

RECEIVED

3:26 pm, Aug 25, 2010

**Alameda County
Environmental Health**

Mr. Paresh Khatri
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

Dear Mr. Chan:

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



July 31, 2010

VIA ALAMEDA COUNTY FTP SITE

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

Re: **Groundwater Monitoring Report - Second Quarter 2010**
Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California
ACEH Case No. 304

Dear Mr. Khatri:

On behalf of Mr. Hooshang Hadjian, Pangea Environmental Services, Inc. has prepared this *Groundwater Monitoring Report – Second Quarter 2010*. The report describes groundwater monitoring, sampling, and other site activities. A remediation progress update is included herein. System startup is anticipated by the end of August 2010.

In a letter dated May 27, 2010, ACEH concurred with Pangea's recommendation to sample new remediation wells DPE-1 and DPE-2 *quarterly* to evaluate remedial progress. Pangea will commence quarterly sampling of these wells during the third quarter 2010 sampling event, after remediation system startup.

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

Sincerely,
Pangea Environmental Services, Inc.


Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Groundwater Monitoring Report – Second Quarter 2010*

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



GROUNDWATER MONITORING REPORT – SECOND QUARTER 2010

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California

July 31, 2010

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:


Morgan Gillies
Project Manager




Bob Clark-Riddell, P.E.
Principal Engineer

PANGEA Environmental Services, Inc.

Groundwater Monitoring Report – Second Quarter 2010
7240 Dublin Boulevard
Dublin, California
July 31, 2010

INTRODUCTION

On behalf of Mr. Hooshang Hadjian, Pangea Environmental Services, Inc. (Pangea) conducted groundwater monitoring and sampling activities during this quarter 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. Current and historical data are summarized on Table 1.

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.

From approximately 1988 to 1997, Chevron Products Company performed assessment and remediation of the site. A soil vapor extraction (SVE) system was operated at the site from December 1992 through June 1995. Mr. Hadjian is the responsible party for an unauthorized release from a leaking stainless steel flex-hose near the northernmost dispenser island in February 1997. Subsequently, a new product delivery system was installed and about 31 cubic yards of contaminated soil was removed from the release area. Gettler-Ryan, Inc. monitored the eight existing groundwater wells at the site until 2003, when SOMA Environmental Engineering, Inc., took over groundwater monitoring and conducted further characterization of the site using electrical conductivity logging to identify potential water-bearing zones. In November 2004, Pangea commenced coordination of groundwater monitoring and corrective action for the site. To delineate the contamination detected during SOMA's investigation, Pangea installed additional monitoring wells with shorter screen lengths in identified water-bearing zones in 2006. Pangea also 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.

The site subsurface consists primarily of clay, sandy clay, and clayey sand. The shallower soil (<34 ft bgs) is predominantly clay and sandy clay with thin lenses of clayey sand, while the deeper soil (>34 ft bgs) contains clayey sand units of apparently higher permeability than shallower materials. In March, April and May, 2006, Pangea installed fourteen monitoring wells to help define the vertical and lateral extent of groundwater contamination in the identified water-bearing zones. Wells with shorter screen lengths than existing wells were installed in the upper shallow (AA) zone from approximately 9 to 14 ft bgs (MW-7AA), the shallow (A) zone from approximately 15 to 20 ft bgs (MW-3A, MW-6A, MW-7A, MW-8A, MW-9A and MW-10A), the middle (B) zone from approximately 25 to 30 ft bgs (MW-6B and MW-7B), and the deep (C) zone from approximately 34 to 45 ft bgs (MW-6C, MW-7C, MW-9C, MW-10C and MW-11C). The well screen in MW-

Groundwater Monitoring Report – Second Quarter 2010
7240 Dublin Boulevard
Dublin, California
July 31, 2010

3A was installed at a shallower depth than the other A-zone wells to intercept the SPH previously observed in destroyed well MW-3.

The shallower (AA, A and B) water-bearing zones primarily consist of thin lenses of clayey sand within sandy clay, while higher permeability silty sand and clayey sand are the predominant soil types constituting the deeper (C) water-bearing zone. Vapor wells VW-1 through VW-3 are screened from approximately 3 to 9 ft bgs in the upper shallow seasonal water-bearing zone, which appears to be a perched zone. In late March and early April 2006, wells EA-1, EA-2, EA-3 and MW-3 were destroyed to reduce the risk of vertical contaminant migration and improve the quality of contaminant concentration and groundwater elevation data. To compare the elevation of surface water in the flood control channel with site groundwater, point C-1 was surveyed on the roadway overpass above the channel. Well construction details are presented in Table 2.

