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April 22, 2009

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 - First Quarter 2009**
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 – First Quarter 2009*. The report describes groundwater monitoring, sampling, and other site activities.

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 – First Quarter 2009*

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 – FIRST QUARTER 2009

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California

April 22, 2009

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.

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-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 the site.

GROUNDWATER MONITORING AND SAMPLING

On February 6 and 7, 2009, groundwater monitoring and sampling was conducted at the site. As part of the monitoring program for this site all well caps are typically removed the day before monitoring to allow water levels to stabilize. However, during this monitoring event well caps were removed only 30 minutes prior to gauging due to potential stormwater runoff into the wells. Groundwater samples were obtained from groundwater monitoring wells MW-1, MW-2, MW-3A, MW-4, MW-5, MW-6A, MW-6B, MW-7AA, MW-7A, MW-7B, MW-8A, MW-9A and MW-10A, and vapor wells VW-1, VW-2 and VW-3. Sampling of the vapor wells was initially requested in a February 9, 2006 letter from Alameda County Environmental Health (ACEH). 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.

Before well purging, the dissolved oxygen (DO) concentration was measured in each 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 0.48 mg/L (well MW-6A) to 2.16 mg/L (vapor well VW-3).

Groundwater Flow Direction

Based on depth-to-water data collected February 6, 2009, 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 0.12 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.

Table A – Vertical Gradient Evaluation using Paired Monitoring Wells

Monitoring Well Pair	Groundwater Elevation	Mean Screen Depth	Calculated Vertical Gradient
MW-6A	320.15	17.5	
MW-6B	321.37	28	
<i>Difference</i>	<i>1.22</i>	<i>10.5</i>	<i>0.12 (upwards)</i>
MW-7A	320.49	18	
MW-7B	320.51	28	
<i>Difference</i>	<i>0.02</i>	<i>10</i>	<i>0.002 (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

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 have now 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.

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-7AA, located west of the dispenser islands, contained both the highest TPHg concentration (11,000 µg/L) and the highest benzene concentration (1,200 µg/L). No petroleum hydrocarbons were detected above reporting limits in either of the two sampled intermediate-depth B-zone wells.

Fuel Oxygenate Distribution in Groundwater

MTBE was detected above reporting limits in several wells, as shown in Table 1 and on Figure 2. The highest MTBE concentration was in source area well MW-7AA (13,000 µg/L). A historic low MTBE concentration was detected in well MW-2 at 20 µg/L. MTBE concentrations in other sampled wells were within historic limits or trends.

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

Groundwater Monitoring Program Reductions

To help control project cost per Cleanup Fund request on October 23, 2008, Pangea proposed groundwater monitoring frequency reductions in the *Groundwater Monitoring Report – Third Quarter 2008* for the subject site. In a letter dated January 16, 2009, ACEH concurred with Pangea's recommendation to reduce sampling frequency for several site wells. The revised groundwater monitoring program, presented in Appendix A, involves quarterly monitoring of six key wells and annual monitoring (first quarter) of sixteen wells. Pangea will summarize groundwater monitoring activities and results in a groundwater monitoring report.

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. Pangea has begun implementation of the approved CAP.

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

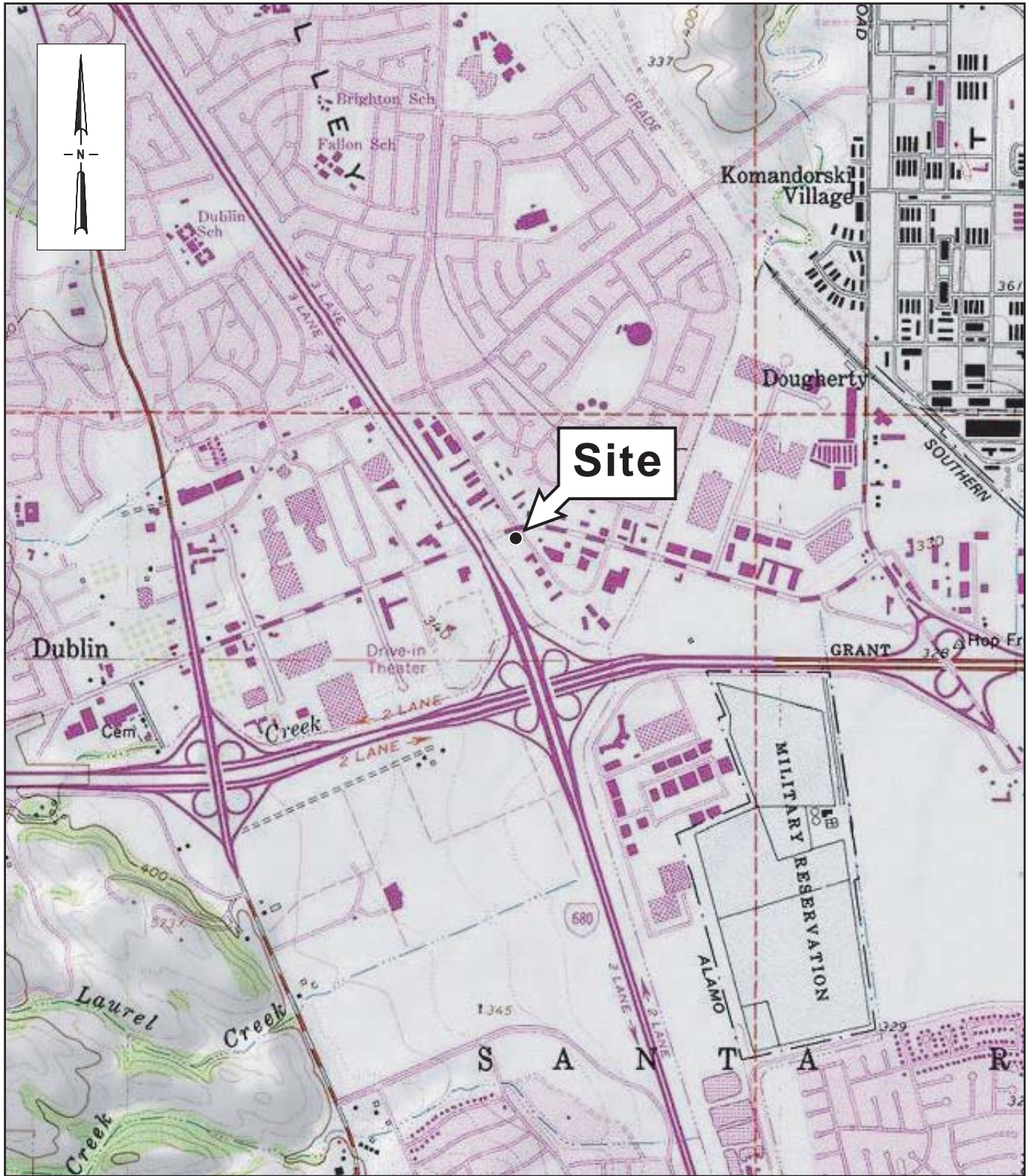
Table 1 – Groundwater Elevation and Analytical Data

