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October 19, 2011

Mr. Paresh Khatari  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**Subject: Semi-Annual Summary Report, April through September 2011**

**Site: 76 Station No. 5748/6419  
6401 Dublin Boulevard  
Dublin, California  
Fuel Leak Case No. RO0000459**

Dear Mr. Khatari;

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

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

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Sincerely,

**PACIFIC CONVENIENCE & FUEL**

**LIZ BERMUDEZ**  
Senior Paralegal  
Division, Unit, or Group

Attachment

# *Semi-Annual Summary Report, April through September 2011*

*76 Station No. 5748/6419  
6401 Dublin Boulevard  
Dublin, California*

*Alameda County Health Care Services Agency  
No. R00000459*

*Regional Water Quality Control Board - San  
Francisco Bay, Case No.01-1568*

*GeoTracker Global ID No. T0600101443*

*Antea Group Project No. I42705748*

*October 19, 2011*

*Prepared for:*  
**Mr. Paresh Khatri**  
Alameda County Health Care  
Services Agency  
1131 Harbor Bay Parkway,  
Suite 250  
Alameda, CA 94502-6577

*Prepared by:*  
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Attachment A	Summary of Previous Environmental Investigations
Attachment B	Blaine Tech Services Groundwater Sampling Procedures
Attachment C	Blaine Tech Services Groundwater Sampling Field Data Sheets
Attachment D	Certified Laboratory Analytical Report and Data Validation Form
Attachment E	Waste Manifest



## 1.0 SITE INFORMATION

Station Number:	<b>76 Station No. 5748/6419</b>
Site Address:	6401 Dublin Boulevard, Dublin, California, 94568
Contact:	Mr. Dennis Dettloff Project Manager Antea Group 11050 White Rock Road, Suite 110 Rancho Cordova, California 95670
Consulting Company:	Antea Group
Delta Project No.:	I42705748
Contact/ Primary Agency:	Mr. Paresh Khatri, Alameda County Health Care Services Agency

### 1.1 Work Performed (April through September 2011)

1. Antea Group supervised the advancement of two cone penetration test (CPT) borings on August 8 through 12, 2011.
2. Blaine Tech Services, Inc. (Blaine Tech) conducted the semi-annual groundwater sampling event on September 1, 2011.

### 1.2 Work Proposed (October 2011 through March 2012)

1. Antea Group prepared and submitted the *Site Investigation Report* for the CPT investigation performed in August 2011, dated October 5, 2011.
2. Antea Group will prepare and submit the *Semi-Annual Summary Report – April through September 2011*, contained herein.
3. Blaine Tech will conduct the semi-annual groundwater monitoring and sampling event during the first quarter 2012.

### 1.3 Background

Antea™ Group (formerly Delta Consultants) is pleased to submit this Semi-Annual Summary Report, April through September 2011 for the referenced site in Dublin, CA (**Figure 1**). The subject site is an active 76 station located on the western corner of Dublin Boulevard and Dougherty Road in Dublin, California. The site is bounded to the south by Dublin Boulevard, to the northeast by Dougherty Road, and to the west-northwest by a shopping center.

Properties in the immediate site vicinity are commercial, including service stations and retail facilities. Current above ground site facilities consist of two dispenser islands, a car wash, and a station building/convenience store. Two 12,000-gallon gasoline underground storage tanks (USTs) are located in the common pit, east of the station building (**Figures 1 and 2**).

Previous investigation information and site history are presented as **Attachment A**. Blaine Tech’s procedures for groundwater monitoring and sampling, and equipment decontamination are presented as **Attachment B**. The groundwater monitoring and sampling field data sheets are presented as **Attachment C**. The groundwater sampling certified analytical report and chain-of-custody (COC) documentation are presented as **Attachment D**.

Site summary data has been tabled in the following:

- **Table 1** summarizes the current groundwater gauging and analytical data.
- **Table 2** summarizes the historical groundwater gauging and analytical data.
- **Table 3** summarizes the well construction details.
- **Table 4** summarizes the historical groundwater flow direction and gradient information.

This report summarizes the groundwater data collected to date, focusing on the most recent analytical data obtained from groundwater samples collected on September 1, 2011. This report has received a technical review by Mr. Dennis S. Dettloff, California Professional Geologist No. 7480.

## **2.0 CURRENT PROJECT STATUS**

Current phase of project:	Groundwater Monitoring
Local Oversight Program (LOP) – Lead agency for cleanup oversight:	Alameda County Health Care Services Agency No. RO0000459
Contact:	Mr. Paresh Khatri
Monitoring well gauging schedule:	Semi-Annual: MW-1R, MW-3, and MW-5
Monitoring well sampling schedule:	Semi-Annual: MW-1R, MW-3, and MW-5
Total number of monitoring wells ( <b>Table 3</b> ):	3
Range of well depths (total depth below ground surface, bgs) ( <b>Table 3</b> ):	19-20 feet
Wells with historical measurable LNAPL (light non-aqueous phase liquid):	None
Generalized site geology:	Predominantly silt and clay with some poorly graded sand to 20 feet bgs the maximum depth explored.
Historical Depth to Water Range, in feet below top of casing (BTOC):	Min: 5.09 (MW-2, Q1 1998) Max: 13.37 (MW-8, Q1 2004)
Historical Groundwater Elevation Range, in feet above mean sea level:	Min: 316.60 (MW-8, Q1 2004) Max: 326.78 (MW-3, Q1 2011)

Local Receptors:	There is a canal 625 feet southeast of the site (See <b>Attachment A</b> )
Current Remediation Technique:	No active remediation

## 2.1 Groundwater Monitoring

Semi-annual groundwater monitoring and sampling was conducted at the site on September 1, 2011 by Blaine Tech Services per their standard sampling protocol (**Attachment B**). Three monitoring wells were gauged and sampled. A copy of Blaine Tech’s field notes is included as **Attachment C**. Measured depth to groundwater and respective groundwater elevations are summarized in **Table 1**. Depths to water were measured to within 0.01 feet BTOC in monitoring wells MW-1R, MW-3, and MW-5 using a water level indicator. Historic laboratory analytical results are summarized in **Table 2**. Gauging and sampling data from the most recent groundwater monitoring event are summarized below.

Well gauging and sampling date:	September 1, 2011
Wells gauged:	MW-1R, MW-3, and MW-5
Wells sampled:	MW-1R, MW-3, and MW-5
Purge method:	3 well casing volumes via electric, submersible pump
Sample collection method:	Disposable bailers
Groundwater parameters measured ( <b>Attachment C</b> ):	Temperature, pH, conductivity, Oxygen Reduction Potential (ORP), Turbidity, and Dissolved Oxygen (DO)
Wells with measurable LNAPL:	None
Depth to Water Range (ft BTOC):	6.82 (MW-5) to 6.86 (MW-3)
Groundwater Elevation Range (ft above mean sea level):	326.23 (MW-5) to 326.54 (MW-3)
Change in water depths from previous event (average change for all gauged wells):	0.31 foot decrease
Groundwater Flow Direction and Gradient foot per foot (ft/ft):	0.0060 ft/ft south-southeast

All monitoring and sampling activities were conducted by Blaine Tech for the site during the third quarter 2011 and reviewed and certified by a California Professional Geologist.

### 2.1.1 Groundwater Sample Analysis

Groundwater samples collected from monitoring wells MW-1R, MW-3, and MW-5 were submitted with COC documentation to Pace Analytical Services, Inc.(Pace) in Seattle, WA, a California state-certified laboratory (No. 01153CA). Samples were analyzed for the presence of total petroleum hydrocarbons as gasoline (TPHg) by the CA LUFT Method, and benzene, toluene, ethylbenzene, total xylenes (collectively BTEX), methyl tertiary-butyl ether (MTBE), and ethanol by Environmental Protection Agency (EPA) Method 8260.

### 2.1.2 Groundwater Quality Data

Groundwater analytical results are tabulated in **Table 1** (current) and **Table 2** (historical). During the September 2011 sampling event, the following ranges of contaminant concentrations were reported in the specified site wells (only the constituents detected are shown):

Constituents	Number of Reported Concentrations Above LRL of Total Samples Analyzed	Minimum Reported Concentration, in µg/L (Sample ID)	Maximum Reported Concentration, in µg/L (Sample ID)
TPHg	0 of 3	<50.0 (MW-1R, MW-3, and MW-5)	<50.0 (MW-1R, MW-3, and MW-5)
Benzene	0 of 3	<0.50 (MW-1R, MW-3, and MW-5)	<0.50 (MW-1R, MW-3, and MW-5)
MTBE	3 of 3	0.78 (MW-1R)	9.1 (MW-5)

Key: LRL = Laboratory reporting limits  
 µg/L = Micrograms per liter

### 2.1.3 Contaminants of Concern

**TPHg:** TPHg was below the laboratory’s indicated reporting limits in each of the groundwater samples collected and submitted for analysis during the current event.

**Benzene:** Benzene was below the laboratory’s indicated reporting limits in each of the groundwater samples collected and submitted for analysis during the current event.

**MTBE:** MTBE was above the laboratory’s indicated reporting limit in the groundwater samples collected and submitted for analysis from monitoring wells MW-1R (0.78 µg/L), MW-3 (6.8 µg/L), and MW-5 (9.1 µg/L) during the current event.

All other constituents tested were below the laboratory’s indicated reporting limits in the groundwater samples collected and submitted for analysis during the current event. The September 1, 2011 groundwater analytical results and historical groundwater monitoring and analytical results are presented in **Table 1** and **Table 2**. Pace Laboratory’s analytical report and chain-of-custody documentation are presented as **Attachment D**.

The September 1, 2011 groundwater elevation contour map is presented as **Figure 3**. An isoconcentration map for MTBE is presented as **Figure 4**. Historical groundwater flow directions are shown on a rose diagram, presented as **Figure 5**.

### 2.1.4 Waste Disposal Summary

A total of approximately 30 gallons of waste water were generated during the September 2011 groundwater sampling event. The generated waste water was temporarily stored by Blaine Tech in a 2000-gallon poly tank. The generated waste water was later transported for proper disposal at Seaport Environmental in Redwood City,

California. The method of containment and disposal is reported in Blaine Tech's procedures for groundwater sampling in **Attachment B**. A copy of the waste disposal manifest is presented as **Attachment E**.

### 2.1.5 Quality Assurance / Quality Control

Antea Group's QA/QC measures included a detailed QA/QC data validation check on the Pace laboratory analytical results for the September 2011 sampling event. Antea Group's laboratory data validation checklist and the Pace laboratory report are presented as **Attachment D**. A summary of QA/QC information follows.

Laboratory QA/QC Performed:	Yes (validated by Antea Group)
Laboratory Data Qualifiers:	One (M1)
Validity of Laboratory Data:	Data set is Valid

Data Qualifiers:

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

Based on a review of the laboratory's analytical report, including their QA/QC procedures and those implemented by Antea Group, we conclude that the laboratory data obtained during this groundwater sampling event are valid for their intended purpose.

## 2.2 Regulatory Correspondence

In a letter from Paresh Khatri dated June 17, 2011, Alameda County Health Care Services Agency approved Antea Group's work plan titled *Site Investigation Report and Work Plan*.

## 2.3 Remedial Activities

There are currently no active remediation activities taking place at this site.

## 3.0 CONCLUSIONS AND RECOMMENDATIONS

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Based on the data from the groundwater monitoring and the recent site investigation, Antea Group recommends that this site be considered for no further action status.



#### 4.0 Remarks


The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. For any reports cited that were not generated by Delta or Antea Group, the data from those reports is used "as is" and is assumed to be accurate. Antea Group does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. The contract between Antea USA, Inc. 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 Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

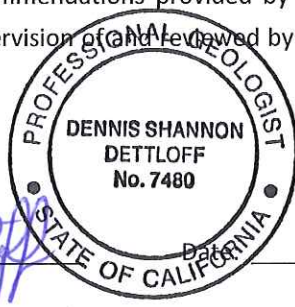
Prepared by:

  
\_\_\_\_\_  
Jonathan Fillingame  
Staff Geologist

Information, conclusions, and recommendations provided by Antea Group in this document regarding the site have been prepared under the supervision of and reviewed by the licensed professional whose signature appears below.

