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

Mr. Barney Chan
Alameda County Health Care Services Agency
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

November 7, 2007

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

Re: **Groundwater Monitoring Report - Third Quarter 2007**
Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California
ACEH Case No. 304

Dear Mr. Chan:

On behalf of Mr. Hooshang Hadjian, Pangea Environmental Services, Inc. has prepared this *Groundwater Monitoring Report – Third Quarter 2007*. The report describes groundwater monitoring, sampling, and other site activities.

Pangea submitted a *Site Investigation Report* to Alameda County Environmental Health (ACEH) on August 11, 2006 recommending installation of additional shallow monitoring wells and implementation of short-term remediation activities. Pangea requests that ACEH concur with these recommendations.

Sincerely,
Pangea Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Groundwater Monitoring Report – Third Quarter 2007*

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

GROUNDWATER MONITORING REPORT – THIRD QUARTER 2007

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California

November 7, 2007

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

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 in 2006 installed additional monitoring wells with shorter screen lengths in identified water-bearing zones.

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 abandoned 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 above 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 abandoned 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 on July 7, 2006 by extracting approximately 40 gallons of impacted liquid from wells MW-3A and MW-7AA with a vacuum truck.

GROUNDWATER MONITORING AND SAMPLING

On August 28, 2007, groundwater monitoring and sampling was conducted at the site. All well caps were removed the night before monitoring was conducted to allow water levels to stabilize. Groundwater samples were obtained from groundwater monitoring wells (MW-1, MW-2, MW-3A, MW-6A, MW-6B, MW-7AA, MW-7A, MW-7B, MW-8A, MW-9A and MW-10A) and from the three vapor wells (VW-1, VW-2 and VW-3). Sampling of the three 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. Upgradient offsite wells MW-4 and MW-5 are sampled annually during the first quarter of each year so were only gauged for water levels this quarter. Monitoring and sampling of deep monitoring wells MW-6C, MW-7C, MW-9C, MW-10C and MW-11C was discontinued starting the second quarter 2007, as approved by Barney Chan of ACEH in a May 14, 2007 telephone conversation. Sampling was discontinued because no significant contamination was detected in any of these wells during the four consecutive quarters that they were sampled.

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^{o} 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 A.

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 0.27 mg/L (well VW-1) to 0.55 mg/L (well MW-5).

Groundwater Flow Direction

Based on depth-to-water data collected August 28, 2007, 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. To ensure that measured groundwater depths were representative of equilibrated piezometric elevations, all well caps were removed the day before well gauging.

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 on Table A. A downward gradient appears to be present between the shallow vapor wells (VW-1, VW-2 and VW-3) and the shallow

Table A – Vertical Gradient Evaluation using Paired Monitoring Wells

Monitoring Well Pair	Groundwater Elevation	Mean Screen Depth	Calculated Vertical Gradient
MW-6A	319.83	17.5	
MW-6B	321.30	28	
Difference	*1.47*	*10.5*	*0.14 (upwards)*
MW-7A	320.26	18	
MW-7B	320.73	28	
Difference	*0.47*	*10*	*0.047(upwards)*

monitoring wells, although this apparent gradient is interpreted to be the result of perched groundwater in the vicinity of the UST excavation.

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 side 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 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. Future monitoring and analysis will help define the consistency and magnitude of this upward gradient. 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.

Hydrocarbon contamination is concentrated in the upper shallow (AA) and shallow (A) water-bearing zones in the vicinity of the fuel dispensers, as shown on Table 1 and Figure 2. Vapor well VW-3, located north of the dispenser islands, had the highest TPHg (10,000 µg/L) concentration, while MW-7AA contained the highest benzene (720µg/L) concentration of all sampled wells. Petroleum hydrocarbon concentrations detected this quarter were within historic limits in all wells, except for historic high TPHg concentrations detected in VW-1 and VW-3, (2,400 µg/L and 10,000 µg/L, respectively) and a historic high benzene concentration (400 µg/L) in well VW-1. Well MW-7AA contained historically low concentrations of TPHg (4,500 µg/L) and benzene (720 µg/L). No petroleum hydrocarbons were detected above reporting limits in either of the two sampled intermediate (B) depth wells.

Fuel Oxygenate Distribution in Groundwater

MTBE was detected above reporting limits in several wells, as shown on Table 1 and Figure 2. The highest MTBE concentration was in source area well MW-7AA (18,000 µg/L), although this was a historic low

concentration for this well. MTBE concentrations detected in wells MW-2 (1,800 µg/L) and VW-3 (84 µg/L) represent historic highs. MTBE concentrations detected in wells MW-3A (3,400 µg/L), MW-7A (<5.0 µg/L), MW-9A (10 µg/L), and VW-2 (160 µg/L) also represent historic lows for each well. MTBE concentrations in other sampled wells were within historic limits.

MTBE concentrations in well MW-1 had been steadily increasing over the past three years and reached a historic high of 8,400 µg/L during the fourth quarter 2006 monitoring event, but have been decreasing substantially since then to 170 µg/L this quarter (the lowest concentration measured in this well since 1996). The concentration reductions in well MW-1 may be due to MTBE migration from the area. MTBE concentrations in well MW-2 appear to have an increasing trend, which could be due to migration of MTBE from the vicinity of well MW-1 or from the source area near the dispenser islands; MW-2 appears to be downgradient from these areas during winter quarters.

