

Hooshang Hadjian
2108 San Ramon Valley Blvd.
San Ramon, CA 94583

Mr. Dilan Roe
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California
ACHCSA Case No. 304

RECEIVED

By Alameda County Environmental Health at 9:20 am, Jan 15, 2013

Dear Mr. Roe:

I, Mr. Hooshang Hadjian, have retained Pangea Environmental Services, Inc. (Pangea) as the environmental consultant for the project referenced above. Pangea is submitting the attached report on my behalf.

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

Sincerely,



Hooshang Hadjian



January 9, 2013

VIA ALAMEDA COUNTY FTP SITE

Mr. Dilan Roe
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Groundwater Monitoring Report - Second Half 2012**
Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California
ACEH Case No. 304

Dear Mr. Roe:

On behalf of Mr. Hooshang Hadjian, Pangea Environmental Services, Inc. has prepared this *Groundwater Monitoring Report – Second Half 2012*. The report describes groundwater monitoring and sampling, and other site activities.

If you have any questions or comments, please call me at (510) 435-8664.

Sincerely,
Pangea Environmental Services, Inc.

A handwritten signature in blue ink, appearing to read "Bob Clark-Riddell".

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Groundwater Monitoring Report – Second Half 2012*

cc: Mr. Hooshang Hadjian, 2108 San Ramon Valley Blvd, San Ramon, CA 94583
Mr. Jim Lange, 6500 Dublin Blvd., Suite 202, Dublin, CA 94568
SWRCB Geotracker (electronic copy)

PANGEA Environmental Services, Inc.

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 www.pangeaenv.com



GROUNDWATER MONITORING REPORT– SECOND HALF 2012

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California

January 9, 2013

Prepared for:

Mr. Hooshang Hadjian
2108 San Ramon Valley Blvd
San Ramon, CA 94583


Prepared by:

Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland, California 94612

Written by:




FOR
Morgan Gillies
Project Manager


Bob Clark-Riddell, P.E.
Principal Engineer

PANGEA Environmental Services, Inc.

INTRODUCTION

On behalf of Mr. Hooshang Hadjian, Pangea Environmental Services, Inc. (Pangea) conducted groundwater monitoring and sampling during this period at the subject site (Figure 1). The purpose of the monitoring and sampling is to evaluate groundwater flow direction and dissolved contaminant concentrations, and to inspect site wells for separate-phase hydrocarbons (SPH). Current groundwater analytical results and elevation data are shown on Figure 2. Well construction details are presented in Table 1. Current and historical data are summarized on Table 2.

SITE BACKGROUND

The Dublin Auto Wash retail gasoline station is located at the southwest corner of Dublin Boulevard and Village Parkway in Dublin, California (Figure 1). Currently, there are three 10,000-gallon underground storage tanks (USTs) and a carwash at the site. Land use immediately surrounding the station is commercial.

Summary of Previous Environmental Work

Chevron Release – 1988 to 1996

The first environmental investigation at the site was performed in early 1988 when Chevron Products Company (Chevron), the previous owner/operator, hired EA Engineering, Science, and Technology, Inc. (EA), to conduct a soil vapor investigation at the site. The results of the soil gas survey indicated elevated levels of hydrocarbons beneath the site, especially around the southern pump island. Subsequently, groundwater monitoring wells were installed and quarterly groundwater monitoring began. In February 1989, one 5,000-gallon and two 10,000-gallon underground storage tanks (USTs) were excavated and removed from the site and replaced with three new USTs. A soil vapor extraction (SVE) system was operated between March 1992 and April 1996, removing approximately 15,000 pounds of hydrocarbons. Between 1994 and 1996, additional groundwater monitoring wells were installed and added to the quarterly monitoring program. A December 1996 Risk Based Corrective Action (RBCA) report concluded that the site is a "Low Risk" soil and groundwater petroleum release site, and ACEH subsequently approved SVE system shutdown.

New Release – February 1997

In February 1997, a leak in a stainless steel product line flex hose was discovered and reported to ACEH. The leak location was immediately south of the north-westernmost dispenser (dispenser No. 2). During June 1997 testing, the secondary piping failed a pressure test. Subsequently, a new product delivery system was installed to replace the existing lines. During the system modifications in July 1997, Parker Environmental Services collected soil samples via hand auger at locations B-1 through B-4. About 31 cubic yards of soil were removed from the release area to a depth of 8 feet bgs. The results of subsequent groundwater monitoring events in

December 1998 and March 1999 indicated free product was present in well MW-3. The detection of free product in MW-3 (up to 0.1 feet thick) corresponds to the historically lowest groundwater elevation observed during site monitoring activities, when the depth to groundwater in well MW-3 was 12.92 feet in December 1998.

Gettler-Ryan, Inc. (GRI), a subcontractor of Chevron, monitored the eight existing groundwater monitoring wells at the site until the first quarter of 2003. In 2003, SOMA began performing groundwater monitoring at the site on behalf of Mr. Hadjian. SOMA noted groundwater apparently flowed from offsite wells MW-4 and MW-5 toward the site in the approximate southeast direction, while groundwater at the eastern portion of the site apparently flowed in the northeast direction. SOMA believed the groundwater flow direction may have been affected by the 18" diameter vitrified clay pipe (VCP) sewer line running beneath the southern portion of Dublin Boulevard immediately north of the site. Information provided by Gettler-Ryan indicated that the top of the sanitary sewer line was approximately 16 feet below grade surface (bgs), while the depth to water in nearby wells MW-1 and MW-3 has ranged from approximately 11 to 13 ft bgs.

In 2003, SOMA also conducted further characterization and remediation activities at the site. SOMA advanced seven shallow soil borings using hand augers (B-1 through B-8), nine soil borings using a Geoprobe™ direct push rig, and one soil boring using a drill rig equipped with hollow stem augers. Initially, the Geoprobe borings were intended to be used for cone penetrometer testing (CPT) to log the borings; however, due to subsurface conditions the borings were logged using electric conductivity sensors. The direct push borings included collection of discrete depth groundwater samples to assess the vertical extent of contamination.

SOMA's investigation confirmed that contaminant concentrations were highest near the northern central portion of the site, and concluded that the 18" diameter sewer line located immediately north of the site is intercepting groundwater contamination. Fill material around the sewer line could be acting as a preferential pathway for the contamination conveyance to the east and then southeast, the sewer flow direction. SOMA also found contamination in deeper groundwater. SOMA concluded that there are three relatively higher permeability zones on the site acting as water bearing zones – Shallow (10 – 15 to 19 – 23 feet bgs), Middle (19 – 23 to 32 – 36 feet bgs), and Deep (32 – 36 to 43 – 47 feet bgs) – with an Upper Shallow zone (at approximately 2 to 6 feet bgs) noted in a few of the borings. In several locations, an insufficient amount of water was present in the potential water bearing zones, so no groundwater samples were obtained by SOMA. Since wells EA-1, EA-2, EA-3, and MW-1 are screened across the various water bearing zones at the site, SOMA recommended that these wells be destroyed to prevent them from acting as vertical conduits for the migration of the contaminants. SOMA also recommended that wells be installed in the Shallow, Middle, and Deep zones at the site to determine the groundwater flow directions in the various zones.

In November 2004, Pangea Environmental Services, Inc. (Pangea) of Oakland, California, assumed the lead role as consultant for Mr. Hadjian. During first, second and fourth quarters of 2005 and the first quarter 2006 groundwater monitoring events free product was again observed in well MW-3.

In February 2005, Pangea prepared a soil and groundwater investigation workplan, which included an evaluation of local and regional geology and hydrogeology, a review of soil and groundwater sampling data from the site (including detailed cross sections), a conduit study, and a sensitive receptor survey to assess potential impacts to wells and surface water bodies. The closest water supply well was identified approximately 1,900 feet southwest of the site, and was not considered to be potentially impacted by site contamination. The adjacent flood control channel is the only nearby surface water body that could potentially be impacted by site contamination. The workplan recommended installing borings along the sanitary sewer line in Dublin Boulevard and destruction of select wells screened across multiple water-bearing zones. The workplan also recommended installation of new monitoring wells within the multiple water-bearing zones and implementation of interim remediation using vacuum extraction to remove groundwater and free product from selected site wells. During subsequent correspondence, ACEH requested installation of a soil boring (SB-2) downgradient of the 1997 release.

During workplan implementation in March through May 2006, Pangea installed fourteen monitoring wells (MW-3A, MW-6A, MW-6B, MW-7AA, MW-7A, MW-7B, MW-7C, MW-8A, MW-9A, MW-9C, MW-10A, MW-10C and MW-11C) to help define the vertical and lateral extent of groundwater contamination. Pangea abandoned wells EA-1, EA-2, EA-3 and MW-3 to reduce the risk of vertical contaminant migration and improve the quality of monitoring data. Pangea drilled three soil borings (SB-1, SB-1A and SB-2) to help evaluate subsurface conditions downgradient of the 1997 release and north of the site, and the potential for contamination migration along the 18-inch sanitary sewer line in Dublin Boulevard. Soil borings SB-1 was located near the intersection of Dublin Boulevard and Village Parkway and boring SB-1A was located approximately 3 ft south of SB-1. Results are detailed in the August 11, 2006 Site Investigation Report prepared by Pangea.

In July 2006, Pangea conducted vacuum extraction from well MW-3A and MW-7AA using a vacuum truck. The vacuum extraction was conducted to provide cost-effective removal of source area material and additional information about subsurface conditions. The results of the vacuum extraction led Pangea to recommend conducting *short-term feasibility testing/source removal* on key site wells (MW-3A, MW-7AA, MW-7A, MW-6A) detailed in the August 11, 2006 *Site Investigation Report*. ACEH approved the proposed feasibility testing and requested a corrective action plan (CAP) in a letter dated November 9, 2007. The ACEH letter also approved discontinuance of groundwater monitoring of C-zone wells, because monitoring data suggested the C-zone was not impacted.

In November 2007, Pangea conducted a five-day dual-phase extraction (DPE) test (and interim remediation event) to evaluate the effectiveness of DPE as remedial technique and to provide additional source removal. On December 9, 2008, Pangea submitted an *Interim Remediation Report and Corrective Action Plan (CAP)* describing DPE testing and proposing short-term dual phase extraction (DPE) as the most appropriate and cost-effective technique for site remediation. In a letter dated January 16, 2009, ACEH approved short-term DPE for additional source removal to help facilitate case closure.

In July 2009 Pangea installed two dual-phase extraction (DPE) wells to facilitate implementation of the approved DPE corrective action plan (CAP). Wells DPE-1 and DPE-2 were constructed of 4-inch diameter and screened from 9 to 14 feet bgs. Details of the DPE well installation are described in Pangea's *Remediation Well Installation Report* dated December 16, 2009.

To remediate the small localized impact area, DPE was conducted between September 15, 2010 and November 15, 2010 until low contaminant removal rates were observed. The DPE system operated for a total of about 1,189 hours (approximately 50 days). Laboratory analytical data indicates that the system removed a total of approximately 443 lbs TPHg and 3.8 lbs benzene in vapor phase, and 0.4 lbs TPHg, 0.01 lbs benzene and 0.25 lbs MTBE in aqueous phase. The DPE system was shutdown on November 15, 2010 due to low contaminant removal rates, the small localized extent of site contamination, the commencement of the winter rainy season, and cost control. DPE operation was very costly due to high energy costs, because PG&E could not provide electrical service before the rainy season and PG&E required very costly re-engineering of the existing electrical service (\$20,000 or more). The utilized DPE equipment required diesel fuel and a diesel generator to power the vacuum pump and required propane as supplementary fuel for the oxidizer.

GROUNDWATER MONITORING AND SAMPLING

On August 25, 2012, groundwater monitoring and sampling was conducted at the site. The approved semi-annual groundwater monitoring program is summarized on Table A in Appendix A. Groundwater samples were obtained from groundwater monitoring wells MW-1, MW-2, MW-3A, MW-6A, MW-7AA, MW-8A; and remediation wells DPE-1 and DPE-2. The depth to water at survey point C-1 above the flood control channel was also measured. Monitoring and sampling of all deep monitoring wells (MW-6C, MW-7C, MW-9C, MW-10C and MW-11C) was discontinued beginning in the second quarter 2007, as approved by Barney Chan of ACEH in a May 14, 2007 telephone conversation, because no significant contamination had been detected in these deeper site wells during four consecutive quarters.

Before well purging, the dissolved oxygen (DO) concentration was measured in each sampled well. DO was measured by lowering a downwell sensor to the approximate middle of the water column, and allowing the reading to stabilize during gentle height adjustment. Prior to sample collection, approximately three casing volumes of water were purged using disposable bailers, a PVC bailer, an electric submersible pump, positive air displacement pump, or a peristaltic pump. During well purging, field technicians measured the pH, temperature and conductivity. Groundwater samples were collected from each well with a disposable bailer, and decanted into the appropriate containers supplied by the analytical laboratory. Groundwater samples were labeled, placed in protective plastic bags, and stored on crushed ice at or below 4° C. All samples were transported under chain-of-custody to a State-certified analytical laboratory. Purge water was temporarily stored onsite in DOT-approved 55-gallon drums. Groundwater monitoring field data sheets are presented in Appendix B.

MONITORING RESULTS

Current and historical groundwater elevation data and analytical results are described below and summarized on Table 2. Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015C; and benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021B. Samples were analyzed by McCampbell Analytical, Inc. of Pittsburg, California, a State-certified laboratory. The laboratory analytical report is included in Appendix B. DO concentrations ranged from 0.40 mg/L (well MW-8A) to 0.97 mg/L (well DPE-2).

Groundwater Flow Direction

Based on depth-to-water data collected August 25, 2012 groundwater elevations in shallow and intermediate zones are shown on Figure 2 and discussed below. Groundwater flow at the site is complex due to the combined effects of a generally upward gradient, the nearby creek/flood control channel, seasonal fluctuations in flow direction, and possible influences of the city sewer line located beneath Dublin Boulevard.

Vertical Gradient Evaluation: A comparison of clustered well pairs screened at different depths indicates that a consistent *upward* gradient component of approximately 0.05 to 0.1 ft/ft is present between the shallow and intermediate water-bearing zones at the portion of the site north of the dispenser islands (MW-6A and 6B), and *no vertical* gradient was present southwest of the dispenser islands (MW-7A and MW-7B) this event, as shown below on Table A. A *downward* gradient appears to be present between the upper shallow, AA-zone vapor wells (VW-1, VW-2 and VW-3) and the shallow A-zone monitoring wells, although this apparent gradient may be due to *perched* groundwater.

Table A – Vertical Gradient Evaluation using Paired Monitoring Wells

Monitoring Well Pair	Groundwater Elevation	Mean Screen Depth	Calculated Vertical Gradient
MW-6A	320.61	17.5	
MW-6B	321.09	28	
<i>Difference</i>	<i>0.48</i>	<i>10.5</i>	<i>0.05 (upwards)</i>
MW-7A	321.05	18	
MW-7B	321.05	28	
<i>Difference</i>	<i>0.0</i>	<i>10</i>	<i>no vertical gradient</i>

Horizontal Gradient Evaluation: Depth-to-water measurements collected during prior monitoring events indicate that the horizontal component of the groundwater flow direction to the north of the site has been consistently *southward to southeastward* for the *shallow* wells, but gradient directions in the southern portion of the site have fluctuated significantly, possibly due to the influence of the nearby flood control channel. As shown on Figure 2, the horizontal component of the groundwater flow direction in the *shallow* wells at the site for the current monitoring event appears to be *eastward to southeastwards*. The groundwater flow direction for the shallow water-bearing zone may also be affected by surface water infiltration from the onsite car wash. The horizontal component of groundwater flow in the *intermediate-depth* wells could not be determined since only two wells are screened at that depth.

Conclusion: The primary observation regarding the piezometric surface is that a moderately well-defined *upward* gradient is present in wells north of the dispenser islands. Historical depth-to-water and groundwater elevation data for the site are presented in Table 1.

Hydrocarbon Distribution in Groundwater

Based on recent results, hydrocarbon contamination is concentrated in the upper shallow (AA) and shallow (A) water-bearing zones in the vicinity of the fuel dispensers, as shown in Table 2 and on Figure 2. TPHg and benzene concentration trends in key wells are shown on Figures 3 and 4, respectively.

During this monitoring event, the highest TPHg (7,000 µg/L) and benzene (370 µg/L) concentrations were detected in wells MW-6A and MW-3A, respectively. Pangea suspects that hydrocarbon concentrations in wells MW-3A and MW-6A will continue to attenuate due to the decreased contaminant mass and the oxygenation provided by the DPE activities. A similar concentration rise and subsequent fall was observed in select site wells after November 2007 DPE testing. Well DPE-1 contained a historic low concentration of TPHg (690 µg/L) and well MW-7AA did not contain a detectable concentration of benzene for the first time in over 6 years of monitoring.