Table 2 – Well Construction Details

Appendix A – Groundwater Monitoring Program

Appendix B – Groundwater Monitoring Field Data Sheets

Appendix C – Laboratory Analytical Results



SOURCE: TOPOI MAPS



SCALE : 1" = 1/4 MILE

Figure 1

Dublin Auto Wash
 7240 Dublin Boulevard
 Dublin, California



Site Location Map

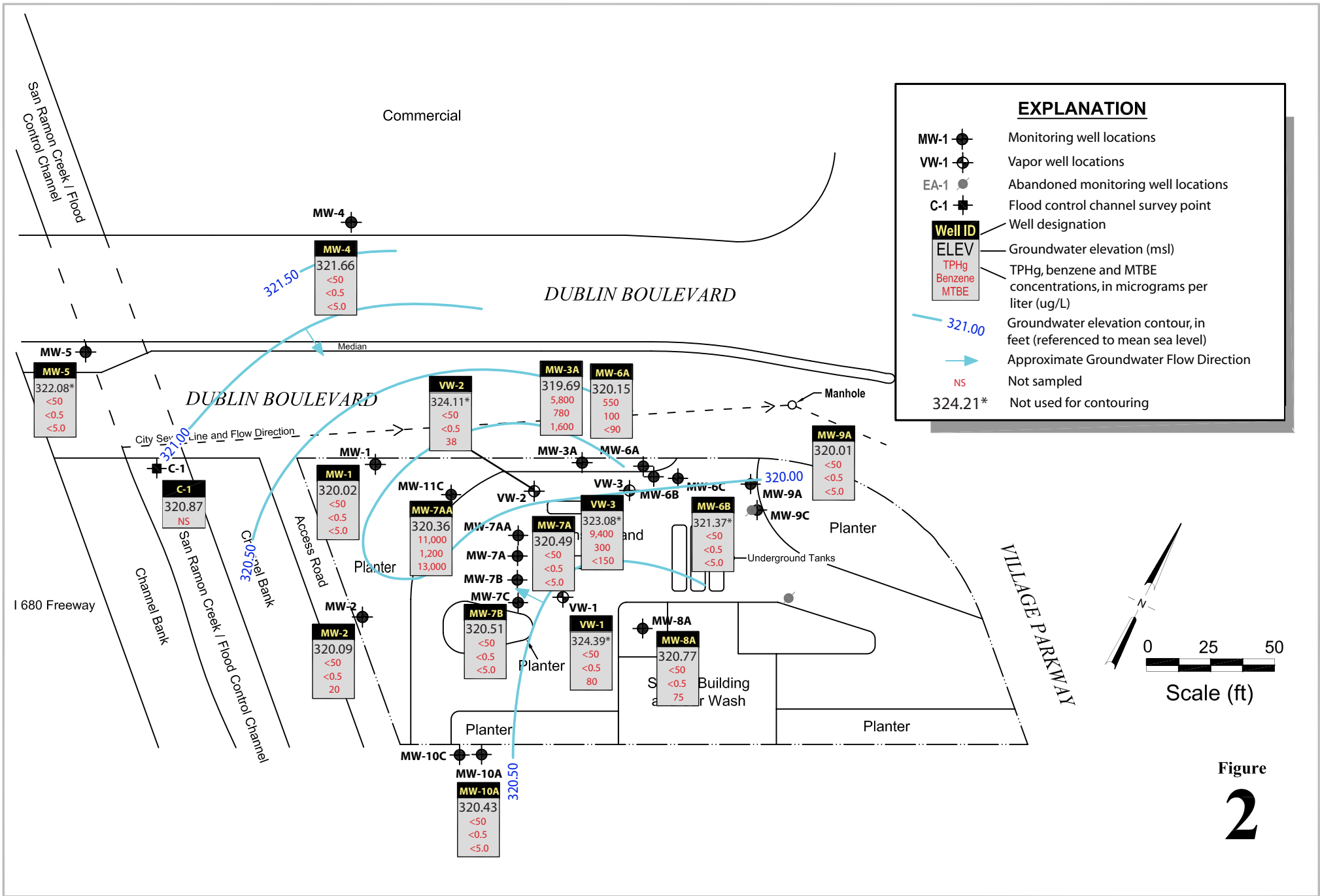


Figure
2

Pangea

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

Well ID <i>TOC Elev</i> <i>(ft)</i>	Date Sampled	Depth to Water <i>(ft)</i>	Groundwater Elevation <i>(ft, msl)</i>	TPHg ←	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved Oxygen <i>mg/L</i>	Notes
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	--	--	--	--	--	--	--	
<hr style="border-top: 1px dashed black;"/>											
Upper Shallow (AA-Zone) Wells											
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	
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			--	--	
	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	
VW-2 330.17	02/21/06	6.01	324.16	1,600	150	2.7	55	20	1,700 (1,600)	1.97	TAME, TBA, DIPE, ETBE=ND
	06/01/06	6.17	324.00	1,500	140	3.3	24	19	1,600 (1,600)	0.29	
	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	
VW-3 330.49	02/21/06	6.10	324.39	8,900	390	29	490	650	<50	2.28	TAME, TBA, DIPE, ETBE=ND
	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	

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

Well ID <i>TOC Elev</i> <i>(ft)</i>	Date Sampled	Depth to Water <i>(ft)</i>	Groundwater Elevation <i>(ft, msl)</i>	TPHg ←	Benzene	Toluene	Ethylbenzene μg/L	Xylenes	MTBE	Dissolved Oxygen mg/L	Notes	
												→
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									
	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									
	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									
	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									
	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		
	333.69	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	<0.5	<5.0	0.87	
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		
	329.48	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	<0.5	20	0.81	

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

Well ID <i>TOC Elev</i> <i>(ft)</i>	Date Sampled	Depth to Water <i>(ft)</i>	Groundwater Elevation <i>(ft, msl)</i>	TPHg ←	Benzene	Toluene	Ethylbenzene μg/L	Xylenes	MTBE	Dissolved Oxygen mg/L	Notes
MW-3A 331.39	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	
	MW-4 332.63	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	
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	<0.5	<5.0	0.67	
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	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	<0.5	<5.0	0.82	

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

