gasoline Range Organics (GRO)-C6-C12	1.2	mg/Kg	0.24	8260B	04/27/2006 1627	04/27/2006 1627	1.0
Ethyl tert-butyl ether	ND	mg/Kg	0.0048	8260B	04/27/2006 1627	04/27/2006 1627	1.0
Surrogate					Acceptance Limits		
Toluene-d8	91	%		8260B			
1,2-Dichloroethane-d4	95	%		8260B	60 - 140		
Ethanol Ethylbenzene MTBE TAME Toluene Xylenes, Total TBA DIPE Gasoline Range Organics (GRO)-C6-C12 Ethyl tert-butyl ether Surrogate Toluene-d8	ND ND 0.093 ND ND 0.034 ND 1.2 ND	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	0.48 0.0048 0.0048 0.0048 0.0048 0.0096 0.0096 0.0048 0.24	8260B 8260B 8260B 8260B 8260B 8260B 8260B 8260B 8260B 8260B	04/27/2006 1627 04/27/2006 1627 Acceptance Limits 70 - 130	04/27/2006 1627 04/27/2006 1627 04/27/2006 1627 04/27/2006 1627 04/27/2006 1627 04/27/2006 1627 04/27/2006 1627 04/27/2006 1627 04/27/2006 1627	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

Mr. Daniel J Davis

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Job Number:

Mr. Daniel J Davis Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Client Sample ID: B-6@ 55'

Job Number:	720-3348-1
Lab Sample Id:	720-3348-4
Date Sampled:	04/25/2006 1115
Date Received:	04/26/2006 1755

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	ND	mg/Kg	0,95	8260B	05/01/2006 1730	05/03/2006 1636	200
Ethanol	ND	mg/Kg	19	8260B	05/01/2006 1730	05/03/2006 1636	200
Ethylbenzene	ND	mg/Kg	0.95	8260B	05/01/2006 1730	05/03/2006 1636	200
МТВЕ	ND	mg/Kg	0.95	8260B	05/01/2006 1730	05/03/2006 1636	200
TAME	ND	mg/Kg	0.95	8260B	05/01/2006 1730	05/03/2006 1636	200
Toluene	ND	mg/Kg	0,95	8260B	05/01/2006 1730	05/03/2006 1636	200
Xylenes, Total	3.2	mg/Kg	1.9	8260B	05/01/2006 1730	05/03/2006 1636	200
TBA	ND	mg/Kg	1.9	8260B	05/01/2006 1730	05/03/2006 1636	200
DIPE	ND	mg/Kg	0.95	8260B	05/01/2006 1730	05/03/2006 1636	200
Gasoline Range Organics (GRO)-C6-C12	190	mg/Kg	48	8260B	05/01/2006 1730	05/03/2006 1636	200
Ethyl tert-butyl ether	ND	mg/Kg	0.95	8260B	05/01/2006 1730	05/03/2006 1636	200
Surrogate					Acceptance Limits		
Toluene-d8	92	%		8260B	50 - 130		
1,2-Dichloroethane-d4	102	%		8260B	60 - 140		

Mr. Daniel J Davis Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Client Sample ID: B-5@ 40'

Job Number:	720-3348-1
Lab Sample Id:	720-3348-5
Date Sampled:	04/26/2006 0840
Date Received:	04/26/2006 1755

	Desultionalities	1.1		Mastle a d	Data Duan ana d	Data Analyzari	Dilection
	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							
Benzene	ND	mg/Kg	0.0047	8260B	04/27/2006 1648	04/27/2006 1648	1.0
Ethanol	ND	mg/Kg	0.47	8260B	04/27/2006 1648	04/27/2006 1648	1.0
Ethylbenzene	ND	mg/Kg	0.0047	8260B	04/27/2006 1648	04/27/2006 1648	1.0
MTBE	ND	mg/Kg	0.0047	8260B	04/27/2006 1648	04/27/2006 1648	1.0
TAME	ND	mg/Kg	0.0047	8260B	04/27/2006 1648	04/27/2006 1648	1.0
Toluene	ND	mg/Kg	0.0047	8260B	04/27/2006 1648	04/27/2006 1648	1.0
Xylenes, Total	ND	mg/Kg	0.0094	8260B	04/27/2006 1648	04/27/2006 1648	1.0
TBA	ND	mg/Kg	0.0094	8260B	04/27/2006 1648	04/27/2006 1648	1.0
DIPE	ND	mg/Kg	0.0047	8260B	04/27/2006 1648	04/27/2006 1648	1.0
Gasoline Range Organics (GRO)-C6-C12	ND	mg/Kg	0.24	8260B	04/27/2006 1648	04/27/2006 1648	1.0
Ethyl tert-butyl ether	ND	mg/Kg	0,0047	8260B	04/27/2006 1648	04/27/2006 1648	1.0
Surrogate					Acceptance Limits		
Toluene-d8	92	%		8260B	70 - 130		
1,2-Dichloroethane-d4	97	%		8260B	60 - 140		

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Delta Environmental Consultants, Inc. Lab Sample Id: 720-3348-6 3164 Gold Camp Drive Date Sampled: 04/26/2006 0940 Suite 200 Date Received: 04/26/2006 1755 Rancho Cordova, CA 95670 Client Sample ID: B-5@ 50' Result/Qualifier Unit RL Method Date Prepared Date Analyzed Dilution GC/MS VOA 0.015 8260B 1.0 Benzene mg/Kg 0.0046 04/27/2006 1709 04/27/2006 1709 Ethanol ND 8260B mg/Kg 0.46 04/27/2006 1709 04/27/2006 1709 1.0 Ethylbenzene 0.070 mg/Kg 0.0046 8260B 04/27/2006 1709 04/27/2006 1709 1.0 MTBE 0.020 mg/Kg 0.0046 8260B 04/27/2006 1709 04/27/2006 1709 1.0 TAME ND mg/Kg 0.0046 8260B 04/27/2006 1709 04/27/2006 1709 1.0 Toluene 8260B 0.026 0.0046 04/27/2006 1709 04/27/2006 1709 1.0 mg/Kg Xylenes, Total 0.19 0.0092 8260B 04/27/2006 1709 04/27/2006 1709 1.0 mg/Kg TBA ND mg/Kg 0.0092 8260B 04/27/2006 1709 04/27/2006 1709 1.0 DIPE ND 8260B 0.0046 04/27/2006 1709 04/27/2006 1709 mg/Kg 1.0 Gasoline Range Organics (GRO)-C6-C12 4.4 mg/Kg 0.23 8260B 04/27/2006 1709 04/27/2006 1709 1.0 Ethyl tert-butyl ether ND mg/Kg 0.0046 8260B 04/27/2006 1709 04/27/2006 1709 1.0 Surrogate Acceptance Limits % Toluene-d8 98 8260B 70 - 130 1,2-Dichloroethane-d4 98 % 8260B 60 - 140

Job Number:

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Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670					Date	Sampled: 04/2	-3348-7 26/2006 1015 26/2006 1755
Client Sample ID: B-5@ 60'	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA	•••••••						
Benzene	ND	mg/Kg	0.0048	8260B	04/27/2006 1731	04/27/2006 1731	1.0
Ethanol	ND	mg/Kg	0.48	8260B	04/27/2006 1731	04/27/2006 1731	1.0
Ethylbenzene	ND	mg/Kg	0.0048	8260B	04/27/2006 1731	04/27/2006 1731	1.0
MTBE	ND	mg/Kg	0.0048	8260B	04/27/2006 1731	04/27/2006 1731	1.0
TAME	ND	mg/Kg	0.0048	8260B	04/27/2006 1731	04/27/2006 1731	1.0
Toluene	ND	mg/Kg	0.0048	8260B	04/27/2006 1731	04/27/2006 1731	1.0
Xylenes, Total	ND	mg/Kg	0.0097	8260B	04/27/2006 1731	04/27/2006 1731	1.0
ТВА	ND	mg/Kg	0.0097	8260B	04/27/2006 1731	04/27/2006 1731	1.0
DIPE	ND	mg/Kg	0.0048	8260B	04/27/2006 1731	04/27/2006 1731	1.0
Gasoline Range Organics (GRO)-C6-C12	ND	mg/Kg	0.24	8260B	04/27/2006 1731	04/27/2006 1731	1.0
Ethyl tert-butyl ether	ND	mg/Kg	0.0048	8260B	04/27/2006 1731	04/27/2006 1731	1.0
Surrogate					Acceptance Limits		
Toluene-d8	94	%		8260B	70 - 130		
1,2-Dichloroethane-d4	98	%		8260B	60 - 140		

Job Number:

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Mr. Daniel J Davis

Mr. Daniel J Davis Delta Environmenta 3164 Gold Camp Di Suite 200 Rancho Cordova, C	rive					Lab S Date	Sample Id: Sampled: (	720-3348-1 720-3348-8 04/26/2006 1340 04/26/2006 1755
Client Sample ID:	B-4@ 10'	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
<b>METALS</b> Lead		3.9	mg/Kg	0.96	6010B	04/28/2006 0741	04/28/2006 180	01 1.0

Mr. Daniel J Davis Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Client Sample ID: B-4@ 40'

Job Number:	720-3348-1
Lab Sample Id:	720-3348-9
Date Sampled:	04/26/2006 1445
Date Received:	04/26/2006 1755

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA							······································
Benzene	ND	mg/Kg	0.0049	8260B	04/28/2006 1406	04/28/2006 1406	1,0
Ethanol	ND	mg/Kg	0.49	8260B	04/28/2006 1406	04/28/2006 1406	1.0
Ethylbenzene	ND	mg/Kg	0.0049	8260B	04/28/2006 1406	04/28/2006 1406	1.0
MTBE	0.019	mg/Kg	0.0049	8260B	04/28/2006 1406	04/28/2006 1406	1.0
TAME	ND	mg/Kg	0.0049	8260B	04/28/2006 1406	04/28/2006 1406	1.0
Toluene	ND	mg/Kg	0.0049	8260B	04/28/2006 1406	04/28/2006 1406	1.0
Xylenes, Total	0.031	mg/Kg	0.0097	8260B	04/28/2006 1406	04/28/2006 1406	1.0
ТВА	ND	mg/Kg	0.0097	8260B	04/28/2006 1406	04/28/2006 1406	1.0
DIPE	ND	mg/Kg	0.0049	8260B	04/28/2006 1406	04/28/2006 1406	1.0
Gasoline Range Organics (GRO)-C6-C12	0.35	mg/Kg	0.24	8260B	04/28/2006 1406	04/28/2006 1406	1.0
Ethyl tert-butyl ether	ND	mg/Kg	0.0049	8260B	04/28/2006 1406	04/28/2006 1406	1.0
Surrogate					Acceptance Limits		
Toluene-d8	89	%		8260B	70 - 130		
1,2-Dichloroethane-d4	101	%		8260B	60 - 140		

Mr. Daniel J Davis Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Client Sample ID: B-4@ 50'

Job Number:	720-3348-1
Lab Sample Id:	720-3348-10
Date Sampled:	04/26/2006 1555
Date Received:	04/26/2006 1755

	Result/Qualifier	Unit	RL	Method	Date Prepared	Date Analyzed	Dilution
GC/MS VOA						······································	
Benzene	ND	mg/Kg	0.0047	8260B	04/28/2006 1107	04/28/2006 1107	1.0
Ethanol	ND	mg/Kg	0.47	8260B	04/28/2006 1107	04/28/2006 1107	1.0
Ethylbenzene	ND	mg/Kg	0.0047	8260B	04/28/2006 1107	04/28/2006 1107	1.0
MTBE	0.088	mg/Kg	0.0047	8260B	04/28/2006 1107	04/28/2006 1107	1.0
TAME	ND	mg/Kg	0.0047	8260B	04/28/2006 1107	04/28/2006 1107	1.0
Toluene	ND	mg/Kg	0.0047	8260B	04/28/2006 1107	04/28/2006 1107	1,0
Xylenes, Total	0.023	mg/Kg	0.0093	8260B	04/28/2006 1107	04/28/2006 1107	1.0
TBA	0.010	mg/Kg	0.0093	8260B	04/28/2006 1107	04/28/2006 1107	1.0
DIPE	ND	mg/Kg	0.0047	8260B	04/28/2006 1107	04/28/2006 1107	1.0
Gasoline Range Organics (GRO)-C6-C12	0.89	mg/Kg	0.23	8260B	04/28/2006 1107	04/28/2006 1107	1.0
Ethyl tert-butyl ether	ND	mg/Kg	0.0047	8260B	04/28/2006 1107	04/28/2006 1107	1.0
Surrogate					Acceptance Limits		
Toluene-d8	89	%		8260B	70 - 130		
1,2-Dichloroethane-d4	99	%		8260B	60 - 140		

Delta Environmental Consultants, Inc. Lab Sample Id: 720-3348-11 3164 Gold Camp Drive 04/26/2006 1630 Date Sampled: Suite 200 Date Received: 04/26/2006 1755 Rancho Cordova, CA 95670 Client Sample ID: B-4@ 60' Dilution Result/Qualifier Unit RL Method **Date Prepared** Date Analyzed GC/MS VOA 1.0 ND 0.0048 8260B 04/28/2006 1428 04/28/2006 1428 Benzene mg/Kg ND 8260B 04/28/2006 1428 04/28/2006 1428 1.0 mg/Kg 0.48 Ethanol Ethylbenzene ND mg/Kg 0.0048 8260B 04/28/2006 1428 04/28/2006 1428 1.0 MTBE 0.020 mg/Kg 0.0048 8260B 04/28/2006 1428 04/28/2006 1428 1.0 1.0 8260B 04/28/2006 1428 04/28/2006 1428 TAME ND mg/Kg 0.0048 8260B 04/28/2006 1428 04/28/2006 1428 1.0 ND 0.0048 Toluene mg/Kg 0.0097 8260B 04/28/2006 1428 04/28/2006 1428 1.0 Xylenes, Total ND mg/Kg 1.0 TBA 0.060 mg/Kg 0.0097 8260B 04/28/2006 1428 04/28/2006 1428 8260B 04/28/2006 1428 1.0 04/28/2006 1428 DIPE ND mg/Kg 0.0048 04/28/2006 1428 04/28/2006 1428 1.0 Gasoline Range Organics (GRO)-C6-C12 ND 0.24 8260B mg/Kg ND 0.0048 8260B 04/28/2006 1428 04/28/2006 1428 1.0 Ethyl tert-butyl ether mg/Kg Acceptance Limits Surrogate % 70 - 130 8260B 92 Toluene-d8 % 8260B 60 - 140 1.2-Dichloroethane-d4 101