An interim remedial action was conducted by Pangea in July 2006 by extracting approximately 40 gallons of impacted liquid from wells MW-3A and MW-7AA with a vacuum truck. 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 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.

GROUNDWATER MONITORING AND SAMPLING

On June 4, 2010, groundwater monitoring and sampling was conducted at the site. As part of the monitoring program for this site, all well caps were removed the day before monitoring to allow water levels to equilibrate. A revised monitoring program, which included reduced sampling frequency for several site wells, was approved in a letter from the Alameda County Environmental Health Department (ACEH) dated January 16, 2009. The approved groundwater monitoring program is summarized in Appendix A. Groundwater samples were obtained from groundwater monitoring wells MW-1, MW-2, MW-3A, MW-6A, MW-7AA and MW-8A. The depth to water at survey point C-1 above the flood control channel was also measured. Monitoring and sampling of 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.

Groundwater Monitoring Report – Second Quarter 2010
7240 Dublin Boulevard
Dublin, California
July 31, 2010

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, 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 1. 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 0.61 mg/L (well MW-7AA) to 0.94 mg/L (well MW-1).

Groundwater Flow Direction

Based on depth-to-water data collected June 4, 2010, 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 0.14 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 a significantly smaller upward gradient is present southwest of the dispenser islands (MW-7A and MW-7B), 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.

Groundwater Monitoring Report – Second Quarter 2010
 7240 Dublin Boulevard
 Dublin, California
 July 31, 2010

Table A – Vertical Gradient Evaluation using Paired Monitoring Wells

Monitoring Well Pair	Groundwater Elevation	Mean Screen Depth	Calculated Vertical Gradient
MW-6A	321.37	17.5	
MW-6B	322.18	28	
<i>Difference</i>	<i>0.81</i>	<i>10.5</i>	<i>0.077 (upwards)</i>
MW-7A	321.28	18	
MW-7B	321.34	28	
<i>Difference</i>	<i>0.06</i>	<i>10</i>	<i>0.006 (upwards)</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 converge to the northeast along Dublin Boulevard and is possibly influenced by permeable backfill around the sanitary sewer line beneath Dublin Boulevard. 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 1 and on Figure 2. Well MW-6A contained the highest TPHg (2,800 µg/L) and benzene (500 µg/L) concentrations detected this quarter. Well MW-7AA contained historic low concentrations of TPHg (1,700 µg/L) and benzene (330 µg/L) this quarter. Lower contaminant concentrations in well MW-7AA may be due to the higher groundwater elevation measured this quarter, which was the highest since February 2008. Elevated TPHg concentrations of 25,000

Groundwater Monitoring Report – Second Quarter 2010
7240 Dublin Boulevard
Dublin, California
July 31, 2010

µg/L and 6,600 µg/L were detected in new remediation wells DPE-1 and DPE-2, respectively, on August 13, 2009. Future monitoring will evaluate conditions in these wells.

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.

Fuel Oxygenate Distribution in Groundwater

MTBE was detected above reporting limits in four of the six sampled wells, as shown in Table 1 and on Figure 2. The highest MTBE concentration was detected in source area well MW-7AA at 4,200 µg/L. MTBE concentrations in other sampled wells were within historic limits or trends. However, in August 2009, elevated MTBE concentrations were detected in nearby remediation wells DPE-1 and DPE-2 at 2,000 µg/L and 28 µg/L, respectively (Table 1).

MTBE concentrations in well MW-1 had been steadily increasing over a three-year period before reaching a historic high of 8,400 µg/L during the fourth quarter 2006 monitoring event, but have decreased substantially since then (<5.0 µg/L this quarter). The concentration reductions in well MW-1 may be due to interim remediation, MTBE migration from the area, or natural attenuation.

OTHER SITE ACTIVITIES

Additional Site Remediation

On January 16, 2009, ACEH approved implementation of short-term DPE as described in the *Interim Remediation Report and Corrective Action Plan* (CAP) dated December 9, 2008. The remediation system has been installed. System startup has been delayed due to problems with the existing electrical service panel and transformer at the site. Pangea is awaiting PG&E shutdown of the transformer at the site so that a new electrical panel can be installed. We anticipate system startup in August 2010. Short-term DPE was selected to provide additional source removal and help facilitate regulatory case closure.

Groundwater Monitoring Report – Second Quarter 2010
7240 Dublin Boulevard
Dublin, California
July 31, 2010

Future Groundwater Monitoring

Due to elevated concentrations detected in new remediation wells DPE-1 and DPE-2, Pangea proposed adding these wells to the *quarterly* monitoring program to evaluate remedial progress. In letter dated May 27, 2010, ACEH concurred with Pangea's recommendation. Pangea plans to commence quarterly monitoring of wells DPE-1 and DPE-2 after remediation system startup during the third quarter of 2010. The approved 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

Table 1 – Groundwater Elevation and Analytical Data

Table 2 – Well Construction Details

Appendix A – Groundwater Monitoring Program

Appendix B – Groundwater Monitoring Field Data Sheets

Appendix C – Laboratory Analytical Results

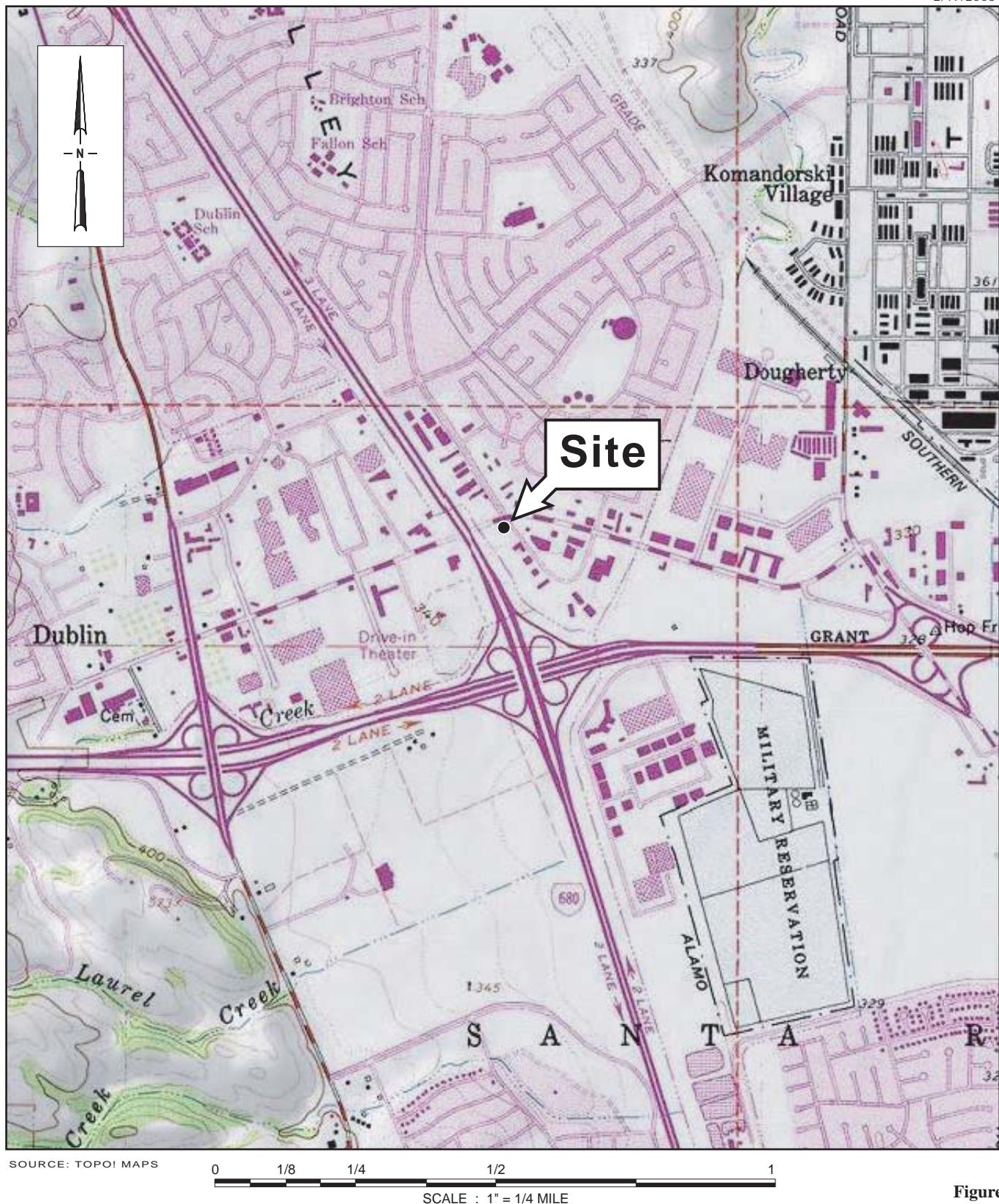
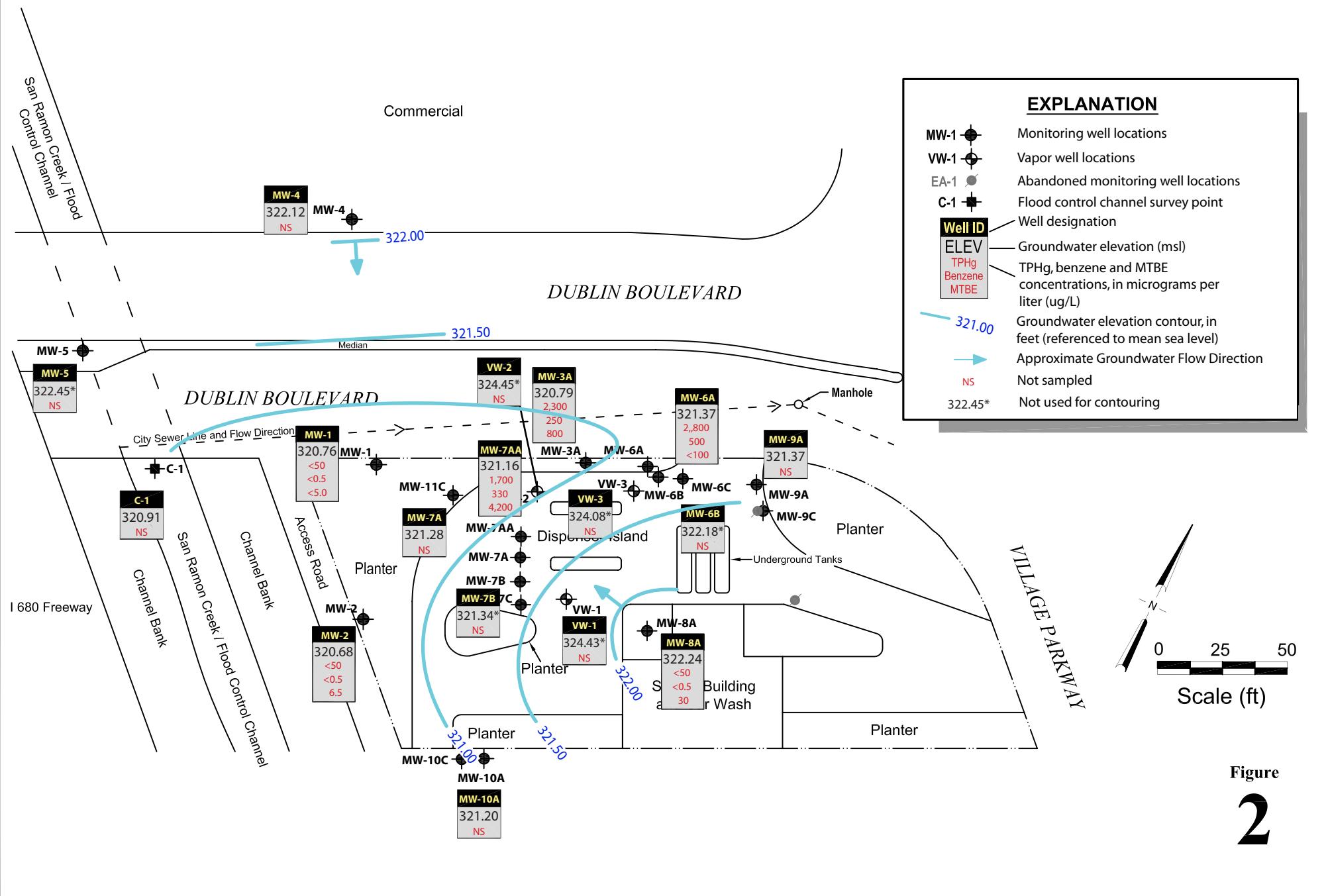


Figure
1

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California



Site Location Map



Figure

2

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California



Groundwater Elevation Contour and Hydrocarbon Concentration Map

June 4, 2010

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID TOC Elev (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved Oxygen mg/L	Notes
				←		μg/L	→				
Surface Water (Flood Control Channel)											
C-1 <i>332.89</i>	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	--	--	--	--	--	--	--	
Upper Shallow (AA-Zone) Wells											
DPE-1	08/13/09	10.55	--	25,000	240	160	530	3,900	2,000	--	
DPE-2	08/13/09	11.06	--	6,600	8.8	<2.5	<2.5	710	28	--	
MW-7AA <i>330.67</i>	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	
VW-1 <i>330.43</i>	02/21/06	7.95	322.48	860	120	1.4	32	4.4	390 (440)	1.97	
	06/01/06	7.89	322.54	1,100	92	2.2	11	1.4	600 (550)	0.11	TAME=12µg/L, TBA,DIPE,ETBE=ND
	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				
	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	---	---	---	---	---	---	---	
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	

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Dissolved				Notes	
					Benzene	Toluene	Ethylbenzene	Xylenes		
μg/L										
VW-2 (<i>cont'd</i>)	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	---	---	---	---	---	---	---
VW-3	02/21/06	6.10	324.39	8,900	390	29	490	650	<50	2.28
330.49	06/01/06	6.22	324.27	5,900	230	4.5	270	63	<35 (15)	0.21
	07/07/06	4.44	326.05	--	--	--	--	--	--	--
	08/17/06	4.4 *	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	---	---	---	---	---	---	---

Shallow (A-Zone) Wells

MW-1 333.66	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)	
	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
	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									

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Dissolved				Notes	
					Benzene	Toluene	Ethylbenzene	Xylenes		
µg/L										mg/L
MW-1 (cont'd)	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
MW-2	10/04/94	8.56	320.62	2300	160	280	96	480	--	
329.29	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
329.48	06/01/06	8.50	320.98	<50	<0.5	<0.5	<0.5	<0.5	120 (110)	0.38
	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
	02/11/10	7.50	321.98	<50	<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	6.5	0.82
MW-3A	05/29/06	10.13	321.28	--	--	--	--	--	--	0.03 SPH
331.39	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			

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Dissolved				Notes
					Benzene	Toluene	Ethylbenzene	Xylenes	
↔ μg/L →									
<i>MW-4 (cont'd)</i>	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
332.64	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	--	--	--	--	--	--
<i>MW-5</i>	03/01/96	10.62	322.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5
333.47	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	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 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 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 0.82
	05/28/09	10.80	322.33	--	--	--	--	--	--

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Dissolved				Notes
					Benzene	Toluene	Ethylbenzene	Xylenes	
↔ μg/L →									
MW-5 (cont'd)	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 0.80
	06/04/10	10.68	322.45	---	---	---	---	---	---
MW-6A	06/01/06	10.38	321.43	620	20	<2.5	<2.5	43	5,700 (5,300) 0.73
<i>331.81</i>	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
MW-7A	05/31/06	9.19	321.52	<50	1.3	<0.5	0.79	0.82	760 (770) 0.40
<i>330.71</i>	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
	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	---	---	---	---	---	---
MW-8A	05/29/06	9.55	321.64	<50	<0.5	<0.5	<0.5	<0.5	20 (18) 0.39
<i>331.19</i>	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
MW-9A	05/29/06	10.13	321.04	<50	<0.5	<0.5	<0.5	<0.5	210 (210) 0.46
<i>331.17</i>	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	--	--	--	--	--	--

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Dissolved				Notes	
					Benzene	Toluene	Ethylbenzene	Xylenes		
					↔	μg/L	↔	↔	mg/L	
MW-9A (cont'd)	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	
	06/04/10	9.80	321.37	---	---	---	---	---	---	
MW-10A 329.93	05/29/06	11.60	318.33	<50	<0.5	<0.5	<0.5	0.67	5.3 (4.7)	
	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	
	11/24/06	12.61	317.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	02/21/07	8.96	320.97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	05/15/07	9.22	320.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	08/28/07	8.44	321.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	12/21/07	8.81	321.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	02/26/08	7.34	322.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	05/21/08	9.22	320.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	08/13/08	9.25	320.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/13/08	9.47	320.46	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	02/06/09	9.50	320.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	05/28/09	9.11	320.82	--	--	--	--	--	--	
	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	
	06/04/10	8.73	321.20	---	---	---	---	---	---	
<hr/>										
Intermediate-Depth (B-zone) Wells										
MW-6B 330.9	06/01/06	8.41	322.49	<50	<0.5	<0.5	<0.5	<0.5	18 (16)	0.34
	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	---	---	---	---	---	---	---
MW-7B 330.69	05/31/06	9.05	321.64	<50	0.79	<0.5	<0.5	0.75	6.4 (6.6)	0.17
	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	---	---	---	---	---	---	---
<hr/>										
Deep (C-Zone) Wells										
MW-6C 330.88	06/01/06	8.21	322.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.29
	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 330.74	05/31/06	8.65	322.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.12
	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

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID TOC Elev (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg ↔	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE →	Dissolved Oxygen mg/L	Notes
						µg/L					
MW-7C (cont'd)	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	
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				--	--	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	11.0									

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Dissolved				Notes
					Benzene	Toluene	Ethylbenzene	Xylenes	
EA-1 (cont'd)	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
	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 <i>330.41</i>	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			

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID TOC Elev (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg ↔	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	MTBE →	Dissolved Oxygen mg/L	Notes
EA-2 (cont'd)	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 <i>331.5</i>	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	--		
	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	--	

Table 1. Groundwater Elevation and Analytical Data - Dublin Auto Wash, 7240 Dublin Boulevard, Dublin, CA

Well ID <i>TOC Elev</i> (ft)	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Dissolved				Notes
					Benzene	Toluene	Ethylbenzene	Xylenes	
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
DPB-6	04/17/03	36-40	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	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

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

Table 2 –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	4	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

APPENDIX A

Groundwater Monitoring Program

Table A. Quarterly Groundwater Monitoring Program During Remediation

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	--	Q	---
Upper Shallow AA-Zone Wells						
DPE-1	DPE	9-14	W Intermediate	4	Q	Q
DPE-2	DPE	9-14	W Intermediate	4	Q	Q
MW-7AA	Mon (Proposed DPE)	9-14	Source	4	Q	Q
VW-1	Mon+SVE (Proposed DPE)	3-9	Source	2	Q	1st
VW-2	Mon+SVE (Proposed DPE)	3-9	Source	2	Q	1st
VW-3	Mon+SVE (Proposed DPE)	3-9	Source	2	Q	1st
Shallow A-Zone Wells						
MW-1	Mon	5-25	W, Adjacent SS	2	Q	Q
MW-2	Mon	5-20	W, Adjacent Flood Channel	2	Q	Q
MW-3A	Mon (Proposed DPE)	10-17	N Source, Adjacent SS	4	Q	Q
MW-4	Mon	8.5-20	NW Upgradient, Offsite	2	Q	1st
MW-5	Mon	8.5-21	W Upgradient, Offsite	2	Q	1st
MW-6A	Mon (Proposed DPE)	15-20	N Source, Adjacent SS	4	Q	Q
MW-7A	Mon (Proposed DPE)	16-20	Source	4	Q	1st
MW-8A	Mon	15-20	S, Adjacent Building	2	Q	Q
MW-9A	Mon	15-20	NE Perimeter	2	Q	1st
MW-10A	Mon	15-20	S Perimeter	2	Q	1st
Intermediate Depth B-Zone Wells						
MW-6B	Mon	26-30	N Source, Adjacent SS	2	Q	1st
DW-7B	Mon	26-30	Source	2	Q	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 each 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.

Q = All four quarters. Typically B months (February, May, August, November)

1st = 1st quarter only, typically February

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 <u>22-3</u>			Project Name: Dublin Car Wash			
Address: 7420 Dublin Boulevard, Dublin, CA				Date: <u>6/4/10</u>		
Name: Sanjiv Gill			Signature: <u>S. Gill</u>			
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)
- MW-1	2"	7:10			12.93	25.32
- MW-2	2"	7:14			8.80	20.00
- MW-3A	4"	7:41			10.60	16.78
MW-4	2"	6:50			10.52	19.78
MW-5	2"	6:55			10.68	20.56
- MW-6A	2"	7:35			10.44	19.13
MW-6B	2"	7:27			8.72	29.73
- MW-7AA	4"	7:49			9.51	13.84
MW-7A	4"	7:45			9.43	19.53
MW-7B	2"	7:30			9.35	28.42
- MW-8A	2"	7:07			8.95	19.01

Comments:

Well Gauging Data Sheet

Comments:

MONITORING FIELD DATA SHEET

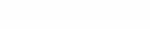
Well ID: MU-1

Comments: YSI 550A DO meter

pre purge DO = 0.94 mg/l

post purge DO = mg/l

your bid

Sample ID: MW-1	Sample Time: 10:45
Laboratory: McCampbell Analytical, INC.	Sample Date: █ 6/4/10
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: M1-2

Comments: YSI 550A DO meter

pre purge DO = 0.82 mg/l

post purge DO = mg/l

furbid

Sample ID: MU-2	Sample Time: 11:15
Laboratory: McCampbell Analytical, INC.	Sample Date: [REDACTED] 6/4/10
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-3A

Comments: YSI 550A DO meter

pre purge DO = 0.69 mg/l

post purge DO = mg/l

Turbid

Sample ID: MN-3A	Sample Time: 12:35
Laboratory: McCampbell Analytical, INC.	Sample Date: [REDACTED] 6/4/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: ML-6A