No separate-phase hydrocarbons (SPH) were detected in site wells this quarter. SPH was previously detected in MW-3 and replacement well MW-3A, but has not been detected in MW-3A since May 2006, shortly after well installation. A brief interim remedial action conducted on July 7, 2006, and consisting of removal of approximately 40 gallons of impacted liquid from well MW-3A using a vacuum truck, may have improved site conditions near well MW-3A. Site conditions were also likely improved by the five-day DPE test/removal event conducted in November 2007 on source area wells MW-3A, MW-6A, MW-7A and MW-7AA. Hydrocarbon concentrations in wells MW-3A, MW-6A and MW-7A generally increased after the November 2007 DPE testing and then returned to near or below pre-test levels. Hydrocarbon concentrations generally show stable to decreasing trends in all site wells, although concentrations remain elevated in select source area wells (MW-3A and MW-6A).

Fuel Oxygenate Distribution in Groundwater

MTBE was detected above reporting limits in three of the eight sampled wells, as shown in Table 2 and on Figure 2. MTBE concentrations in sampled wells were at or near *historic lows*, except for source area well MW-3A, where DPE activities have likely temporarily affected groundwater quality. The highest MTBE concentration detected this quarter was 860 µg/L in well MW-3A. MTBE concentration trends in key wells are shown on Figure 5.

OTHER SITE ACTIVITIES

Low Threat Closure Policy Review

The State Water Resources Control Board recently adopted a *Low Threat Closure Policy* (LTCP) that became effective in August 2012, and adopted a plan for LTCP implementation on November 6, 2012. Pangea understands that the oversight agency will soon evaluate site conditions with respect to the low threat case closure criteria of the LTCP and establish a pathway to closure. The SWRCB also recently updated the guidance manual for assessment and remediation of leaking underground storage tanks, the LUFT Manual. Pangea offers the following information for consideration during your agency's review of LTCP criteria for this case.

Secondary Source Removal: While prior site remediation removed some secondary mass removal, persistent elevated hydrocarbon concentrations in wells MW-3A and MW-6A suggests that more secondary mass could be removed from near these wells. Pangea is drafting a CAP Addendum to address additional secondary mass removal as described below.

Soil Gas Sampling: To help confirm there is no significant risk to human health via vapor intrusion into onsite buildings, shallow soil gas sampling could be performed near the onsite building. Soil gas sampling is yet to be completed for this site. Please notify Pangea if your agency concurs with the recommendation for soil gas sampling or requires other effort to pursue case closure.

Naphthalene Analysis: The LTCP includes media-specific criteria for benzene, MTBE and naphthalene. Pangea recommends analysis for naphthalene during future groundwater monitoring and any future soil gas sampling.

CAP Addendum

Pangea presented a bioremediation workplan in the *Groundwater Monitoring Report and Bioremediation Workplan* dated July 19, 2011. The proposed low-cost bioremediation involved biosparging using existing subsurface conduits and introduction of a bio-organic catalyst. In an email dated, January 20, 2012, ACEH requested a CAP Addendum justifying the use of air sparging at the site. Pangea will submit the requested

CAP Addendum shortly which will propose additional secondary mass removal from near wells MW-3A and MW-6A and justify the use of biosparging onsite.

Groundwater Monitoring

The semi-annual groundwater monitoring program is shown in Appendix A. Pangea will summarize groundwater monitoring activities and results in a groundwater monitoring report.

Electronic Reporting

The report, laboratory data, and other applicable information will be uploaded to the State Water Resource Control Board's Geotracker database.

ATTACHMENTS

Figure 1 – Site Location Map

Figure 2 – Groundwater Elevation Contour and Hydrocarbon Concentration Map – Shallow