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Mr. Daniel J Davis

720-3348-1

Job Number:

### DATA REPORTING QUALIFIERS

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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Lab Section	Qualifier	Description
GC/MS VOA		
	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits
Metals		
	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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### **QC Association Summary**

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC/MS VOA				
Analysis Batch:720-83	338			
LCS 720-8338/19	Lab Control Spike	Solid	8260B	
LCSD 720-8338/18	Lab Control Spike Duplicate	Solid	8260B	
MB 720-8338/20	Method Blank	Solid	8260B	
720-3332-A-2 MS	Matrix Spike	Solid	8260B	
720-3332-A-2 MSD	Matrix Spike Duplicate	Solid	8260B	
720-3348-1	B-6@ 25'	Solid	8260B	
720-3348-2	B-6@ 35'	Solid	8260B	
720-3348-3	B-6@ 46'	Solid	8260B	
720-3348-5	B-5@ 40'	Solid	8260B	
720-3348-6	B-5@ 50'	Solid	8260B	
720-3348-7	B-5@ 60'	Solid	8260B	
120-0040-1	D-0@ 00	Solid	02000	
Analysis Batch:720-83	369			
LCS 720-8369/15	Lab Control Spike	Solid	8260B	
LCSD 720-8369/14	Lab Control Spike Duplicate	Solid	8260B	
MB 720-8369/16	Method Blank	Solid	8260B	
720-3348-9	B-4@ 40'	Solid	8260B	
720-3348-10	B-4@ 50'	Solid	8260B	
720-3348-10MS	Matrix Spike	Solid	8260B	
720-3348-10MSD	Matrix Spike Duplicate	Solid	8260B	
720-3348-11	B-4@ 60'	Solid	8260B	
	C			
Prep Batch: 720-8421				
720-3348-4	B-6@ 55'	Solid	5030B	
Analysis Batch:720-84	484			
720-3348-4	B-6@ 55'	Solid	8260B	720-8421
	<u> </u>			
Metals				
Prep Batch: 720-8287				
LCS 720-8287/2-A	Lab Control Spike	Solid	3050B	
LCSD 720-8287/3-A	Lab Control Spike Duplicate	Solid	3050B	
MB 720-8287/1-A	Method Blank	Solid	3050B	
720-3348-8	B-4@ 10'	Solid	3050B	
720-3352-A-1-B MS	Matrix Spike	Solid	3050B	
720-3352-A-1-C MSD	Matrix Spike Duplicate	Solid	3050B	
	242			
Analysis Batch:720-83		Calid	C010D	700 8097
LCS 720-8287/2-A	Lab Control Spike	Solid	6010B	720-8287
LCSD 720-8287/3-A	Lab Control Spike Duplicate	Solid	6010B	720-8287
MB 720-8287/1-A	Method Blank	Solid	6010B	720-8287
720-3348-8	B-4@ 10'	Solid	6010B	720-8287
720-3352-A-1-B MS	Matrix Spike	Solid	6010B	720-8287
720-3352-A-1-C MSD	Matrix Spike Duplicate	Solid	6010B	720-8287

#### STL San Francisco

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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#### Method Blank - Batch: 720-8338

#### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8338/20	Analysis Batch: 720-8338	Instrument ID: Varian 3900E
Client Matrix: Solid	Prep Batch: N/A	Lab File ID: c:\varianws\data\200604\04
Dilution: 1.0	Units: mg/Kg	Initial Weight/Volume: 5 g
Date Analyzed: 04/27/2006 1040		Final Weight/Volume: 10 mL
Date Prepared: 04/27/2006 1040		

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Ethanol	ND		0.50
Ethylbenzene	ND		0.0050
MTBE	ND		0.0050
TAME	ND		0.0050
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
ТВА	ND		0.010
DIPE	ND		0.0050
Gasoline Range Organics (GRO)-C6-C12	ND		0.25
Ethyl tert-butyl ether	ND		0.0050
Surrogate	% Rec	Acceptanc	e Limits
Toluene-d8	90	70 - 13	30
1,2-Dichloroethane-d4	104	60 - 14	40

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

04/27/2006 0958

Job Number: 720-3348-1

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#### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8338

LCS Lab Sample IE Client Matrix: Dilution: Date Analyzed: Date Prepared:	0: LCS 720-8338/19 Solid 1.0 04/27/2006 0936 04/27/2006 0936	Analysis Batch: 720-8338 Prep Batch: N/A Units: mg/Kg	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\04 Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL			
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed:	ID: LCSD 720-8338/18 Solid 1.0 04/27/2006 0958	Analysis Batch: 720-8338 Prep Batch: N/A Units:mg/Kg	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\042 Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL			

<u>% Rec.</u>						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual	
Benzene	99	96	69 - 129	3	20	
MTBE	88	97	65 - 165	10	20	
Toluene	93	85	70 - 130	9	20	
Surrogate	I	CS % Rec	LCSD %	Rec	Acceptance Limits	
Toluene-d8	ę	97	85		70 - 130	
1,2-Dichloroethane-d4	ę	95	100		60 - 140	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Date Prepared:

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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#### Matrix Spike/

#### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-8338

#### Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3332-A-2 MS Solid 1.0 04/27/2006 1159 04/27/2006 1159	Analysis Batch: 7 Prep Batch: N/A	720-8338	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\( Initial Weight/Volume: 5.27 g Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3332-A-2 MSD Solid 1.0 04/27/2006 1221 04/27/2006 1221	Analysis Batch: 7 Prep Batch: N/A	720-8338	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\04 Initial Weight/Volume: 5.41 g Final Weight/Volume: 10 mL

	<u>%</u>	Rec.			
Analyte	MS	MSD	Limit	RPD	RPD Limit MS Qual MSD Qual
Benzene	92	82	69 - 129	14	20
MTBE	80	81	65 - 165	2	20
Toluene	86	80	70 - 130	10	20
Surrogate		MS % Rec	MSD %	Rec	Acceptance Limits
Toluene-d8		96	95		70 - 130
1,2-Dichloroethane-d4		98	98		60 - 140

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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#### Method Blank - Batch: 720-8369

#### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8369/16	Analysis Batch: 720-8369	Instrument ID: Varian 3900A
Client Matrix: Solid	Prep Batch: N/A	Lab File ID: c:\saturnws\data\200604\04
Dilution: 1.0	Units: mg/Kg	Initial Weight/Volume: 5.00 g
Date Analyzed: 04/28/2006 1028		Final Weight/Volume: 10 mL
Date Prepared: 04/28/2006 1028		

Analyte	Result	Qual	RL
Benzene	ND	aanaa aanaa aa ahaa ahaa ahaa ahaa ahaa	0.0050
Ethanol	ND		0.50
Ethylbenzene	ND		0.0050
MTBE	ND		0.0050
TAME	ND		0.0050
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
ТВА	ND		0.010
DIPE	ND		0.0050
Gasoline Range Organics (GRO)-C6-C12	ND		0.25
Ethyl tert-butyl ether	ND		0.0050
Surrogate	% Rec	Acceptance Limits	5
Toluene-d8	89	70 - 130	
1,2-Dichloroethane-d4	94	60 - 140	

