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ENVIRONMENTAL HEALTH SERVICES

**Letter of Transmittal**

To: Alameda County Health Care Services Agency Date: 1/12/2006  
 Environmental Health Service - Environmental Protection  
 1131 Harbor Bay Parkway, Suite 250 Job No: SJ89-99S-1.2005  
 Alameda, California 94502-6577

Attn: Jerry Wickham

We are sending the following items:

Date	Copies	Description
16-Jan-06	1	Quarterly Monitoring Report - Fourth Quarter 2005
		Shell-branded Service Station
		8999 San Ramon Road
		Dublin, CA

These are transmitted:

- For your Information   
  For action specified below   
  For review and comment   
  For your use   
  As requested

**Remarks**

Copies to: Denis Brown, Shell Oil Products US                      By: Lena Martinez  
 Isabel Mejia, Shell Oil Products US                                      Title: Project Manager Assistant/Chris

The information contained in this transmission is confidential and only intended for the addressee. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or action taken in reliance on the contents of this facsimile transmittal is strictly prohibited. If you have received this facsimile in error, please call us immediately to arrange for the return of these documents.

R02744



**Shell Oil Products US**

January 16, 2006

Re: **Quarterly Monitoring Report – Fourth Quarter 2005**  
**Shell-branded Service Station**  
**8999 San Ramon Road**  
**Dublin, California**

Dear Mr. Jerry Wickham:

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

Sincerely,  
Shell Oil Products US

A handwritten signature in black ink, appearing to read "Denis L. Brown", is written over a horizontal line.

Denis L. Brown  
Sr. Environmental Engineer

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January 16, 2006  
Project No. SJ89-99S-1.2005

Ms. Jerry Wickham  
Alameda County Health Care Services Agency  
Environmental Health Services – Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Re: **Quarterly Monitoring Report – Fourth Quarter 2005**  
**Shell-branded Service Station**  
**8999 San Ramon Road**  
**Dublin, California**

Dear Mr. Wickham:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared the following fourth quarter 2005 groundwater monitoring and sampling report for the above referenced site. Groundwater sampling was performed by Blaine Tech Services (Blaine) at the direction of Delta. A site location map is included as Figure 1.

#### **QUARTERLY GROUND WATER MONITORING PROGRAM**

Groundwater monitoring wells were gauged by Blaine on November 8, 2005. Depth to groundwater was measured in Wells MW-1 through MW-4. All site wells were dry this quarter. Since wells were installed in May 2005, depth to ground water has increased from approximately 20 feet to greater than 27 feet. A summary of well construction data is provided as Table 1. Well locations are shown on Figure 2.

Groundwater samples could not be collected this quarter due to all site wells being dry. Blaine's groundwater monitoring and sampling report, which includes historical groundwater elevation data, historical analytical results, and field data records for the current monitoring event, is included as Attachment A.

A member of:



**DISCUSSION**

Depth to groundwater in Wells MW-1 through MW-4 decreased by at least 2 to 3 feet since the previous quarter. The groundwater gradient on November 8, 2005 could not be established. Blaine will gauge and attempt to sample all site wells during the first quarter 2006. An additional hydraulic cycle (one year) of sampling should indicate if the groundwater typically fluctuates to a depth deeper than the existing site wells or if the fourth quarter 2005 monitoring event was an anomaly. Delta will include a discussion regarding water level fluctuation in the fourth quarter 2006 monitoring and sampling report.

Delta, on behalf of Shell, is performing an off-site groundwater investigation. An updated electronic site conceptual model (eSCM) will be issued to the Alameda County Health Care Services Agency by February 28, 2006.

**REMARKS**

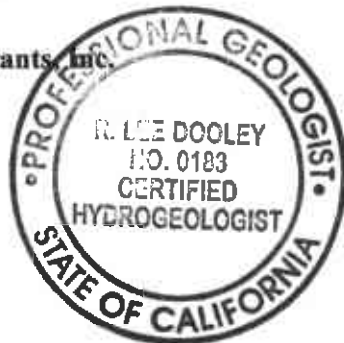
The information and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

Please call if you have any questions regarding the contents of this letter.

Sincerely,  
Delta Environmental Consultants, Inc.



R. Lee Dooley  
Senior Hydrogeologist  
CHG 0183



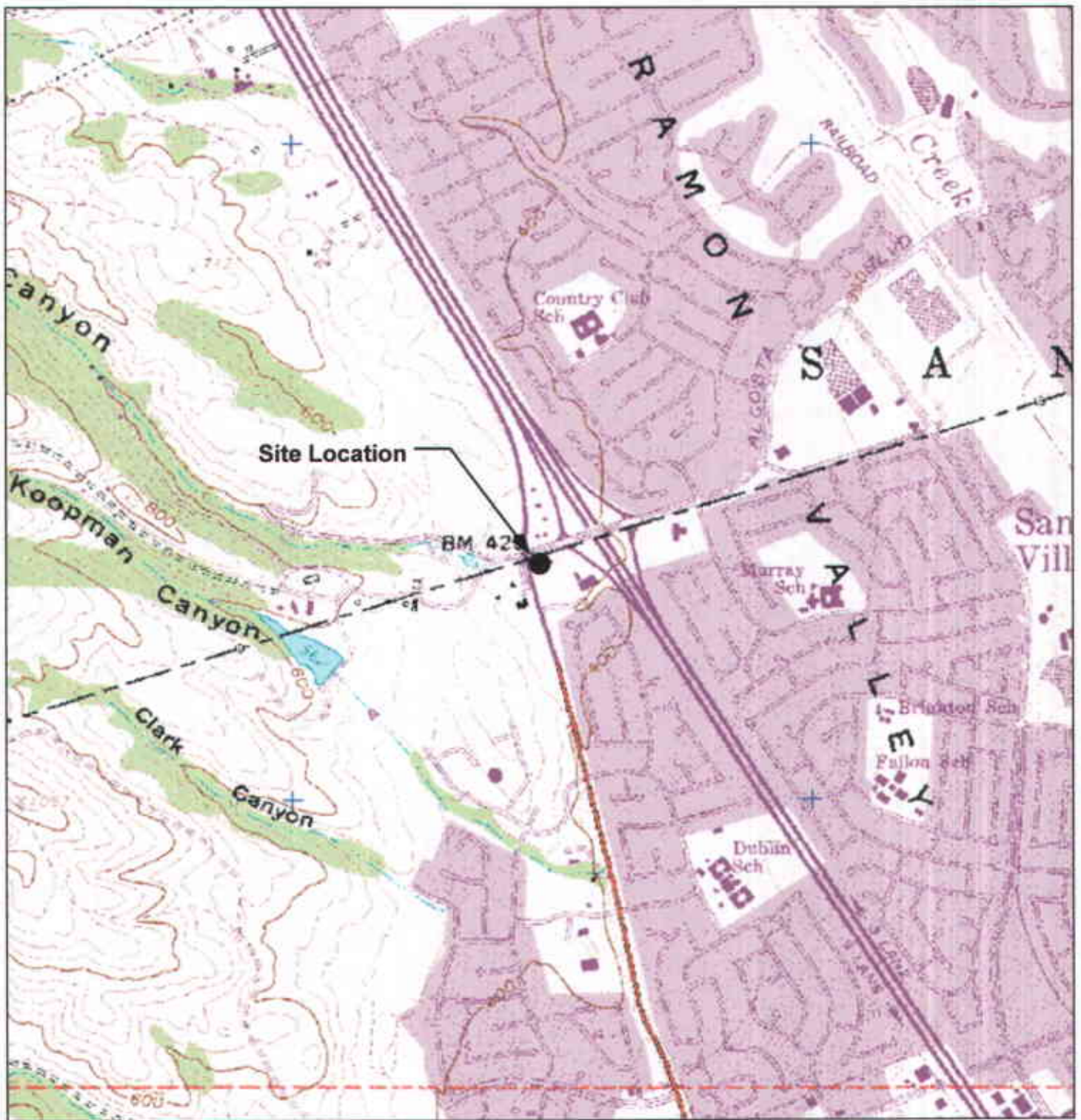
Attachments: Table 1 – Summary of Well Construction Data  
Figure 1 – Site Location Map  
Figure 2 – Groundwater Elevation Data Map, November 8, 2005

Attachment A – Groundwater Monitoring and Sampling Report, November 11, 2005

cc: Denis Brown, Shell Oil Products US, Carson

TABLE 1 Well Construction Data  
Shell-Branded Service Station at 8999 San Ramon Road, Dublin, CA

Well ID	Date Installed	Total Depth (feet)	Screen Interval (ft.)	Top of Casing Elevation (ft.)
MW-1	5/5/2005	27	23-27	420.06
MW-2	5/5/2005	27	23-27	418.88
MW-3	5/6/2005	26	21-25.5	417.24
MW-4	5/6/2005	27	23-27	420.52

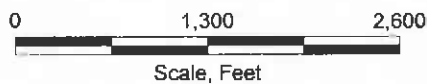


**GENERAL NOTES:**

Base Map from: 3-D TopoQuads DeLorme  
 Yarmouth, ME 04096 Source Data: USGS



QUADRANGLE LOCATION



**FIGURE 1**  
**SITE LOCATION MAP**

**SHELL-BRANDED SERVICE STATION**  
 8999 San Ramon Road  
 Dublin, California

PROJECT NO. SJ89-99S-1.2005	DRAWN BY V. F. 12/9/04
FILE NO. SJ89-99S-1.2004	PREPARED BY VF
REVISION NO.	REVIEWED BY



Alcosta Blvd.

North

UST Complex

San Ramon Road

(Dry)  
MW-4

Kiosk

(Dry)  
MW-3

(Dry)  
MW-1

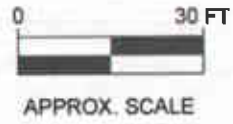
MW-2  
(Dry)

Storage

Car Wash

**LEGEND**

- MW-4 ● GROUNDWATER MONITORING WELL
- (Dry) WELL DRY



**FIGURE 2**  
**GROUNDWATER ELEVATION DATA MAP,**  
**NOVEMBER 8, 2005**  
**SHELL-BRANDED SERVICE STATION**  
**8999 San Ramon Road**  
**Dublin, California**

PROJECT NO. SJ89-99S-1.2005	DRAWN BY VF 11/28/04
FILE NO. SJ89-99S-1.2005	PREPARED BY VF
REVISION NO. 1	REVIEWED BY



**Attachment A**

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**GROUNDWATER MONITORING AND SAMPLING REPORT**



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**BLAINE**  
**TECH SERVICES INC.**

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GROUNDWATER SAMPLING SPECIALISTS  
SINCE 1985

November 11, 2005

Denis Brown  
Shell Oil Products US  
20945 South Wilmington Avenue  
Carson, CA 90810

Fourth Quarter 2005 Groundwater Monitoring at  
Former Shell Service Station  
8999 San Ramon Road  
Dublin, CA

Monitoring performed on November 8, 2005

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Groundwater Monitoring Report **051108-WC-2**

This report covers the routine monitoring of groundwater wells at this former Shell facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Mike Ninokata  
Project Coordinator

MN/ks

attachments: Cumulative Table of WELL CONCENTRATIONS  
Certified Analytical Report  
Field Data Sheets

cc: Vera Fischer  
Delta Environmental  
175 Bernal Road, Suite 200  
San Jose, CA 95119

**WELL CONCENTRATIONS**  
**Shell Service Station**  
**8999 San Ramon Road**  
**Dublin, CA**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-1	05/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.93	NA
MW-1	05/19/2005	<5,000	160 a	<50	<50	<50	<100	1,400	<200	<200	<200	57,000	420.06	20.70	399.36
MW-1	08/15/2005	<5,000	<50	<50	<50	<50	<100	360	<200	<200	<200	56,000	420.06	23.98	396.08
<b>MW-1</b>	<b>11/08/2005</b>	<b>Well dry</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>420.06</b>	<b>NA</b>	<b>NA</b>
MW-2	05/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.72	NA
MW-2	05/19/2005	<500	<50	<5.0	<5.0	<5.0	<10	11	<20	<20	<20	4,200	418.88	21.26	397.62
MW-2	08/15/2005	<1,000	<50	<10	<10	<10	<20	<10	<40	<40	<40	7,500	418.88	25.33	393.55
<b>MW-2</b>	<b>11/08/2005</b>	<b>Well dry</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>418.88</b>	<b>NA</b>	<b>NA</b>
MW-3	05/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.08	NA
MW-3	05/19/2005	<50	120 a	<0.50	<0.50	<0.50	<1.0	40	<2.0	<2.0	<2.0	6.5	417.24	19.08	398.16
MW-3	08/15/2005	<50	73	<0.50	<0.50	<0.50	<1.0	34	<2.0	<2.0	<2.0	<5.0	417.24	22.20	395.04
<b>MW-3</b>	<b>11/08/2005</b>	<b>Well dry</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>417.24</b>	<b>NA</b>	<b>NA</b>
MW-4	05/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.77	NA
MW-4	05/19/2005	97	59 a	0.66	<0.50	<0.50	<1.0	4.8	<2.0	<2.0	<2.0	8.2	420.52	19.85	400.67
MW-4	08/15/2005	67	<50	<0.50	<0.50	<0.50	<1.0	0.86	<2.0	<2.0	<2.0	<5.0	420.52	23.34	397.18
<b>MW-4</b>	<b>11/08/2005</b>	<b>Well dry</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>420.52</b>	<b>NA</b>	<b>NA</b>

**WELL CONCENTRATIONS**  
**Shell Service Station**  
**8999 San Ramon Road**  
**Dublin, CA**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8260B.

TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B

TBA = Tertiary butyl alcohol or tertiary butanol, analyzed by EPA Method 8260B

TOC = Top of Casing Elevation

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

NA = Not applicable

Notes:

a = Hydrocarbon reported does not match the pattern of the laboratory's Diesel standard.

b = Quantity of unknown hydrocarbon(s) in sample based on gasoline.

Site surveyed May 10, 2005 by Mid Coast Engineers.

WELLHEAD INSPECTION CHECKLIST

Date 11/8/05 Client Shell

Site Address 2999 San Ramon Rd, Dublin

Job Number \_\_\_\_\_ Technician Will

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	✓							
MW-2	✓							
MW-3	✓							
MW-4	✓							

NOTES: excellent condition

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## WELL GAUGING DATA

Project # 060103-WC-2 Date 01/05/06 Client Shell

Site 8999 San Ramon Valley Rd., Dublin

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC
MW-1	4					Dry	26.73	↓
MW-2	4					Dry	26.75*	
MW-3	4					24.11	24.34	
MW-4	4					25.19	26.39	
<p>* Depth to bottom verified with new water level indicator at 26.75. Depth to bottom taken on 11/8/05 was incorrect @ 22.81.</p>								

### SHELL WELL MONITORING DATA SHEET

BTS #: <u>051108-WC-2</u>	Site: <u>8999 San Ramon Rd, Dublin</u>
Sampler: <u>WC</u>	Date: <u>11/8/05</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>26.84</u>	Depth to Water (DTW): <u>      </u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>VC</u> Grade	D.O. Meter (if req'd): YSI HACH
<del>DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:</del>	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

\_\_\_\_\_ (Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<del>* Well dry, no purge or sample.</del>						

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time:      Depth to Water:
Sample I.D.:	Laboratory: STL Other _____
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
EB I.D. (if applicable): @ _____ Time	Duplicate I.D. (if applicable):
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV

## SHELL WELL MONITORING DATA SHEET

BTS #: <b>051108-WC-2</b>	Site: <b>8999 San Ramon Rd, Dublin</b>
Sampler:	Date: <b>11/8/05</b>
Well I.D.:	Well Diameter: 2 3 4 6 8 ____
Total Well Depth (TD): <b>22.81</b>	Depth to Water (DTW): $\longrightarrow$
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> <b>YSI</b> Grade	D.O. Meter (if req'd): <input type="checkbox"/> YSI <input type="checkbox"/> HACH
DTW with 80% Recharge [ <del>[(Height of Water Column x 0.20) + DTW]</del> ]:	

Purge Method:  Bailer  Disposable Bailer  Positive Air Displacement  Electric Submersible  Other \_\_\_\_\_

Watera:  Peristaltic  Extraction Pump  Other \_\_\_\_\_

Sampling Method:  Bailer  Disposable Bailer  Extraction Port  Dedicated Tubing  Other \_\_\_\_\_

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

(Gals.) X _____ = _____ Gals
1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* Well dry / no purge or sample						
Did well dewater? Yes <input type="checkbox"/> No <input type="checkbox"/>		Gallons actually evacuated: _____				
Sampling Date: _____		Sampling Time: _____		Depth to Water: _____		
Sample I.D.: _____				Laboratory: STL Other _____		
Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____			EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____			
Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____			D.O. (if req'd): Pre-purge: _____ mg/L Post-purge: _____ mg/L			
O.R.P. (if req'd): Pre-purge: _____ mV Post-purge: _____ mV						



**SHELL WELL MONITORING DATA SHEET**

BTS #: <u>051108-WC-2</u>	Site: <u>2999 San Ramon Rd, Dublin</u>
Sampler: <u>WC</u>	Date: <u>11/8/05</u>
Well I.D.: <u>MW-3</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD):	Depth to Water (DTW): <u>          </u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

~~DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:~~

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Other: _____	Water: Peristaltic Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
--	---	---

(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<del>X Well dry, no purge or sample</del>						

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory: STL Other
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
D.O. (if req'd): Pre-purge: <input type="text"/> mg/L	Post-purge: <input type="text"/> mg/L
O.R.P. (if req'd): Pre-purge: <input type="text"/> mV	Post-purge: <input type="text"/> mV

**SHELL WELL MONITORING DATA SHEET**

BTS #: <u>051108-WC-2</u>	Site: <u>8999 San Ramon Rd, Dublin</u>
Sampler: <u>WC</u>	Date: <u>11/8/05</u>
Well I.D.: <u>MW-4</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>26.53</u>	Depth to Water (DTW): <u>    </u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>    </u> Grade	D.O. Meter (if req'd): YSI HACH

~~DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:~~

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Watera Peristaltic Extraction Pump Other:	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other:
--	---	---

	(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>Well</u>	<u>Dry</u>					

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory: STL Other
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
D.O. (if req'd): Pre-purge: <u>    </u> mg/L	Post-purge: <u>    </u> mg/L
O.R.P. (if req'd): Pre-purge: <u>    </u> mV	Post-purge: <u>    </u> mV