

RECEIVED

By Alameda County Environmental Health at 2:01 pm, Mar 04, 2014



One Michael Owens Way, Plaza 1
Perrysburg OH 43551-2999

March 3, 2014

Mr. Jerry Wickham
Alameda County Health Care Services
Environmental Health Services
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

**Subject: RO0000289
2014 ANNUAL GROUNDWATER MONITORING REPORT,
OWENS-BROCKWAY GLASS CONTAINER FACILITY.
3600 ALAMEDA AVENUE, OAKLAND, CALIFORNIA.**

Dear Mr. Wickham:

Owens-Brockway Glass Container Corporation is pleased to submit the attached 2014 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.

Mark Tussing
Legislative and Technical Manager

**2014 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:

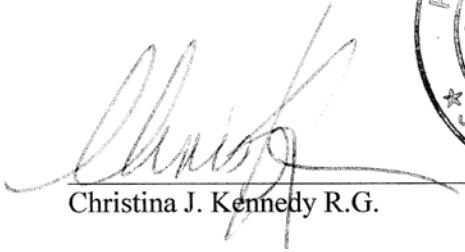
Mr. Mark Tussing
Environmental Affairs
One Michael Owens Way
Perrysburg, OH 43551-2999

**2014 GROUNDWATER MONITORING
REPORT**

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

February 28, 2014

Prepared by:



Christina J. Kennedy R.G.



Principal

CKG Environmental, Inc.
P.O. Box 246
St. Helena, California 94574
(707) 967-8080

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY1

2.0 INTRODUCTION.....2

 2.1 SITE DESCRIPTION 2

3.0 GROUNDWATER MONITORING3

 3.1 GROUNDWATER GRADIENT 3

 3.2 WELL SAMPLING 3

 3.3 CHEMICAL ANALYSIS 4

 3.4 INVESTIGATION DERIVED WASTES (IDW) 4

4.0 FINDINGS5

 4.1 SUMMARY OF GROUNDWATER RESULTS 5

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

 4.1.2 Gasoline Release Area (MW-13, MW-15, MW- 16, MW17, MW-20)..... 5

5.0 CONCLUSIONS AND RECOMMENDATIONS.....6

 5.1 CONCLUSIONS 6

 5.2 RECOMMENDATIONS 6

6.0 REFERENCES.....7

LIMITATIONS.....8

TABLES

Table 1 Monitoring Well Construction Details

Table 2 Groundwater Elevations

Table 3 Summary of Groundwater Analytical Results

PLATES

Plate 1 Site Location Map

Plate 2 Groundwater Elevation Contour Map

Plate 3 Fuel Oil Distribution Map

APPENDICES

Appendix A Well Sampling Logs

Appendix B Analytical Laboratory Report

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 (SCM) prepared in April 2009. The subsurface investigation and groundwater monitoring, and a review of historic data, shows that the petroleum hydrocarbon plumes are stable and have attenuated substantially over time. The fuel oil release appears to extend off site.

Based on the SCM a Feasibility Study dated August 27, 2010 was completed. The recommended remediation option was targeted excavations at fuel source areas with chemical oxidant placed in the excavations before backfilling. The targeted excavation program was partially implemented in summer of 2011. The full program could not be completed due to logistical issues associated with working at an operating plant. 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 2014. 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).

Western UST Area

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 17 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.

Central UST Area

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 January January 24, 2014, 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 January 14, 2014 the groundwater flow direction is generally to the south-southwest. The groundwater elevation at MW-8 appears to be anomalously low. It is not clear if this is a measurement error but the overall groundwater flow direction is still to the south-southwest. This groundwater flow direction has been observed in past monitoring events. 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 January 24, 2014 a round of groundwater sampling in the monitoring wells was performed. Floating product was not observed in any of the wells sampled. Absorbent socks are deployed in MW-5, MW-6, MW-7, MW-13, MW-15, MW-16, MW-17 and MW-20. All socks were replaced. Staining was observed in the old socks from MW-5, MW-5, MW-7. MW-15 and MW-17 suggesting that there was free product in these wells.. MW-1 was buried under cullet (waste glass) so it could not be accessed. 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. A total of 10 purge volumes was removed from MW-13. 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, and xylenes, 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 Western UST Area (MW-1, 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, except for MW-20. Diesel concentrations are shown and contoured on Plate 3. TPHd concentrations detected in groundwater range from 110 to 180,000 µg/l. Absorbent socks are installed in MW-5, MW-6, and MW-7. Although separate phase product was not measured in these wells they were stained when they were replaced indicating that separate phase product is present. Owens-Brockway regularly changes the socks. The estimated outline of the product plume is illustrated on Plate 3.

4.1.2 Central UST 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 370 µg/l which is lower than that observed over the last few years, but likely reflects the high concentration of diesel present in the well as opposed to the presence of gasoline in the groundwater. TPH quantified as diesel and motor oil was detected in MW-17 at 59,000 µg/l and 32,000 µg/l respectively which are lower than that observed in 2013. An absorbent sock has been maintained in MW-17 since 2008.

Owens-Brockway had installed absorbent socks in MW-13, MW-15, and MW-20, as part of their general well maintenance. On January 24 the sock in MW-15 appeared to be stained but no separate phase product was measured in MW-15.

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. 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. Groundwater Monitoring Reports,
2012 Report, April 30, 2013.
2012 Report, April 22, 2012.
2010 Report, January 20, 2011.
2009 Report, January 10, 2010.
2008 Report, January 8, 2009.
2007 Report, December 17, 2007.
2006 Report, January 12, 2007.
2005 Report, November 29, 2005.
2004 Report, April 29, 2004.

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. 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.