Well ID <i>TOC Elev</i> <i>(ft)</i>	Date Sampled	Depth to Water <i>(ft)</i>	Groundwater Elevation <i>(ft, msl)</i>	TPHg ←	Benzene	Toluene	Ethylbenzene μg/L	Xylenes	MTBE	Dissolved Oxygen mg/L	Notes
MW-6A <i>331.81</i>	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	
MW-7A <i>330.71</i>	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	
	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	<0.5	<5.0	
MW-8A <i>331.19</i>	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	<0.5	75	
MW-9A <i>331.17</i>	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	<0.5	<5.0	
MW-10A <i>329.93</i>	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	

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

Well ID	Date	Depth	Groundwater							Dissolved	Notes
TOC Elev	Sampled	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen	
(ft)		(ft)	(ft, msl)	← μg/L →						mg/L	
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	TAME, TBA, DIPE, ETBE=ND
	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	<0.5	<5.0	
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	TAME, TBA, DIPE, ETBE=ND
	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	<0.5	<5.0	0.55	
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	TAME, TBA, DIPE, ETBE=ND
	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	TAME, TBA, DIPE, ETBE=ND
	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	
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	--	--	0.1' SPH; 0.079 gal SPH removed 0.05' SPH; 0.05 gal SPH removed
	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	--	--	--	--	--	--	--	
	03/25/99	12.56	320.3	--	--	--	--	--	--	--	
	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	--		

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

Well ID <i>TOC Elev</i> <i>(ft)</i>	Date Sampled	Depth to Water <i>(ft)</i>	Groundwater Elevation <i>(ft, msl)</i>	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved		Notes
										Oxygen		
				←----- µg/L -----→						mg/L		
<i>MW-3 (cont'd)</i>	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 <i>331.21</i>	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			
	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	--				

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

Well ID	Date	Depth	Groundwater							Dissolved	Notes		
TOC Elev	Sampled	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen			
(ft)		(ft)	(ft, msl)	←----- μg/L ----->						mg/L			
EA-2 (cont'd)	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	<0.5	2.2/0.9			
	12/15/04	8.96	321.45	<50	<0.5	<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	<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	--				
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	<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				