Figure 3 – Extent of TPHg in Shallow Groundwater

Figure 4 – Extent of Benzene in Shallow Groundwater

Figure 5 – TPHg Concentration Trends in Key Wells

Figure 6 – Benzene Concentration Trends in Key Wells

Figure 7 – MTBE Concentration Trends in Key Wells

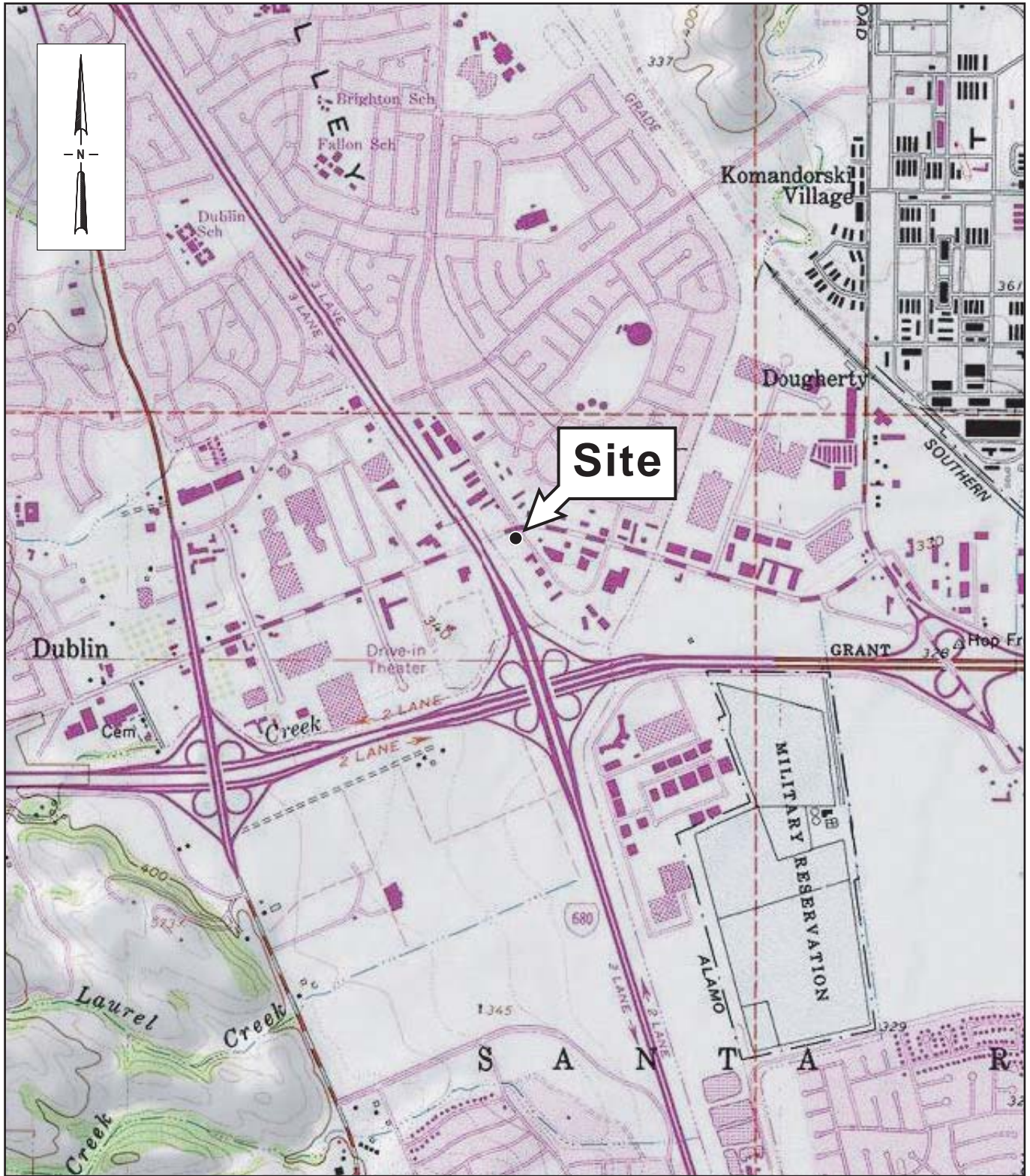
Table 1 – Well Construction Details

Table 2 – Groundwater Elevation and Analytical Data

Appendix A – Groundwater Monitoring Program

Appendix B – Groundwater Monitoring Field Data Sheets

Appendix C – Laboratory Analytical Results



SOURCE: TOPOI MAPS



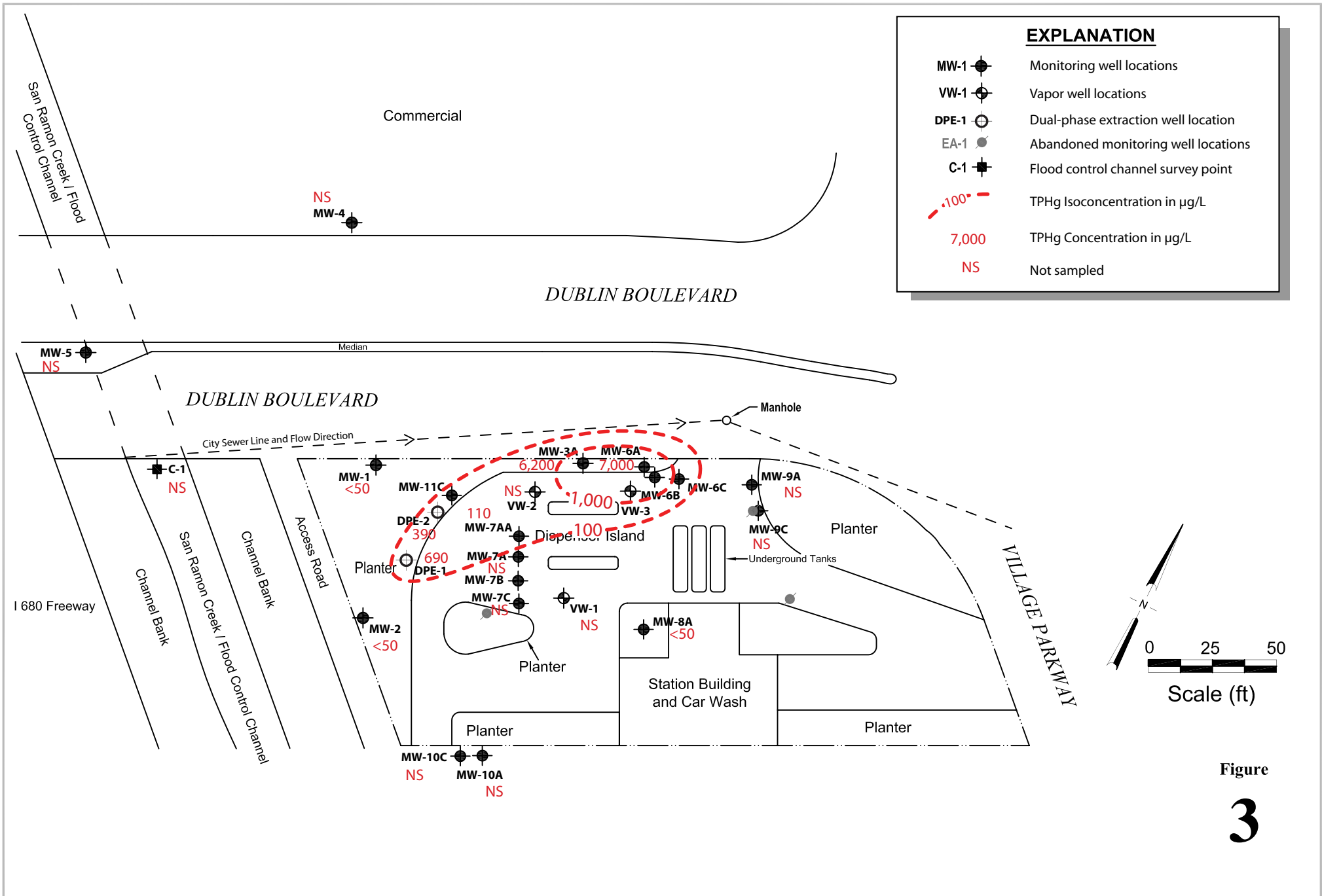
SCALE : 1" = 1/4 MILE

Figure 1

Dublin Auto Wash
 7240 Dublin Boulevard
 Dublin, California



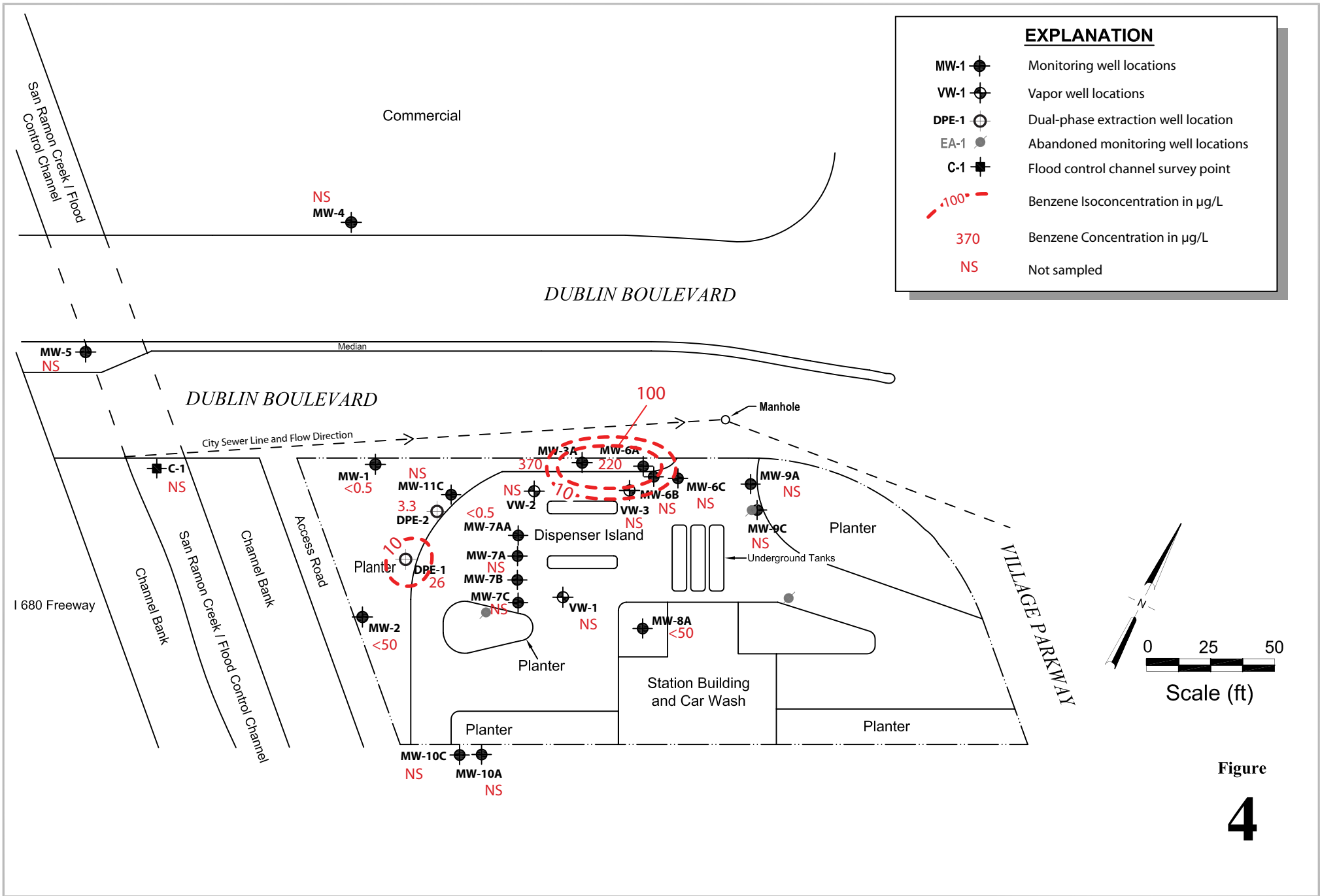
Site Location Map



Dublin Auto Wash
 7240 Dublin Boulevard
 Dublin, California



**Extent of TPHg in
 Shallow Groundwater**
 August 25, 2012



Dublin Auto Wash
 7240 Dublin Boulevard
 Dublin, California



**Extent of Benzene in
 Shallow Groundwater**
 August 25, 2012

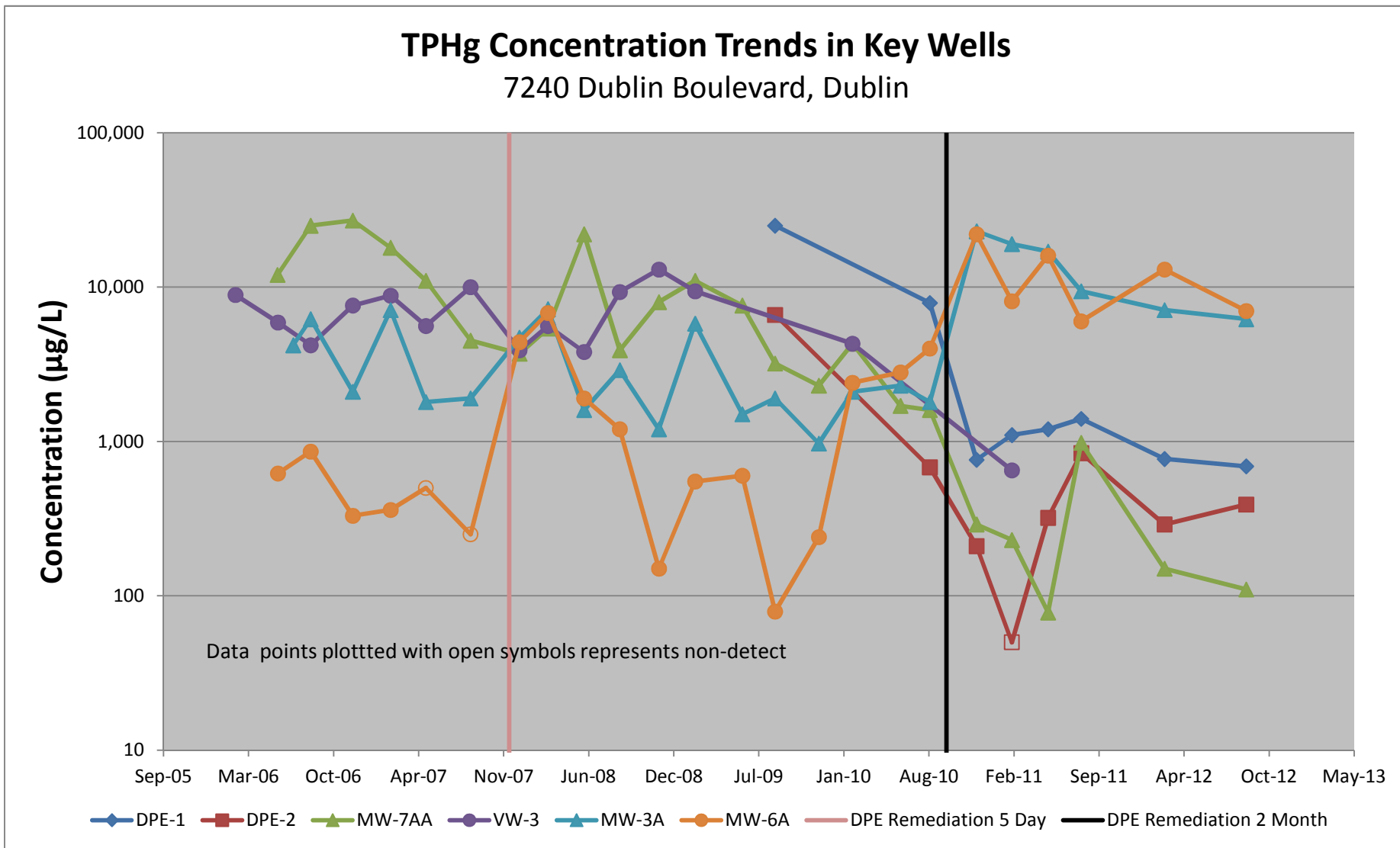


Figure 5. TPHg Concentration Trends in Key Wells

Benzene Concentration Trends in Key Wells

7240 Dublin Boulevard, Dublin

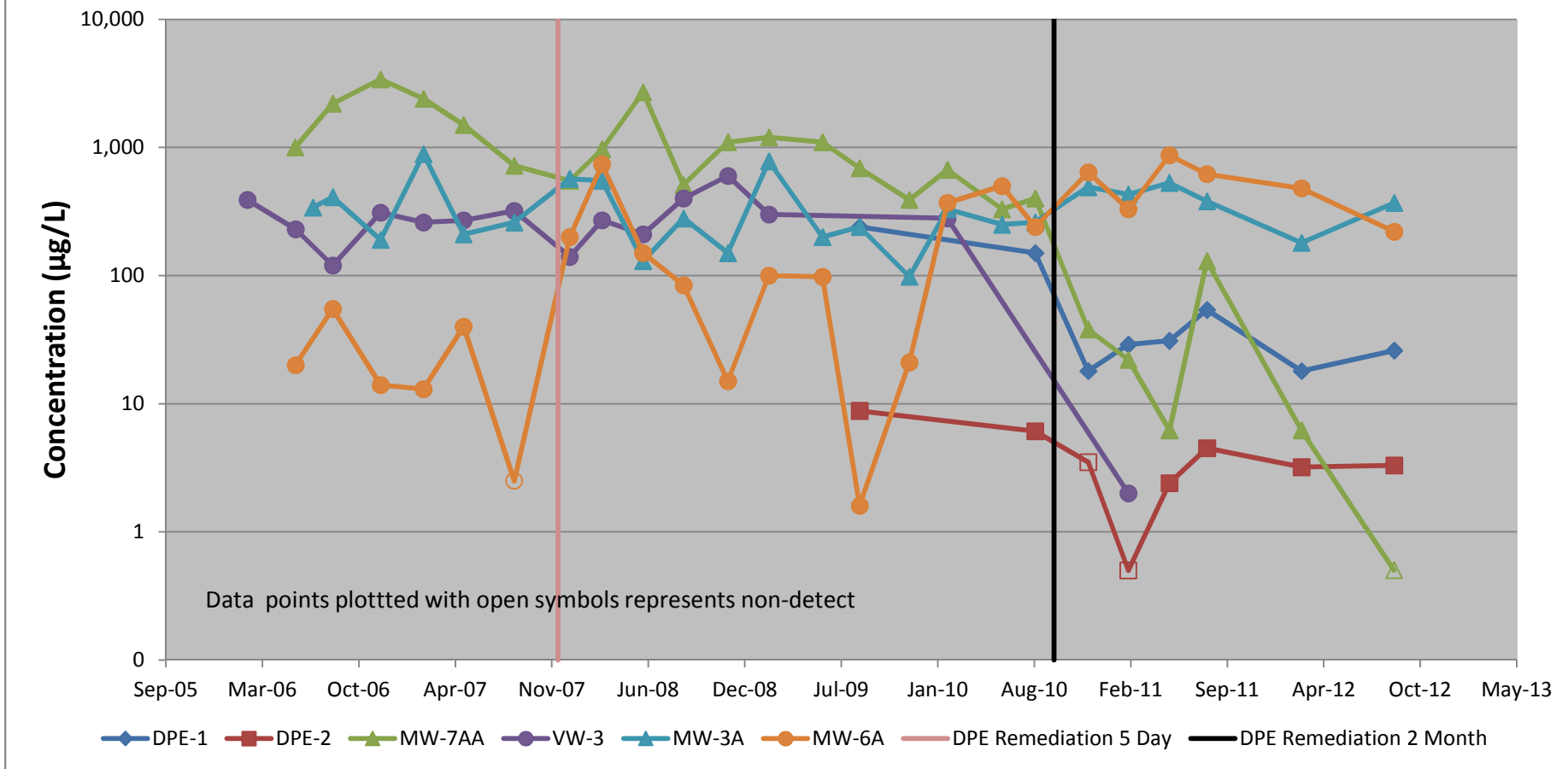


Figure 6. Benzene Concentration Trends in Key Wells

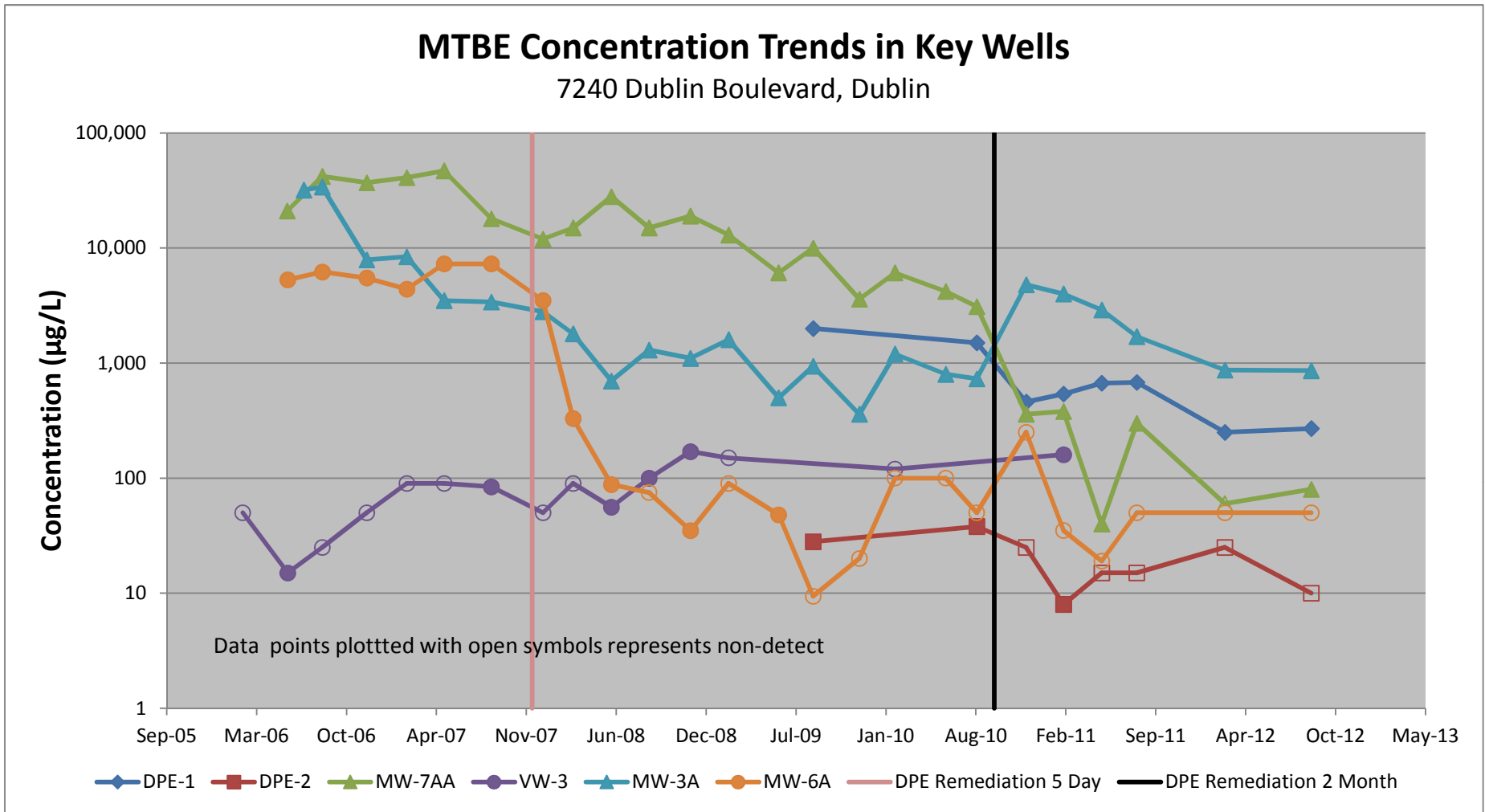


Figure 7. MTBE Concentration Trends in Key Wells

Table 1 –Well Construction Details –7240 Dublin Blvd., Dublin, CA

Well ID (TOC Elev)	Total Depth of Well (feet bgs)	Screened Interval (ft bgs)	Drill Hole Diameter (inches)	Casing Diameter (inches)	Surface Seal Depth (ft bgs)
DPE-1	14	9-14	10	4	0-8
DPE-2	14	9-14	10	4	0-8
MW-1	25	5-25	8	2	0-4
MW-2	20	5-20	8	2	0-4
MW-3A	17	10-17	10	4	0-9
MW-4	20	8.5-20	8	2	0-8
MW-5	21	8.5-21	8	2	0-8
MW-6A	20	15-20	10	2	0-14
MW-6B	30	26-30	8	2	0-25
MW-6C	44	34-44	8	2	0-33
MW-7AA	14	9-14	10	4	0-8
MW-7A	20	16-20	10	4	0-15
MW-7B	30	26-30	8	2	0-25
MW-7C	45	35-45	12	2	0-34
MW-8A	20	15-20	8	2	0-4
MW-9A	20	15-20	8	2	0-14
MW-9C	45	35-45	12	2	0-34
MW-10A	20	15-20	8	2	0-14
MW-10C	45	35-45	8	2	0-34
MW-11C	43.5	33.5-43.5	8	2	0-32
VW-1	9	3-9	8	2	0-2.5
VW-2	9	3-9	8	2	0-2.5
VW-3	9	3-9	8	2	0-2.5

Pangea

Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Measured	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved	Notes
										Oxygen mg/L	
Surface Water (Flood Control Channel)											
C-1 332.89	08/17/06	11.60	321.29	--	--	--	--	--	--	--	Gauge data - flood control channel
	11/24/06	12.10	320.79	--	--	--	--	--	--	--	
	02/21/07	12.10	320.79	--	--	--	--	--	--	--	
	05/15/07	12.05	320.84	--	--	--	--	--	--	--	
	08/28/07	11.90	320.99	--	--	--	--	--	--	--	
	12/21/07	12.16	320.73	--	--	--	--	--	--	--	
	02/26/08	12.21	320.68	--	--	--	--	--	--	--	
	05/21/08	12.40	320.49	--	--	--	--	--	--	--	
	08/13/08	11.95	320.94	--	--	--	--	--	--	--	
	11/13/08	12.40	320.49	--	--	--	--	--	--	--	
	02/06/09	12.02	320.87	--	--	--	--	--	--	--	
	05/28/09	11.98	320.91	--	--	--	--	--	--	--	
	08/13/09	12.01	320.88	--	--	--	--	--	--	--	
	11/24/09	11.92	320.97	--	--	--	--	--	--	--	
	02/11/10	11.95	320.94	--	--	--	--	--	--	--	
	06/04/10	11.98	320.91	--	--	--	--	--	--	--	
	08/12/10	11.94	320.95	--	--	--	--	--	--	--	
	11/30/10	11.68	321.21	--	--	--	--	--	--	--	
	02/21/11	10.27	322.62	--	--	--	--	--	--	--	
	05/17/11	12.02	320.87	--	--	--	--	--	--	--	
08/03/11	12.10	320.79	--	--	--	--	--	--	--		
02/15/12	12.51	320.38	--	--	--	--	--	--	--		
	08/25/12	10.33	322.56	--	--	--	--	--	--	--	
<hr/>											
Upper Shallow (AA-Zone) Wells											
DPE-1 331.01	08/13/09	10.55	--	25,000	240	160	530	3,900	2,000	--	
	08/12/10	10.20	--	7,900	150	17	110	1,000	1,500	1.12	
	11/30/10	10.47	320.54	760	18	1.6	25	87	460	0.97	
	02/21/11	9.91	321.10	1,100	29	1.1	5.3	97	540	0.73	
	05/17/11	10.21	320.80	1,200	31	2.4	62	65	670	0.69	
	08/03/11	10.28	320.73	1,400	54	1.7	160	42	680	0.73	
	02/15/12	10.71	320.30	770	18	2.2	20	37	250	0.69	
		08/25/12	10.21	320.80	690	26	0.95	27	78	270	
DPE-2 331.42	08/13/09	11.06	--	6,600	8.8	<2.5	<2.5	710	28	--	
	08/12/10	10.49	--	680	6.1	4.7	<0.5	1.4	38	1.74	
	11/30/10	10.63	320.79	210	3.5	1.7	0.70	1.8	<25	1.40	
	02/21/11	9.83	321.59	<50	<0.5	<0.5	<0.5	<0.5	8.0	1.12	
	05/17/11	10.50	320.92	320	2.4	1.5	12	3.0	<15	1.34	
	08/03/11	10.62	320.80	840	4.5	3.5	24	5.4	<15	0.62	
	02/15/12	11.19	320.23	290	3.2	4.5	<0.5	1.1	<25	0.79	
		08/25/12	10.57	320.85	390	3.3	5.0	2.8	0.79	<10	
MW-7AA 330.67	05/31/06	9.18	321.49	12,000	1,000	410	180	1,600	23,000 (21,000)	0.44	TAME, TBA, DIPE, ETBE=ND
	07/07/06	9.15	321.52	--	--	--	--	--	--	--	
	08/17/06	8.75	321.92	25,000	2,200	210	780	1,400	36,000(42,000)	0.24	
	11/24/06	9.84	320.83	27,000	3,400	1,100	1,300	3,400	37,000	0.33	
	02/21/07	9.60	321.07	18,000	2,400	670	200	2,800	41,000	0.58	
	05/15/07	10.20	320.47	11,000	1,500	200	520	1,100	47,000	0.49	
	08/28/07	10.20	320.47	4,500	720	13	73	100	18,000	0.33	
	12/21/07	10.09	320.58	3,700	550	32	74	330	12,000	0.58	
	02/26/08	8.96	321.71	5,400	970	7.2	320	100	15,000	0.74	
	05/21/08	10.28	320.39	22,000	2,700	19	940	440	28,000	0.71	
	08/13/08	10.38	320.29	3,900	510	<5.0	150	42	15,000	0.77	
	11/13/08	10.35	320.32	8,000	1,100	20	290	280	19,000	0.80	
	02/06/09	10.31	320.36	11,000	1,200	37	500	800	13,000	0.79	
	05/28/09	10.05	320.62	7,600	1,100	34	390	870	6,100	0.73	
	08/13/09	10.15	320.52	3,200	690	5.4	54	92	10,000	0.87	
	11/24/09	10.06	320.61	2,300	390	7.2	50	150	3,600	0.81	
	02/11/10	9.56	321.11	4,300	670	9.0	73	240	6,100	0.64	
	06/04/10	9.51	321.16	1,700	330	3.7	<1.7	120	4,200	0.61	
	08/12/10	9.63	321.04	1,600	400	3.0	50	7.0	3,100	0.70	
	11/30/10	9.70	320.97	290	38	0.95	6.1	19	360	0.89	
02/21/11	8.57	322.10	230	22	<0.5	<0.5	7.2	380	0.54		
05/17/11	9.51	321.16	78	6.2	1.1	<0.5	<0.5	40	1.31		
08/03/11	9.71	320.96	980	130	1.4	49	53	300	0.83		
02/15/12	10.42	320.25	150	6.2	1.7	<0.5	<0.5	<60	0.86		
	08/25/12	9.74	320.93	110	<0.5	1.8	<0.5	<0.5	80	0.49	
VW-1 330.43	02/21/06	7.95	322.48	860	120	1.4	32	4.4	390 (440)	1.97	TAME=12µg/L, TBA,DIPE,ETBE=ND
	06/01/06	7.89	322.54	1,100	92	2.2	11	1.4	600 (550)	0.11	
	07/07/06	7.71	322.72	--	--	--	--	--	--	--	
	08/17/06	7.65	322.78	--	--	--	--	--	--	0.07	
	11/24/06	7.75	322.68	--	--	Insufficient Water to Sample				0.48	
	02/21/07	7.81	322.62	620	52	4.3	<0.5	2.7	340	0.22	
	05/15/07	7.94	322.49	2,000	270	6.4	1.2	15	720	0.10	
	08/28/07	8.07	322.36	2,400	400	4.6	<0.5	23	610	0.27	
	12/21/07	8.20	322.23	--	--	Insufficient Water to Sample				--	
	02/26/08	8.20	322.23	--	--	Insufficient Water to Sample				--	
	05/21/08	8.21	322.22	--	--	Insufficient Water to Sample				--	