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	Destroyed
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	Destroyed
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 January 24, 2014

Well Number	Date Installed	Top of Casing Elevation ^(a)	Depth to Water	Product thickness (ft)*	Groundwater Elevation
MW-1	12-Sep-86	16.02	NM		
MW-2	12-Sep-86	17.11	Destroyed		
MW-4	12-Sep-86	16.02	NM		
MW-5	12-Sep-86	16.19	12.29		3.90
MW-6	12-Sep-86	17.48	14.46	0.02	3.04
MW-7	12-Sep-86	16.11	12.56	0.02	3.57
MW-8	12-Sep-86	16.57	13.85		2.72
MW-9	12-Sep-86	7.33 ^(d)	NM		
MW-10	12-Sep-86	15.96	9.46		6.5
MW-11	12-Sep-86	13.99	NM		
MW-12	12-Sep-86	13.83	NM		
MW-13	12-Sep-86	13.98	10.57		3.41
MW-15	12-Sep-86	15.16	12.00	0.01	3.17
MW-16	12-Sep-86	13.48	9.35		4.13
MW-17	12-Sep-86	14.17	8.73		5.44
MW-19	01-May-03	NA	12.46		
MW-20	01-Dec-00	12.74	8.81		3.93

(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
	3/1/2012	<0.5	<0.5	<0.5	<0.5	92	<50	<250
	3/22/2013	not accessible						
	1/24/2014	not accessible						
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)						
	3/1/2012	Destroyed May 2011						

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-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						
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 Destroyed	BDL	NA	BDL	100	BDL	NA
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)						
	3/1/2012	<0.5	<0.5	<0.5	<0.5	8,600	190	8,900
3/22/2013	floating product (0.03 ft)							
1/24/2014	<0.5	<0.5	<0.5	<0.5	5,100	160	4,500	

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-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)						
	3/1/2012	floating product (0.01 ft)						
	3/22/2013	floating product (0.02 ft)						
1/24/2014	<0.5	<0.5	<0.5	<0.5	87,000	230	73,000	
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)						
	3/1/2012	floating product (0.01 ft)						
3/22/2013	floating product (0.02 ft)							
1/24/2014	<.05	<.05	0.052	1.6	130,000	650	82,000	

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-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
3/1/2012	<0.5	<0.5	<0.5	<0.5	410	560	600	
3/22/2013	<0.5	<0.5	<0.5	<0.5	570	420	310	
1/24/2014	<0.5	<0.5	<0.5	<0.5	110	82	<250	
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							
3/1/2012	innaccessible							
3/22/2013	innaccessible							
1/24/2014	innaccessible							

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-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	
3/1/2012	<0.5	<0.5	<0.5	<0.5	2000	140	2400	
3/22/2013	<0.5	<0.5	<0.5	<0.5	3100	150	3200	
1/24/2014	<0.5	<0.5	<0.5	0.91	1100	290	830	
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							
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						

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-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	
3/1/2012	<0.5	<0.5	<0.5	<0.5	<50	<50	<250	
3/22/2013	<0.5	<0.5	<0.5	<0.5	88	<50	<250	
1/24/2014	<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:

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-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
	3/1/2012	<0.5	<0.5	<0.5	<0.5	100	<50	<250
3/22/2013	floating product (0.01 ft)							
1/24/2014	<0.5	<0.5	<0.5	<0.5	65	<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
	3/1/2012	<0.5	<0.5	<0.5	<0.5	270	<50	1600
	3/22/2013	<0.5	<0.5	<0.5	<0.5	220	<50	1700
1/24/2014	<0.5	<0.5	<0.5	<0.5	120	<50	990	

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-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	innaccessible							
	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	
	9/11/2006	<2.5	36	9.50	79	2,300,000	26,000	810,000	
	re-test	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	
3/1/2012		<5.0	<5.0	<5.0	<5.0	390,000	3,000	160,000	
3/22/2013		8.2	1.4	<5.0	4.1	570,000	4,500	220,000	
1/24/2014		<5.0	<5.0	<5.0	<5.0	59,000	370	32,000	
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							

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-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
	3/1/2012	<0.5	<0.5	<0.5	<0.5	440	310	<250
	3/22/2013	<0.5	<0.5	<0.5	1.1	780	620	<250
1/24/2014	<0.5	<0.5	<0.5	0.82	490	380		
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
	3/1/2012	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	3/22/2013	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
1/24/2014	<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)

