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

July 19, 2011

VIA ALAMEDA COUNTY FTP SITE

Ms. Donna Drogos
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Groundwater Monitoring Report and Bioremediation Workplan- Second Quarter 2011**
Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California
ACEH Case No. 304

Dear Ms. Drogos:

On behalf of Mr. Hooshang Hadjian, Pangea Environmental Services, Inc. has prepared this *Groundwater Monitoring Report and Bioremediation Workplan – Second Quarter 2011*. The report describes groundwater monitoring and sampling, and other site activities.

Due to recent increases and persistence of hydrocarbon concentrations, Pangea also proposes groundwater monitoring reductions and presents a bioremediation workplan for continued site remediation. To help facilitate bioremediation startup during the dry season, Pangea respectfully requests your approval of the proposed bioremediation in the near future.

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 and Bioremediation Workplan – Second Quarter 2011*

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 AND BIOREMEDIATION WORKPLAN – SECOND QUARTER 2011

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California

July 19, 2011

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 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 2.

SITE BACKGROUND

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

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 © 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 1.

An interim remedial action was conducted by Pangea in July 2006 by extracting approximately 40 gallons of impacted liquid from wells MW-3A and MW-7AA with a vacuum truck. In November 2007, Pangea conducted a five-day dual-phase extraction (DPE) test (and interim remediation event) to evaluate the effectiveness of DPE as remedial technique and to provide additional source removal. On December 9, 2008, Pangea submitted an *Interim Remediation Report and Corrective Action Plan* (CAP) describing DPE testing and proposing short-term dual phase extraction (DPE) as the most appropriate and cost-effective technique for site remediation. In a letter dated January 16, 2009, ACEH approved short-term DPE for additional source removal to help facilitate case closure.

In July 2009 Pangea installed two dual-phase extraction (DPE) wells to facilitate implementation of the approved corrective action plan (CAP). Wells DPE-1 and DPE-2 were constructed of 4-inch diameter and screened from 9 to 14 feet bgs. Details of the DPE well installation are described in Pangea's *Remediation Well Installation Report* dated December 16, 2009. To remediate the small, localized impact area, DPE was conducted between September 15, 2010 and November 15, 2010 until low contaminant removal rates were observed.

As of November 15, 2010, the DPE system operated for a total of about 1,189 hours (approximately 49.51 days). Laboratory analytical data indicates that the system removed a total of approximately 443 lbs TPHg and 3.8 lbs benzene in vapor phase, and 0.4 lbs TPHg, 0.01 lbs benzene and 0.25 lbs MTBE in aqueous phase.

The DPE system was shutdown on November 15, 2010 due to low contaminant removal rates, the small localized extent of site contamination, the commencement of the winter rainy season, and cost control. DPE operation was very costly due to high energy costs, because PG&E could not provide electrical service before the rainy season and PG&E required very costly re-engineering of the existing electrical service ($20,000 or more). The utilized DPE equipment required diesel fuel and a diesel generator to power the vacuum pump and required propane as supplementary fuel for the oxidizer.

GROUNDWATER MONITORING AND SAMPLING

On May 17, 2011, groundwater monitoring and sampling was conducted at the site. The approved semi-annual groundwater monitoring program is summarized on Table A in Appendix A. Groundwater samples were obtained from groundwater monitoring wells MW-3A, MW-6A and MW-7AA; and remediation wells DPE-1 and DPE-2. The depth to water at survey point C-1 above the flood control channel was also measured. Monitoring and sampling of all deep monitoring wells (MW-6C, MW-7C, MW-9C, MW-10C and MW-11C) was discontinued beginning in the second quarter 2007, as approved by Barney Chan of ACEH in a May 14, 2007 telephone conversation, because no significant contamination had been detected in these deeper site wells during four consecutive quarters.

Before well purging, the dissolved oxygen (DO) concentration was measured in each sampled well. DO was measured by lowering a downwell sensor to the approximate middle of the water column, and allowing the reading to stabilize during gentle height adjustment. Prior to sample collection, approximately three casing volumes of water were purged using disposable bailers, a PVC bailer, an electric submersible pump, positive air displacement pump, or a peristaltic pump. During well purging, field technicians measured the pH, temperature and conductivity. Groundwater samples were collected from each well with a disposable bailer, and decanted into the appropriate containers supplied by the analytical laboratory. Groundwater samples were labeled, placed in protective plastic bags, and stored on crushed ice at or below 4^{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 B.

MONITORING RESULTS

Current and historical groundwater elevation data and analytical results are described below and summarized on Table 2. Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015C; and benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021B. Samples were analyzed by McCampbell Analytical, Inc. of Pittsburg, California, a State-certified laboratory. The laboratory analytical report is included in Appendix B. DO concentrations ranged from 0.43 mg/L (well MW-3A) to 1.34 mg/L (well DPE-2).

Groundwater Flow Direction

Based on depth-to-water data collected May 17, 2011 groundwater elevations in shallow and intermediate zones are shown on Figure 2 and discussed below. Groundwater elevation in most site wells decreased by approximately 1 ft or less compared to the first quarter elevation, except for wells MW-8A (+3.21 ft) and MW-10A (-3.83 ft). The relatively large elevation increase in well MW-8A was due to the anomalously low elevation measured during the previous monitoring event, so this well was still used for contouring. However, the elevation change for well MW-10A was considered anomalous and was not used for contouring.

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 0.1 ft/ft is present between the shallow and intermediate water-bearing zones at the portion of the site north of the dispenser islands (MW-6A and 6B), and a 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	321.03	17.5	
MW-6B	322.07	28	
Difference	*1.04*	*10.5*	*0.1 (upwards)*
MW-7A	321.38	18	
MW-7B	321.46	28	
Difference	*0.08*	*10*	*0.008 (upwards)*

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. Groundwater flow at the site is possibly influenced by permeable backfill around the sanitary sewer line beneath Dublin Boulevard. The groundwater flow direction for the shallow water-bearing zone may also be affected by surface water infiltration from the onsite car wash. The horizontal component of groundwater flow in the *intermediate-depth* wells could not be determined since only two wells are screened at that depth.

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

Hydrocarbon Distribution in Groundwater

Based on recent results, hydrocarbon contamination is concentrated in the upper shallow (AA) and shallow (A) water-bearing zones in the vicinity of the fuel dispensers, as shown in Table 2 and on Figure 2. *Historic low* hydrocarbon concentrations were observed in monitoring well MW-7AA for the second consecutive quarter. TPHg and benzene concentration trends in key wells are shown on Figures 3 and 4, respectively.

During this monitoring event, the highest TPHg concentration (17,000 µg/L) was detected in well MW-3A and the highest benzene (870 µg/L) concentration was detected in well MW-6A. Monitoring wells MW-3A and MW-6A contained significantly higher TPHg and benzene concentrations compared to the August 12, 2010 results; the concentration increase this event in these wells is likely due to short-term DPE in late 2010. Pangea suspects that hydrocarbon concentrations in these wells will attenuate in the near future due to the decreased contaminant mass and the oxygenation provided by the DPE activities. A similar concentration rise and subsequent fall was observed in these wells after the November 2007 DPE testing.

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

Fuel Oxygenate Distribution in Groundwater

MTBE was detected above reporting limits in three of the five sampled wells, as shown in Table 2 and on Figure 2. MTBE concentrations in sampled wells were at or near *historic lows*, except for source area well MW-3A, where DPE activities have likely temporarily affected groundwater quality. The highest MTBE concentration detected this quarter was 2,900 µg/L in well MW-3A. MTBE concentration trends in key wells are shown on Figure 5.

OTHER SITE ACTIVITIES

Post Remediation Verification Monitoring

This report presents monitoring data from the *third* quarterly monitoring event since the completion of short-term dual phase extraction (DPE) remediation described above. Due to recent increases and persistence of hydrocarbon concentrations, Pangea proposes groundwater monitoring reductions and presents a bioremediation workplan. To help control monitoring costs, Pangea proposes to reduce the groundwater monitoring frequency from quarterly to semi-annually (first and third quarter). The semi-annual groundwater monitoring program is shown in Appendix A. Pangea will summarize groundwater monitoring activities and results in a groundwater monitoring report.

Electronic Reporting

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

BIOREMEDIATION WORKPLAN

Due to recent increases and persistence of hydrocarbon concentrations in select wells (MW-3A and MW-6A), Pangea proposes biosparging via existing subsurface piping as a cost effective remedial technique. To enhance bioremediation, Pangea also proposes the addition of a low cost bio-organic catalyst. To help facilitate bioremediation startup during the dry season, Pangea respectfully requests your approval of the proposed bioremediation in the near future. Our evaluation of DPE remediation effectiveness and our proposed bioremediation plan are described below.

DPE Remediation Evaluation

DPE extraction was performed using a powerful vacuum pump and "stinger" in several wells (DPE-1, DPE-2, MW-3A, VW-3, MW-6A, MW-7AA and MW-7A). The system operated for approximately two months (September to November 2010) before removal rates decreased and the winter rainy season commenced. DPE was also discontinued due to high fuel costs from lack of cost-effective electrical service.

The short-term DPE efforts apparently remediated the shallow impact in key source area well MW-7AA (located adjacent to documented fuel release from a flex hose in 1997) and in wells DPE-1, DPE-2 and VW-3. However, DPE efforts apparently contributed to increased and persistent hydrocarbon concentrations in slightly deeper wells MW-3A and MW-6A located further from the source area and near the adjacent sanitary sewer. Due to the high energy costs to operate a DPE system (PG&E will require very costly re-engineering of the three-phase electrical service), Pangea recommends implementation of lower cost alternatives.

Biosparging Technique

Biosparging is a technique used to stimulate degradation of residual contaminants that slowly diffuses out of fine-grained materials at a given site. Biosparging can cost effectively remediates petroleum hydrocarbons and MTBE from saturated soil and groundwater, and can even help remediate vadose zone soil (a process called bioventing). Biosparging involves the injection of compressed air at low flow rates (generally 1 to 2 cubic feet per minute per injection point) into the saturated zone to oxygenate groundwater and thereby stimulate contaminant biodegradation by microbes present in the subsurface. The low air flow rate is designed to oxygenate groundwater within the well and/or surrounding formation while minimizing the potential for causing any significant migration of contaminants in the vapor phase.

Biosparging wells are typically constructed with well screens starting approximately 5 to 10 feet below the water table. The submerged well screen allows the injection of air directly into the formation for a greater influence area. Biosparging can be conducted into groundwater monitoring wells screened at shallower depths, but this approach provides a more limited influence area and primarily oxygenates the well water and relies on the diffusion of dissolved oxygen from the well into the surrounding soil. Biosparging in existing monitoring wells is also more dependent upon the groundwater velocity at a site.

Biosparging is very cost effective since the remedial approach only involves procurement of a small to medium-sized air compressor to inject air into the subsurface, and use of existing or new wells screened into the water table at appropriate depths. This approach is even more cost effective at this site because we can utilize existing subsurface piping to the proposed wells.

Proposed Biosparging for Subject Site

Pangea proposes to perform low-flow air sparging (biosparging) using existing piping to wells MW-3A, MW-6A and MW-7A. Given a groundwater depth of approximately 10 to 11 ft bgs, wells MW-6A and MW-7A, screened from approximately 15 to 20 ft bgs, are ideally suited for biosparging. The submerged well screens will allow injected air to move laterally within the shallow groundwater-bearing materials. Screened from 10 to 17 ft bgs, well MW-3A is also amenable to biosparging but the air injection will be more localized around the well because the well casing and shallower filter pack may not provide lateral air injection into surrounding soil: biosparging in MW-3A will rely more on oxygen diffusion from MW-3A into the well vicinity. Due to the biosparging limitations in MW-3A, Pangea proposed biosparging in nearby well MW-7A to enhance sparging effectiveness.

To conduct biosparging at this site, Pangea will procure and install a small air compressor and associated controls in the existing equipment compound. Air valves and meters will be used to regulate air flow rates into wells MW-3A, MW-6A and MW-7A. Tubing will be installed from the air compressor to the sparge wells within the existing remediation piping, and air diffusers will be installed in each well to optimize oxygenation

of the water within the well casing to total well depth. Single-phase electrical service will be obtained from the nearby service on the nearby vacuum island associated with the carwash facilities.

Pangea anticipates performing operation and maintenance (O&M) visits at the site on a weekly basis initially and monthly thereafter. Pangea will monitor the air flow rates and air pressures required to perform air sparging in the sparge wells. Pangea may also periodically measure water level, dissolved oxygen concentrations and the oxidation-reduction potential (ORP) in the three biosparge wells and nearby well MW-7AA.

Contaminant concentration reduction is the best indicator of biosparging effectiveness, and Pangea anticipates that contaminant concentrations in site monitoring wells will decrease as a result of biosparging. Since groundwater oxygenation and contaminant biodegradation is as relatively slow process, longer-term system operation is typically required to observe contamination reduction. Therefore, semi-annual monitoring is sufficient to allow evaluation of biosparging efforts.

Biosparging activities will be summarized in groundwater monitoring reports. The reports will present tabulated biosparge data, evaluate biosparging performance, and include recommendations for future site activity.

Bioremediation Enhancement using Bio-Organic Catalyst

To augment the biodegradation provided by the biosparging system, Pangea proposes to use a relatively new and understudied bio-organic catalyst product called NONTOX™-TPH Eliminator. NONTOX™ is a low-cost, innovative and 'green' product with potential applicability for a wide range of sites impacted by petroleum hydrocarbons. Pangea is currently using NONTOX™ at one site and has proposed use at other sites. If successful, this remedial technology may be able to help control remediation costs across the state of California where reimbursement from the UST Cleanup Fund is increasingly limited.

"NONTOX™-TPH Eliminator" is a highly concentrated bio-organic catalyst (BOC) in liquid form designed to accelerate the biodegradation rates of petroleum hydrocarbons. Petroleum hydrocarbons are decomposed, eventually degrading to carbon dioxide and water as end products. NONTOX™ is non-toxic, 100% biodegradable, and safe to human, animals and plant life. NONTOX™ is mostly water, proteins, and enzymes derived from plant and mineral sources. NONTOX™ works in concert with indigenous bacteria. NONTOX™ behaves similar to a surfactant and forms small bubbles when agitated by air injection (or shaking of product within a jar or treatment cell). NONTOX™ is primarily comprised of enzymes derived from yeast. NONTOX™ has been used effectively on open water spills of petroleum crude oil. Product literature for NONTOX™ is included in Appendix D.

For this site, NONTOX™ could be injected into existing wells and dispersed further into the subsurface using the existing AS system. The NONTOX™ should help biodegrade the recalcitrant the longer-chain TPHg molecules in site groundwater and adsorbed to site soil. NONTOX™ reportedly decreases surface tension to help distribute the blend of oxygen and enzymes/proteins. The small bubbles formed by the NONTOX™ reportedly forms tiny bubbles should help transport oxygen throughout the subsurface. Bringing the enzymes, oxygen and contaminants together is the key to accelerated biodegradation achieved by NONTOX™. Initial NONTOX™ use can be performed and monitoring using existing wells. Due to the relatively low cost of NONTOX™ and the use of the existing wells and AS system, Pangea recommends implementation of this technique as described below.

For this site, NONTOX™ will be injected into existing wells and dispersed further into the subsurface using the existing biosparging system. Pangea plans to procure 55 gallons of the NONTOX™ (approximately $3,500) for batch treatment within site wells. Additional NONTOX™ may be purchased only after initial monitoring of remedial effectiveness. The NONTOX™ will be injected into wells MW-3A, MW-6A and MW-7AA. Pangea will initially inject approximately 5 gallons of NONTOX™ into each of these 3 wells, followed by flushing/dispersion with approximately 25 gallons of water. On a monthly basis thereafter for three more months, Pangea will inject another 5 gallons of NONTOX™ into each of these wells and flush with water. This yields a total NONTOX™ injection of 55 gallons.

To evaluate the effectiveness of biosparging with NONTOX™ remedial enhancement, Pangea will monitor wells MW-3A, MW-6A and MW-7A before biosparging and NONTOX™ injection and quarterly during routine monitoring. These wells will be monitored for the following parameters:

- Petroleum hydrocarbons (TPHg/BTEX/MTBE);
- Dissolved oxygen (DO);
- Oxidation Reduction Potential (ORP); and
- Hydrocarbon-degrading heterotropic bacteria.

Pangea will also monitor for the presence of NONTOX™ using visual indicators (pale amber water color and foam/bubbles in shaken sample), since NONTOX™ makes water cloudy and acts like a surfactant. Pangea will also submit a NONTOX™ sample to an analytical laboratory to identify an appropriate analytical technique for evaluating (and hopefully quantifying) the presence of NONTOX™ in a groundwater sample. Based on initial discussions the laboratory suspects an alcohol analysis may be performed to determine the presence of NONTOX™. This will help optimize the recommended injection volumes of NONTOX™.

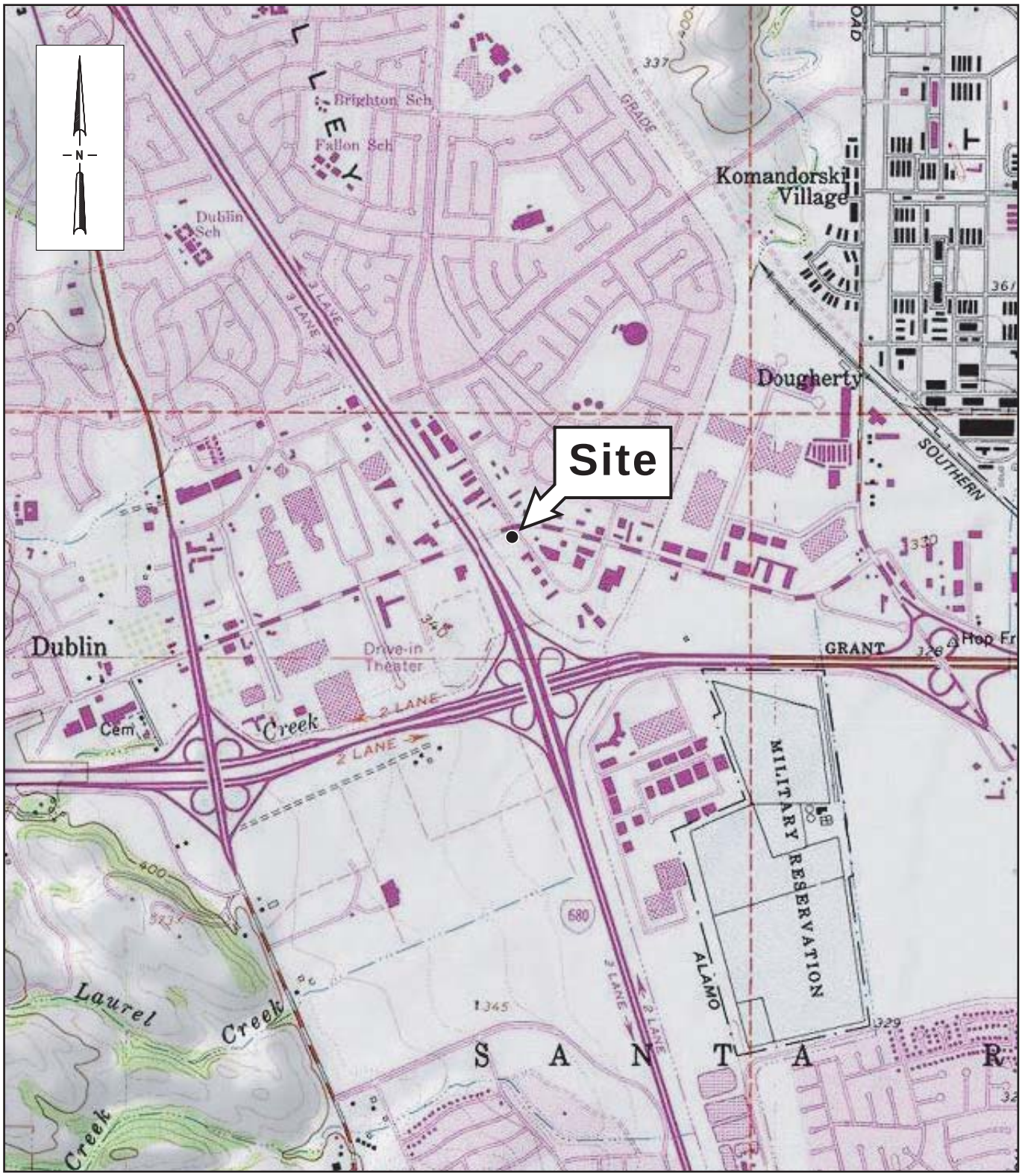
ATTACHMENTS

Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour and Hydrocarbon Concentration Map – Shallow
Figure 3 – TPHg Concentration Trends in Key Wells
Figure 4 – Benzene Concentration Trends in Key Wells
Figure 5 – MTBE Concentration Trends in Key Wells

Table 1 – Well Construction Details
Table 2 – Groundwater Elevation and Analytical Data

Appendix A – Groundwater Monitoring Program
Appendix B – Groundwater Monitoring Field Data Sheets
Appendix C – Laboratory Analytical Results
Appendix D – Product literature for NONTOX™

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

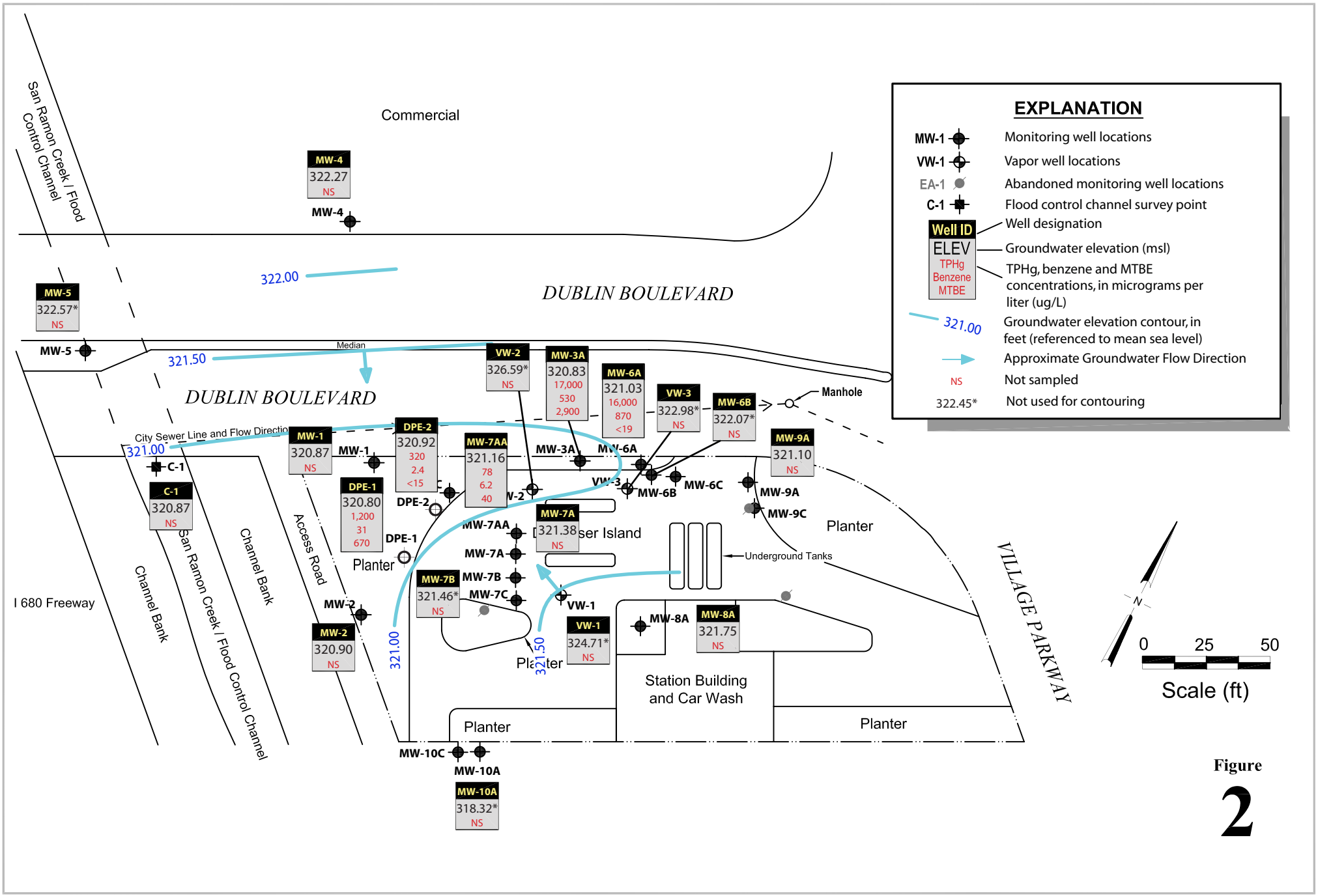


Figure 2

Dublin Auto Wash
7240 Dublin Boulevard
Dublin, California

PANGEA

Groundwater Elevation Contour and Hydrocarbon Concentration Map
May 17, 2011

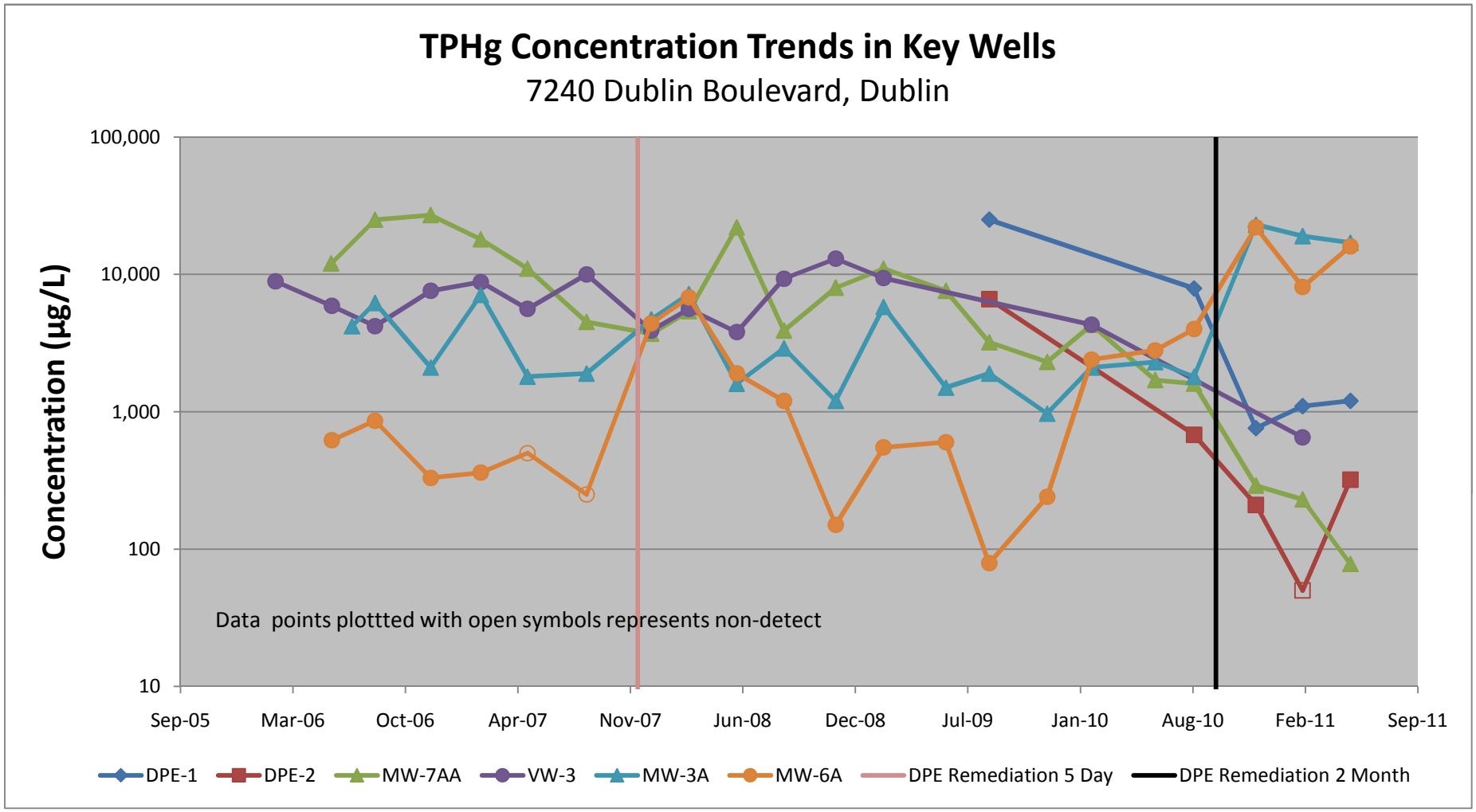


Figure 3. TPHg Concentration Trends in Key Wells

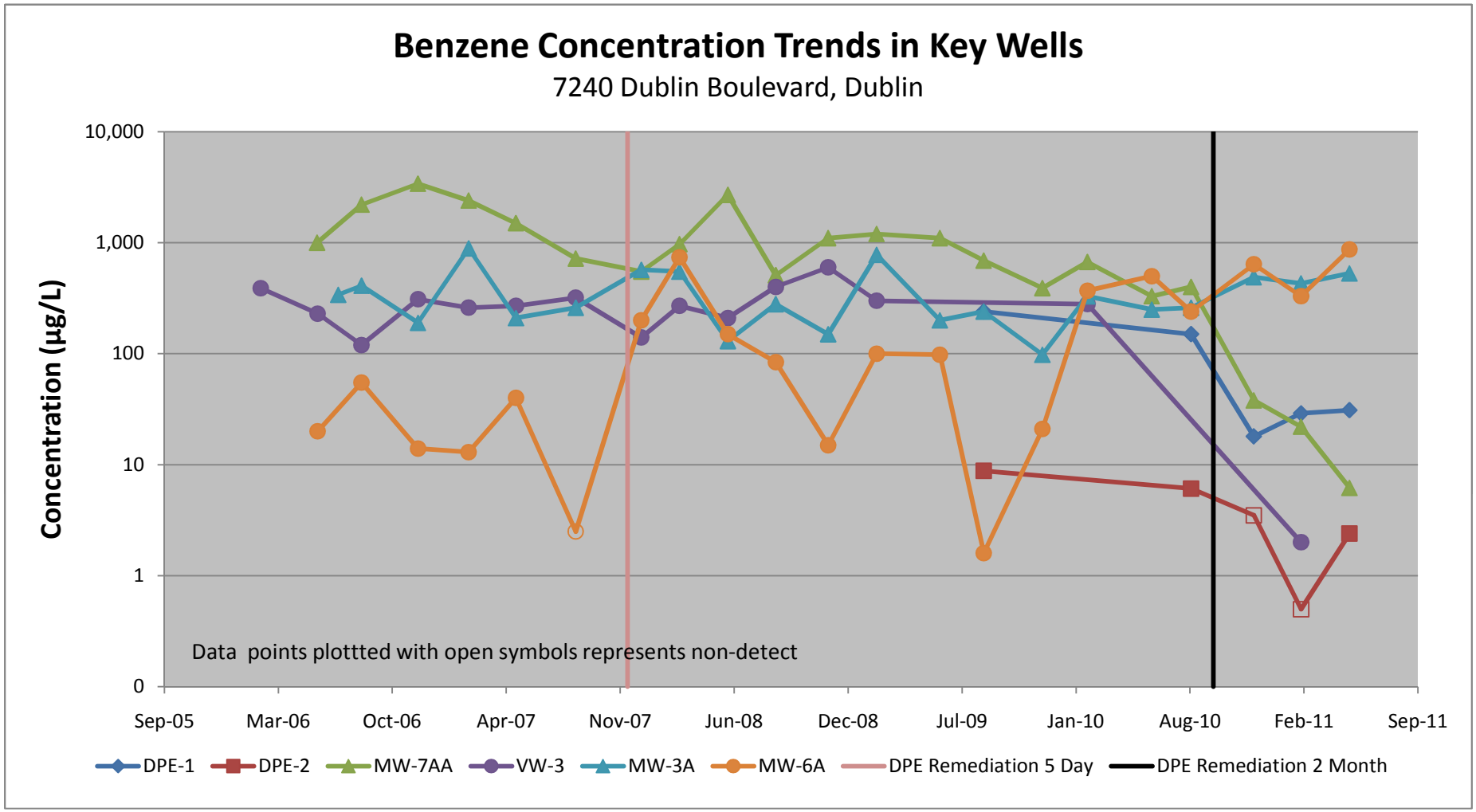


Figure 4. Benzene Concentration Trends in Key Wells

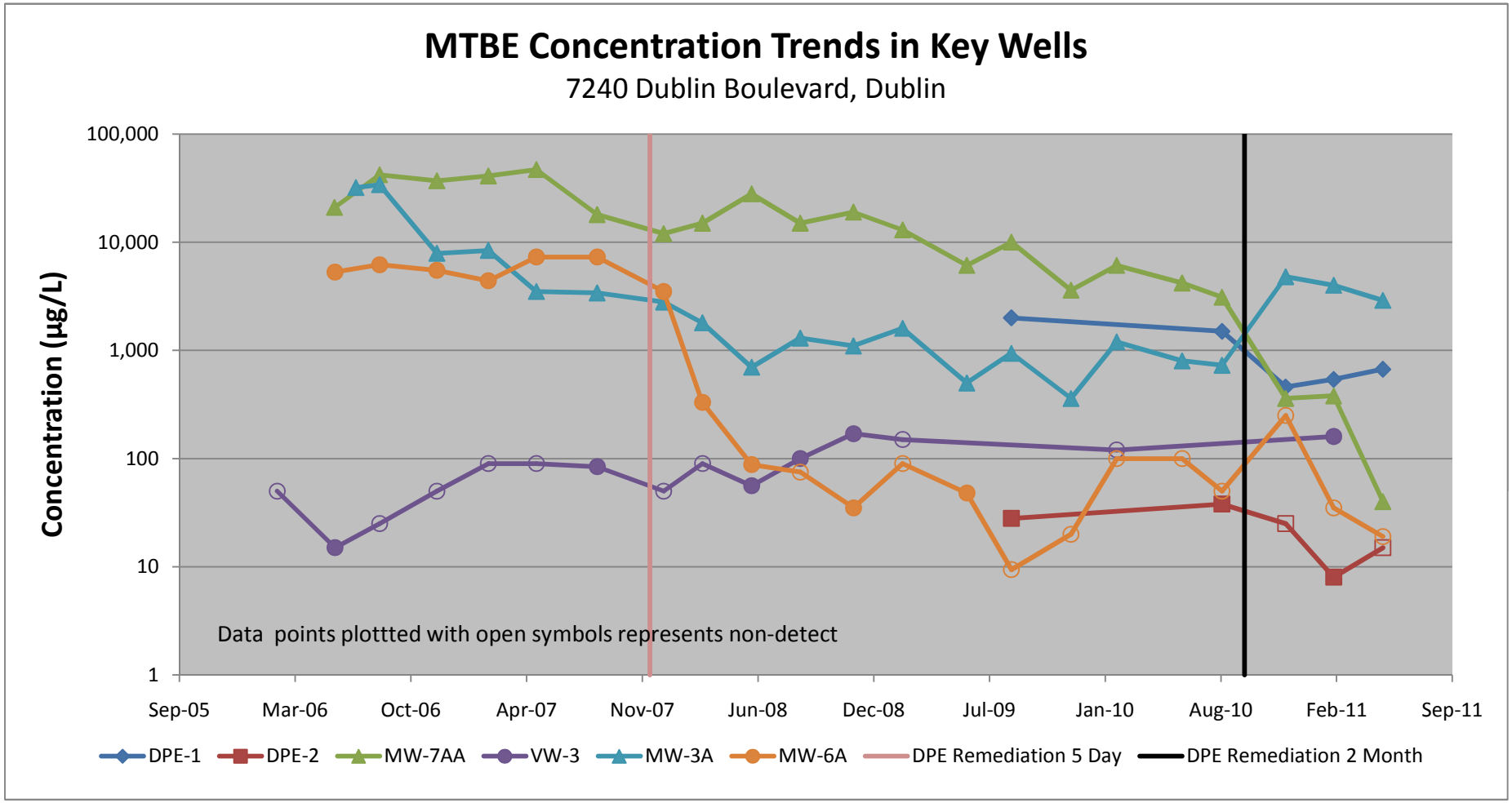


Figure 5. MTBE Concentration Trends in Key Wells

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

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

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

Well ID *TOC Elev* *(ft)*	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft, msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved Oxygen mg/L	Notes
				←			µg/L		→		
Surface Water (Flood Control Channel)											
C-1	08/17/06	11.60	321.29	--	--	--	--	--	--	--	Gauge data - flood control channel
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	--	--	--	--	--	--	--	
	12/21/07	12.16	320.73	--	--	--	--	--	--	--	
	02/26/08	12.21	320.68	--	--	--	--	--	--	--	
	05/21/08	12.40	320.49	--	--	--	--	--	--	--	
	08/13/08	11.95	320.94	--	--	--	--	--	--	--	
	11/13/08	12.40	320.49	--	--	--	--	--	--	--	
	02/06/09	12.02	320.87	--	--	--	--	--	--	--	
	05/28/09	11.98	320.91	--	--	--	--	--	--	--	
	08/13/09	12.01	320.88	--	--	--	--	--	--	--	
	11/24/09	11.92	320.97	--	--	--	--	--	--	--	
	02/11/10	11.95	320.94	--	--	--	--	--	--	--	
	06/04/10	11.98	320.91	--	--	--	--	--	--	--	
	08/12/10	11.94	320.95	--	--	--	--	--	--	--	
	11/30/10	11.68	321.21	--	--	--	--	--	--	--	
	02/21/11	10.27	322.62	--	--	--	--	--	--	--	
	05/17/11	**12.02**	**320.87**	--	--	--	--	--	--	--	
Upper Shallow (AA-Zone) Wells											
DPE-1	08/13/09	10.55	--	25,000	240	160	530	3,900	2,000	--	
	08/12/10	10.20	--	7,900	150	17	110	1,000	1,500	1.12	
331.01	11/30/10	10.47	320.54	760	18	1.6	25	87	460	0.97	
	02/21/11	9.91	321.10	1,100	29	1.1	5.3	97	540	0.73	
	05/17/11	**10.21**	**320.80**	**1,200**	**31**	**2.4**	**62**	**65**	**670**	**0.69**	
DPE-2	08/13/09	11.06	--	6,600	8.8	<2.5	<2.5	710	28	--	
	08/12/10	10.49	--	680	6.1	4.7	<0.5	1.4	38	1.74	
331.42	11/30/10	10.63	320.79	210	3.5	1.7	0.70	1.8	<25	1.40	
	02/21/11	9.83	321.59	<50	<0.5	<0.5	<0.5	<0.5	8.0	1.12	
	05/17/11	**10.50**	**320.92**	**320**	**2.4**	**1.5**	**12**	**3.0**	**<15**	**1.34**	
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	
	12/21/07	10.09	320.58	3,700	550	32	74	330	12,000	0.58	
	02/26/08	8.96	321.71	5,400	970	7.2	320	100	15,000	0.74	
	05/21/08	10.28	320.39	22,000	2,700	19	940	440	28,000	0.71	
	08/13/08	10.38	320.29	3,900	510	<5.0	150	42	15,000	0.77	
	11/13/08	10.35	320.32	8,000	1,100	20	290	280	19,000	0.80	
	02/06/09	10.31	320.36	11,000	1,200	37	500	800	13,000	0.79	
	05/28/09	10.05	320.62	7,600	1,100	34	390	870	6,100	0.73	
	08/13/09	10.15	320.52	3,200	690	5.4	54	92	10,000	0.87	
	11/24/09	10.06	320.61	2,300	390	7.2	50	150	3,600	0.81	
	02/11/10	9.56	321.11	4,300	670	9.0	73	240	6,100	0.64	
	06/04/10	9.51	321.16	1,700	330	3.7	<1.7	120	4,200	0.61	
	08/12/10	9.63	321.04	1,600	400	3.0	50	7.0	3,100	0.70	
	11/30/10	9.70	320.97	290	38	0.95	6.1	19	360	0.89	
	02/21/11	8.57	322.10	230	22	<0.5	<0.5	7.2	380	0.54	
	05/17/11	**9.51**	**321.16**	**78**	**6.2**	**1.1**	**<0.5**	**<0.5**	**40**	**1.31**	
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	
	12/21/07	8.20	322.23	Insufficient Water to Sample							
	02/26/08	8.20	322.23	Insufficient Water to Sample							
	05/21/08	8.21	322.22	Insufficient Water to Sample							
	08/13/08	8.27	322.16	Insufficient Water to Sample							
	11/13/08	5.97	324.46	<50	<0.5	<0.5	<0.5	<0.5	46	1.10	
	02/06/09	6.04	324.39	<50	<0.5	<0.5	<0.5	<0.5	80	0.97	
	05/28/09	6.30	324.13	--	--	--	--	--	--	--	
	08/13/09	6.61	323.82	--	--	--	--	--	--	--	

Table 2. 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-1 (cont'd)	11/24/09	6.99	323.44	--	--	--	--	--	--	--	
	02/11/10	7.30	323.13	<50	<0.5	<0.5	<0.5	<0.5	29	1.16	
	06/04/10	6.00	324.43	---	---	---	---	---	---	---	
	08/12/10	6.30	324.13	---	---	---	---	---	---	---	
	11/30/10	6.95	323.48	---	---	---	---	---	---	---	
	02/21/11	7.25	323.18	<50	<0.5	<0.5	<0.5	<0.5	15	0.93	
	05/17/11	**5.72**	**324.71**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
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	
	08/28/07	7.82	322.35	1,200	170	5.0	<0.5	20	160	0.35	
	12/21/07	4.44	325.73	<50	<0.5	<0.5	<0.5	<0.5	100	0.70	
	02/26/08	4.56	325.61	<50	<0.5	<0.5	<0.5	<0.5	21	0.75	
	05/21/08	7.65	322.52	300	28	1.7	<0.5	0.97	<45	0.71	
	08/13/08	7.92	322.25	Insufficient Water to Sample						1.58	
	11/13/08	5.96	324.21	<50	8.0	<0.5	<0.5	<0.5	53	0.97	
	02/06/09	6.06	324.11	<50	<0.5	<0.5	<0.5	<0.5	38	0.95	
	05/28/09	6.90	323.27	--	--	--	--	--	--	--	
	08/13/09	7.52	322.65	--	--	--	--	--	--	--	
	11/24/09	6.28	323.89	--	--	--	--	--	--	--	
	02/11/10	5.65	324.52	<50	<0.5	<0.5	<0.5	<0.5	39	0.91	
	06/04/10	5.72	324.45	---	---	---	---	---	---	---	
	08/12/10	1.50	328.67	---	---	---	---	---	---	---	
	11/30/10	2.46	327.71	---	---	---	---	---	---	---	
	02/21/11	4.06	326.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.03	
	05/17/11	**3.58**	**326.59**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
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	4.40*	326.09	4,200	120	1.7	39	30	<25	0.10	
	11/24/06	6.15	324.34	7,600	310	9.9	270	420	<50	0.21	
	02/21/07	6.87	323.62	8,800	260	5.1	130	160	<90	0.29	
	05/15/07	7.13	323.36	5,600	270	6.9	110	110	<90	0.36	
	08/28/07	7.41	323.08	10,000	320	5.9	150	140	84	0.39	
	12/21/07	6.28	324.21	3,900	140	1.9	54	29	<50	0.66	
	02/26/08	6.09	324.40	5,600	270	4.5	68	130	<90	0.69	
	05/21/08	6.46	324.03	3,800	210	3.0	32	47	56	0.77	
	08/13/08	6.93	323.56	9,300	400	4.8	87	60	100	0.59	
	11/13/08	7.45	323.04	13,000	600	9.6	220	120	170	2.79	
	02/06/09	7.41	323.08	9,400	300	9.1	140	230	<150	2.16	
	05/28/09	5.93	324.56	--	--	--	--	--	--	--	
	08/13/09	6.40	324.09	--	--	--	--	--	--	--	
	11/24/09	6.75	323.74	--	--	--	--	--	--	--	
	02/11/10	6.08	324.41	4300	280	3.7	52	80	<120	1.77	
	06/04/10	6.41	324.08	---	---	---	---	---	---	---	
	08/12/10	6.51	323.98	---	---	---	---	---	---	---	
	11/30/10	8.22	322.27	---	---	---	---	---	---	---	
	02/21/11	7.45	323.04	650	2.0	<0.5	<0.5	87	160	1.25	
	05/17/11	**7.51**	**322.98**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Shallow (A-Zone) Wells											
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		

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

Well ID	Date	Depth	Groundwater						Dissolved	
TOC Elev	Sampled	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen	Notes
(ft)		(ft)	(ft, msl)	←			µg/L		→	mg/L	
MW-1 (cont'd)	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	
	12/21/07	13.40	320.29	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68	
	02/26/08	12.60	321.09	<50	<0.5	<0.5	<0.5	<0.5	7.0	0.86	
	05/21/08	13.45	320.24	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.94	
	08/13/08	13.37	320.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.91	
	11/13/08	13.50	320.19	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.94	
	02/06/09	13.67	320.02	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.87	
	05/28/09	13.25	320.44	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.71	
	08/13/09	13.26	320.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.77	
	11/24/09	13.28	320.41	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.80	
	02/11/10	13.04	320.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.81	
	06/04/10	12.93	320.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.94	
	08/12/10	12.80	320.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.77	
	11/30/10	13.08	320.61	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.72	
	02/21/11	12.38	321.31	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.91	
	05/17/11	**12.82**	**320.87**	---	---	---	---	---	---	---	
MW-2	10/04/94	8.56	320.62	2300	160	280	96	480	--		
329.29	11/30/94	8.33	320.85	1,600	170	16	110	120	--		
	03/02/95	8.35	320.83	1,200	220	5.6	140	36	--		
	06/07/95	8.62	320.56	160	25	<0.5	16	<0.5	240		
	09/26/95	8.71	320.47	150	15	<0.5	7.2	<0.5	120		
	12/28/95	8.78	320.4	400	34	1.3	26	5.1	170		
	02/29/96	7.82	321.36	120	29	<0.5	<0.5	<0.5	790		
	06/27/96	8.72	320.46	150	13	<0.5	7	<0,5	850		
	09/12/96	8.81	320.48	<1,000	18	<10	<10	<10	3,100		
	03/31/97	8.65	320.64	<500	<5.0	<5.0	<5.0	<5.0	1,400		
	12/23/98	8.32	320.97	<50	<0.5	<0.5	<0.5	<1.5	900		
	03/25/99	7.89	321.4	<50	2.6	<0.5	<0.5	<0.5	1,100 (670)		
	02/03/00	7.53	321.76	<125	<1.25	<1.25	<1.25	<1.25	1,020 (1,100)		
	01/23/01	8.18	321.11	<50.0	<0.5	<0.5	<0.5	<0.5	642		
	05/01/01	8.43	320.86	70.8	<0.5	<0.5	<0.5	<0.5	342		
	08/28/01	8.39	320.9	<50	<0.5	<0.5	<0.5	<0.5	530		
	11/27/01	8.46	320.83	210	<0.5	<0.5	<0.5	<1.5	260		
	02/28/02	8.48	320.81	<50	<0.5	<0.5	<0.5	<1.5	180		
	05/22/02	8.14	321.15	<50	<0.5	<0.5	<0.5	<1.5	180		
	08/20/02	8.24	321.05	<50	<0.5	<0.5	<0.5	<1.5	160		
	11/11/02	8.06	321.23	<50	<0.5	<0.5	<0.5	<1.5	130		
	05/08/03	7.86	321.43	<50	<0.5	<0.5	<0.5	<0.5	180 (160)		
	12/15/04	8.60	320.69	<50	<0.5	<0.5	<0.5	<0.5	1,400 (1,600)		
	02/21/05	7.55	321.74	<50	<0.5	<0.5	<0.5	<0.5	800 (1,100)	1.35	
	05/17/05	8.52	320.77	<50	<0.5	<0.5	<0.5	<0.5	160 (210)	1.06	
	08/17/05	8.16	321.13	<50	<0.5	<0.5	<0.5	<0.5	190 (210)	0.90	
	11/27/05	9.00	320.29	<50	<0.5	<0.5	<0.5	<0.5	200 (210)	0.92	
	02/21/06	8.51	320.78	<50	<0.5	<0.5	<0.5	<0.5	240 (270)	0.33/0.46	
329.48	06/01/06	8.50	320.98	<50	<0.5	<0.5	<0.5	<0.5	120 (110)	0.38	TAME, TBA, DIPE, ETBE=ND
	07/07/06	8.57	320.91	--	--	--	--	--	--	--	
	08/17/06	8.21	321.27	<50	<0.5	<0.5	<0.5	<0.5	230(230)	0.30	
	11/24/06	8.87	320.61	<50	<0.5	<0.5	<0.5	<0.5	760	0.24	
	02/21/07	8.80	320.68	<50	<0.5	<0.5	<0.5	<0.5	1,100	0.21	
	05/15/07	8.94	320.54	<50	<0.5	<0.5	<0.5	<0.5	1,400	0.25	
	08/28/07	8.83	320.65	<50	<0.5	<0.5	<0.5	<0.5	1,800	0.33	
	12/21/07	8.93	320.55	<50	<0.5	<0.5	<0.5	<0.5	1,700	0.49	
	02/26/08	8.49	320.99	<50	<0.5	<0.5	<0.5	<0.5	590	0.51	
	05/21/08	9.06	320.42	<50	<0.5	<0.5	<0.5	<0.5	230	0.67	
	08/13/08	8.89	320.59	<50	<0.5	<0.5	<0.5	<0.5	190	0.77	
	11/13/08	9.16	320.32	<50	<0.5	<0.5	<0.5	<0.5	77	0.86	
	02/06/09	9.39	320.09	<50	<0.5	<0.5	<0.5	<0.5	20	0.81	
	05/28/09	8.86	320.62	<50	<0.5	<0.5	<0.5	<0.5	12	0.74	
	08/13/09	8.81	320.67	<50	<0.5	<0.5	<0.5	<0.5	10	0.69	
	11/24/09	9.04	320.44	<50	<0.5	<0.5	<0.5	<0.5	13	0.80	
	02/11/10	7.50	321.98	<50	<0.5	<0.5	<0.5	<0.5	7.8	0.76	
	06/04/10	8.80	320.68	<50	<0.5	<0.5	<0.5	<0.5	6.5	0.82	

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

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

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

Well ID	Date	Depth	Groundwater							Dissolved	
TOC Elev	Sampled	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen	Notes
(ft)		(ft)	(ft, msl)	←			µg/L		→	mg/L	
MW-5 (cont'd)	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	
333.13	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	<5.0	0.82	
	05/28/09	10.80	322.33	--	--	--	--	--	--	--	
	08/13/09	**10.90**	**322.23**	--	--	--	--	--	--	--	
	11/24/09	10.96	322.17	--	--	--	--	--	--	--	
	02/11/10	10.50	322.63	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.80	
	06/04/10	10.68	322.45	---	---	---	---	---	---	---	
	08/12/10	10.61	322.52	---	---	---	---	---	---	---	
	11/30/10	10.68	322.45	---	---	---	---	---	---	---	
	02/21/11	10.35	322.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.78	
	05/17/11	**10.56**	**322.57**	---	---	---	---	---	---	---	
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	
	12/21/07	11.31	320.50	4,400	200	45	50	550	3,500	0.45	
	02/26/08	10.15	321.66	6,800	740	130	290	600	330	0.61	
	05/21/08	11.60	320.21	1,900	150	8.1	44	100	88	0.63	
	08/13/08	11.91	319.90	1,200	84	3.7	36	18	<75	0.42	
	11/13/08	11.73	320.08	150	15	1.4	3.0	4.2	35	0.44	
	02/06/09	11.66	320.15	550	100	9.3	22	34	<90	0.48	
	05/28/09	11.45	320.36	600	98	14	21	42	48	0.55	
	08/13/09	11.49	320.32	79	1.6	1.5	0.66	0.76	9.4	0.69	
	11/24/09	11.15	320.66	240	21	3.7	5.8	20	<20	0.72	
	02/11/10	10.80	321.01	2,400	370	65	47	320	<100	0.55	
	06/04/10	10.44	321.37	2,800	500	85	87	500	<100	0.68	
	08/12/10	10.65	321.16	4,000	240	39	160	770	<50	0.72	
	11/30/10	10.69	321.12	22,000	640	210	940	4,300	<250	0.89	
	02/21/11	9.79	322.02	8,100	330	93	340	1,700	<35	0.62	
	05/17/11	**10.78**	**321.03**	**16,000**	**870**	**75**	**780**	**2,500**	**<19**	**0.83**	
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	
	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	