Pangea

Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Measured	Depth to Water (ft)	Groundwater Elevation (ft, msl)	← μg/L →						Dissolved Oxygen mg/L	Notes	
				TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE			
<i>VW-1 (cont'd)</i>	08/13/08	8.27	322.16	Insufficient Water to Sample								
	11/13/08	5.97	324.46	<50	<0.5	<0.5	<0.5	<0.5	46	1.10		
	02/06/09	6.04	324.39	<50	<0.5	<0.5	<0.5	<0.5	80	0.97		
	05/28/09	6.30	324.13	--	--	--	--	--	--	--		
	08/13/09	6.61	323.82	--	--	--	--	--	--	--		
	11/24/09	6.99	323.44	--	--	--	--	--	--	--		
	02/11/10	7.30	323.13	<50	<0.5	<0.5	<0.5	<0.5	29	1.16		
	06/04/10	6.00	324.43	---	---	---	---	---	---	---		
	08/12/10	6.30	324.13	---	---	---	---	---	---	---		
	11/30/10	6.95	323.48	---	---	---	---	---	---	---		
	02/21/11	7.25	323.18	<50	<0.5	<0.5	<0.5	<0.5	15	0.93		
	05/17/11	5.72	324.71	---	---	---	---	---	---	---		
	08/03/11	7.08	323.35	---	---	---	---	---	---	---		
	02/15/12	7.22	323.21	<50	<0.5	<0.5	<0.5	<0.5	13	1.03		
08/25/12	7.85	322.58	--	--	--	--	--	--	--			
VW-2 <i>330.17</i>	02/21/06	6.01	324.16	1,600	150	2.7	55	20	1,700 (1,600)	1.97		
	06/01/06	6.17	324.00	1,500	140	3.3	24	19	1,600 (1,600)	0.29	TAME, TBA, DIPE, ETBE=ND	
	07/07/06	7.02	323.15	--	--	--	--	--	--	--		
	08/17/06	7.23	322.94	--	--	--	--	--	--	0.14		
	11/24/06	5.55	324.62	<50	5.7	<0.5	<0.5	<0.5	260	0.20		
	02/21/07	6.22	323.95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.42		
	05/15/07	7.54	322.63	430	40	1.5	<0.5	1.0	470	0.28		
	08/28/07	7.82	322.35	1,200	170	5.0	<0.5	20	160	0.35		
	12/21/07	4.44	325.73	<50	<0.5	<0.5	<0.5	<0.5	100	0.70		
	02/26/08	4.56	325.61	<50	<0.5	<0.5	<0.5	<0.5	21	0.75		
	05/21/08	7.65	322.52	300	28	1.7	<0.5	0.97	<45	0.71		
	08/13/08	7.92	322.25	Insufficient Water to Sample							1.58	
	11/13/08	5.96	324.21	<50	8.0	<0.5	<0.5	<0.5	53	0.97		
	02/06/09	6.06	324.11	<50	<0.5	<0.5	<0.5	<0.5	38	0.95		
	05/28/09	6.90	323.27	--	--	--	--	--	--	--		
	08/13/09	7.52	322.65	--	--	--	--	--	--	--		
	11/24/09	6.28	323.89	--	--	--	--	--	--	--		
	02/11/10	5.65	324.52	<50	<0.5	<0.5	<0.5	<0.5	39	0.91		
	06/04/10	5.72	324.45	---	---	---	---	---	---	---		
	08/12/10	1.50	328.67	---	---	---	---	---	---	---		
	11/30/10	2.46	327.71	---	---	---	---	---	---	---		
	02/21/11	4.06	326.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.03		
	05/17/11	3.58	326.59	---	---	---	---	---	---	---		
08/03/11	7.01	323.16	---	---	---	---	---	---	---			
02/15/12	4.62	325.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.62			
08/25/12	6.89	323.28	--	--	--	--	--	--	--			
VW-3 <i>330.49</i>	02/21/06	6.10	324.39	8,900	390	29	490	650	<50	2.28		
	06/01/06	6.22	324.27	5,900	230	4.5	270	63	<35 (15)	0.21	TAME, TBA, DIPE, ETBE=ND	
	07/07/06	4.44	326.05	--	--	--	--	--	--	--		
	08/17/06	4.40*	326.09	4,200	120	1.7	39	30	<25	0.10		
	11/24/06	6.15	324.34	7,600	310	9.9	270	420	<50	0.21		
	02/21/07	6.87	323.62	8,800	260	5.1	130	160	<90	0.29		
	05/15/07	7.13	323.36	5,600	270	6.9	110	110	<90	0.36		
	08/28/07	7.41	323.08	10,000	320	5.9	150	140	84	0.39		
	12/21/07	6.28	324.21	3,900	140	1.9	54	29	<50	0.66		
	02/26/08	6.09	324.40	5,600	270	4.5	68	130	<90	0.69		
	05/21/08	6.46	324.03	3,800	210	3.0	32	47	56	0.77		
	08/13/08	6.93	323.56	9,300	400	4.8	87	60	100	0.59		
	11/13/08	7.45	323.04	13,000	600	9.6	220	120	170	2.79		
	02/06/09	7.41	323.08	9,400	300	9.1	140	230	<150	2.16		
	05/28/09	5.93	324.56	--	--	--	--	--	--	--		
	08/13/09	6.40	324.09	--	--	--	--	--	--	--		
	11/24/09	6.75	323.74	--	--	--	--	--	--	--		
	02/11/10	6.08	324.41	4300	280	3.7	52	80	<120	1.77		
	06/04/10	6.41	324.08	---	---	---	---	---	---	---		
	08/12/10	6.51	323.98	---	---	---	---	---	---	---		
	11/30/10	8.22	322.27	---	---	---	---	---	---	---		
	02/21/11	7.45	323.04	650	2.0	<0.5	<0.5	87	160	1.25		
	05/17/11	7.51	322.98	---	---	---	---	---	---	---		
08/03/11	7.36	323.13	---	---	---	---	---	---	---			
02/15/12	---	---	Well Dry							---		
08/25/12	8.36	322.13	--	--	--	--	--	--	--	--		
Shallow (A-Zone) Wells												
MW-1 <i>333.66</i>	10/04/94	12.8	320.76	2,100	150	170	61	320	--			
	11/30/94	12.38	321.18	1,500	210	17	73	130	--			
	03/02/95	12.88	320.68	2,600	510	<10	160	<10	--			
	06/07/95	12.58	320.98	710	160	<2.0	45	<2.0	<10			
	09/26/95	13.15	320.41	1,100	140	1.4	92	1.8	<5.0			
	12/28/95	13.09	320.47	750	96	2.5	61	7.4	37			
	02/29/96	12.17	321.39	250	17	<0.5	18	0.81	9			
	06/27/96	12.95	320.61	710	72	<2.0	92	2.2	<10			
	09/12/96	13.11	320.55	300	53	<0.5	32	0.65	21			
	03/31/97	12.99	320.67	<200	4.1	<2.0	4.8	<2.0	640			
	12/23/98	13.87	319.79	<50	<50	<0.5	<0.5	<0.5	3200			
	03/25/99	12.01	321.65	<50	<0.5	<0.5	<0.5	<0.5	5,200 (5,200)			
	02/03/00	11.91	321.75	<500	<5.0	<5.0	<5.0	<5.0	3,180 (3,350)			

Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID TOC Elev (ft)	Date Measured	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved	Notes
										Oxygen mg/L	
MW-1 <i>(cont'd)</i> 333.69	01/23/01	12.57	321.09	<50.0	<0.5	<0.5	<0.5	<0.5	4,420		
	05/01/01	12.6	321.06						SAMPLED SEMI-ANNUALLY		
	08/28/01	12.74	320.92	<50	<0.5	<0.5	<0.5	<0.5	4,800		
	11/27/01	12.7	320.96						SAMPLED SEMI-ANNUALLY		
	02/28/02	12.7	320.96	<50	<0.5	<0.5	<0.5	<1.5	1,400		
	05/22/02	12.38	321.28						SAMPLED SEMI-ANNUALLY		
	08/20/02	12.57	321.09	<50	<0.5	<0.5	<0.5	<1.5	1,400		
	11/11/02	11.31	322.35						SAMPLED SEMI-ANNUALLY		
	05/08/03	11.85	321.81	<50	<0.5	<0.5	<0.5	<0.5	1,300 (1,200)		
	12/15/04	12.80	320.86	<50	<0.5	<0.5	<0.5	<0.5	1,700 (1,900)		
	02/21/05	11.81	321.85	<100	<1.0	<1.0	<1.0	<1.0	3,000 (3,800)	0.82	
	05/17/05	12.51	321.15	<120	<1.2	<1.2	<1.2	<1.2	3,400 (4,400)	0.75	
	08/17/05	12.35	321.31	<170	<1.7	<1.7	<1.7	<1.7	4,500 (4,900)	0.77	
	11/27/05	13.18	320.48	<170	<1.7	<1.7	<1.7	<1.7	5,400 (4,400)	0.90	
	02/21/06	12.61	321.05	<170	<1.7	<1.7	<1.7	<1.7	5,000 (5,400)	0.29/0.71	
	06/01/06	12.47	321.22	<250	<2.5	<2.5	<2.5	<2.5	6,400 (6,300)	0.46	TAME, TBA, DIPE, ETBE=ND
	07/07/06	12.60	321.09	--	--	--	--	--	--	--	
	08/17/06	11.93	321.76	<250	<2.5	<2.5	<2.5	<2.5	7,700 (9,100)	0.43	
	11/24/06	13.01	320.68	<250	<2.5	<2.5	<2.5	<2.5	8,400	0.29	
	02/21/07	12.91	320.78	<50	<0.5	<0.5	<0.5	<0.5	3,600	0.24	
	05/15/07	13.40	320.29	<50	<0.5	<0.5	<0.5	<0.5	2,500	0.29	
	08/28/07	13.40	320.29	<50	<0.5	<0.5	<0.5	<0.5	170	0.40	
	12/21/07	13.40	320.29	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68	
	02/26/08	12.60	321.09	<50	<0.5	<0.5	<0.5	<0.5	7.0	0.86	
	05/21/08	13.45	320.24	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.94	
	08/13/08	13.37	320.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.91	
	11/13/08	13.50	320.19	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.94	
	02/06/09	13.67	320.02	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.87	
	05/28/09	13.25	320.44	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.71	
	08/13/09	13.26	320.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.77	
	11/24/09	13.28	320.41	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.80	
02/11/10	13.04	320.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.81		
06/04/10	12.93	320.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.94		
08/12/10	12.80	320.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.77		
11/30/10	13.08	320.61	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.72		
02/21/11	12.38	321.31	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.91		
05/17/11	12.82	320.87	---	---	---	---	---	---	---		
08/03/11	12.88	320.81	---	---	---	---	---	---	---		
02/15/12	13.42	320.27	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.83		
	08/25/12	12.77	320.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.73	
MW-2 329.29	10/04/94	8.56	320.62	2300	160	280	96	480	--		
	11/30/94	8.33	320.85	1,600	170	16	110	120	--		
	03/02/95	8.35	320.83	1,200	220	5.6	140	36	--		
	06/07/95	8.62	320.56	160	25	<0.5	16	<0.5	240		
	09/26/95	8.71	320.47	150	15	<0.5	7.2	<0.5	120		
	12/28/95	8.78	320.4	400	34	1.3	26	5.1	170		
	02/29/96	7.82	321.36	120	29	<0.5	<0.5	<0.5	790		
	06/27/96	8.72	320.46	150	13	<0.5	7	<0.5	850		
	09/12/96	8.81	320.48	<1,000	18	<10	<10	<10	3,100		
	03/31/97	8.65	320.64	<500	<5.0	<5.0	<5.0	<5.0	1,400		
	12/23/98	8.32	320.97	<50	<0.5	<0.5	<0.5	<1.5	900		
	03/25/99	7.89	321.4	<50	2.6	<0.5	<0.5	<0.5	1,100 (670)		
	02/03/00	7.53	321.76	<125	<1.25	<1.25	<1.25	<1.25	1,020 (1,100)		
	01/23/01	8.18	321.11	<50.0	<0.5	<0.5	<0.5	<0.5	642		
	05/01/01	8.43	320.86	70.8	<0.5	<0.5	<0.5	<0.5	342		
	08/28/01	8.39	320.9	<50	<0.5	<0.5	<0.5	<0.5	530		
	11/27/01	8.46	320.83	210	<0.5	<0.5	<0.5	<1.5	260		
	02/28/02	8.48	320.81	<50	<0.5	<0.5	<0.5	<1.5	180		
	05/22/02	8.14	321.15	<50	<0.5	<0.5	<0.5	<1.5	180		
	08/20/02	8.24	321.05	<50	<0.5	<0.5	<0.5	<1.5	160		
	11/11/02	8.06	321.23	<50	<0.5	<0.5	<0.5	<1.5	130		
	05/08/03	7.86	321.43	<50	<0.5	<0.5	<0.5	<0.5	180 (160)		
	12/15/04	8.60	320.69	<50	<0.5	<0.5	<0.5	<0.5	1,400 (1,600)		
	02/21/05	7.55	321.74	<50	<0.5	<0.5	<0.5	<0.5	800 (1,100)	1.35	
	05/17/05	8.52	320.77	<50	<0.5	<0.5	<0.5	<0.5	160 (210)	1.06	
	08/17/05	8.16	321.13	<50	<0.5	<0.5	<0.5	<0.5	190 (210)	0.90	
	11/27/05	9.00	320.29	<50	<0.5	<0.5	<0.5	<0.5	200 (210)	0.92	
	02/21/06	8.51	320.78	<50	<0.5	<0.5	<0.5	<0.5	240 (270)	0.33/0.46	
	06/01/06	8.50	320.98	<50	<0.5	<0.5	<0.5	<0.5	120 (110)	0.38	TAME, TBA, DIPE, ETBE=ND
	07/07/06	8.57	320.91	--	--	--	--	--	--	--	
	08/17/06	8.21	321.27	<50	<0.5	<0.5	<0.5	<0.5	230(230)	0.30	
	11/24/06	8.87	320.61	<50	<0.5	<0.5	<0.5	<0.5	760	0.24	
02/21/07	8.80	320.68	<50	<0.5	<0.5	<0.5	<0.5	1,100	0.21		
05/15/07	8.94	320.54	<50	<0.5	<0.5	<0.5	<0.5	1,400	0.25		
08/28/07	8.83	320.65	<50	<0.5	<0.5	<0.5	<0.5	1,800	0.33		
12/21/07	8.93	320.55	<50	<0.5	<0.5	<0.5	<0.5	1,700	0.49		
02/26/08	8.49	320.99	<50	<0.5	<0.5	<0.5	<0.5	590	0.51		
05/21/08	9.06	320.42	<50	<0.5	<0.5	<0.5	<0.5	230	0.67		
08/13/08	8.89	320.59	<50	<0.5	<0.5	<0.5	<0.5	190	0.77		
11/13/08	9.16	320.32	<50	<0.5	<0.5	<0.5	<0.5	77	0.86		
02/06/09	9.39	320.09	<50	<0.5	<0.5	<0.5	<0.5	20	0.81		
05/28/09	8.86	320.62	<50	<0.5	<0.5	<0.5	<0.5	12	0.74		
08/13/09	8.81	320.67	<50	<0.5	<0.5	<0.5	<0.5	10	0.69		
11/24/09	9.04	320.44	<50	<0.5	<0.5	<0.5	<0.5	13	0.80		