Licensed Approver:

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



Date: 10/19/11

cc: Mr. Paresh Khatri, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250,  
Alameda, CA 94502-6577  
GeoTracker (upload)

## ***Figures***

- Figure 1      Site Location Map
- Figure 2      Site Plan
- Figure 3      Groundwater Elevation Contour Map – September 1, 2011
- Figure 4      Dissolved Phase MTBE Isoconcentration Map – September 1, 2011
- Figure 5      Historical Groundwater Flow Directions

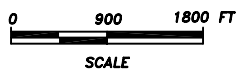
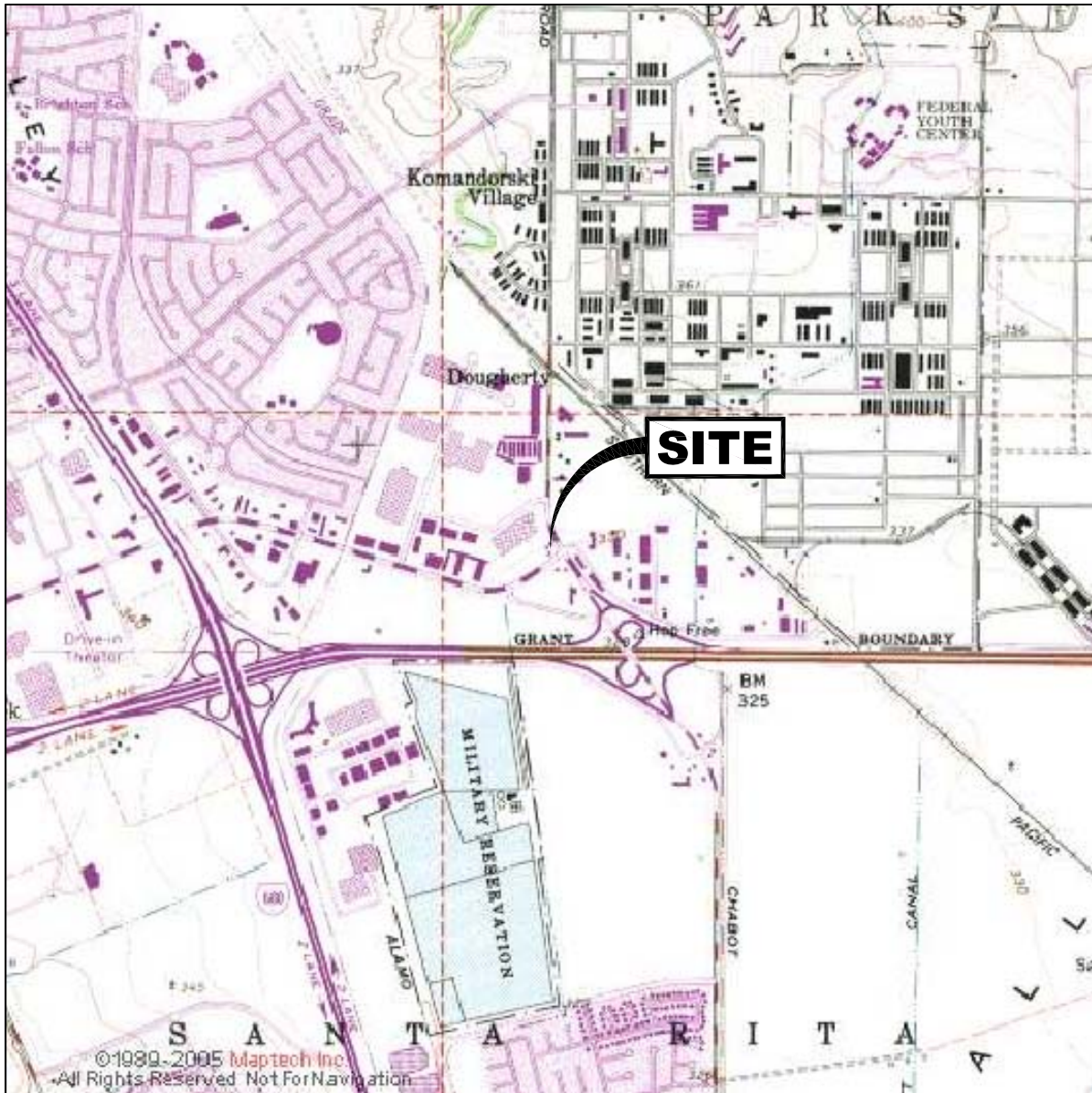


FIGURE 1

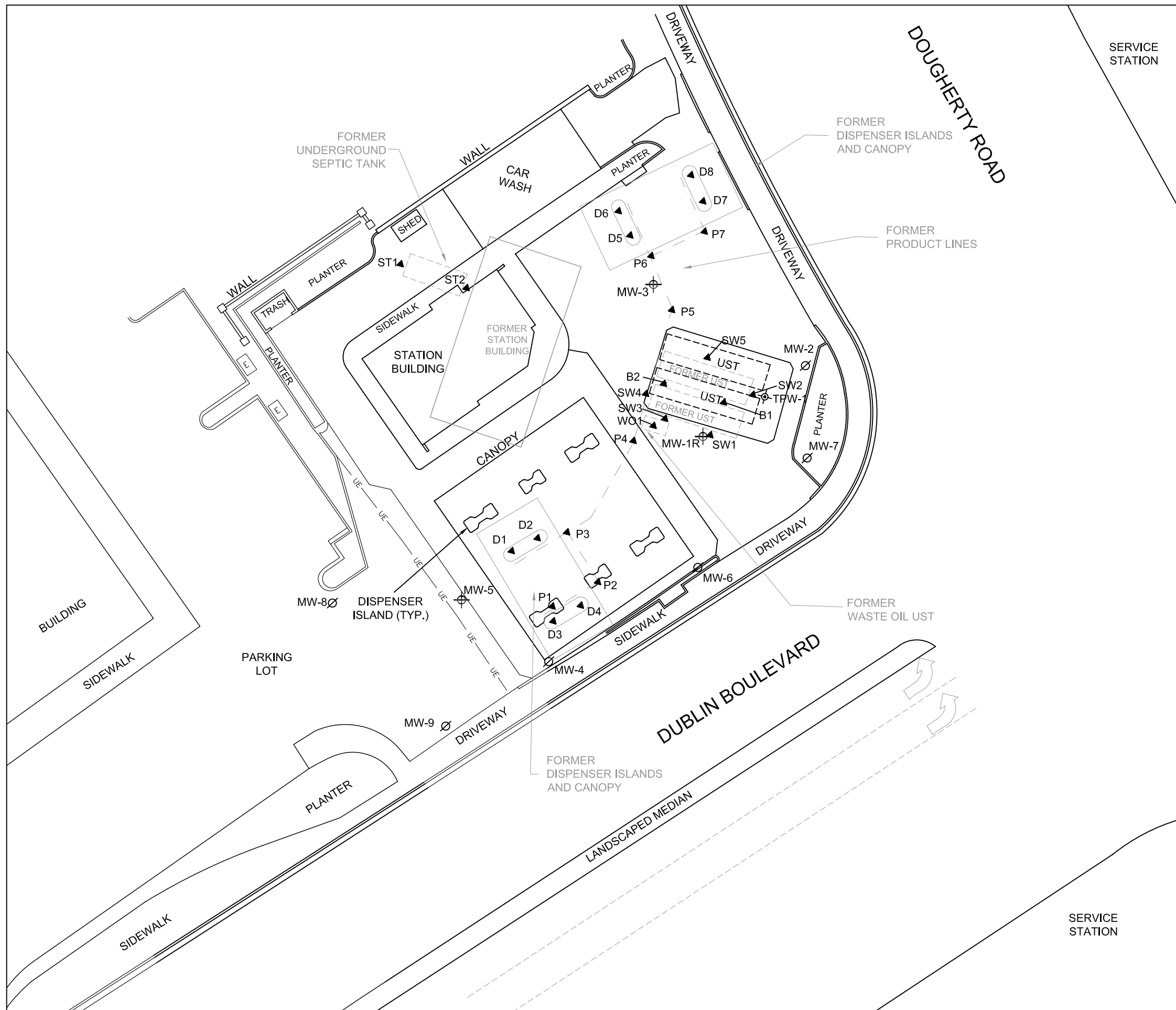
SITE LOCATION MAP

76 STATION NO. 5748 / 6419  
 6401 DUBLIN BOULEVARD  
 DUBLIN, CALIFORNIA

PROJECT NO. C105748	DRAWN BY JH 2/2/11
FILE NO. 5748-SiteLocator	PREPARED BY JH
REVISION NO.	REVIEWED BY DD

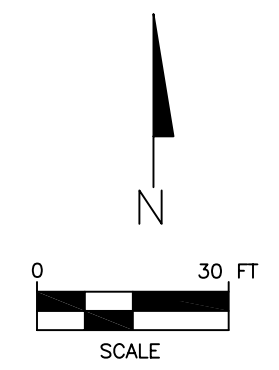


SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, DUBLIN (1998) QUADRANGLE



**EXPLANATION:**

- ⊕ MONITORING WELL
- ∅ ABANDONED MONITORING WELL
- ⊖ UST BACKFILL WELL
- ▲ SOIL SAMPLE LOCATION
- UE — UNDERGROUND ELECTRIC LINE



SITE PLAN BASED OFF OF A SURVEY BY MORROW SURVEYING ON 12/29/10.

