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January 20, 2011

Mr. Paresh Khatri
Alameda County Health Care Services
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**Subject: RO0000289
2010 ANNUAL GROUNDWATER MONITORING REPORT,
OWENS-BROCKWAY GLASS CONTAINER FACILITY.
3600 ALAMEDA AVENUE, OAKLAND, CALIFORNIA.**

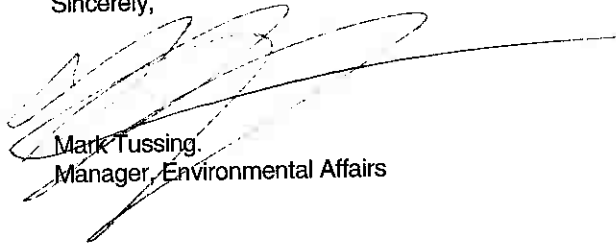
Dear Mr. Khatri:

Owens-Brockway Glass Container Inc. is pleased to submit the attached 2010 Annual Groundwater Monitoring Report for the above site.

I declare under penalty of perjury that the information and recommendations contained in the attached report are true and correct to the best of my knowledge.

If you need further information feel free to call me at (567) 336-8682.

Sincerely,



Mark Tussing
Manager, Environmental Affairs

**2010 GROUNDWATER MONITORING
REPORT**

**OWENS-BROCKWAY
GLASS CONTAINER FACILITY
OAKLAND, CALIFORNIA**



CKG Environmental, Inc.

P.O. Box 246
St. Helena, CA 94574

A Report Prepared for:

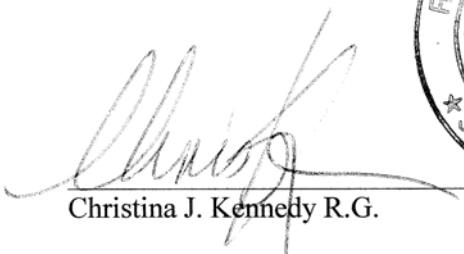
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Environmental Affairs
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**2010 GROUNDWATER MONITORING
REPORT**

**OWENS-BROCKWAY GLASS CONTAINER FACILITY,
OAKLAND, CALIFORNIA**

January 20, 2011

Prepared by:



Christina J. Kennedy R.G.



Principal

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1.0 EXECUTIVE SUMMARY

The Owens-Brockway glass manufacturing facility is located at 3600 Alameda Avenue in Oakland, California. The site is located to the north of the Oakland Estuary with Fruitvale Avenue to the west, a Home Depot to the east and residences to the north. Onsite facilities include the operating glass manufacturing plant, warehouses, offices and two former underground fuel storage tank areas.

Two underground fuel storage tank (UST) areas existed at the Oakland plant. The first UST area was located on the west side of the plant and included three fuel oil USTs. Impacts by fuel oil to the subsurface were observed when the associated USTs were removed. The second UST area was located near the central part of the plant adjacent to the compressor building. Originally there were four USTs in this area. When they were removed and replaced by two new USTs, a gasoline release to the subsurface was observed.

CKG compiled all the historic data for the site and completed a Cone Penetration Test (CPT) subsurface investigation and installed one offsite monitoring well. This data was used to refine our understanding of the distribution of petroleum hydrocarbons at the site and to evaluate the UST releases with respect to potential closure. A round of groundwater monitoring also was completed to comply with regulatory requirements and to evaluate the existence and distribution of the various types of petroleum hydrocarbons potentially present on and off site. In August 2009 a subsurface investigation was completed to address data gaps identified in a Site Conceptual Model prepared in April 2009.

The recent subsurface investigation and groundwater monitoring, as well as a review of historic data, shows that the petroleum hydrocarbon plumes at the site are stable and have attenuated substantially over time. The fuel oil release appears to extend off site. CKG recommends that Owens-Brockway submit this report to the Alameda County Health Agency.

2.0 INTRODUCTION

The following report presents the results and conclusions of the annual of groundwater monitoring in 2010. The work was performed in general accordance with CKG's proposal dated November 15, 2002 with slight modifications as discussed below.

2.1 SITE DESCRIPTION

The Owens-Brockway glass manufacturing facility is located at 3600 Alameda Avenue in Oakland, California, (Plate 1). The site is located to the north of the Oakland Estuary with Fruitvale Avenue to the west, a former retail center to the east and residences to the north. Onsite facilities include the operating glass manufacturing plant, warehouses, offices and two former underground fuel storage tank areas, (Plate 2).

Fuel Oil USTs

One UST site was located on the west side of the plant and included three former USTs, which were used to contain fuel oil. At the time these USTs were removed it was discovered that fuel oil had been released to the subsurface. Owens-Brockway excavated impacted soil at the time the USTs were removed. Floating product associated with the fuel oil release exists and past efforts to remove it have been unsuccessful. This lack of success is mainly due to the clay rich nature of the subsurface and the viscosity of the product. Groundwater monitoring has been ongoing sporadically for the last 16 years. A Geoprobe™ investigation completed in 1999 by Kennedy/Jenks Consultants included collecting groundwater samples from five locations off-site in the downgradient direction. Three of these samples were found to contain petroleum hydrocarbons. This petroleum hydrocarbon was identified to be Stoddard solvent, not fuel oil.

Gasoline USTs

The second UST area was located near the central part of the plant adjacent to the compressor building. Originally there were four USTs in the area. When they were removed and replaced by two new USTs a gasoline release to the subsurface was observed. Owens-Brockway excavated impacted soil at the time the USTs were removed. Groundwater monitoring has shown that the gasoline release has attenuated naturally.

3.0 GROUNDWATER MONITORING

3.1 GROUNDWATER GRADIENT

Depth to groundwater measurements were made on October 29, 2010, before the monitoring wells were sampled. Depth to static ground water was measured from a marked location at the top of the PVC casing. The depth of water was then subtracted from the elevation of the top of the well casing to provide a ground water elevation for each monitoring well. Plate 2 shows groundwater elevations and the interpreted groundwater flow direction. Based on the data measured on October 29 the groundwater flow direction is generally to the south-southwest. This groundwater flow direction has been observed in past monitoring events. The depth to water information suggests that groundwater is elevated at MW-2 however this reading may be in error or it may be skewed because of the presence of separate phase petroleum hydrocarbon product. Monitoring well construction details are presented in Table 1. Depth to water measurements and groundwater elevations are summarized in Table 2. Well sampling and purge logs are contained in Appendix A.

3.2 WELL SAMPLING

On October 29, 2010 a round of groundwater sampling in the monitoring wells was performed. Floating product was observed in MW-2, MW-5, MW-6, and MW-7 so they were not sampled. MW-9, which is located in the middle of the loading ramp, could not be safely accessed.

The wells were sampled using the following protocol.

- The depth-to-water was measured using a conductivity-based water level indicator.
- The volume of water standing in each well was calculated by subtracting the depth-to-water measurement from the total depth of the well, and multiplying by the appropriate volume conversion factor.
- A minimum of three well volumes of water was purged from each well using a centrifugal pump. The pump was decontaminated prior to use in each well by washing with TSP and rinsing with distilled water. Fresh tubing was used for each well

- Physical parameters of pH and temperature were monitored for stability during purging.
- Sample bottles, provided by the analytical laboratory were filled from a new clean disposable bailer at each well.
- Samples were immediately labeled and placed in an iced sample container. The samples were picked up by the analytical laboratory, under chain-of-custody control the following day.

3.3 CHEMICAL ANALYSIS

Groundwater samples were submitted under chain-of-custody to McCampbell Analytical Laboratory in Pacheco, California. McCampbell is a laboratory certified with the California Department of Health Services under the California Environmental Laboratory Accreditation Program (ELAP) for the requested analyses. The analytical program was completed in general accordance with CKG's proposal dated November 15, 2002. The chemical analyses performed include the following:

- Total Petroleum Hydrocarbons quantified as diesel, (TPHd,) motor oil (TPHmo) and gasoline (TPHg) by Modified EPA Method 8015 and;
- Benzene, Toluene, Ethylbenzene, xylenes, and MTBE by EPA Method 8020

3.4 INVESTIGATION DERIVED WASTES (IDW)

Investigation derived wastes (IDW) were generated during the investigation and included purge water. Purge water was placed into the on-site oil/water separator system.

4.0 FINDINGS

The following describes the results of the annual groundwater monitoring at the Owens-Brockway Glass Container facility in Oakland, California. Comparisons are made between the data and appropriate regulatory standards and risk based screening levels where they are available. Groundwater sample results are presented in Table 3. Analytical laboratory reports are included in Appendix B. Sample locations and pertinent data are presented on Plate 3.