Pangea

Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> <i>(ft)</i>	Date <i>Measured</i>	Depth <i>to Water</i> <i>(ft)</i>	Groundwater <i>Elevation</i> <i>(ft, msl)</i>	← <i>µg/L</i> →						<i>Dissolved</i> <i>Oxygen</i> <i>mg/L</i>	<i>Notes</i>		
				<i>TPHg</i>	<i>Benzene</i>	<i>Toluene</i>	<i>Ethylbenzene</i>	<i>Xylenes</i>	<i>MTBE</i>				
<i>MW-2 (cont'd)</i>	02/11/10	7.50	321.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.8	0.76		
	06/04/10	8.80	320.68	<50	<0.5	<0.5	<0.5	<0.5	<0.5	6.5	0.82		
	08/12/10	8.61	320.87	<50	<0.5	<0.5	<0.5	<0.5	<0.5	8.0	0.85		
	11/30/10	8.99	320.49	<50	<0.5	<0.5	<0.5	<0.5	<0.5	6.8	0.93		
	02/21/11	8.46	321.02	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.5	0.95		
	05/17/11	8.58	320.90	---	---	---	---	---	---	---	---		
	08/03/11	8.82	320.66	---	---	---	---	---	---	---	---		
	02/15/12	9.09	320.39	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.2	1.31		
	08/25/12	8.72	320.76	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	0.74		
MW-3A <i>331.39</i>	05/29/06	10.13	321.28	--	--	--	--	--	--	--	--	0.03 SPH	
	07/07/06	10.15	321.24	4,200	340	27	75	79	32,000	--	--		
	08/17/06	9.56	321.83	6,200	410	68	100	650	28,000(34,000)	0.19	--		
	11/24/06	10.73	320.66	2,100	190	11	72	220	7,900	0.10	--		
	02/21/07	10.52	320.87	7,100	890	28	440	470	8,400	0.17	--		
	05/15/07	11.46	319.93	1,800	210	11	96	88	3,500	0.25	--		
	08/28/07	11.62	319.77	1,900	260	6.9	110	74	3,400	0.28	--		
	12/21/07	11.33	320.06	4,700	570	160	120	970	2,800	0.54	--		
	02/26/08	10.25	321.14	7,200	550	32	440	690	1,800	0.49	--		
	05/21/08	11.52	319.87	1,600	130	2.9	40	94	700	0.55	--		
	08/13/08	11.62	319.77	2,900	280	3.4	52	56	1,300	0.52	--		
	11/13/08	11.55	319.84	1,200	150	3.5	22	31	1,100	0.64	--		
	02/06/09	11.70	319.69	5,800	780	25	260	390	1,600	0.69	--		
	05/28/09	11.30	320.09	1,500	200	9.0	57	190	500	0.70	--		
	08/13/09	11.40	319.99	1,900	240	6.3	29	72	940	0.81	--		
	11/24/09	11.22	320.17	970	98	5.2	25	41	360	0.79	--		
	02/11/10	10.87	320.52	2,100	330	8.6	27	34	1,200	0.72	--		
	06/04/10	10.60	320.79	2,300	250	31	40	330	800	0.69	--		
	08/12/10	10.75	320.64	1,800	260	9.2	50	120	730	0.63	--		
	11/30/10	10.61	320.78	23,000	490	140	220	5,800	4,800	0.80	--		
	02/21/11	9.59	321.80	19,000	430	33	160	3,500	4,000	0.74	--		
05/17/11	10.56	320.83	17,000	530	27	390	3,000	2,900	0.43	--			
08/03/11	10.68	320.71	9,400	380	13	380	730	1,700	0.56	--			
02/15/12	11.46	319.93	7,100	180	15	89	360	870	0.62	--			
08/25/12	10.76	320.63	6,200	370	10	39	80	860	0.92				
MW-4 <i>332.63</i>	03/01/96	9.9	322.74	<50	<0.5	<0.5	<0.5	<0.5	<2.5				
	04/02/96	9.77	322.87	--	--	--	--	--	--				
	06/27/96	10	322.64	<50	<0.5	<0.5	<0.5	<0.5	<2.5				
	09/12/96	11.67	320.96	<50	<0.5	<0.5	<0.5	<0.5	3.5				
	03/31/97	10.59	322.04	<50	<0.5	<0.5	<0.5	<0.5	<2.5				
	12/23/98	10.37	322.26	<50	<0.5	<0.5	<0.5	<1.5	<2.5				
	03/25/99	9.91	322.72	<50	<0.5	<0.5	<0.5	<0.5	<2.5				
	02/03/00	10.32	322.31	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 (3)				
	01/23/01	10.54	322.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0				
	05/01/01	10.32	322.31			SAMPLED ANNUALLY							
	08/28/01	10.57	322.06			SAMPLED ANNUALLY							
	11/27/01	10.29	322.34			SAMPLED ANNUALLY							
	02/28/02	10.3	322.33	<50	<0.5	<0.5	<0.5	<1.5	<2.5				
	05/22/02	10.12	322.51			SAMPLED ANNUALLY							
	08/20/02	10.43	322.2			SAMPLED ANNUALLY							
	11/11/02	9.89	322.74			SAMPLED ANNUALLY							
	05/08/03	9.79	322.84	<50	<0.5	<0.5	<0.5	<0.5	<2				
	12/15/04	10.56	322.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0				
	02/21/05	9.50	323.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0 (<0.5)	1.60			
	05/17/05	10.20	322.43			SAMPLED ANNUALLY					1.29		
	08/17/05	10.50	322.13			SAMPLED ANNUALLY					1.10		
	11/27/05	11.07	321.56			SAMPLED ANNUALLY					1.01		
	02/21/06	10.53	322.10	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.14/0.90			
	<i>332.64</i>	05/29/06	10.33	322.31			SAMPLED ANNUALLY					--	
		07/07/06	10.52	322.12	--	--	--	--	--	--	--	--	
		08/17/06	10.45	322.19	--	--	--	--	--	--	--	--	
		11/24/06	10.95	321.69	--	--	--	--	--	--	--	0.22	
		02/21/07	10.71	321.93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.40		
		05/15/07	11.24	321.40	--	--	--	--	--	--	--	--	
		08/28/07	11.42	321.22	--	--	--	--	--	--	--	0.52	
		12/21/07	11.26	321.38	--	--	--	--	--	--	--	0.81	
		02/26/08	10.12	322.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.06		
		05/21/08	11.30	321.34	--	--	--	--	--	--	0.98		
		08/13/08	11.23	321.41	--	--	--	--	--	--	0.71		
		11/13/08	10.93	321.71	--	--	--	--	--	--	--	--	
		02/06/09	10.98	321.66	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.67		
05/28/09		10.96	321.68	--	--	--	--	--	--	--	--		
08/13/09		11.23	321.41	--	--	--	--	--	--	--	--		
11/24/09		11.15	321.49	--	--	--	--	--	--	--	--		
02/11/10		10.17	322.47	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.69			
06/04/10		10.52	322.12	---	---	---	---	---	---	---	---		
08/12/10		10.72	321.92	---	---	---	---	---	---	---	---		
11/30/10		10.75	321.89	---	---	---	---	---	---	---	---		
02/21/11		9.29	323.35	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.61			
05/17/11		10.37	322.27	---	---	---	---	---	---	---	---		
08/03/11	10.49	322.15	---	---	---	---	---	---	---	---			
02/15/12	11.18	321.46	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.89				
08/25/12	10.83	321.81	--	--	--	--	--	--	--	--			

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Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Measured	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved	Notes	
										Oxygen mg/L		
MW-5 333.47	03/01/96	10.62	322.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5			
	04/02/96	10.14	323.06	--	--	--	--	--	--			
	06/27/96	10.22	322.98	<50	<0.5	<0.5	<0.5	<0.5	<2.5			
	09/12/96	10.85	322.19	<50	<0.5	<0.5	<0.5	<0.5	<2.5			
	03/31/97	10.44	322.6	<50	<0.5	<0.5	<0.5	<0.5	<2.5			
	12/23/98	10.21	322.83	<50	<0.5	<0.5	<0.5	<1.5	<2.5			
	03/25/99	9.92	323.12	<50	<0.5	<0.5	<0.5	<0.5	<2.5			
	02/03/00	9.63	323.41	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.03			
	01/23/01	10.35	322.69	<50	<0.5	<0.5	<0.5	<0.5	<5.0			
	05/01/01	10.34	322.7			SAMPLED ANNUALLY						
	08/28/01	10.44	322.6			SAMPLED ANNUALLY						
	11/27/01	10.17	322.87			SAMPLED ANNUALLY						
	02/28/02	10.2	322.84	<50	<0.5	<0.5	<0.5	<1.5	<2.5			
	05/22/02	10.38	322.66			SAMPLED ANNUALLY						
	08/20/02	10.36	322.68			SAMPLED ANNUALLY						
	11/11/02	10.03	323.01			SAMPLED ANNUALLY						
	05/08/03	9.56	323.48	<50	<0.5	<0.5	<0.5	<0.5	3.4/<0.5			
	12/15/04	10.08	322.96	<50	<0.5	<0.5	<0.5	<0.5	<5.0			
	02/21/05	9.90	323.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0 (0.54)	1.62		
	05/17/05	10.33	322.71			SAMPLED ANNUALLY					1.47	
	08/17/05	10.40	322.64			SAMPLED ANNUALLY					1.18	
	11/27/05	10.43	322.61			SAMPLED ANNUALLY					1.19	
	02/21/06	10.32	322.81	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.48/0.76		
	05/29/06	10.41	322.72			SAMPLED ANNUALLY					--	
	07/07/06	10.46	322.67	--	--	--	--	--	--	--		
	08/17/06	10.49	324.19	--	--	--	--	--	--	--		
	11/24/06	10.92	322.21	--	--	--	--	--	--	--	0.27	
	02/21/07	10.90	322.23	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	0.73	
	05/15/07	10.97	322.16	--	--	--	--	--	--	--	--	
	08/28/07	11.07	322.06	--	--	--	--	--	--	--	0.55	
12/21/07	10.80	322.33	--	--	--	--	--	--	--	0.97		
02/26/08	10.38	322.75	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	1.01		
05/21/08	10.97	322.16	--	--	--	--	--	--	--	0.95		
08/13/08	10.98	322.15	--	--	--	--	--	--	--	0.99		
11/13/08	11.01	322.12	--	--	--	--	--	--	--	--		
02/06/09	11.05	322.08	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	0.82		
05/28/09	10.80	322.33	--	--	--	--	--	--	--	--		
08/13/09	10.90	322.23	--	--	--	--	--	--	--	--		
11/24/09	10.96	322.17	--	--	--	--	--	--	--	--		
02/11/10	10.50	322.63	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	0.80		
06/04/10	10.68	322.45	--	--	--	--	--	--	--	--		
08/12/10	10.61	322.52	--	--	--	--	--	--	--	--		
11/30/10	10.68	322.45	--	--	--	--	--	--	--	--		
02/21/11	10.35	322.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	0.78		
05/17/11	10.56	322.57	--	--	--	--	--	--	--	--		
08/03/11	10.66	322.47	--	--	--	--	--	--	--	--		
02/15/12	10.82	322.31	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	1.02		
	08/25/12	10.70	322.43	--	--	--	--	--	--	--		
MW-6A 331.81	06/01/06	10.38	321.43	620	20	<2.5	<2.5	43	5,700 (5,300)	0.73	TAME, TBA, DIPE, ETBE=ND	
	07/07/06	10.15	321.66	--	--	--	--	--	--	--		
	08/17/06	9.69	322.12	860	55	3.1	31	41	5,300(6,200)	0.49		
	11/24/06	11.10	320.71	330	14	<2.5	11	3.4	5,500	0.37		
	02/21/07	10.72	321.09	360	13	1.8	16	34	4,400	0.50		
	05/15/07	11.69	320.12	<500	40	5.3	11	16	7,300	0.52		
	08/28/07	11.98	319.83	<250	<2.5	<2.5	<2.5	<2.5	7,300	0.39		
	12/21/07	11.31	320.50	4,400	200	45	50	550	3,500	0.45		
	02/26/08	10.15	321.66	6,800	740	130	290	600	330	0.61		
	05/21/08	11.60	320.21	1,900	150	8.1	44	100	88	0.63		
	08/13/08	11.91	319.90	1,200	84	3.7	36	18	<75	0.42		
	11/13/08	11.73	320.08	150	15	1.4	3.0	4.2	35	0.44		
	02/06/09	11.66	320.15	550	100	9.3	22	34	<90	0.48		
	05/28/09	11.45	320.36	600	98	14	21	42	48	0.55		
	08/13/09	11.49	320.32	79	1.6	1.5	0.66	0.76	9.4	0.69		
	11/24/09	11.15	320.66	240	21	3.7	5.8	20	<20	0.72		
	02/11/10	10.80	321.01	2,400	370	65	47	320	<100	0.55		
	06/04/10	10.44	321.37	2,800	500	85	87	500	<100	0.68		
	08/12/10	10.65	321.16	4,000	240	39	160	770	<50	0.72		
	11/30/10	10.69	321.12	22,000	640	210	940	4,300	<250	0.89		
02/21/11	9.79	322.02	8,100	330	93	340	1,700	<35	0.62			
05/17/11	10.78	321.03	16,000	870	75	780	2,500	<19	0.83			
08/03/11	10.92	320.89	6,000	620	24	340	830	<50	0.47			
02/15/12	11.95	319.86	13,000	480	49	580	1,300	<50	0.78			
	08/25/12	11.20	320.61	7,000	220	34	200	840	<50	0.47		
MW-7A 330.71	05/31/06	9.19	321.52	<50	1.3	<0.5	0.79	0.82	760 (770)	0.40	TAME, TBA, DIPE, ETBE=ND	
	07/07/06	9.17	321.54	--	--	--	--	--	--	--		
	08/17/06	8.68	322.03	60	1.1	<0.5	<0.5	1.1	930 (1,400)	0.29		
	11/24/06	9.88	320.83	<50	<0.5	<0.5	<0.5	<0.5	260	0.20		
	02/21/07	9.59	321.12	<50	4.6	<0.5	0.62	2.2	270	0.35		
	05/15/07	10.15	320.56	<50	<0.5	<0.5	<0.5	<0.5	45	0.40		
	08/28/07	10.09	320.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.42		
	12/21/07	10.00	320.71	3,200	180	38	100	410	890	0.68		

Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Measured	Depth to Water (ft)	Groundwater Elevation (ft, msl)	μg/L						Dissolved Oxygen mg/L	Notes
				TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
<i>MW-7A (cont'd)</i>	02/26/08	8.78	321.93	1,300	150	1.8	59	99	410	0.90	
	05/21/08	10.16	320.55	200	18	<0.5	3.3	<0.5	30	0.75	
	08/13/08	10.27	320.44	<50	<0.5	<0.5	<0.5	<0.5	24	0.81	
	11/13/08	10.27	320.44	<50	<0.5	<0.5	<0.5	<0.5	30	0.85	
	02/06/09	10.22	320.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.83	
	05/28/09	9.91	320.80	--	--	--	--	--	--	--	
	08/13/09	9.98	320.73	--	--	--	--	--	--	--	
	11/24/09	9.93	320.78	--	--	--	--	--	--	--	
	02/11/10	9.39	321.32	360	75	0.83	4.8	62	200	0.90	
	06/04/10	9.43	321.28	---	---	---	---	---	---	---	
	08/12/10	9.50	321.21	---	---	---	---	---	---	---	
	11/30/10	9.73	320.98	---	---	---	---	---	---	---	
	02/21/11	8.37	322.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.87	
	05/17/11	9.33	321.38	---	---	---	---	---	---	---	
	08/03/11	9.58	321.13	---	---	---	---	---	---	---	
	02/15/12	10.54	320.17	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.85	
08/25/12	9.66	321.05	--	--	--	--	--	--	--		
MW-8A 331.19	05/29/06	9.55	321.64	<50	<0.5	<0.5	<0.5	<0.5	20 (18)	0.39	TAME, TBA, DIPE, ETBE=ND
	07/07/06	9.20	321.99	--	--	--	--	--	--	--	
	08/17/06	8.73	322.46	<50	<0.5	<0.5	<0.5	<0.5	19 (26)	0.26	
	11/24/06	9.80	321.39	<50	<0.5	<0.5	<0.5	<0.5	34	0.21	
	02/21/07	9.81	321.38	<50	<0.5	<0.5	<0.5	<0.5	16	0.29	
	05/15/07	10.05	321.14	<50	<0.5	<0.5	<0.5	<0.5	13	0.33	
	08/28/07	9.83	321.36	<50	<0.5	<0.5	<0.5	<0.5	19	0.35	
	12/21/07	10.36	320.83	<50	<0.5	<0.5	<0.5	<0.5	16	0.61	
	02/26/08	8.33	322.86	<50	<0.5	<0.5	<0.5	<0.5	38	0.77	
	05/21/08	9.99	321.20	<50	<0.5	<0.5	<0.5	<0.5	13	0.81	
	08/13/08	10.49	320.70	<50	<0.5	<0.5	<0.5	<0.5	68	0.65	
	11/13/08	10.39	320.80	<50	<0.5	<0.5	<0.5	<0.5	110	0.68	
	02/06/09	10.42	320.77	<50	<0.5	<0.5	<0.5	<0.5	75	0.70	
	05/28/09	9.90	321.29	<50	<0.5	<0.5	<0.5	<0.5	36	0.66	
	08/13/09	9.78	321.41	<50	<0.5	<0.5	<0.5	<0.5	68	0.74	
	11/24/09	9.76	321.43	<50	<0.5	<0.5	<0.5	<0.5	66	0.71	
	02/11/10	9.33	321.86	<50	<0.5	<0.5	<0.5	<0.5	56	0.63	
	06/04/10	8.95	322.24	<50	<0.5	<0.5	<0.5	<0.5	30	0.69	
	08/12/10	9.24	321.95	<50	<0.5	<0.5	<0.5	<0.5	28	0.75	
	11/30/10	13.19	318.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.69	
02/21/11	12.65	318.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68		
05/17/11	9.44	321.75	---	---	---	---	---	---	---		
08/03/11	9.14	322.05	---	---	---	---	---	---	---		
02/15/12	9.33	321.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.91		
08/25/12	13.25	317.94	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	0.40	
MW-9A 331.17	05/29/06	10.13	321.04	<50	<0.5	<0.5	<0.5	<0.5	210 (210)	0.46	TAME, TBA, DIPE, ETBE=ND
	07/07/06	9.96	321.21	--	--	--	--	--	--	--	
	08/17/06	9.40	321.77	150	<0.5	1.3	<0.5	<0.5	79(100)	0.53	
	11/24/06	11.02	320.15	200	<0.5	2.4	<0.5	<0.5	31	0.38	
	02/21/07	10.53	320.64	<50	<0.5	<0.5	<0.5	<0.5	21	0.33	
	05/15/07	10.81	320.36	86	<0.5	<0.5	<0.5	<0.5	31	0.45	
	08/28/07	11.11	320.06	95	<0.5	1.4	<0.5	<0.5	10	0.38	
	12/21/07	10.76	320.41	120	<0.5	2.9	<0.5	0.51	9.5	0.50	
	02/26/08	9.71	321.46	120	<0.5	1.2	<0.5	<0.5	9.5	0.86	
	05/21/08	10.75	320.42	86	<0.5	<0.5	<0.5	<0.5	6.3	0.84	
	08/13/08	11.31	319.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.76	
	11/13/08	11.14	320.03	52	<0.5	<0.5	<0.5	<0.5	5.5	0.63	
	02/06/09	11.16	320.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.61	
	05/28/09	10.75	320.42	--	--	--	--	--	--	--	
	08/13/09	10.65	320.52	--	--	--	--	--	--	--	
	11/24/09	10.48	320.69	--	--	--	--	--	--	--	
	02/11/10	10.16	321.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.63	
	06/04/10	9.80	321.37	---	---	---	---	---	---	---	
	08/12/10	10.08	321.09	---	---	---	---	---	---	---	
	11/30/10	10.10	321.07	---	---	---	---	---	---	---	
02/21/11	9.45	321.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.73		
05/17/11	10.07	321.10	---	---	---	---	---	---	---		
08/03/11	10.38	320.79	---	---	---	---	---	---	---		
02/15/12	11.52	319.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.73		
08/25/12	10.78	320.39	--	--	--	--	--	--	--		
MW-10A 329.93	05/29/06	11.60	318.33	<50	<0.5	<0.5	<0.5	0.67	5.3 (4.7)	0.68	TAME, TBA, DIPE, ETBE=ND
	07/07/06	9.78	320.15	--	--	--	--	--	--	--	
	08/17/06	8.80	321.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.47	
	11/24/06	12.61	317.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.26	
	02/21/07	8.96	320.97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.25	
	05/15/07	9.22	320.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.30	
	08/28/07	8.44	321.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.35	
	12/21/07	8.81	321.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.47	
	02/26/08	7.34	322.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.70	
	05/21/08	9.22	320.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.64	
	08/13/08	9.25	320.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.61	
	11/13/08	9.47	320.46	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.70	
	02/06/09	9.50	320.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68	
	05/28/09	9.11	320.82	--	--	--	--	--	--	--	

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Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i>	Date Measured	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved	Notes
										Oxygen mg/L	
<i>MW-10A (cont'd)</i>	08/13/09	9.21	320.72	--	--	--	--	--	--	--	
	11/24/09	9.26	320.67	--	--	--	--	--	--	--	
	02/11/10	8.35	321.58	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.64	
	06/04/10	8.73	321.20	---	---	---	---	---	---	---	
	08/12/10	8.85	321.08	---	---	---	---	---	---	---	
	11/30/10	9.02	320.91	---	---	---	---	---	---	---	
	02/21/11	7.78	322.15	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.70	
	05/17/11	11.61	318.32	---	---	---	---	---	---	---	
	08/03/11	11.39	318.54	---	---	---	---	---	---	---	
	02/15/12	9.68	320.25	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.26	
	08/25/12	9.11	320.82	--	--	--	--	--	--	--	
<hr style="border-top: 1px dashed black;"/>											
Intermediate-Depth (B-zone) Wells											
MW-6B	06/01/06	8.41	322.49	<50	<0.5	<0.5	<0.5	<0.5	18 (16)	0.34	TAME, TBA, DIPE, ETBE=ND
<i>330.9</i>	07/07/06	8.55	322.35	--	--	--	--	--	--	--	
	08/17/06	8.66	322.24	<50	<0.5	<0.5	<0.5	<0.5	8.5(9.6)	0.40	
	11/24/06	9.25	321.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.31	
	02/21/07	8.80	322.10	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.37	
	05/15/07	9.21	321.69	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.31	
	08/28/07	9.60	321.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.51	
	12/21/07	9.42	321.48	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.82	
	02/26/08	7.87	323.03	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.80	
	05/21/08	9.37	321.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.87	
	08/13/08	9.70	321.20	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.81	
	11/13/08	9.62	321.28	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.78	
	02/06/09	9.53	321.37	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.71	
	05/28/09	9.23	321.67	--	--	--	--	--	--	--	
	08/13/09	9.63	321.27	--	--	--	--	--	--	--	
	11/24/09	9.63	321.27	--	--	--	--	--	--	--	
	02/11/10	8.41	322.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68	
	06/04/10	8.72	322.18	---	---	---	---	---	---	---	
	08/12/10	9.10	321.80	---	---	---	---	---	---	---	
	11/30/10	9.02	321.88	---	---	---	---	---	---	---	
	02/21/11	8.11	322.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.66	
	05/17/11	8.83	322.07	---	---	---	---	---	---	---	
	08/03/11	9.16	321.74	---	---	---	---	---	---	---	
	02/15/12	9.83	321.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.91	
	08/25/12	9.81	321.09	--	--	--	--	--	--	--	
MW-7B	05/31/06	9.05	321.64	<50	0.79	<0.5	<0.5	0.75	6.4 (6.6)	0.17	TAME, TBA, DIPE, ETBE=ND
<i>330.69</i>	07/07/06	9.03	321.66	--	--	--	--	--	--	--	
	08/17/06	8.62	322.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.22	
	11/24/06	9.75	320.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.27	
	02/21/07	9.44	321.25	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.29	
	02/21/07	9.44	321.25	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.29	
	05/15/07	9.97	320.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.33	
	08/28/07	9.96	320.73	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.51	
	12/21/07	9.87	320.82	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.53	
	02/26/08	8.64	322.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.59	
	05/21/08	10.05	320.64	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.56	
	08/13/08	10.17	320.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.51	
	11/13/08	10.15	320.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.53	
	02/06/09	10.18	320.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.55	
	05/28/09	9.80	320.89	--	--	--	--	--	--	--	
	08/13/09	9.89	320.80	--	--	--	--	--	--	--	
	11/24/09	9.85	320.84	--	--	--	--	--	--	--	
	02/11/10	9.24	321.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.81	
	06/04/10	9.35	321.34	---	---	---	---	---	---	---	
	08/12/10	9.37	321.32	---	---	---	---	---	---	---	
	11/30/10	9.80	320.89	---	---	---	---	---	---	---	
	02/21/11	8.69	322.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.85	
	05/17/11	9.23	321.46	---	---	---	---	---	---	---	
	08/03/11	9.42	321.27	---	---	---	---	---	---	---	
	02/15/12	10.18	320.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.73	
	08/25/12	9.64	321.05	--	--	--	--	--	--	--	
<hr style="border-top: 1px dashed black;"/>											
Deep (C-Zone) Wells											
MW-6C	06/01/06	8.21	322.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.29	TAME, TBA, DIPE, ETBE=ND
<i>330.88</i>	07/07/06	8.41	322.47	--	--	--	--	--	--	--	
	08/17/06	8.56	322.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.21	
	11/24/06	9.12	321.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.28	
	02/21/07	8.62	322.26	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.21	
MW-7C	05/31/06	8.65	322.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.12	TAME, TBA, DIPE, ETBE=ND
<i>330.74</i>	07/07/06	8.70	322.04	--	--	--	--	--	--	--	
	08/17/06	8.52	322.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.17	
	11/24/06	9.42	321.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.19	
	02/21/07	9.01	321.73	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.31	

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Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i>	Date <i>Measured</i>	Depth <i>to Water</i>	Groundwater <i>Elevation</i>	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved	Notes
										Oxygen	
<i>(ft)</i>		<i>(ft)</i>	<i>(ft, msl)</i>				<i>µg/L</i>			<i>mg/L</i>	
MW-9C 331.48	05/29/06	16.59	314.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.28	TAME, TBA, DIPE, ETBE=ND
	07/07/06	8.85	322.63	--	--	--	--	--	--	--	
	08/17/06	9.20	322.28	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.21	
	11/24/06	9.61	321.87	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.33	
	02/21/07	8.94	322.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.46	
MW-10C 329.66	05/29/06	7.28	322.38	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.16	TAME, TBA, DIPE, ETBE=ND
	07/07/06	7.28	322.38	--	--	--	--	--	--	--	
	08/17/06	7.29	322.37	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.22	
	11/24/06	10.75	318.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.33	
	02/21/07	7.69	321.97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.39	
MW-11C 331.61	05/31/06	9.90	321.71	<50	<0.5	<0.5	<0.5	<0.5	11 (11)	0.29	TAME, TBA, DIPE, ETBE=ND
	07/07/06	10.02	321.59	--	--	--	--	--	--	--	
	08/17/06	9.60	322.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.22	
	11/24/06	10.60	321.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.28	
	02/21/07	10.30	321.31	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.43	

Destroyed Wells

MW-3 332.86	10/04/94	12.06	320.67	6,300	610	750	68	670	--	
	11/30/94	11.38	321.35	17	3,600	490	430	610	--	
	03/02/95	11.97	320.76	8,500	2,200	<50	240	<50	64,000	
	06/07/95	11.54	321.19	3,000	710	18	220	44	3,100	
	09/26/95	12.36	320.37	<10,000	230	<100	130	<100	64,000	
	12/28/95	12.07	320.66	<12,500	760	<125	<125	<125	100,000	
	02/29/96	11.01	321.72	1,600	380	<10	84	17	33,000	
	06/27/96	11.93	320.8	1,400	<2.5	4.3	130	4	96,000	
	09/12/96	12.26	320.6	<10,000	560	<100	110	<100	100,000	
	03/31/97	12.04	320.82	<25,000	1,200	370	<250	380	130,000	
	12/23/98	12.92	319.94	--	--	--	--	--	--	0.1' SPH; 0.079 gal SPH removed
	03/25/99	12.56	320.3	--	--	--	--	--	--	0.05' SPH; 0.05 gal SPH removed
	02/03/00	11.12	321.74	92,100	4,780	11,400	2,270	15,800	137,000 (162,000)	
	1/23/2001	11.78	321.08	60,600	4,810	7,500	1,870	11,000	148,000	Absorbent sock in well
	5/1/2001	10.66	322.2	56,000	3,760	5,640	<2,500	8,740	136,000	Absorbent sock in well
	8/28/2001	11.79	321.07	32,000	3,800	2,600	1,200	7,500	160,000	Absorbent sock in well
	11/27/2001	11.98	320.88	110,000	1,300	2,400	1,500	9,400	90,000	Absorbent sock removed
	02/28/02	11.81	321.05	24,000	1,900	820	520	3,100	90,000	
	05/22/02	11.6	321.26	110,000	4,000	3,200	2,800	18,000	140,000	
	08/20/02	11.81	321.05	37,000	2,600	1,500	890	4,800	110,000	
	11/11/02	11.63	321.23	81,000	2,900	2,100	2,100	14,000	110,000	
	05/08/03	10.91	321.95	5,700	770	69	130	365	76,000 (70,000)	
	12/15/04	11.97	320.89	33,000	1,700	430	1,300	7,000	70,000 (89,000)	
02/21/05	10.81	322.06	--	--	--	--	--	--	1.29	0.01 SPH
05/17/05	11.63	321.29	--	--	--	--	--	--	1.06	0.08 SPH
08/17/05	10.83	322.03	39,000	1,500	260	780	2,700	42,000 (47,000)	0.93	
11/27/05	12.29	320.72	--	--	--	--	--	--	--	0.19 SPH
02/21/06	11.73	321.28	--	--	--	--	--	--	--	0.19 SPH
03/30/06	--	--	--	--	--	--	--	--	--	Well Destroyed
EA-1 331.21	10/17/88	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	10/24/88	10.64	322.77	--	--	--	--	--	--	
	11/02/88	10.69	322.72	--	--	--	--	--	--	
	12/20/88	10.51	322.9	<50	<0.5	<0.5	<0.5	<0.5	--	
	03/28/89	9.87	323.54	<250	<0.5	<0.5	<0.5	<0.5	--	
	08/02/89	10.34	323.07	<50	<0.1	<0.1	<0.1	<0.1	--	
	11/06/89	10.65	322.76	<500	<3.0	<5.0	<5.0	<5.0	--	
	01/25/90	10.6	322.81	<50	<0.5	<0.5	<0.5	<0.5	--	
	04/23/90	10.58	322.83	71	2	5	3	8	--	
	08/01/90	10.88	322.53	300	86	21	10	33	--	
	10/24/91	11.12	322.29	280	69	13	11	16	--	
	01/31/91	11.16	322.25	460	160	11	17	17	--	
	08/21/91	10.8	322.61	2,400	400	220	44	120	--	
	08/21/91	10.8	322.61	2,300	390	210	42	120	--	Duplicate
	10/07/91	10.79	322.62	--	--	--	--	--	--	
	01/28/92	10.79	322.62	3,600	320	360	110	310	--	
	01/28/92	10.79	322.62	3,000	290	320	99	270	--	Duplicate
	06/05/92	10.84	322.57	1,700	290	89	61	130	--	
	09/30/92	11.06	322.35	2,100	160	260	80	350	--	
	12/30/92	10.15	323.26	3,200	240	180	110	310	--	
	03/29/93	9.42	323.99	23,000	700	3,000	610	3,000	--	
	06/25/93	10.42	322.99	2.7	130	590	130	590	--	
	09/16/93	10.66	322.75	3.9	410	830	220	890	--	
	12/20/93	10.6	322.81	27	1,200	2,600	1,100	4,200	--	
	03/29/94	10.41	323	6.3	250	700	200	830	--	
	06/22/94	10.4	323.01	4.1	71	240	110	460	<30	
	09/20/94	10.37	323.04	8,500	1,200	1,300	370	1,400	--	
	10/04/94	10.34	323.07	7,600	97	360	150	620	--	
	11/30/94	9.46	323.95	8,800	180	490	240	900	--	
03/02/95	9.96	321.07	6.9	82	570	210	970	--		
06/15/95	9.8	321.23	4.8	44	210	160	620	<25		
09/26/95	10.48	320.55	13,000	150	620	370	1,400	<125		
12/28/95	10.14	320.89	11,000	74	250	200	750	79		