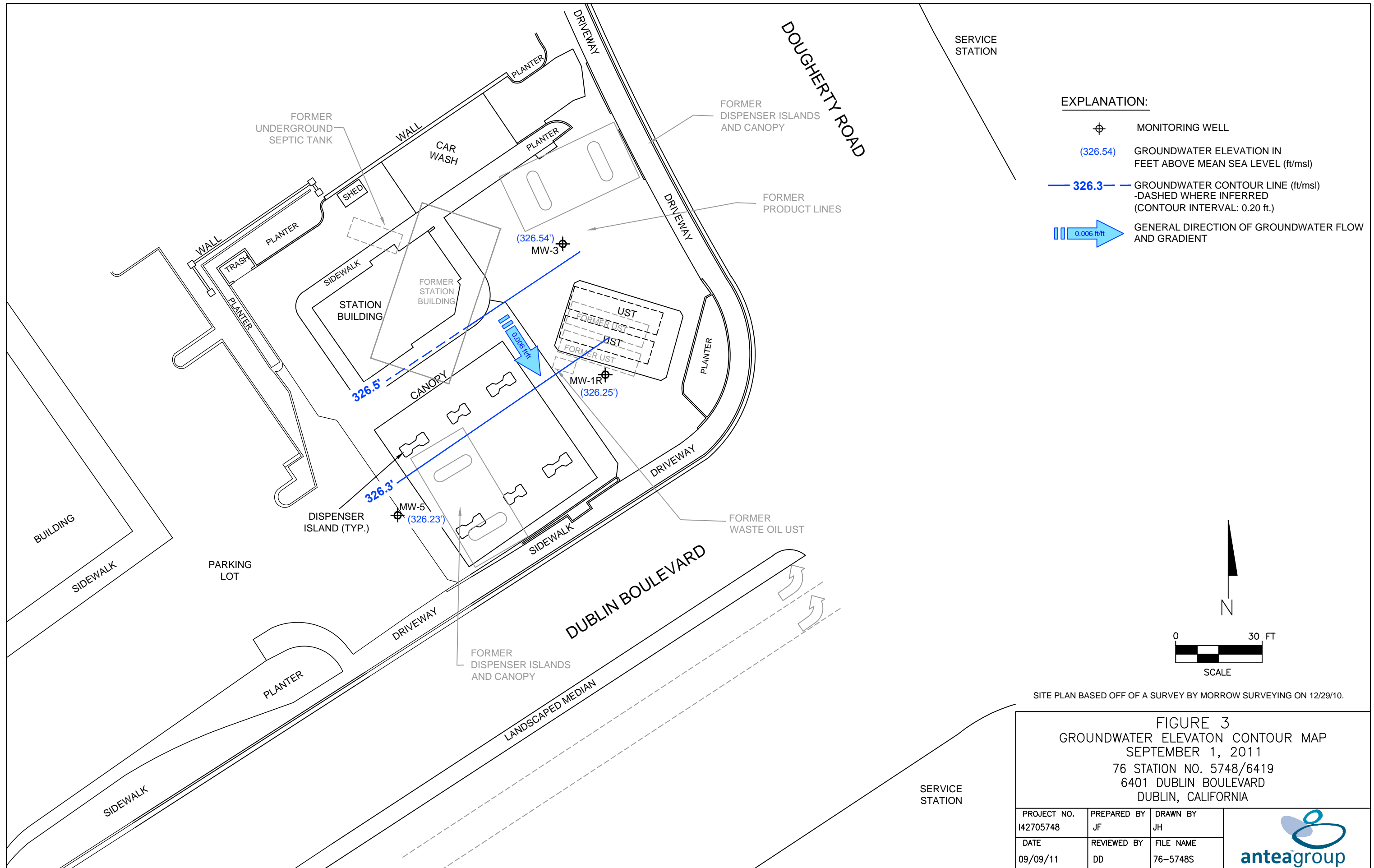
**FIGURE 2  
SITE PLAN**

76 STATION NO. 5748/6419  
6401 DUBLIN BOULEVARD  
DUBLIN, CALIFORNIA

PROJECT NO. I42705748	PREPARED BY JF	DRAWN BY JH
DATE 04/04/11	REVIEWED BY DD	FILE NAME 76-5748S



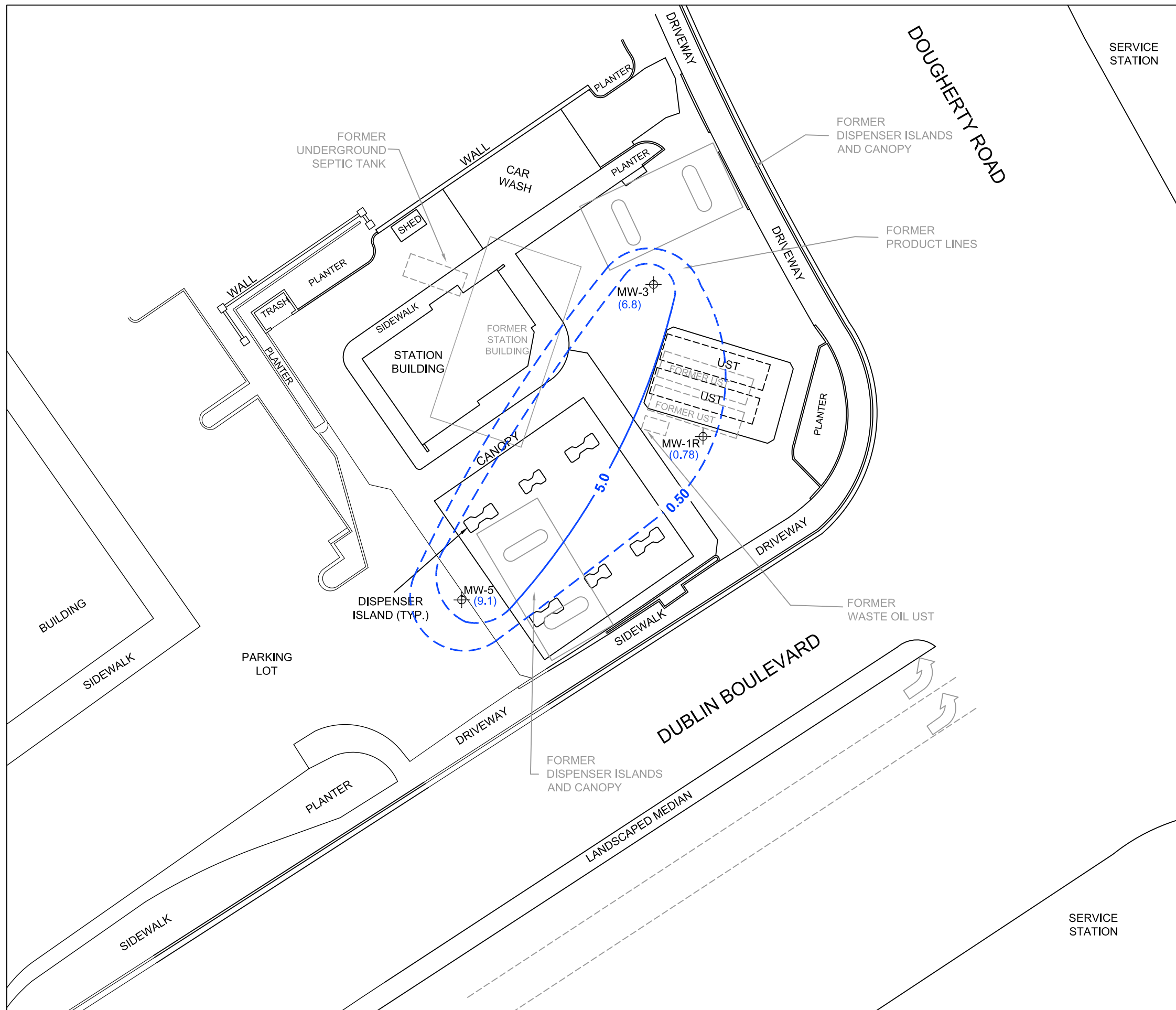
SERVICE STATION



**FIGURE 3**  
**GROUNDWATER ELEVATION CONTOUR MAP**  
 SEPTEMBER 1, 2011  
 76 STATION NO. 5748/6419  
 6401 DUBLIN BOULEVARD  
 DUBLIN, CALIFORNIA

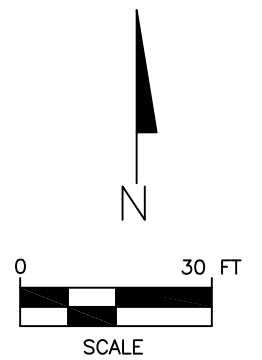
PROJECT NO. 142705748	PREPARED BY JF	DRAWN BY JH
DATE 09/09/11	REVIEWED BY DD	FILE NAME 76-5748S





**EXPLANATION:**

- ⊕ MONITORING WELL
- (6.8) DISSOLVED PHASE MTBE ISOCONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 5.0 — DISSOLVED PHASE MTBE ISOCONCENTRATION CONTOUR (µg/L)
- MTBE = METHYL TERTIARY BUTYL ETHER



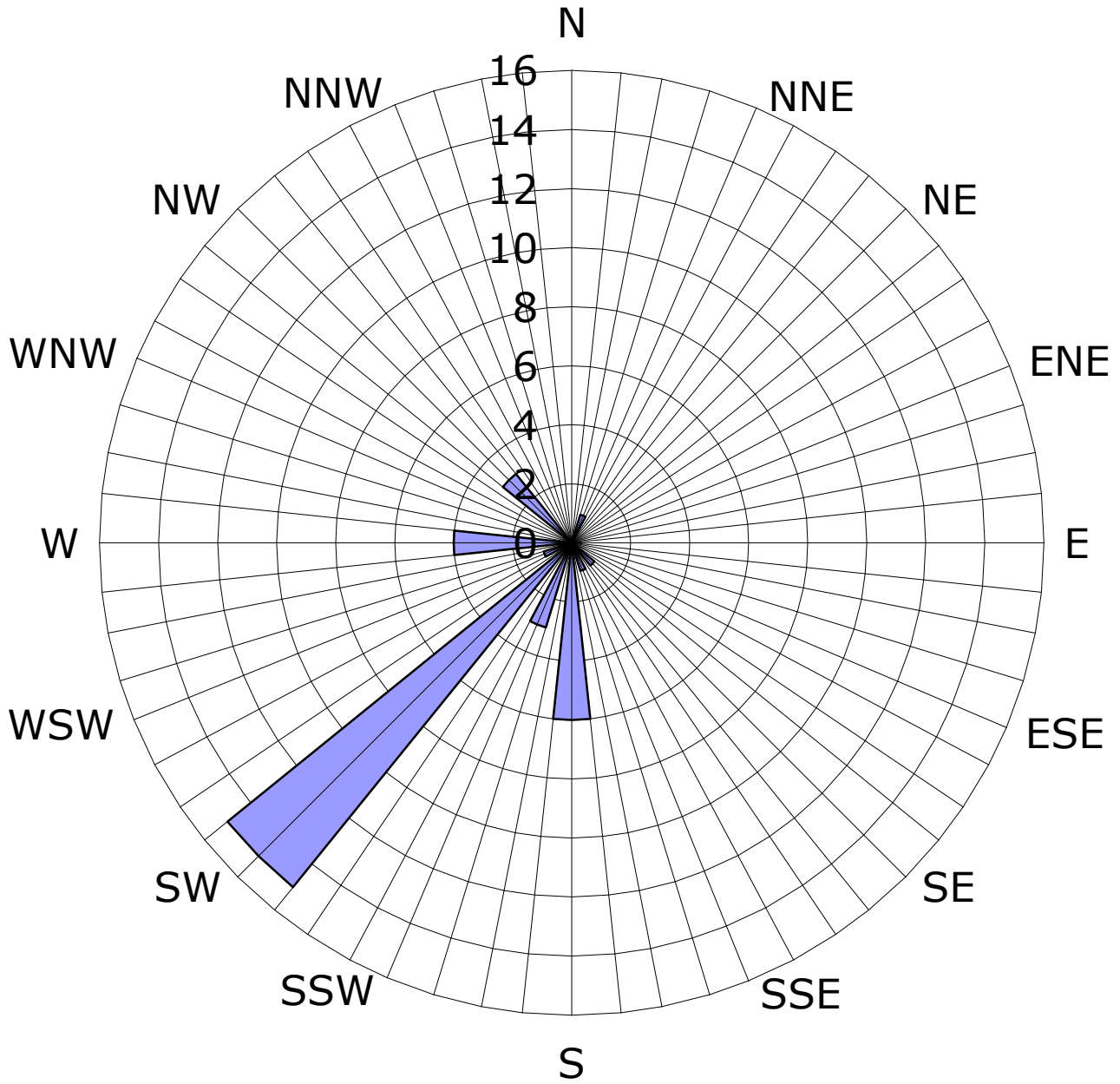
SITE PLAN BASED OFF OF A SURVEY BY MORROW SURVEYING ON 12/29/10.

**FIGURE 4**  
 DISSOLVED PHASE MTBE ISOCONCENTRATION MAP  
 SEPTEMBER 1, 2011  
 76 STATION NO. 5748/6419  
 6401 DUBLIN BOULEVARD  
 DUBLIN, CALIFORNIA

PROJECT NO. I42705748	PREPARED BY JF	DRAWN BY JH
DATE 10/12/11	REVIEWED BY DD	FILE NAME 76-5748S



**Figure 5**  
**Historic Groundwater Flow Directions**  
**76 Station No. 5748/6419**  
 6401 Dublin Blvd.  
 Dublin, California



Legend

Groundwater flow directions are based on data from third quarter 1994 to first quarter 2011. 34 data points shown.