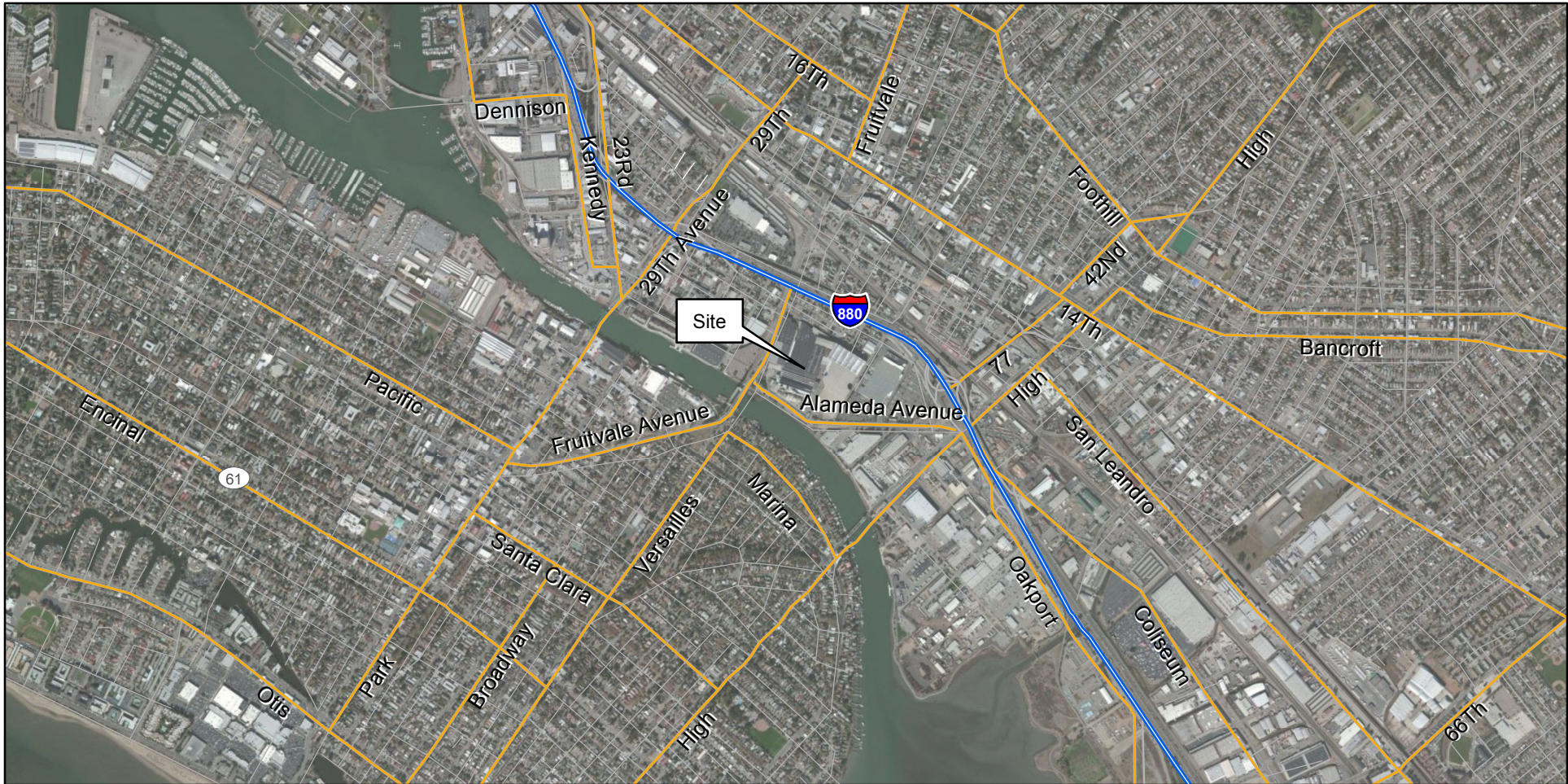
BDL - Below detection limit

NA - Not analyzed

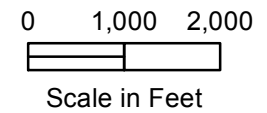
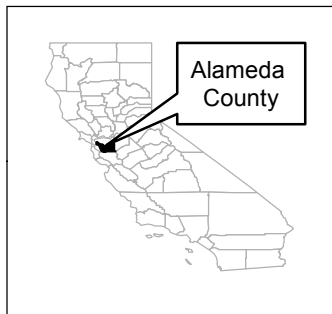
(a) - Quantified as diesel but chromatogram did not match diesel pattern

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

PLATES



Drawn by A. Lewellyn. March 2012. Base layers are unmodified Alameda County Digital Data Sets.

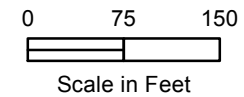




Drawn by A. Llewellyn, February 2014. Base layer is Bing aeriels provided by ArcGIS Online.

EXPLANATION

- Monitoring Well
- Destroyed Well
- Line of Equal Groundwater Elevation
- - - Approximate Line of Equal Groundwater Elevation
- 3.57 Groundwater Elevation
- NA Not Available
- NM Not Measured

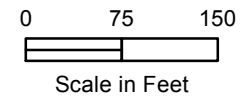




Drawn by A. Llewellyn. February 2014. Base layer is Bing aeriels provided by ArcGIS Online.

EXPLANATION

- ⊙ Monitoring Well
- Destroyed Well
- Line of Equal Fuel Oil Concentration
- - - Approximate Line of Equal Fuel Oil Concentration
- 490 TPHd Cocentration in µg/L
- NA Not Available



APPENDIX A

WELL GAUGING DATA

Project # 140123-DR1 Date 11/23/14 Client CKG Env.

Site 3600 Alameda Ave. Oakland Ca.

Well ID	Time	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	Notes
MW-1		*	Inaccessible.		Large pile of		glass over well			
MW-5	0954	2	odor				12.29	22.22		soak
MW-6	0947	2	odor				14.46	25.72		soak
MW-7	1024	2					12.56	20.95		soak
MW-8	1020	2					13.85	22.65		
MW-10	1000	2					9.46	18.87		
MW-13	0934	2					10.57	18.30		soak
MW-15	0940	2					12.00	29.85		soak
MW-16	0920	2					9.35	19.35		soak
MW-17	0915	2					8.73	18.96		soak
MW-19	1029	2					12.46	25.05		
MW-20	0928	2					8.81	21.81	✓	soak

WELLHEAD INSPECTION CHECKLIST

Client CKG Env Date 1/23/14
 Site Address 3600 Alameda Ave. Oakland Ca.
 Job Number 140123-DRI Technician DR/BW

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
mw-1	* Inaccessible.		Large pile of glass over				well.	
mw-5						x		
mw-6	x							
mw-7	x							
mw-8						-2 1/2 bolts.		
mw-10						Christy lid broken		
mw-13						Christy lid broken.		
mw-15						-1 1/2 bolts		
mw-16						-2 1/2 bolts		
mw-17	DR					broken apron		
mw-19	x							
mw-20						x		

NOTES: mw-20 -2 1/2 bolts -1/2 tabs mw-5 -2 1/2 bolts. Apron badly damaged.

WELL MONITORING DATA SHEET

Project #: 140123-DRL	Client: CKG Environmental
Sampler: —	Date: 11/23/14
Well I.D.: MW-1	Well Diameter: 2 3 4 6 8 _____
Total Well Depth (TD): —	Depth to Water (DTW): —
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]:	

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: _____

$\frac{\text{I Case Volume (Gals.)} \times \text{Specified Volumes}}{\text{Calculated Volume}} = \text{Gals.}$	<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
						* Well is inaccessible. Covered w/ huge pile of glass.

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 #: 140123-DA1	Client: CK6 Environmental
Sampler: DN/BW	Date: 1/23/14
Well I.D.: mw-5	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 22.22	Depth to Water (DTW): 12.29
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVO</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.28	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Wattera Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
---	--	--

$1.6 \text{ (Gals.)} \times 3 = 4.8 \text{ Gals.}$ 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 <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1202	16.6	7.24	1249	>1000	1.6	odor
1204	16.9	6.98	1267	>1000	3.2	"
1206	16.8	6.99	1264	>1000	4.8	"
* Replaced stained sock. Redeployed @ same depth as found.						

Did well dewater? Yes No Gallons actually evacuated: 4.8

Sampling Date: 1/23/14 Sampling Time: 1215 Depth to Water: 14.09

Sample I.D.: mw-5 Laboratory: Kiff CalScience Other McCampbell

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

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 #: 140123-DA1	Client: CK6 Environmental
Sampler: DN/BW	Date: 1/23/14
Well I.D.: mw-6	Well Diameter: <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8
Total Well Depth (TD): 25.72	Depth to Water (DTW): 14.46
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVO <input type="radio"/> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.71	

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

$1.8 \text{ (Gals.)} \times 3 = 5.4 \text{ Gals.}$	<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														
1 Case Volume Specified Volumes Calculated Volume																	

Time	Temp (°F or °C)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
1138	19.3	7.08	1230	>1000	1.8	Screen / odor
1140	19.1	7.21	1328	>1000	3.6	" "
1142	19.0	7.22	1333	>1000	5.4	" "

* Replaced stained socks. Deployed @ same depth as found.