Table 2. 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-7A (cont'd)	11/13/08	10.27	320.44	<50	<0.5	<0.5	<0.5	<0.5	30	0.85	
	02/06/09	10.22	320.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.83	
	05/28/09	9.91	320.80	--	--	--	--	--	--	--	
	08/13/09	9.98	320.73	--	--	--	--	--	--	--	
	11/24/09	9.93	320.78	--	--	--	--	--	--	--	
	02/11/10	9.39	321.32	360	75	0.83	4.8	62	200	0.90	
	06/04/10	9.43	321.28	---	---	---	---	---	---	---	
	08/12/10	9.50	321.21	---	---	---	---	---	---	---	
	11/30/10	9.73	320.98	---	---	---	---	---	---	---	
	02/21/11	8.37	322.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.87	
	05/17/11	**9.33**	**321.38**	---	---	---	---	---	---	---	
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	
	12/21/07	10.36	320.83	<50	<0.5	<0.5	<0.5	<0.5	16	0.61	
	02/26/08	8.33	322.86	<50	<0.5	<0.5	<0.5	<0.5	38	0.77	
	05/21/08	9.99	321.20	<50	<0.5	<0.5	<0.5	<0.5	13	0.81	
	08/13/08	10.49	320.70	<50	<0.5	<0.5	<0.5	<0.5	68	0.65	
	11/13/08	10.39	320.80	<50	<0.5	<0.5	<0.5	<0.5	110	0.68	
	02/06/09	10.42	320.77	<50	<0.5	<0.5	<0.5	<0.5	75	0.70	
	05/28/09	9.90	321.29	<50	<0.5	<0.5	<0.5	<0.5	36	0.66	
	08/13/09	9.78	321.41	<50	<0.5	<0.5	<0.5	<0.5	68	0.74	
	11/24/09	9.76	321.43	<50	<0.5	<0.5	<0.5	<0.5	66	0.71	
	02/11/10	9.33	321.86	<50	<0.5	<0.5	<0.5	<0.5	56	0.63	
	06/04/10	8.95	322.24	<50	<0.5	<0.5	<0.5	<0.5	30	0.69	
	08/12/10	9.24	321.95	<50	<0.5	<0.5	<0.5	<0.5	28	0.75	
	11/30/10	13.19	318.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.69	
	02/21/11	12.65	318.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68	
	05/17/11	**9.44**	**321.75**	---	---	---	---	---	---	---	
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	
	12/21/07	10.76	320.41	120	<0.5	2.9	<0.5	0.51	9.5	0.50	
	02/26/08	9.71	321.46	120	<0.5	1.2	<0.5	<0.5	9.5	0.86	
	05/21/08	10.75	320.42	86	<0.5	<0.5	<0.5	<0.5	6.3	0.84	
	08/13/08	11.31	319.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.76	
	11/13/08	11.14	320.03	52	<0.5	<0.5	<0.5	<0.5	5.5	0.63	
	02/06/09	11.16	320.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.61	
	05/28/09	10.75	320.42	--	--	--	--	--	--	--	
	08/13/09	10.65	320.52	--	--	--	--	--	--	--	
	11/24/09	10.48	320.69	--	--	--	--	--	--	--	
	02/11/10	10.16	321.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.63	
	06/04/10	9.80	321.37	---	---	---	---	---	---	---	
	08/12/10	10.08	321.09	---	---	---	---	---	---	---	
	11/30/10	10.10	321.07	---	---	---	---	---	---	---	
	02/21/11	9.45	321.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.73	
	05/17/11	**10.07**	**321.10**	---	---	---	---	---	---	---	
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	
	12/21/07	8.81	321.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.47	
	02/26/08	7.34	322.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.70	
	05/21/08	9.22	320.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.64	
	08/13/08	9.25	320.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.61	
	11/13/08	9.47	320.46	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.70	
	02/06/09	9.50	320.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68	
	05/28/09	9.11	320.82	--	--	--	--	--	--	--	
	08/13/09	9.21	320.72	--	--	--	--	--	--	--	
	11/24/09	9.26	320.67	--	--	--	--	--	--	--	
	02/11/10	8.35	321.58	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.64	
	06/04/10	8.73	321.20	---	---	---	---	---	---	---	
	08/12/10	8.85	321.08	---	---	---	---	---	---	---	

Table 2. 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-10A (cont'd)	11/30/10	9.02	320.91	---	---	---	---	---	---	---	
	02/21/11	7.78	322.15	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.70	
	05/17/11	**11.61**	**318.32**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Intermediate-Depth (B-zone) Wells											
MW-6B	06/01/06	8.41	322.49	<50	<0.5	<0.5	<0.5	<0.5	18 (16)	0.34	TAME, TBA, DIPE, ETBE=ND
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	
	12/21/07	9.42	321.48	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.82	
	02/26/08	7.87	323.03	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.80	
	05/21/08	9.37	321.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.87	
	08/13/08	9.70	321.20	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.81	
	11/13/08	9.62	321.28	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.78	
	02/06/09	9.53	321.37	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.71	
	05/28/09	9.23	321.67	--	--	--	--	--	--	--	
	08/13/09	9.63	321.27	--	--	--	--	--	--	--	
	11/24/09	9.63	321.27	--	--	--	--	--	--	--	
	02/11/10	8.41	322.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68	
	06/04/10	8.72	322.18	---	---	---	---	---	---	---	
	08/12/10	9.10	321.80	---	---	---	---	---	---	---	
	11/30/10	9.02	321.88	---	---	---	---	---	---	---	
	02/21/11	8.11	322.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.66	
	05/17/11	**8.83**	**322.07**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
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	
	12/21/07	9.87	320.82	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.53	
	02/26/08	8.64	322.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.59	
	05/21/08	10.05	320.64	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.56	
	08/13/08	10.17	320.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.51	
	11/13/08	10.15	320.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.53	
	02/06/09	10.18	320.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.55	
	05/28/09	9.80	320.89	--	--	--	--	--	--	--	
	08/13/09	9.89	320.80	--	--	--	--	--	--	--	
	11/24/09	9.85	320.84	--	--	--	--	--	--	--	
	02/11/10	9.24	321.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.81	
	06/04/10	9.35	321.34	---	---	---	---	---	---	---	
	08/12/10	9.37	321.32	---	---	---	---	---	---	---	
	11/30/10	9.80	320.89	---	---	---	---	---	---	---	
	02/21/11	8.69	322.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.85	
	05/17/11	**9.23**	**321.46**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Deep (C-Zone) Wells											
MW-6C	06/01/06	8.21	322.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.29	TAME, TBA, DIPE, ETBE=ND
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-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	
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-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	--	--	--	--	--	--	--	

Table 2. 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-10C (cont'd)	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	
Destroyed Wells											
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 Destroyed**		--	--	--	Well Destroyed
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	<l25		

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

Well ID	Date	Depth	Groundwater							Dissolved	
TOC Elev	Sampled	to Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Oxygen	Notes
(ft)		(ft)	(ft, msl)	←			µg/L		→	mg/L	
EA-1 (cont'd)	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	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	

Table 2. 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 (cont'd)	03/28/06	--	--	--		**Well Destroyed**		--	--	--	Well Destroyed
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 Destroyed**		--	--	--	Well Destroyed
Grab Groundwater Analytical Data											
SB-1A-W	05/18/06	11.20	NA	170	1.5	1.5	1.2	5.9	570 (500)	--	TAME=90µg/L, TBA,DIPE,ETBE=ND
DPB-1	05/01/03	16-20	NA	12,000	25	440	440	2,180	8,100	--	
DPB-2	04/22/03	NA	NA	710	1.1	<1	18	74	540	--	
DPB-3	04/17/03	16-20	NA	48,000	400	5,800	1,500	9,500	8,900	--	
DPB-3	04/17/03	27-31	NA	62,000	700	9,900	1,300	7,900	4,200	--	
	04/17/03	39-43	NA	27,000	210	3,200	640	4,100	7,700	--	
DPB-4	04/17/03	32-36	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
DPB-5	04/30/03	7-11	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/17/03	11-15	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/30/03	26-30	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/17/03	36-40	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
DPB-6	04/18/03	15-19	NA	7,700	18	77	170	640	5.9	--	
	04/18/03	26-30	NA	4,700	21	76	160	650	6.2	--	
	04/18/03	35-39	NA	2,900	8.8	24	54	249	100	--	

Table 2. 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		→		
DPB-7	04/18/03	15-19	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	04/18/03	20-24	NA	7,000	42	640	190	990	300	--	
	04/18/03	35-39	NA	150	<0.5	1.8	0.8	5.7	<0.5	--	
DPB-8	05/01/03	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	
DPB-S	04/18/03	14-18	NA	20,000	<170	<170	380	6,600	53,000	--	
	04/18/03	26-30	NA	1,500	7.1	<3.1	7.4	170	760	--	
	04/18/03	35-39	NA	4,300	<63	<63	<63	910	42,000	--	

ABBREVIATIONS AND NOTES:

SPH = Separate-phase hydrocarbons; calculated groundwater elevation corrected for SPH by the relation: Groundwater Elevation = Well Elevation - Depth to Water +(0.8xSPH Thickness)
Groundwater monitoring data and laboratory analytical results prior to December 14, 2004, were scanned from a report by SOMA.
(ft) = Feet
(msl) = Mean sea level
TOC Elev. (ft) = Top of casing elevation
µg/L = Micrograms per liter - approximately equal to parts per billion = ppb
mg/L = Milligrams per liter - approximately equal to parts per million = ppm
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015C
BTEX = Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020/8021.
MTBE = Methyl tertiary butyl ether by EPA Method 8020/8021. (Concentrations in parentheses are by EPA Method 8260B).
1,2-DCA = 1,2-Dichloroethane
TAME = Tertiary amyl methyl ether by EPA Method 8260B
TBA = Tertiary butyl alcohol by EPA Method 8260B
DIPE = 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 Program

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

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

Notes and Abbreviations:

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

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

1st = 1st quarter, typically February

3rd = 3rd quarter, typically November

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

Pangea
ENVIRONMENTAL SERVICES, INC.

Well Gauging Data Sheet

Project.Task # 1001.001.227 | Project Name: ~~PSI - El Cerrito~~ Dublin Auto Wash

Address: ~~1687 San Pablo Ave, El Cerrito~~ 7240 Dublin Blvd. | Date: 5-17-11

Name: Steve Hunter | 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"	1003			12.82	25.10	
MW-2	2"	1007			8.58	20.05	
MW-3A	4"	1011			10.56	17.00	
MW-4	2"	0943			10.37	19.70	
MW-5	2"	0950			10.56	19.20	
MW-6A	2"	1029			10.78	20.00	
MW-6B	2"	1035			8.83	30.00	
MW-7AA	4"	1024			9.51	14.00	
MW-7A	4"	1018			9.33	20.00	
MW-7B	2"	1052			9.23	30.00	
MW-8A	2"	1057			9.44	20.00	

Comments:

Project #1001.001
Task #227

Pangea
ENVIRONMENTAL SERVICES, INC.

[redacted] Well Gauging Data Sheet

Project.Task # [redacted]	Project Name: ~~PGI El Cerrito~~ Dublin Auto Wash
Address: ~~11687 San Pablo Ave, El Cerrito~~ 7240 Dublin BLV	Date: 5-17-11
Name: Steve Hunter	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"	1017			1007	20.00	
MW-10A	2"	1012			11.01	20.00	
VW-1	2"	1103			5.72	8.40	
VW-2	2"	1109			3.58	8.30	
VW-3	2"	1113			7.51	8.40	
DPE-1	4"	1117			10.21	14.00	
DPE-2	4"	1121			10.50	14.00	
C-1	N/A	0957			12.02	—	

Comments:

Pangea
ENVIRONMENTAL SERVICES, INC.

1001.001.227

MONITORING FIELD DATA SHEET

Well ID: MW-3A

Project.Task #: ~~1001.001.200~~	Project Name: Dublin Auto Wash
Address: 7240 Dublin Blvd., Dublin	
Date: 5-17-11	Weather: Rain
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): 17.00	Depth to Product: —
Depth to Water (DTW): 10.56	Product Thickness: —
Water Column Height: 6.44	1 Casing Volume: 4.18 gallons
Reference Point: N side TOC	3 Casing Volumes: 13 gallons
Purging Device: ~~Disposable Bailer~~ Stack Pump / Buckets	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
1458					Pre 0.43		9	
1509	16.2	7.01	1909			-96	4	
1513	16.9	6.89	1684			-107	8	

Comments: Well dewatered @ 9 gallons

Sample ID: MW-3A	Sample Time: 1530
Laboratory: McCampbell	Sample Date: ~~2/22/2006~~ 5-17-11
Containers/Preservative: 3 HCL VOAs	
Analyzed for: ~~8015, 8020~~ TPHg / BTEX / MTBE	
Sampler Name: ~~Morgan Gillies~~ Stevie Hunter	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

1001.001.227

MONITORING FIELD DATA SHEET

Well ID: MW-6A

Project.Task #: [redacted]	Project Name: Dublin Auto Wash
Address: 7240 Dublin Blvd., Dublin	
Date: 5-17-11	Weather: Rain
Well Diameter: ~~4~~ 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): 10.78	Product Thickness: —
Water Column Height: 9.22	1 Casing Volume: 1.5 gallons
Reference Point: N side TOC	3 Casing Volumes: 4.5 gallons
Purging Device: Disposable Bailer	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
1134					Pre:0.23			
1147	17.3	6.93	1836			-13		
1152	17.8	6.87	1842			-11		
1158	17.9	6.88	1851			-9		

Comments:

Sample ID: MW-6A	Sample Time: 1210
Laboratory: McCampbell	Sample Date: 5-17-11
Containers/Preservative: 3 HCL VOAs	
Analyzed for: TPHg/BTEX/MTBE (8015B/8021)	
Sampler Name: Steve Hunter	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

1001.001-227

MONITORING FIELD DATA SHEET

Well ID: MW-7AA

Project.Task #: ~~1001.001.000~~	Project Name: Dublin Auto Wash
Address: 7240 Dublin Blvd., Dublin	
Date: 5-17-11	Weather: Rain
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): 14.00	Depth to Product: —
Depth to Water (DTW): 9.51	Product Thickness: —
Water Column Height: 4.49	1 Casing Volume: 3 gallons
Reference Point: N side TOC	3 Casing Volumes: 9 gallons
Purging Device: ~~Disposable Bailer~~ Stack-Pump/Buckets	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
1321					Pre: 1.31			
1329	16.6	7.38	1368			-58	3	

Comments: Well dewatered at 4 gallons

Sample ID: MW-7AA	Sample Time: 1350
Laboratory: McCampbell	Sample Date: 5-17-11
Containers/Preservative: 3 HCL VOAs	
Analyzed for: TPHg/BTEX/MTBE (8015B/8021)	
Sampler Name: Steve Hunter	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

1001.001.227

MONITORING FIELD DATA SHEET

Well ID: DPE-1

Project.Task #: [redacted]	Project Name: Dublin Auto Wash
Address: 7240 Dublin Blvd., Dublin	
Date: 5-17-11	Weather: Rain
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): 14.00	Depth to Product: —
Depth to Water (DTW): 10.21	Product Thickness: —
Water Column Height: 3.79	1 Casing Volume: 2.5 gallons
Reference Point: N side TOC	3 Casing Volumes: 7.5 gallons
Purging Device: ~~Disposable Bailer~~ Stack pump w/ buckets	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
1414					Pre 0.69		0	
1421	16.4	6.30	2643			-100	2.5	
1426	16.5	6.65	2825			-107	5	
1431	16.3	6.67	2815			-105	7.5	

Comments:

Sample ID: DPE-1	Sample Time: 1440
Laboratory: McCampbell	Sample Date: 2/22/2006
Containers/Preservative: 3 HCL VOAs	
Analyzed for: ~~8015, 8020~~ TPHg/BTEX/MTBE	
Sampler Name: ~~Morgan Gillies~~ Steve Hunter	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

1001-001-227

MONITORING FIELD DATA SHEET

Well ID: DPE-2

Project.Task #: ~~[illegible]~~	Project Name: Dublin Auto Wash
Address: 7240 Dublin Blvd., Dublin	
Date: 5-17-11	Weather: Rain
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): 14.00	Depth to Product: -
Depth to Water (DTW): 10.50	Product Thickness: -
Water Column Height: 3.50	1 Casing Volume: 2.5 gallons
Reference Point: N side TOC	3 Casing Volumes: 7.5 gallons
Purging Device: Disposable Bailer	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
1224					Pre:1.34			
1229	15.4	7.51	2810			-25	2.5	

Comments: Well dewatered at 4 gallons

Sample ID: DPE-2	Sample Time: 1255
Laboratory: McCampbell	Sample Date: ~~2/22/2006~~
Containers/Preservative: 3 HCL VOAs	
Analyzed for: ~~8015, 8020~~ TPH-g / BTEX / MTBE	
Sampler Name: ~~Morgan Gillies~~ Steve Hunter	Signature:

APPENDIX C

Laboratory Analytical Results

McCampbell Analytical, Inc.
"When Quality Counts"

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

Pangea Environmental Svcs., Inc.	Client Project ID: 7240 Dublin Blvd	Date Sampled: 05/17/11
		Date Received: 05/18/11
1710 Franklin Street, Ste. 200	Client Contact: Tina De La Fuente	Date Reported: 05/23/11
Oakland, CA 94612	Client P.O.:	Date Completed: 05/23/11

WorkOrder: 1105529

May 23, 2011

Dear Tina:

Enclosed within are:

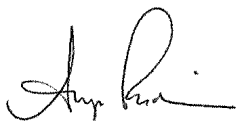
1) The results of the **5** analyzed samples from your project: **7240 Dublin Blvd,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

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

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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,



Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1105529

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
Pittsburg, CA 94565
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ 5 DAY

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

Report To: Tina de la Fuente	Bill To: Pangea
Company: Pangea Environmental Services, Inc.	
1710 Franklin Street, Suite 200, Oakland, CA 94612	
	E-Mail: tdelafuente@pangeaenv.com
Tele: (510) 836-3702	Fax: (510) 836-3709
Project #: 7240 Dublin Blvd	Project Name: 7240 Dublin Blvd
Project Location: 7240 Dublin Blvd., Dublin, CA	
Sampler Signature:	

SAMPLE ID	LOCATION (Field Point Name)	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	TPHg/BTEX/MTBE (8015B/8021)	TPH as Diesel (8015) w/ Silica Gel Cleanup	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)	Other	Other	Other	Comments
MW-3A		5-17-11	1530	3	Voa's	X					X	X			X																			Filter Samples for Metals analysis: Yes / No
MW-6A			1210	3		X					X	X			X																			
MW-7AA			1350	3		X					X	X			X																			
DPE-1			1440	3		X					X	X			X																			
DPE-2		↓	1255	3	↓	X					X	X			X																			

Relinquished By:	Date: 5-17-11	Time: 9:18	Received By: Envirotech
Relinquished By: Enviro-Tech	Date: 5/18/11	Time: 1200	Received By:
Relinquished By:	Date: 5/18/11	Time: 1645	Received By:

ICE/t° 58c
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

COMMENTS:

PRESERVATION	VOAS	O&G	METALS	OTHER
	✓		pH<2	

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1105529 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

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

Email: tdelafuente@pangeaenv.com
cc:
PO:
ProjectNo: 7240 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: **05/18/2011**
Date Printed: **05/19/2011**

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
1105529-001	MW-3A	Water	5/17/2011 15:30	☐	A	A										
1105529-002	MW-6A	Water	5/17/2011 12:10	☐	A											
1105529-003	MW-7AA	Water	5/17/2011 13:50	☐	A											
1105529-004	DPE-1	Water	5/17/2011 14:40	☐	A											
1105529-005	DPE-2	Water	5/17/2011 12:55	☐	A											

Test Legend:

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

Prepared by: Melissa Valles

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.

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

Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **5/18/2011 6:12:28 PM**

Project Name: **7240 Dublin Blvd**
Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **1105529** Matrix Water
Carrier: EnviroTech (MTZ)

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: 5.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

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

Client contacted: Date contacted: Contacted by:

Comments:

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

Pangea Environmental Svcs., Inc.	Client Project ID: 7240 Dublin Blvd	Date Sampled: 05/17/11
		Date Received: 05/18/11
1710 Franklin Street, Ste. 200	Client Contact: Tina De La Fuente	Date Extracted: 05/19/11-05/21/11
Oakland, CA 94612	Client P.O.:	Date Analyzed: 05/19/11-05/21/11

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1105529

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-3A	W	17,000	2900	530	27	390	3000	33	103	d1
002A	MW-6A	W	16,000	ND<19	870	75	780	2500	10	94	d1
003A	MW-7AA	W	78	40	6.2	1.1	ND	ND	1	104	d1
004A	DPE-1	W	1200	670	31	2.4	62	65	1	110	d1
005A	DPE-2	W	320	ND<15	2.4	1.5	12	3.0	1	116	d1

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

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

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 58406 WorkOrder 1105529

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1105443-003A**

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	95	89	6.57	96.5	89.3	7.75	70 - 130	20	70 - 130	20
MTBE	ND	10	105	106	1.11	107	105	2.31	70 - 130	20	70 - 130	20
Benzene	ND	10	100	104	3.28	101	102	1.09	70 - 130	20	70 - 130	20
Toluene	ND	10	101	103	1.49	98.8	102	3.00	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	97.6	100	2.39	97.1	99.6	2.56	70 - 130	20	70 - 130	20
Xylenes	ND	30	101	103	1.66	100	102	1.93	70 - 130	20	70 - 130	20
%SS:	104	10	100	101	1.57	98	102	4.39	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 58406 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1105529-001A	05/17/11 3:30 PM	05/20/11	05/20/11 6:54 PM	1105529-002A	05/17/11 12:10 PM	05/20/11	05/20/11 7:24 PM
1105529-003A	05/17/11 1:50 PM	05/19/11	05/19/11 10:58 PM	1105529-004A	05/17/11 2:40 PM	05/20/11	05/20/11 12:04 AM
1105529-005A	05/17/11 12:55 PM	05/21/11	05/21/11 1:56 AM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

APPENDIX D

Product Literature for NONTOX™

General Description

NONTOX: PETROLEUM HYDROCARBON REMEDIATION/CLEANING

- Is a biocatalytic system in a liquid concentrate form that stimulates and accelerates natural biological reactions. When combined with fresh or salt water and o xygen, the product will cause crude oil, jet fuel, diesel oil and other organic substances to rapidly decompose, eventually biodegrading them to carbon dioxide and water as end products.

- It is non-toxic and safe to humans, animals, marine life and plant life. It is 100% biodegradable.

- Works in concert with indigenous bacteria. No cultured or foreign bacteria are introduced into the ecosystem.

- Is nonflammable. It will reduce fire hazards by increasing flash points and autoignition threshold points in substances such as gasoline or fuel oil.

- Eliminates obnoxious odors associated with crude oil, petroleum derivatives and other organic molecules that are proceeding through the natural decomposing process.

- Is fully compatible with most types of application equipment now in use. The product may be easily applied by hand or power sprayers, helicopter, airplane or floating equipment. Its application requires no special safety equipment.

TARGETED HYDROCARBON CONTAMINANTS

In this case, the hydrocarbon compounds found in water, soil and air are the selected targets of NONTOX. This would include such petroleum derived products as crude oil, drilling muds, creosote, kerosene, coal tars, gasoline, diesel, bunker fuels, lubricating and hydraulic fluids. Other contaminant groups would include aliphatic and aromatic hydrocarbons, poly nuclear aromatic hydrocarbons, chlorinated aliphatic compounds, chlorinated aromatic compounds and chlorinated and non-chlorinated phenols.
It has been shown that the product has unique features in odor elimination of such gases as hydrogen sulfide, ammonia, mercaptan and other noxious odors emanating from anaerobic decomposition. The odor degradation activity happens in a very short period and effectively eliminates volatilization of light chain organic molecules, such as the BTEX group of petrochemicals, into the atmosphere.

TREATMENT METHODOLOGY

The product is fully compatible with most types of application equipment now in use. NONTOX may be easily applied with hand or power sprayers, standard educator tubes, helicopters, airplane or floating equipment. No special nozzles or hoses are required. Each

treatment site may differ in its requirements and modality of treatment. Factors that can influence the tactical use of NONTOX are:
Redo Potential Temperature Availability of Nutrients Nature and Concentration of Contaminants pH Heavy Metals Should these variables complicate the application and treatment procedures, the NONTOX works well with other commonly accepted treatment modalities such as venting, injection aeration, aeration lagoons and enoculants for removal of heavy metals.

Water or Beach Spills

Reducing the danger of oil reaching beaches and shore structures is best achieved by spraying the oil slick perimeter with a diluted solution of 10 gallons of NONTOX mixed with 150 gallons of sea water or fresh water for each 40,000 square feet of surface area to be treated. If the slick has a heavy consistency, it is recommended that a 1:15 diluted NONTOX solution is applied over a three-day period, using one-third of the mixed solution each day. For best results, the product should be applied at a high pressure – generally above 500 psi.

TECHNICAL DATA

Bacterial Proliferation

The successful biodegradation of petroleum is dependent on two factors: 1) having the bio-organic catalyst reduce the petroleum to a form, which can be readily assimilated, by bacteria and 2) stimulating the proliferation of naturally occurring nonpathogenic heterotrophic bacteria. NONTOX to significantly increase beneficial bacterial activity in bay water by 12,857% and ocean water by 14,333%.

Accelerated Bioremediation

Independent laboratory studies from specialists in petroleum technology have quantified the ability of NONTOX to dramatically reduce petroleum contaminants.
showing a 90% reduction in Jet-A, Diesel-2 and Heavy Duty Lube Oil within 96 hours. While treatment time required may vary dependent on conditions previously noted, the mode of action is the same. NONTOX is a unique biocatalytic system that accelerates natural biological reactions with hydrocarbon products in water.

METAL CONTAMINANT PRECIPITATION

Another benefit of NONTOX use is its ability to break the matrix that suspends metals.

FLAMMABILITY REDUCTION

Open cup flash points and auto ignition temperature tests quantify the ability of NONTOX to render petroleum products nonflammable and dramatically increase their auto ignition temperatures. NONTOX alters the molecular structure that dramatically reduces

flammability and the elimination of volatile organic compounds (VOCs) and their odors. The importance of this feature cannot be overstated in terms of shipboard safety and survivability. In addition, the use of other ecologically incompatible materials, such as AFFF Foam, may be significantly reduced.

SAFETY PROFILE

Extensive independent laboratory testing utilizing accepted standards for dermal and ocular effects on animal and human subjects have been performed. Phytotoxicity, bacteria community and internal aquatic organism safety studies are well documented.

OTHER POSSIBLE APPLICATIONS

- Initial Actions for Fire Fighting, i.e. cover the fire hazard with a layer of AFFF and flash point reducing product.

- Fuel or Oil Tank Cleaning

- Engine / Generator Wipe down

- Galley Drain Line Unclogging

- CHT Tank Cleaning / Degreasing

- Flight Deck Cleaning (should be able to hose it over the side).

- Trough Cleaning

MATERIAL SAFETY DATA SHEET

OSHA Hazard Communication Standard, 29CFR 1910.1200.

1. Identification Of Product & Company

PRODUCT NAME: **NonTox®-TPH Eliminator**
INTENDED USE : ***Surface Washing Agent, Hydrocarbon Cleaner, for use on Beaches, and Hard surfaces***
DETAILS OF COMPANY: Bio-Organic Catalyst, Inc., A wholly-owned subsidiary Of Neozyme International, Inc.
711 W. 17th Street, Suite E-6
Costa Mesa, CA 92627
Phone: (949) 515-1301 / Fax: (949) 515-1314

2. Composition/Information On Ingredients

SUBSTANCE: Water, highly purified proteins from plant and mineral sources.

3. Hazardous Identification

DANGER CLASSIFICATION: None
RISK PHRASES: None
P PHRASES: None

4. First Aid Measures

GENERAL: Wash well after use.
ON INHALATION: None
ON EYE CONTACT: Wash with copious amounts of water.
ON SKIN CONTACT: Wash with soap and water.
ON INGESTION: Should any symptoms occur, seek medical attention.

5. Fire Fighting Measures

EXTINGUISHING MEDIA
RECOMMENDED: Water/Dry Chemical
NOT TO BE USED: None
SPECIAL INSTRUCTIONS FOR FIRE FIGHTING PERSONNEL: None

6. Accidental Release Measures

Flush away with copious amounts of water.

7. Storage & Handling

HANDLING: General good work practices.
STORAGE: 5 Liter and 200 Liter containers in either metal or plastic.
Store below 45°C as higher storage temperatures reduce the effectiveness of the product.
Should not be stored close to caustics or strong bases.

8. Exposure Controls/Personal Protection

GENERAL PROTECTION: Follow good industrial practices of hygiene and care.
RESPIRATORY PROTECTION: None
HAND PROTECTION: None, although the use of rubber gloves is suggested.
EYE PROTECTION: None, although the use of protective eyewear is recommended under normal GMP's
SKIN PROTECTION: None

9. Physical And Chemical Properties

PHYSICAL STATE: LIQUID
COLOR: Colorless - pale amber
ODOR: Mild
ODOR THRESHOLD: No test data available
FLASH POINT: None
VISCOSITY: @ 40 °C 2.3373 cst
SPECIFIC GRAVITY: @*20°C /68°F*=1.005-1.008 @ 20 ° C
PH: Full Strength. 3.5 to 4
VAPOR DENSITY: None

LOWER EXPLOSION LIMIT: None
SOLUBILITY IN WATER: 100% in water
FLASH POINT: Closed Cup >93 °C
FLAMMABILITY (SOLID, GAS): None
FLAMMABLE LIMITS IN AIR LOWER: No test data available.
UPPER: No test data available.
AUTO IGNITION TEMPERATURE: No test data available.
VAPOR PRESSURE: < 0.01 mmHg @ 20°C *Calculated*
BOILING POINT:(@760 mmHg): > 100°C
VAPOR DENSITY (air = 1): >1 *Calculated*
FREEZING POINT: See Pour Point
MELTING POINT: Not applicable
POUR POINT: 2.22°C (+28 °F)
SOLUBILITY IN WATER (by weight): *Visual* Completely soluble.
DECOMPOSITION TEMPERATURE: No test data available

10. Stability & Reactivity

NO KNOWN REACTION TO OCCUR

CONDITIONS TO AVOID: Temperatures above 45°C., pH below 3.0 and above 9.5 will affect the quality and condition of the product. Strong caustics and strong bases may affect the quality and condition of the product.

11. Toxicological Information

ORAL LD50: Levels of 5,000 mg/kg: No Effects.
OCULAR: Primary Ocular-Albino Rabbits-Levels of 1,000 mg/kg for 24hours: No effects; Non-Toxic; "No Warning Required".
ACUTE TOXICITY: LC50-Level of 10,000 mg/kg: No effects after 168 hours; Non-Toxic; "No Warning Required."
SKIN TESTS: Draize Test-Dermal score of .38; Non Irritant; "No Warning Required." Repeated Insult Patch - No indication of irritation or sensitization; Non Irritant; "No Warning Required."
INHALATION TESTS: Results. No possibility of Irritation; Non Irritant; "No Warning Required."
LONG TERM STUDIES: No recorded side effects since 1971.

12. Ecological Information

This is a totally safe and efficient biocatalytic degrader of organic waste materials. The product causes contaminants and other organic matter to eventually biodegrade, thus returning to carbon dioxide and water. When disposed of in sewage and drainage systems, the product aids in the breakdown of pollutants such as oil.
OECD BIODEGRADATION TESTS: For this family of materials: OECD Guideline for Testing of Chemicals, 302 B, Inherent Biodegradability: Zahn-Wellens/EMPA-Test Adopted: July 17, 1992, as well as German Standard Procedures for Water, Waste Water and Sludge Testing, Test procedure with water organisms (Group L) Determination of the biodegradability, Static Test (L25),DIN 38 412, Part 25
BIODEGRADATION EXPOSURE TIME METHOD: > 58% -48 HRS OECD 302B TEST
Closed Bottle Ready Biodegradability Test Reference: Environmental Protection Agency - Toxic Substances Control Act, Code of Federal Regulations Title 40, part 796, section 3200 (40 CPR 796.3200)
BIODEGRADATION EXPOSURE TIME METHOD: > 75%-28 Days
ENVIRONMENTAL FATE: Persistence and Degradability: The material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
ECOTOXICITY: The material is non-toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).
FISH ACUTE & PROLONGED TOXICITY: For this family of materials: LC50, fathead minnow (Pimephales promelas), static, 96 hrs 100 % survival rate at 1ppm
AQUATIC INVERTEBRATE ACUTE TOXICITY: EC50, water flea Daphnia magna, 48 hrs, Toxicity, Not Detected.
TOXICITY TO MICRO-ORGANISMS: EC_{50} Vibrio fischeri (Photobacterium phosphoreum) ,P seudokirchner¡ella subcapitata (Selen astrum capricornutum) Toxicity: Not Detected.
MUTAGENICITY TEST ;The organisms *P. subcapitata* and *D. magna* are continental water organisms. *V. fischeri* is an organism that can that can be involved for both continental water and marine water samples. *Salmonella typhimurium* is an organism to evaluate sweet water and its results can be applied to the environment and extrapolated to humans. *Salmonella typhimurium:*
Mutagenicity: Not Detected
MARINE ACUTE TOXCITY: The marine invertebrate species, *Mysidopsis bahia (Americamysis bahia)* and the marine vertebrate species, *Menidia beryllina* were used in the tests. For the marine invertebrate species,48-Hour Acute *Mysidopsis bahia* survival

test results : LC-50 -316.23 (ppm), The 96-Hour LC-50 (concentration at which 50% mortality is expected to occur, *Menidia beryllina* survival data, was 203.04 (ppm)

13. Disposal Considerations

"IN ACCORDANCE WITH NATIONAL AND LOCAL LAWS AND PRACTICES"
Flush down sewage or drainage systems with copious amounts of water.

14. Transport Information

DOMESTIC ROAD/RAIL: Unrestricted
SEA: Unrestricted
AIR: Unrestricted
INTERNATIONAL ROAD/RAIL: Unrestricted

15. Regulatory Information

OSHA Hazard Communication Standard
This product is a "Not A Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312:
Immediate (Acute) Health Hazard: No
Delayed (Chronic) Health Hazard: No
Fire Hazard: No
Reactive Hazard: No
Sudden Release of Pressure Hazard: No

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

US. Toxic Substances Control Act
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

The information contained in this Safety Data Sheet does not constitute the user's own assessment of the workplace risks as required by other health and safety legislation.

16. Other Information

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written instructions. As specific conditions of use of the product are outside of the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.
The information contained in this Safety Data Sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. This MSDS will be revised and updated as requirements occur. Should further information and relevant advice be required, contact Bio-Organic Catalyst, Inc. @ Info@bio-organic.com
NonTox® is manufactured under U. S. Patent No.5,879,928.