RO2985

PHASE II ENVIRONMENTAL SITE ASSESSMENT

SHELL OIL PRODUCTS US, SAP #165112

4895 HACIENDA DRIVE
DUBLIN, CALIFORNIA

DELTA PROJECT NO. CASHL-BADW-A-165112

Prepared for:

Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810

Prepared by:

Delta Consultants, Inc.
4640 SW Macadam Avenue, Suite 110
Portland, OR 97239
(503) 639-8098

October 28, 2008

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
1.0 INTRODUCTION 1
1.1 General 1
1.2 Purpose and Scope 1
1.3 Deviations 2
1.4 Background 2
2.0 SOIL AND GROUNDWATER ENVIRONMENTAL ASSESSMENT 3
2.1 Drilling and Soil Sampling 3
2.2 Grab Groundwater Sampling 3
2.3 Investigation Derived Waste 4
2.4 Laboratory Analytical Results 4
2.5 Release Notification 5
3.0 SUMMARY OF FINDINGS 5
4.0 REMARKS 6

FIGURES

Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Soil Concentration Map – August 20, 2008
Figure 4 Groundwater Concentration Map – August 20, 2008

TABLES

Table 1 Summary of Soil Analytical Results - TPH and VOCs
Table 2 Summary of Groundwater Analytical Results - TPH and VOCs

APPENDICES

Appendix A Environmental Data Resources Well Survey Report
Appendix B Boring Logs
Appendix C Laboratory Reports and Chain of Custody Forms
Appendix D Waste Inventory Form and/or Waste Disposal Manifests (if available at report time)
Appendix E Release Notification to Agency and Response

PHASE II ENVIRONMENTAL SITE ASSESSMENT

SHELL OIL PRODUCTS US, SAP #165112
4895 HACIENDA DRIVE
DUBLIN, CALIFONIA
DELTA PROJECT NO. CASHL-BADW-A-165112

EXECUTIVE SUMMARY

Delta Consultants (Delta) on behalf of Shell Oil Products US has completed a Phase II Environmental Site Assessment (Phase II ESA) for Due Diligence at the Shell branded service station located at 4895 Hacienda Drive, Dublin, Alameda County, California (Site).

- Prepared a site-specific Health & Safety Plan prior to the initiation of field activities.
- Notified USA-North to have public utilities in the area of the Site clearly marked.
- Contracted with a private underground utility locating firm (Cruz Brothers), in addition to the public locates, to clear each soil boring location.
- Cleared each soil boring location to 5-feet below ground surface (bgs) using air-knifing and vacuum truck equipment.
- Advanced four soil borings (B-1 through B-4) to maximum depths ranging from 20 to 25 feet bgs using direct push probe drilling methods and equipment on August 20, 2008.
- Collected representative soil samples from continuously cored boreholes for logging and characterization of soil types, field screening, and potential analytical laboratory testing.
- Conducted headspace screening of the soil samples for volatile organic compound (VOC) vapors using a portable photo-ionization detector (PID).
- Collected one soil sample from each soil boring, the location of which was selected by the following ordered criteria:
    - The sample interval exhibiting the highest PID reading, or
    - In the event that impacts are not observed, the sample interval directly above the soil/groundwater interface, or
    - In the event that groundwater is not encountered in the boring, the termination point of the boring.
- Collected a groundwater sample from each boring in which groundwater was encountered.
- Submitted all samples to CalScience Environmental Laboratories (CalScience) in Garden Grove, California to be analyzed for:
    - Total petroleum hydrocarbons as gasoline (TPH-G) using US Environmental Protection Agency (EPA) Method 8260B.

- Select VOCs by EPA Method 8260B, including benzene, toluene, ethylbenzene, total xylenes (BTEX), 1,2-dibromoethane (EDB), 1,2-dichloroethane (EDC), methyl tert-butyl ether (MTBE), tertiary butyl alcohol (TBA), diisopropyl ether (DIPE), ethyl tert-butyl ether, (ETBE), tert amyl-butyl ether (TAME), and ethanol.

Because diesel was sold at the site at the time of the Phase II ESA samples also were analyzed for:

- Total petroleum hydrocarbons as diesel (TPH-D) using EPA Method 8015B.

A summary of findings is as follows: All soil and groundwater analytical laboratory results were reviewed for detections of petroleum hydrocarbon constituents above the laboratory method reporting limits (MRLs) and compared to the California Regional Water Quality Control Board Environmental Screening Levels (ESLs)[1]. For comparison purposes the following assumptions were used in selecting the ESLs:

- Residential land use,
- Shallow Soil (less than 3 meters) or Deep Soil (greater than 3 meters) as appropriate, and;
- Groundwater is a current or potential source of drinking water.

The appropriate ESLs were obtained from Summary Table A and Summary Table C in the document *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*[1]. Comparisons between the ESLs and laboratory results can be found in **Table 1** for soil samples and **Table 2** for groundwater samples.

- None of the soil samples collected and submitted for laboratory analysis during this investigation contained concentrations of any constituent in excess of the ESLs with two exceptions. Soil samples B-2-19-20 and B-3-19-20' exhibited concentrations of MTBE (0.026 milligrams per kilogram [mg/kg] and 0.073 mg/kg, respectively) in excess of the ESL (0.023 mg/kg).
- None of the groundwater samples collected and submitted for laboratory analysis during this investigation contained concentrations of any constituent in excess of the ESLs with one exception. The groundwater sample collected from boring B-2 exhibited concentrations of TPH-G (320 micrograms per liter [ug/L]) and MTBE (370 ug/L) in excess of the ESLs (100 ug/L and 5 ug/L, respectively).
- Based on Delta's review of the findings, Delta notified the Alameda County Water District that concentrations of TPH-G and MTBE had been detected in groundwater and/or soil samples

[1] California Regional Water Quality Board, San Francisco Bay Region. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final – November 2007, revised May 2008.

collected at the Site. Delta also submitted an *Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report.*

- Water wells were not identified within 1,000 feet of the Site.

PHASE II ENVIRONMENTAL SITE ASSESSMENT

SHELL OIL PRODUCTS US, SAP #165112
4895 HACIENDA DRIVE
DUBLIN, CALIFORNIA
DELTA PROJECT NO. CASHL-BADW-A-165112

1.0 INTRODUCTION

1.1 General

At the request of Shell Oil Products US (Shell), Delta Consultants (Delta) has conducted a Phase II Environmental Site Assessment (Phase II ESA) for Due Diligence at the Shell Retail Store located at 4895 Hacienda Drive, Dublin, Alameda County, California (Site). This Site is an active Shell service station.

1.2 Purpose and Scope

In order to establish a baseline of environmental conditions, Delta conducted this Phase II ESA to assess subsurface conditions and potential hydrocarbon impacts through implementation of the following scope of work:

- Prepared a site-specific Health & Safety Plan prior to the initiation of field activities.
- Notified USA-North to have public utilities in the area of the Site clearly marked.
- Contracted with a private underground utility locating firm (Cruz Brothers), in addition to the public locates, to clear each soil boring location.
- Cleared each soil boring location to 5-feet below ground surface (bgs) using air-knifing and vacuum truck equipment.
- Advanced four soil borings (B-1 through B-4) to maximum depths ranging from 20 to 25 feet bgs using direct push probe drilling methods and equipment on August 20, 2008. Borings were placed in the vicinity of the underground storage tank (UST) basin and in the vicinity of dispensers. The scope of work, as defined by Shell, limited drilling depth to 40 feet bgs around tank basins and 20 feet bgs near dispensers; or to the depth of first encountered groundwater or drilling refusal, whichever was encountered first.
- Collected representative soil samples from continuously cored boreholes for logging and characterization of soil types, field screening, and potential laboratory analysis.
- Conducted headspace screening of the soil samples for volatile organic compound (VOC) vapors using a portable photo-ionization detector (PID).
- Collected one soil sample from each soil boring, the location of which was selected by the following ordered criteria:
    - The sample interval exhibiting the highest PID reading, or

  - In the event that impacts are not observed, the sample interval directly above the soil/groundwater interface, or
  - In the event that groundwater is not encountered in the boring, the termination point of the boring.
- Collected a groundwater sample from each boring in which groundwater was encountered.
- Submitted all samples to CalScience Environmental Laboratories (CalScience) in Garden Grove, California to be analyzed for:
  - Total petroleum hydrocarbons as gasoline (TPH-G) using US Environmental Protection Agency (EPA) Method 8260B.
  - Select VOCs by EPA Method 8260B, including benzene, toluene, ethylbenzene, total xylenes (BTEX), 1,2-dibromoethane (EDB), 1,2-dichloroethane (EDC), methyl tert-butyl ether (MTBE), tertiary butyl alcohol (TBA), diisopropyl ether (DIPE), ethyl tert-butyl ether, (ETBE), tert amyl-butyl ether (TAME), and ethanol.

  Because diesel was sold at the site at the time of the Phase II ESA samples also were analyzed for:
  - Total petroleum hydrocarbons as diesel (TPH-D) using EPA Method 8015B.

- Evaluated and compiled field observations and laboratory analytical data into this report, documenting boring installations, soil and groundwater sampling, and analytical data.