4.1 SUMMARY OF GROUNDWATER RESULTS

4.1.1 Fuel Oil Release Area (MW-1, MW-2, MW-5, MW-6, MW-7, MW-8, MW-10, MW-19)

Petroleum hydrocarbons quantified as diesel/fuel oil, were detected in all of the water samples collected as summarized in Table 3. Diesel concentrations are shown and contoured on Plate 3. Detected TPHd concentrations in groundwater range from 100 to 640 µg/l. Absorbent socks are installed in MW-2, MW-5, MW-6, and MW-7. All four of these wells had measureable separate phase floating product in them as shown on Table 2 and Plate 2. Owens-Brockway was regularly changing the socks until a few years ago. They will reinstate the sock change program so that socks are changed monthly. At MW-2 socks will be changed weekly until the bulk of the measureable free product is removed. The estimated outline of the product plume is illustrated on Plate 3. In general the separate phase floating product was observed in more wells in 2010 than in the past. This increase in free phase product may be related to lower ground water elevations than observed in previous years, however, it may also be a function of the present management of the absorbent socks.

4.1.2 Gasoline Release Area (MW-13, MW-15, MW- 16, MW17, MW-20)

Petroleum hydrocarbons quantified as gasoline, were detected in one water sample as summarized in Table 3. TPHg was detected in MW-17 at 5,000 µg/l which was higher than observed over the last few years but may also reflect the very high concentration of diesel present in the well. TPH quantified as diesel/motor oil was detected at MW-17 at 610,000 µg/l

which was lower than that observed in 2009. An absorbent sock has been maintained in MW-17 since 2008.

5.0 CONCLUSIONS AND RECOMMENDATIONS

On the basis of the annual monitoring the following conclusions and recommendations can be made:

5.1 CONCLUSIONS

The recent groundwater monitoring, as well as a review of historic data, shows that the petroleum hydrocarbon plumes at the site are stable and have attenuated over time. Separate phase floating product occurred more in 2010 compared to past monitoring events but this may be a reflection of how the absorbent socks are managed in the wells. The fuel oil release appears to extend off site.

5.2 RECOMMENDATIONS

CKG recommends that Owens-Brockway submit this report to the Alameda County Health Agency.

6.0 REFERENCES

California Regional Water Quality Control Board – San Francisco Bay region, Order No 99-045, 1999

CKG Environmental, Inc. 2009 Groundwater Monitoring Report, Owens-Brockway Glass Container Facility, Oakland, California January 10, 2010.

CKG Environmental, Inc. 2008 Groundwater Monitoring Report, Owens-Brockway Glass Container Facility, Oakland, California January 8, 2009.

CKG Environmental, Inc. 2007 Groundwater Monitoring Report, Owens-Brockway Glass Container Facility, Oakland, California December 17, 2007.

CKG Environmental, Inc. 2006 Groundwater Monitoring Report, Owens-Brockway Glass Container Facility, Oakland, California January 12, 2006.

CKG Environmental, Inc. 2005 Groundwater Monitoring Report, Owens-Brockway Glass Container Facility, Oakland, California November 29, 2005.

CKG Environmental, Inc. 2005, Work Plan to Prepare a Site Conceptual Model, Owens-Brockway Glass Container Facility, Oakland, California. April 6, 2005.

CKG Environmental, Inc. 2004 Groundwater Monitoring Report, Owens-Brockway Glass Container Facility, Oakland, California April 29, 2004.

CKG Environmental, Inc. Summary of Remediation History and Groundwater Impact by Petroleum Hydrocarbons, Owens-Brockway Glass Container Facility, 3600 Alameda Avenue, Oakland, California. April 4, 2003.

CKG Environmental, Inc. Work Plan to Install One Monitoring Well and Assess the Distribution of Petroleum Hydrocarbons, Owens-Brockway Glass Container Facility, Oakland, California, April 22, 2003.

CKG Environmental, Inc. Data Compilation and Closure Report Underground Fuel Storage Tank Locations, Owens-Brockway Glass Container Facility, Oakland, California, November 4, 2003.

Exeltech, Soil and Groundwater Contamination Investigation for Owens-Illinois Glass Container Division, 3600 Alameda Avenue, Oakland, California, December 1986.

Exeltech, Soil and Groundwater Contamination Investigation for Owens-Illinois Glass Container Division, 3600 Alameda Avenue, Oakland, California, February 1987.

Kennedy/Jenks, Consultants. Groundwater investigation Report, Owens-Brockway Glass Containers, February 16, 1999.

Kennedy/Jenks, Consultants. Annual Groundwater Monitoring Report, Owens-Brockway Glass Containers, January 21, 2003.

7.0 LIMITATIONS

CKG Environmental, Inc. prepared this report in accordance with generally accepted standards of care, which exist in Northern California at this time. It should be recognized that definition and evaluation of geologic and environmental conditions is a difficult and an inexact science.

Conclusions and recommendations presented in this report are based on the results of the scope of work presented in our proposal dated November 15, 2002. This scope of work includes groundwater sampling at total of 10 wells, and quantitative analysis of groundwater samples conducted by McCampbell Analytical. Only work described herein was performed. As such CKG cannot render opinions on issues not resulting directly from the work performed.

Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present. More extensive studies, including additional subsurface investigations, may be performed to reduce uncertainties. If the client wishes to reduce the uncertainties of this investigation, CKG should be notified for additional consultation. No warranty, expressed or implied, is made.

This report may be used only by the client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both onsite and offsite) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the client who wishes to use this report shall notify CKG of such intended use. Based on the intended use of the report, CKG may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release CKG from any liability resulting from the use of this report by any unauthorized party.

TABLES

Table 1 Summary of Well Construction Details

Well Number	Date Installed	Top of Casing Elevation ^(a)	Top of Screen ^(b)	Screen Length	Well Depth ^(c)	Casing Diameter (inches)	Comments
MW-1	9/12/1986	16.02	8	21	29	2	
MW-2	12-Sep-86	17.11	10	20	30	2	
MW-3	12-Sep-86	15.46	10	20	39	2	Destroyed
MW-4	12-Sep-86	16.02	8.5	20	28.5	2	
MW-5	12-Sep-86	16.19	8.5	20	28.5	2	
MW-6	12-Sep-86	17.48	12.5	16	28.5	2	
MW-7	12-Sep-86	16.11	12.5	11	23.5	2	
MW-8	12-Sep-86	16.57	15	13.5	28.5	2	
MW-9	12-Sep-86	7.33 ^(d)	5	10	20	2	
MW-10	12-Sep-86	15.96	10	15	25	2	
MW-11	12-Sep-86	13.99	10	20	30	2	
MW-12	12-Sep-86	13.83	11	15	26	2	
MW-13	12-Sep-86	13.98	9.5	15	24.5	2	
MW-14	12-Sep-86	14.78	10	15	25	2	Destroyed
MW-15	12-Sep-86	15.16	9.5	20	29.5	2	
MW-16	12-Sep-86	13.48	10	14.5	24.5	2	
MW-17	12-Sep-86	14.17	9.5	15	24.5	2	
MW-18	12-Sep-86	14.89	9	15	24	2	Destroyed
MW-19	01-May-03	NA	10	15	25	2	
MW-20	01-Dec-00	12.74	6.9	15	21.9	2	
R-1	1987	NM ^(e)	NA ^(f)	NA	24	36	Destroyed
R-2	1989	NM	NA	NA	NA	12	Destroyed

(a) Top of casing elevation (TOCE) except where noted; measured in feet above US Coast and Geodetic Datum (mean sea level). Elevations measured by Exceltech in 1986, and by PLS Surveys for MW-20 in 2000.

(b) Depth to top of screened interval (feet below top of casing)

(c) Depth to bottom of screened interval (feet below top of casing)

(d) Well casing was not measured for this well; well is located beneath forklift ramp and this measurement is the ground surface elevation in MSL.

(e) NM = Not measured

(f) NA = Not available

Table 2 Groundwater Depths and Elevation October 29, 2010

Well Number	Date Installed	Top of Casing Elevation ^(a)	Depth to Water	Product thickness (ft)*	Groundwater Elevation
MW-1	9/12/1986	16.02	8.19		7.83
MW-2	12-Sep-86	17.11	13.88	1.25	4.23
MW-4	12-Sep-86	16.02	NM		
MW-5	12-Sep-86	16.19	11.46	0.04	4.77
MW-6	12-Sep-86	17.48	12.69	0.05	4.83
MW-7	12-Sep-86	16.11	12.3	0.03	3.84
MW-8	12-Sep-86	16.57	9.38		7.19
MW-9	12-Sep-86	7.33 ^(d)	NM		
MW-10	12-Sep-86	15.96	8.55		7.41
MW-11	12-Sep-86	13.99	NM		
MW-12	12-Sep-86	13.83	NM		
MW-13	12-Sep-86	13.98	10.19		3.79
MW-15	12-Sep-86	15.16	11.75		3.41
MW-16	12-Sep-86	13.48	9.13		4.35
MW-17	12-Sep-86	14.17	9.09		5.08
MW-19	01-May-03	NA	11.84		
MW-20	01-Dec-00	12.74	8.48		4.26

(a) Top of casing elevation (TOCE) except where noted; measured in feet above US Coast and Geodetic Datum (mean sea level). Elevations measured by Exceltech in 1986, and by PLS Surveys for MW-20 in 2000.