OTHER SITE ACTIVITIES

Upcoming Monitoring and Proposed Frequency

Pangea will continue groundwater monitoring and sampling at the site and will sample all shallow and intermediate-depth onsite groundwater monitoring wells quarterly. Upgradient offsite wells MW-4 and MW-5 will be sampled annually during the first quarter of each year. All monitored wells will be gauged for depth to water and inspected for SPH. All groundwater samples will be analyzed for TPHg/BTEX/MTBE by EPA Method 8015Cm/8021B. Pangea has discontinued sampling of all deep groundwater monitoring wells (MW-6C, MW-7C, MW-9C, MW-10C and MW-11C).

The upcoming monitoring will also include the following activities:

- To evaluate shallow conditions at the site, Pangea will continue to gauge vapor wells VW-1 through VW-3 and sample these wells if they contain sufficient water.

- To compare surface water and groundwater elevation and help evaluate whether groundwater is impacting the flood control channel, Pangea will measure the depth to water at survey point C-1 at the overpass of the flood control channel.

- To address apparently non-representative water levels measured in some site wells due to slow recovery, Pangea will open well caps the day prior to monitoring for future monitoring events.

Pangea will summarize groundwater monitoring activities and results in a groundwater monitoring report.

Additional Assessment and Remediation

On August 11, 2006, Pangea submitted a *Site Investigation Report* documenting recent site assessment, well installation, and interim remediation activities. In the report, Pangea recommended the installation of additional shallow monitoring wells and implementation of short-term remediation activities. Pangea is awaiting regulatory response prior to implementing these recommendations.

Electronic Reporting

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

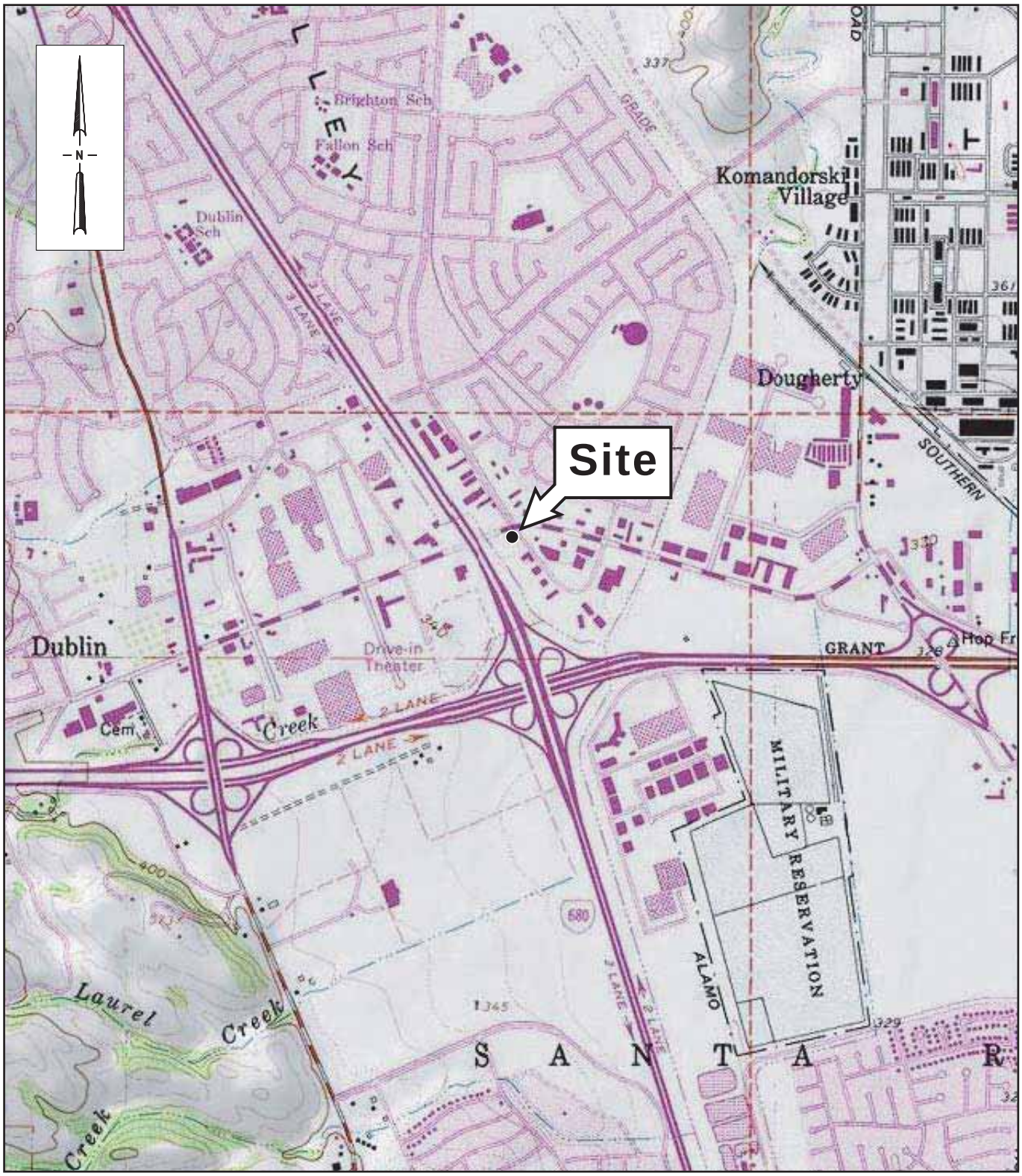
ATTACHMENTS

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 Field Data Sheets
Appendix B – Laboratory Analytical Report