1.3 Deviations

The following list summarizes deviations from the proposed scope of work and reason(s) for such deviation:

- Proposed soil boring location B-5, proposed to investigate the west side of the tank pit, was removed from the scope of work due to its proximity to underground utilities.
- The groundwater samples collected from borings B-1 and B-2 were not analyzed for TPH-D because of insufficient groundwater volume.

1.4 Background

The Site is an active retail gasoline station located in western California, in Alameda County at 4895 Hacienda Drive in Dublin **(Figure 1)**. Above ground structures include a station building in the northwest portion of the Site, a car wash southeast of the station building, and dispenser islands located southwest of the station building (**Figure 2**). The Site is primarily covered with asphalt and concrete pavement. The

USTs are located within a common excavation in the northwestern portion of the Site. Local access to the Site is gained from Hacienda Drive to the west and Hacienda Crossing to the south.

Water wells were not located within 1,000 feet of the Site. The Environmental Data Resources well survey report is included in **Appendix A**.

2.0 SOIL AND GROUNDWATER ENVIRONMENTAL ASSESSMENT

2.1 Drilling and Soil Sampling

Soil borings were advanced using a direct-push hydraulic drive point system to depths ranging from 20 to 25 feet bgs. Soil samples were collected continuously using a 5-foot macrocore sampler with a 1.5-inch inside diameter driven into undisturbed formation materials utilizing a hydraulic piston mechanism. The soils encountered were logged using the Unified Soil Classification System (USCS) and field screened using a PID by a Delta field technician working under the supervision of a California Professional Geologist. Field observations, including soil color, odor, and PID readings, were recorded on the soil boring logs, included as **Appendix B.**

One soil sample from the sample interval exhibiting the highest PID reading, or if no field indications of impacts were noted, the interval located directly above the soil/groundwater interface or at the termination point in each soil boring was submitted for laboratory analysis. Soil samples were either placed in laboratory prepared glass containers or the macrocore sample liner was cut into a 6-inch long section and sealed with Teflon tape and end caps. Soil samples were placed into ice-chilled coolers. Standard chain-of-custody (COC) protocol was followed for transporting soil samples to CalScience in Garden Grove, California. Soil analytical laboratory results are summarized in **Table 1** and shown spatially in **Figure 3**. The soil sample analytical laboratory report and COC records are included in **Appendix C**.

All soil borings were backfilled with bentonite grout and the ground surfaces were repaired to approximate original conditions.

2.2 Grab Groundwater Sampling

Following borehole advancement, groundwater samples were collected utilizing Hydropunch sampling techniques. Hyrdropunch sampling utilizes a probe rod with a retractable stainless steel screen with a steel drop-off tip. The probe rods are advanced a minimum of two feet into the water table, at which point the tip is released. The drill rods are then retracted to expose the disposable screen. Groundwater was collected from the screened interval using a peristaltic pump and disposable polyethylene tubing. Groundwater samples were decanted directly into laboratory prepared sample containers and placed in

an iced cooler for transport to CalScience following standard COC protocols. Groundwater analytical laboratory results are summarized in **Table 2** and shown spatially in **Figure 4**. The analytical laboratory reports and COC records for the groundwater sampling event are included in **Appendix C**.

2.3 Investigation Derived Waste

All investigation derived waste generated during the investigation was stored in US Department of Transportation-approved 55-gallon drums for subsequent disposal following proper waste characterization. Decontamination wash water generated during the investigation was stored in a separate drum for subsequent recycling. Copies of waste disposal records are included as **Appendix D,** if they were available at the time this report was prepared.

2.4 Laboratory Analytical Results

All soil and groundwater analytical laboratory results were reviewed for detections of petroleum hydrocarbon constituents above the laboratory method reporting limits (MRLs) and compared to the California Regional Water Quality Control Board Environmental Screening Levels (ESLs)[1]. For comparison purposes the following assumptions were used in selecting the ESLs:

- Residential land use,
- Shallow Soil (less than 3 meters) or Deep Soil (greater than 3 meters) as appropriate, and;
- Groundwater is a current or potential source of drinking water.

The appropriate ESLs were obtained from Summary Table A and Summary Table C in the document *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*[1]. Comparisons between the ESLs and laboratory results can be found in **Table 1** for soil samples and **Table 2** for groundwater samples.

Soil analytical laboratory results are summarized in **Table 1**. Within the table, samples with concentrations that exceed the ESLs are bolded. The soil sample analytical laboratory report and COC records are included in **Appendix C**.

Groundwater analytical laboratory results are summarized in **Table 2**. Within the table, samples with concentrations that exceed the ESLs are bolded. The analytical laboratory reports and COC records for the groundwater event are included in **Appendix C**.

---

[1] California Regional Water Quality Board, San Francisco Bay Region. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final – November 2007, revised May 2008.

2.5 Release Notification

Based on Delta's review of the analytical results, Delta notified the Alameda County Water District that concentrations of TPH-G and MTBE had been detected in groundwater and/or soil samples collected at the Site. Delta also submitted an *Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report.* A copy of the release report is included in **Appendix E.**

3.0 SUMMARY OF FINDINGS

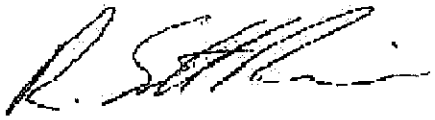
Based on the scope of work performed, Delta presents the following summary of findings:

- Four soil exploration borings (B-1 through B-4) were advanced on August 20, 2008, to maximum depths ranging from 20 to 25 feet bgs.
- All soil and groundwater laboratory results were reviewed for detections of petroleum constituents above the laboratory MRLs and compared to the California Regional Water Quality Control Board ESLs. Comparisons between the ESLs and lab results can be found in **Tables 1 and 2**.
- None of the soil samples collected and submitted for laboratory analysis during this investigation contained concentrations of any constituent in excess of the ESLs with two exceptions. Soil samples B-2-19-20 and B-3-19-20' exhibited concentrations of MTBE (0.026 mg/kg and 0.073 mg/kg, respectively) in excess of the ESL (0.023 mg/kg).
- None of the groundwater samples collected and submitted for laboratory analysis during this investigation contained concentrations of any constituent in excess of the ESLs with one exception. The groundwater sample collected from boring B-2 contained concentrations of TPH-G (320 ug/L) and MTBE (370 ug/L) in excess of the ESLs (100 ug/L and 5 ug/L, respectively).
- Based on Delta's review of the findings, Delta notified the Alameda County Water District that concentrations of TPH-G and MTBE had been detected in groundwater and/or soil samples collected at the Site. Delta also submitted an *Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report.*

4.0 REMARKS

The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report.

This report was prepared by **DELTA CONSULTANTS**



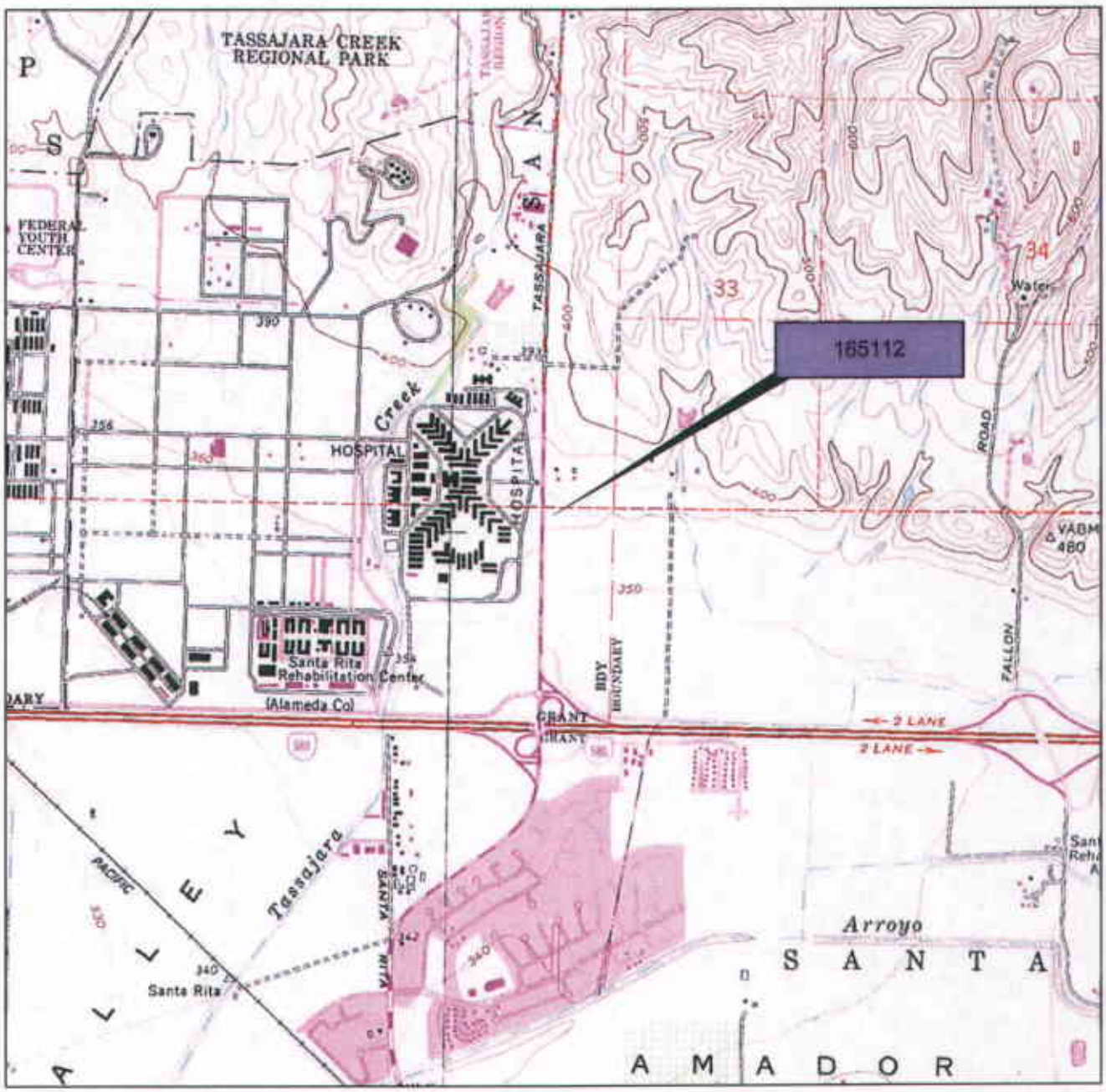
Date: 10/28/2008

R. Scott Barnica
Project Geologist

Reviewed by:

Date:

Rich Garlow, P.G.
California Professional Geologist



N

Scale (miles)
0 0.1 0.2 0.3 0.4 0.5 0.75 1

0 1000 2000 3000 4000
Scale (feet)

from Dublin and Livermore 7.5 minute USGS Quadrangles

Projection: California State Plane Coordinate System, Zone 3, NAD83, U.S. Survey foot

Figure 1

SITE LOCATION MAP

Shell SAP 165112
4895 Hacienda Drive
Dublin, California

Project No.	Prepared by	Drawn by	
CASHLBADWA	LNH	LNH	
Date	Reviewed by	Filename	
10/6/08		165112-SL	DELTA

LEGEND

- ● UNDERGROUND STORAGE TANK (UST) AREA SOIL BORING
- ○ DISPENSER AREA SOIL BORING

N

0 15 30

Scale (feet)
(GRID NORTH)

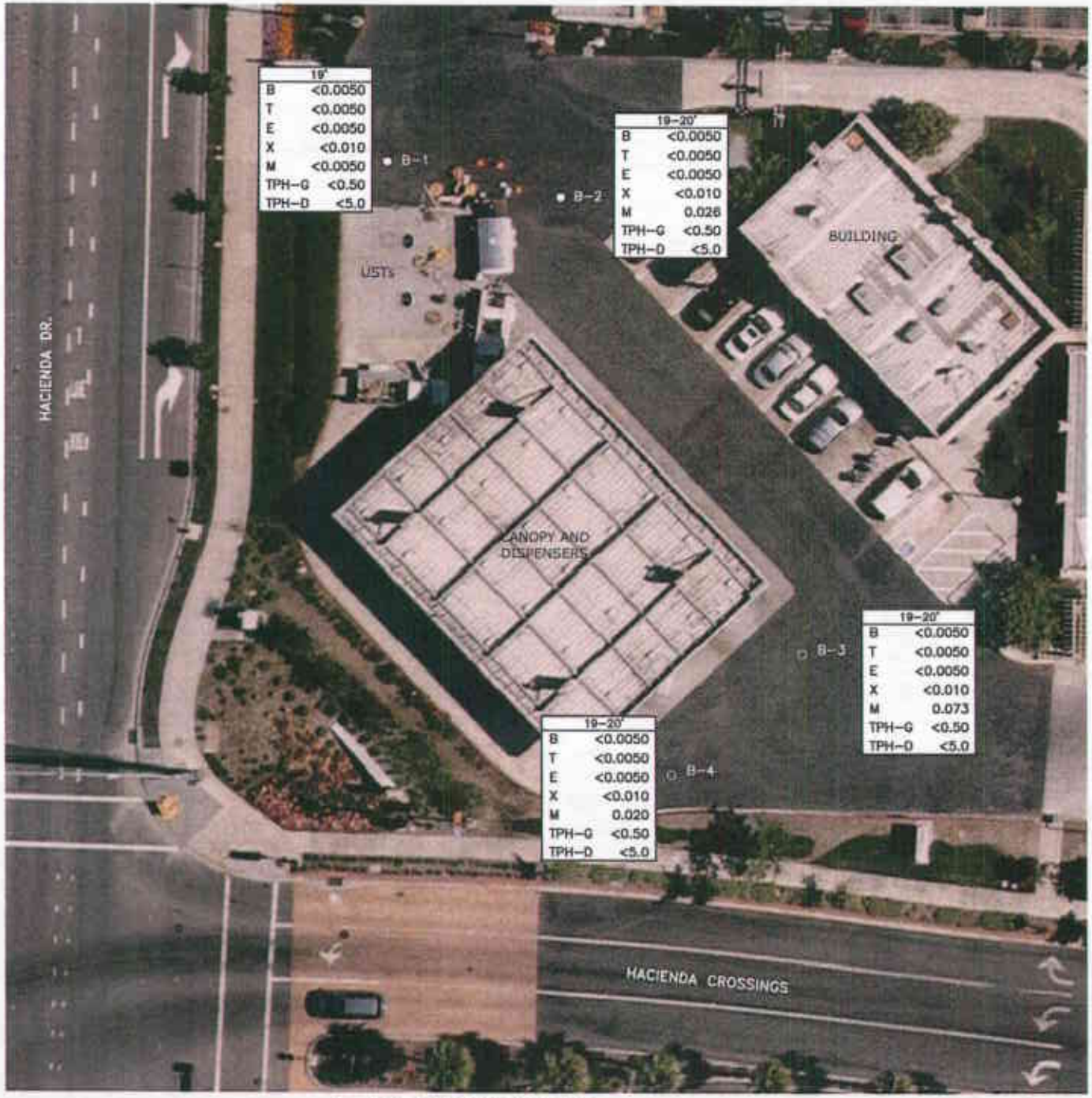
Projection: California State Plane Coordinate System, Zone 3, NAD83, U.S. Survey foot

* BORING LOCATIONS ARE APPROXIMATE

Figure 2
SITE PLAN

Shell SAP 165112
4895 Hacienda Drive
Dublin, California

Project No.	Prepared by	Drawn by	
CASHLBADWA	LHH	LHH/JH	DELTA
Date	Reviewed by	Filename	
10/3/08		165112	



* BORING LOCATIONS ARE APPROXIMATE

LEGEND

- ● UNDERGROUND STORAGE TANK (UST) AREA SOIL BORING
- ○ DISPENSER AREA SOIL BORING

6'		SAMPLE DEPTH (bgs)
B	<0.0050	BENZENE (mg/kg)
T	<0.0050	TOLUENE (mg/kg)
E	<0.0050	ETHYL-BENZENE (mg/kg)
X	<0.0050	TOTAL XYLENES (mg/kg)
M	<0.0050	MTBE (mg/kg)
TPH-G	<0.50	TOTAL PETROLEUM HYDROCARBONS GASOLINE RANGE ORGANICS (mg/kg)
TPH-D	NA	TOTAL PETROLEUM HYDROCARBONS DIESEL RANGE ORGANICS (mg/kg)

mg/kg	MILLIGRAMS PER KILOGRAM
<0.0050	LESS THAN METHOD REPORTING LIMIT (NOT DETECTED)
MTBE	METHYL TERT-BUTYL ETHER
bgs	BELOW GROUND SURFACE