(d) Well casing was not measured for this well; well is located beneath forklift ramp and this measurement is the ground surface elevation in MSL.

(e) NM = Not measured

(f) NA = Not available

* In the case where separate phase product is measured, groundwater elevation is corrected assuming a fuel oil with product density of 0.893

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

MW-1	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
	9/23/1986	<10	<10	NA	<10	<.01	<.01	25,000
	4/9/1987	<10	<10	NA	<10	<.01	NA	NA
	9/16/1987	not accessible						
	12/1/1987	not accessible						
	3/7/1988	not accessible						
	6/8/1988	not accessible						
	9/14/1988	not accessible						
	9/16/1997	<0.5	<0.5	<0.5	<0.5	190 ^(a)	<50	NA
	11/2/1998	<0.5	<0.5	<0.5	<0.5	160 ^(a)	<50	NA
	12/11/2001	not accessible						
	12/6/2002	<0.5	<0.5	<0.5	<0.5	69 ^(a)	<50	NA
	3/15/2004	not accessible						
	6/30/2005	not accessible						
	10/19/2006	<0.5	<0.5	<0.5	<0.5	5400	120	3300
	10/17/2007	not accessible						
	10/21/2008	<0.5	<0.5	<0.5	<0.5	2000	69	1300
	10/16/2009	<0.5	<0.5	<0.5	<0.5	310	<50	310
	10/29/2010	<0.5	<0.5	<0.5	<0.5	100	<50	<250
MW-2	4/9/1987	floating product						
	9/16/1987	floating product						
	12/1/1987	floating product						
	3/7/1988	floating product						
	6/8/1988	floating product						
	9/14/1988	floating product						
	9/16/1997	floating product						
	11/2/1998	floating product						
	12/11/2001	floating product						
	12/6/2002	floating product						
	3/15/2004	floating product						
	6/30/2005	<0.5	<0.5	<0.5	<0.5	1,600,000	2900	1,200,000
	9/11/2006	<2.5	4.4	19	60	830,000	13000 ^(b)	530,000
	10/17/2007	floating product (1.25 feet)						
	10/21/2008	floating product						
	10/16/2009	floating product						
	10/29/2010	floating product (1.25 feet)						
MW-3	9/23/1986	<10	<10	NA	<10	NA	<10	18
	4/9/1987	BDL	BDL	NA	BDL	NA	370	NA
	9/16/1987	floating product						
	12/1/1987	floating product						
	3/7/1988	NA	NA	NA	NA	190,000	NA	NA
	6/8/1988	NA	NA	NA	NA	16,000	NA	NA
	9/14/1988	floating product Destroyed						

NOTES:

- TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l B - Benzene in ug/l X - Xylenes in ug/l
 TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l T - Toluene in ug/l E - Ethylbenzene in ug/l
 TOG - Total Oil and Grease in ug/l TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)
 BDL - Below detection limit NA - Not analyzed
 (a) - Quantified as diesel but chromatogram did not match diesel pattern
 (b) - Quantified as gasoline but chromatogram did not match gasoline pattern

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-4	9/23/1986	<5	<5	NA	<5	NA	20	7,200
	4/9/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	9/16/1987	BDL	BDL	NA	BDL	660	1.3	NA
	12/1/1987	BDL	BDL	NA	8.9	100	BDL	NA
	3/7/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	6/8/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	9/14/1988	BDL	BDL	NA	BDL	100	BDL	NA
	Destroyed							
MW-5	10/3/1986	<5	<5	NA	6.6	NA	1400	24,000
	4/9/1987	<5	<5	NA	<5	NA	54	NA
	9/16/1987	NA	NA	NA	NA	960	NA	NA
	12/1/1987	NA	NA	NA	NA	2000	NA	NA
	3/9/1988	NA	NA	NA	NA	<50	NA	NA
	6/8/1988	NA	NA	NA	NA	12,000	NA	NA
	9/14/1988	NA	NA	NA	NA	6,300	NA	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	11,600	<50	NA
	11/2/1998	floating product						
	12/6/2000	<0.5	<0.5	<0.5	<0.5	11,700 ^(a)	1000	NA
	12/12/2001	<0.5	<0.5	<0.5	<0.5	10,000 ^(a)	360 ^(b)	NA
	12/6/2002	<0.5	<0.5	<0.5	<0.5	5,200 ^(a)	150 ^(b)	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	46,000 ^(a)	180 ^(b)	NA
	6/30/2005	<0.5	<0.5	<0.5	<0.5	34,000	100	26,000
	9/11/2006	<0.5	<0.5	<0.5	<0.5	45,000	300 ^(a)	33,000
	10/17/2007	<0.5	<0.5	<0.5	<0.5	34,000	120	31,000
10/21/2008	<0.5	<0.5	<0.5	<0.5	13,000	150	11,000	
10/16/2009	<0.5	<0.5	<0.5	<0.5	160,000	180	140,000	
10/29/2010	Floating product (0.04 ft)							
MW-6	4/9/1987	floating product						
	9/16/1987	NA	NA	NA	NA	400,000	NA	NA
	12/1/1987	NA	NA	NA	NA	30,000	NA	NA
	3/7/1988	NA	NA	NA	NA	9,800	NA	NA
	6/8/1988	NA	NA	NA	NA	63,000	NA	NA
	9/14/1988	NA	NA	NA	NA	140,000	NA	NA
	9/16/1997	floating product						
	11/2/1998	floating product						
	12/11/2001	floating product						
	12/6/2002	floating product						
	3/15/2004	floating product						
	6/30/2005	<0.5	<0.5	<0.5	<0.5	270,000	300	200,000
	9/11/2006	<0.5	<0.5	<0.5	<0.5	100,000	700 ^(a)	77,000
	10/17/2007	<1	<1	<1	11.00	290,000	3400	190,000
	10/21/2008	<1	<1	<1	<1	38,000	330	28,000
10/16/2009	<0.5	<0.5	<0.5	<0.5	98,000	490	89,000	
10/29/2010	floating product (0.05 ft)							

NOTES:

TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l

B - Benzene in ug/l

X - Xylenes in ug/l

TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l

T - Toluene in ug/l

E - Ethylbenzene in ug/l

TOG - Total Oil and Grease in ug/l

TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)

BDL - Below detection limit

NA - Not analyzed

(a) - Quantified as diesel but chromatogram did not match diesel pattern

(b) - Quantified as gasoline but chromatogram did not match gasoline pattern

December 10, 2010

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-7	10/3/1986	<5	<5	NA	<5	NA	260	8,000
	4/9/1987	floating product						
	9/16/1987	NA	NA	NA	NA	790,000	NA	NA
	12/1/1987	NA	NA	NA	NA	5,300	NA	NA
	3/9/1988	NA	NA	NA	NA	<50	NA	NA
	6/9/1988	NA	NA	NA	NA	12,000	NA	NA
	9/14/1988	NA	NA	NA	NA	67,000	NA	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	37,000 ^(a)	850	NA
	11/2/1998	floating product						
	12/6/2000	<5	<.05	<.05	1.90	3,580 ^(a)	540	NA
	12/12/2001	<1	<1	<1	<1	12,600 ^(a)	1200 ^(b)	NA
	12/6/2002	<0.5	<0.5	<0.5	<0.5	27,600 ^(a)	480 ^(b)	NA
	3/15/2004	<0.5	<0.5	0.57	1.10	170,000 ^(a)	890 ^(b)	NA
	6/30/2005	<.05	<.05	3.1	<.05	290,000	3000	150,000
	9/11/2006	<5	<5	<5	<5	310,000	6600 ^(a)	150,000
	10/17/2007	<1	<1	<1	2.70	330,000	1900	190,000
	10/21/2008	<1	<1	<1	<1	82,000	1100	43,000
10/16/2009	<5	<5	<5	<5	60,000	2200	35,000	
10/29/2010	floating product (0.03 ft)							
MW-8	10/23/1986	<0.2	<0.2	NA	<1	NA	1300	14,000
	4/9/1987	<0.5	<0.2	NA	<1	NA	73	NA
	9/16/1987	floating product						
	12/1/1987	NA	NA	NA	NA	630	NA	NA
	3/9/1988	NA	NA	NA	NA	2,600	NA	NA
	6/9/1988	NA	NA	NA	NA	1,700	NA	NA
	9/14/1988	NA	NA	NA	NA	150	NA	NA
	8/12/1997	floating product						
	9/16/1997	<0.5	<0.5	<0.5	<0.5	290 ^(a)	<50	NA
	11/2/1998	<0.5	<0.5	<0.5	<0.5	1,300 ^(a)	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	160 ^(a)	<50	NA
	12/12/2001	<0.5	<0.5	<0.5	<0.5	<50	<50	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	170 ^(a)	55 ^(b)	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	3,000 ^(a)	320 ^(b)	NA
	6/30/2005	<0.5	<0.5	<0.5	<0.5	4,600	1100	1,400
	9/11/2006	<0.5	<0.5	<0.5	2.1	1800	1200	760
	10/17/2007	<0.5	<0.5	<0.5	<0.5	1,300	390	2,100
10/21/2008	<0.5	<0.5	<0.5	<0.5	380	74	470	
10/16/2009	<0.5	<0.5	<0.5	<0.5	340	280	<250	
10/29/2010	<0.5	<0.5	<0.5	<0.5	84	150	<250	