Did well dewater? Yes No Gallons actually evacuated: 5.4

Sampling Date: 1/23/14 Sampling Time: 1150 Depth to Water: 15.29

Sample I.D.: mw-6 Laboratory: Kiff CalScience Other: McCampbell

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 #: 140123-DR1	Client: CK6 Environmental
Sampler: <u>DA</u> / BW	Date: 1/23/14
Well I.D.: MW-7	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth (TD): 20.95	Depth to Water (DTW): 12.56
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]: 14.24	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Wattera Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
---	--	--

$1.3 \text{ (Gals.)} \times 3 = 3.9 \text{ Gals.}$ <p>I Case Volume Specified Volumes Calculated Volume</p>	<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 <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1054	22.5	6.49	1207	71000	1.3	strong color / sheen
1056	22.3	6.54	1201	>1000	2.6	" " / "
1058	22.4	6.56	1200	>1000	3.9	" " / "

Did well dewater? Yes No Gallons actually evacuated: 3.9

Sampling Date: 1/23/14 Sampling Time: 1108 Depth to Water: 14.19

Sample I.D.: MW-7 Laboratory: Kiff CalScience Other McCamphall

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 #: 140123-DRI	Client: CKG
Sampler: BW	Date: 1/23/14
Well I.D.: MW-8	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 22.65	Depth to Water (DTW): 13.85
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]: 15.61	

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

1.4 (Gals.) X 3 = 4.2 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
1127	17.2	7.40	1114	71000	1.4	
1129	17.1	7.35	1108	71000	2.8	
1131	16.9	7.11	1101	71000	4.2	

Did well dewater? Yes No Gallons actually evacuated: 4.2

Sampling Date: 1/23/14 Sampling Time: 1135 Depth to Water: 14.27

Sample I.D.: MW-8 Laboratory: Kiff CalScience Other Mc Campbell

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>140123-DR1</u>	Client: <u>CKG</u>
Sampler: <u>BW</u>	Date: <u>1/23/14</u>
Well I.D.: <u>MW-10</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>18.87</u>	Depth to Water (DTW): <u>9.46</u>
Depth to Free Product: <u>-</u>	Thickness of Free Product (feet): <u>-</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>11.34</u>	

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

$\underline{1.5} \text{ (Gals.)} \times \underline{3} = \underline{4.5} \text{ Gals.}$ 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
1107	19.5	6.70	1163	71000	1.5	Sheen
1109	19.5	6.72	1159	>1000	3.0	
1111	19.5	6.80	1152	>1000	4.5	DTW 11.78'

Did well dewater? Yes No Gallons actually evacuated: 4.5

Sampling Date: 1/23/14 Sampling Time: 1125 Depth to Water: 11.30'

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

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 #: 140123- BR1	Client: CKG
Sampler: BW	Date: 1/23/14
Well I.D.: MW-13	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 18.30	Depth to Water (DTW): 10.57
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]: 12.12	

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

1.2 (Gals.) X	3	= 3.6 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 ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1145	18.3	7.16	916	71000	1.2	
1148	18.6	7.24	915	71000	2.4	
1149	18.6	7.32	900	71000	3.6	
* Replaced SPH sock w/new to same depth as sand.						
Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Gallons actually evacuated: 3.6				
Sampling Date: 1/23/14		Sampling Time: 1155		Depth to Water: 11.10		
Sample I.D.: MW-13		Laboratory: Kiff CalScience Other <i>Mc Campbell</i>				
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>140123-DRI</u>	Client: <u>CKG</u>
Sampler: <u>BW</u>	Date: <u>1/23/14</u>
Well I.D.: <u>MW-15</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>29.85</u>	Depth to Water (DTW): <u>12.00</u>
Depth to Free Product: <u>-</u>	Thickness of Free Product (feet): <u>-</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>15.57</u>	

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

$\underline{2.9} \text{ (Gals.)} \times \underline{3} = \underline{8.7} \text{ Gals.}$ 1 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
1056	19.9	7.15	983	>1000	3.0	
* well dewatered @ 3.5 gal						
1400	20.2	7.21	978	24	-	
Replaced stained sock. Replayed @ depth as found						
Did well dewater? <input checked="" type="checkbox"/> Yes No			Gallons actually evacuated: <u>3.5</u>			
Sampling Date: <u>1/23/14</u>		Sampling Time: <u>1400</u>		Depth to Water: <u>12.18</u>		
Sample I.D.: <u>MW-15</u>			Laboratory: Kiff CalScience Other <u>McCoybell</u>			
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>See CcC</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 #: 140123-DR1	Client: CKG
Sampler: BW	Date: 1/23/14
Well I.D.: MW-16	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): 19.35	Depth to Water (DTW): 9.35
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]: 11.35	

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

1.6 (Gals.) X	3	= 4.8 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 ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1212	21.1	7.38	651	>1000	1.6	Shen
1215	21.0	7.34	648	>1000	3.2	
1218	20.4	7.20	646	>1000	4.8	
* Replaced SP4 Sock w/ new and deployed as found						

Did well dewater? Yes No Gallons actually evacuated: 4.8

Sampling Date: 1/23/14 Sampling Time: 1225 Depth to Water: 11.12

Sample I.D.: MW-16 Laboratory: Kiff CalScience Other McCampbell

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 #: 140123-DA1	Client: CK6 Environmental
Sampler: DA/BW	Date: 1/23/14
Well I.D.: mw-17	Well Diameter: <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8
Total Well Depth (TD): 18.96	Depth to Water (DTW): 8.73
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC <input type="radio"/> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.78	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible

Water: Waterra Peristaltic Extraction Pump Other _____

Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing

Other: _____

$$1.6 \text{ (Gals.)} \times 3 = 4.8 \text{ Gals.}$$
 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 ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1256	20.5	7.27	955	71000	1.6	odor
1301	20.7	6.93	950	71000	3.2	"
1306	20.9	6.91	948	71000	4.8	"
* Replaced stained sock. Re-deployed @ same depth as found.						
Did well dewater?	Yes	<input checked="" type="radio"/> No	Gallons actually evacuated:		4.8	
Sampling Date:	1/23/14	Sampling Time:	1420	Depth to Water:	8.98	
Sample I.D.:	mw-17		Laboratory:	Kiff CalScience Other: <u>McCampbell</u>		
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 #: 140123-DR1	Client: CK6 Environmental
Sampler: <u>DN</u> / BW	Date: 1/23/14
Well I.D.: mw-19	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 25.05	Depth to Water (DTW): 12.46
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVO</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.98	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Wattera Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
---	--	--

$2.0 \text{ (Gals.)} \times 3 = 6.0 \text{ Gals.}$ 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 <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1117	19.5	7.07	863	79	2.0	
1119	19.7	6.85	866	126	4.0	
1121	19.7	6.84	868	121	6.0	