N

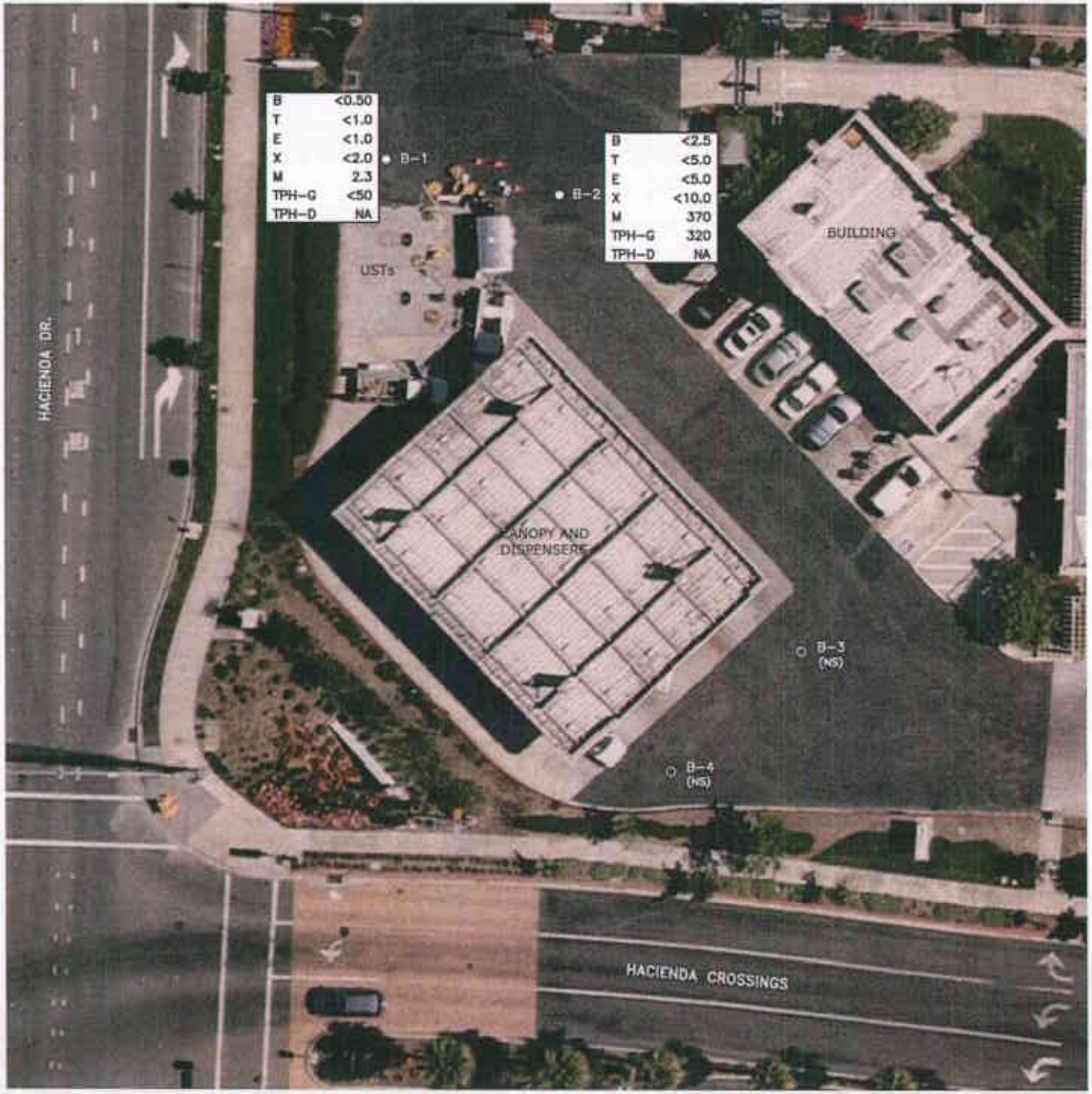
0 15 30

Scale (feet)
(GRID NORTH)

Projection: California State Plane Coordinate System, Zone 3, NAD83, U.S. Survey foot

Figure 3
SOIL CONCENTRATION MAP
AUGUST 20, 2008
Shell SAP 165112
4895 Hacienda Drive
Dublin, California

Project No.	Prepared by	Drawn by	
CASHLBADWA	LMH	LMH/JH	DELTA
Date	Reviewed by	Filename	
10/3/08		165112	



* BORING LOCATIONS ARE APPROXIMATE

LEGEND

- ● UNDERGROUND STORAGE TANK (UST) AREA SOIL BORING
- ○ DISPENSER AREA SOIL BORING

B	<0.50	BENZENE (ug/L)
T	<1.0	TOLUENE (ug/L)
E	<1.0	ETHYL-BENZENE (ug/L)
X	<2.0	TOTAL XYLENES (ug/L)
M	5.8	MTBE (ug/L)
TPH-G	200	TOTAL PETROLEUM HYDROCARBONS GASOLINE RANGE ORGANICS (ug/L)
TPH-D	NA	TOTAL PETROLEUM HYDROCARBONS DIESEL RANGE ORGANICS (ug/L)

NA	NOT ANALYZED
NS	NOT SAMPLED (GROUNDWATER NOT ENCOUNTERED)
ug/L	MICROGRAMS PER LITER
<0.50	LESS THAN METHOD REPORTING LIMIT (NOT DETECTED)
MTBE	METHYL TERT-BUTYL ETHER

N

0 15 30

Scale (feet)
(GRID NORTH)

Projection: California State Plane Coordinate System, Zone 3, NAD83, U.S. Survey foot

Figure 4
GROUNDWATER CONCENTRATION MAP
AUGUST 20, 2008
Shell SAP 165112
4895 Hacienda Drive
Dublin, California

Project No.	Prepared by	Drawn by
CASHLBADWA	LNH	LNH/JH
Date	Reviewed by	Filename
10/16/08		165112

DELTA

Table 1
Summary of Soil Analytical Results - TPH & VOCs
SAP No. 165112
4895 Hacienda Drive
Dublin, California

Sample Identification	Sample Depth (feet)	Sample Date	TPH-G (mg/kg)	TPH-D (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)
B-1-19'	19	08/20/08	<0.50	<5.0	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.50
B-2-19-20	19-20	08/20/08	<0.50	<5.0	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050	<0.0050	**0.026**	<0.050	<0.010	<0.010	<0.010	<0.50
B-3-19-20'	19-20	08/20/08	<0.50	39	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050	<0.0050	**0.073**	<0.050	<0.010	<0.010	<0.010	<0.50
B-4-19-20'	19-20	08/20/08	<0.50	<5.0	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050	<0.0050	0.020	<0.050	<0.010	<0.010	<0.010	<0.50
ESL[1]: Shallow Soils (<3m), Residential Land Use, Groundwater is Current or Potential Source of Drinking Water (Table A)			83	83	0.044	2.9	2.3	2.3	0.00033	0.0045	0.023	0.075	NA	NA	NA	NA
ESL[1]: Deep Soils (>3m), Residential Land Use, Groundwater is Current or Potential Source of Drinking Water (Table C)			83	83	0.044	2.9	3.3	2.3	0.00033	0.0045	0.023	0.075	NA	NA	NA	NA

Notes:
mg/kg = milligrams per kilogram
< = Not detected at concentration exceeding laboratory method reporting limit (MRL)
VOC = Volatile organic compound
TPH-G = Total Petroleum Hydrocarbons as Gasoline
TPH-D = Total Petroleum Hydrocarbons as Diesel
EDB = 1,2-dibromoethane
EDC = 1,2-dichloroethane
MTBE = Methyl tert-Butyl Ether
TBA = Tertiary Butyl Alcohol
DIPE = Diisopropyl Ether
ETBE = Ethyl tert-Butyl Ether
TAME = Tert-Amyl Butyl Ether
NA = Not Analyzed, Not Available
VOC analysis by EPA Method 8260B
Gasoline-range hydrocarbons by EPA Method 8260B
Diesel-range hydrocarbons by EPA Method 8015B
[1] ESL = Environmental Screening Level. Screening criteria referenced are from the *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, California Regional Water Quality Control Board, San Francisco Bay Region, Interim Final, November 2007, revised May 2008.

Table 2
Summary of Groundwater Analytical Results - TPH & VOCs
SAP No. 165112
4895 Hacienda Drive
Dublin, California

Sample Identification	Sample Date	Depth to Water (feet)	TPH-G (µg/L)	TPH-D (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	EDC (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)
B-1	08/20/08	20.0	<50	NA	<0.50	<1.0	<1.0	<2.0	<1.0	<0.50	2.3	<10	<2.0	<2.0	<2.0	<100
B-2	08/20/08	20.0	320	NA	<2.5	<5.0	<5.0	<10.0	<5.0	<2.5	370	<50	<10	<10	<10	<500
ESL[1]: Shallow Soils (<3m), Residential Land Use, Groundwater is a Current or Potential Source of Drinking Water (Table A)			100	100	1	40	30	20	0.05	0.5	5	12	NA	NA	NA	NA
ESL[1]: Deep Soils (>3m), Residential Land Use, Groundwater is a Current or Potential Source of Drinking Water ESLs (Table C)			100	100	1	40	30	20	0.05	0.5	5	12	NA	NA	NA	NA

Notes:
µg/L = micrograms per liter
< = Not detected at concentration exceeding laboratory method reporting limit (MRL)
VOC = Volatile organic compound
TPH-G = Total Petroleum Hydrocarbons as Gasoline
TPH-D = Total Petroleum Hydrocarbons as Diesel
EDB = 1,2-dibromoethane
EDC = 1,2-dichloroethane
MTBE = Methyl tert-Butyl Ether
TBA = Tertiary Butyl Alcohol
DIPE = Diisopropyl Ether
ETBE = Ethyl tert-Butyl Ether
TAME = Tert-Amyl Butyl Ether
NA = Not Analyzed, Not Available
VOC analysis by EPA Method 8260B
Gasoline-range hydrocarbons by EPA Method 8260B
Diesel-range hydrocarbons by EPA Method 8015B
[1] ESL = Environmental Screening Level. Screening criteria referenced are from the *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, California Regional Water Quality Control Board, San Francisco Bay Region, Interim Final, November 2007, revised May 2008.