2/17/2005



SOURCE: TOPO! MAPS

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Figure

1

Dublin Auto Wash

7240 Dublin Boulevard
Dublin, California

PANGEA

Site Location Map

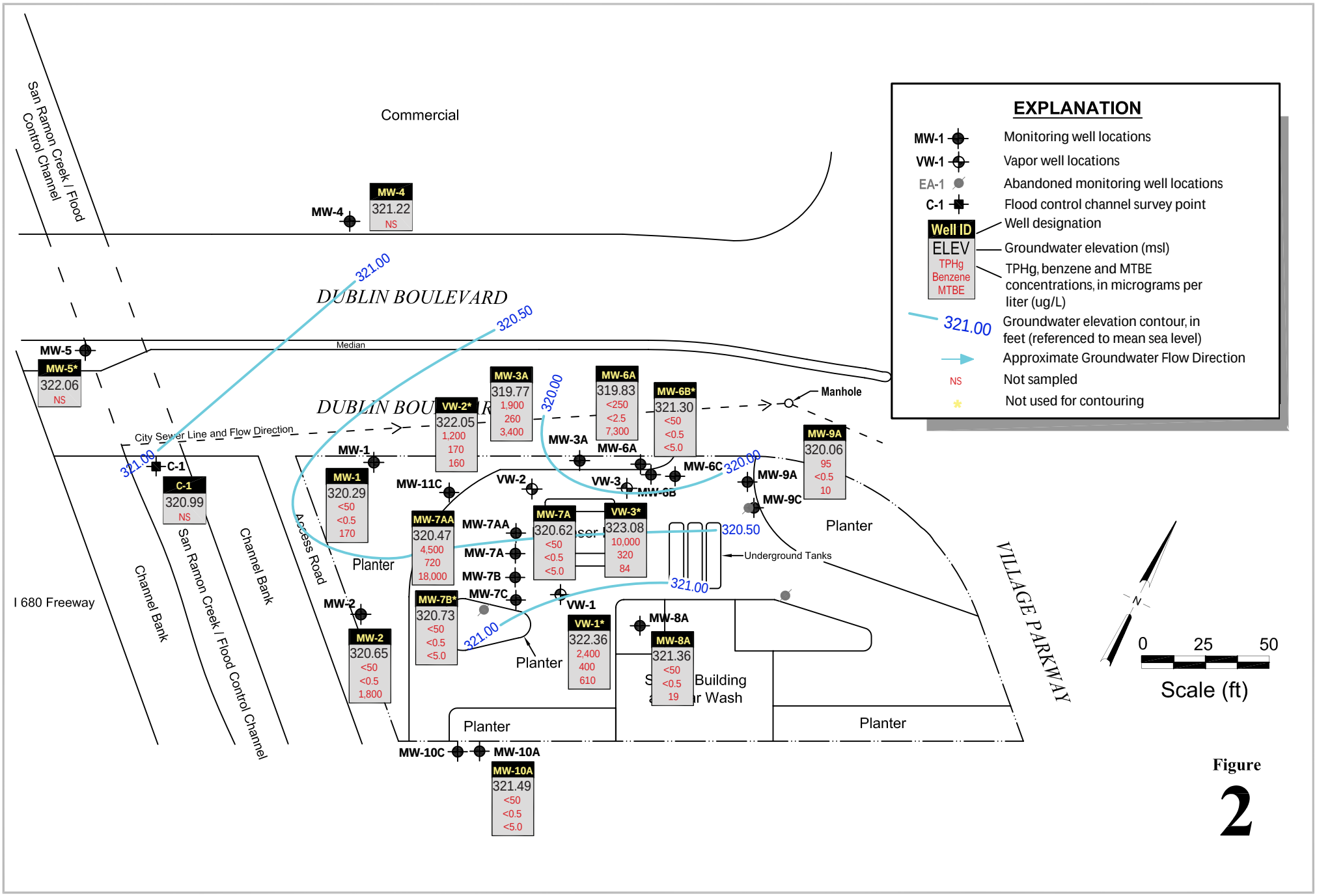


Figure 2

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California

PANGEA

Groundwater Elevation Contour and Hydrocarbon Concentration Map
August 28, 2007

Pangea

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		→		
EA-1	10/17/88	--	--	<50	<0.5	<0.5	<0.5	<0.5	--		
331.21	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 Abandoned