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Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID TOC Elev (ft)	Date Measured	Depth to Water (ft)	Groundwater Elevation (ft, msl)	Groundwater						Dissolved Oxygen mg/L	Notes
				TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
EA-1 (cont'd)	02/29/96	8.74	322.29	17,000	59	480	350	1,600	<125		
	06/27/96	10.21	320.82	3,600	22	130	130	49	46		
	09/12/96	10.49	320.72	2,000	20	<10	18	44	<50		
	03/31/97	10.19	321.02	17,000	87	230	330	1,200	310		
	12/23/98	9.83	321.38	290	20	0.88	1.1	16	<2.5		
	03/25/99	9.13	322.08	500	21	<0.5	21	<0.5	18		
	02/03/00	9.05	322.16	2,310	35.7	90	21.8	147	1,280 (365)		
	01/23/01	--	--	--	--	--	--	--	--		Inaccessible
	05/01/01	9.82	321.39	7,710	19.9	12.6	22.3	64	31.8		
	08/28/01	10.04	321.17	4,800	69	<25	50	140	160		
	11/27/01	10.05	321.16	5,300	25	<5.0	30	120	<20		
	02/28/02	--	--	--	--	--	--	--	--		Inaccessible
	05/22/02	9.05	322.16	110	<1.0	<0.50	1	<1.5	<2.5		
	08/20/02	9.21	322	410	2.6	<0.50	8.5	29	<5.0		
	11/11/02	9.01	322.2	3,800	<0.50	1.3	17	47	<5.0		
	05/08/03	8.23	322.98	1,700	11	0.97	63	161	<2.0		
	12/15/04	--	--	--	--	--	--	--	--		Inaccessible
	02/21/05	--	--	--	--	--	--	--	--		Inaccessible
	05/17/05	--	--	--	--	--	--	--	--		Inaccessible
	08/17/05	--	--	--	--	--	--	--	--		Inaccessible
	11/27/05	--	--	--	--	--	--	--	--		Inaccessible
02/21/06	--	--	--	--	--	--	--	--		Inaccessible	
03/31/06	--	--	--	--	Well Destroyed	--	--	--	--	Well Destroyed	
EA-2 330.41	10/17/88	--	--	<50	<0.5	<0.5	<0.5	1.2	--		
	10/24/88	9.7	322.89	--	--	--	--	--	--		
	11/02/88	10.03	322.56	--	--	--	--	--	--		
	12/20/88	9.98	322.61	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/28/89	8.8	323.79	<250	<2	<0.5	<0.5	<0.5	--		
	08/02/89	9.44	323.15	<50	<0.1	<0.1	<0.1	<0.1	--		
	11/06/89	9.53	323.06	<500	<3.0	<5.0	<5.0	<5.0	--		
	01/25/90	9.27	323.32	<50	<0.5	<0.5	<0.5	<0.5	--		
	04/23/90	9.35	323.24	<50	0.6	0.8	<0.5	2	--		
	08/01/90	9.71	322.88	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/24/90	10.08	322.51	<50	<0.5	<0.5	<0.5	<0.5	--		
	01/31/91	10.21	322.38	<50	<0.5	<0.5	<0.5	<0.5	--		
	01/31/91	10.21	322.38	<50	<0.5	<0.5	<0.5	<0.5	--		Duplicate
	08/21/91	9.8	322.79	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/07/91	9.98	322.61	--	--	--	--	--	--		
	01/28/92	9.81	322.78	<50	0.8	<0.5	<0.5	<0.5	--		
	06/05/92	9.86	322.73	<50	<0.5	<0.5	<0.5	<0.5	--		
	09/30/92	10.6	321.99	66	1	3.2	1.3	7.4	--		
	12/30/92	9.11	323.48	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/29/93	7.73	324.86	<50	<0.5	<0.5	<0.5	<1.5	--		
	06/25/93	9.22	323.37	<50	<0.5	<0.5	<0.5	<1.5	--		
	09/16/93	10	322.59	<50	<0.5	<0.5	<0.5	<1.5	--		
	12/20/93	9.38	323.21	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/29/94	9.3	323.29	<50	<0.5	0.6	<0.5	<0.5	--		
	06/22/94	9.49	323.1	<50	<0.5	<0.5	<0.5	<0.5	--		
	09/26/94	9.72	322.87	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/04/94	9.58	323.01	<50	<0.5	<0.5	<0.5	<0.5	--		
	11/30/94	8.7	323.89	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/02/95	8.54	321.67	<50	<0.5	<0.5	<0.5	<0.5	--		
	06/07/95	8.42	321.79	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	09/26/95	9.34	320.87	540	6.8	<0.5	47	29	13		
	12/28/95	8.84	321.37	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	02/29/96	7.44	322.77	<50	<0.5	<0.5	<0.5	1.5	<2.5		
	06/27/96	8.83	321.38	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	09/12/96	9.4	321.01	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	03/31/97	9.11	321.3	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	12/23/98	8.91	321.5	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	03/25/99	8.1	322.31	<50	<0.5	<0.5	<0.5	<0.5	2.7		
	02/03/00	8.36	322.05	<50	<0.5	<0.5	<0.5	<0.5	<2.5 (<2.0)		
	01/23/01	9.08	321.33	441 (1)	1.27	0.542	40.3	31	72.9		
	05/01/01	8.87	321.54			SAMPLED ANNUALLY					
08/28/01	9.45	320.96			SAMPLED ANNUALLY						
11/27/01	9.5	320.91			SAMPLED ANNUALLY						
02/28/02	9.05	321.36	<50	<0.50	<0.50	<0.5	<1.5	74			
05/22/02	9.04	321.37			SAMPLED ANNUALLY						
08/20/02	9	321.41			SAMPLED ANNUALLY						
11/11/02	9.03	321.38			SAMPLED ANNUALLY						
05/08/03	7.26	323.15	<50	<0.5	<0.5	<0.5	<0.5	2.2/0.9			
12/15/04	8.96	321.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0			
02/21/05	7.20	323.21	<50	<0.5	<0.5	<0.5	<0.5	13 (11)	0.64		
05/17/05	8.21	322.20			SAMPLED ANNUALLY				0.77		
08/17/05	7.97	322.44			SAMPLED ANNUALLY				0.85		
11/27/05	9.83	320.58			SAMPLED ANNUALLY				0.84		
02/21/06	8.78	321.63	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.51/0.68		
03/28/06	--	--	--	--	Well Destroyed	--	--	--	--	Well Destroyed	
EA-3 331.5	10/17/88	--	--	<50	1.8	<0.5	<0.5	3	--		
	10/24/88	11.03	322.61	--	--	--	--	--	--		
	11/02/88	11.03	322.61	--	--	--	--	--	--		
	12/20/88	10.96	322.68	240	90	1.2	13	3.3	--		

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Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID	Date	Depth	Groundwater	←----- µg/L ----->						Dissolved	Notes
<i>TOC Elev</i>	Measured	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen	
<i>(ft)</i>		<i>(ft)</i>	<i>(ft, msl)</i>							<i>mg/L</i>	
<i>EA-3 (cont'd)</i>	03/28/89	9.77	323.87	2,300	380	130	240	910	--		
	08/02/89	10.65	322.99	<50	<0.1	<0.1	<0.1	<0.1	--		
	11/06/89	10.78	322.86	<500	<3.0	<5.0	<5.0	<5.0	--		
	01/25/90	10.66	322.98	<50	<0.5	<0.5	<0.5	<0.5	--		
	04/23/90	10.68	322.96	<50	0.8	<0.5	0.9	<0.5	--		
	08/01/90	11.03	322.61	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/24/90	11.35	322.29	<50	<0.5	<0.5	<0.5	<0.5	--		
	01/31/91	11.52	322.12	<50	<0.5	<0.5	<0.5	<0.5	--		
	08/21/91	--	--	--	--	--	--	--	--		
	10/07/91	11.15	322.49	180	40	20	4.7	8.4	--		
	10/7/1991	--	--	200	43	17	4.1	6.7	--		Duplicate
	01/28/92	11.08	322.56	640	69	85	13	46	--		
	06/05/92	10.98	322.66	250	63	8.3	3	9.5	--		
	09/30/92	11.38	322.26	330	120	33	6.3	22	--		
	12/30/92	10.48	323.16	58	7.6	1.3	2.5	5.4	--		
	03/29/93	9.3	324.34	120	11	4.5	6.2	13	--		
	06/25/93	10.46	323.18	<50	<0.5	<0.5	<0.5	<1.5	--		
	09/16/93	10.9	322.74	85	3.9	8.8	4.5	22	--		
	12/20/93	10.66	322.98	190	12	12	13	50	--		
	03/29/94	10.5	323.14	<50	<0.5	1.2	<0.5	0.9	--		
	06/22/94	10.64	323	<50	<0.5	<0.5	<0.5	<0.5	<3.0		
	09/26/94	10.72	322.92	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/04/94	10.68	322.96	<50	<0.5	<0.5	<0.5	0.7	--		
	11/30/94	9.66	323.98	170	6.1	3	6.5	28	--		
	03/02/95	9.92	321.38	<50	<0.5	<0.5	<0.5	<0.5	--		
	06/07/95	9.72	321.58	<50	<0.5	<0.5	<0.5	<0.5	3.2		
	09/26/95	10.6	320.7	2,000	140	<5.0	<5.0	190	280		
	12/28/95	9.82	321.48	<50	<0.5	<0.5	<0.5	<0.5	26		
	02/29/96	8.28	323.02	<50	2.1	<0.5	2.5	6	31		
	06/27/96	9.91	321.39	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	09/12/96	10.59	320.91	13,000	<20	<20	<20	<20	48		
	03/31/97	--	--	--	--	--	--	--	--		Inaccessible
	04/15/97	10.25	321.25	<125	2	<1.2	<1.2	<1.2	680		
	12/23/98	--	--	--	--	--	--	--	--		Inaccessible
	03/25/99	--	--	--	--	--	--	--	--		Inaccessible
	02/03/00	--	--	--	--	--	--	--	--		Inaccessible
	01/23/01	10.31	321.19	862 (1)	3.97	1.15	18.9	48.6	289		
	05/01/01	10.15	321.35			SAMPLED SEMI-ANNUALLY					
	08/28/01	10.56	320.94	<50	<0.5	<0.5	<0.5	<0.5	37		
	11/27/01	10.65	320.85			SAMPLED SEMI-ANNUALLY					
	02/28/02	10.37	321.13	<50	1.3	<0.50	2	1.8	90		
	05/22/02	10.27	321.23			SAMPLED SEMI-ANNUALLY					
	08/20/02	10.3	321.2	<50	<0.50	<0.50	<0.50	<1.5	40		
	11/11/02	9.05	322.45			SAMPLED SEMI-ANNUALLY					
	05/08/03	8.83	322.67	<50	<0.5	<0.5	<0.5	<0.5	39/37		
	12/15/04	10.39	321.11	<50	<0.5	<0.5	<0.5	<0.5	18 (17)		
	02/21/05	8.80	322.70	<50	<0.5	<0.5	2.3	1.4	180 (290)	0.69	
	05/17/05	9.57	321.93	140	0.68	<0.5	6.6	0.94	250 (340)	0.86	
	08/17/05	9.23	322.27	3,800	11	3.7	110	24	200 (200)	0.99	
	11/27/05	11.05	320.45	150	<0.5	1.8	2.4	0.56	88 (85)	0.81	
	02/21/06	10.10	321.40	83	<0.5	0.72	1.7	<0.5	40 (49)	0.38/0.65	
	04/03/06	--	--	--		Well Destroyed		--	--	--	Well Destroyed

Grab Groundwater Analytical Data

SB-1A-W	05/18/06	11.20	NA	170	1.5	1.5	1.2	5.9	570 (500)	--	TAME=90µg/L, TBA,DIPE,ETBE=ND
DPB-1	05/01/03	16-20	NA	12,000	25	440	440	2,180	8,100	--	
DPB-2	04/22/03	NA	NA	710	1.1	<1	18	74	540	--	
DPB-3	04/17/03	16-20	NA	48,000	400	5,800	1,500	9,500	8,900	--	
DPB-3	04/17/03	27-31	NA	62,000	700	9,900	1,300	7,900	4,200	--	
	04/17/03	39-43	NA	27,000	210	3,200	640	4,100	7,700	--	
DPB-4	04/17/03	32-36	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
DPB-5	04/30/03	7-11	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/17/03	11-15	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/30/03	26-30	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/17/03	36-40	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
DPB-6	04/18/03	15-19	NA	7,700	18	77	170	640	5.9	--	
	04/18/03	26-30	NA	4,700	21	76	160	650	6.2	--	
	04/18/03	35-39	NA	2,900	8.8	24	54	249	100	--	
DPB-7	04/18/03	15-19	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/18/03	20-24	NA	7,000	42	640	190	990	300	--	
	04/18/03	35-39	NA	150	<0.5	1.8	0.8	5.7	<0.5	--	
DPB-8	05/01/03	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
DPB-S	04/18/03	14-18	NA	20,000	<170	<170	380	6,600	53,000	--	
	04/18/03	26-30	NA	1,500	7.1	<3.1	7.4	170	760	--	
	04/18/03	35-39	NA	4,300	<63	<63	<63	910	42,000	--	

ABBREVIATIONS AND NOTES:

SPH = Separate-phase hydrocarbons; calculated groundwater elevation corrected for SPH by the relation: Groundwater Elevation = Well Elevation - Depth to Water +(0.8xSPH Thickness)

Groundwater monitoring data and laboratory analytical results prior to December 14, 2004, were scanned from a report by SOMA.

(ft) = Feet

(msl) = Mean sea level

TOC Elev. (ft) = Top of casing elevation

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Table 2. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID	Date	Depth	Groundwater							Dissolved	Notes
<i>TOC Elev</i>	Measured	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen	
(ft)		(ft)	(ft, msl)	← μg/L →						mg/L	

μg/L = Micrograms per liter - approximately equal to parts per billion = ppb
 mg/L = Milligrams per liter - approximately equal to parts per million = ppm
 TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015C
 BTEX = Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020/8021.
 MTBE = Methyl tertiary butyl ether by EPA Method 8020/8021. (Concentrations in parentheses are by EPA Method 8260B).
 1,2-DCA = 1,2-Dichloroethane
 TAME = Tertiary amyl methyl ether by EPA Method 8260B
 TBA = Tertiary butyl alcohol by EPA Method 8260B
 DIPE = Diisopropyl ether by EPA Method 8260B
 ETBE = Ethyl tertiary butyl ether by EPA Method 8260B
 -- = Not Measured/Not Analyzed
 1 Laboratory report indicates weathered gasoline C6-C12
 Dissolved oxygen concentrations measured downhole pre-purge or pre-purge/post-purge
 * = Cap loose, sprinkler runoff entering well

APPENDIX A

Groundwater Monitoring Program

Table A. Semi-Annual Groundwater Monitoring Program - 7240 Dublin Boulevard, Dublin, CA

Well ID	Well Type	Screened Interval (ft bgs)	Well Location for Monitoring	Casing Diam. (in)	Gauge Frequency	Sample Frequency ^{1, 2}
Surface Water						
C-1*	Gauging Point	--	W, Flood Control Channel	--	1st, 3rd	---
Upper Shallow AA-Zone Wells						
DPE-1	DPE	9-14	W Intermediate	4	1st, 3rd	1st, 3rd
DPE-2	DPE	9-14	W Intermediate	4	1st, 3rd	1st, 3rd
MW-7AA	Mon (Proposed DPE)	9-14	Source	4	1st, 3rd	1st, 3rd
VW-1	Mon+SVE (Proposed DPE)	3-9	Source	2	1st, 3rd	1st
VW-2	Mon+SVE (Proposed DPE)	3-9	Source	2	1st, 3rd	1st
VW-3	Mon+SVE (Proposed DPE)	3-9	Source	2	1st, 3rd	1st
Shallow A-Zone Wells						
MW-1	Mon	5-25	W, Adjacent SS	2	1st, 3rd	1st, 3rd
MW-2	Mon	5-20	W, Adjacent Flood Channel	2	1st, 3rd	1st, 3rd
MW-3A	Mon (Proposed DPE)	10-17	N Source, Adjacent SS	4	1st, 3rd	1st, 3rd
MW-4	Mon	8.5-20	NW Upgradient, Offsite	2	1st, 3rd	1st
MW-5	Mon	8.5-21	W Upgradient, Offsite	2	1st, 3rd	1st
MW-6A	Mon (Proposed DPE)	15-20	N Source, Adjacent SS	4	1st, 3rd	1st, 3rd
MW-7A	Mon (Proposed DPE)	16-20	Source	4	1st, 3rd	1st
MW-8A	Mon	15-20	S, Adjacent Building	2	1st, 3rd	1st, 3rd
MW-9A	Mon	15-20	NE Perimeter	2	1st, 3rd	1st
MW-10A	Mon	15-20	S Perimeter	2	1st, 3rd	1st
Intermediate Depth B-Zone Wells						
MW-6B	Mon	26-30	N Source, Adjacent SS	2	1st, 3rd	1st
DW-7B	Mon	26-30	Source	2	1st, 3rd	1st
Deep C-Zone Wells						
MW-6C	Mon	34-44	N Source, Adjacent SS	2	---	---
MW-7C	Mon	35-45	Source	2	---	---
MW-9C	Mon	35-45	NE Perimeter	2	---	---
MW-10C	Mon	35-45	S Perimeter	2	---	---
MW-11C	Mon	33.5-43.5	W Intermediate	2	---	---

Notes and Abbreviations:

1 = Summary: 6 wells sampled 3rd quarter, 16 wells sampled 1st quarter. 5 C-zone wells not sampled.