■ Groundwater Flow Direction

## ***Tables***

Table 1	Current Groundwater Gauging and Analytical Data
Table 2	Historical Groundwater Gauging and Analytical Data
Table 3	Well Construction Details
Table 4	Groundwater Gradient and Flow Direction Data



**TABLE 1**  
**CURRENT GROUNDWATER GAUGING AND ANALYTICAL DATA**  
**76 STATION NO. 5748/6419**  
**6401 DUBLIN BLVD**  
**DUBLIN, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA						
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	Ethanol (ug/L)
MW-1R	9/1/2011	333.08	6.83	NP	326.25	<50.0	<0.50	<0.50	<0.50	<1.5	<b>0.78</b>	<250
MW-3	9/1/2011	333.40	6.86	NP	326.54	<50.0	<0.50	<0.50	<0.50	<1.5	<b>6.8</b>	<250
MW-5	9/1/2011	333.05	6.82	NP	326.23	<50.0	<0.50	<0.50	<0.50	<1.5	<b>9.1</b>	<250

**Gauging Notes:**

TOC - Top of Casing

ft - Feet

NP - LNAPL not present

LNAPL - Light non-aqueous phase liquid

\* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)

-- - No information available

**Analytical Notes:**

< - Not detected at or above indicated laboratory reporting limit

ug/L - micrograms/liter

TPHg- Total petroleum hydrocarbons as gasoline

MTBE- Methyl tertiary-butly ether





**TABLE 2  
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA  
76 STATION NO. 5748/6419  
6401 DUBLIN BLVD  
DUBLIN, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-3	8/2/1999	330.49	6.95	NP	323.54	--	ND	ND	ND	ND	ND	140	--	--	--	--	--	--	--	--
	2/11/2000	330.49	6.71	NP	323.78	--	ND	ND	ND	ND	ND	46	--	--	--	--	--	--	--	--
	7/26/2000	330.60	7.35	NP	323.25	--	ND	ND	ND	ND	ND	927	--	--	--	--	--	--	--	--
	2/2/2001	330.60	7.17	NP	323.43	--	ND	ND	ND	ND	ND	2240	--	--	--	--	--	--	--	--
	5/16/2001	330.60	NG	NG	NG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/24/2001	330.60	7.88	NP	322.72	--	<50	<0.50	<0.50	<0.50	<0.50	2500	--	--	--	--	--	--	--	--
	10/11/2001	330.59	7.83	NP	322.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/6/2002	330.59	6.73	NP	323.86	--	<1000	<10	<10	<10	<10	4300	3300	<33	<33	<33	<670	<17000	<33	<33
	7/30/2002	330.59	7.38	NP	323.21	--	<2500	<25	<25	<25	<50	--	4900	--	--	--	--	--	--	--
	2/17/2003	330.59	6.49	NP	324.10	--	<2500	<25	<25	<25	<50	--	4400	--	--	--	--	--	--	--
	8/18/2003	330.59	6.70	NP	323.89	--	4400	<20	<20	<20	<40	--	3300	--	--	--	--	<20000	--	--
	2/24/2004	330.59	6.11	NP	324.48	--	<2500	<25	<25	<25	<50	--	3000	--	--	--	--	<25000	--	--
	9/17/2004	330.59	7.61	NP	322.98	--	<1300	<13	<13	<13	<25	--	2300	--	--	--	--	<1300	--	--
	3/22/2005	330.59	5.79	NP	324.80	--	<1300	<0.50	<0.50	<0.50	<1.0	--	1600	--	--	--	--	<1300	--	--
	9/29/2005	330.59	9.24	NP	321.35	--	680	<0.50	<0.50	<0.50	<1.0	--	1600	--	--	--	--	<250	--	--
	1/9/2006	330.59	7.74	NP	322.85	--	410	<0.50	<0.50	<0.50	<1.0	--	1200	--	--	--	--	<250	--	--
	9/27/2006	330.59	8.54	NP	322.05	--	780	<5.0	<5.0	<5.0	<5.0	--	1500	--	--	--	--	<2500	--	--
	3/29/2007	330.59	8.82	NP	321.77	--	230	<0.50	<0.50	<0.50	<0.50	--	230	--	--	--	--	<250	--	--
	9/21/2007	330.59	9.38	NP	321.21	--	140	<0.50	<0.50	<0.50	<0.50	--	160	--	--	--	--	<250	--	--
	3/27/2008	330.59	7.08	NP	323.51	--	84	<0.50	<0.50	<0.50	<1.0	--	98	--	--	--	--	<250	--	--
9/2/2008	330.59	7.84	NP	322.75	--	<50	<0.50	<0.50	<0.50	<1.0	--	50	--	--	--	--	<250	--	--	
3/6/2009	330.59	5.85	NP	324.74	--	<50	<0.50	<0.50	<0.50	<1.0	--	43	--	--	--	--	<250	--	--	
8/21/2009	330.59	8.04	NP	322.55	--	<50	<0.50	<0.50	<0.50	<1.0	--	33	--	--	--	--	<250	--	--	
3/10/2010	330.59	6.43	NP	324.16	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	16.7	--	--	--	--	<250	--	--	
9/24/2010	330.59	8.02	NP	322.57	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	23.5	--	--	--	--	<250	--	--	
3/8/2011	333.40	6.62	NP	326.78	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	19.5	--	--	--	--	<250	--	--	
9/1/2011	333.40	6.86	NP	326.54	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	6.8	--	--	--	--	<250	--	--	
MW-4	5/21/1999	330.36	6.43	NP	323.93	--	ND	ND	ND	ND	960	910	--	--	--	--	--	--	--	
	8/2/1999	330.36	7.34	NP	323.02	--	ND	10	ND	13	ND	--	--	--	--	--	--	--	--	
	2/11/2000	330.36	6.92	NP	323.44	--	ND	ND	ND	ND	2700	--	--	--	--	--	--	--	--	
	7/26/2000	330.35	7.68	NP	322.67	--	ND	ND	ND	ND	3710	--	--	--	--	--	--	--	--	
	2/2/2001	330.35	7.40	NP	322.95	--	ND	ND	ND	ND	5340	--	--	--	--	--	--	--	--	
	8/24/2001	330.35	8.14	NP	322.21	--	<50	<0.50	<0.50	<0.50	<0.50	7800	--	--	--	--	--	--	--	
	10/11/2001	330.35	8.29	NP	322.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2/6/2002	330.35	7.28	NP	323.07	--	<100	<1.0	<1.0	<1.0	<1.0	2300	3100	<25	<25	<25	<500	<12000	<25	<25
	7/30/2002	330.35	7.76	NP	322.59	--	<500	<5.0	<5.0	5.8	<10	--	1600	--	--	--	--	--	--	--
	2/17/2003	330.35	6.85	NP	323.50	--	<1000	<10	<10	<10	<20	--	2200	--	--	--	--	--	--	--
	8/18/2003	330.35	7.30	NP	323.05	--	2000	<10	<10	<10	<20	--	1400	--	--	--	--	<10000	--	--
	2/24/2004	330.35	6.55	NP	323.80	--	<2000	<20	<20	<20	<40	--	2000	--	--	--	--	--	--	--
	9/17/2004	330.35	8.00	NP	322.35	--	340	<2.5	<2.5	<2.5	<5.0	--	610	--	--	--	--	<250	--	--
	3/22/2005	330.35	6.37	NP	323.98	--	<200	<0.50	<0.50	<0.50	<1.0	--	290	--	--	--	--	<200	--	--
	9/29/2005	330.35	9.43	NP	320.92	--	84	<0.50	<0.50	0.53	<1.0	--	57	--	--	--	--	<250	--	--
	1/9/2006	330.35	7.97	NP	322.38	--	100	<0.50	<0.50	1.5	<1.0	--	150	--	--	--	--	<250	--	--
9/27/2006	330.35	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	
MW-5	5/21/1999	330.20	5.99	NP	324.21	--	ND	ND	ND	ND	32	33	--	--	--	--	--	--	--	
	8/2/1999	330.20	6.83	NP	323.37	--	ND	ND	ND	ND	230	--	--	--	--	--	--	--	--	
	2/11/2000	330.20	6.34	NP	323.86	--	ND	ND	ND	ND	98	--	--	--	--	--	--	--	--	
	7/26/2000	330.20	7.06	NP	323.14	--	ND	ND	ND	ND	25.9	--	--	--	--	--	--	--	--	
	2/2/2001	330.20	6.81	NP	323.39	--	ND	ND	ND	ND	18	--	--	--	--	--	--	--	--	
	8/24/2001	330.20	7.60	NP	322.60	--	<50	<0.50	<0.50	<0.50	<0.50	18	--	--	--	--	--	--	--	
	10/11/2001	330.18	7.34	NP	322.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2/6/2002	330.18	6.55	NP	323.63	--	<50	<0.50	<0.50	<0.50	<0.50	7.7	7.9	<1.0	<1.0	<1.0	<20	<500	<1.0	<1.0
	7/30/2002	330.18	7.15	NP	323.03	--	<50	<0.50	<0.50	<0.50	<1.0	--	4.6	--	--	--	--	--	--	--
	2/17/2003	330.18	6.27	NP	323.91	--	<50	<0.50	<0.50	<0.50	<1.0	--	2.8	--	--	--	--	--	--	--
8/18/2003	330.18	6.57	NP	323.61	--	75	<0.50	<0.50	<0.50	<1.0	--	3.8	--	--	--	--	<500	--	--	
2/24/2004	330.18	5.88	NP	324.30	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.3	--	--	--	--	<500	--	--	