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		→		
EA-2	10/17/88	--	--	<50	<0.5	<0.5	<0.5	1.2	--		
330.41	10/24/88	9.7	322.89	--	--	--	--	--	--		
	11/02/88	10.03	322.56	--	--	--	--	--	--		
	12/20/88	9.98	322.61	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/28/89	8.8	323.79	<250	<2	<0.5	<0.5	<0.5	--		
	08/02/89	9.44	323.15	<50	<0.1	<0.1	<0.1	<0.1	--		
	11/06/89	9.53	323.06	<500	<3.0	<5.0	<5.0	<5.0	--		
	01/25/90	9.27	323.32	<50	<0.5	<0.5	<0.5	<0.5	--		
	04/23/90	9.35	323.24	<50	0.6	0.8	<0.5	2	--		
	08/01/90	9.71	322.88	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/24/90	10.08	322.51	<50	<0.5	<0.5	<0.5	<0.5	--		
	01/31/91	10.21	322.38	<50	<0.5	<0.5	<0.5	<0.5	--		
	01/31/91	10.21	322.38	<50	<0.5	<0.5	<0.5	<0.5	--		Duplicate
	08/21/91	9.8	322.79	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/07/91	9.98	322.61	--	--	--	--	--	--		
	01/28/92	9.81	322.78	<50	0.8	<0.5	<0.5	<0.5	--		
	06/05/92	9.86	322.73	<50	<0.5	<0.5	<0.5	<0.5	--		
	09/30/92	10.6	321.99	66	1	3.2	1.3	7.4	--		
	12/30/92	9.11	323.48	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/29/93	7.73	324.86	<50	<0.5	<0.5	<0.5	<1.5	--		
	06/25/93	9.22	323.37	<50	<0.5	<0.5	<0.5	<1.5	--		
	09/16/93	10	322.59	<50	<0.5	<0.5	<0.5	<1.5	--		
	12/20/93	9.38	323.21	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/29/94	9.3	323.29	<50	<0.5	0.6	<0.5	<0.5	--		
	06/22/94	9.49	323.1	<50	<0.5	<0.5	<0.5	<0.5	--		
	09/26/94	9.72	322.87	<50	<0.5	<0.5	<0.5	<0.5	--		
	10/04/94	9.58	323.01	<50	<0.5	<0.5	<0.5	<0.5	--		
	11/30/94	8.7	323.89	<50	<0.5	<0.5	<0.5	<0.5	--		
	03/02/95	8.54	321.67	<50	<0.5	<0.5	<0.5	<0.5	--		
	06/07/95	8.42	321.79	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	09/26/95	9.34	320.87	540	6.8	<0.5	47	29	13		
	12/28/95	8.84	321.37	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	02/29/96	7.44	322.77	<50	<0.5	<0.5	<0.5	1.5	<2.5		
	06/27/96	8.83	321.38	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	09/12/96	9.4	321.01	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	03/31/97	9.11	321.3	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	12/23/98	8.91	321.5	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
	03/25/99	8.1	322.31	<50	<0.5	<0.5	<0.5	<0.5	2.7		
	02/03/00	8.36	322.05	<50	<0.5	<0.5	<0.5	<0.5	<2.5 (<2.0)		
	01/23/01	9.08	321.33	441 (1)	1.27	0.542	40.3	31	72.9		
	05/01/01	8.87	321.54			SAMPLED ANNUALLY					
	08/28/01	9.45	320.96			SAMPLED ANNUALLY					
	11/27/01	9.5	320.91			SAMPLED ANNUALLY					
	02/28/02	9.05	321.36	<50	<0.50	<0.50	<0.5	<1.5	74		
	05/22/02	9.04	321.37			SAMPLED ANNUALLY					
	08/20/02	9	321.41			SAMPLED ANNUALLY					
	11/11/02	9.03	321.38			SAMPLED ANNUALLY					
	05/08/03	7.26	323.15	<50	<0.5	<0.5	<0.5	<0.5	2.2/0.9		
	12/15/04	8.96	321.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	02/21/05	7.20	323.21	<50	<0.5	<0.5	<0.5	<0.5	13 (11)	0.64	
	05/17/05	8.21	322.20			SAMPLED ANNUALLY				0.77	
	08/17/05	7.97	322.44			SAMPLED ANNUALLY				0.85	
	11/27/05	9.83	320.58			SAMPLED ANNUALLY				0.84	
	02/21/06	8.78	321.63	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.51/0.68	
	03/28/06	--	--	--	--	--	--	--	--	--	Well Abandoned

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		→		
EA-3	10/17/88	--	--	<50	1.8	<0.5	<0.5	3	--		
331.5	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 Abandoned

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-1	10/04/94	12.8	320.76	2,100	150	170	61	320	--		
333.66	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	
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**	
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		

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-2 (Cont'd)	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**	
MW-3	10/04/94	12.06	320.67	6,300	610	750	68	670	--		
332.86	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	<l00	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 Abandoned
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**	
MW-4	03/01/96	9.9	322.74	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
332.63	04/02/96	9.77	322.87	--	--	--	--	--	--		
	06/27/96	10	322.64	<50	<0.5	<0.5	<0.5	<0.5	<2.5		

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-4 (Cont'd)	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**	
MW-5	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	322.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.48/0.76	
333.13	05/29/06	10.41	322.72				SAMPLED ANNUALLY			--	
	07/07/06	10.46	322.67	--	--	--	--	--	--	--	
	08/17/06	10.49	322.64	--	--	--	--	--	--	--	
	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**	

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-6A	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
331.81	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**	
MW-6B	06/01/06	8.41	322.49	<50	<0.5	<0.5	<0.5	<0.5	18 (16)	0.34	TAME, TBA, DIPE, ETBE=ND
330.9	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**	
MW-6C	06/01/06	8.21	322.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.29	TAME, TBA, DIPE, ETBE=ND
330.88	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-7AA	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
330.67	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**	
MW-7A	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
330.71	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**	
MW-7B	05/31/06	9.05	321.64	<50	0.79	<0.5	<0.5	0.75	6.4 (6.6)	0.17	TAME, TBA, DIPE, ETBE=ND
330.69	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**	
MW-7C	05/31/06	8.65	322.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.12	TAME, TBA, DIPE, ETBE=ND
330.74	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	