Did well dewater? Yes No Gallons actually evacuated: 6.0

Sampling Date: 1/23/14 Sampling Time: 1128 Depth to Water: 14.27

Sample I.D.: mw-19 Laboratory: Kiff CalScience Other McCampbell

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 #: 140123-DRL	Client: CK6 Environmental
Sampler: DN/BW	Date: 1/23/14
Well I.D.: mw-20	Well Diameter: <input checked="" type="radio"/> 2 3 4 6 8 ___
Total Well Depth (TD): 21.81	Depth to Water (DTW): 8.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVO Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.41	

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

$2.1 \text{ (Gals.)} \times 3 = 6.3 \text{ Gals.}$ 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
1225	20.1	7.94	833	>1000	2.1	
1230	19.9	7.43	798	>1000	4.2	
1234	19.8	7.41	794	>1000	6.3	

Did well dewater?	Yes	<input checked="" type="radio"/> No	Gallons actually evacuated:	6.3	
Sampling Date:	1/23/14	Sampling Time:	1242	Depth to Water:	11.29
Sample I.D.:	mw-20		Laboratory:	Kiff CalScience Other <u>McCampbell</u>	
Analyzed for:	TPH-G BTEX MTBE TPH-D		Oxygenates (5)	Other: <u>See CoC</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	

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
 SAN JOSE, CALIFORNIA 95112-1105
 FAX (408) 573-7771
 PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB

McC Campbell

DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
- LIA
- OTHER

RWQCB REGION _____

CHAIN OF CUSTODY

BTS# 140123-Dr1

CLIENT: CKG Environmental

SITE: Owens Brockway Glass Plant

3600 Alameda Avenue

Oakland, CA

C = COMPOSITE ALL CONTAINERS

SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS		C	TPHg / BTEX (8015/8021)	TPH-d, TPH-mo w/silica gel clean up	CONDUCT ANALYSIS TO DETECT							ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			S=SOIL W=H ₂ O	TOTAL															
MW-7	1/23/14	1108	W	4	11400		X	X											
MW-19		1128	W	4			X	X											
MW-6		1150	W	4			X	X											
MW-5		1215	W	4			X	X											
MW-20		1242	W	4			X	X											
MW-8		1135	W	4			X	X											
MW-10		1125	W	4			X	X											
MW-13		1155	W	4			X	X											
MW-16		1225	W	4			X	X											
MW-17		1420	W	4			X	X											
MW-15		1400	W	4			X	X											

COPY

SAMPLING COMPLETED: DATE 1/23/14 TIME _____ SAMPLING PERFORMED BY D. Reynal / B. Weeks RESULTS NEEDED NO LATER THAN _____ Per Client

RELEASED BY [Signature] DATE 1/23/14 TIME 1540 RECEIVED BY [Signature] DATE 1/23/14 TIME 1540 (Sample Custodian)

RELEASED BY _____ DATE _____ TIME _____ RECEIVED BY _____ DATE _____ TIME _____

RELEASED BY _____ DATE _____ TIME _____ RECEIVED BY _____ DATE _____ TIME _____

SHIPPED VIA _____ DATE SENT _____ TIME SENT _____ COOLER # _____

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
 SAN JOSE, CALIFORNIA 95112-1105
 FAX (408) 573-7771
 PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB McC Campbell DHS # _____

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
 LIA
 OTHER
- RWQCB REGION _____

CHAIN OF CUSTODY

BTS # 14C123-D21

CLIENT CKG Environmental

SITE Owens Brockway Glass Plant

3600 Alameda Avenue

Oakland, CA

C = COMPOSITE ALL CONTAINERS

TPHg / BTEX (8015/8021)

TPH-d, TPH-mo w/silica gel clean up

SAMPLE I.D.	DATE	TIME	MATRIX		CONTAINERS	C	TPHg / BTEX (8015/8021)	TPH-d, TPH-mo w/silica gel clean up	CONDUCT ANALYSIS TO DETECT								ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			S=SOIL	W=H ₂ O					TOTAL											
MW-7	11/23/14	1108	W	W	4	1120005	X	X												
MW-19		1128	W	W	4		X	X												
MW-6		1150	W	W	4		X	X												
MW-5		1215	W	W	4		X	X												
MW-20		1242	W	W	4		X	X												
MW-8		1135	W	W	4		X	X												
MW-10		1125	W	W	4		X	X												
MW-13		1155	W	W	4		X	X												
MW-16		1225	W	W	4		X	X												
MW-17		1420	W	W	4		X	X												
MW-15		1400	W	W	4		X	X												

SAMPLING COMPLETED DATE 11/23/14 TIME _____ SAMPLING PERFORMED BY D. Reynol / B. Weeks RESULTS NEEDED NO LATER THAN _____ Per Client

RELEASED BY [Signature] DATE 11/23/14 TIME 1540 RECEIVED BY [Signature] DATE 11/23/14 TIME 1540 (Sample custodian)

RELEASED BY [Signature] DATE 11/24/14 TIME 1110 RECEIVED BY [Signature] DATE 11/24/14 TIME 1110

RELEASED BY _____ DATE _____ TIME _____ RECEIVED BY _____ DATE _____ TIME _____

SHIPPED VIA _____ DATE SENT _____ TIME SENT _____ COOLER # _____

APPENDIX B



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1401717

Report Created for: CKG Environmental
P.O. Box 246
St. Helena, CA 94574

Project Contact: Christina Kennedy
Project P.O.:
Project Name: #140123_DRI; Owens Brockway Glass Plant

Project Received: 01/24/2014

Analytical Report reviewed & approved for release on 01/31/2014 by:

Question about
your data?