NOTES:

- TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l B - Benzene in ug/l X - Xylenes in ug/l
 TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l T - Toluene in ug/l E - Ethylbenzene in ug/l
 TOG - Total Oil and Grease in ug/l TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)
 BDL - Below detection limit NA - Not analyzed
 (a) - Quantified as diesel but chromatogram did not match diesel pattern
 (b) - Quantified as gasoline but chromatogram did not match gasoline pattern

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-9	4/9/1987	floating product						
	9/16/1987	NA	NA	NA	NA	1,300	NA	NA
	12/1/1987	NA	NA	NA	NA	18,000	NA	NA
	3/9/1988	NA	NA	NA	NA	47,000	NA	NA
	6/8/1988	floating product						
	9/14/1988	floating product						
	9/16/1997	<13	<13	<13	18.00	28,000 ^(a)	6000	NA
	11/2/1998	floating product						
	12/6/2000	<5	<.5	<.5	<.5	102,000 ^(a)	790	NA
	12/12/2001	innaccessible						
	12/5/2002	innaccessible						
	3/15/2004	innaccessible						
	6/30/2005	innaccessible						
	9/11/2006	innaccessible						
	10/17/2007	innaccessible						
	10/21/2008	innaccessible						
	10/16/2009	innaccessible						
10/29/2010	innaccessible							
MW-10	10/23/1986	<0.2	<0.2	NA	<0.2	NA	380	7,200
	4/9/1987	<0.2	<0.2	NA	<0.2	NA	300	NA
	9/16/1987	NA	NA	NA	NA	3,800	NA	NA
	12/1/1987	NA	NA	NA	NA	590	NA	NA
	3/8/1988	NA	NA	NA	NA	<50	NA	NA
	6/8/1988	NA	NA	NA	NA	3,800	NA	NA
	9/14/1988	NA	NA	NA	NA	570	NA	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	1,300 ^(a)	<50	NA
	11/2/1998	<0.5	<0.5	<0.5	<0.5	1400 ^(a)	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	0.70	730 ^(a)	150	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	630 ^(a)	210 ^(b)	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	840 ^(a)	210 ^(b)	NA
	3/15/2004	<0.5	<0.5	<0.5	0.8	2,500 ^(a)	160 ^(b)	NA
	6/30/2005	<0.5	<0.5	<0.5	<0.5	2900	140	2300
	9/11/2006	<0.5	<0.5	<0.5	0.81	3400	270	2600
	10/17/2007	<0.5	<0.5	<0.5	<0.5	1700	140	1500
	10/21/2008	<0.5	<0.5	<0.5	<0.5	2300	240	1500
10/16/2009	<0.5	<0.5	<0.5	<0.5	4700	110	4600	
10/29/2010	<0.5	<0.5	<0.5	<0.5	640	190	530	
MW-11	9/23/1986	<0.4	<0.4	NA	1.4	NA	<8	1,200
	4/9/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	9/16/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	12/1/1987	0.8	BDL	NA	10	NA	BDL	NA
	3/7/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	6/8/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	9/14/1988	BDL	BDL	NA	BDL	100,000	BDL	NA
		Destroyed						

NOTES:

TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l B - Benzene in ug/l X - Xylenes in ug/l
 TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l T - Toluene in ug/l E - Ethylbenzene in ug/l
 TOG - Total Oil and Grease in ug/l TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)
 BDL - Below detection limit NA - Not analyzed
 (a) - Quantified as diesel but chromatogram did not match diesel pattern
 (b) - Quantified as gasoline but chromatogram did not match gasoline pattern

December 10, 2010

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-12	9/23/1986	0.49	1	NA	1.3	NA	100	2,500
	4/9/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	9/16/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	12/1/1987	BDL	BDL	NA	13	NA	BDL	NA
	3/7/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	6/8/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	9/14/1988	BDL	BDL	NA	BDL	120	BDL	NA
	6/30/2005	Destroyed						
MW-13	12/24/1986	<0.2	<0.9	NA	<0.9	NA	<10	57,000
	4/9/1987	<5	<5	NA	<5	NA	<10	NA
	9/16/1987	<5	<5	NA	<5	NA	<10	NA
	12/1/1987	1.6	<5	NA	12	NA	<10	NA
	3/8/1988	<5	<5	NA	<5	<50	7.7	NA
	6/8/1988	<5	<5	NA	<5	<50	<10	NA
	9/14/1988	<5	<5	NA	<5	130	<10	NA
	9/16/1997	<5	<5	<5	<5	120 ^(a)	<50	NA
	11/2/1998	<5	<5	<5	<5	120 ^(a)	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	200 ^(a)	<50	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	91 ^(a)	<50	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	190 ^(a)	<50	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	<50	<50	NA
	6/30/2005	<1.0	<1.0	<1.0	<1.0	56	<50	<250
	9/11/2006	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	10/17/2007	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
10/21/2008	<0.5	<0.5	<0.5	<0.5	<50	<50	<250	
10/16/2009	<0.5	<0.5	<0.5	<0.5	<50	<50	<250	
10/29/2010	<0.5	<0.5	<0.5	<0.5	<50	<50	<250	
MW-14	9/23/1986	<0.4	<0.2	NA	<0.2	NA	<8	3,200
	4/9/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	9/16/1987	BDL	BDL	NA	BDL	56	1.7	NA
	12/1/1987	1.2	4	NA	10	66	BDL	NA
	3/7/1988	BDL	BDL	NA	BDL	BDL	20	NA
	6/8/1988	inaccessible						
	9/14/1988	inaccessible						
		Destroyed						

NOTES:

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 TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l T - Toluene in ug/l E - Ethylbenzene in ug/l
 TOG - Total Oil and Grease in ug/l TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)
 BDL - Below detection limit NA - Not analyzed
 (a) - Quantified as diesel but chromatogram did not match diesel pattern
 (b) - Quantified as gasoline but chromatogram did not match gasoline pattern

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-15	12/24/1986	<0.2	<0.9	NA	9.20	NA	120	1,600
	4/9/1987	<5	<5	NA	<5	NA	<0.5	NA
	9/16/1987	<5	<5	NA	<5	<100	8.4	NA
	12/1/1987	3.30	0.84	NA	14	NA	<0.5	NA
	3/8/1988	0.80	<5	NA	<5	<100	90	NA
	6/9/1988	<5	<5	NA	<5	<100	53	NA
	9/14/1988	NA	NA	NA	NA	100	NA	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	127 ^(a)	<50	NA
	11/2/1998	<0.5	<0.5	<0.5	<0.5	340 ^(a)	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	400 ^(a)	<50	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	290 ^(a)	<50	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	440 ^(a)	<50	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	<50	<50	NA
	6/30/2005	<0.5	<0.5	<0.5	<0.5	240	<50	360
	9/11/2006	<0.5	<0.5	<0.5	<0.5	56	<50	<250
	10/17/2007	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
10/21/2008	<0.5	<0.5	<0.5	<0.5	<50	<50	<250	
10/16/2009	<0.5	<0.5	<0.5	<0.5	55	<50	<250	
10/29/2010	<0.5	<0.5	<0.5	<0.5	<50	<50	<250	
MW-16	12/24/1986	<0.2	<0.9	NA	<.9	NA	<10	1,200
	4/9/1987	<5	<5	NA	<5	NA	<.5	NA
	9/16/1987	<5	<5	NA	<5	64	<.5	NA
	12/1/1987	1.00	0.37	NA	9.1	150	120	NA
	3/7/1988	0.50	<5	NA	<5	<100	10	NA
	6/8/1988	<5	<5	NA	<5	<100	<0.5	NA
	9/14/1988	<5	<5	NA	<5	190	<0.5	NA
	9/16/1997	floating product						
	12/6/2000	<0.5	<0.5	<0.5	<0.5	97 ^(a)	<50	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	<50	<50	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	51 ^(a)	<50	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	63	<50	NA
	6/30/2005	<0.5	<0.5	<0.5	<0.5	66	<50	<250
	9/11/2006	<0.5	<0.5	<0.5	<0.5	140	<50	550
	10/17/2007	<0.5	<0.5	<0.5	<0.5	92	<50	290
	10/21/2008	<0.5	<0.5	<0.5	<0.5	76	<50	<250
10/16/2009	<0.5	<0.5	<0.5	<0.5	780	<50	910	
10/29/2010	<0.5	<0.5	<0.5	<0.5	390	<50	1500	