Pangea

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

Well ID	Date	Depth	Groundwater							Dissolved	Notes
TOC Elev	Sampled	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen	
(ft)		(ft)	(ft, msl)	←----- μg/L -----→						mg/L	
EA-3 (cont'd)	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	--	
	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	--	
DPB-7	04/18/03	35-39	NA	2,900	8.8	24	54	249	100	--	
	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	--	
DPB-8	04/18/03	35-39	NA	150	<0.5	1.8	0.8	5.7	<0.5	--	
	05/01/03	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/18/03	14-18	NA	20,000	<170	<170	380	6,600	53,000	--	
DPB-S	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)
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. 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	--	Q	---
Upper Shallow AA-Zone Wells						
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 #: 1001.001 218			Project Name: Dublin Car Wash					
Address: 7420 Dublin Boulevard, Dublin, CA						Date: 2/6/09		
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-1	2"	8:40			13.67	25.32	TOC	
MW-2	2"	8:45			9.39	20.00		
MW-3A	4"	9:15			11.70	16.78		
MW-4	2"	8:20			10.98	19.78		
MW-5	2"	8:15			11.05	20.56		
MW-6A	2"	9:08			11.66	19.13		
MW-6B	2"	8:50			9.53	29.73		
MW-7AA	4"	9:20			10.31	13.84		
MW-7A	4"	8:35			10.22	19.53		
MW-7B	2"	8:32			10.18	28.42		
MW-8A	2"	8:23			10.42	19.01		✓

Comments:

Well Gauging Data Sheet

Project.Task #: 1001.001 218	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	Date: 2/6/09

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	8:25				11.16	19.66	TOC
MW-10A	8:28				9.50	19.51	
VW-1	8:34				6.04	8.40	
VW-2	8:59				6.06	8.30	
VW-3	9:03				7.41	8.40	
C-1	9:25				12.02	—	

Comments:

MONITORING FIELD DATA SHEET

Well ID: MW-1

Project.Task #: 1001.001 218		Project Name: Dublin Car Wash						
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 2/6/09		Weather: Rain						
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): 25.32		Depth to Product:						
Depth to Water (DTW): 13.67		Product Thickness:						
Water Column Height: 11.65		1 Casing Volume: 1.86 gallons						
Reference Point: TOC		3 Casing Volumes: 5.58 gallons						
Purging Device: Disposable Bailer 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
12:10	18.1	7.46	1960				2	
12:15	17.9	7.38	1980				4	
12:20	18.1	7.39	1992				5.5	

Comments: YSI 550A DO meter pre purge DO = 0.87 mg/l
 post purge DO = mg/l
 very turbid

Sample ID: MW-1	Sample Time: 12:25
Laboratory: McCampbell Analytical, INC.	Sample Date: 2/6/09
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MU-2

Project.Task #: 1001.001 218		Project Name: Dublin Car Wash						
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 2/6/09		Weather: <u>Rain</u>						
Well Diameter: <u>2''</u>	Volume/ft.							
	1" = 0.04 2" = 0.16	3" = 0.37 4" = 0.65	6" = 1.47 radius* 0.163					
Total Depth (TD): <u>20.00</u>	Depth to Product:							
Depth to Water (DTW): <u>9.39</u>	Product Thickness:							
Water Column Height: <u>10.61</u>	1 Casing Volume: <u>1.69</u>		gallons					
Reference Point: TOC	3 Casing Volumes: <u>5.07</u>		gallons					
Purging Device: <u>Disposable Bailer</u> 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>12:40</u>	<u>18.7</u>	<u>7.48</u>	<u>1637</u>				<u>2</u>	
<u>12:45</u>	<u>18.7</u>	<u>7.50</u>	<u>1613</u>				<u>4</u>	
<u>12:50</u>	<u>18.5</u>	<u>7.56</u>	<u>1625</u>				<u>5</u>	

Comments: YSI 550A DO meter pre purge DO = 0.81 mg/l
 post purge DO = mg/l
turbid


Sample ID: <u>MU-2</u>	Sample Time: <u>12:55</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/6/09</u>
Containers/Preservative: <u>Voa/HCl</u>	
Analyzed for: <u>8015, 8021</u>	
Sampler Name: Sanjiv Gill	Signature: <u>[Signature]</u>

MONITORING FIELD DATA SHEET

Well ID: MW-3A

Project.Task #: 1001.001 218		Project Name: Dublin Car Wash						
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 2/6/09		Weather: Rain						
Well Diameter: 4"	Volume/ft.							
	1" = 0.04	3" = 0.37	6" = 1.47					
	2" = 0.16	4" = 0.65	radius * 0.163					
Total Depth (TD): 16.78	Depth to Product:							
Depth to Water (DTW): 11.70	Product Thickness:							
Water Column Height: 5.08	1 Casing Volume: 3.30 3.30 gallons							
Reference Point: TOC	3 Casing Volumes: 9.90 gallons							
Purging Device: Disposable Bailer, 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
8:05	18.8	7.11	1636				3.5	
8:10	19.4	7.13	1641				7	
8:30	19.0	7.16	1644				10	

Comments: YSI 550A DO meter pre purge DO = 0.69 mg/l
 post purge DO = mg/l
 turbid