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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#### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8369

LCS Lab Sample ID Client Matrix: Dilution: Date Analyzed: Date Prepared:	2: LCS 720-8369/15 Solid 1.0 04/28/2006 0944 04/28/2006 0944	Analysis Batch: 720-8369 Prep Batch: N/A Units: mg/Kg	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	ID: LCSD 720-8369/14 Solid 1.0 04/28/2006 1006 04/28/2006 1006	Analysis Batch: 720-8369 Prep Batch: N/A Units:mg/Kg	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\042 Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

	<u>%</u>	Rec.			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	89	92	69 - 129	4	20
MTBE	94	92	65 - 165	3	20
Toluene	88	91	70 - 130	3	20
Surrogate	L	CS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8	90	0	89		70 - 130
1,2-Dichloroethane-d4	92	2	88		60 - 140

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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#### Matrix Spike/

# Matrix Spike Duplicate Recovery Report - Batch: 720-8369

#### Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3348-10 Solid 1.0 04/28/2006 1129 04/28/2006 1129	Analysis Batch: 720-8369 Prep Batch: N/A	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\( Initial Weight/Volume: 5.50 g Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3348-10 Solid 1.0 04/28/2006 1152 04/28/2006 1152	Analysis Batch: 720-8369 Prep Batch: N/A	Instrument ID: Varian 3900A Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 5.26 g Final Weight/Volume: 10 mL

	<u>%</u>	Rec.				
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual MSD Qual
Benzene	92	87	69 - 129	1	20	
MTBE	92	46	65 - 165	17	20	*
Toluene	87	81	70 - 130	3	20	
Surrogate		MS % Rec	MSD %	6 Rec	Acce	eptance Limits
Toluene-d8		92	91		7	0 - 130
1,2-Dichloroethane-d4		99	96		6	0 - 140

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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	Batch: 720-8287				ethod: 6010B eparation: 3050B							
Lab Sample ID: M Client Matrix: S Dilution: 1. Date Analyzed: 04 Date Prepared: 04	olid 0 4/28/2006 1642	Analysis Batch: 7 Prep Batch: 720- Units: mg/Kg		La Ini	Instrument ID: Varian ICP Lab File ID: N/A Initial Weight/Volume: 1.00 g Final Weight/Volume: 50 mL							
Analyte		Result		Qual	RL							
Lead	ten en e	ND	1999-1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1		ин тооноо и или и или или или или или или или и							
Laboratory Co Laboratory Co	ntrol/ ntrol Duplicate Recover	y Report - Batch:	720-8287		ethod: 6010B eparation: 3050B							
LCS Lab Sample I Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8287/2-A Solid 1.0 04/28/2006 1645 04/28/2006 0741	Analysis Batch: Prep Batch: 72 Units: mg/Kg		Lab Initia	rument ID: Varian ICP File ID: N/A al Weight/Volume: 1.00 g I Weight/Volume: 50 mL							
Client Matrix: Dilution: Date Analyzed: Date Prepared:	Solid 1.0 04/28/2006 1645	Prep Batch: 72	0-8287 720-8312	Lab Initia Fina Instr Lab Initia	File ID: N/A al Weight/Volume: 1.00 g							
Client Matrix: Dilution: Date Analyzed: Date Prepared: LCSD Lab Sample Client Matrix: Dilution: Date Analyzed:	Solid 1.0 04/28/2006 1645 04/28/2006 0741 e ID: LCSD 720-8287/3-A Solid 1.0 04/28/2006 1649	Prep Batch: 72 Units: mg/Kg Analysis Batch: Prep Batch: 72	0-8287 720-8312	Lab Initia Fina Instr Lab Initia	File ID: N/A al Weight/Volume: 1.00 g I Weight/Volume: 50 mL rument ID: Varian ICP File ID: N/A al Weight/Volume: 1.00 g							

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

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#### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-8287

#### Method: 6010B Preparation: 3050B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3352-A-1-B MS Solid 1.0 04/28/2006 1657 04/28/2006 0741	Analysis Batch: 720-8312 Prep Batch: 720-8287	Instrument ID: Varian ICP Lab File ID: N/A Initial Weight/Volume: 1.01 g Final Weight/Volume: 50 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3352-A-1-C MSD Solid 1.0 04/28/2006 1701 04/28/2006 0741	Analysis Batch: 720-8312 Prep Batch: 720-8287	Instrument ID: Varian ICP Lab File ID: N/A Initial Weight/Volume: 0.99 g Final Weight/Volume: 50 mL

	<u>% R</u>	ec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Lead	67	74	75 - 125	11	20	*	*

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### LOGIN SAMPLE RECEIPT CHECK LIST

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3348-1

### Login Number: 3348

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Out of temperature
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

SEVERN STL

## ANALYTICAL REPORT

Job Number: 720-3296-1

Job Description: Conoco Phillips #4186, Livermore

For: Delta Environmental Consultants, Inc. 3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670

Attention: Mr. Daniel J Davis

Alhar

Dimple Sharma Project Manager I dsharma@stl-inc.com 05/08/2006

cc: Mr. Ben Wright

Project Manager: Dimple Sharma

Severn Trent Laboratories, Inc. STL San Francisco 1220 Quarry Lane, Pleasanton, CA 94566 Tel (925) 484-1919 Fax (925) 484-1096 www.stl-inc.com

### METHOD SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Description		Lab Location	Method	Preparation Method		
Matrix:	Solid	······································		····· · · · · · · · · · · · · · · · ·		
Volatile Orga	inic Compounds by GC/MS	STL-SF	SW846 8260E	3		
F	Purge and Trap for Solids	STL-SF		SW846 5030B		
F	Purge-and-Trap for Aqueous Samples/High	STL-SF		SW846 5030B		

#### LAB REFERENCES:

STL-SF = STL-San Francisco

#### **METHOD REFERENCES:**

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

.

### SAMPLE SUMMARY

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Lab Sample ID	Client Sample ID	<b>Client Matrix</b>	Date/Time Sampled	Date/Time Received
720-3296-1	B-2@40'	Solid	04/19/2006 1305	04/21/2006 1807
720-3296-2	B-2@45'	Solid	04/19/2006 1320	04/21/2006 1807
720-3296-3	B-2@60'	Solid	04/19/2006 1400	04/21/2006 1807
720-3296-4	B-1@40'	Solid	04/20/2006 0850	04/21/2006 1807
720-3296-5	B-1@45'	Solid	04/20/2006 0950	04/21/2006 1807
720-3296-6	B-1@60'	Solid	04/20/2006 1020	04/21/2006 1807
720-3296-7	B-3@35'	Solid	04/20/2006 1500	04/21/2006 1807
720-3296-8	B-3@40'	Solid	04/20/2006 1540	04/21/2006 1807
720-3296-9	B-3@65'	Solid	04/20/2006 1645	04/21/2006 1807
720-3296-10	S-7@35'	Solid	04/21/2006 1035	04/21/2006 1807
720-3296-11	S-7@45'	Solid	04/21/2006 1120	04/21/2006 1807
720-3296-12	S-7@55'	Solid	04/21/2006 1150	04/21/2006 1807

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#### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID	: B-2@40'			
Lab Sample ID: Client Matrix:	720-3296 Solid	-1		Date Sampled: 04/19/2006 1305 Date Received: 04/21/2006 1807
		8260B Volatile Org	anic Compounds by	GC/MS
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5030B 200 04/25/2006 04/25/2006	Prep 1	sis Batch: 720-8178 Batch: 720-8196	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\04 Initial Weight/Volume: 5.09 g Final Weight/Volume: 10 mL
Analyte		DryWt Corrected: N	Result (mg/Kg)	Qualifier RL
Benzene			ND	0.98
Ethanol			64	20
Ethylbenzene			ND	0.98
MTBE			ND	0.98
TAME			ND	0.98
Toluene			ND	0.98
Xylenes, Total TBA			ND ND	2.0 2.0
DIPE			ND	0.98
Gasoline Range C	irganics (GRO	0-06-012	120	49
Ethyl tert-butyl eth		, 00 012	ND	0.98
Surrogate			%Rec	Acceptance Limits
Toluene-d8			81	50 - 130
1,2-Dichloroethan	e-d4		83	60 - 140

#### Job Number: 720-3296-1 **Client Sample ID:** B-2@45' Lab Sample ID: 720-3296-2 Date Sampled: 04/19/2006 1320 **Client Matrix:** Solid Date Received: 04/21/2006 1807 8260B Volatile Organic Compounds by GC/MS Method: 8260B Analysis Batch: 720-8178 Instrument ID: Varian 3900E Preparation: 5030B Prep Batch: 720-8196 Lab File ID: c:\varianws\data\200604\04 Dilution: 200 Initial Weight/Volume: 5.84 g Date Analyzed: 04/26/2006 1723 Final Weight/Volume: 10 mL Date Prepared: 04/25/2006 1610 Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RL Benzene ND 0.86 Ethanol 58 17 Ethylbenzene ND 0.86 MTBE ND 0.86 TAME ND 0.86 Toluene ND 0.86 Xylenes, Total ND 1.7 TBA ND 1.7 DIPE ND 0.86 Gasoline Range Organics (GRO)-C6-C12 180 43 Ethyl tert-butyl ether ND 0.86 Surrogate %Rec Acceptance Limits Toluene-d8 88 50 - 130 1,2-Dichloroethane-d4 99 60 - 140

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#### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID:	B-2@60'		
Lab Sample ID:	720-3296-3	•	04/19/2006 1400
Client Matrix:	Solid		04/21/2006 1807

#### 8260B Volatile Organic Compounds by GC/MS

Method: Preparation: Dilution: Date Analyzed:	8260B 5030B 1.0 04/25/2006_1335	Analysis Batch: 720-8187	Instrument ID: Lab File ID: Initial Weight/Vo Final Weight/Vol	lume:	rnws\data\200604\04 5.08 g
Date Analyzed: Date Prepared:	04/25/2006 1335 04/25/2006 1335		Final Weight/Vol	ume:	10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0049
Ethanol		ND		0.49
Ethylbenzene		ND		0.0049
MTBE		ND		0.0049
TAME		ND		0.0049
Toluene		ND		0.0049
Xylenes, Total		ND		0.0098
TBA		ND		0.0098
DIPE		ND		0.0049
Gasoline Range Organics (GRO)	-C6-C12	ND		0.25
Ethyl tert-butyl ether		ND		0.0049
Surrogate		%Rec		Acceptance Limits
Toluene-d8		97		70 - 130
1,2-Dichloroethane-d4		99		60 - 140

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#### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

70 - 130

60 - 140

Client Sample ID:	: B-1@40'		
Lab Sample ID: Client Matrix:	720-3296-4 Solid		Date Sampled: 04/20/2006 0850 Date Received: 04/21/2006 1807
	8260E	3 Volatile Organic Compounds by GC	C/MS
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5030B 1.0 04/25/2006 1453 04/25/2006 1453	Analysis Batch: 720-8187	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 5.45 g Final Weight/Volume: 10 mL
Analyte	DryWi	t Corrected: N Result (mg/Kg) Q	Qualifier RL
Benzene		ND	0.0046
Ethanol		ND	0.46
Ethylbenzene		0.024	0.0046
MTBE		ND	0.0046
TAME		ND	0.0046
Toluene		ND	0.0046
Xylenes, Total		ND	0.0092
TBA		ND	0.0092
DIPE		ND	0.0046
-	rganics (GRO)-C6-C12		0.23
Ethyl tert-butyl ethe	er	ND	0.0046
Surrogate		%Rec	Acceptance Limits

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Toluene-d8 1,2-Dichloroethane-d4

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### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID	: B-1@45'					
Lab Sample ID: Client Matrix:	720-3296-5 Solid				Date Sampled: Date Received:	04/20/2006 0950 04/21/2006 1807
•	8260B	Volatile Organ	ic Compounds by	GC/MS		
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5030B 200 05/03/2006 1530 05/01/2006 1730	•	Batch: 720-8484 ch: 720-8421			0
Analyte	DryWt	Corrected: N	Result (mg/Kg)	Qualifie	er	RL
Benzene		in an an an an an ann an Anna Anna ann an Anna an Anna an Anna an Anna an Anna an Anna Anna Anna Anna Anna Ann	ND			0.95
Ethanol			ND			19
Ethylbenzene			ND			0.95
MTBE			ND			0.95
TAME			ND			0.95
Toluene			ND			0.95
Xylenes, Total TBA			2.1 ND			1.9 1.9
DIPE			ND			0.95
	rganics (GRO)-C6-C12	,	450			48
Ethyl tert-butyl eth			ND			0.95
Surrogate			%Rec		Accepta	ance Limits
Toluene-d8		an a dhadhan darabar a darabahan abahar na adhladhan abahan dh	100		50 - 1	30
1,2-Dichloroethan	e-d4		120		60 - 1	40

Job Number: 720-3296-1

#### **Client Sample ID:** B-1@60' Lab Sample ID: 720-3296-6 Date Sampled: 04/20/2006 1020 Client Matrix: Solid Date Received: 04/21/2006 1807 8260B Volatile Organic Compounds by GC/MS Method: 8260B Analysis Batch: 720-8228 Instrument ID: Saturn 2100 Preparation: 5030B Lab File ID: c:\saturnws\data\200604\04 Dilution: 1.0 Initial Weight/Volume: 5.50 g Date Analyzed: 04/26/2006 2013 Final Weight/Volume: 10 mL Date Prepared: 04/26/2006 2013 Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RL Benzene ND 0.0045 Ethylbenzene ND 0.0045 MTBE ND 0.0045 TAME ND 0.0045 Toluene ND 0.0045 Xylenes, Total ND 0.0091 TBA ND 0.0091 DIPE ND 0.0045 Gasoline Range Organics (GRO)-C6-C12 0.29 0.23 Ethyl tert-butyl ether 0.0045 ND Surrogate %Rec Acceptance Limits Toluene-d8 98 70 - 130 1,2-Dichloroethane-d4 93 60 - 140 Method: 8260B Analysis Batch: 720-8383 Instrument ID: Varian 3900E Preparation: 5030B Lab File ID: c:\varianws\data\200605\05 Dilution: Initial Weight/Volume: 1.0 5.39 g Date Analyzed: 05/01/2006 1429 Final Weight/Volume: 10 mL Date Prepared: 05/01/2006 1429 Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RL Ethanol ND 0.46

Client: Delta Environmental Consultants, Inc.