**TABLE 2  
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA  
76 STATION NO. 5748/6419  
6401 DUBLIN BLVD  
DUBLIN, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-5	9/17/2004	330.18	7.41	NP	322.77	--	<50	<0.50	<0.50	<0.50	1.4	--	6.0	--	--	--	--	--	--	--
	3/22/2005	330.18	5.58	NP	324.60	--	<50	<0.50	<0.50	<0.50	<1.0	--	5.8	--	--	--	--	<50	--	--
	9/29/2005	330.18	9.42	NP	320.76	--	<50	<0.50	<0.50	<0.50	<1.0	--	7.8	--	--	--	--	<250	--	--
	1/9/2006	330.18	7.93	NP	322.25	--	<50	<0.50	<0.50	<0.50	<1.0	--	14	--	--	--	--	<250	--	--
	9/27/2006	330.18	8.60	NP	321.58	--	300	<0.50	<0.50	<0.50	<0.50	--	860	--	--	--	--	<250	--	--
	3/29/2007	330.18	8.82	NP	321.36	--	520	<0.50	<0.50	<0.50	<0.50	--	690	--	--	--	--	<250	--	--
	9/21/2007	330.18	9.66	NP	320.52	--	300	<0.50	<0.50	<0.50	<0.50	--	490	--	--	--	--	<250	--	--
	3/27/2008	330.18	7.12	NP	323.06	--	580	<0.50	<0.50	<0.50	<1.0	--	1400	--	--	--	--	<250	--	--
	9/2/2008	330.18	7.70	NP	322.48	--	360	<0.50	<0.50	<0.50	<1.0	--	840	--	--	--	--	<250	--	--
	3/6/2009	330.18	5.79	NP	324.39	--	240	<0.50	<0.50	<0.50	<1.0	--	480	--	--	--	--	<250	--	--
	8/21/2009	330.18	7.90	NP	322.28	--	260	<0.50	<0.50	<0.50	<1.0	--	310	--	--	--	--	<250	--	--
	3/10/2010	330.18	6.30	NP	323.88	--	94.8	<0.50	<0.50	<0.50	<1.5	--	144	--	--	--	--	<250	--	--
9/24/2010	330.18	7.93	NP	322.25	--	169	<0.50	<0.50	<0.50	<1.5	--	209	--	--	--	--	<250	--	--	
3/8/2011	333.05	6.54	NP	326.51	--	94.6	<0.50	<0.50	<0.50	<1.5	--	116	--	--	--	--	<250	--	--	
9/1/2011	333.05	6.82	NP	326.23	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	9.1	--	--	--	--	<250	--	--	
MW-6	5/21/1999	330.49	6.24	NP	324.25	--	ND	ND	ND	ND	ND	2200	2300	<8.3	<8.3	<8.3	<170	--	--	--
	8/2/1999	330.49	7.10	NP	323.39	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	2/11/2000	330.49	6.60	NP	323.89	--	ND	ND	ND	ND	ND	2500	--	--	--	--	--	--	--	--
	7/26/2000	330.49	7.31	NP	323.18	--	ND	ND	ND	ND	ND	4280	--	--	--	--	--	--	--	--
	2/2/2001	330.49	7.02	NP	323.47	--	ND	ND	ND	ND	ND	1990	--	--	--	--	--	--	--	--
	8/24/2001	330.49	7.84	NP	322.65	--	<200	<2.0	<2.0	<2.0	<2.0	1100	--	--	--	--	--	--	--	--
	10/11/2001	330.47	8.03	NP	322.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/6/2002	330.47	6.78	NP	323.69	--	<50	<0.50	<0.50	<0.50	<0.50	610	680	<8.3	<8.3	<8.3	<170	<4200	<8.3	<8.3
	7/30/2002	330.47	7.40	NP	323.07	--	180	<0.50	<0.50	<0.50	<1.0	--	160	--	--	--	--	--	--	--
	2/17/2003	330.47	6.49	NP	323.98	--	<250	<2.5	<2.5	<2.5	<5.0	--	400	--	--	--	--	--	--	--
	8/18/2003	330.47	6.81	NP	323.66	--	320	<1.0	<1.0	<1.0	<2.0	--	280	--	--	--	--	<1000	--	--
	2/24/2004	330.47	6.11	NP	324.36	--	130	<1.0	<1.0	<1.0	<2.0	--	200	--	--	--	--	<1000	--	--
	9/17/2004	330.47	7.64	NP	322.83	--	110	<1.0	<1.0	<1.0	<2.0	--	200	--	--	--	--	<100	--	--
	3/22/2005	330.47	5.81	NP	324.66	--	<50	<0.50	<0.50	<0.50	<1.0	--	83	--	--	--	--	<50	--	--
	9/29/2005	330.47	9.19	NP	321.28	--	110	<0.50	<0.50	<0.50	<1.0	--	140	--	--	--	--	<250	--	--
	1/9/2006	330.47	7.65	NP	322.82	--	100	<0.50	<0.50	<0.50	<1.0	--	160	--	--	--	--	<250	--	--
	9/27/2006	330.47	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD
MW-7	5/21/1999	330.43	6.13	NP	324.30	--	ND	ND	ND	ND	ND	22	22	--	--	--	--	--	--	--
	8/2/1999	330.43	6.92	NP	323.51	--	ND	ND	ND	ND	ND	31	--	--	--	--	--	--	--	--
	2/11/2000	330.43	6.50	NP	323.93	--	ND	ND	ND	ND	ND	20	--	--	--	--	--	--	--	--
	7/26/2000	330.43	7.18	NP	323.25	--	ND	ND	ND	ND	ND	17.9	--	--	--	--	--	--	--	--
	2/2/2001	330.43	6.95	NP	323.48	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	8/24/2001	330.43	7.72	NP	322.71	--	<50	<0.50	<0.50	<0.50	<0.50	4.4	--	--	--	--	--	--	--	--
	10/11/2001	330.41	7.87	NP	322.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/6/2002	330.41	6.62	NP	323.79	--	<50	<0.50	<0.50	<0.50	<0.50	3.9	3.2	1.4	<1.0	<1.0	<20	<500	<1.0	<1.0
	7/30/2002	330.41	NG	NG	NG	--	<50	<0.50	<0.50	<0.50	<1.0	--	4.3	--	--	--	--	--	--	--
	2/17/2003	330.41	NG	NG	NG	--	<50	<0.50	<0.50	<0.50	<1.0	--	4.7	--	--	--	--	--	--	--
	8/18/2003	330.41	6.64	NP	323.77	--	76	<0.50	<0.50	<0.50	<1.0	--	6.3	--	--	--	--	<500	--	--
	2/24/2004	330.41	6.01	NP	324.40	--	<50	<0.50	<0.50	<0.50	<1.0	--	6.2	--	--	--	--	<500	--	--
	9/17/2004	330.41	7.45	NP	322.96	--	<50	<0.50	<0.50	<0.50	<1.0	--	8.7	--	--	--	--	<50	--	--
	3/22/2005	330.41	5.73	NP	324.68	--	<50	<0.50	<0.50	<0.50	<1.0	--	9.4	--	--	--	--	<50	--	--
	9/29/2005	330.41	8.94	NP	321.47	--	<50	<0.50	<0.50	<0.50	<1.0	--	11	--	--	--	--	<250	--	--
1/9/2006	330.41	7.43	NP	322.98	--	<50	<0.50	<0.50	<0.50	<1.0	--	7.6	--	--	--	--	<250	--	--	
9/27/2006	330.41	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD
MW-8	10/11/2001	329.97	7.57	NP	322.40	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<2.0	<2.0	<2.0	<2.0	<20	<500	<2.0	<2.0
	2/6/2002	329.97	6.35	NP	323.62	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<1.0	<1.0	<1.0	<1.0	<20	<500	<1.0	<1.0
	7/30/2002	329.97	6.95	NP	323.02	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	2/17/2003	329.97	6.11	NP	323.86	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	8/18/2003	329.97	6.33	NP	323.64	--	53	<0.50	<0.50	<0.50	<1.0	--	<2	--	--	--	--	<500	--	--
	2/24/2004	329.97	13.37	NP	316.60	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	<500	--	--
	9/17/2004	329.97	7.23	NP	322.74	--	<50	<0.50	<0.50	<0.50	<1.0	--	4.0	--	--	--	--	<50	--	--
3/22/2005	329.97	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD
MW-9	10/11/2001	329.51	7.12	NP	322.39	--	<50	<0.50	<0.50	<0.50	<0.50	22	15	<2.0	<2.0	<2.0	<20	<500	<2.0	<2.0

**TABLE 2**  
**HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA**  
**76 STATION NO. 5748/6419**  
**6401 DUBLIN BLVD**  
**DUBLIN, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-9	2/6/2002	329.51	5.94	NP	323.57	--	<50	<0.50	<0.50	<0.50	<0.50	19	14	<1.0	<1.0	<1.0	<20	<500	<1.0	<1.0
	7/30/2002	329.51	6.53	NP	322.98	--	<50	<0.50	<0.50	<0.50	<1.0	--	9	--	--	--	--	--	--	--
	2/17/2003	329.51	5.63	NP	323.88	--	<50	<0.50	<0.50	<0.50	<1.0	--	4.9	--	--	--	--	--	--	--
	8/18/2003	329.51	5.99	NP	323.52	--	57	<0.50	<0.50	<0.50	<1	--	6.2	--	--	--	--	<500	--	--
	2/24/2004	329.51	5.27	NP	324.24	--	<50	<0.50	<0.50	<0.50	<1.0	--	5.6	--	--	--	--	<500	--	--
	9/17/2004	329.51	6.80	NP	322.71	--	<50	<0.50	<0.50	<0.50	<1.0	--	4.8	--	--	--	--	<50	--	--
	3/22/2005	329.51	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD

**Gauging Notes:**

TOC - Top of Casing  
ft - Feet  
NP - LNAPL not present  
LNAPL - Light non-aqueous phase liquid  
\* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)  
ABD - Well Abandoned  
NG - Not gauged  
WD - Well Destroyed  
DRY - Well is dry  
-- - No information available

**Analytical Notes:**

-- - No information available  
< - below the laboratory's indicated reporting limit  
ABD - Well Abandoned  
DRY - Well was Dry; sample could not be taken  
ND - Not detected, and detection limit is not known  
NS - Well not sampled.  
ug/L - micrograms/liter  
WD - Well Destroyed  
DRO- diesel range organics  
TPHg- Total petroleum hydrocarbons as gasoline  
MTBE- Methyl tertiary-butyl ether  
TBA- Tertiary-butyl alcohol  
DIPE- Di-isopropyl ether  
ETBE- Ethyl tertiary-butyl ether  
TAME- Tertiary-amyl methyl ether

**TABLE 3  
WELL CONSTRUCTION DETAILS  
76 STATION NO. 5748/6419  
6401 DUBLIN BLVD  
DUBLIN, CALIFORNIA**



Well I.D.	Construction Date	Elevation (TOC feet above MSL)	Boring Depth (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Casing Material	Slot Size (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Bentonite Seal Interval (feet bgs)	Cement Seal Interval (feet bgs)	Comments
<b>Groundwater Monitoring Wells</b>												
MW-1R	12/21/10	333.08	20	10	4	PVC	0.02	5-15	4-15	3-4	0-3	Bentonite from 15 to 20 feet
MW-3	02/24/94	333.40	20	8	2	PVC	0.01	4-19	3-19	2-3	0-2	
MW-5	05/10/99	333.05	19	8	2	PVC	0.02	4-19	3.5-19	2.5-3.5	0-2.5	

Notes:

bgs = below ground surface

TOC = top of casing

MSL = mean sea level

-- = Not available

Elevations are in US survey feet, Vertical Datum is NAD 83

All wells were surveyed on December 29, 2010

**TABLE 4**  
**Groundwater Gradient and Flow Direction Data**

76 Station No. 5748/6419  
6401 Dublin Blvd.  
Dublin, California

Site	Monitoring Date	Groundwater Gradient (feet per foot)	Groundwater Flow Direction																
			N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
5748	08/25/94	0.00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	11/18/94	0.00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02/15/95	0.00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	05/17/95	0.00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	08/25/95	0.01	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	11/28/95	0.004	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	02/26/96	0.006	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	08/23/96	0.01	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	02/17/97	0.003	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	08/18/97	0.0005	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	02/02/98	0.001	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	08/24/98	0.002	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	02/10/99	0.003	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	08/02/99	0.004	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	02/11/00	0.007	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	07/26/00	0.006	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	02/02/01	0.004 ; 0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	08/24/01	0.005 ; 0.02	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	02/06/02	0.003 ; 0.01	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	07/30/02	0.002 ; 0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02/17/03	0.005 ; 0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	08/18/03	0.003	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	02/24/04	0.010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	09/17/04	0.010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	03/22/05	0.020	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	09/29/05	0.007	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	01/09/06	0.010	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	09/27/06	0.010	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	03/27/07	0.010	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	09/21/07	0.020	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	03/27/08	0.007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	09/02/08	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	03/06/09	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	08/21/09	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	03/12/10	0.003	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
09/24/10	0.006	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
03/08/11	0.003	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
09/01/11	0.006	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
		<b>0.006 Average</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>15</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>0</b>

**Explanation**

NA = Not available  
Number of Events = 35



*Semi-Annual Summary Report, April through September 2011*  
*76 Station No. 5748/6419*  
*Dublin, CA*  
*Antea Group Project No. I42705748*



## ***Attachment A***

Summary of Previous Environmental Investigations



## **SUMMARY OF PREVIOUS ENVIRONMENTAL INVESTIGATIONS**

September 1993: Two 10,000-gallon gasoline USTs, one 55-gallon waste-oil UST, and the associated product piping were removed from the site subsequent to confirmation sampling. Groundwater was observed entering the UST excavation. Concentrations of petroleum hydrocarbons in confirmation soil samples beneath the fuel USTs were non-detect to low. Petroleum hydrocarbon and volatile organic compounds (VOCs) concentrations in confirmation soil samples beneath the waste oil UST were non-detect to low, and concentrations of metals were considered background levels. Petroleum hydrocarbon and lead concentrations in confirmation soil samples from the dispenser islands were non-detect, and low, respectively. Petroleum hydrocarbon and lead concentrations in confirmation soil samples from the piping trenches were non-detect, and low, respectively.

February 1994: Three on-site monitoring wells (MW-1 through MW-3) were installed.

June 1999: Four on-site monitoring wells (MW-4 through MW-7) were installed to a depth of approximately 19 feet below ground surface (bgs).

November 1999: A four-inch diameter groundwater observation and extraction well (TPW-1) was installed in the gasoline UST pit backfill to allow purging of MTBE impacted groundwater.

September 2001: Two off-site monitoring wells (MW-8 and MW-9) were installed to a depth of 20 feet bgs.