Sample ID: MW-3A	Sample Time: 8:45
Laboratory: McCampbell Analytical, INC.	Sample Date: 2/7/09
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 


MONITORING FIELD DATA SHEET

Well ID: MW-6A

Project Task #: 1001.001 218				Project Name: Dublin Car Wash				
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 2/6/09				Weather: <u>Rain</u>				
Well Diameter: <u>2"</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>19.13</u>				Depth to Product:				
Depth to Water (DTW): <u>11.66</u>				Product Thickness:				
Water Column Height: <u>7.47</u>				1 Casing Volume: <u>1.19</u>		gallons		
Reference Point: TOC				<u>3</u> Casing Volumes: <u>3.57</u>		gallons		
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>7:25</u>	<u>18.8</u>	<u>6.95</u>	<u>1980</u>				<u>1.5</u>	
<u>7:35</u>	<u>18.8</u>	<u>6.99</u>	<u>1986</u>				<u>2.5</u>	
<u>7:45</u>	<u>18.8</u>	<u>7.03</u>	<u>2008</u>				<u>3.5</u>	

Comments: YSI 550A DO meter pre purge DO = 0.48 mg/l
 post purge DO = mg/l

very turbid, silty

Sample ID: <u>MW-6A</u>	Sample Time: <u>7:50</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/7/09</u>
Containers/Preservative: <u>Voal/HCl</u>	
Analyzed for: <u>8015, 8021</u>	
Sampler Name: Sanjiv Gill	Signature: 


MONITORING FIELD DATA SHEET

Well ID: MW-7AA

Project Task #: 1001.001 218				Project Name: Dublin Car Wash				
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 2/6/09				Weather: <u>Rain</u>				
Well Diameter: 10.84 <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): 10.84 <u>13.84</u>				Depth to Product:				
Depth to Water (DTW): <u>10.31</u>				Product Thickness:				
Water Column Height: <u>3.53</u>				1 Casing Volume:		<u>2.29</u>	gallons	
Reference Point: TOC				<u>3</u> Casing Volumes:		<u>6.87</u>	gallons	
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>5:50</u>	<u>18.1</u>	<u>7.19</u>	<u>2013</u>				<u>2.5</u>	
<u>6:00</u>	<u>18.0</u>	<u>7.11</u>	<u>2027</u>				<u>5</u>	
<u>6:15</u>	<u>18.2</u>	<u>7.16</u>	<u>2019</u>				<u>7</u>	

Comments: YSI 550A DO meter pre purge DO = 0.79 mg/l
 post purge DO = mg/l

turbid


Sample ID: <u>MW-7AA</u>		Sample Time: <u>6:30</u>	
Laboratory: McCampbell Analytical, INC.		Sample Date: <u>2/7/09</u>	
Containers/Preservative: <u>Voal/HCl</u>			
Analyzed for: <u>8015, 8021</u>			
Sampler Name: Sanjiv Gill		Signature: 	

MONITORING FIELD DATA SHEET

Well ID: **MW-7A**

Project.Task #: 1001.001 218		Project Name: Dublin Car Wash						
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 2/6/09				Weather: Rain				
Well Diameter: 4"				Volume/ft.		1" = 0.04	3" = 0.37	6" = 1.47
						2" = 0.16	4" = 0.65	radius* 0.163
Total Depth (TD): 19.53				Depth to Product:				
Depth to Water (DTW): 10.22				Product Thickness:				
Water Column Height: 9.31				1 Casing Volume: 6.05 gallons				
Reference Point: TOC				<u>3</u> Casing Volumes: 18.15 gallons				
Purging Device: Disposable Bailer, 3" PVC Bailer , Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
5:10	18.6	7.31	1920				6	
5:15	18.8	7.33	1947				12	
5:25	18.9	7.35	1943				18	

Comments: YSI 550A DO meter pre purge DO = **0.83** mg/l
 post purge DO = mg/l
turbid


Sample ID: MW-7A		Sample Time: 5:35	
Laboratory: McCampbell Analytical, INC.		Sample Date: 2/7/09	
Containers/Preservative: Voa/HCl			
Analyzed for: 8015, 8021			
Sampler Name: Sanjiv Gill		Signature: 	

MONITORING FIELD DATA SHEET

Well ID: ML-7B

Project.Task #: 1001.001 218		Project Name: Dublin Car Wash	
Address: 7420 Dublin Boulevard, Dublin, CA			
Date: 2/6/09		Weather: <u>Rain</u>	
Well Diameter: <u>2"</u>	Volume/ft.	1" = 0.04	3" = 0.37
		2" = 0.16	4" = 0.65
Total Depth (TD): <u>28.42</u>		Depth to Product:	
Depth to Water (DTW): <u>10.18</u>		Product Thickness:	
Water Column Height: <u>18.24</u>		1 Casing Volume: <u>2.91</u> gallons	
Reference Point: TOC		<u>3</u> Casing Volumes: <u>8.73</u> gallons	
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump			
Sampling Device: Disposable Bailer			
Time	Temp ©	pH	Cond (µs)
<u>4:30</u>	<u>18.8</u>	<u>7.44</u>	<u>695</u>
<u>4:40</u>	<u>18.8</u>	<u>7.46</u>	<u>713</u>
<u>4:50</u>	<u>18.8</u>	<u>7.47</u>	<u>720</u>