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### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID	: B-3@35'				
Lab Sample ID: Client Matrix:	720-3296 Solid	-7		Date Sam Date Rece	
		8260B Volatile Orga	anic Compounds by	GC/MS	
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5030B 1.0 04/25/2006 04/25/2006	1612	is Batch: 720-8187	Instrument ID: Lab File ID: Initial Weight/V Final Weight/Ve	
Analyte		DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene			ND		0.0047
Ethanol			ND		0.47
Ethylbenzene			ND		0.0047
MTBE			ND		0.0047
TAME			ND		0.0047
Toluene			ND		0.0047
Xylenes, Total TBA			ND ND		0.0093 0.0093
DIPE			ND		0.0047
Gasoline Range O	rganics (GRO)	)-C6-C12	ND		0.23
Ethyl tert-butyl eth		,	ND		0.0047
Surrogate			%Rec	А	cceptance Limits
Toluene-d8			100		70 - 130
1,2-Dichloroethan	e-d4		90		60 - 140

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### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID:	B-3@40'		
Lab Sample ID: Client Matrix:	720-3296-8 Solid	•	04/20/2006 1540 04/21/2006 1807
	8260B Volatile Organic Compounds by GC/MS		•••••••••••••••••••••••••••••••••••••••

Method: Preparation:	8260B 5030B	Analysis Batch: 720-8338	Instrument ID: Lab File ID:	Varian 3900E c:\varianws\data\200604\04
Dilution:	1.0		Initial Weight/Vo	lume: 1.11 g
Date Analyzed:	04/27/2006 1948		Final Weight/Vol	ume: 10 mL
Date Prepared:	04/27/2006 1948			

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.023
Ethanol		ND		2.3
Ethylbenzene		0.20		0.023
MTBE		ND		0.023
TAME		ND		0.023
Toluene		ND		0.023
Xylenes, Total		0.42		0.045
ТВА		ND		0.045
DIPE		ND		0.023
Gasoline Range Organics (GRO)	-C6-C12	30		1.1
Ethyl tert-butyl ether		ND		0.023
Surrogate		%Rec		Acceptance Limits
Toluene-d8		102		70 - 130
1,2-Dichloroethane-d4		93		60 - 140

#### Job Number: 720-3296-1 **Client Sample ID:** B-3@65' 720-3296-9 Lab Sample ID: Date Sampled: 04/20/2006 1645 **Client Matrix:** Solid Date Received: 04/21/2006 1807 8260B Volatile Organic Compounds by GC/MS Method: 8260B Analysis Batch: 720-8228 Instrument ID: Saturn 2100 5030B Preparation: Lab File ID: c:\saturnws\data\200604\04 Dilution: 1.0 Initial Weight/Volume: 5.14 g Date Analyzed: 04/26/2006 1854 Final Weight/Volume: 10 mL Date Prepared: 04/26/2006 1854 Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RL Benzene ND 0.0049 Ethylbenzene ND 0.0049 MTBE 0.0069 0.0049 TAME ND 0.0049 Toluene ND 0.0049 Xylenes, Total ND 0.0097 TBA 0.026 0.0097 DIPE ND 0.0049 Gasoline Range Organics (GRO)-C6-C12 ND 0.24 Ethyl tert-butyl ether ND 0.0049 Surrogate %Rec Acceptance Limits Toluene-d8 97 70 - 130 1,2-Dichloroethane-d4 60 - 140 102 Method: 8260B Analysis Batch: 720-8383 Instrument ID: Varian 3900E 5030B Preparation: Lab File ID: c:\varianws\data\200605\05 Dilution: 1.0 Initial Weight/Volume: 5.00 q Date Analyzed: 05/01/2006 1535 Final Weight/Volume: 10 mL Date Prepared: 05/01/2006 1535 DryWt Corrected: N Analyte Result (mg/Kg) Qualifier RL Ethanol ND 0.50

Client: Delta Environmental Consultants, Inc.

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### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID:	S-7@35'	v
Lab Sample ID:	720-3296-10	Date Sampled: 04/21/2006 1035
Client Matrix:	Solid	Date Received: 04/21/2006 1807

### 8260B Volatile Organic Compounds by GC/MS

Method: Preparation: Dilution: Date Analyzed:	8260B 5030B 1.0 04/25/2006 1730	Analysis Batch: 720-8187	Instrument ID: Lab File ID: Initial Weight/Vo Final Weight/Vol	lume:	2100 rnws\data\200604\04 5.22 g 10 mL
Date Prepared:	04/25/2006 1730			unio.	

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0048
Ethanol		ND		0.48
Ethylbenzene		ND		0.0048
MTBE		ND		0.0048
TAME		ND		0.0048
Toluene		ND		0.0048
Xylenes, Total		ND		0.0096
ТВА		ND		0.0096
DIPE		ND		0.0048
Gasoline Range Organics (GRO)	-C6-C12	ND		0.24
Ethyl tert-butyl ether		ND		0.0048
Surrogate		%Rec		Acceptance Limits
Toluene-d8		99	2000 C C C C C C C C C C C C C C C C C C	70 - 130
1,2-Dichloroethane-d4		86		60 - 140

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# Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID:	S-7@45'		
Lab Sample ID:	720-3296-11	Date Sampled:	04/21/2006 1120
Client Matrix:	Solid	Date Received:	04/21/2006 1807

# 8260B Volatile Organic Compounds by GC/MS

Method: Preparation: Dilution: Date Analyzed:	8260B 5030B 200 04/26/2006 1819	Analysis Batch: 720-8178 Prep Batch: 720-8196	Instrument ID: Lab File ID: Initial Weight/Vo Final Weight/Vol	c:\varia lume:	3900E anws\data\200604\04 5.63 g 10 mL
Date Prepared:	04/25/2006 1610			unio.	

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		1.3		0.89
Ethanol		27		18
Ethylbenzene		5.6		0.89
MTBE		ND		0.89
TAME		ND		0.89
Toluene		ND		0.89
Xylenes, Total		14		1.8
ТВА		ND		1.8
DIPE		ND		0.89
Gasoline Range Organics (GRO)-	C6-C12	700		44
Ethyl tert-butyl ether		ND		0.89
Surrogate		%Rec		Acceptance Limits
Toluene-d8		92		50 - 130
1,2-Dichloroethane-d4		89		60 - 140

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### Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

Client Sample ID	: S-7@55'			
Lab Sample ID: Client Matrix:	720-3296 Solid	5-12		Date Sampled: 04/21/2006 1150 Date Received: 04/21/2006 1807
		8260B Volatile Org	anic Compounds by	y GC/MS
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5030B 1.0 04/25/2006 04/25/2006	1756	is Batch: 720-8187	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 5.23 g Final Weight/Volume: 10 mL
Analyte		DryWt Corrected: N	Result (mg/Kg)	Qualifier RL
Benzene			ND	0.0048
Ethanol			ND	0.48
Ethylbenzene			ND	0.0048
MTBE			ND	0.0048
TAME			ND	0.0048
Toluene			ND	0.0048
Xylenes, Total TBA			ND ND	0.0096
DIPE			ND	0.0096 0.0048
Gasoline Range O	roanics (GRO	)-C6-C12	1.0	0.0048
Ethyl tert-butyl eth		J-00-012	ND	0.24
Surrogate			%Rec	Acceptance Limits
Toluene-d8			90	70 - 130
1,2-Dichloroethane	e-d4		82	60 - 140