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

December 2004: Off-site monitoring wells MW-8 and MW-9 were abandoned due to construction activities planned at those locations by Pin Brothers Fine Homes.

January 12, 2006: On-site monitoring wells MW-2, MW-4, MW-6, and MW-7 were abandoned at the request of the City of Dublin in anticipation of street widening on both Dougherty Road and Dublin Boulevard.

December 21, 2010: MW-1 was replaced with MW-1R after the casing in MW-1 was found to be compromised. MW-1 was over-drilled and MW-1R was installed in the same boring.

January 2011: Delta Consultants rebranded to Antea Group.

August 2011: Antea Group supervised the advancement of soil borings CPT-1 and CPT-2. Analytical results from the soil samples indicated the MTBE was present at concentrations ranging from 0.0059 mg/kg (CPT-2d31) to 0.01 mg/kg (CPT-1d15). Analytical results from grab-groundwater samples collected during the soil boring advancement indicated that all analyzed constituents were below the laboratory's indicated reporting limits.

## **SENSITIVE RECEPTORS SURVEY**

July 3, 2007: TRC completed a sensitive receptor survey for the site. According to California Department of Water Resources (DWR) and the Zone 7 Water Agency records, four water supply wells are located within a one-half mile of the site. Three of the wells are listed by the Zone 7 Water Agency as water supply wells and are located approximately 1,940 feet east, 2,175 feet north, and 2,070 feet northwest of the site. One well is listed by the



Zone 7 Water Agency as an abandoned water supply well and is located approximately 2,440 feet west-southwest of the site.

Three surface water bodies were identified within a one-half mile of the site. San Ramon Creek is located approximately 2,145 feet northwest of the site, an unnamed canal is located approximately 625 feet southwest of the site, and the Chabot Canal is located approximately 1,650 feet east of the site.

Current Consultant: Antea Group

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*Antea Group Project No. I42705748*



## ***Attachment B***

Blaine Tech Services Groundwater Sampling Procedures

# BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS

## SAMPLING PROCEDURES OVERVIEW

### SAFETY

All groundwater monitoring assignments performed for DELTA comply with safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40 hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any DELTA COP/ELT site.

### INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic sounders which are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of Immiscibles or sheen and when free product is suspected, it is confirmed using an electronic interface probe (e.g. MMC). No samples are collected from a well containing free product.

### EVACUATION

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well. Small volumes of purgewater are often removed by hand bailing with a disposable bailer.

### PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less

than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

## DEWATERED WELLS

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewateres and does not recharge.

Wells known to dewater are evacuated as early as possible during each site visit in order to allow for the greatest amount of recovering. Any well that does not recharge to 80% of its original volume will be sampled prior to the departure of our personnel from the site in order to eliminate the need of a return visit.

In jurisdictions where a certain percentage of recovery is included in the local completion standard, our personnel follow the regulatory expectation.

## PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non hazardous purgewater is transported under standard Bill of Lading or Non-Hazardous manifest to a Blaine Tech Services, Inc. facility before being transported to an approved disposal facility.

## SAMPLE COLLECTION DEVICES

All samples are collected using disposable bailers.

## SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory which will analyze the samples. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

## TRIP BLANKS

Upon request, a Trip Blank is carried to each site and is kept inside the cooler for the duration of the sampling event. It is turned over to the laboratory for analysis with the samples from that site.

## DUPLICATES

Upon request, one Duplicate sample is collected at each site. It is up to the Field Technician to choose the well at which the Duplicate is collected. Typically, a duplicate is collected from one of the most contaminated wells. The Duplicate sample is labeled DUP thus rendering the sample blind.

## SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the analytical laboratory that will perform the intended analytical procedures. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

## DOCUMENTATION CONVENTIONS

Each and every sample container has a label affixed to it. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time at which the sample was collected and the initials of the person collecting the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

## DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is de-tuned to function as a hot pressure washer which is then operated with high quality deionized water which is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps

and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, sounder etc.) that cannot be washed using the hot high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

EXAMPLE: The sounder is cleaned between wells using the non-phosphate soap and deionized water solution followed by deionized water rinses. The sounder is then washed with the steam cleaner between sites or as necessitated by use in a particularly contaminated well.

#### DISSOLVED OXYGEN READINGS

All Dissolved Oxygen readings are taken using YSI meters (e.g. YSI Model 550 meter). These meters are equipped with membrane probe that enables them to collect accurate in-situ readings.

The probe and reel is decontaminated between wells as described above. The meter is calibrated as per the instructions in the operating manual. The probe is lowered into the water column allowed to stabilize before use.

#### OXYIDATON REDUCTION POTENTIAL READINGS

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual. In use the probe is placed in a cup of freshly obtained monitoring well water and allowed to stabilize.



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*Antea Group Project No. I42705748*



## ***Attachment C***

Blaine Tech Services Groundwater Sampling Field Data Sheets

## Well-Head Inspection & Well Gauging Form

Antea Group Project No: 2705748 Site Address: 6401 DUBLIN BLVD.

Field Technician: Cody KUPATZICH BLAKE TECH SERVICES Date: 9/1/11 Weather: CLEAR  
(Print Full Name & Company\*)

### Well Condition

Sample Order	Field Point	Bolts	Seal	Lid Secure	Lock	Expanding Cap	Water in Well Box	Well Casing Dia.	Time Gauged	Depth to Water (Feet)	Depth to Bottom (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Comments
1	MW-12	G	G	G	G	G	N	4	1230	6.83	14.60			
2	MW-3	G	G	G	G	G	N	2	1235	6.86	18.34			
3	MW-5	G	G	G	G	G	N	2	1240	6.82	19.24			

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\*\* All well caps opened at least 15 minutes or longer before gauging wells:  
**CIRCLE ONE: YES or NO\*\***



\*Form provided by Antea Group

Note: Use G=good and P=poor for well condition

# Groundwater Sampling Form

Site Address:	6401 DUBLIN BLVD.		
Project No:	2705748	Field Technician:	C. Kilpatrick
Field Point:	MW-1R	Date:	9/1/11
Depth to Water (DTW) (ft bgs):	6.93	Well Diameter (in):	2 <u>4</u> 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	14.60	Water Column Height (ft):	7.77

### Purging Info and Calculations:

<b>Purge Method:</b> Low-Flow <u>3 casing volumes</u> Other: _____	<b>Purge Equipment:</b> Disposable Bailor <u>Electric Submersible Peristaltic Pump</u> Bladder Pump Other: _____	<b>Sample Collection Method:</b> <u>Disposable Bailor w/ BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>7.77</u>	X Conversion Factor (gal/ft): <u>0.66</u>	= Casing Volume (gal): <u>5.1</u>
Casing Volume (gal): <u>5.1</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>15.3</u>

Conversion Factors (gal/ft): 2" = 0.17    4" = 0.66    6" = 1.5    8" = 2.6    Other = radius<sup>2</sup> \* 0.163

Purge:		Start Time: <u>1314</u>		Stop Time: <u>1326</u>					
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)	
<b>Pre-Purge</b>									
1316	25.5	7.31	2477	-58.3	38	0.98	2.5		
1318	25.4	7.31	2461	-57.6	30	0.98	5.1		
1320	25.7	7.26	2356	-55.0	11	1.02	7.6		
1322	25.8	7.32	2360	-52.6	8	1.03	10.2		
1324	25.1	7.34	2400	-51.8	13	0.91	12.7		
1326	24.8	7.36	2420	-51.0	15	0.89	15.3		
<b>Post-Purge</b>									

Did Well dewater? Yes  No  Total Purge volume (gal): 15.3

**Other Comments:** 80%: 9.38      \* PURGED THROUGH FLOW CELL  
 DTW: 10.35

<b>Sample Info:</b>	
Sample ID: MW-1R-20110930	Sample Date and Time: 9/1/11 1530
Selected Analysis: SEE COC	

This form was provided by Antea Group and completed by: (Print Full Name) COREY KILPATRICK, an employee of Blaine Tech Services, Inc.

Signature: [Signature] Date: 9/1/11

LNAPL= light non-aqueous phase liquids
gal = gallon/s  
bgs = below ground surface
temp = temperature  
ORP = Oxidation-Reduction Potential
NTU = Nephelometric Turbidity Units  
D.O.= dissolved oxygen
mV = millivolts

# Groundwater Sampling Form

Site Address:	6401 DUBLIN BLVD.		
Project No:	2705748	Field Technician:	C. KILPATRICK
Field Point:	MW-3	Date:	9/1/11
Depth to Water (DTW) (ft bgs):	6.86	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	18.34	Water Column Height (ft):	11.48

### Purging Info and Calculations:

<b>Purge Method:</b> Low-Flow <u>3 casing volumes</u> Other: _____	<b>Purge Equipment:</b> Disposable Bailor <u>Electric Submersible</u> Peristaltic Pump Bladder Pump Other: _____	<b>Sample Collection Method:</b> <u>Disposable Bailor w/ BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>11.48</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>2.0</u> Casing Volume (gal): <u>2.0</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>6.0</u>		
Conversion Factors (gal/ft): 2" = 0.17    4" = 0.66    6" = 1.5    8" = 2.6    Other = radius <sup>2</sup> * 0.163		

Purge:	Start Time:	Stop Time:	Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge							—		—		
			1341	25.8	7.55	2530	-7.7	79	2.49	1.0	
			1342	26.1	7.43	2526	-17.6	518	2.54	2.0	
			1343	25.1	7.31	2316	-13.9	45	2.62	3.0	
			1344	24.8	7.27	2296	+6.6	36	2.51	4.0	
			1345	24.9	7.24	2276	-17.4	28	2.34	5.0	
			1346	25.0	7.20	2269	-17.5	25	2.17	6.0	
Post-Purge							—		—		
Did Well dewater? Yes No				Total Purge volume (gal): <u>6.0</u>							

**Other Comments:** 80%: 9.16 \* PURGED THROUGH A FLOW CELL  
 DTW: 8.65 \*\* MS/MSD TAKEN

<b>Sample Info:</b>	
Sample ID: MW-3 - 20110930	Sample Date and Time: 9/1/11 1350
Selected Analysis: SEE COC	

This form was provided by Antea Group and completed by: (Print Full Name) COREY KILPATRICK, an employee of Blaine Tech Services, Inc.

Signature: Date: 9/1/11

LNAPL = light non-aqueous phase liquids
gal = gallon/s  
bgs = below ground surface
temp = temperature  
ORP = Oxidation-Reduction Potential
NTU = Nephelometric Turbidity Units  
D.O. = dissolved oxygen
mV = millivolts

# Groundwater Sampling Form

Site Address:	6401 DUBLIN BLVD.		
Project No:	2705748	Field Technician:	C. KILPATRICK
Field Point:	MW-5	Date:	9/1/11
Depth to Water (DTW) (ft bgs):	6.82	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.24	Water Column Height (ft):	12.42

### Purging Info and Calculations:

<b>Purge Method:</b> Low-Flow casing volumes Other: _____	<b>Purge Equipment:</b> Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	<b>Sample Collection Method:</b> Disposable Bailer w/ BED Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>12.42</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>2.1</u> Casing Volume (gal): <u>2.1</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>6.3</u>		
Conversion Factors (gal/ft): 2" = 0.17    4" = 0.66    6" = 1.5    8" = 2.6    Other = radius <sup>2</sup> * 0.163		

Purge:	Start Time:	Stop Time:	Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
			<b>Pre-Purge</b>								
			1415	27.2	7.20	2275	-8.5	22	3.23	1.0	
			1416	28.2	7.15	2266	-21.9	17	2.88	2.1	
			1417	25.5	7.22	1378	-19.2	207	2.18	3.1	
			1418	25.1	7.21	1377	-19.5	120	1.92	4.2	
			1419	24.5	7.20	1379	-20.4	79	1.51	5.2	
			1420	24.0	7.21	1377	-21.1	48	1.27	6.3	
			<b>Post-Purge</b>								
Did Well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Total Purge volume (gal): <u>6.3</u>							

**Other Comments:** 80%: 9.30      \* PURGED THROUGH FLOW CELL  
DTW: 6.95

<b>Sample Info:</b>	
Sample ID: MW-5-20110930	Sample Date and Time: 9/1/11 1430
Selected Analysis: SEE COC	

This form was provided by Antea Group and completed by: (Print Full Name) COREY KILPATRICK, an employee of Blaine Tech Services, Inc.

Signature: Date: 9/1/11

LNAPL = light non-aqueous phase liquids
gal = gallon/s  
bgs = below ground surface
temp = temperature  
ORP = Oxidation-Reduction Potential
NTU = Nephelometric Turbidity Units  
D.O. = dissolved oxygen
mV = millivolts



**COPY**

**ELT CHAIN-OF-CUSTODY / Analytical Request Document**

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

3Q11 GW Event

<b>Required Lab Information:</b>		<b>Required Project Information:</b>			<b>Required Invoice Information:</b>							
Lab Name:	Pace-Seattle	Site ID #:	2705748	Task:	WG_Q_201109	Send Invoice to:	David Sowle					
Address:		AnteaGrp proj#:				Address:	11050 White Rock Road, Suite 110		Turn around time (days)	10		
940 S. Harney Street Seattle WA 98108		Site Address:	6401 Dublin Blvd		City/State:	Rancho Cordova CA 95670	Phone #:	1-800-477-7411		QC level Required: Standard	Special	Mark on
Lab PM:	Regina Ste. Marie	City:	Dublin	State:	CA 94568	Reimbursement project?		Non-reimbursement project?	Y	Mark one	NJ Reduced Deliverable Package?	
Phone/Fax:	P: 206-957-2433 F: 206-767-5063	AG PM Name:	Dennis Dettloff		Send EDD to:	copeltdata@intelligentehs.com			MA MCP Cert?		CT RCP Cert?	Mark On
Lab PM email:	Regina.SteMarie@pacelabs.com	Phone/Fax:	P: 1-800-477-7411 F: 916-638-8385		CC Hardcopy report to:				Lab Project ID (lab use)			
Applicable Lab Quote #:		AG PM Email:	dennis.dettloff@anteagroup.com		CC Hardcopy report to:				Requested Analyses			

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes		MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives										Requested Analyses	Comments/Lab Sample I.D.																	
		MATRIX																																				
		GROUND WATER	WASTE WATER							WATER	SURFACE WATER	W	WO	SL	WH	OT	TA	Unpreserved	H <sub>2</sub> SO <sub>4</sub>			HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>	Methanol	Other											
1	MW-1R_20110930	WG	C	9/1/11	1530	6	2	2													X	X	X															
2	MW-3_20110930	WG	C	↓	1350	6	2	2														X	X	X														
3	MW-5_20110930	WG	C	↓	1430	6	2	2														X	X	X														
4																																						
5																																						
6																																						
7																																						
8																																						
9																																						
10																																						
11																																						
12																																						

<b>Additional Comments/Special Instructions:</b>  Global ID: T0600101443	RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	Sample Receipt Conditions						
	<i>Cory K. Rick / BLS</i>		9/1/11	1640					Y/N	Y/N	Y/N	Y/N			
									Y/N	Y/N	Y/N	Y/N			
									Y/N	Y/N	Y/N	Y/N			
SHIPPING METHOD: (mark as appropriate)		SAMPLER NAME AND SIGNATURE										Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?
UPS COURIER FEDEX		PRINT Name of SAMPLER:		<i>CORY K. RICK</i>											
US MAIL		SIGNATURE of SAMPLER:		DATE Signed	Time:										
		<i>Cory Rick</i>		9/1/11	1535										



*Semi-Annual Summary Report, April through September 2011*  
*76 Station No. 5748/6419*  
*Dublin, CA*  
*Antea Group Project No. I42705748*



## ***Attachment D***

Certified Laboratory Analytical Report and Data Validation Form

September 15, 2011

Dennis Dettloff  
Antea USA  
11050 White Rock Rd. #110  
Rancho Cordova, CA 95670

RE: Project: 2705748  
Pace Project No.: 259073

Dear Dennis Dettloff:

Enclosed are the analytical results for sample(s) received by the laboratory on September 02, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,



Regina SteMarie

regina.stemarie@pacelabs.com  
Project Manager

Enclosures

cc: Tara Bosch, Antea USA  
Jonathon Fillingame, Antea USA  
Lia Holden, Antea USA  
Dan Keltner, Antea USA  
Josh Mahoney, Antea USA  
Stephen Meninger, Antea USA  
Tony Perini, Antea USA  
Nicole Persaud, Antea USA  
Don Pinkerton, Antea USA  
Doug Umland, Antea USA  
Ed Weyrens, Antea USA



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 2705748

Pace Project No.: 259073

### Washington Certification IDs

940 South Harney Street, Seattle, WA 98108

Alaska CS Certification #: UST-025

California Certification #: 01153CA

Florida/NELAP Certification #: E87617

Oregon Certification #: WA200007

Washington Certification #: C555

---

### SAMPLE ANALYTE COUNT

Project: 2705748

Pace Project No.: 259073

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
259073001	MW-1R_20110930	EPA 5030B/8260	LPM	10	PASI-S
		CA LUFT	LPM	2	PASI-S
259073002	MW-3_20110930	EPA 5030B/8260	LPM	10	PASI-S
		CA LUFT	LPM	2	PASI-S
259073003	MW-5_20110930	EPA 5030B/8260	LNH	10	PASI-S
		CA LUFT	LNH	2	PASI-S

### REPORT OF LABORATORY ANALYSIS

### HITS ONLY

Project: 2705748

Pace Project No.: 259073

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>259073001</b>	<b>MW-1R_20110930</b>					
EPA 5030B/8260	Methyl-tert-butyl ether	0.78	ug/L	0.50	09/10/11 03:48	
<b>259073002</b>	<b>MW-3_20110930</b>					
EPA 5030B/8260	Methyl-tert-butyl ether	6.8	ug/L	0.50	09/10/11 04:07	
<b>259073003</b>	<b>MW-5_20110930</b>					
EPA 5030B/8260	Methyl-tert-butyl ether	9.1	ug/L	0.50	09/13/11 16:32	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 2705748

Pace Project No.: 259073

Sample: MW-1R_20110930		Lab ID: 259073001	Collected: 09/01/11 15:30	Received: 09/02/11 09:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		0.50	1		09/10/11 03:48	71-43-2	
Ethanol	ND ug/L		250	1		09/10/11 03:48	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		09/10/11 03:48	100-41-4	
Methyl-tert-butyl ether	<b>0.78</b> ug/L		0.50	1		09/10/11 03:48	1634-04-4	
Toluene	ND ug/L		0.50	1		09/10/11 03:48	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		09/10/11 03:48	1330-20-7	
4-Bromofluorobenzene (S)	93 %		79-121	1		09/10/11 03:48	460-00-4	
Dibromofluoromethane (S)	94 %		81-119	1		09/10/11 03:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	88 %		72-127	1		09/10/11 03:48	17060-07-0	
Toluene-d8 (S)	97 %		77-120	1		09/10/11 03:48	2037-26-5	
<b>CA LUFT MSV GRO</b>		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		09/10/11 03:48		
4-Bromofluorobenzene (S)	93 %		76-121	1		09/10/11 03:48	460-00-4	

Sample: MW-3_20110930		Lab ID: 259073002	Collected: 09/01/11 13:50	Received: 09/02/11 09:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		0.50	1		09/10/11 04:07	71-43-2	
Ethanol	ND ug/L		250	1		09/10/11 04:07	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		09/10/11 04:07	100-41-4	
Methyl-tert-butyl ether	<b>6.8</b> ug/L		0.50	1		09/10/11 04:07	1634-04-4	
Toluene	ND ug/L		0.50	1		09/10/11 04:07	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		09/10/11 04:07	1330-20-7	
4-Bromofluorobenzene (S)	95 %		79-121	1		09/10/11 04:07	460-00-4	
Dibromofluoromethane (S)	93 %		81-119	1		09/10/11 04:07	1868-53-7	
1,2-Dichloroethane-d4 (S)	88 %		72-127	1		09/10/11 04:07	17060-07-0	
Toluene-d8 (S)	99 %		77-120	1		09/10/11 04:07	2037-26-5	
<b>CA LUFT MSV GRO</b>		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		09/10/11 04:07		
4-Bromofluorobenzene (S)	95 %		76-121	1		09/10/11 04:07	460-00-4	

Sample: MW-5_20110930		Lab ID: 259073003	Collected: 09/01/11 14:30	Received: 09/02/11 09:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		0.50	1		09/13/11 16:32	71-43-2	
Ethanol	ND ug/L		250	1		09/13/11 16:32	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		09/13/11 16:32	100-41-4	
Methyl-tert-butyl ether	<b>9.1</b> ug/L		0.50	1		09/13/11 16:32	1634-04-4	

Date: 09/15/2011 02:23 PM

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 2705748

Pace Project No.: 259073

Sample: MW-5_20110930		Lab ID: 259073003	Collected: 09/01/11 14:30	Received: 09/02/11 09:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260						
Toluene	ND	ug/L	0.50	1		09/13/11 16:32	108-88-3	
Xylene (Total)	ND	ug/L	1.5	1		09/13/11 16:32	1330-20-7	
4-Bromofluorobenzene (S)	109	%	79-121	1		09/13/11 16:32	460-00-4	
Dibromofluoromethane (S)	105	%	81-119	1		09/13/11 16:32	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	72-127	1		09/13/11 16:32	17060-07-0	
Toluene-d8 (S)	101	%	77-120	1		09/13/11 16:32	2037-26-5	
<b>CA LUFT MSV GRO</b>		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	ND	ug/L	50.0	1		09/13/11 16:32		
4-Bromofluorobenzene (S)	109	%	76-121	1		09/13/11 16:32	460-00-4	

**QUALITY CONTROL DATA**

Project: 2705748

Pace Project No.: 259073

QC Batch: MSV/5349 Analysis Method: EPA 5030B/8260  
 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge  
 Associated Lab Samples: 259073001, 259073002

METHOD BLANK: 85192 Matrix: Water

Associated Lab Samples: 259073001, 259073002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	09/09/11 23:49	
Ethanol	ug/L	ND	250	09/09/11 23:49	
Ethylbenzene	ug/L	ND	0.50	09/09/11 23:49	
Methyl-tert-butyl ether	ug/L	ND	0.50	09/09/11 23:49	
Toluene	ug/L	ND	0.50	09/09/11 23:49	
Xylene (Total)	ug/L	ND	1.5	09/09/11 23:49	
1,2-Dichloroethane-d4 (S)	%	86	72-127	09/09/11 23:49	
4-Bromofluorobenzene (S)	%	95	79-121	09/09/11 23:49	
Dibromofluoromethane (S)	%	93	81-119	09/09/11 23:49	
Toluene-d8 (S)	%	99	77-120	09/09/11 23:49	

LABORATORY CONTROL SAMPLE: 85193

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.6	93	66-123	
Ethanol	ug/L	800	803	100	40-160	
Ethylbenzene	ug/L	20	17.4	87	67-122	
Methyl-tert-butyl ether	ug/L	20	17.8	89	65-138	
Toluene	ug/L	20	18.0	90	64-118	
Xylene (Total)	ug/L	60	52.1	87	68-122	
1,2-Dichloroethane-d4 (S)	%			84	72-127	
4-Bromofluorobenzene (S)	%			96	79-121	
Dibromofluoromethane (S)	%			95	81-119	
Toluene-d8 (S)	%			98	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 85333 85334