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-8A	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
331.19	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**	
MW-9A	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
331.17	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**	
MW-9C	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
331.48	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-10A	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
329.93	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**	
MW-10C	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
329.66	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	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
331.61	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	
VW-1	02/21/06	7.95	322.48	860	120	1.4	32	4.4	390 (440)	1.97	
330.43	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**	
VW-2	02/21/06	6.01	324.16	1,600	150	2.7	55	20	1,700 (1,600)	1.97	
330.17	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 *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		→		
VW-2 (cont'd)	**08/28/07**	**7.82**	**322.35**	**1,200**	**170**	**5.0**	**<0.5**	**20**	**160**	**0.35**	
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	TAME, TBA, DIPE, ETBE=ND
	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**	
C-1	08/17/06	11.60	321.29	--	--	--	--	--	--	--	Flood control channel location.
332.89	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**	--	--	--	--	--	--	--	

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 = Diispopropyl ether by EPA Method 8260B
ETBE = Ethyl tertiary butyl ether by EPA Method 8260B
-- = Not Measured/Not Analyzed
1 Laboratory report indicates weathered gasoline C6-C12
Dissolved oxygen concentrations measured downhole pre-purge or pre-purge/post-purge
* = Cap loose, sprinkler runoff entering well

APPENDIX A

Groundwater Monitoring Field Data Sheets

Pangea
ENVIRONMENTAL SERVICES, INC.

Well Gauging Data Sheet

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	Date: 8/28/07
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"	9:03			13.40	25.32	TOC
MW-2	2"	8:58			8.83	20.00	
MW-3A	4"	9:25			11.62	16.78	
MW-4	2"	8:30			11.42	19.78	
MW-5	2"	8:34			11.07	20.56	
MW-6A	2"	9:22			11.98	19.13	
MW-6B	2"	8:52			9.60	29.73	
MW-7AA	4"	9:29			10.20	13.84	
MW-7A	4"	8:55			10.09	19.53	
MW-7B	2"	8:42			9.96	28.42	
MW-8A	2"	8:45			9.83	19.01	X

Comments:

~~DO = mg/L~~ ~~MW-4 = 0.59~~, ~~MW-5 = 0.55~~

Pangea
ENVIRONMENTAL SERVICES, INC.

Well Gauging Data Sheet

Project.Task #: 1001.001 212				Project Name: Dublin Car Wash			
Address: 7420 Dublin Boulevard, Dublin, CA						Date: 8/28/07	
Name: Sanjiv Gill				Signature:			
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)	Measuring Point
MW-9A	2"	8:49			11.11	19.66	TOC
MW-10A	2"	8:39			8.44	19.51	
VW-1	2"	9:15			8.07	8.40	
VW-2	2"	9:12			7.82	8.30	
VW-3	2"	9:19			7.41	8.40	
C-1	—	9:08			11.90	→	TOG

Comments:

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ENVIRONMENTAL SERVICES INC.

MONITORING FIELD DATA SHEET

Well ID: MW-1

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 25.32	Depth to Product:
Depth to Water (DTW): 13.40	Product Thickness:
Water Column Height: 11.92	1 Casing Volume: 1.90 gallons
Reference Point: TOC	3 Casing Volumes: 5.72 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
12:15	20.3	7.62	2348				2	
12:20	19.7	7.63	2314				4	
12:25	19.9	7.64	2366				6	

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

post purge DO = mg/l

very turbid, silty, roots in well

Sample ID: MW-1	Sample Time: 12:30
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/28/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-2

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 20.00	Depth to Product:
Depth to Water (DTW): 8.83	Product Thickness:
Water Column Height: 11.17	1 Casing Volume: 1.78 gallons
Reference Point: TOC	3 Casing Volumes: 5.36 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
11:40	20.8	7.46	1972				1.5	
11:45	20.2	7.41	1971				3	
11:50	20.0	7.45	1979				5	

Comments: YSI 550A DO meter

pre purge DO = 0.33 mg/l

post purge DO = mg/l

very turbid, silty

Sample ID: MW-2	Sample Time: 11:55
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/28/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-3A

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04 | 3" = 0.37 | 6" = 1.47 | 2" = 0.16 | 4" = 0.65 | radius^2 * 0.163
Total Depth (TD): 16.78	Depth to Product:
Depth to Water (DTW): 11.62	Product Thickness:
Water Column Height: 5.16	1 Casing Volume: 3.35 gallons
Reference Point: TOC	3 Casing Volumes: 10.06 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
12:40	21.3	6.94	1920				35	
12:50	20.7	6.89	1916				7	
1:00	21.1	7.03	1918				10	

Comments: YSI 550A DO meter — pre purge DO = 0.28 mg/l

post purge DO = mg/l

very turbid

Sample ID: MW-3A	Sample Time: 1:05
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES INC.

MONITORING FIELD DATA SHEET

Well ID: MW-6A

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04, 3" = 0.37, 6" = 1.47, 2" = 0.16, 4" = 0.65, radius^2 * 0.163
Total Depth (TD): 19.13	Depth to Product:
Depth to Water (DTW): 11.98	Product Thickness:
Water Column Height: 7.15	1 Casing Volume: 1.14 gallons
Reference Point: TOC	3 Casing Volumes: 3.43 gallons

Purging Device: Disposable Bailer (circled), 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	21.9	6.95	2236				1.5	
12:15	21.9	6.87	2252				2.5	
12:20	21.7	6.85	2274				3.5	

Comments: YSI 550A DO meter — pre purge DO = 0.39 mg/l

post purge DO = mg/l

very turbid, very silty

Sample ID: MW-6A	Sample Time: 12:25
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: [signature]