Comments: YSI 550A DO meter pre purge DO = 0.55 mg/l
 post purge DO = mg/l
turbid

Sample ID: <u>ML-7B</u>	Sample Time: <u>4:55</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/7/09</u>
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 



MONITORING FIELD DATA SHEET

Well ID: MW-10A

Project.Task #: 1001.001 218		Project Name: Dublin Car Wash	
Address: 7420 Dublin Boulevard, Dublin, CA			
Date: 2/6/09		Weather: <u>Rain</u>	
Well Diameter: <u>2"</u>	Volume/ft.	1" = 0.04	3" = 0.37
		2" = 0.16	4" = 0.65
		6" = 1.47	radius* 0.163
Total Depth (TD): <u>19.51</u>	Depth to Product:		
Depth to Water (DTW): <u>9.50</u>	Product Thickness:		
Water Column Height: <u>10.01</u>	1 Casing Volume: <u>1.60</u>	gallons	
Reference Point: TOC	<u>3</u> Casing Volumes: <u>4.80</u>	gallons	
Purging Device: <u>Disposable Bailer</u> 3" PVC Bailer, Check Valve Tubing, Whal Pump			
Sampling Device: Disposable Bailer			
Time	Temp ©	pH	Cond (µs)
			NTU
			DO(mg/L)
			ORP (mV)
			Vol(gal)
			DTW
<u>11:40</u>	<u>18.6</u>	<u>7.31</u>	<u>2097</u>
<u>11:45</u>	<u>18.8</u>	<u>7.33</u>	<u>2115</u>
<u>11:50</u>	<u>18.9</u>	<u>7.36</u>	<u>2128</u>

Comments: YSI 550A DO meter pre purge DO = 0.68 mg/l
post purge DO = _____ mg/l
turbid

Sample ID: <u>MW-10A</u>	Sample Time: <u>11:55</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/6/09</u>
Containers/Preservative: <u>Voa/HCl</u>	
Analyzed for: <u>8015, 8021</u>	
Sampler Name: Sanjiv Gill	Signature:

MONITORING FIELD DATA SHEET

Well ID: VW-1

Project.Task #: 1001.001 218				Project Name: Dublin Car Wash				
Address: 7420 Dublin Boulevard, Dublin, CA								
Date: 2/6/09				Weather: <u>Rain</u>				
Well Diameter: <u>2"</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>8.40</u>				Depth to Product:				
Depth to Water (DTW): <u>6.04</u>				Product Thickness:				
Water Column Height: <u>2.36</u>				1 Casing Volume: <u>0.37</u>			gallons	
Reference Point: TOC				<u>3</u> Casing Volumes: <u>1.11</u>			gallons	
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>2-6-09 1:05</u>		<u>Deuter</u>					<u>.3</u>	
							.6	
							.9	

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

Sample ID: <u>VW-1</u>	Sample Time: <u>8:55</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/7/09</u>
Containers/Preservative: <u>Voal/HCl</u>	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: <u>[Signature]</u>


MONITORING FIELD DATA SHEET

Well ID: VW-2

Project.Task #: 1001.001 218		Project Name: Dublin Car Wash							
Address: 7420 Dublin Boulevard, Dublin, CA									
Date: 2/6/09		Weather: <u>Rain</u>							
Well Diameter: <u>2''</u>		Volume/ft. <table border="1"> <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>8.30</u>		Depth to Product:							
Depth to Water (DTW): <u>6.06</u>		Product Thickness:							
Water Column Height: <u>2.24</u>		1 Casing Volume: <u>0.35</u> gallons							
Reference Point: TOC		<u>3</u> Casing Volumes: <u>1.05</u> gallons							
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump									
Sampling Device: Disposable Bailer									
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW	
<u>1:20</u>		<u>Dewatered</u>					<u>.3</u>		
							6		
							1.0		

2-6-09

Comments: YSI 550A DO meter pre purge DO = 0.95 mg/l
 post purge DO = mg/l
turbid

Sample ID: <u>VW-2</u>	Sample Time: <u>9:05</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/7/09</u>
Containers/Preservative: <u>Voa/HCl</u>	
Analyzed for: <u>8015, 8021</u>	
Sampler Name: Sanjiv Gill	Signature: 

APPENDIX C

Laboratory Analytical Results



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1001.001; Dublin Car Wash, 7420-Dublin Blvd	Date Sampled: 02/06/09-02/07/09
	Client Contact: Erica Ray	Date Received: 02/09/09
	Client P.O.:	Date Reported: 02/17/09
		Date Completed: 02/13/09

WorkOrder: 0902215

February 17, 2009

Dear Erica:

Enclosed within are:

- 1) The results of the **16** analyzed samples from your project: **#1001.001; Dublin Car Wash, 7420-**
- 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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

0902215

10f2

McCAMPBELL ANALYTICAL, INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? yes Coelt (Normal) No Write On (DW) No