NOTES:

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 TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l T - Toluene in ug/l E - Ethylbenzene in ug/l
 TOG - Total Oil and Grease in ug/l TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)
 BDL - Below detection limit NA - Not analyzed
 (a) - Quantified as diesel but chromatogram did not match diesel pattern
 (b) - Quantified as gasoline but chromatogram did not match gasoline pattern

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-17	12/24/1986	5	1.20	NA	14.00	NA	240	2,400
	4/9/1987	<5	<5	NA	<5	NA	<0.5	NA
	9/16/1987	<5	<5	NA	0.55	680	44	NA
	12/1/1987	7.80	2.40	NA	28	1,300	540	NA
	3/8/1988	83.00	<5	NA	46	3,800	4300	NA
	6/8/1988	inaccessible						
	9/14/1988	<0.5	<0.5	<0.5	<0.5	64,000	54000	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	119,600 ^(a)	1900	NA
	11/2/1998	<0.5	<0.5	<0.5	0.60	16,000 ^(a)	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	47,800 ^(a)	340	NA
	12/11/2001	<10	<10	<10	<10	101,000 ^(a)	5300 ^(b)	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	71,000 ^(a)	700 ^(b)	NA
	3/15/2004	2.1	0.71	<0.5	1.5	660,000 ^(a)	1400 ^(b)	NA
	6/30/2005	<0.5	2.4	<0.5	1.1	1,600,000	1700	NA
	re-test	9/11/2006	<2.5	36	9.50	79	2,300,000	26,000
10/19/2006		5.90	<1.0	<1.0	3.7	1,100,000	1,600	480,000
10/17/2007		<2.5	<2.5	<2.5	<2.5	710,000	4,400	270,000
10/21/2008		<2.5	<2.5	<2.5	<2.5	330,000	3,300	130,000
10/16/2009		<1.0	2.9	<1.0	<1.0	900,000	2,400	350,000
10/29/2010		<5.0	5.0	0.92	12	610,000	5,000	360,000
MW-18	9/23/1986	<0.3	<0.3	NA	0.99	NA	<20	1,600
	4/9/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	9/16/1987	BDL	BDL	NA	BDL	480	BDL	NA
	12/1/1987	BDL	BDL	NA	6.6	180	BDL	NA
	3/7/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	6/8/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	9/14/1988	BDL	BDL	NA	BDL	190	BDL	NA
	Destroyed							
MW-19	6/23/2004	<0.5	<0.5	<0.5	<0.5	1,100	480	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	1,100 ^(a)	330 ^(b)	NA
	6/30/2005	<0.5	<0.5	1.5	4.5	1700	840	350
	9/18/2006	<0.5	<0.5	<0.5	0.83	890	280	280
	10/17/2007	<0.5	<0.5	<0.5	0.61	1200	880	<250
	10/21/2008	<0.5	<0.5	<0.5	<0.5	300	340	<250
	10/16/2009	<0.5	<0.5	<0.5	<0.5	440	390	<250
	10/29/2010	<0.5	<0.5	<0.5	0.95	460	670	<250

NOTES:

TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l

B - Benzene in ug/l

X - Xylenes in ug/l

TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l

T - Toluene in ug/l

E - Ethylbenzene in ug/l

TOG - Total Oil and Grease in ug/l

TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)

BDL - Below detection limit

NA - Not analyzed

(a) - Quantified as diesel but chromatogram did not match diesel pattern

(b) - Quantified as gasoline but chromatogram did not match gasoline pattern

**Table 3 Summary of Groundwater Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA**

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-20	12/11/2000	<0.5	<0.5	<0.5	<0.5	110 ^(a)	<50	NA
	4/6/2001	<0.5	<0.5	<0.5	<0.5	57 ^(a)	<50	NA
	7/6/2001	<0.5	<0.5	<0.5	<0.5	120 ^(a)	<50	NA
	9/19/2001	<0.5	<0.5	<0.5	<0.5	160 ^(a)	<50	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	82 ^(a)	86 ^(b)	NA
	2/6/2002	<0.5	<0.5	<0.5	<0.5	85 ^(a)	<50	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	<0.5	<50	NA
	6/30/2005	<0.5	<0.5	<0.5	<0.5	<500	<50	NA
	9/11/2006	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	10/17/2007	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	10/21/2008	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	10/16/2009	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	10/29/2010	<0.5	<0.5	<0.5	<0.5	<50	<50	<250

NOTES:

TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l

B - Benzene in ug/l

X - Xylenes i

TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l

T - Toluene in ug/l

E - Ethylbenzene in ug/l

TOG - Total Oil and Grease in ug/l

TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)

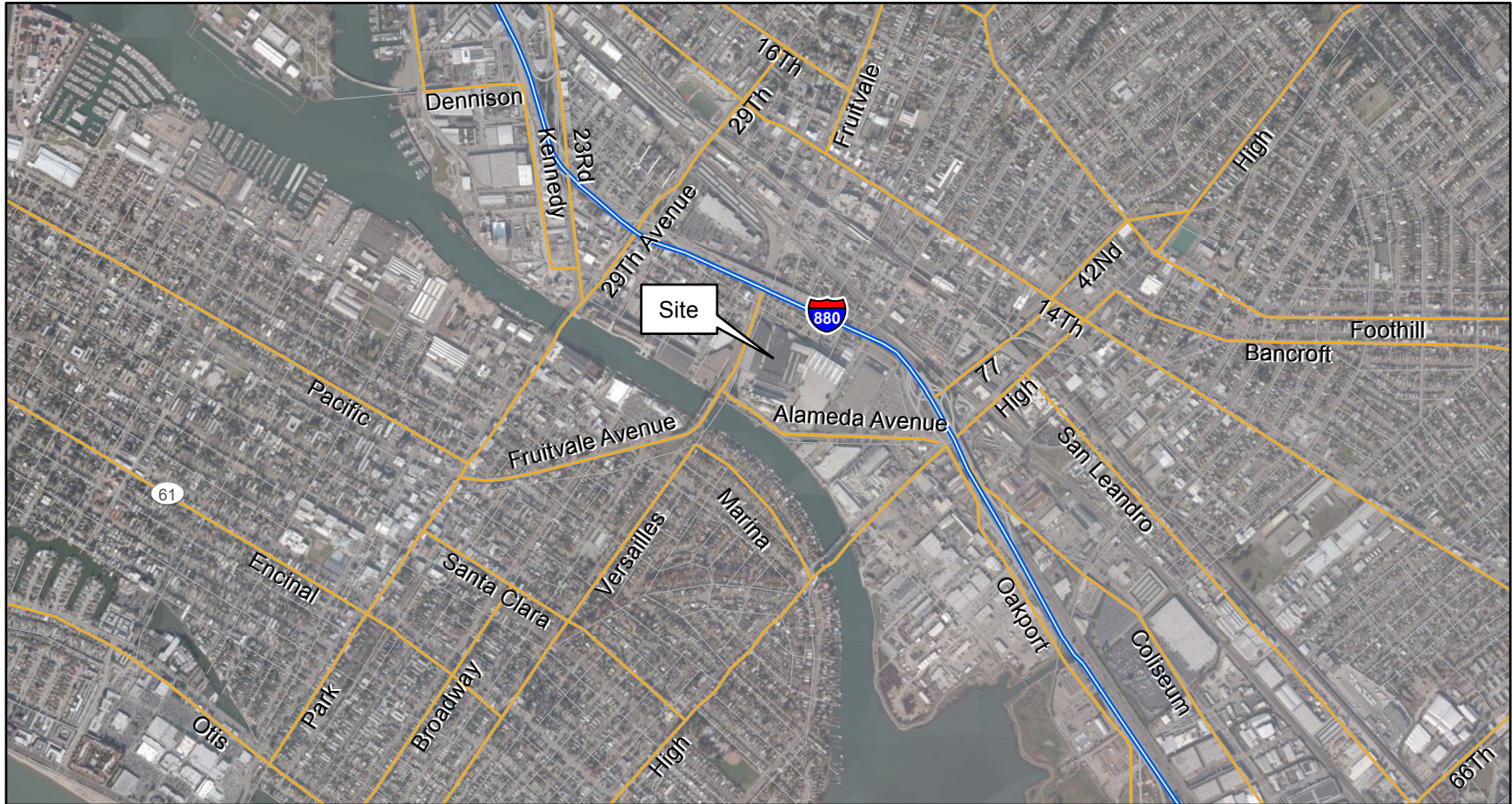
BDL - Below detection limit

NA - Not analyzed

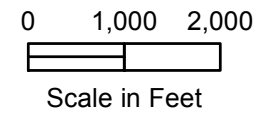
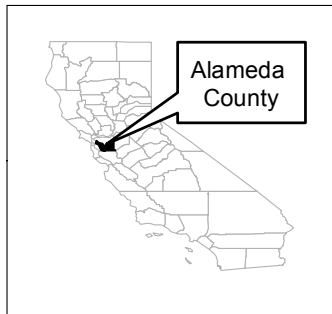
(a) - Quantified as diesel but chromatogram did not match diesel pattern

(b) - Quantified as gasoline but chromatogram did not match gasoline pattern

PLATES



Drawn by A. Llewellyn. December 2010. Base layers are unmodified Alameda County Digital Data Sets.



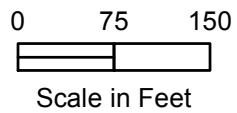
CKG Environmental, Inc.

Site Location Map
 Owens-Brockway Glass Container Facility
 3600 Alameda Avenue, Oakland, California

PLATE
1



Drawn by A. Llewellyn. December 2010, Base layers are unmodified Pictometry Digital Data Sets.



EXPLANATION

- MW-20 ● Monitoring Well
- Line of Equal Groundwater Elevation
- 4.26 Groundwater Elevation

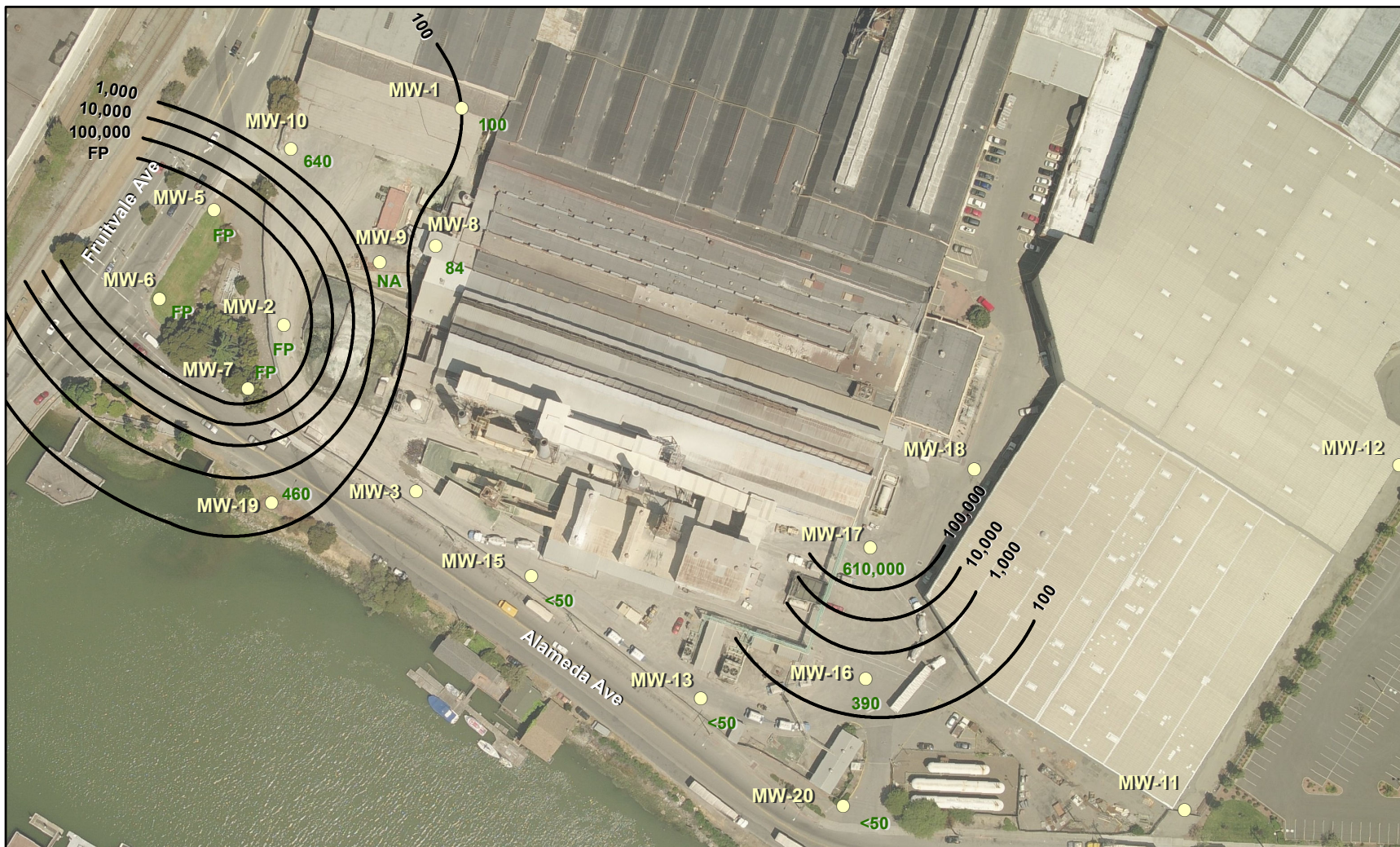


CKG Environmental, Inc.

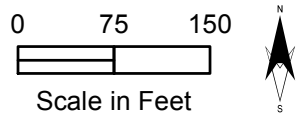
Groundwater Elevation Contour Map
 October 29, 2010
 Owens-Brockway Glass Container Facility
 3600 Alameda Avenue, Oakland California

PLATE

2



Drawn by A. Llewellyn, December 2010. Base layers are unmodified Pictometry Digital Data Sets.



EXPLANATION

- MW-20 ● Monitoring Well
- Line of Equal Fuel Oil Concentration
- 460 TPHd result (µg/L)
- FP Floating Product

Fuel Oil/Diesel Contour Map
October 29, 2010

PLATE

Owens-Brockway Glass Container Facility
3600 Alameda Avenue, Oakland California

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CKG Environmental, Inc.

APPENDIX A

WELLHEAD INSPECTION CHECKLIST

Date 10/29/10 Client SKG

Site Address 3600 ALAMEDA AVE, OAKLAND, CA

Job Number 101029-nw1 Technician MW

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							X	
MW-2				X			X	
MW-5							X	
MW-6	X							
MW-7	X							
MW-8	X							
MW-10							X	
MW-13	X							
MW-15	X							
MW-16							X	
MW-17	X							
MW-19	X							
MW-20							X	

NOTES: MW-1: MISSING LID (6"); currently has 6" metal plate.
 MW-2: 1/2 BOLTS MISSING. MW-5: ~~NO LID (EMCO) (12")~~ 2 1/2 BOLTS MISSING.
 MW-10: BROKEN 6" CHRISTY LID. MW-16: 2 1/2 BOLTS MISSING.
 MW-20: 1/2 TABS BROKEN. 1/2 BOLTS MISSING

WELL MONITORING DATA SHEET

Project #: 1010 29-ww1	Client: <i>Chk</i>
Sampler: <i>R</i>	Date: 10-29-10
Well I.D.: <i>MW-1</i>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth (TD): <i>29.08</i>	Depth to Water (DTW): <i>8.19</i>
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]: <i>12.51</i>	

Purge Method: <u>Bailer</u> Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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$3.5 \text{ (Gals.)} \times 3 = 10.5 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1420	17.6	7.92	811	950	3.5	
1428	17.2	7.84	792	958	7.0	
1436	17.0	7.56	796	157	10.5	
— well		DEWATERED		@ 11	GALLONS	
1500	17.0	7.79	781	98	—	

Did well dewater? Yes No Gallons actually evacuated: *11*

Sampling Date: 10-29-10 Sampling Time: *2:28* @ 1500 Depth to Water: *8.81*

Sample I.D.: *MW-1* Laboratory: Kiff CalScience Other: *MCCAMPBELL*

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: *see SON*

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: 101029-ww1	Client: CRG
Sampler: ww	Date: 10/29/10
Well I.D.: Mw-2	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 13.88
Depth to Free Product: 12.63	Thickness of Free Product (feet): 1.25
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	Water: Peristaltic Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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$\frac{\text{(Gals.) X}}{\text{Specified Volumes}} = \text{Gals.}$ I Case Volume Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
						* SPH DETECTED (THICK SPH)
						-NO SAMPLE TAKEN
						-SPH sock replaced

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory: Kiff CalScience Other _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:	
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: 101029-ww1	Client: CCG
Sampler: ww	Date: 10/29/10
Well I.D.: Mw-5	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 11.46
Depth to Free Product: 11.42	Thickness of Free Product (feet): 11.42 0.04
Referenced to: PVC 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	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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_____ (Gals.) X _____ = _____ Gals. I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
						* SPH - detected (BAILER CHECK)
						- NO SAMPLE TAKEN
						SPH - SOLE REPLACED