Comments: YSI 550A DO meter

pre purge DO = 0.68 mg/l

post purge DO = mg/l

very turbid, silty

Sample ID: MW-6A	Sample Time: 11:45
Laboratory: McCampbell Analytical, INC.	Sample Date: ████ 6/4/10
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 



MONITORING FIELD DATA SHEET

Well ID: MU-7AA

Comments: YSI 550A DO meter

pre purge DO = 0.61 mg/l

post purge DO = mg/l

turbid

Sample ID:	MU-7AA	Sample Time:	9:20
Laboratory:	McCampbell Analytical, INC.	Sample Date:	██████ 6/4/10
Containers/Preservative: Voa/HCl			
Analyzed for: 8015, 8021			
Sampler Name:	Sanjiv Gill	Signature:	

MONITORING FIELD DATA SHEET

Well ID: MW-8A

Comments: YSI 550A DO meter

pre purge DO = 0.69 mg/l

post purge DO = mg/l

turbid

Sample ID:	ML-8A	Sample Time:	10:00
Laboratory:	McCampbell Analytical, INC.	Sample Date:	6/4/10
Containers/Preservative: Voa/HCl			
Analyzed for: 8015, 8021			
Sampler Name:	Sanjiv Gill	Signature:	

APPENDIX C

Laboratory Analytical Results



McCampbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1001.001223; Dublin Car Wash	Date Sampled: 06/04/10
		Date Received: 06/04/10
	Client Contact: Tina De La Fuente	Date Reported: 06/10/10
	Client P.O.:	Date Completed: 06/10/10

WorkOrder: 1006143

June 10, 2010

Dear Tina:

Enclosed within are:

- 1) The results of the **6** analyzed samples from your project: **#1001.001223; Dublin Car Wash**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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
McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1006143



McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

Report To: Tina de la Fuente Bill To: Steve Panger

Company: Panger Environmental Service,
1710 Franklin St. Ste:200
Oakland, CA

Tele: (510) 836-3702 E-Mail: tdelafuente@pangersenv.com

Fax: (510) 836-3709

Project #: 1001-001 2 23 Project Name: Dublin Car Wash

Project Location: 7420 Dublin Blvd., Dublin, CA

Sampler Signature: Muskan Environmental Sampling M

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type	MATRIX	METHOD PRESERVED
		Date	Time				
+ MW-1		6-4-10	10:45AM	3	VOR	X	
+ MW-2			11:15AM	1			
+ MW-3A			12:35PM				
+ MW-6A			11:45AM				
+ MW-7AA			9:20AM				
+ MW-8A		A	10:00AM	1			

Relinquished By:	Date:	Time:	Received By:
	6/4/10	1410	Muskan V-2
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

Analysis Request		Other	Comments
BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	TPH as Diesel (8015)		Filter Samples for Metals analysis: Yes / No
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 (Cl Pesticides)	EPA 508 / 8082 PCB's ONLY; Aroclors / Congeners		
EPA 507 / 8141 (NP Pesticides)	EPA 515.3 / 8151 (Aldic Cl Herbicides)		
EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)		
CAM 17 Metals (200.8 / 6020)	EPA 8270 SIM / 8310 (PAHs / PNAs)		
LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)		

Relinquished By:	Date:	Time:	Received By:
	6/4/10	1410	Muskan V-2
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/I ^o	GOOD CONDITION	HEAD SPACE ABSENT	DECHLORINATED IN LAB	APPROPRIATE CONTAINERS	PRESERVED IN LAB	COMMENTS:
1.2	✓	✓				
VOAS	O&G	METALS	OTHER			
PRESERVATION	pH<2					

McCampbell Analytical, Inc.

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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WaterTrax WriteOn EDF Excel Fax 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: #1001.001223; 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: 06/04/2010

Date Printed: 06/04/2010

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
1006143-001	MW-1	Water	6/4/2010 10:45	<input type="checkbox"/>	A	A										
1006143-002	MW-2	Water	6/4/2010 11:15	<input type="checkbox"/>	A											
1006143-003	MW-3A	Water	6/4/2010 12:35	<input type="checkbox"/>	A											
1006143-004	MW-6A	Water	6/4/2010 11:45	<input type="checkbox"/>	A											
1006143-005	MW-7AA	Water	6/4/2010 9:20	<input type="checkbox"/>	A											
1006143-006	MW-8A	Water	6/4/2010 10:00	<input type="checkbox"/>	A											

Test Legend:

1	G-MBTEX_W
6	
11	

2	PREDF REPORT
7	
12	

3	
8	

4	
9	

5	
10	

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.

**McCampbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**Date and Time Received: **6/4/2010 3:19:50 PM**Project Name: **#1001.001223; Dublin Car Wash**Checklist completed and reviewed by: **Maria Venegas**WorkOrder N°: **1006143** Matrix WaterCarrier: Client Drop-In

Chain of Custody (COC) Information

- | | | |
|---------------------------------------------------------|-----------------------------------------|-----------------------------|
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sample IDs noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Date and Time of collection noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sampler's name noted on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |

Sample Receipt Information

- | | | | |
|----------------------------------------------------|-----------------------------------------|-----------------------------|----------------------------------------|
| Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper containers/bottles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

Sample Preservation and Hold Time (HT) Information

- | | | | |
|-----------------------------------------------------|-----------------------------------------|-----------------------------|-------------------------------------------------|
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Container/Temp Blank temperature | Cooler Temp: 7.2°C | | NA <input type="checkbox"/> |
| Water - VOA vials have zero headspace / no bubbles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Sample labels checked for correct preservation? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Metal - pH acceptable upon receipt (pH<2)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Samples Received on Ice? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

(Ice Type: WET ICE)

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

Client contacted:

Date contacted:

Contacted by:

Comments:



McCampbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1001.001223; Dublin Car Wash	Date Sampled:	06/04/10
		Date Received:	06/04/10
	Client Contact: Tina De La Fuente	Date Extracted:	06/07/10-06/09/10
	Client P.O.:	Date Analyzed:	06/07/10-06/09/10

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1006143

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	µg/L
	S	1.0	0.05	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

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation.

d1) weakly modified or unmodified gasoline is significant



McCampbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
 Web: www.mccampbell.com E-mail: main@mccampbell.com
 Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 51073

WorkOrder 1006143

EPA Method SW8021B/8015Bm		Extraction SW5030B								Spiked Sample ID: 1006129-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex) ^f	ND	60	114	109	4.40	108	111	2.88	70 - 130	20	70 - 130	20	
MTBE	ND	10	101	92.5	8.67	100	95.1	5.34	70 - 130	20	70 - 130	20	
Benzene	ND	10	90.1	87.6	2.80	88	87.4	0.716	70 - 130	20	70 - 130	20	
Toluene	ND	10	90.2	86.6	4.13	86.7	86.2	0.632	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	89.9	87	3.26	86.7	86.8	0.0734	70 - 130	20	70 - 130	20	
Xylenes	ND	30	89.9	87.5	2.70	87.8	87.2	0.762	70 - 130	20	70 - 130	20	
%SS:	99	10	95	95	0	94	95	0.913	70 - 130	20	70 - 130	20	

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

BATCH 51073 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1006143-001A	06/04/10 10:45 AM	06/08/10	06/08/10 2:21 AM	1006143-002A	06/04/10 11:15 AM	06/09/10	06/09/10 12:49 AM
1006143-003A	06/04/10 12:35 PM	06/07/10	06/07/10 7:24 PM	1006143-004A	06/04/10 11:45 AM	06/07/10	06/07/10 2:22 PM
1006143-005A	06/04/10 9:20 AM	06/07/10	06/07/10 4:23 PM	1006143-005A	06/04/10 9:20 AM	06/08/10	06/08/10 9:29 PM

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.

^f 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.



McCampbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 51083

WorkOrder 1006143

EPA Method SW8021B/8015Bm		Extraction SW5030B								Spiked Sample ID: 1006144-009A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex) ^f	ND	60	93.3	96.7	3.54	91	97.6	7.00	70 - 130	20	70 - 130	20	
MTBE	ND	10	93.8	94.9	1.23	90.4	92.7	2.48	70 - 130	20	70 - 130	20	
Benzene	ND	10	90.4	92.8	2.63	94.8	92.7	2.25	70 - 130	20	70 - 130	20	
Toluene	ND	10	92	94.4	2.60	96	94.1	2.00	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	90.8	93.4	2.81	95.2	93.3	2.04	70 - 130	20	70 - 130	20	
Xylenes	ND	30	93.3	95.6	2.44	96.4	95.3	1.15	70 - 130	20	70 - 130	20	
%SS:	103	10	99	99	0	106	99	6.43	70 - 130	20	70 - 130	20	

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

BATCH 51083 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1006143-006A	06/04/10 10:00 AM	06/07/10	06/07/10 8:53 PM				

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.

^f 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.