Report To: Erica Ray Bill To: Pangea Environmental
Company: Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland, CA 94612 E-Mail: eray@pangeaenv.com
Tele: 510-836-3702 Fax: (510) 836-3709
Project #: 1001-001 Project Name: 7420-Dublin Blvd. All
Project Location: Dublin Car Wash
Sampler Signature: Musken Environmental Sampling

Analysis Request Other Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED			
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other
MW-1		2-6-09	12:25	3	VOA	X					X	X		X
MW-2		2-6-09	12:55											
MW-3A		2-7-09	8:45											
MW-4		2-6-09	10:25											
MW-5		2-6-09	9:55											
MW-6A		2-7-09	7:50											
MW-6B		2-7-09	7:10											
MW-7AA		2-7-09	6:30											
MW-7A		2-7-09	5:35											
MW-7B		2-7-09	4:55											
MW-8A		2-6-09	11:25											
MW-9A		2-6-09	10:55											
MW-10A		2-6-09	11:55											
VW-1		2-7-09	8:55	A	A	X					X	X		X

BTEX & TPH as Gas (602/8020 + 8015)/NTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/D&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB'S ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8250	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAME-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)
--	----------------------	---	--------------------------------------	-----------------------	----------------------------	----------------	---------------------------	-----------------	-----------------	------------------------	----------------------	--	------------------------------	-----------------------------	-----------------------------

Filter Samples for Metals analysis: Yes / No

+
+
+
+
+
+
+
+
+
+
+
+
+
+
+

Relinquished By: [Signature] Date: 2/9/09 Time: 1410 Received By: [Signature]

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

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

COMMENTS: ICE/24 GOOD CONDITION HEAD SPACE ABSENT DECHLORINATED IN LAB APPROPRIATE CONTAINERS PRESERVED IN LAB

VOAS O&G METALS OTHER PRESERVATION pH<2

McCAMPBELL ANALYTICAL, INC.
 110 2nd AVENUE SOUTH, #D7
 PACHECO, CA 94553-5560
 Website: www.mccampbell.com Email: main@mccampbell.com
 Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD
 TURN AROUND TIME
 RUSH 24 HR 48 HR 72 HR 5 DAY
 EDF Required? Yes Coelt (Normal) No Write On (DW) No

Report To: Erica Ray Bill To: Pangea Environmental
 Company: Pangea Environmental Services, Inc.
 1710 Franklin Street, Suite 200
 Oakland, CA 94612 E-Mail: eray@pangeaenv.com
 Tele: 510-836-3702 Fax: (510) 836-3709
 Project #: 1001-001 Project Name: 7420-Dublin Blvd, Dublin
 Project Location: 7420 Dublin Blvd, Dublin, CA
 Sampler Signature: Musken Environmental Sampling

SAMPLE ID (Field Point Name)		LOCATION		SAMPLING		Type Containers		MATRIX				METHOD PRESERVED		Analysis Request										Other	Comments										
Date	Time	# Containers		Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)		Filter Samples for Metals analysis: Yes / No					
VW-2		2-7-09	9:05	3	vac	X			X	X			X																						
VW-3		2-7-09	9:15	3	vac	X			X	X			X																						

Relinquished By: [Signature] Date: 2/9/09 Time: 1410 Received By: [Signature]
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____

ICE/A* _____ COMMENTS: _____
 GOOD CONDITION _____
 HEAD SPACE ABSENT _____
 DECHLORINATED IN LAB _____
 APPROPRIATE CONTAINERS _____
 PRESERVED IN LAB _____
 VOAS | O&G | METALS | OTHER
 PRESERVATION | pH<2

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0902215

ClientCode: PEO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Erica Ray
 Pangea Environmental Svcs., Inc.
 1710 Franklin Street, Ste. 200
 Oakland, CA 94612
 (510) 836-3700 FAX (510) 836-3709

Email: eray@pangeaenv.com
cc:
PO:
ProjectNo: #1001.001; Dublin Car Wash, 7420-Dublin Blvd

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

Requested TAT: 5 days
Date Received: 02/09/2009
Date Printed: 02/09/2009

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	
0902215-001	MW-1	Water	2/6/2009 12:25	<input type="checkbox"/>	A	A											
0902215-002	MW-2	Water	2/6/2009 12:55	<input type="checkbox"/>	A												
0902215-003	MW-3A	Water	2/7/2009 8:45	<input type="checkbox"/>	A												
0902215-004	MW-4	Water	2/6/2009 10:25	<input type="checkbox"/>	A												
0902215-005	MW-5	Water	2/6/2009 9:55	<input type="checkbox"/>	A												
0902215-006	MW-6A	Water	2/7/2009 7:50	<input type="checkbox"/>	A												
0902215-007	MW-6B	Water	2/7/2009 7:10	<input type="checkbox"/>	A												
0902215-008	MW-7AA	Water	2/7/2009 6:30	<input type="checkbox"/>	A												
0902215-009	MW-7A	Water	2/7/2009 5:35	<input type="checkbox"/>	A												
0902215-010	MW-7B	Water	2/7/2009 14:55	<input type="checkbox"/>	A												
0902215-011	MW-8A	Water	2/6/2009 11:25	<input type="checkbox"/>	A												
0902215-012	MW-9A	Water	2/6/2009 10:55	<input type="checkbox"/>	A												
0902215-013	MW-10A	Water	2/6/2009 11:55	<input type="checkbox"/>	A												
0902215-014	VW-1	Water	2/7/2009 8:55	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTX W	2	PREF 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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0902215

ClientCode: PEO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Erica Ray
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX (510) 836-3709

Email: eray@pangeaenv.com
cc:
PO:
ProjectNo: #1001.001; Dublin Car Wash, 7420-Dublin Blvd

Bill to:

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

Requested TAT: 5 days

Date Received: 02/09/2009

Date Printed: 02/09/2009

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	
0902215-015	VW-2	Water	2/7/2009 9:05	<input type="checkbox"/>	A												
0902215-016	VW-3	Water	2/7/2009 9:15	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTEX_W	2	PREDF 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: **02/09/09 2:23:52 PM**

Project Name: **#1001.001; Dublin Car Wash, 7420-Dublin Blvd**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **0902215** 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: 2.4°C NA
 - Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 - Sample labels checked for correct preservation? Yes No
 - TTLC 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.

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1001.001; Dublin Car Wash, 7420-Dublin Blvd	Date Sampled: 02/06/09-02/07/09
	Client Contact: Erica Ray	Date Received: 02/09/09
	Client P.O.:	Date Analyzed 02/11/09-02/12/09
		Date Extracted: 02/11/09-02/12/09

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

Extraction method SW5030B

Analytical methods SW8021B/8015Bm

Work Order: 0902215

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND	ND	ND	ND	ND	ND	1	92
002A	MW-2	W	ND	20	ND	ND	ND	ND	1	92
003A	MW-3A	W	5800,d1	1600	780	25	260	390	20	95
004A	MW-4	W	ND	ND	ND	ND	ND	ND	1	91
005A	MW-5	W	ND	ND	ND	ND	ND	ND	1	96
006A	MW-6A	W	550,d1	ND<90	100	9.3	22	34	1	116
007A	MW-6B	W	ND	ND	ND	ND	ND	ND	1	100
008A	MW-7AA	W	11,000,d1	13,000	1200	37	500	800	10	101
009A	MW-7A	W	ND	ND	ND	ND	ND	ND	1	93
010A	MW-7B	W	ND	ND	ND	ND	ND	ND	1	95
011A	MW-8A	W	ND	75	ND	ND	ND	ND	1	93
012A	MW-9A	W	ND	ND	ND	ND	ND	ND	1	95
013A	MW-10A	W	ND	ND	ND	ND	ND	ND	1	92
014A	VW-1	W	ND	80	ND	ND	ND	ND	1	92
015A	VW-2	W	ND	38	ND	ND	ND	ND	1	93
016A	VW-3	W	9400,d1	ND<150	300	9.1	140	230	10	107

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5	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 and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41288

WorkOrder: 0902215

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0902208-016A			
	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) [£]	ND	60	86	83.4	3.00	106	95.4	10.3	70 - 130	20	70 - 130	20
MTBE	ND	10	80.9	81.3	0.520	106	107	0.935	70 - 130	20	70 - 130	20
Benzene	ND	10	94	101	7.21	101	95.7	5.15	70 - 130	20	70 - 130	20
Toluene	ND	10	85.1	90.5	6.17	112	106	5.30	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	95	100	5.36	108	104	3.05	70 - 130	20	70 - 130	20
Xylenes	ND	30	92.4	96.5	4.37	119	116	2.41	70 - 130	20	70 - 130	20
%SS:	97	10	106	116	9.42	95	95	0	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 41288 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0902215-001A	02/06/09 12:25 PM	02/11/09	02/11/09 7:40 AM	0902215-002A	02/06/09 12:55 PM	02/11/09	02/11/09 8:13 AM
0902215-003A	02/07/09 8:45 AM	02/11/09	02/11/09 8:46 AM	0902215-004A	02/06/09 10:25 AM	02/11/09	02/11/09 10:59 AM
0902215-005A	02/06/09 9:55 AM	02/11/09	02/11/09 5:47 AM	0902215-006A	02/07/09 7:50 AM	02/11/09	02/11/09 6:17 AM
0902215-007A	02/07/09 7:10 AM	02/11/09	02/11/09 6:47 AM	0902215-008A	02/07/09 6:30 AM	02/11/09	02/11/09 7:03 PM
0902215-008A	02/07/09 6:30 AM	02/12/09	02/12/09 5:27 PM	0902215-009A	02/07/09 5:35 AM	02/11/09	02/11/09 4:07 PM
0902215-010A	02/07/09 2:55 PM	02/11/09	02/11/09 4:41 PM	0902215-011A	02/06/09 11:25 AM	02/11/09	02/11/09 5:14 PM
0902215-012A	02/06/09 10:55 AM	02/11/09	02/11/09 5:47 PM	0902215-013A	02/06/09 11:55 AM	02/11/09	02/11/09 6:20 PM
0902215-014A	02/07/09 8:55 AM	02/11/09	02/11/09 6:53 PM	0902215-015A	02/07/09 9:05 AM	02/12/09	02/12/09 9:15 PM
0902215-016A	02/07/09 9:15 AM	02/12/09	02/12/09 6:28 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.

£ 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.