# DATA REPORTING QUALIFIERS

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Lab Section

Qualifier

Description

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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# **QC Association Summary**

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC/MS VOA				
Analysis Batch:720-81	187			
LCS 720-8187/9	Lab Control Spike	Solid	8260B	
LCSD 720-8187/8	Lab Control Spike Duplicate	Solid	8260B	
MB 720-8187/10	Method Blank	Solid	8260B	
720-3296-3	B-2@60'	Solid	8260B	
720-3296-3MS	Matrix Spike	Solid	8260B	
720-3296-3MSD	Matrix Spike Duplicate	Solid	8260B	
720-3296-4	B-1@40'	Solid	8260B	
720-3296-7	B-3@35'	Solid	8260B	
720-3296-10	S-7@35'	Solid	8260B	
720-3296-10	_	Solid		
120-3290-12	S-7@55'	5010	8260B	
Prep Batch: 720-8196		0.5	5000D	
LCSD 720-8196/3-A	Lab Control Spike Duplicate	Solid	5030B	
720-3296-1	B-2@40'	Solid	5030B	
720-3296-2	B-2@45'	Solid	5030B	
720-3296-11	S-7@45'	Solid	5030B	
Analysis Batch:720-82	228			
LCS 720-8228/8	Lab Control Spike	Solid	8260B	
LCSD 720-8228/7	Lab Control Spike Duplicate	Solid	8260B	
MB 720-8228/9	Method Blank	Solid	8260B	
720-3296-6	B-1@60'	Solid	8260B	
720-3296-9	B-3@65'	Solid	8260B	
720-3296-9MS	Matrix Spike	Solid	8260B	
720-3296-9MSD	Matrix Spike Duplicate	Solid	8260B	
Analysis Batch:720-83	338			
LCS 720-8338/19	Lab Control Spike	Solid	8260B	
LCSD 720-8338/18	Lab Control Spike Duplicate	Solid	8260B	
MB 720-8338/20	Method Blank	Solid	8260B	
720-3296-8	B-3@40'	Solid	8260B	
Analusia Datah 700.03	_			
Analysis Batch:720-83		Calid	9060D	
LCS 720-8383/5	Lab Control Spike	Solid	8260B	
LCSD 720-8383/4	Lab Control Spike Duplicate	Solid	8260B	
MB 720-8383/6	Method Blank	Solid	8260B	
720-3296-6	B-1@60'	Solid	8260B	
720-3296-9	B-3@65'	Solid	8260B	
Prep Batch: 720-8421		C-III	5000B	
720-3296-5	B-1@45'	Solid	5030B	
Analysis Batch:720-81				
LCSD 720-8196/3-A	Lab Control Spike Duplicate	Solid	8260B	720-8196
720-3296-1	B-2@40'	Solid	8260B	720-8196
720-3296-2	B-2@45'	Solid	8260B	720-8196
720-3296-11	S-7@45'	Solid	8260B	720-8196

### STL San Francisco

### Client: Delta Environmental Consultants, Inc.

### Job Number: 720-3296-1

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# **QC Association Summary**

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC/MS VOA				
Analysis Batch:720-84				
720-3296-5	B-1@45'	Solid	8260B	720-8421

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

# Method Blank - Batch: 720-8187

### Method: 8260B Preparation: 5030B

 Lab Sample ID:
 MB 720-8187/10
 Analysis Batch:
 720-8187
 Instrument ID:
 Saturn 2100

 Client Matrix:
 Solid
 Prep Batch:
 N/A
 Lab File ID:
 c:\saturn\u00ebs\u00ebd\u00ebd\u00eb\u00eb

 Dilution:
 1.0
 Units:
 mg/Kg
 Initial Weight/Volume:
 5 g

 Date Analyzed:
 04/25/2006
 1301
 Final Weight/Volume:
 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Ethanol	ND		0.50
Ethylbenzene	ND		0.0050
MTBE	ND		0.0050
TAME	ND		0.0050
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
ТВА	ND		0.010
DIPE	ND		0.0050
Gasoline Range Organics (GRO)-C6-C12	ND		0.25
Ethyl tert-butyl ether	ND		0.0050
Surrogate	% Rec	Acceptance Lin	nits
Toluene-d8	97	70 - 130	
1,2-Dichloroethane-d4	98	60 - 140	

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8187

LCS Lab Sample I Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8187/9 Solid 1.0 04/25/2006 1208 04/25/2006 1208	Analysis Batch: 720-8187 Prep Batch: N/A Units: mg/Kg	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\0/ Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCSD 720-8187/8 Solid 1.0 04/25/2006 1235 04/25/2006 1235	Analysis Batch: 720-8187 Prep Batch: N/A Units:mg/Kg	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\042 Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL

		<u>% Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	78	79	69 - 129	1	20
MTBE	85	92	65 - 165	8	20
Toluene	91	93	70 - 130	2	20
Surrogate		LCS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8		94	93		70 - 130
1,2-Dichloroethane-d4		91	93		60 - 140

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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### Matrix Spike/

# Matrix Spike Duplicate Recovery Report - Batch: 720-8187

### Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3296-3 Solid 1.0 04/25/2006 1401 04/25/2006 1401	Analysis Batch: 720-8187 Prep Batch: N/A	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\( Initial Weight/Volume: 5.07 g Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3296-3 Solid 1.0 04/25/2006 1427 04/25/2006 1427	Analysis Batch: 720-8187 Prep Batch: N/A	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 5.09 g Final Weight/Volume: 10 mL

	<u>%</u>	<u>Rec.</u>			
Analyte	MS	MSD	Limit	RPD	RPD Limit MS Qual MSD Qual
Benzene	78	80	69 - 129	2	20
MTBE	87	94	65 - 165	8	20
Toluene	95	94	70 - 130	2	20
Surrogate		MS % Rec	MSD %	Rec	Acceptance Limits
Toluene-d8		95	89		70 - 130
1,2-Dichloroethane-d4		88	89		60 - 140

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

### Method Blank - Batch: 720-8228

### Method: 8260B Preparation: 5030B

 Lab Sample ID:
 MB 720-8228/9
 Analysis Batch: 720-8228
 Instrument ID: Saturn 2100

 Client Matrix:
 Solid
 Prep Batch: N/A
 Lab File ID: c:\saturn\sstrum\

Analyte	Result	Qual	RL
Benzene	ND	M Mala and A	0.0050
Ethanol	ND		0.50
Ethylbenzene	ND		0.0050
MTBE	ND		0.0050
TAME	ND		0.0050
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
TBA	ND		0.010
DIPE	ND		0.0050
Gasoline Range Organics (GRO)-C6-C12	ND		0.25
Ethyl tert-butyl ether	ND		0.0050
Surrogate	% Rec	Acceptance Li	mits
Toluene-d8	96	70 - 130	
1,2-Dichloroethane-d4	100	60 - 140	

Method: 8260B

Preparation: 5030B

Client: Delta Environmental Consultants, Inc.