Parameter	Units	259043005 Result	MS	MSD	MS	MSD	MS	MSD	% Rec Limits	RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
Benzene	ug/L	ND	20	20	18.7	20.6	93	103	63-138	10	
Ethanol	ug/L	ND	800	800	666	785	83	98	40-160	16	
Ethylbenzene	ug/L	ND	20	20	17.5	19.0	87	95	65-135	8	
Methyl-tert-butyl ether	ug/L	0.55	20	20	16.7	18.4	81	89	59-143	10	
Toluene	ug/L	ND	20	20	18.2	19.5	90	97	64-128	7	
Xylene (Total)	ug/L	ND	60	60	51.5	55.6	85	92	65-133	8	
1,2-Dichloroethane-d4 (S)	%						84	84	72-127		
4-Bromofluorobenzene (S)	%						98	97	79-121		
Dibromofluoromethane (S)	%						95	96	81-119		
Toluene-d8 (S)	%						99	100	77-120		

**QUALITY CONTROL DATA**

Project: 2705748

Pace Project No.: 259073

QC Batch: MSV/5366 Analysis Method: EPA 5030B/8260  
 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge  
 Associated Lab Samples: 259073003

METHOD BLANK: 85490 Matrix: Water

Associated Lab Samples: 259073003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	09/13/11 12:03	
Ethanol	ug/L	ND	250	09/13/11 12:03	
Ethylbenzene	ug/L	ND	0.50	09/13/11 12:03	
Methyl-tert-butyl ether	ug/L	ND	0.50	09/13/11 12:03	
Toluene	ug/L	ND	0.50	09/13/11 12:03	
Xylene (Total)	ug/L	ND	1.5	09/13/11 12:03	
1,2-Dichloroethane-d4 (S)	%	103	72-127	09/13/11 12:03	
4-Bromofluorobenzene (S)	%	107	79-121	09/13/11 12:03	
Dibromofluoromethane (S)	%	104	81-119	09/13/11 12:03	
Toluene-d8 (S)	%	102	77-120	09/13/11 12:03	

LABORATORY CONTROL SAMPLE: 85491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.3	101	66-123	
Ethanol	ug/L	800	973	122	40-160	
Ethylbenzene	ug/L	20	20.0	100	67-122	
Methyl-tert-butyl ether	ug/L	20	19.9	99	65-138	
Toluene	ug/L	20	19.7	98	64-118	
Xylene (Total)	ug/L	60	57.2	95	68-122	
1,2-Dichloroethane-d4 (S)	%			106	72-127	
4-Bromofluorobenzene (S)	%			104	79-121	
Dibromofluoromethane (S)	%			104	81-119	
Toluene-d8 (S)	%			101	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 85492 85493

Parameter	Units	259117001 Result	MS	MSD	MS	MSD	MS	MSD	% Rec Limits	RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
Benzene	ug/L	ND	20	20	14.3	12.6	71	62	63-138	13	M1
Ethanol	ug/L	ND	800	800	544	485	68	61	40-160	12	
Ethylbenzene	ug/L	ND	20	20	14.1	12.6	70	62	65-135	11	M1
Methyl-tert-butyl ether	ug/L	ND	20	20	11.7	11.3	56	55	59-143	3	M1
Toluene	ug/L	ND	20	20	14.1	12.5	70	62	64-128	12	M1
Xylene (Total)	ug/L	ND	60	60	40.5	36.1	66	59	65-133	12	M1
1,2-Dichloroethane-d4 (S)	%						98	101	72-127		
4-Bromofluorobenzene (S)	%						106	106	79-121		
Dibromofluoromethane (S)	%						103	103	81-119		
Toluene-d8 (S)	%						102	101	77-120		

**QUALITY CONTROL DATA**

Project: 2705748

Pace Project No.: 259073

QC Batch: MSV/5351

Analysis Method: CA LUFT

QC Batch Method: CA LUFT

Analysis Description: CA LUFT MSV GRO

Associated Lab Samples: 259073001, 259073002

METHOD BLANK: 85206

Matrix: Water

Associated Lab Samples: 259073001, 259073002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	09/09/11 23:49	
4-Bromofluorobenzene (S)	%	95	76-121	09/09/11 23:49	

LABORATORY CONTROL SAMPLE: 85207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	526	105	57-139	
4-Bromofluorobenzene (S)	%			95	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 85335

85336

Parameter	Units	259043005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
TPH-Gasoline (C05-C12)	ug/L	ND	500	500	536	506	106	100	40-150	6	
4-Bromofluorobenzene (S)	%						96	95	76-121		



**QUALITY CONTROL DATA**

Project: 2705748

Pace Project No.: 259073

QC Batch: MSV/5364

Analysis Method: CA LUFT

QC Batch Method: CA LUFT

Analysis Description: CA LUFT MSV GRO

Associated Lab Samples: 259073003

METHOD BLANK: 85467

Matrix: Water

Associated Lab Samples: 259073003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	09/13/11 12:03	
4-Bromofluorobenzene (S)	%	107	76-121	09/13/11 12:03	

LABORATORY CONTROL SAMPLE: 85468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	601	120	57-139	
4-Bromofluorobenzene (S)	%			108	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 85790

85791

Parameter	Units	259117002		MS		MSD		% Rec		RPD	Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec	Limits		
TPH-Gasoline (C05-C12)	ug/L	2060	500	500	2570	2370	102	62	40-150	8	
4-Bromofluorobenzene (S)	%						110	109	76-121		

## QUALIFIERS

Project: 2705748

Pace Project No.: 259073

### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel Clean-Up

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

### LABORATORIES

PASI-S Pace Analytical Services - Seattle

### ANALYTE QUALIFIERS

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

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2705748

Pace Project No.: 259073

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
259073001	MW-1R_20110930	EPA 5030B/8260	MSV/5349		
259073002	MW-3_20110930	EPA 5030B/8260	MSV/5349		
259073003	MW-5_20110930	EPA 5030B/8260	MSV/5366		
259073001	MW-1R_20110930	CA LUFT	MSV/5351		
259073002	MW-3_20110930	CA LUFT	MSV/5351		
259073003	MW-5_20110930	CA LUFT	MSV/5364		



# Sample Container Count

2 5 9 0 7 3

CLIENT: Antea



COC PAGE 1 of 1

COC ID# \_\_\_\_\_

Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU	Comments
1	6											
2	10											
3	6											
4												
5												
6												
7												
8												
9												
10												
11												
12												Trip Blank? <u>No</u>

AG1H	1 liter HCL amber glass							BP2S	500mL H2SO4 plastic		JGFU	4oz unpreserved amber wide
AG1U	1liter unpreserved amber glass							BP2U	500mL unpreserved plastic		R	terra core kit
AG2S	500mL H2SO4 amber glass							BP2Z	500mL NaOH, Zn Ac		U	Summa Can
AG2U	500mL unpreserved amber glass							BP3C	250mL NaOH plastic		VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass							BP3N	250mL HNO3 plastic		VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass							BP3S	250mL H2SO4 plastic		VG9U	40mL unpreserved <b>clear</b> vial
BG1U	1 liter unpreserved glass							BP3U	250mL unpreserved plastic		VG9W	40mL glass vial preweighted (EPA 5035)
BP1N	1 liter HNO3 plastic							DG9B	40mL Na Bisulfate amber vial		VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic							DG9H	40mL HCL amber vial		WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic							DG9M	40mL MeOH clear vial		WGFU	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac							DG9T	40mL Na Thio amber vial		ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic							DG9U	40mL unpreserved <b>amber</b> vial			
BP2O	500mL NaOH plastic							I	Wipe/Swab			

**Sample Condition Upon Receipt**



Client Name: Antea Project # \_\_\_\_\_

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_

Tracking #: 8796 0531 5672

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_ Temp. Blank Yes \_\_\_\_\_ No

Thermometer Used 132013 of 101731962 or 226099 Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature 0.6c Biological Tissue is Frozen: Yes No  Date and Initials of person examining contents: 09/2/11 CW  
Temp should be above freezing ≤ 6 °C Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Follow Up / Hold Analysis Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G		Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blanks Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17.
Pace Trip Blank Creation Date:		

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: CARB Date: 9/2/11

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

Is the Data Valid?

(circle)

Yes / No

Preservation Temperature  
(if Known): 0.6 °C

## Antea Group Lab Validation Sheet

Project/Client: COP/ELT

Project #: I42705748

Date of Validation: 10/3/11 Date of Analysis: 9/13/11 Sample Date: 9/1/11

Completed By: Jon E. Signature: *Jonathan E. Ferguson*

Analytical Lab Used and Report # (if any): Pace Analytical 259073

Circle or  
Highlight  
Yes/No  
below

1. Was the analysis the one requested?

Yes / No

2. Do the sample number(s) on the chain-of-custody (COC) match the one(s) that appear on the laboratory data sheet?

Yes / No

3. Were samples prepared (extracted, filtered, etc.) within EPA holding times?

Yes / No

4. Once prepared/extracted, were the samples analyzed within the EPA holding times?

Yes / No

5. Were Laboratory blanks performed, if so, were they below non-detect?

Yes / No

6. Are the units correct? (i.e., soil samples in mg/kg or ug/g, water samples mg/L, ug/L, and air samples in volume mg/m<sup>3</sup>, etc.)

Yes / No

7. Were appropriate Matrix Spike (MS) and Matrix Spike Duplicate (MSD) samples included in the laboratory batch sample?

Yes / No

8. In lieu of MS/ MSD, were surrogate spike (SS) or surrogate spike duplicate (SSD) samples included in the laboratory batch samples?

Yes / No

N/a

9. Were MS/ MSD (or SS/SSD) within the acceptable range of % recovery (i.e., approx 80-120% depending on analyte)?

Yes / No

10. Were MS/MSD (or SS/SSD) values used to calculate Relative Percent Difference (RPD)?

Yes / No

11. Were Relative Percent Difference values within the acceptable range (i.e. ± 25%)?

Yes / No

If any answer is no, explain why and what corrective action was taken:

*Semi-Annual Summary Report, April through September 2011*  
*76 Station No. 5748/6419*  
*Dublin, CA*  
*Antea Group Project No. I42705748*



## ***Attachment E***

Waste Manifest



# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <i>n/a</i>	Manifest Document No. <i>2705748-0711</i>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>PCAF C/O LIZ BERMUDEZ 2203 CAMINO RAMON SUITE 350</i>		Site # <i>2705748</i> <i>10401 DUBLIN BLVD DUBLIN, CA 94518</i>		
4. Generator's Phone <i>(925) 884-0800 SAN RAMON, CA 94583</i>	6. US EPA ID Number	A. State Transporter's ID		
5. Transporter 1 Company Name <i>Blaine Tech Services</i>	8. US EPA ID Number	B. Transporter 1 Phone <i>310-885-4455</i>		
7. Transporter 2 Company Name	10. US EPA ID Number	C. State Transporter's ID		
9. Designated Facility Name and Site Address <i>Seaport Environmental 700 Seaport Blvd Redwood City, CA 94063</i>	11. WASTE DESCRIPTION	D. Transporter 2 Phone		
		E. State Facility's ID		
		F. Facility's Phone <i>1050-304-1024</i>		
		100013572		
11. WASTE DESCRIPTION		12. Containers	13. Total Quantity	14. Unit
		No.	Type	WT./Vol.
a. <i>Non hazardous waste liquid</i>		<i>1</i>	<i>TT</i>	<i>30 gal</i>
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>Wear protective equipment while handling weights and volumes are approximate</i> <i>24hr emergency phone No (310) 885-4455</i> <i>Approval No 500-1049</i> <i>Direct bill Blaine Tech</i> <i>Blaine Tech PO # MW090611-F31</i>				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name <i>(Aruba Group) Kerlyn Mendes</i>		Signature <i>Kerlyn Mendes</i>	Date <i>8/10/11</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name <i>COREY KILPATRICK</i>		Signature <i>[Signature]</i>	Month Day Year <i>9/1/11</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name		Signature	Month Day Year	
19. Discrepancy Indication Space				
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				
Printed/Typed Name <i>Joaquin D. Cameron</i>		Signature <i>[Signature]</i>	Date <i>09/06/11</i>	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