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-6B

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.47; radius^2 * 0.163
Total Depth (TD): 29.73	Depth to Product:
Depth to Water (DTW): 9.60	Product Thickness:
Water Column Height: 20.13	1 Casing Volume: 3.22 gallons
Reference Point: TOC	3 Casing Volumes: 9.66 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
11:10	21.1	7.31	3167				3.5	
11:25	20.7	7.38	3124				7	
11:45	20.5	7.38	3101				9.5	

Comments: YSI 550A DO meter — pre purge DO = 0.51 mg/l

post purge DO = mg/l

very turbid, silty

Sample ID: MW-6B	Sample Time: 11:55
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-7AA

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04, 2" = 0.16, 3" = 0.37, 4" = 0.65, 6" = 1.47, radius^2 * 0.163
Total Depth (TD): 13.84	Depth to Product:
Depth to Water (DTW): 10.20	Product Thickness:
Water Column Height: 3.64	1 Casing Volume: 2.36 gallons
Reference Point: TOC	3 Casing Volumes: 7.09 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
9:55	20.7	7.14	2064				2.5	
10:10	20.5	6.98	2058				5	
10:30	20.5	7.02	2051				7	

Comments: YSI 550A DO meter — pre purge DO = 0.33 mg/l

post purge DO = mg/l

very turbid

Sample ID: MW-7AA	Sample Time: 10:50
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-7A

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 19.53	Depth to Product:
Depth to Water (DTW): 10.09	Product Thickness:
Water Column Height: 9.44	1 Casing Volume: 6.13 gallons
Reference Point: TOC	3 Casing Volumes: 18.40 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
8:40	20.0	7.38	1357				6	
8:55	19.7	7.35	1340				12	
9:15	19.6	7.39	1360				18	

Comments: YSI 550A DO meter — pre purge DO = 0.42 mg/l

post purge DO = mg/l

very turbid, silty

Sample ID: MW-7A	Sample Time: 9:30
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-7B

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
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): 28.42	Depth to Product:
Depth to Water (DTW): 9.96	Product Thickness:
Water Column Height: 18.46	1 Casing Volume: 2.95 gallons
Reference Point: TOC	3 Casing Volumes: 8.86 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
7:30	20.8	7.78	1033				3	
7:50	20.1	7.76	1109				6	
8:10	19.9	7.71	1106				9	

Comments: YSI 550A DO meter

pre purge DO = 0.51 mg/l

post purge DO = mg/l

very turbid

Sample ID: MW-7B	Sample Time: 8:15
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES INC

MONITORING FIELD DATA SHEET

Well ID: MW-8A

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 19.01	Depth to Product:
Depth to Water (DTW): 9.83	Product Thickness:
Water Column Height: 9.18	1 Casing Volume: 1.46 gallons
Reference Point: TOC	3 Casing Volumes: 4.40 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
11:10	21.6	7.21	2081				1.5	
11:15	21.2	7.30	2072				3	
11:20	21.0	7.33	2009				4.5	

Comments: YSI 550A DO meter — pre purge DO = 0.35 mg/l

post purge DO = mg/l

very turbid, silty

Sample ID: MW-8A	Sample Time: 11:25
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/28/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-9A

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 19.66	Depth to Product:
Depth to Water (DTW): 11.11	Product Thickness:
Water Column Height: 8.55	1 Casing Volume: 1.36 gallons
Reference Point: TOC	3 Casing Volumes: 4.08 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
10:40	22.6	7.53	1829				1.5	
10:45	21.9	7.37	1897				3	
10:50	21.9	7.49	1906				4	

Comments: YSI 550A DO meter

pre purge DO = 0.38 mg/l

post purge DO = mg/l

very turbid, silty

Sample ID: MW-9A	Sample Time: 10:55
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/28/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-10A

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 19.51	Depth to Product:
Depth to Water (DTW): 8.44	Product Thickness:
Water Column Height: 11.07	1 Casing Volume: 1.77 gallons
Reference Point: TOC	3 Casing Volumes: 5.31 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
10:05	22.1	6.80	2849				1.5	
10:10	21.6	6.88	2930				3	
10:15	21.9	6.89	2870				5	

Comments: YSI 550A DO meter

pre purge DO = 0.35 mg/l

post purge DO = mg/l

very turbid

Sample ID: MW-10A	Sample Time: 10:20
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/28/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES INC

MONITORING FIELD DATA SHEET

Well ID: VW-1

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 8.40	Depth to Product:
Depth to Water (DTW): 8.07	Product Thickness:
Water Column Height: 0.33	1 Casing Volume: 0.05 gallons
Reference Point: TOC	3 Casing Volumes: 0.15 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
3-28-07 12:45	Developed ~ 500ml purged						~~.05~~	
							~~.1~~	
							.15	

Comments: YSI 550A DO meter — pre purge DO = 0.27 mg/l

post purge DO = mg/l

very turbid

Sample ID: VW-1	Sample Time: 1:25
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: VN-2

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 8.30	Depth to Product:
Depth to Water (DTW): 7.82	Product Thickness:
Water Column Height: 0.48	1 Casing Volume: 0.07 gallons
Reference Point: TOC	3 Casing Volumes: 0.21 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
8-28-07 1:10	Dewatered ≈ 500 ml						~~0.07~~	
							~~0.14~~	
							~~0.21~~	

Comments: YSI 550A DO meter

pre purge DO = 0.35 mg/l

post purge DO = mg/l

very turbid, very silty

Sample ID: VN-2	Sample Time: 1:35
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: VW-3