APPENDIX A
ENVIRONMENTAL DATA RESOURCES WELL SURVEY REPORT

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Clear Lake

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	35 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	35 inches	64 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	0.189
Federal FRDS PWS	0.189
State Database	0.189

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

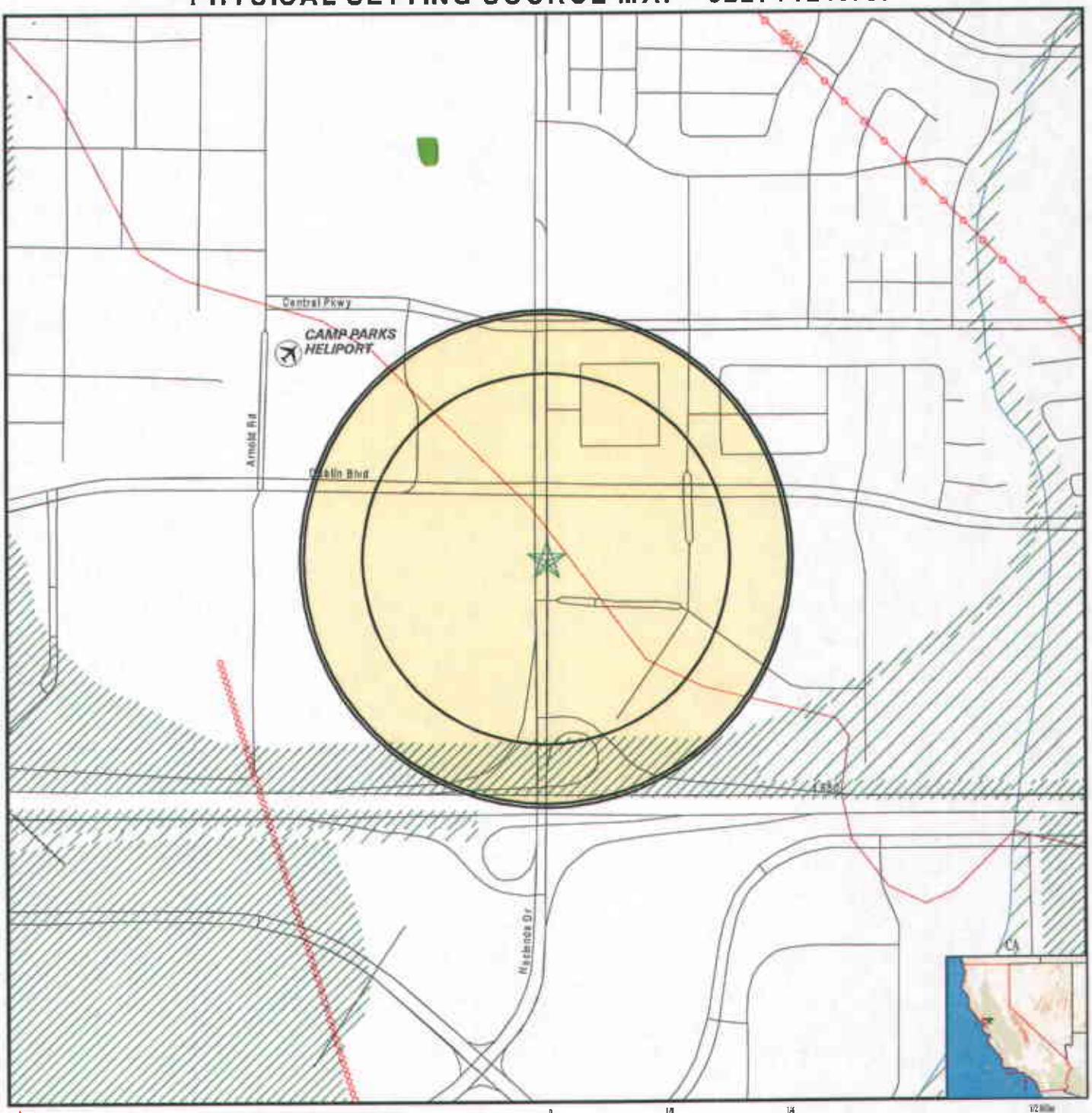
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 02271121.10r



- County Boundary
- Major Roads
- Contour Lines
- Power transmission lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

SITE NAME: 165112	CLIENT: Delta Consultants
ADDRESS: 4895 HACIENDA DRIVE DUBLIN CA 94568	CONTACT: Gary E. Turgeon
LAT/LONG: 37.7052 / 121.8879	INQUIRY #: 02271121.10r
	DATE: July 17, 2008 9:39 am

Drilling Started: 08/20/2008
Drilling Completed: 08/20/2008
Drilling Method and Diameter: Direct Push - 2" Dia.
Drilling Company: Cascade Drilling
Drilled By:
Logged By: Steve Harquail
Boring: B-1

Depth (feet)	Samples	Recovery (%)	PID (ppm)	LITHOLOGIC DESCRIPTION	USCS	Graphic Log	Depth (feet)
				No Recovery - Air Knifed to 5 feet below ground surface (bgs).			
				5.00'			
				Clayey Silt: Dark brown.	ML		
				Clayey Silt: Brown, with 5% fined grained sand.			
		100	0.0	*Clayey Silt: Tan, brown.*			
				13.00'			
				Silty Clay: Tan, soft, high plasticity.	CH		
		100	0.0	15.00'			
				Clayey Silt: Light brown, with 5% sand	ML		
		85	0.0	20.00'			
				Silty Sand: Brown, wet.	SM		
				21.50'			
				Clayey Silt: Tan, hard, white to black marbling.	ML		
		100	0.0	25.00'			
				Boring terminated at 25 feet bgs.			

▼ Water Level (Not Recorded)

CONTINUOUS CORE Sample Collected for Laboratory Analysis

DELTA	CASHL-BADW-A 09-26-2008 / 09-26-2008 CALIFORNIA / O.P. / J.R. SH5112-B1	SHELL FACILITY No. 165112 4895 Hacienda Drive Dublin, California	Soil Boring Log B-1

FIGURE

Drilling Started: 08/20/2008
Drilling Completed: 08/20/2008
Drilling Method and Diameter: **Direct Push - 2" Dia.**
Drilling Company: **Cascade Drilling**
Drilled By:
Logged By: **Steve Harquail**
Boring: **B-2**

Depth (feet)	Samples	Recovery (%)	PID (ppm)	LITHOLOGIC DESCRIPTION	USCS	Graphic Log	Depth (feet)
				No Recovery - Air Knifed to 5 feet below ground surface (bgs).			
5							5
				Sandy Silt: Dark brown, hard, dry.	ML		
8				*Sandy Silt: Brown, with 5% fined grained sand, hard, dry.*			8
10		100	0.0	*Similar to above.*			10
12				*Clayey Silt: Tan, dry, firm, with 5% sand.*	ML		12
14				*Silty Clay: Tan, soft.*	CL		14
		100	0.0	*Clayey Silt: Brown, hard, dry.*	ML		
18							18
20		100	0.0	*Clayey Silt: Brown/tan*			20
				Sand: Brown, wet.	SP		
22				*Clayey Sand: Tan.*	SC		22
				Clay: Tan, soft, dry.	CL		
25		100	0.0				25

Boring terminated at 25 feet bgs.

▼ Water Level (Not Recorded)

CONTINUOUS CORE Sample Collected for Laboratory Analysis

DELTA	CASHL-BADW-A 09-26-2008 09-26-2008 CALIFORNIA O.F. J.R. SH5112-B2	SHELL FACILITY No. 165112 4895 Hacienda Drive Dublin, California	Soil Boring Log B-2	FIGURE

Drilling Started: 08/20/2008
Drilling Completed: 08/20/2008
Drilling Method and Diameter: **Direct Push – 2" Dia.**
Drilling Company: **Cascade Drilling**
Drilled By:
Logged By: **Steve Harquail**
Boring: **B-3**

Depth (feet)	Samples	Recovery (%)	PID (ppm)	LITHOLOGIC DESCRIPTION	USCS	Graphic Log	Depth (feet)
0				*No Recovery – Air Knifed to 5 feet below ground surface (bgs).*			0
2							2
4							4
				5.00'			
6				*Clayey Silt: Dark brownish-black.*	ML		6
				Clayey Silt with trace sand: Brown, hard, dry, low to medium plasticity.			
8							8
10		90	0.0	*Clayey Silt with trace sand: Brown, firm, dry.*			10
12							12
14		90	0.0	*Similar to above, hard, dry, medium plasticity.*			14
16							16
18							18
20		100	0.0				20
				20.00'			

Boring terminated at 20 feet bgs.

▼ Water Level (Not Encountered)

CONTINUOUS CORE Sample Collected for Laboratory Analysis

DELTA

CASHL-BADW-A	SHELL FACILITY No. 165112 4895 Hacienda Drive Dublin, California	Soil Boring Log B-3	FIGURE
09-26-2008 / 09-26-2008			
CALIFORNIA / O.F. / J.R.			
SH5112-B3			

Drilling Started: 08/20/2008
Drilling Completed: 08/20/2008
Drilling Method and Diameter: Direct Push – 2" Dia.
Drilling Company: Cascade Drilling
Drilled By:
Logged By: Steve Harquail
Boring: B-4

Depth (feet)	Samples	Recovery (%)	PID (ppm)	LITHOLOGIC DESCRIPTION	USCS	Graphic Log	Depth (feet)
				No Recovery – Air Knifed to 5 feet below ground surface (bgs).			
5.00'				*Clayey Silt with Sand: Dark brown, dry, hard, medium plasticity.*	ML		
				Similar to above, brown.			
10		80	0.0	*Clayey Silt: Dark brown, dry, hard.*			
14		90	0.0	*Clayey Silt: Brown, hard, dry, with 5% fine grained sand.*			
20		90	0.0				
20.00'				*Boring terminated at 20 feet bgs.*			

▼ Water Level (Not Encountered)

CONTINUOUS CORE Sample Collected for Laboratory Analysis

DELTA

CASHL-BADW-A
09-26-2008 | 09-26-2008
CALIFORNIA | O.P. | J.E.
SH5112-B4

SHELL FACILITY No. 165112
4895 Hacienda Drive
Dublin, California

Soil Boring Log
B-4

FIGURE

APPENDIX C
LABORATORY REPORTS
AND CHAIN OF CUSTODY FORMS

Calscience
Environmental
Laboratories, Inc.