04/26/2006 1513

Job Number: 720-3296-1

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### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8228

LCS Lab Sample ID Client Matrix: Dilution: Date Analyzed: Date Prepared:	2: LCS 720-8228/8 Solid 1.0 04/26/2006 1447 04/26/2006 1447	Analysis Batch: 720-8228 Prep Batch: N/A Units: mg/Kg	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed:	ID: LCSD 720-8228/7 Solid 1.0 04/26/2006 1513	Analysis Batch: 720-8228 Prep Batch: N/A Units:mg/Kg	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\042 Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL

	0	<u> 6 Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	77	86	69 - 129	10	20
MTBE	92	95	65 - 165	3	20
Toluene	90	94	70 - 130	4	20
Surrogate	L	CS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8	g	3	87		70 - 130
1,2-Dichloroethane-d4	8	9	93		60 - 140

Calculations are performed before rounding to avoid round-off errors in calculated results.

Date Prepared:

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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### Matrix Spike/

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-8228

### Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3296-9 Solid 1.0 04/26/2006 1920 04/26/2006 1920	Analysis Batch: 720-8228 Prep Batch: N/A	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\( Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-3296-9 Solid 1.0 04/26/2006 1946 04/26/2006 1946	Analysis Batch: 720-8228 Prep Batch: N/A	Instrument ID: Saturn 2100 Lab File ID: c:\saturnws\data\200604\04 Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

	<u>%</u>	Rec.			
Analyte	MS	MSD	Limit	RPD	RPD Limit MS Qual MSD Qual
Benzene	81	92	69 - 129	12	20
MTBE	108	117	65 - 165	7	20
Toluene	92	100	70 - 130	9	20
Surrogate		MS % Rec	MSD %	Rec	Acceptance Limits
Toluene-d8		92	95		70 - 130
1,2-Dichloroethane-d4		86	94		60 - 140

Job Number: 720-3296-1

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Client: Delta Environmental Consultants, Inc.

### Method Blank - Batch: 720-8338

### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8338/20	Analysis Batch: 720-8338	Instrument ID: Varian 3900E
Client Matrix: Solid	Prep Batch: N/A	Lab File ID: c:\varianws\data\200604\04
Dilution: 1.0	Units: mg/Kg	Initial Weight/Volume: 5 g
Date Analyzed: 04/27/2006 1040		Final Weight/Volume: 10 mL
Date Prepared: 04/27/2006 1040		

Analyte	Result	Qual	RL
Benzene	ND	aan ahaa ahaa ahaa ahaa ahaa ahaa ahaa	0.0050
Ethanol	ND		0.50
Ethylbenzene	ND		0.0050
MTBE	ND		0.0050
TAME	ND		0.0050
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
ТВА	ND		0.010
DIPE	ND		0.0050
Gasoline Range Organics (GRO)-C6-C12	ND		0.25
Ethyl tert-butyl ether	ND		0.0050
Surrogate	% Rec	Acceptance Lin	nits
Toluene-d8	90	70 - 130	
1,2-Dichloroethane-d4	104	60 - 140	

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8338

Method:	8260B
Preparat	ion: 5030B

LCS Lab Sample II Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8338/19 Solid 1.0 04/27/2006 0936 04/27/2006 0936	Analysis Batch: 720-8338 Prep Batch: N/A Units: mg/Kg	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\0 Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	ID: LCSD 720-8338/18 Solid 1.0 04/27/2006 0958 04/27/2006 0958	Analysis Batch: 720-8338 Prep Batch: N/A Units:mg/Kg	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200604\042 Initial Weight/Volume: 5 g Final Weight/Volume: 10 mL

	0	<u> 6 Rec.</u>			
Analyte	LCS	LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	99	96	69 - 129	3	20
MTBE	88	97	65 - 165	10	20
Toluene	93	85	70 - 130	9	20
Surrogate	L	.CS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8	g	)7	85		70 - 130
1,2-Dichloroethane-d4	ç	15	100		60 - 140

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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### Method Blank - Batch: 720-8383

### Method: 8260B Preparation: 5030B

Lab Sample ID: MB 720-8383/6	Analysis Batch: 720-8383	Instrument ID: Varian 3900E
Client Matrix: Solid	Prep Batch: N/A	Lab File ID: c:\varianws\data\200605\05
Dilution: 1.0	Units: mg/Kg	Initial Weight/Volume: 5.00 g
Date Analyzed: 05/01/2006 1030		Final Weight/Volume: 10 mL
Date Prepared: 05/01/2006 1030		

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Ethanol	ND		0.50
Ethylbenzene	ND		0.0050
MTBE	ND		0.0050
TAME	ND		0.0050
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
ТВА	ND		0.010
DIPE	ND		0.0050
Gasoline Range Organics (GRO)-C6-C12	ND		0.25
Ethyl tert-butyl ether	ND		0.0050
Surrogate	% Rec	Acceptar	ce Limits
Toluene-d8	92	70 -	130
1,2-Dichloroethane-d4	102	60 -	

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

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### Laboratory Control/ Laboratory Control Duplicate Recovery Report - Batch: 720-8383

### Method: 8260B Preparation: 5030B

LCS Lab Sample I Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-8383/5 Solid 1.0 05/01/2006 0948 05/01/2006 0948	Analysis Batch: 720-8383 Prep Batch: N/A Units: mg/Kg	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200605\0 Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	e ID: LCSD 720-8383/4 Solid 1.0 05/01/2006 1009 05/01/2006 1009	Analysis Batch: 720-8383 Prep Batch: N/A Units:mg/Kg	Instrument ID: Varian 3900E Lab File ID: c:\varianws\data\200605\05C Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

Analyte	LCS	<u>6 Rec.</u> LCSD	Limit	RPD	RPD Limit LCS Qual LCSD Qual
Benzene	95	88	69 - 129	7	20
MTBE	98	97	65 - 165	2	20
Toluene	94	94	70 - 130	0	20
Surrogate	L	CS % Rec	LCSD %	Rec	Acceptance Limits
Toluene-d8	9	2	93		70 - 130
1,2-Dichloroethane-d4	1	02	101		60 - 140

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IPLER NAME(S) (Print): Ben	Wright	CONSULT		CT NUMBER											R	EQUI	ESTE	D AN	ALY	SES								
URNAROUND TIME (CAL	ENDAR DAYS):			<u> </u>		1	ũ	<u> </u>			1	Τ	<u> </u>					T				Τ			1	- [····		
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						0-Н-Т-	TPPH/ TAME/	'H997 -	8260B - TPH- Oxygenates	TPH	Ser	802	6010 - Lead I															
	nly required if different fro tification/Field Poin	m Sample	PLING	<u></u>	NO. OF	8015M	8260B - ETBA/	8260B -	- 90 /gen	80.	8270C -	8015M	CLP							1						TEM	MPERA	TURE ON RECEIF
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LAB USE ONLY		tification/Field Poil Name*	DATE		MATRIX	NO OF CONT.	8015M	8260B ETBA/	8260B	8260 Oxyg	8260 Oyxg	8270	8015 MTB	6010 DTC									TEN	IPERATURE ON REPETPT	<u>;</u> •
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# LOGIN SAMPLE RECEIPT CHECK LIST

Client: Delta Environmental Consultants, Inc.

Job Number: 720-3296-1

# Login Number: 3296

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	