Project.Task #: 1001.001 212	Project Name: Dublin Car Wash
Address: 7420 Dublin Boulevard, Dublin, CA	
Date: 8/28/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 8.40	Depth to Product:
Depth to Water (DTW): 7.41	Product Thickness:
Water Column Height: 0.99	1 Casing Volume: 0.16 gallons
Reference Point: TOC	3 Casing Volumes: 0.47 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
8.28.07 1:35	Dewatered ~1500ml						~~0.16~~	
							~~0.32~~	
							~~0.47~~	

Comments: YSI 550A DO meter

pre purge DO = 0.39 mg/l

post purge DO = mg/l

Sample ID: VW-3	Sample Time: 1:45
Laboratory: McCampbell Analytical, INC.	Sample Date: 8/29/07
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

APPENDIX B

Laboratory Analytical Report

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: #1001.001; 7420 Dublin Blvd., Dublin Car Wash	Date Sampled: 08/28/07-08/29/07
		Date Received: 08/31/07
	Client Contact: Bob Clark-Riddell	Date Reported: 09/07/07
	Client P.O.:	Date Completed: 09/07/07

WorkOrder: 0708891

September 07, 2007

Dear Bob:

Enclosed are:

1). the results of **14** analyzed samples from your **#1001.001; 7420 Dublin Blvd., Dublin Car Wash project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill 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 please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0708891

McCAMPBELL ANALYTICAL, INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Website: 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 No

Report To: Bob Clark-Riddel Bill To: Pangea Environmental
Company: Pangea Environmental Services Inc.
1710 Franklin Street Sutie 200
Oakland, CA 94612 E-Mail: bcr@pangeaenv.com
Tele: 510-836-3702 Fax: 510-836-3709
Project #: 1001.001 Project Name: 7420 Dublin Blvd., Dublin Car Wash
Project Location: 7420 Dublin Boulevard, Dublin, CA
Sampler Signature: Muskan Environmental Sampling

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)	Analysis Request: MTBE / BTEX ONLY (EPA 602 / 8021)	Analysis Request: TPH as Diesel (8015)	Analysis Request: Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Analysis Request: Total Petroleum Hydrocarbons (418.1)	Analysis Request: EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	Analysis Request: EPA 505/ 608 / 8081 (Cl Pesticides)	Analysis Request: EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	Analysis Request: EPA 507 / 8141 (NP Pesticides)	Analysis Request: EPA 515 / 8151 (Acidic Cl Herbicides)	Analysis Request: EPA 524.2 / 624 / 8260 (VOCs)	Analysis Request: Fuel Additives (MTBE, ETBE, TAME, DIPE, TBA, 1,2 – DCA, 1,2 – EDB, ethanol) by 8260B	Analysis Request: If Mtbe is detected by 8021 confirm by 8260B	Other	Comments
MW-1		8-28-07	12:30	3	VOA	X					X	X			X														
MW-2		8-28-07	11:55																										
MW-3A		8-29-07	1:05																										
MW-6A		8-29-07	12:25																										
MW-6B		8-29-07	11:55																										
MW-7AA		8-29-07	10:50																										
MW-7A		8-29-07	9:30																										
MW-7B		8-29-07	8:15																										
MW-8A		8-28-07	11:25																										
MW-9A		8-28-07	10:55																										
MW-10A		8-28-07	N:20																										
VW-1		8-29-07	1:25																										
VW-2		8-29-07	1:35																										
VW-3		8-29-07	1:45																										

Relinquished By:	Date:	Time:	Received By:
	8/31/07	1154	
Relinquished By:	Date:	Time:	Received By:

ICE/T 6.2
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ✓ CONTAINERS ✓
DECHLORINATED IN LAB PRESERVED IN LAB
PRESERVATION VOAS ✓ O&G METALS OTHER

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0708891 **ClientID: PEO**

☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

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

Email: bcr@pangeaenv.com
TEL: (510) 836-370 FAX: (510) 836-370
ProjectNo: #1001.001; 7420 Dublin Blvd., Dublin C
PO:

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

Requested TAT: 5 days

Date Received **08/31/2007**
Date Printed: **08/31/2007**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0708891-001	MW-1	Water	08/28/07 12:30:00	☐	A	A										
0708891-002	MW-2	Water	08/28/07 11:55:00	☐	A											
0708891-003	MW-3A	Water	08/29/07 1:05:00	☐	A											
0708891-004	MW-6A	Water	08/29/07 12:25:00	☐	A											
0708891-005	MW-6B	Water	08/29/07 11:55:00	☐	A											
0708891-006	MW-7AA	Water	08/29/07 10:50:00	☐	A											
0708891-007	MW-7A	Water	08/29/07 9:30:00	☐	A											
0708891-008	MW-7B	Water	08/29/07 8:15:00	☐	A											
0708891-009	MW-8A	Water	08/28/07 11:25:00	☐	A											
0708891-010	MW-9A	Water	08/28/07 10:55:00	☐	A											
0708891-011	MW-10A	Water	08/28/07 10:20:00	☐	A											
0708891-012	VW-1	Water	08/29/07 1:25:00	☐	A											
0708891-013	VW-2	Water	08/29/07 1:35:00	☐	A											
0708891-014	VW-3	Water	08/29/07 1:45:00	☐	A											

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

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

McCampbell Analytical, Inc.
"When Quality Counts"

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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: **08/31/07 1:54:22 PM**

Project Name: **#1001.001; 7420 Dublin Blvd., Dublin Car Wash** Checklist completed and reviewed by: Ana Venegas

WorkOrder N°: **0708891** 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: 6.2°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 ☑

Client contacted: Date contacted: Contacted by:

Comments:

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Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1001.001; 7420 Dublin Blvd., Dublin Car Wash	Date Sampled: 08/28/07-08/29/07
		Date Received: 08/31/07
	Client Contact: Bob Clark-Riddell	Date Extracted: 09/02/07-09/07/07
	Client P.O.:	Date Analyzed 09/02/07-09/07/07

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

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0708891

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND	170	ND	ND	ND	ND	1	104
002A	MW-2	W	ND	1800	ND	ND	ND	ND	1	84
003A	MW-3A	W	1900,a	3400	260	6.9	110	74	3.3	93
004A	MW-6A	W	ND<250,j	7300	ND<2.5	ND<2.5	ND<2.5	ND<2.5	5	82
005A	MW-6B	W	ND	ND	ND	ND	ND	ND	1	99
006A	MW-7AA	W	4500,a	18,000	720	13	73	100	20	101
007A	MW-7A	W	ND	ND	ND	ND	ND	ND	1	93
008A	MW-7B	W	ND	ND	ND	ND	ND	ND	1	91
009A	MW-8A	W	ND	19	ND	ND	ND	ND	1	89
010A	MW-9A	W	95,b	10	ND	1.4	ND	ND	1	93
011A	MW-10A	W	ND	ND	ND	ND	ND	ND	1	91
012A	VW-1	W	2400,a	610	400	4.6	ND	23	1	101
013A	VW-2	W	1200,a	160	170	5.0	ND	20	1	91
014A	VW-3	W	10,000,a	84	320	5.9	150	140	5	101
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	1	µg/L
		S	NA	NA	NA	NA	NA	NA	1	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 McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0708891

EPA Method SW8021B/8015Cm **Extraction SW5030B** **BatchID: 30337** **Spiked Sample ID: 0708891-008A**

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)£	ND	60	94.6	84.5	11.3	111	91.3	19.6	70 - 130	30	70 - 130	30
MTBE	ND	10	104	99.7	4.58	116	115	0.839	70 - 130	30	70 - 130	30
Benzene	ND	10	93.3	91.9	1.49	98.3	102	3.22	70 - 130	30	70 - 130	30
Toluene	ND	10	92	89.7	2.52	88.3	91.8	3.97	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	94.4	91.6	2.94	97.1	101	3.46	70 - 130	30	70 - 130	30
Xylenes	ND	30	91.3	90	1.47	92.3	96.7	4.59	70 - 130	30	70 - 130	30
%SS:	91	10	100	100	0	96	99	2.76	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 30337 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0708891-001A	08/28/07 12:30 PM	09/05/07	09/05/07 4:07 AM	0708891-002A	08/28/07 11:55 AM	09/05/07	09/05/07 4:37 AM
0708891-002A	08/28/07 11:55 AM	09/05/07	09/05/07 8:29 PM	0708891-003A	08/29/07 1:05 PM	09/05/07	09/05/07 5:07 AM
0708891-003A	08/29/07 1:05 PM	09/05/07	09/05/07 9:05 PM	0708891-004A	08/29/07 12:25 PM	09/05/07	09/05/07 5:38 AM
0708891-004A	08/29/07 12:25 PM	09/05/07	09/05/07 9:40 PM	0708891-005A	08/29/07 11:55 AM	09/05/07	09/05/07 6:08 AM
0708891-006A	08/29/07 10:50 AM	09/06/07	09/06/07 4:13 PM	0708891-006A	08/29/07 10:50 AM	09/06/07	09/06/07 4:44 PM
0708891-007A	08/29/07 9:30 AM	09/07/07	09/07/07 3:03 PM	0708891-008A	08/29/07 8:15 AM	09/02/07	09/02/07 1:47 AM
0708891-009A	08/28/07 11:25 AM	09/02/07	09/02/07 2:59 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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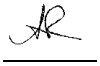
QA/QC Officer

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0708891

EPA Method SW8021B/8015Cm Extraction SW5030B BatchID: 30351 Spiked Sample ID: 0708903-001A

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)£	ND	60	91	97.1	6.49	90.7	85.2	6.34	70 - 130	30	70 - 130	30
MTBE	ND	10	111	111	0	108	99.9	7.90	70 - 130	30	70 - 130	30
Benzene	ND	10	96.2	96.3	0.180	97.1	116	17.9	70 - 130	30	70 - 130	30
Toluene	ND	10	88.8	88.2	0.689	89	106	17.6	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	96.2	97.3	1.18	98	114	15.0	70 - 130	30	70 - 130	30
Xylenes	ND	30	96	96.3	0.347	96.3	110	13.2	70 - 130	30	70 - 130	30
%SS:	90	10	99	98	1.46	97	118	19.1	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 30351 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0708891-010A	08/28/07 10:55 AM	09/07/07	09/07/07 3:36 PM	0708891-011A	08/28/07 10:20 AM	09/04/07	09/04/07 8:32 PM
0708891-012A	08/29/07 1:25 PM	09/04/07	09/04/07 9:05 PM	0708891-012A	08/29/07 1:25 PM	09/05/07	09/05/07 9:50 PM
0708891-013A	08/29/07 1:35 AM	09/04/07	09/04/07 9:39 PM	0708891-013A	08/29/07 1:35 AM	09/05/07	09/05/07 10:53 PM
0708891-014A	08/29/07 1:45 AM	09/05/07	09/05/07 11:24 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.

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QA/QC Officer