2 = Sample Analytes: Total Petroleum Hydrocarbons as Gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8015Cm/8021B.

1st = 1st quarter, typically February

3rd = 3rd quarter, typically August

Mon = Groundwater Monitoring Only

SVE = Soil Vapor Extraction

DPE = Dual Phase Extraction

N, S, W, E = Cardinal directions North, South, West, East and other directions (e.g., Northeast = NE)

SS = Sanitary Sewer beneath Dublin Blvd

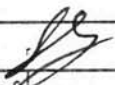
* = Surface water level gauging point, not a well.

-- = Not gauged or sampled.

APPENDIX B


Groundwater Monitoring Field Data Sheets

Well Gauging Data Sheet

Project.Task #:1001.001 219				Project Name: Dublin Car Wash			
Address:7420 Dublin Boulevard, Dublin, CA						Date <u>8/25/12</u>	
Name: Sanjiv Gill				Signature: 			
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)	Measuring Point
^s MW-1	2	01:56			12.77	2532	TJC
^s MW-2	2	02:00			8.72	20.00	
^s MW-3A	4	03:00			10.76	16.78	
MW-4	2	01:30			10.83	19.78	
MW-5	2	01:35			10.70	20.56	
^s MW-6A	2	02:53			11.20	19.34	
MW-6B	2	02:10			9.81	29.73	
^s MW-7AA	4	02:47			9.74	13.84	
MW-7A	4	02:43			9.66	19.53	
MW-7B	2	02:05			9.64	28.42	
^s MW-8A	2	01:47			13.25	19.01	X

Comments:

Well Gauging Data Sheet

Project Task #: 1001.001 219				Project Name: Dublin Car Wash			
Address: 7420 Dublin Boulevard, Dublin, CA						Date: 8/25/12	
Name: Sanjiv Gill				Signature: 			
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)	Measuring Point
MW-9A	2	01:42			10.78	19.66	TOC
MW-10A	2	01:51			9.11	19.51	
VW-1	2	02:15			7.85	8.40	
VW-2	2	02:21			6.89	8.30	
VW-3	2	02:27			8.36	8.65	TOC
C-1	—	03:08			10.33	—	TO G
^s DPE-1	4	02:36			10.21	13.80	TOC
^s DPE-2	4	02:32			10.57	13.80	TOC


Comments:

MONITORING FIELD DATA SHEET

Well ID: **MW-3A**

Project.Task #: 1001.001 220				Project Name: Dublin Car Wash				
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 8/25/12				Weather: cloudy				
Well Diameter: 4"				Volume/ft.		1" = 0.04	3" = 0.37	6" = 1.47
						2" = 0.16	4" = 0.65	radius ² * 0.163
Total Depth (TD): 16.78				Depth to Product:				
Depth to Water (DTW): 10.76				Product Thickness:				
Water Column Height: 6.02				1 Casing Volume: 3.91		gallons		
Reference Point: TOC				3 Casing Volumes: 11.73		gallons		
Purging Device: Disposable Bailer, <u>3" PVC Bailer</u> , Parastaltic Pump, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
07:50	16.7	6.72	1205				4	
07:55	16.8	6.75	1170				8	
08:25	16.5	6.79	1174				12	

Comments: YSI 550A DO meter pre purge DO = **0.92** mg/l
 post purge DO = mg/l

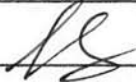
Sample ID: MW-3A	Sample Time: 08:55
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/25/12
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-6A

Project.Task #: 1001.001 220		Project Name: Dublin Car Wash							
Address: 7420 Dublin Boulevard, Dublin, CA									
Date: <u>8/25/12</u>		Weather: <u>cloudy</u>							
Well Diameter: <u>2"</u>		Volume/ft. <table border="1" style="font-size: small; border-collapse: collapse;"> <tr> <td>1" = 0.04</td> <td>3" = 0.37</td> <td>6" = 1.47</td> </tr> <tr> <td>2" = 0.16</td> <td>4" = 0.65</td> <td>radius² * 0.163</td> </tr> </table>		1" = 0.04	3" = 0.37	6" = 1.47	2" = 0.16	4" = 0.65	radius ² * 0.163
1" = 0.04	3" = 0.37	6" = 1.47							
2" = 0.16	4" = 0.65	radius ² * 0.163							
Total Depth (TD): <u>19.34</u>		Depth to Product:							
Depth to Water (DTW): <u>11.20</u>		Product Thickness:							
Water Column Height: <u>8.14</u>		1 Casing Volume: <u>1.30</u> gallons							
Reference Point: TOC		<u>3</u> Casing Volumes: <u>3.90</u> gallons							
Purging Device: <u>Disposable Bailer</u> 3" PVC Bailer, Parastaltic Pump, Whal Pump									
Sampling Device: Disposable Bailer									
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW	
<u>07:10</u>	<u>16.8</u>	<u>6.95</u>	<u>1744</u>				<u>1.5</u>		
<u>07:15</u>	<u>17.1</u>	<u>6.99</u>	<u>1789</u>				<u>3.0</u>		
<u>07:20</u>	<u>17.3</u>	<u>7.01</u>	<u>1793</u>				<u>4.0</u>		

Comments: YSI 550A DO meter pre purge DO = 0.47 mg/l
 post purge DO = mg/l


Sample ID: <u>MW-6A</u>	Sample Time: <u>07:25</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>8/25/12</u>
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-8A

Project.Task #: 1001.001 220				Project Name: Dublin Car Wash				
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 8/25/12				Weather: cloudy				
Well Diameter: 2"				Volume/ft.		1" = 0.04	3" = 0.37	6" = 1.47
						2" = 0.16	4" = 0.65	radius ² * 0.163
Total Depth (TD): 19.01				Depth to Product:				
Depth to Water (DTW): 13.25				Product Thickness:				
Water Column Height: 5.76				1 Casing Volume: 0.92		gallons		
Reference Point: TOC				3 Casing Volumes: 2.76		gallons		
Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
04:45	16.7	7.38	1019				1	
04:50	16.2	7.36	1006				2	
04:55	16.8	7.39	995				3	

Comments: YSI 550A DO meter pre purge DO = 0.40 mg/l
 post purge DO = mg/l

Sample ID: MW-8A	Sample Time: 05:00
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/25/12
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: DPE-1

Project.Task #: 1001.001 220		Project Name: Dublin Car Wash							
Address: 7420 Dublin Boulevard, Dublin, CA									
Date: <u>8/25/12</u>		Weather: <u>cloudy</u>							
Well Diameter: <u>4"</u>		Volume/ft. <table border="1" style="font-size: small; border-collapse: collapse;"> <tr> <td>1" = 0.04</td> <td>3" = 0.37</td> <td>6" = 1.47</td> </tr> <tr> <td>2" = 0.16</td> <td>4" = 0.65</td> <td>radius² * 0.163</td> </tr> </table>		1" = 0.04	3" = 0.37	6" = 1.47	2" = 0.16	4" = 0.65	radius ² * 0.163
1" = 0.04	3" = 0.37	6" = 1.47							
2" = 0.16	4" = 0.65	radius ² * 0.163							
Total Depth (TD): <u>13.80</u>		Depth to Product:							
Depth to Water (DTW): <u>10.21</u>		Product Thickness:							
Water Column Height: <u>3.59</u>		1 Casing Volume: <u>2.33</u> gallons							
Reference Point: TOC		<u>3</u> Casing Volumes: <u>6.99</u> gallons							
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Parastaltic Pump, Whal Pump									
Sampling Device: Disposable Bailer									
Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW	
<u>06:30</u>	<u>17.0</u>	<u>6.92</u>	<u>1290</u>				<u>2.5</u>		
<u>06:35</u>	<u>16.8</u>	<u>6.99</u>	<u>1294</u>				<u>5.0</u>		
<u>06:40</u>	<u>16.7</u>	<u>7.04</u>	<u>1317</u>				<u>7.0</u>		

Comments: YSI 550A DO meter pre purge DO = 0.86 mg/l
 post purge DO = mg/l

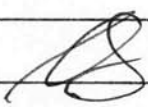
Sample ID: <u>DPE-1</u>	Sample Time: <u>06:45</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>8/25/12</u>
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

MONITORING FIELD DATA SHEET

Well ID: DPE-2

Project.Task #: 1001.001 220		Project Name: Dublin Car Wash						
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: <u>8/25/12</u>		Weather: <u>cloudy</u>						
Well Diameter: <u>4"</u>	Volume/ft.							
	1" = 0.04	3" = 0.37	6" = 1.47					
	2" = 0.16	4" = 0.65	radius ² * 0.163					
Total Depth (TD): <u>13.80</u>	Depth to Product:							
Depth to Water (DTW): <u>10.57</u>	Product Thickness:							
Water Column Height: <u>3.23</u>	1 Casing Volume: <u>2.69</u>	gallons						
Reference Point: TOC	<u>3</u> Casing Volumes: <u>6.27</u>	gallons						
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Parastaltic Pump, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>05:55</u>	<u>17.9</u>	<u>6.68</u>	<u>1412</u>				<u>2</u>	
<u>06:00</u>	<u>17.7</u>	<u>6.72</u>	<u>1426</u>				<u>4</u>	
<u>06:05</u>	<u>17.1</u>	<u>6.75</u>	<u>1481</u>				<u>6</u>	

Comments: YSI 550A DO meter pre purge DO = 0.97mg/l
 post purge DO = mg/l

Sample ID: <u>DPE-2</u>	Sample Time: <u>06:10</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>8/25/10</u>
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

APPENDIX C

Laboratory Analytical Results



Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1001.001 232; Dublin Car Wash	Date Sampled: 08/25/12
		Date Received: 08/28/12
	Client Contact: Tina De La Fuente	Date Reported: 09/04/12
	Client P.O.:	Date Completed: 08/31/12

WorkOrder: 1208680

September 04, 2012

Dear Tina:

Enclosed within are:

- 1) The results of the **8** analyzed samples from your project: **#1001.001 232; Dublin Car Wash**,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

1208680



McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker EDF PDF Excel Write On (DW)

Check if sample is effluent and "J" flag is required

Report To: Tina de la Fuente Bill To: Steve Pangea
Company: Pangea Environmental Services
1710 Franklin St.
Oakland, CA E-Mail: tde la fuente@pangeaenv.com
Tele: (510) 836-3702 Fax: (510) 836-3709
Project #: 1001.001 232 Project Name: Dublin Car Wash
Project Location: 7420 Dublin Blvd, Dublin, CA
Sampler Signature: Muskan Environmental Sampling

Analysis Request

Other

Comments

BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	
TPH as Diesel (8015)	
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	
Total Petroleum Hydrocarbons (418.1)	
EPA 8260 (HVOCS)	
MTBE / BTEX ONLY (EPA 602 / 8021)	
EPA 505 / 608 / 8081 (CI Pesticides)	
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	
EPA 507 / 8141 (NP Pesticides)	
EPA 515.3 / 8151 (Acidic CI Herbicides)	
EPA 524.2 / 624 / 8260 (VOCs)	
EPA 525.2 / 625 / 8270 (SVOCs)	
EPA 8270 SIM / 8310 (PAHs / PNAs)	
CAM 17 Metals (200.8 / 6020)	
LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	
Lead (200.7 / 200.8 / 6010 / 6020)	

Filter Samples for Metals analysis: Yes / No

+
+
+
+
+
+
+
+

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED									
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other						
MW-1		8-25-12	03:50	3	VOA	X					X	X								
MW-2			04:25																	
MW-3A			08:55																	
MW-6A			07:25																	
MW-7AA			05:35																	
MW-8A			05:00																	
DPE-1			06:45																	
DPE-2			06:10			X					X	X								

Relinquished By: [Signature] Date: 8/28/12 Time: 1318 Received By: [Signature]

Relinquished By: _____ Date: _____ Time: _____ Received By: _____

Relinquished By: _____ Date: _____ Time: _____ Received By: _____

ICE/# 0.7 COMMENTS:

GOOD CONDITION

HEAD SPACE ABSENT

DECHLORINATED IN LAB

APPROPRIATE CONTAINERS

PRESERVED IN LAB

VOAS O&G METALS OTHER
PRESERVATION pH<2



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1208680

ClientCode: PEO

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Tina De La Fuente
 Pangea Environmental Svcs., Inc.
 1710 Franklin Street, Ste. 200
 Oakland, CA 94612
 (510) 836-3700 FAX: (510) 836-3709

Email: tdelafuente@pangeaenv.com
 cc:
 PO:
 ProjectNo: #1001.001 232; Dublin Car Wash

Bill to:

Bob Clark-Riddell
 Pangea Environmental Svcs., Inc.
 1710 Franklin Street, Ste. 200
 Oakland, CA 94612

Requested TAT:

5 days

Date Received: **08/28/2012**

Date Printed: **08/28/2012**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1208680-001	MW-1	Water	8/25/2012 3:50	<input type="checkbox"/>	A	A											
1208680-002	MW-2	Water	8/25/2012 4:25	<input type="checkbox"/>	A												
1208680-003	MW-3A	Water	8/25/2012 8:55	<input type="checkbox"/>	A												
1208680-004	MW-6A	Water	8/25/2012 7:25	<input type="checkbox"/>	A												
1208680-005	MW-7AA	Water	8/25/2012 5:35	<input type="checkbox"/>	A												
1208680-006	MW-8A	Water	8/25/2012 5:00	<input type="checkbox"/>	A												
1208680-007	DPE-1	Water	8/25/2012 6:45	<input type="checkbox"/>	A												
1208680-008	DPE-2	Water	8/25/2012 6:10	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTX_W	2	PREFD REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.** Date and Time Received: **8/28/2012 1:49:04 PM**
 Project Name: **#1001.001 232; Dublin Car Wash** Login Reviewed by: **Maria Venegas**
 WorkOrder N°: **1208680** Matrix: Water Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 0.7°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 Metal - pH acceptable upon receipt (pH<2)? Yes No NA
 Samples Received on Ice? Yes No

(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

 Comments:



Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1001.001 232; Dublin Car Wash	Date Sampled: 08/25/12
	Client Contact: Tina De La Fuente	Date Received: 08/28/12
	Client P.O.:	Date Extracted: 08/29/12-08/30/12
		Date Analyzed: 08/29/12-08/30/12

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1208680

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1	W	ND	ND	ND	ND	ND	ND	1	86	
002A	MW-2	W	ND	ND	ND	ND	ND	ND	1	87	
003A	MW-3A	W	6200	860	370	10	39	80	10	108	d1
004A	MW-6A	W	7000	ND<50	220	34	200	840	10	105	d1,b1
005A	MW-7AA	W	110	80	ND	1.8	ND	ND	1	93	d1
006A	MW-8A	W	ND	ND	ND	ND	ND	ND	1	87	
007A	DPE-1	W	690	270	26	0.95	27	78	1	104	d1
008A	DPE-2	W	390	ND<10	3.3	5.0	2.8	0.79	1	116	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 b1) aqueous sample that contains greater than ~1 vol. % sediment
 d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 70265

WorkOrder: 1208680

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1208660-004A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	60	102	102	0	95.2	70 - 130	20	70 - 130	
MTBE	ND	10	80.7	81.4	0.753	82.4	70 - 130	20	70 - 130	
Benzene	ND	10	89	89.1	0.154	84.1	70 - 130	20	70 - 130	
Toluene	ND	10	92.7	95.4	2.91	87.3	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	92.4	94.3	2.01	84.5	70 - 130	20	70 - 130	
Xylenes	ND	30	96.3	97.5	1.21	87.6	70 - 130	20	70 - 130	
%SS:	91	10	84	85	1.84	85	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 70265 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1208680-003A	08/25/12 8:55 AM	08/29/12	08/29/12 9:42 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 70302

WorkOrder: 1208680

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1208661-010A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	60	108	108	0	109	70 - 130	20	70 - 130	
MTBE	ND	10	103	101	2.42	97.1	70 - 130	20	70 - 130	
Benzene	ND	10	100	100	0	99.1	70 - 130	20	70 - 130	
Toluene	ND	10	102	101	1.20	99.7	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	105	103	1.72	104	70 - 130	20	70 - 130	
Xylenes	ND	30	110	106	3.64	108	70 - 130	20	70 - 130	
%SS:	86	10	89	91	2.39	87	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 70302 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1208680-001A	08/25/12 3:50 AM	08/30/12	08/30/12 9:19 AM	1208680-002A	08/25/12 4:25 AM	08/30/12	08/30/12 9:50 AM
1208680-004A	08/25/12 7:25 AM	08/29/12	08/29/12 10:45 PM	1208680-005A	08/25/12 5:35 AM	08/29/12	08/29/12 8:09 PM
1208680-006A	08/25/12 5:00 AM	08/30/12	08/30/12 10:21 AM	1208680-007A	08/25/12 6:45 AM	08/30/12	08/30/12 9:36 PM
1208680-008A	08/25/12 6:10 AM	08/30/12	08/30/12 10:51 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
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