[Click here to email
McC Campbell](#)

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
WorkOrder: 1401717

<u>Glossary</u> <u>Abbreviation</u>	<u>Description</u>
95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, 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.
RD	Relative Difference
RL	Reporting Limit
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
TEQ	Toxicity Equivalence

Analytical
Qualifier

S	spike recovery outside accepted recovery limits
b6	lighter than water immiscible sheen/product is present
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9	no recognizable pattern
e1	unmodified or weakly modified diesel is significant
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant
e11/e2	stoddard solvent/mineral spirit (?); and/or diesel range compounds are significant; no recognizable pattern



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
<http://www.mccampbell.com> / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
WorkOrder: 1401717



Analytical Report

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
Date Received: 1/24/14 20:29
Date Prepared: 1/27/14-1/29/14

WorkOrder: 1401717
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-7	1401717-001A	Water	01/23/2014 11:08	GC3	86479

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	650	50	1	01/29/2014 00:13
MTBE	---	5.0	1	01/29/2014 00:13
Benzene	ND	0.50	1	01/29/2014 00:13
Toluene	ND	0.50	1	01/29/2014 00:13
Ethylbenzene	0.52	0.50	1	01/29/2014 00:13
Xylenes	1.6	0.50	1	01/29/2014 00:13
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d7,d9,b6	
aaa-TFT	106	70-130		01/29/2014 00:13

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19	1401717-002A	Water	01/23/2014 11:28	GC3	86479

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	380	50	1	01/27/2014 15:19
MTBE	---	5.0	1	01/27/2014 15:19
Benzene	ND	0.50	1	01/27/2014 15:19
Toluene	ND	0.50	1	01/27/2014 15:19
Ethylbenzene	ND	0.50	1	01/27/2014 15:19
Xylenes	0.82	0.50	1	01/27/2014 15:19
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d7	
aaa-TFT	102	70-130		01/27/2014 15:19

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-6	1401717-003A	Water	01/23/2014 11:50	GC3	86479

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	230	50	1	01/29/2014 00:42
MTBE	---	5.0	1	01/29/2014 00:42
Benzene	ND	0.50	1	01/29/2014 00:42
Toluene	ND	0.50	1	01/29/2014 00:42
Ethylbenzene	ND	0.50	1	01/29/2014 00:42
Xylenes	ND	0.50	1	01/29/2014 00:42
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d7,b6	
aaa-TFT	96	70-130		01/29/2014 00:42

(Cont.)



Analytical Report

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
Date Received: 1/24/14 20:29
Date Prepared: 1/27/14-1/29/14

WorkOrder: 1401717
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-5	1401717-004A	Water	01/23/2014 12:15	GC3	86479

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	160	50	1	01/29/2014 01:12
MTBE	---	5.0	1	01/29/2014 01:12
Benzene	ND	0.50	1	01/29/2014 01:12
Toluene	ND	0.50	1	01/29/2014 01:12
Ethylbenzene	ND	0.50	1	01/29/2014 01:12
Xylenes	ND	0.50	1	01/29/2014 01:12
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d7	
aaa-TFT	96	70-130		01/29/2014 01:12

MW-20	1401717-005A	Water	01/23/2014 12:42	GC3	86479
-------	--------------	-------	------------------	-----	-------

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	01/27/2014 20:45
MTBE	---	5.0	1	01/27/2014 20:45
Benzene	ND	0.50	1	01/27/2014 20:45
Toluene	ND	0.50	1	01/27/2014 20:45
Ethylbenzene	ND	0.50	1	01/27/2014 20:45
Xylenes	ND	0.50	1	01/27/2014 20:45
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
aaa-TFT	101	70-130		01/27/2014 20:45

MW-8	1401717-006A	Water	01/23/2014 11:35	GC3	86479
------	--------------	-------	------------------	-----	-------

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	82	50	1	01/29/2014 01:41
MTBE	---	5.0	1	01/29/2014 01:41
Benzene	ND	0.50	1	01/29/2014 01:41
Toluene	ND	0.50	1	01/29/2014 01:41
Ethylbenzene	ND	0.50	1	01/29/2014 01:41
Xylenes	ND	0.50	1	01/29/2014 01:41
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d7	
aaa-TFT	96	70-130		01/29/2014 01:41

(Cont.)



Analytical Report

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
Date Received: 1/24/14 20:29
Date Prepared: 1/27/14-1/29/14

WorkOrder: 1401717
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-10	1401717-007A	Water	01/23/2014 11:25	GC3	86479
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	270		50	1	01/27/2014 21:44
MTBE	---		5.0	1	01/27/2014 21:44
Benzene	ND		0.50	1	01/27/2014 21:44
Toluene	ND		0.50	1	01/27/2014 21:44
Ethylbenzene	ND		0.50	1	01/27/2014 21:44
Xylenes	0.91		0.50	1	01/27/2014 21:44
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	<u>Analytical Comments:</u> d7	
aaa-TFT	99		70-130		01/27/2014 21:44
MW-13	1401717-008A	Water	01/23/2014 11:55	GC3	86479
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	01/27/2014 22:13
MTBE	---		5.0	1	01/27/2014 22:13
Benzene	ND		0.50	1	01/27/2014 22:13
Toluene	ND		0.50	1	01/27/2014 22:13
Ethylbenzene	ND		0.50	1	01/27/2014 22:13
Xylenes	ND		0.50	1	01/27/2014 22:13
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	99		70-130		01/27/2014 22:13
MW-16	1401717-009A	Water	01/23/2014 12:25	GC3	86479
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	01/27/2014 22:43
MTBE	---		5.0	1	01/27/2014 22:43
Benzene	ND		0.50	1	01/27/2014 22:43
Toluene	ND		0.50	1	01/27/2014 22:43
Ethylbenzene	ND		0.50	1	01/27/2014 22:43
Xylenes	ND		0.50	1	01/27/2014 22:43
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	99		70-130		01/27/2014 22:43

(Cont.)



Analytical Report

Client: CKG Environmental	WorkOrder: 1401717
Project: #140123_DRI; Owens Brockway Glass Plant	Extraction Method: SW5030B
Date Received: 1/24/14 20:29	Analytical Method: SW8021B/8015Bm
Date Prepared: 1/27/14-1/29/14	Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-17	1401717-010A	Water	01/23/2014 14:20	GC3	86479
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	370		50	1	01/29/2014 02:11
MTBE	---		5.0	1	01/29/2014 02:11
Benzene	ND		0.50	1	01/29/2014 02:11
Toluene	ND		0.50	1	01/29/2014 02:11
Ethylbenzene	ND		0.50	1	01/29/2014 02:11
Xylenes	ND		0.50	1	01/29/2014 02:11
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	Analytical Comments: d7,d9,b6,c4	
aaa-TFT	144	S	70-130		01/29/2014 02:11
MW-15	1401717-011A	Water	01/23/2014 14:00	GC3	86479
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	01/27/2014 23:42
MTBE	---		5.0	1	01/27/2014 23:42
Benzene	ND		0.50	1	01/27/2014 23:42
Toluene	ND		0.50	1	01/27/2014 23:42
Ethylbenzene	ND		0.50	1	01/27/2014 23:42
Xylenes	ND		0.50	1	01/27/2014 23:42
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	98		70-130		01/27/2014 23:42