Did well dewater? Yes No	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
Laboratory: Kiff CalScience Other _____	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	
EB I.D. (if applicable): _____	Duplicate I.D. (if applicable): _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: <u>101029-WW1</u>	Client: <u>CTG</u>
Sampler: <u>WW</u>	Date: <u>10/29/10</u>
Well I.D.: <u>WW-b</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>—</u>	Depth to Water (DTW): <u>12.69</u>
Depth to Free Product: <u>12.64</u>	Thickness of Free Product (feet): <u>0.05</u>
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	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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_____ (Gals.) X _____ = _____ Gals. Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
X						SPH detected (BAILER CHECK)
						-NO SAMPLE TAKEN
						-SPH sock replaced

Did well dewater? Yes No	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Depth to Water: _____	
Sample I.D.: _____	Laboratory: Kiff CalScience Other _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	
EB I.D. (if applicable): _____ @ _____ Time	Duplicate I.D. (if applicable): _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: <u>101029-ww1</u>	Client: <u>CKG</u>
Sampler: <u>ww</u>	Date: <u>10/29/10</u>
Well I.D.: <u>Mw-7</u>	Well Diameter: 2 3 4 6 8 <u> </u>
Total Well Depth (TD): <u> </u>	Depth to Water (DTW): <u>12.30</u>
Depth to Free Product: <u>12.27</u>	Thickness of Free Product (feet): <u>0.03</u>
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]: <u>1</u>	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Water Peristaltic Extraction Pump Other: <u> </u>	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: <u> </u>
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1"	0.04	4"	0.65														
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Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
						<u>* SPH detected (BAILER CHECK)</u>
						<u>- NO SAMPLE TAKEN</u>
						<u>- SPH SOLR replaced</u>

Did well dewater? Yes No	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	Laboratory: Kiff CalScience Other: _____
EB I.D. (if applicable): _____ @ _____ Time	Duplicate I.D. (if applicable): _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: 101029-WW1	Client: OWENS BRICKWAY GLASS PLANT CKG ENVIRONMENTAL
Sampler: F ₃	Date: 10-29-10
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 19.00	Depth to Water (DTW): 8.55
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.64	

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

$1.7 \text{ (Gals.)} \times 3 = 5.1 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1400	20.5	7.73	1434	>1000	1.7	
1403	20.7	7.31	1297	71000	3.4	
1406	20.7	7.25	1287	71000	5.1	

Did well dewater? Yes No Gallons actually evacuated: 5.1

Sampling Date: 10.29.10 Sampling Time: 1450 Depth to Water: 8.91

Sample I.D.: MW-10 Laboratory: Kiff CalScience Other McCAMBELL

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC.

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: <u>101029-WW1</u>	Client: <u>CKG</u>
Sampler: <u>WW</u>	Date: <u>10/29/10</u>
Well I.D.: <u>MW-13</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>19.84</u>	Depth to Water (DTW): <u>10.19</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]: <u>12.12</u>	

Purge Method: <u>Bailer</u> <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump Other _____	Sampling Method: <u>Bailer</u> <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
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$\underline{1.5} \text{ (Gals.)} \times \underline{3} = \underline{4.5} \text{ Gals.}$ I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1320	20.4	7.63	807	>1000	1.5	odor
1322	20.5	7.54	802	>1000	3	"
1326	20.8	7.53	799	>1000	4.5	"

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>4.5</u>
Sampling Date: <u>10/29/10</u> Sampling Time: <u>1335</u> Depth to Water: <u>11.15</u>	
Sample I.D.: <u>MW-13</u> Laboratory: Kiff CalScience Other: <u>MCCAMPBELL</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>see saw</u>	
EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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	

WELL MONITORING DATA SHEET

Project #: <u>101029-ww1</u>	Client: <u>CKG</u>
Sampler: <u>ww</u>	Date: <u>10/29/10</u>
Well I.D.: <u>MW-15</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>28.87</u>	Depth to Water (DTW): <u>11.75</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]: <u>15.17</u>	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
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$2.7 \text{ (Gals.)} \times 3 = 8.1 \text{ Gals.}$ I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1340	19.6	7.68	1542	>1000	2.7	
WELL	DEWATERED @		4.2	GALS		
1425	20.1	7.65	1843	>1000	—	

Did well dewater? Yes No Gallons actually evacuated: 4.2

Sampling Date: 10/29/10 Sampling Time: 1425 Depth to Water: 12.17

Sample I.D.: MW-15 Laboratory: Kiff CalScience Other: MCCAMPBELL

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see saw

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: <u>101029-lw1</u>	Client: <u>CKG</u>
Sampler: <u>lw</u>	Date: <u>10/29/10</u>
Well I.D.: <u>MW-16</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth (TD): <u>19.90</u>	Depth to Water (DTW): <u>9.13</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]: <u>11.28</u>	

Purge Method: <u>Bailer</u> <input checked="" type="radio"/> Disposable Bailer <input type="radio"/> Positive Air Displacement <input type="radio"/> Electric Submersible	<input type="radio"/> Waterra <input type="radio"/> Peristaltic <input type="radio"/> Extraction Pump <input type="radio"/> Other _____	Sampling Method: <u>Bailer</u> <input checked="" type="radio"/> Disposable Bailer <input type="radio"/> Extraction Port <input type="radio"/> Dedicated Tubing Other: _____
--	--	---

$\underline{1.7} \text{ (Gals.)} \times \underline{3} = \underline{5.1} \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1304	21.6	7.26	452	>1000	1.7	
1307	22.1	8.04	447	>1000	3.4	
1310	22.1	7.96	475	>1000	5.1	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>5.1</u>	
Sampling Date: <u>10/29/10</u>	Sampling Time: <u>1315</u>	Depth to Water: <u>10.80</u>
Sample I.D.: <u>MW-16</u>	Laboratory: Kiff CalScience	Other: <u>MCCAMP BELL</u>
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5)	Other: <u>See Sow</u>	
EB I.D. (if applicable): @ _____ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5)	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	

WELL MONITORING DATA SHEET

Project #: <u>101029-WW1</u>	Client: <u>CKG</u>
Sampler: <u>WW</u>	Date: <u>10/29/10</u>
Well I.D.: <u>MW-17</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>15.42</u>	Depth to Water (DTW): <u>9.09</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]: <u>10.36</u>	

Purge Method: <u>Bailer</u> <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump Other _____	Sampling Method: <u>Bailer</u> <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
---	--	--

$\underline{1.0} \text{ (Gals.)} \times \underline{3} = \underline{3.0} \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1246	21.8	7.25	1307	>1000	1	odor, sheen
1248	21.9	7.92	1304	>1000	2	odor, sheen, gray
1251	21.9	6.94	1310	>1000	3	"

Did well dewater? Yes <input checked="" type="checkbox"/> No	Gallons actually evacuated: <u>3</u>
Sampling Date: <u>10/29/10</u> Sampling Time: <u>1300</u> Depth to Water: <u>10.12</u>	
Sample I.D.: <u>1300</u> ⁽¹⁰⁾ <u>MW-17</u> Laboratory: Kiff CalScience Other: <u>MCCAMPBELL</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>see saw</u>	
EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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	

WELL MONITORING DATA SHEET

Project #: <u>101029-ww1</u>	Client: <u>CRG</u>
Sampler: <u>ww</u>	Date: <u>10/29/10</u>
Well I.D.: <u>MW-19</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>25.07 25.07</u>	Depth to Water (DTW): <u>11.84</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]: <u>14.48</u>	

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

Other: _____

$\underline{2.1} \text{ (Gals.)} \times \underline{3} = \underline{6.3} \text{ Gals.}$ I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or <u>C</u>)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1130</u>	<u>18.8</u>	<u>6.16</u>	<u>763</u>	<u>47</u>	<u>2.1</u>	
<u>1135</u>	<u>18.9</u>	<u>6.23</u>	<u>778</u>	<u>186</u>	<u>4.2</u>	
<u>1138</u>	<u>19.3</u>	<u>6.26</u>	<u>773</u>	<u>56</u>	<u>6.3</u>	

Did well dewater? Yes No Gallons actually evacuated: 6.3

Sampling Date: 10/29/10 Sampling Time: 1145 Depth to Water: 13.94

Sample I.D.: MW-19 Laboratory: Kiff CalScience MCLAMPBELL
 Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see SOW

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

WELL MONITORING DATA SHEET

Project #: <u>101029-WW1</u>	Client: <u>CKG</u>
Sampler: <u>ww</u>	Date: <u>10/29/10</u>
Well I.D.: <u>MW-20</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>21.83</u>	Depth to Water (DTW): <u>8.48</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>11.15</u>	

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

Other: _____

$2.1 \text{ (Gals.)} \times \underline{3} = \underline{6.3} \text{ Gals.}$ I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1218	20.7	7.65	1016	>1000	2.1	
1221	20.5	7.49	1015	>1000	4.2	
1224	20.5	7.54	1029	>1000	6.3	

Did well dewater? Yes No Gallons actually evacuated: 6.3

Sampling Date: 10/29/10 Sampling Time: 1230 Depth to Water: 10.87

Sample I.D.: MW-20 Laboratory: Kiff CalScience Other: MCCAMPBELL

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See Sow

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) 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

APPENDIX B



McC Campbell Analytical, Inc.

"When Quality Counts"

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

CKG Environmental P.O. Box 246 St. Helena, CA 94574	Client Project ID: Owens Brockway Glass Plant	Date Sampled: 10/29/10
		Date Received: 10/29/10
	Client Contact: Chris Kennedy	Date Reported: 11/05/10
	Client P.O.:	Date Completed: 11/05/10

WorkOrder: 1010853

November 05, 2010

Dear Chris:

Enclosed within are:

- 1) The results of the **9** analyzed samples from your project: **Owens Brockway Glass Plant**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1010853

ClientCode: CKGS

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Chris Kennedy	Email: ckennedy@geologist.com	Bill to:	Accounts Payable	Requested TAT: 5 days
	CKG Environmental	cc:		CKG Environmental	<i>Date Received: 10/29/2010</i>
	P.O. Box 246	PO:		P.O. Box 246	<i>Date Printed: 10/29/2010</i>
	St. Helena, CA 94574	ProjectNo: Owens Brockway Glass Plant		St. Helena, CA 94574	
	(707) 967-8080 FAX (707) 967-8080				

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
1010853-001	MW-1	Water	10/29/2010 15:00	<input type="checkbox"/>	A	A	B									
1010853-002	MW-8	Water	10/29/2010 14:10	<input type="checkbox"/>	A		B									
1010853-003	MW-13	Water	10/29/2010 13:35	<input type="checkbox"/>	A		B									
1010853-004	MW-10	Water	10/29/2010 14:50	<input type="checkbox"/>	A		B									
1010853-005	MW-15	Water	10/29/2010 14:25	<input type="checkbox"/>	A		B									
1010853-006	MW-16	Water	10/29/2010 13:15	<input type="checkbox"/>	A		B									
1010853-007	MW-17	Water	10/29/2010 13:00	<input type="checkbox"/>	A		B									
1010853-008	MW-19	Water	10/29/2010 11:45	<input type="checkbox"/>	A		B									
1010853-009	MW-20	Water	10/29/2010 12:30	<input type="checkbox"/>	A		B									

Test Legend:

1	G-MBTX_W	2	PREDF REPORT	3	TPH(DMO)WSG_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **CKG Environmental**

Date and Time Received: **10/29/2010 6:36:27 PM**

Project Name: **Owens Brockway Glass Plant**

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

WorkOrder N°: **1010853** Matrix Water

Carrier: Derik Cartan (MAI Courier)

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: 5.4°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- 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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CKG Environmental P.O. Box 246 St. Helena, CA 94574	Client Project ID: Owens Brockway Glass Plant	Date Sampled: 10/29/10
	Client Contact: Chris Kennedy	Date Received: 10/29/10
	Client P.O.:	Date Extracted: 11/02/10
		Date Analyzed: 11/02/10

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1010853

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1	W	ND	---	ND	ND	ND	ND	1	95	b1
002A	MW-8	W	150	---	ND	ND	ND	ND	1	91	d9,b1
003A	MW-13	W	ND	---	ND	ND	ND	ND	1	96	b1
004A	MW-10	W	190	---	ND	ND	ND	ND	1	91	d7,b1
005A	MW-15	W	ND	---	ND	ND	ND	ND	1	95	
006A	MW-16	W	ND	---	ND	ND	ND	ND	1	101	b1
007A	MW-17	W	5000	---	ND	5.0	0.92	12	1	95	d7,d9,b6,b1
008A	MW-19	W	670	---	ND	ND	ND	0.95	1	93	d7
009A	MW-20	W	ND	---	ND	ND	ND	ND	1	95	b1

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	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples 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 McC Campbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
b6) lighter than water immiscible sheen/product is present
d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9) no recognizable pattern



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CKG Environmental P.O. Box 246 St. Helena, CA 94574	Client Project ID: Owens Brockway Glass Plant	Date Sampled: 10/29/10
	Client Contact: Chris Kennedy	Date Received: 10/29/10
	Client P.O.:	Date Extracted: 10/29/10
		Date Analyzed: 11/03/10-11/05/10

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1010853

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1010853-001B	MW-1	W	100	ND	1	93	e2,b1
1010853-002B	MW-8	W	84	ND	1	91	e2,b1
1010853-003B	MW-13	W	ND	ND	1	99	b1
1010853-004B	MW-10	W	640	530	1	84	e1,e7,b1
1010853-005B	MW-15	W	ND	ND	1	83	
1010853-006B	MW-16	W	390	1500	1	100	e7,e2,b1
1010853-007B	MW-17	W	610,000	360,000	200	---#	e1,b6,b1
1010853-008B	MW-19	W	460	ND	1	81	e4,e2
1010853-009B	MW-20	W	ND	ND	1	91	b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

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

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate 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 McC Campbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
 b6) lighter than water immiscible sheen/product is present
 e1) unmodified or weakly modified diesel is significant
 e2) diesel range compounds are significant; no recognizable pattern
 e4) gasoline range compounds are significant.
 e7) oil range compounds are significant

OC for



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 54092

WorkOrder 1010853

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 1010787-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	92.8	92.3	0.524	91.7	91.4	0.308	70 - 130	20	70 - 130	20
MTBE	ND	10	123	119	3.03	115	117	1.39	70 - 130	20	70 - 130	20
Benzene	ND	10	113	116	3.04	108	110	1.98	70 - 130	20	70 - 130	20
Toluene	ND	10	97.9	103	4.79	98.4	96.1	2.38	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	99.3	103	3.65	98.2	96.7	1.51	70 - 130	20	70 - 130	20
Xylenes	ND	30	111	116	4.40	111	109	2.23	70 - 130	20	70 - 130	20
%SS:	98	10	102	105	3.20	100	101	0.382	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 54092 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010853-001A	10/29/10 3:00 PM	11/02/10	11/02/10 6:41 AM	1010853-002A	10/29/10 2:10 PM	11/02/10	11/02/10 7:13 AM
1010853-003A	10/29/10 1:35 PM	11/02/10	11/02/10 7:45 AM	1010853-004A	10/29/10 2:50 PM	11/02/10	11/02/10 8:41 PM
1010853-005A	10/29/10 2:25 PM	11/02/10	11/02/10 8:17 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.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 54136

WorkOrder 1010853

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 1010853-009A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	94.9	90.5	4.71	92.4	92.2	0.195	70 - 130	20	70 - 130	20
MTBE	ND	10	123	119	2.95	121	116	3.91	70 - 130	20	70 - 130	20
Benzene	ND	10	109	110	1.24	111	105	5.51	70 - 130	20	70 - 130	20
Toluene	ND	10	99.4	99.6	0.182	100	93.3	7.41	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	100	98.3	1.94	99.8	94.7	5.24	70 - 130	20	70 - 130	20
Xylenes	ND	30	114	112	2.31	114	108	5.30	70 - 130	20	70 - 130	20
%SS:	95	10	99	101	2.40	101	96	4.58	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 54136 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010853-006A	10/29/10 1:15 PM	11/02/10	11/02/10 8:50 AM	1010853-007A	10/29/10 1:00 PM	11/02/10	11/02/10 9:41 PM
1010853-008A	10/29/10 11:45 AM	11/02/10	11/02/10 2:58 AM	1010853-009A	10/29/10 12:30 PM	11/02/10	11/02/10 3:30 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.

OC for



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 54042

WorkOrder 1010853

EPA Method SW8015B		Extraction SW3510C/3630C							Spiked Sample ID: N/A			
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-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	119	119	0	N/A	N/A	70 - 130	30
%SS:	N/A	625	N/A	N/A	N/A	111	112	1.15	N/A	N/A	70 - 130	30

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

BATCH 54042 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010853-001B	10/29/10 3:00 PM	10/29/10	11/03/10 7:21 AM	1010853-002B	10/29/10 2:10 PM	10/29/10	11/03/10 8:27 AM
1010853-003B	10/29/10 1:35 PM	10/29/10	11/04/10 8:39 AM	1010853-004B	10/29/10 2:50 PM	10/29/10	11/04/10 9:04 PM
1010853-005B	10/29/10 2:25 PM	10/29/10	11/05/10 1:29 AM	1010853-006B	10/29/10 1:15 PM	10/29/10	11/04/10 9:51 AM
1010853-007B	10/29/10 1:00 PM	10/29/10	11/04/10 8:07 PM	1010853-008B	10/29/10 11:45 AM	10/29/10	11/05/10 4:46 AM
1010853-009B	10/29/10 12:30 PM	10/29/10	11/04/10 11:03 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).

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