September 08, 2008

Kevin McCarthy
Delta Environmental Consultants
4640 SW Macadam Ave; Suite 110
Portland, OR 97239-4283

Subject: **Calscience Work Order No.:** **08-08-2003**
Client Reference: **4895 Hacienda Dr., Dublin, CA.**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/22/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Jessie Kim
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants	Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 3550B
	Method:	EPA 8015B

Project: 4895 Hacienda Dr., Dublin, CA. Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-19'	**08-08-2003-1-A**	**08/20/08 08:45**	**Solid**	**GC 6**	**08/29/08**	**08/30/08 01:55**	**080829B01**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	94	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-2-19-20	**08-08-2003-3-A**	**08/20/08 10:35**	**Solid**	**GC 6**	**08/29/08**	**08/30/08 02:42**	**080829B01**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	95	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-4-19-20'	**08-08-2003-5-A**	**08/20/08 13:15**	**Solid**	**GC 6**	**08/29/08**	**08/30/08 03:24**	**080829B01**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	90	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-3-19-20'	**08-08-2003-6-A**	**08/20/08 15:00**	**Solid**	**GC 6**	**08/29/08**	**08/30/08 04:08**	**080829B01**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	39	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	98	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants	Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 3550B
	Method:	EPA 8015B

Project: 4895 Hacienda Dr., Dublin, CA.

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-025-418**	**N/A**	**Solid**	**GC 6**	**08/29/08**	**08/29/08 17:39**	**080829B01**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	91	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants	Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 5030B
	Method:	LUFT GC/MS / EPA 8260B
	Units:	ug/L

Project: 4895 Hacienda Dr., Dublin, CA.

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1	**08-08-2003-2-F**	**08/20/08 08:45**	**Aqueous**	**GC/MS W**	**08/29/08**	**08/29/08 23:43**	**080829L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	2.3	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Ethylbenzene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Toluene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
p/m-Xylene	ND	1.0	1		Ethanol	ND	100	1	
o-Xylene	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	116	74-140			1,2-Dichloroethane-d4	121	74-146		
Toluene-d8	97	88-112			Toluene-d8-TPPH	93	88-112		
1,4-Bromofluorobenzene	85	74-110							

B-2	**08-08-2003-4-B**	**08/20/08 10:35**	**Aqueous**	**GC/MS W**	**08/29/08**	**08/29/08 23:13**	**080829L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.5	5		Methyl-t-Butyl Ether (MTBE)	370	5.0	5	
1,2-Dibromoethane	ND	5.0	5		Tert-Butyl Alcohol (TBA)	ND	50	5	
1,2-Dichloroethane	ND	2.5	5		Diisopropyl Ether (DIPE)	ND	10	5	
Ethylbenzene	ND	5.0	5		Ethyl-t-Butyl Ether (ETBE)	ND	10	5	
Toluene	ND	5.0	5		Tert-Amyl-Methyl Ether (TAME)	ND	10	5	
p/m-Xylene	ND	5.0	5		Ethanol	ND	500	5	
o-Xylene	ND	5.0	5		TPPH	320	250	5	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	113	74-140			1,2-Dichloroethane-d4	118	74-146		
Toluene-d8	98	88-112			Toluene-d8-TPPH	94	88-112		
1,4-Bromofluorobenzene	88	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants	Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 5030B
	Method:	LUFT GC/MS / EPA 8260B
	Units:	ug/L

Project: 4895 Hacienda Dr., Dublin, CA.

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-767-156**	**N/A**	**Aqueous**	**GC/MS W**	**08/29/08**	**08/29/08 17:39**	**080829L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Ethylbenzene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Toluene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
p/m-Xylene	ND	1.0	1		Ethanol	ND	100	1	
o-Xylene	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	102	74-140			1,2-Dichloroethane-d4	108	74-146		
Toluene-d8	99	88-112			Toluene-d8-TPPH	95	88-112		
1,4-Bromofluorobenzene	92	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants	Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 5030B
	Method:	LUFT GC/MS / EPA 8260B
	Units:	mg/kg

Project: 4895 Hacienda Dr., Dublin, CA.

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-19'	**08-08-2003-1-A**	**08/20/08 08:45**	**Solid**	**GC/MS PP**	**08/30/08**	**08/30/08 14:05**	**080830L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethanol	ND	0.50	1	
o-Xylene	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	103	73-139			1,2-Dichloroethane-d4	103	73-145		
Toluene-d8	101	90-108			1,4-Bromofluorobenzene	91	71-113		
Toluene-d8-TPPH	102	88-112							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-2-19-20	**08-08-2003-3-A**	**08/20/08 10:35**	**Solid**	**GC/MS PP**	**08/30/08**	**08/30/08 15:47**	**080830L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	0.026	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethanol	ND	0.50	1	
o-Xylene	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	104	73-139			1,2-Dichloroethane-d4	107	73-145		
Toluene-d8	101	90-108			1,4-Bromofluorobenzene	92	71-113		
Toluene-d8-TPPH	102	88-112							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants	Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 5030B
	Method:	LUFT GC/MS / EPA 8260B
	Units:	mg/kg

Project: 4895 Hacienda Dr., Dublin, CA.

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-4-19-20'	**08-08-2003-5-A**	**08/20/08 13:15**	**Solid**	**GC/MS PP**	**08/30/08**	**08/30/08 16:12**	**080830L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	0.020	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethanol	ND	0.50	1	
o-Xylene	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	108	73-139			1,2-Dichloroethane-d4	107	73-145		
Toluene-d8	101	90-108			1,4-Bromofluorobenzene	92	71-113		
Toluene-d8-TPPH	102	88-112							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-3-19-20'	**08-08-2003-6-A**	**08/20/08 15:00**	**Solid**	**GC/MS PP**	**08/30/08**	**08/30/08 16:38**	**080830L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	0.073	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethanol	ND	0.50	1	
o-Xylene	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	106	73-139			1,2-Dichloroethane-d4	107	73-145		
Toluene-d8	100	90-108			1,4-Bromofluorobenzene	91	71-113		
Toluene-d8-TPPH	101	88-112							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants	Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 5030B
	Method:	LUFT GC/MS / EPA 8260B
	Units:	mg/kg

Project: 4895 Hacienda Dr., Dublin, CA.

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-769-61**	**N/A**	**Solid**	**GC/MS PP**	**08/30/08**	**08/30/08 13:14**	**080830L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethanol	ND	0.50	1	
o-Xylene	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	100	73-139			1,2-Dichloroethane-d4	97	73-145		
Toluene-d8	99	90-108			1,4-Bromofluorobenzene	91	71-113		
Toluene-d8-TPPH	101	88-112							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants	Date Received: 08/22/08
4640 SW Macadam Ave; Suite 110	Work Order No: 08-08-2003
Portland, OR 97239-4283	Preparation: EPA 3550B
	Method: EPA 8015B

Project 4895 Hacienda Dr., Dublin, CA.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-2139-1	**Solid**	**GC 6**	**08/29/08**	**08/29/08**	**080829S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	87	92	64-130	6	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants		Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110		Work Order No:	08-08-2003
Portland, OR 97239-4283		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B

Project 4895 Hacienda Dr., Dublin, CA.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-1878-3	**Aqueous**	**GC/MS W**	**08/29/08**	**08/29/08**	**080829S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	91	95	88-118	4	0-7	
Carbon Tetrachloride	97	104	67-145	8	0-11	
Chlorobenzene	89	96	88-118	7	0-7	
1,2-Dibromoethane	97	105	70-130	8	0-30	
1,2-Dichlorobenzene	91	92	86-116	1	0-8	
1,1-Dichloroethene	89	94	70-130	5	0-25	
Ethylbenzene	92	97	70-130	5	0-30	
Toluene	91	93	87-123	2	0-8	
Trichloroethene	88	93	79-127	5	0-10	
Vinyl Chloride	95	101	69-129	6	0-13	
Methyl-t-Butyl Ether (MTBE)	94	101	71-131	7	0-13	
Tert-Butyl Alcohol (TBA)	91	95	36-168	4	0-45	
Diisopropyl Ether (DIPE)	95	100	81-123	5	0-9	
Ethyl-t-Butyl Ether (ETBE)	95	101	72-126	5	0-12	
Tert-Amyl-Methyl Ether (TAME)	94	100	72-126	6	0-12	
Ethanol	85	86	53-149	0	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants		Date Received:	08/22/08
4640 SW Macadam Ave; Suite 110		Work Order No:	08-08-2003
Portland, OR 97239-4283		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B

Project 4895 Hacienda Dr., Dublin, CA.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-19'	**Solid**	**GC/MS PP**	**08/30/08**	**08/30/08**	**080830S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	89	91	79-115	2	0-13	
Carbon Tetrachloride	82	86	55-139	5	0-15	
Chlorobenzene	86	87	79-115	1	0-17	
1,2-Dibromoethane	85	88	70-130	3	0-30	
1,2-Dichlorobenzene	82	85	63-123	4	0-23	
1,1-Dichloroethene	91	92	69-123	1	0-16	
Ethylbenzene	86	90	70-130	4	0-30	
Toluene	88	91	79-115	3	0-15	
Trichloroethene	85	88	66-144	3	0-14	
Vinyl Chloride	107	111	60-126	4	0-14	
Methyl-t-Butyl Ether (MTBE)	89	89	68-128	0	0-14	
Tert-Butyl Alcohol (TBA)	76	80	44-134	5	0-37	
Diisopropyl Ether (DIPE)	91	89	75-123	2	0-12	
Ethyl-t-Butyl Ether (ETBE)	89	89	75-117	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	89	90	79-115	2	0-12	
Ethanol	81	83	42-138	3	0-28	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants	Date Received:	N/A
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 3550B
	Method:	EPA 8015B

Project: 4895 Hacienda Dr., Dublin, CA.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-025-418	**Solid**	**GC 6**	**08/29/08**	**08/29/08**	**080829B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	86	85	75-123	2	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants	Date Received: N/A
4640 SW Macadam Ave; Suite 110	Work Order No: 08-08-2003
Portland, OR 97239-4283	Preparation: EPA 5030B
	Method: LUFT GC/MS / EPA 8260B

Project: 4895 Hacienda Dr., Dublin, CA.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-767-156	**Aqueous**	**GC/MS W**	**08/29/08**	**08/29/08**	**080829L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	100	97	84-120	78-126	3	0-8	
Carbon Tetrachloride	104	99	63-147	49-161	5	0-10	
Chlorobenzene	99	100	89-119	84-124	1	0-7	
1,2-Dibromoethane	109	100	80-120	73-127	9	0-20	
1,2-Dichlorobenzene	99	98	89-119	84-124	1	0-9	
1,1-Dichloroethene	99	91	77-125	69-133	8	0-16	
Ethylbenzene	101	103	80-120	73-127	2	0-20	
Toluene	99	101	83-125	76-132	2	0-9	
Trichloroethene	97	96	89-119	84-124	0	0-8	
Vinyl Chloride	103	102	63-135	51-147	1	0-13	
Methyl-t-Butyl Ether (MTBE)	102	93	82-118	76-124	9	0-13	
Tert-Butyl Alcohol (TBA)	92	88	46-154	28-172	5	0-32	
Diisopropyl Ether (DIPE)	102	95	81-123	74-130	7	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	94	74-122	66-130	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	102	96	76-124	68-132	5	0-10	
Ethanol	82	77	60-138	47-151	7	0-32	
TPPH	73	73	65-135	53-147	1	0-30	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants	Date Received:	N/A
4640 SW Macadam Ave; Suite 110	Work Order No:	08-08-2003
Portland, OR 97239-4283	Preparation:	EPA 5030B
	Method:	LUFT GC/MS / EPA 8260B

Project: 4895 Hacienda Dr., Dublin, CA.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-769-61	Solid	GC/MS PP	08/30/08	08/30/08	080830L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	99	98	84-114	79-119	1	0-7	
Carbon Tetrachloride	96	93	66-132	55-143	3	0-12	
Chlorobenzene	98	98	87-111	83-115	0	0-7	
1,2-Dibromoethane	98	98	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	96	97	79-115	73-121	1	0-8	
1,1-Dichloroethene	104	98	73-121	65-129	6	0-12	
Ethylbenzene	102	99	80-120	73-127	2	0-20	
Toluene	100	99	78-114	72-120	1	0-7	
Trichloroethene	97	96	84-114	79-119	1	0-8	
Vinyl Chloride	123	116	63-129	52-140	5	0-15	
Methyl-t-Butyl Ether (MTBE)	98	100	77-125	69-133	2	0-11	
Tert-Butyl Alcohol (TBA)	92	88	47-137	32-152	4	0-27	
Diisopropyl Ether (DIPE)	100	101	76-130	67-139	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	98	101	76-124	68-132	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	98	102	82-118	76-124	4	0-11	
Ethanol	95	90	59-131	47-143	5	0-21	
TPPH	95	93	65-135	53-147	2	0-30	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-08-2003

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

From: Kevin McCarthy
To: Jessie Kim; Jeff Schatz;
Subject: RE: 08-08-2003
Date: Friday, August 22, 2008 2:15:09 PM

Yes, no Diesel and Metals is fine.
Kevin McCarthy
Project Manager
DELTA Consultants
4640 SW Macadam Avenue; Suite 110
Portland, OR 97239
Direct: 503.863.2102
Cell: 360.556.9742
Toll Free: 800.477.7411
Fax: 503.639.7619
kmccarthy@deltaenv.com

-----Original Message-----
From: Jessie Kim [mailto:JKim@calscience.com]
Sent: Friday, August 22, 2008 2:12 PM
To: Kevin McCarthy; Jeff Schatz
Subject: 08-08-2003
Hi All,
We only received 6 vials which were also noted on COC for sample # 2(B-1) and # 4(B-2) so we can not analyze TPH-DRO and CAM 17 Metals on those samples.
Thanks!
<<08082003.pdf>>
Best Regards,
Jessie Kim
Project Manager
Calscience Environmental
Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
Tel.: 714-895-5494 ext 231
Fax : 714-894-7501
jkim@calscience.com

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☑ CALSCIENCE ( )
- ☐ SPL ( )
- ☐ XENCO ( )
- ☐ TEST AMERICA ( )
- ☐ OTHER ( )

Please Check Appropriate Box:
☐ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER ______

Print Bill To Contact Name: Charlie O'Neil

INCIDENT # (ENV SERVICES) ☐ CHECK IF NO INCIDENT # APPLIES

DATE: 8/20/08
PAGE: 1 of 1

PO #: 97767816
SAP #: 165112

CONSULTANT COMPANY: Delta Consultants
ADDRESS: 4640 SW Macadam Avenue; Suite 110
CITY: Portland, OR 97239
TELEPHONE: 1-800-477-7411 FAX: 503.639.7619 E-MAIL: kmccarthy@deltaenv.com

SITE ADDRESS: Street and City: 4895 Hacienda Dr Dublin State: CA GLOBAL ID NO.:
EDF DELIVERABLE TO (Name, Company, Office Location): Angela Pico PHONE NO.: 408-826-1862 E-MAIL: apico@deltaenv.com CONSULTANT PROJECT NO.:
SAMPLER NAME(S) (Print): Stephen Harquail
LAB USE ONLY: 08-2003

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES :
☐ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED

Please also email results to:
droulette@deltaenv.com jeckart@deltaenv.com

TEMPERATURE ON RECEIPT C°

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	DATE	TIME	MATRIX	HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH - Gas, Purgeable (8260B)	TPH - Diesel Range Only (8015M)	BTEX (8260B)	5 Oxygenates (8260B) (MTBE, TBA, DIPE, TAME, ETBE)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH-motor oil (8015M)	TDS (160.1)	Total Iron (6010B)	Total Lead (6010B) (If >50ppm, run STLC)	CAM 17	Total Oil and Grease (1664A)		Container PID Readings or Laboratory Notes
1	B-1-19'	8/20/08	845	Soil						1	X	X	X	X						X	X	X									
2	B-1	8/20/08	845	Water	X					6	X	X	X	X						X	X	X						X			
3	B-2-19-20	8/20/08	1035	Soil						1	X	X	X	X						X	X	X									
4	B-2	8/20/08	1035	water	X					6	X	X	X	X						X	X	X						X			
5	B-4-19-20'	8/20	1315	Soil						1	X	X	X	X						X	X	X									
6	B-3-19-20'	8/20	1500	Soil						1	X	X	X	X						X	X	X									
~~SBH~~	~~DR-1~~	~~8/20~~	~~1505~~	~~Soil~~						1																					

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 8/20/08			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature) 105866843	Received by: (Signature) [signature]	8/22/08	1000

05/2/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 08-2003

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Delta **DATE:** 8/22/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:	LABORATORY (Other than Calscience Courier):
_____ Chilled, cooler with temperature blank provided.	3.3 °C Temperature blank.
_____ Chilled, cooler without temperature blank.	___.___ °C IR Thermometer.
_____ Chilled and placed in cooler with wet ice.	_____ Ambient temperature (For Air & Filter Only).
_____ Ambient and placed in cooler with wet ice.	
_____ Ambient temperature (For Air & Filter Only).	
___.___ °C Temperature blank.	

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		✓
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: [illegible]

COMMENTS:

#2: B-1 received only 6 vials

#4: B-2 received only 6 vials

KCN

APPENDIX D

COPIES of WASTE DISPOSAL MANIFESTS

(as applicable and available)

THIS ATTACHMENT HAS BEEN LEFT BLANK INTENTIALLY. THE DOCUMENTS ASSOCIATED WITH THE DISPOSAL OF SOIL FOR THIS PHASE II ESA WERE NOT AVAILABLE AT THE TIME THE REPORT WAS WRITTEN.

APPENDIX E

COPIES of RELEASE NOTIFICATIONS to AGENCY and RESPONSE

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ Yes ☒ No

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ Yes ☒ No

REPORT DATE: 9/24/2008

CASE #:

FOR LOCAL AGENCY USE ONLY

I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE.

SIGNED _____ DATE _____

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT: Charles O'Neill

PHONE: (916) 853-8927

SIGNATURE: Charles O'Neill

REPRESENTING: ☐ LOCAL AGENCY ☐ REGIONAL BOARD ☒ OWNER/OPERATOR ☐ OTHER

COMPANY OR AGENCY NAME: Shell Oil Products US

ADDRESS: 20945 S. Wilmington Ave. (STREET) Carson (CITY) CA (STATE) 90810 (ZIP)

RESPONSIBLE PARTY

NAME: Shell Oil Products US ☐ Unknown

CONTACT PERSON: Carol Campagna

PHONE: (707) 864-1617

ADDRESS: 20945 S. Wilmington Ave (STREET) Carson (CITY) CA (STATE) 90810 (ZIP)

SITE LOCATION

FACILITY NAME (IF APPLICABLE): Shell 165112

OPERATOR:

PHONE: ( )

ADDRESS: 4895 Hacienda Drive (STREET) Dublin (CITY) Alameda (COUNTY) 94568 (ZIP)

CROSS STREET: Hacienda Drive and Hacienda Crossing

IMPLEMENTING AGENCIES

LOCAL AGENCY AGENCY NAME: Alameda County Environmental Health

PHONE: (510) 567-6721

REGIONAL BOARD: San Francisco Regional Water Board

PHONE: ( )

SUBSTANCES INVOLVED

(1) NAME: TPPH (diesel; 39 ppm soil) QUANTITY LOST (GALLONS) ☒ Unknown

(2) MTBE (0.073 ppm soil, 370 ppb groundwater) ☒ Unknown

DISCOVERY/ABATEMENT

DATE DISCOVERED: 9/23/08

HOW DISCOVERED: ☐ Tank Test ☐ Tank Removal ☐ Nuisance Conditions ☐ Inventory Control ☐ Subsurface Monitoring ☒ Other

DATE DISCHARGE BEGAN: ☒ UNKNOWN

HAS DISCHARGE BEEN STOPPED? ☒ YES ☐ NO IF YES, DATE: Unknown

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ Remove Contents ☐ Close Tank ☐ Repair Tank ☐ Change Procedure ☐ Replace Tank ☒ Other ☐ Repair Piping

SOURCE/CAUSE

SOURCE OF DISCHARGE: ☐ Tank Leak ☐ Piping Leak ☐ Unknown ☒ Other

CAUSE(S): ☐ Overfill ☐ Corrosion ☐ Rupture/Failure ☐ Unknown ☐ Spill ☒ Other

CASE TYPE

CHECK ONE ONLY
☐ Undetermined ☐ Soil Only ☒ Groundwater ☐ Drinking Water – (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS

CHECK ONE ONLY
☒ No Action Taken
☐ Leak Being Confirmed
☐ Remediation Plan
☐ Preliminary Site Assessment Workplan Submitted
☐ Preliminary Site Assessment Underway
☐ Case Closed (Cleanup Completed or Unnecessary)
☐ Pollution Characterization
☐ Post Cleanup Monitoring in Progress
☐ Cleanup Underway

REMEDIAL ACTION

CHECK APPROPRIATE ACTION(S)
☐ Cap Site (CD)
☐ Contamination Barrier (CB)
☐ Vacuum Extract (VE)
☐ Excavate & Dispose (ED)
☐ Excavate & Treat (ET)
☐ No Action Required (NA)
☐ Remove Free Product (FP)
☐ Pump & Treat Groundwater (GT)
☐ Treatment At Hookup (HU)
☐ Enhanced Bio Degradation (IT)
☐ Replace Supply (RS)
☐ Vent Soil (VS)
☒ Other

COMMENTS

During review of laboratory analytical results from soil and groundwater sampling, concentrations of MTBE (370 ppb groundwater, 0.073 ppm soil); and TPPH (diesel; 39 ppm soil) were noted in groundwater and/or soil samples collected from the site by Delta Consultants (Delta). Delta notified Alameda County Environmental Health on 9/23/08 by emailing Donna Drogos at 3:16pm PST. A report documenting the findings will be submitted to the agency within 60 days.

Instructions for Completing UST Unauthorized Release (Leak) / Contamination Site Report

EMERGENCY: Indicate whether emergency response personnel and equipment were involved at any time. If so, a Hazardous Material Incident Report should be filed with the State Office of Emergency Services (OES). Indicate whether the OES report has been filed as of the date of this report.

LOCAL AGENCY USE ONLY: To avoid duplicate notifications pursuant to Health and safety Code Section 25180.7, a designated government employee should sign and date the form in this block. A signature here does not mean that the leak has been determined to pose a significant threat to human health or safety, only that notification procedures have been followed if required.

REPORTED BY: Enter name, telephone number, and address. Indicate which party you represent and provide company or agency name.

SIGNATURE: Sign the form in the space provided.

RESPONSIBLE PARTY: Enter the name, telephone number, contact person, and address of the party responsible for the leak. The Responsible Party would normally be the tank owner.

SITE LOCATION: Enter information regarding the tank facility. At a minimum, you must provide the facility name and full site address.

IMPLEMENTING AGENCIES: Enter the names of the local agency and Regional Water Quality Control Board having jurisdiction over the site.

SUBSTANCES INVOLVED: Enter the name and quantity lost of the hazardous substance(s) involved. If more than two substances leaked, list the two of most concern for cleanup.

DISCOVERY/ABATEMENT: Provide information regarding the discovery and abatement of the leak.

SOURCE/CAUSE: Indicate the source(s) of leak. Check box(es) indicating the cause(s) of leak.

CASE TYPE: Check one box only. Indicate the Case Type category for this leak. Case Type is based on the most sensitive resource affected. For example, if both soil and ground water have been affected, Case Type will be "Groundwater." Indicate "Drinking Water" only if one or more municipal or domestic water wells have actually been affected. A "Groundwater" designation does not imply that the affected water cannot be, or is not, used for drinking water, but only that water wells have not yet been affected. It is understood that Case Type may change upon further investigation.

CURRENT STATUS: Check one box only. Indicate the category which best describes the Current Status of the case. The response should be relative to the Case Type. For example, if the Case Type is "Groundwater," then Current Status should refer to the status of the ground water investigation or cleanup, as opposed to that of soil. Descriptions of options are as follows:

- **No Action Taken** – No action has been taken by the Responsible Party beyond initial reporting of the leak.
- **Leak Being Confirmed** – A leak is suspected at the site, but has not yet been confirmed.
- **Remediation Plan** – Remediation Plan submitted evaluating long term remediation options. Proposal and implementation schedule for appropriate remediation options also submitted.
- **Preliminary Site Assessment Workplan Submitted** – Workplan/proposal requested of/submitted by Responsible Party to determine whether ground water has been, or will be, impacted as a result of the release.
- **Preliminary Site Assessment Underway** – Workplan is being implemented.
- **Case Closed** – Regional Water Quality Control Board and local agency Local Oversight Program (LOP) agree that no further work is necessary at the site.
- **Pollution Characterization** – Responsible Party is in the process of fully defining the extent of contamination in soil and ground water and assessing impacts on surface and/or ground water.
- **Post Cleanup Monitoring In Progress** – Periodic ground water or other monitoring at site, as necessary, to verify and/or evaluate the effectiveness of remedial activities.
- **Cleanup Underway** – Remediation Plan is being implemented.

IMPORTANT: THE INFORMATION PROVIDED ON THIS FORM IS INTENDED FOR GENERAL STATISTICAL PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS REPRESENTING THE OFFICIAL POSITION OF ANY GOVERNMENTAL AGENCY.

REMEDIAL ACTION: Indicate which actions have been used to clean up or remediate the leak. Descriptions of options are as follows:

- **Cap Site** – Install horizontal impermeable layer to reduce rainfall infiltration.
- **Containment Barrier** – Install vertical dike to block horizontal movement of contaminants.
- **Excavate and Dispose** – Remove contaminated soil and dispose at approved site.
- **Excavate and Treat** – Remove contaminated soil and treat (includes spreading or land farming).
- **Remove Free Product** – Remove floating product from water table.
- **Pump and Treat Groundwater** – Generally employed to remove dissolved contaminants.
- **Enhanced Biodegradation** – Use of any available technology to promote bacterial decomposition of contaminants.
- **Replace Supply** – Provide alternate water supply to affected parties.
- **Treatment at Hookup** – Install water treatment devices at each dwelling or other place of use.
- **Vacuum Extract** – Use pumps or blowers to draw air through soil.
- **Vent Soil** – Bore holes in soil to allow volatilization of contaminants.
- **No Action Required** – Incident is minor, requiring no remedial action.

COMMENTS: Use this space to elaborate on any aspects of the incident.

DISTRIBUTION: If this form is completed by the tank owner or his/her agent, retain a copy and forward the original to your local tank permitting agency for distribution.

- Original – Local UST permitting agency. (Agency contact information is available at www.unidocs.org.)
- Copy – Regional Water Quality Control Board. (Boundaries and contact information are available at www.swrcb.ca.gov/regions.html.)
- Copy – Local Oversight Program (LOP) agency. (Agency contact information is available at www.unidocs.org.)
- Copy – Local Health Officer and County Board of Supervisors or their designee to receive Proposition 65 notifications.
- Copy – Owner/Responsible Party.