Analytical Report

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
Date Received: 1/24/14 20:29
Date Prepared: 1/24/14

WorkOrder: 1401717
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-7	1401717-001B	Water	01/23/2014 11:08	GC11B	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	130,000		5000	100	01/29/2014 22:54
TPH-Motor Oil (C18-C36)	82,000		25,000	100	01/29/2014 22:54
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	Analytical Comments: e1	
C9	132	S	70-130		01/29/2014 22:54
MW-19	1401717-002B	Water	01/23/2014 11:28	GC9a	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	490		50	1	01/27/2014 20:55
TPH-Motor Oil (C18-C36)	ND		250	1	01/27/2014 20:55
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e2	
C9	103		70-130		01/27/2014 20:55
MW-6	1401717-003B	Water	01/23/2014 11:50	GC9b	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	87,000		5000	50	01/28/2014 01:20
TPH-Motor Oil (C18-C36)	73,000		25,000	50	01/28/2014 01:20
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e2,e7,b6	
C9	117		70-130		01/28/2014 01:20
MW-5	1401717-004B	Water	01/23/2014 12:15	GC11A	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	5100		50	1	01/27/2014 16:04
TPH-Motor Oil (C18-C36)	4500		250	1	01/27/2014 16:04
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e2,e7	
C9	106		70-130		01/27/2014 16:04

(Cont.)



Analytical Report

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
Date Received: 1/24/14 20:29
Date Prepared: 1/24/14

WorkOrder: 1401717
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-20	1401717-005B	Water	01/23/2014 12:42	GC9b	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	01/28/2014 00:14
TPH-Motor Oil (C18-C36)	ND		250	1	01/28/2014 00:14
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	89		70-130		01/28/2014 00:14
MW-8	1401717-006B	Water	01/23/2014 11:35	GC9a	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	110		50	1	01/27/2014 22:01
TPH-Motor Oil (C18-C36)	ND		250	1	01/27/2014 22:01
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e11,e2	
C9	108		70-130		01/27/2014 22:01
MW-10	1401717-007B	Water	01/23/2014 11:25	GC6A	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1100		50	1	01/27/2014 21:41
TPH-Motor Oil (C18-C36)	830		250	1	01/27/2014 21:41
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e2,e7	
C9	102		70-130		01/27/2014 21:41
MW-13	1401717-008B	Water	01/23/2014 11:55	GC11B	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	01/29/2014 14:16
TPH-Motor Oil (C18-C36)	ND		250	1	01/29/2014 14:16
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	110		70-130		01/29/2014 14:16

(Cont.)



Analytical Report

Client: CKG Environmental
Project: #140123_DRI; Owens Brockway Glass Plant
Date Received: 1/24/14 20:29
Date Prepared: 1/24/14

WorkOrder: 1401717
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-16	1401717-009B	Water	01/23/2014 12:25	GC11A	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	120		50	1	01/28/2014 10:21
TPH-Motor Oil (C18-C36)	990		250	1	01/28/2014 10:21
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e7,e2	
C9	108		70-130		01/28/2014 10:21
MW-17	1401717-010B	Water	01/23/2014 14:20	GC2B	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	59,000		2500	50	01/28/2014 21:05
TPH-Motor Oil (C18-C36)	32,000		12,000	50	01/28/2014 21:05
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e1,b6	
C9	118		70-130		01/28/2014 21:05
MW-15	1401717-011B	Water	01/23/2014 14:00	GC11B	86431
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	65		50	1	01/28/2014 06:55
TPH-Motor Oil (C18-C36)	ND		250	1	01/28/2014 06:55
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: e2	
C9	114		70-130		01/28/2014 06:55



Quality Control Report

Client: CKG Environmental
Date Prepared: 1/27/14
Date Analyzed: 1/27/14
Instrument: GC3
Matrix: Water
Project: #140123_DRI; Owens Brockway Glass Plant

WorkOrder: 1401717
BatchID: 86479
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-86479
 1401728-015AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	59.98	40	60	-	100	70-130
MTBE	ND	10.3	5.0	10	-	103	70-130
Benzene	ND	10.33	0.50	10	-	103	70-130
Toluene	ND	10.34	0.50	10	-	103	70-130
Ethylbenzene	ND	10.38	0.50	10	-	104	70-130
Xylenes	ND	31.36	0.50	30	-	105	70-130

Surrogate Recovery

aaa-TFT	9.896	9.671		10	99	97	70-130
---------	-------	-------	--	----	----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	59.76	60.94	60	ND	99.6	102	70-130	1.95	20
MTBE	8.901	9.018	10	ND	89	90.2	70-130	1.31	20
Benzene	10.34	9.762	10	ND	103	97.6	70-130	5.77	20
Toluene	10.27	9.811	10	ND	103	98.1	70-130	4.57	20
Ethylbenzene	10.19	9.816	10	ND	102	98.2	70-130	3.77	20
Xylenes	30.73	29.8	30	ND	102	99.3	70-130	3.07	20

Surrogate Recovery

aaa-TFT	10.11	9.638	10		101	96	70-130	4.80	20
---------	-------	-------	----	--	-----	----	--------	------	----



Quality Control Report

Client:	CKG Environmental	WorkOrder:	1401717
Date Prepared:	1/24/14	BatchID:	86431
Date Analyzed:	1/25/14	Extraction Method	SW3510C/3630C
Instrument:	GC6A	Analytical Method:	SW8015B
Matrix:	Water	Unit:	µg/L
Project:	#140123_DRI; Owens Brockway Glass Plant	Sample ID:	MB/LCS-86431

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1017	50	1000	-	102	70-130
Surrogate Recovery							
C9	529.9	591.9		625	85	95	70-130



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1401717

ClientCode: CKGS

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Christina Kennedy
CKG Environmental
P.O. Box 246
St. Helena, CA 94574
(707) 967-8080 FAX: (707) 967-8080

Email: ckennedy@geologist.com
cc:
PO:
ProjectNo: #140123_DRI; Owens Brockway Glass Plant

Bill to:

Accounts Payable
CKG Environmental
808 Zinfindel Lane
St. Helena, CA 94574

Requested TAT:

5 days

Date Received: **01/24/2014**

Date Printed: **01/24/2014**

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	
1401717-001	MW-7	Water	1/23/2014 11:08	<input type="checkbox"/>	A	A	B										
1401717-002	MW-19	Water	1/23/2014 11:28	<input type="checkbox"/>	A		B										
1401717-003	MW-6	Water	1/23/2014 11:50	<input type="checkbox"/>	A		B										
1401717-004	MW-5	Water	1/23/2014 12:15	<input type="checkbox"/>	A		B										
1401717-005	MW-20	Water	1/23/2014 12:42	<input type="checkbox"/>	A		B										
1401717-006	MW-8	Water	1/23/2014 11:35	<input type="checkbox"/>	A		B										
1401717-007	MW-10	Water	1/23/2014 11:25	<input type="checkbox"/>	A		B										
1401717-008	MW-13	Water	1/23/2014 11:55	<input type="checkbox"/>	A		B										
1401717-009	MW-16	Water	1/23/2014 12:25	<input type="checkbox"/>	A		B										
1401717-010	MW-17	Water	1/23/2014 14:20	<input type="checkbox"/>	A		B										
1401717-011	MW-15	Water	1/23/2014 14:00	<input type="checkbox"/>	A		B										

Test Legend:

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

Prepared by: Daniel Loa

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.



WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL

QC Level: LEVEL 2

Work Order: 1401717

Project: #140123_DRI; Owens Brockway Glass Plant

Client Contact: Christina Kennedy

Date Received: 1/24/2014

Comments:

Contact's Email: ckennedy@geologist.com

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1401717-001A	MW-7	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:08	5 days	Present	<input type="checkbox"/>	
1401717-001B	MW-7	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:08	5 days	Present	<input type="checkbox"/>	
1401717-002A	MW-19	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:28	5 days	Present	<input type="checkbox"/>	
1401717-002B	MW-19	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:28	5 days	Present	<input type="checkbox"/>	
1401717-003A	MW-6	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:50	5 days	Present	<input type="checkbox"/>	
1401717-003B	MW-6	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:50	5 days	Present	<input type="checkbox"/>	
1401717-004A	MW-5	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 12:15	5 days	Present	<input type="checkbox"/>	
1401717-004B	MW-5	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 12:15	5 days	Present	<input type="checkbox"/>	
1401717-005A	MW-20	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 12:42	5 days	Present	<input type="checkbox"/>	
1401717-005B	MW-20	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 12:42	5 days	Present	<input type="checkbox"/>	
1401717-006A	MW-8	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:35	5 days	Present	<input type="checkbox"/>	
1401717-006B	MW-8	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:35	5 days	Present	<input type="checkbox"/>	
1401717-007A	MW-10	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:25	5 days	Present	<input type="checkbox"/>	
1401717-007B	MW-10	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:25	5 days	Present	<input type="checkbox"/>	
1401717-008A	MW-13	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:55	5 days	Present	<input type="checkbox"/>	
1401717-008B	MW-13	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 11:55	5 days	Present	<input type="checkbox"/>	
1401717-009A	MW-16	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 12:25	5 days	Present	<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

VOA w/ HCl = 43mL VOA w/ HCl



WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL

QC Level: LEVEL 2

Work Order: 1401717

Project: #140123_DRI; Owens Brockway Glass Plant

Client Contact: Christina Kennedy

Date Received: 1/24/2014

Comments:

Contact's Email: ckennedy@geologist.com

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1401717-009B	MW-16	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 12:25	5 days	Present	<input type="checkbox"/>	
1401717-010A	MW-17	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 14:20	5 days	Present	<input type="checkbox"/>	
1401717-010B	MW-17	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 14:20	5 days	Present	<input type="checkbox"/>	
1401717-011A	MW-15	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 14:00	5 days	Present	<input type="checkbox"/>	
1401717-011B	MW-15	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	1/23/2014 14:00	5 days	Present	<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

VOA w/ HCl = 43mL VOA w/ HCl

1401717

BLAINE

TECH SERVICES, INC

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB McC Campbell DHS # _____
ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
 EPA RWQCB REGION _____
 LIA
 OTHER

CHAIN OF CUSTODY	
BTS #	<u>140123-Dr1</u>
CLIENT	<u>CKG Environmental</u>
SITE	<u>Owens Brockway Glass Plant</u>
	<u>3600 Alameda Avenue</u>
	<u>Oakland, CA</u>

C = COMPOSITE ALL CONTAINERS

TPHg / BTEX (8015/8021)

TPH-d, TPH-mo w/silica gel clean up

SPECIAL INSTRUCTIONS

Invoice and Report to : CKG Environmental
808 Zinfandel Lane, St Helena, CA 94574
Attn: Christina Kennedy
Dissolved product in samples MW-2 and MW-6
Please provide EDF and PDF of results

SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H ₂ O	CONTAINERS TOTAL	C	TPHg / BTEX (8015/8021)	TPH-d, TPH-mo w/silica gel clean up								ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
+ MW-7	<u>11/23/14</u>	<u>1108</u>	<u>W</u>	<u>4</u>	<u>11/23/14</u>	X	X											
+ MW-19		<u>1128</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-6		<u>1150</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-5		<u>1215</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-20		<u>1242</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-8		<u>1135</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-10		<u>1128</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-13		<u>1155</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-16		<u>1225</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-17		<u>1420</u>	<u>W</u>	<u>4</u>		X	X											
+ MW-15		<u>1400</u>	<u>W</u>	<u>4</u>		X	X											

ICE 11-9.2
GOOD CONDITION _____ APPROPRIATE
HEAD SPACE ABSENT _____ CONTAINERS
DECHLORINATED IN LAB _____ PRESERVED IN LAB
PRESERVATION VOAS | O & G | METALS | OTHER |

SAMPLING COMPLETED 11/23/14 TIME _____ SAMPLING PERFORMED BY D. Reynal / B. Wickes RESULTS NEEDED NO LATER THAN _____ Per Client

RELEASED BY [Signature] DATE 11/23/14 TIME 1540 RECEIVED BY [Signature] DATE 11/23/14 TIME 1540

RELEASED BY [Signature] DATE 11/24/14 TIME 1110 RECEIVED BY [Signature] DATE 11/24/14 TIME 1110

RELEASED BY [Signature] DATE 11/24/14 TIME 1605 RECEIVED BY [Signature] DATE 11/24/14 TIME 1605

SHIPPED VIA _____ DATE SENT _____ TIME SENT _____ COOLER # _____



Sample Receipt Checklist

Client Name: **CKG Environmental** Date and Time Received: **1/24/2014 8:29:19 PM**
 Project Name: **#140123_DRI; Owens Brockway Glass Plant** LogIn Reviewed by: **Daniel Loa**
 WorkOrder N°: **1401717** Matrix: Water Carrier: Benjamin Yslas (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: 4.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 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.

 Comments: