RECEIVED
By Alameda County Environmental Health 9:28 am, Aug 04, 2017

July 10, 2017

Ms. Dilan Roe
Alameda County Health Care Services
Environmental Health Services
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Subject: **RO0000289**
SECOND QUARTER 2017 GROUNDWATER MONITORING AND REMEDIATION EFFECTIVENESS REPORT
OWENS-BROCKWAY GLASS CONTAINER FACILITY.
3600 ALAMEDA AVENUE, OAKLAND, CALIFORNIA.

Dear Ms. Roe:

Owens-Brockway Glass Container Corporation is pleased to submit the attached Second Quarter 2017 Grou8ndwater Monitoring and Remediation Effectiveness Report for the above site.

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

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

Sincerely,

Mark Tussing
Regional EHS Manager

SECOND QUARTER 2017 GROUNDWATER MONITORING AND REMEDIATION EFFECTIVENESS 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

SECOND QUARTER 2017 GROUNDWATER MONITORING AND REMEDIATION EFFECTIVENESS REPORT

OWENS-BROCKWAY GLASS CONTAINER FACILITY, OAKLAND, CALIFORNIA

July 7, 2017

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 SUMMARY

The Owens-Brockway glass manufacturing facility is located at 3600 Alameda Avenue in Oakland, California. The site is located on the north side 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 closed glass manufacturing plant, warehouses, and offices.

Subsurface investigations to assess petroleum hydrocarbon releases from two underground fuel storage tank (UST) areas have been ongoing 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. In 1986 18 groundwater monitoring wells were installed. Since that time some of those wells had been destroyed and new ones added. As of November 2016, there are still 15 operating monitoring wells at the site.

Since 1986 a number of petroleum hydrocarbon recovery or remediation measures have been completed at the site. These include removing USTs, installing free product recovery wells, and excavating suspected source areas.

Property research conducted in May 2015 as part of a Phase I Environmental Site Assessment for the property revealed that prior to the glass manufacturing plant being constructed the property was occupied by an asphalt refinery. The refinery operations included a number of petroleum hydrocarbon storage vessels and equipment that likely contributed petroleum hydrocarbons to the subsurface. The overall remediation strategy for the site includes the installation and operation of a groundwater treatment biobarrier along the downgradient property boundary and targeted soil excavations to reduce potential exposure to impacted soil.

With the approval of the groundwater treatment biobarrier on September 4, 2014, the groundwater monitoring program was modified to add analysis for naphthalene, MTBE, lead

scavengers, inorganic constituents and heterotrophic plate counts in addition to petroleum hydrocarbons and benzene, toluene, ethylbenzene, and xylenes.

In late 2015 through early 2016 the groundwater treatment trench or “biobarrier” was installed along the southern property boundary. The biobarrier operates as a series of air sparging wells that introduce oxygen to the subsurface to promote natural biodegradation of petroleum hydrocarbons in groundwater as it migrates offsite to toward the Oakland Estuary. The biobarrier was started on July 20, 2016. Initially there were issues with the system producing too much heat which necessitating installing a heat exchanger. Since the heat exchanger was installed the system has been operating continuously with no problems. An engineering technician checks the system weekly and adjusts flow rates to each well if warranted based on individual well performance.

Groundwater monitoring is performed to evaluate the stability of petroleum hydrocarbons in the subsurface and to assess the effectiveness of remediation efforts. MTBE was detected in MW-17 at 2.5 µg/l. Naphthalene was detected at low concentrations in MW-7, MW-8, MW-10.and MW-17. Petroleum hydrocarbon concentrations in MW-6, which is near wells near the biobarrier have decreased then increased since the biobarrier started operating. Higher heterotrophic plate counts in wells nearer the biobarrier suggest that oxygen added to the subsurface by the biobarrier is promoting bacterial growth.

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 second quarter 2017 groundwater monitoring and groundwater treatment trench (biobarrier) performance. The work was performed in general accordance with CKG's Groundwater Treatment Biobarrier Design dated August 13, 2014. Any deviations from the work plan are 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 closed glass manufacturing plant, warehouses, and offices, (Plate 2).

UST Areas

USTs were formerly located on the west side and central area of the plant and included three former fuel oil USTs, (on the west side) and four USTs that contained diesel and gasoline in the central area. An eighth UST formerly used to store lube oil was located immediately adjacent to the plant building between the two areas. Fuel releases were observed when the USTs were removed in the late 1980s. Owens-Brockway excavated impacted soil at the time the USTs were removed, and has excavated petroleum hydrocarbon impacted soil in 2011 and 2014.

Former Asphalt Refinery Area

In May 2015, a review of Sanborn Maps showed that a historic asphalt refinery occupied the Western UST Area in the early 20th century, prior to the glass plant being constructed. Subsequent subsurface investigations have shown that the majority of petroleum hydrocarbon impacts in soil and groundwater at the site are the result of releases from the former asphalt refinery. These impacts occur underneath the glass plant building and warehouse and extend all the way to the Oakland Estuary.

3.0 GROUNDWATER MONITORING

3.1 GROUNDWATER GRADIENT

Depth to groundwater measurements were made on May 25, 2017, 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 May 25, 2017 the groundwater flow direction is generally 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 May 25, 2017 a round of groundwater sampling in the monitoring wells was performed. No separate phase product or visible sheen was observed in the wells however small globules of separate phase petroleum hydrocarbons product were observed floating in the water from MW-5. Absorbent socks were deployed and replaced in MW-5, MW-6, MW-7 and MW-13. MW-1 could not be sampled because it was covered with equipment. MW-9 which was located in the middle of the loading ramp could not be located. It appeared that it may have been concreted over some years ago.

The wells were sampled using the following protocol.

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

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

3.3 CHEMICAL ANALYSIS

Groundwater samples were submitted under chain-of-custody to McCampbell Analytical Laboratory in Pacheco, California. McCampbell is a laboratory certified with the California Department of Health Services under the California Environmental Laboratory Accreditation Program (ELAP) for the requested analyses. The analytical program was completed in general accordance with CKG's workplan dated August 13, 2014. 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;
- Benzene, Toluene, Ethylbenzene, Xylenes, Methyl-tert-butyl ether (MTBE), Naphthalene, 1, 2- Dichloroethane (1,2-DCA) and Ethylene dibromide (EDB) by EPA Method 8260B
- Nitrate, Nitrite and Sulfate by EPA Method 300.0
- Alkalinity (total and speciated) by EPA Method 310.1
- Heterotrophic Plate Count by Standard Method 9215.

3.5 INVESTIGATION DERIVED WASTES (IDW)

Investigation derived wastes (IDW) were generated during the investigation and included purge water. Purge water was placed into drums and left onsite pending proper disposal.

3.6 BIOBARRIER OPERATIONS AND MAINTENANCE

The biobarrier was started on July 20, 2016. After some initial issues with the system overheating, a heat exchanger was installed to mitigate the problem. The biobarrier has been operating continuously since the heat exchanger was installed. Part of the initial start-up activity was to evaluate the optimum flow rate for each well, then group wells according to flow rate so that they could be operated together. An engineering technician visits the site weekly to check the flow rate in each well and to assure that everything is operating properly or to affect repairs if necessary. A summary of observations made weekly from April 3, 2017 through June 30, 2017 is provided in Appendix C.

4.0 FINDINGS

The following describes the results of the second quarter 2017 groundwater monitoring and weekly biobarrier 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 Tables 3-5. 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 Petroleum Hydrocarbons (gasoline, diesel and motor oil)

Petroleum hydrocarbons quantified as gasoline were detected in eight of the wells sampled. These include, MW-2R (150 µg/l), MW-5 (390 µg/l), MW-6 (110 µg/l), MW-7 (86 µg/l), MW-8 (1200 µg/l), MW-10 (190 µg/l), MW-17 (300 µg/l) and MW-19 (200 µg/l). These wells are highly impacted by petroleum hydrocarbons and the TPHg detected likely represents the lighter end of the diesel range of contaminants that are present rather than primary gasoline constituents.

Petroleum hydrocarbons quantified as diesel were detected in 13 of the wells sampled. These include MW-2R (2200 µg/l), MW-5 (7200 µg/l), MW-6 (9,100 µg/l), MW-7 (2000 µg/l), MW-8 (590 µg/l), MW-10 (2600 µg/l), MW-13 (100 µg/l), MW-15 (270 µg/l), MW-16 (98 µg/l), MW-17 (3000 µg/l), MW-19 (230 µg/l), MW-20 (100 µg/l) and MW-21 (100 µg/l). In the fourth quarter of 2016 the TPHd in MW5, MW-6 and MW-7 was substantially lower than observed in the past, but in the first quarter 2017 the concentrations were much higher again, then dropped in the second quarter. It should be noted that groundwater elevations were over two feet higher than usual in the first quarter of 2017 and have dropped approximately two feet since then. Petroleum hydrocarbons can be variable depending on groundwater elevations and the activity of air injection and subsurface microbes.

Petroleum hydrocarbons quantified as motor oil were detected in nine of the wells sampled. These include MW-2R (470 µg/l), MW-5 (7600 µg/l), MW-6 (21,000 µg/l), MW-7 (730 µg/l), MW-10 (570 µg/l), MW-15 (340 µg/l), MW-15 (1300 µg/l), MW-17 (5700 µg/l) and MW-24

(280 µg/l). As observed for TPHd the TPHmo is higher in some wells this quarter compared to last quarter but lower in others. Petroleum hydrocarbon data is summarized on Table 3.

4.1.2 Naphthalene MTBE and Lead Scavengers

Table 4 summarizes the results of analyses for naphthalene, MTBE was detected in MW-17 at 2.5 µg/l. Naphthalene was detected at low concentrations in MW-7 (0.99 µg/l), MW-8 (2.5 µg/l), MW-10 (1.2 µg/l).and MW-17 (0.61 µg/l).

4.1.3 Inorganic Constituents and Heterotrophic Plate Counts

Inorganic constituents such as nitrate, nitrite, sulfate, and alkalinity are analyzed to assess the extent to which bacteria are utilizing oxygen to biodegrade petroleum hydrocarbons in the groundwater. Dissolved oxygen and Oxidation Reduction Potential (ORP) are also measured in the field to provide some information regarding oxygen availability and utilization in groundwater as well. Heterotrophic plate counts are measured to evaluate the activity of microbes in the groundwater that may be contributing to the biodegradation of the petroleum hydrocarbons. The results of these analyses are summarized on Table 5. Changes in inorganic constituents are observed but a clear pattern is not yet apparent. Heterotrophic plate counts are generally higher than observed in the past, particularly in the wells closer to the biobarrier. This increase suggests that the addition of oxygen to the subsurface is promoting bacterial growth. Ongoing groundwater monitoring should reveal additional trends associated with the addition of oxygen to the groundwater.

4.2 SUMMARY OF BIOBARRIER OPERATIONS & MAINTENANCE

The biobarrier has been operating continuously and without need for maintenance since the heat exchanger was installed after initial start-up on July 20. All wells are receiving steady airflows without problems.

5.0 CONCLUSIONS AND RECOMMENDATIONS

On the basis of the quarterly 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 petroleum hydrocarbon release on the west side of the site appears to extend off site.

The diesel release in the central part of the site has been attenuating.

The former gasoline release in the central part of the site has attenuated with no gasoline related constituents detected at MW-16.

Petroleum hydrocarbon concentrations in wells nearest the biobarrier have fluctuated since the biobarrier started operating but this may influenced by fluctuating water levels. Increased heterotrophic plate counts suggest that oxygen added to the subsurface by the biobarrier is promoting bacterial growth.

The biobarrier is operating smoothly and all wells are receiving steady air flows.

5.2 RECOMMENDATIONS

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

Groundwater monitoring will be continued to monitor the effectiveness of the groundwater treatment biobarrier.

6.0 REFERENCES

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

CKG Environmental, Inc. 2017, First Quarter 2017 Groundwater Monitoring and Remediation Effectiveness Report, Owens-Brockway Glass Container Facility, 3600 Alameda Avenue, Oakland, California, April 5, 2017

CKG Environmental, Inc. 2017, Fourth Quarter 2016 Groundwater Monitoring and Remediation Effectiveness Report, Owens-Brockway Glass Container Facility, 3600 Alameda Avenue, Oakland, California, January 5, 2017

CKG Environmental, Inc. 2016, Revised Work Plan to Complete a Soil Vapor Investigation, Owens-Brockway Glass Container Facility, Oakland, California, October 13, 2016.

CKG Environmental, Inc. 2016, Subsurface Investigation Report Former Fuel Storage and Historical Asphalt Refinery Operational Areas, Owens-Brockway Glass Container Facility, 3600 Alameda Avenue, Oakland, California, March 4, 2016

CKG Environmental, Inc. Annual Groundwater Monitoring Reports,
2015 Report, December 14, 2016.
2014 Report, February 28, 2014.
2013 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.

Work Plan for Additional Targeted Excavation and Subsurface Investigation, Former Fuel Storage and Historical Asphalt Refinery Operational Areas, Owens-Brockway Glass Container Facility, 3600 Alameda Avenue, Oakland, California, dated December 2, 2015.

CKG Environmental, Inc. 2014 Groundwater Treatment Biobarrier Design, Owens-Brockway Glass Container Facility, Oakland, California August 13, 2014.

CKG Environmental, Inc. 2014 Revised Corrective Action Plan Targeted Excavations and Groundwater Treatment Trench, Owens-Brockway Glass Container Facility, Oakland, California January 17, 2014.

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 Elelvation[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-2R	11-Sep-15	18.17	18	5	23	2	
MW-3	12-Sep-86	15.46	10	20	39	2	Destroyed
MW-3R	11-Sep-15	17.18	17	5	22	2	
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	15.84	10	15	25	2	
MW-20	01-Dec-00	12.74	6.9	15	21.9	2	
MW-21	11-Sep-15	16.2	15	15	39	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 May 25, 2017

Well Number	Date Installed	Top of Casing Elelvation[(a)]	Depth to Water	Product thickness (ft)*	Groundwater Elevation
MW-1	12-Sep-86	16.02	NA		NA
MW-2	12-Sep-86	17.11	Destroyed		
MW-2R	11-Sep-15	18.17	9.94		8.23
MW-3R	11-Sep-15	17.18	11.7		5.48
MW-4	12-Sep-86	NA	Destroyed		
MW-5	12-Sep-86	16.19	11.00		5.19
MW-6	12-Sep-86	17.48	13.76		3.72
MW-7	12-Sep-86	16.11	11.82		4.29
MW-8	12-Sep-86	16.57	8.97		7.6
MW-9	12-Sep-86	7.33[(d)]	Not measured, well cannot be located		
MW-10	12-Sep-86	15.96	8		7.96
MW-11	12-Sep-86	13.99	Destroyed		
MW-12	12-Sep-86	13.83	Destroyed		
MW-13	12-Sep-86	13.98	10.25		3.73
MW-14	12-Sep-86	NA	Destroyed		
MW-15	12-Sep-86	15.16	11.74		3.42
MW-16	12-Sep-86	13.48	8.28		5.2
MW-17	12-Sep-86	14.17	8.99		5.18
MW-19	01-May-03	15.84	13.28		2.56
MW-20	01-Dec-00	12.74	8.63		4.11
MW-21	11-Sep-15	16.20	12.78		3.42

(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 oil with product density of 0.893

Table 3 Summary of Petroleum Hydrocarbon Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-1	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						
	10/1/2015					<50	<50	<250
	11/10/2016	not accessible						
	2/9/2017	not accessible						
	5/27/2017	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 Petroleum Hydrocarbon Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-2R	10/1/2015	floating product (0.05 feet)						
	11/10/2016	<0.5	<0.5	<0.5	<0.5	1500	130	1400
	2/9/2017	<0.5	<0.5	<0.5	<1.5	460	<50	470
	5/25/2017	<0.5	<0.5	<0.5	<0.5	2200	150	2600
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-3R	10/1/2015	<0.5	<0.5	<0.5	<0.5	71	<50	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	<50	<50	<50
	2/9/2017	<0.5	<0.5	<0.5	<1.5	<50	<50	<250
	5/25/2017	<0.5	<0.5	<0.5	<0.5	100	<50	<250
MW-4	9/23/1986	<5	<5	NA	<5	NA	20	7,200
	4/9/1987	BDL	BDL	NA	BDL	NA	BDL	NA
	9/16/1987	BDL	BDL	NA	BDL	660	1.3	NA
	12/1/1987	BDL	BDL	NA	8.9	100	BDL	NA
	3/7/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	6/8/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	9/14/1988	BDL	BDL	NA	BDL	100	BDL	NA
		Destroyed						

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 Petroleum Hydrocarbon Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
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
	10/1/2015	floating product (0.03 feet)						
	11/10/2016	<0.5	<0.5	<0.5	<0.5	940	94	590
	2/9/2017	<0.5	<0.5	<0.5	<1.5	6,700	<50	7,600
	5/25/2017	<0.5	<0.5	<0.5	<0.5	7,200	390	7,500

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 Petroleum Hydrocarbon 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
	10/1/2015	floating product (0.02 ft)						
	11/10/2016	<0.5	<0.5	<0.5	<0.5	13,000	260	11,000
	2/9/2017	<0.5	<0.5	<0.5	<1.5	23,000	140	21,000
	5/25/2017	<0.5	<0.5	<0.5	<0.5	9,100	110	7,800

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 Petroleum Hydrocarbon Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-7	10/3/1986	<5	<5	NA	<5	NA	260	8,000
	4/9/1987	floating product						
	9/16/1987	NA	NA	NA	NA	790,000	NA	NA
	12/1/1987	NA	NA	NA	NA	5,300	NA	NA
	3/9/1988	NA	NA	NA	NA	<50	NA	NA
	6/9/1988	NA	NA	NA	NA	12,000	NA	NA
	9/14/1988	NA	NA	NA	NA	67,000	NA	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	37,000[a]	850	NA
	11/2/1998	floating product						
	12/6/2000	<5	<.05	<.05	1.90	3,580[a]	540	NA
	12/12/2001	<1	<1	<1	<1	12,600[a]	1200[b]	NA
	12/6/2002	<0.5	<0.5	<0.5	<0.5	27,600[a]	480[b]	NA
	3/15/2004	<0.5	<0.5	0.57	1.10	170,000[a]	890[b]	NA
	6/30/2005	<.05	<.05	3.1	<.05	290,000	3000	150,000
	9/11/2006	<5	<5	<5	<5	310,000	6600[a]	150,000
	10/17/2007	<1	<1	<1	2.70	330,000	1900	190,000
	10/21/2008	<1	<1	<1	<1	82,000	1100	43,000
	10/16/2009	<5	<5	<5	<5	60,000	2200	35,000
	10/29/2010	floating product (0.03 ft)						
	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
	10/1/2015	not sampled, could not be located						
	11/10/2016	<0.5	<0.5	<0.5	<0.5	760	<50	720
	2/9/2017	<0.5	<0.5	<0.5	<1.5	1,900	290	730
	5/25/2017	<0.5	<0.5	<0.5	<0.5	2,000	86	630

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 Petroleum Hydrocarbon 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	190	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
	10/1/2015	<0.5	<0.5	<0.5	<0.5	120	190	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	150	210	340
	2/9/2017	<0.5	<0.5	<0.5	<1.5	<100	200	<500
	5/25/2017	<0.5	<0.5	<0.5	<0.5	590	1200	<250

NOTES:

TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l
B - Benzene in ug/l
X - Xylenes in ug/l

TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l
T - Toluene in ug/l
E - Ethylbenzene in ug/l

TOG - Total Oil and Grease in ug/l
TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)

BDL - Below detection limit
NA - Not analyzed

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

Table 3 Summary of Petroleum Hydrocarbon Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
MW-9	4/9/1987	floating product						
	9/16/1987	NA	NA	NA	NA	1,300	NA	NA
	12/1/1987	NA	NA	NA	NA	18,000	NA	NA
	3/9/1988	NA	NA	NA	NA	47,000	NA	NA
	6/8/1988	floating product						
	9/14/1988	floating product						
	9/16/1997	<13	<13	<13	18.00	28,000[(a)]	6000	NA
	11/2/1998	floating product						
	12/6/2000	<5	<.5	<.5	<.5	102,000[(a)]	790	NA
	12/12/2001	innaccessible						
	12/5/2002	innaccessible						
	3/15/2004	innaccessible						
	6/30/2005	innaccessible						
	9/11/2006	innaccessible						
	10/17/2007	innaccessible						
	10/21/2008	innaccessible						
	10/16/2009	innaccessible						
	10/29/2010	innaccessible						
	3/1/2012	innaccessible						
	3/22/2013	innaccessible						
	1/24/2014	innaccessible						
	10/1/2015	innaccessible						
	From 11/16	could not be located						

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 Petroleum Hydrocarbon 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
	10/1/2015	<0.5	<0.5	<0.5	<0.5	320	220	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	310	140	<250
	2/9/2017	<0.5	<0.5	<0.5	<1.5	180	<50	570
	5/25/2017	<0.5	<0.5	<0.5	<0.5	2600	190	3400
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 Petroleum Hydrocarbon 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
	10/1/2015	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	2/9/2017	<0.5	<0.5	<0.5	<1.5	<50	<50	<250
	5/25/2017	<0.5	<0.5	<0.5	<0.5	100	<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 Petroleum Hydrocarbon 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
	10/1/2015	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	2/9/2017	<0.5	<0.5	<0.5	<1.5	67	<50	340
	5/25/2017	<0.5	<0.5	<0.5	<0.5	270	<50	330

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 Petroleum Hydrocarbon Analytical Results
Owens-Brockway Glass Container Facility, Oakland, CA

	Date	B	T	E	X	TPHd	TPHg	TOG/TPHmo
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
	10/1/2015	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	2/9/2017	<0.5	<0.5	<0.5	<1.5	83	<50	1300
	5/25/2017	<0.5	<0.5	<0.5	<0.5	98	<50	<250

NOTES:

TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l
B - Benzene in ug/l
X - Xylenes in ug/l

TPH-d - Total Petroleum Hydrocarbons as Diesel in ug/l
T - Toluene in ug/l
E - Ethylbenzene in ug/l

TOG - Total Oil and Grease in ug/l
TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)

BDL - Below detection limit
NA - Not analyzed

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

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

Table 3 Summary of Petroleum Hydrocarbon 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
	10/1/2015	<5.0	<5.0	<5.0	0.52	51,000	460	27,000
	11/10/2016	<0.5	<0.5	<0.5	<0.5	910,000	530	360,000
	2/9/2017	<0.5	<0.5	<0.5	<1.5	10,000	100	5,700
	5/25/2017	<0.5	<0.5	<0.5	<0.5	3,000	300	1,800
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 Petroleum Hydrocarbon 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	<250
	10/1/2015	<0.5	<0.5	<0.5	<0.5	430	170	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	900	330	<250
	2/9/2017	<0.5	<0.5	<0.5	<1.5	110	170	<250
	5/25/2017	<0.5	<0.5	<0.5	<0.5	230	200	<250
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
	10/1/2015	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	2/9/2017	<0.5	<0.5	<0.5	<1.5	76	<50	<250
	5/25/2017	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
MW-21	10/1/2015	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	11/10/2016	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
	2/9/2017	<0.5	<0.5	<0.5	<1.5	110	<50	280
	5/25/2017	<0.5	<0.5	<0.5	<0.5	100	<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

Table 4 Summary of MTBE, Naphthalene and Lead Scavenger Results

Well Number	Date Sampled	EDB (ug/l)	1,2,DCA (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)
MW-1	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	Innaccessible			
	25-May-17	Innaccessible			
MW-2R	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-3R	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-5	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-6	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-7	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	0.99
MW-8	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	2.5
MW-9	01-Oct-15	Innaccessible			
	From 11/16	Could not be located			

Table 4 Summary of MTBE, Naphthalene and Lead Scavenger Results

MW-10	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	1.2
MW-13	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-15	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-16	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-17	01-Oct-15	<0.5	<0.5	**5.8**	<0.5
	10-Nov-16	<0.5	<0.5	**3.7**	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	2.5	0.61
MW-19	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	**6.7**
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-20	01-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5
MW-21	1-Oct-15	<0.5	<0.5	<0.5	<0.5
	10-Nov-16	<0.5	<0.5	<0.5	<0.5
	9-Feb-17	<0.5	<0.5	<0.5	<0.5
	25-May-17	<0.5	<0.5	<0.5	<0.5

EDB = Ethylene dibromide
1,2,-DCA = !,2 Dichloroethane
MTBE = Methyl-ter-butyl ether
ug/l = micrograms per liter

Table 5 Summary of Inorganic Constituent Results

Well Number	Date Sampled	Nitrate as N (mg/l)	Nitrite as N (mg/l)	Sulfate (mg/l)	Total Alkalinity (mg/l)	Carbonate (mg/l)	Bicarbonate (mg/l)	Hydroxide (mg/l)	Heterotrophic Plate Count (CFU/ml)	DO (mg/l)	ORC (mV)
MW-1	01-Oct-15	3	<0.1	41	248	<1	248	<1	1,800	0.81	185
	10-Nov-16	Could not be sampled because it was inaccessible									
	9-Feb-17	Could not be sampled because it was inaccessible									
	25-May-17	Could not be sampled because it was inaccessible									
MW-2R	01-Oct-15	Floating product, not sampled									
	10-Nov-16	0.8	2.3	41	604	124	<5	480	<1		
	9-Feb-17	<0.1	1.1	65	1090	308	<10	784	3.00	1.27	-112.30
	25-May-17	0.15	0.12	78	712	560	<10	152	2.00	2.13	147.00
MW-3R	01-Oct-15	<0.1	<0.1	130	581	<1	581	<1	19,000	1.00	170
	10-Nov-16	0.11	<0.1	84	867	<1	480	<1	7,100	NA	NA
	9-Feb-17	0.49	<0.1	130	655	<1	655	<1	22,000	0.23	-11
	25-May-17	0.12	<0.1	150	722	<1	722	<1	12,000	2.81	73
MW-5	01-Oct-15	Floating product, not sampled									
	10-Nov-16	0.11	0.2	8.2	646	<1	646	<1	210	NA	NA
	9-Feb-17	2.5	<0.1	43	728	<1	728	<1	4,100	0.92	-86.00
	25-May-17	<0.1	<0.1	19	680	<1	680	<1	89	0.78	-101.00
MW-6	01-Oct-15	Floating product, not sampled									
	10-Nov-16	<0.1	<0.1	150	356	<1	356	<1	23,000	NA	NA
	9-Feb-17	<0.1	<0.1	120	333	<1	333	<1	110,000	2.34	64.00
	25-May-17	<0.1	<0.1	100	382	<1	382	<1	5,500	2.12	22.00

Table 5 Summary of Inorganic Constituent Results

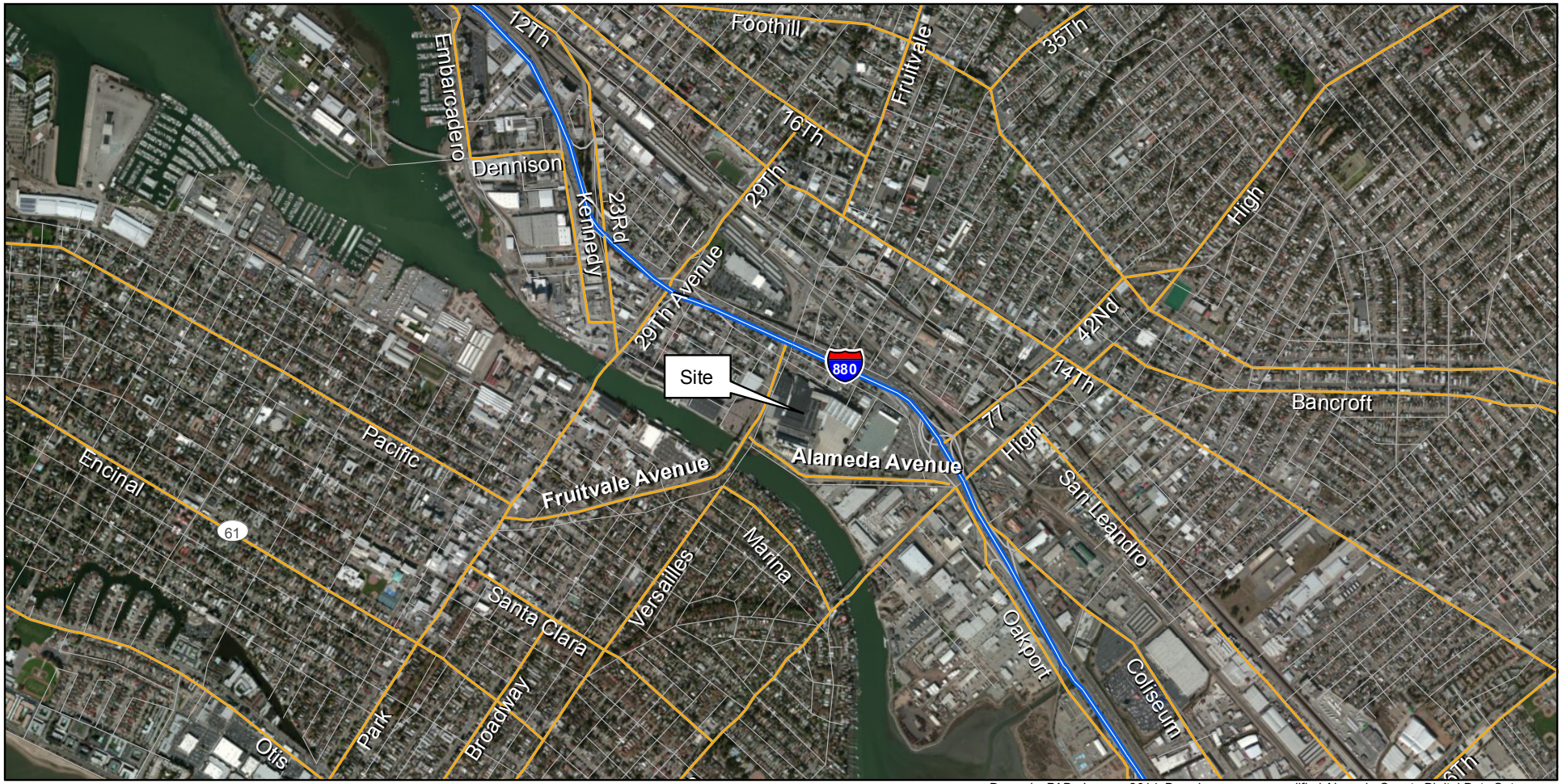
Well Number	Date Sampled	Nitrate as N (mg/l)	Nitrite as N (mg/l)	Sulfate (mg/l)	Total Alkalinity (mg/l)	Carbonate (mg/l)	Bicarbonate (mg/l)	Hydroxide (mg/l)	Heterotrophic Plate Count (CFU/ml)	DO (mg/l)	ORC (mV)
MW-7	01-Oct-15	Could not locate									
	10-Nov-16	<0.1	<0.1	500	237	<1	237	<1	4,400	NA	NA
	9-Feb-17	<0.1	<0.1	580	579	<1	579	<1	38,000	1.37	-36.00
	25-May-17	<0.1	<0.1	1300	681	<1	681	<1	2,200	1.12	72.00
MW-8	01-Oct-15	2.9	<0.1	100	404	<1	404	<1	350	0.45	141
	10-Nov-16	3.7	0.23	100	460	<1	460	<1	680	NA	NA
	9-Feb-17	4.7	0.13	100	384	<1	384	<1	670	1.47	-17
	25-May-17	0.54	<0.1	44	898	<1	898	<1	69	1.77	55
MW-9	01-Oct-15	Inaccessible									
	From 11/16	Could not be located									
MW-10	01-Oct-15	<0.1	<0.1	0.53	576	<1	576	<1	2,800	0.35	180
	10-Nov-16	<0.1	<0.1	0.22	763	<1	763	<1	1,100	NA	NA
	9-Feb-17	<0.1	<0.1	5.7	326	<1	326	<1	20,000	2.46	87.2
	25-May-17	<0.1	<0.1	0.89	436	<1	436	<1	920	1.73	-32
MW-13	01-Oct-15	25	<0.1	39	381	<1	381	<1	1,400	1.10	80
	10-Nov-16	0.96	0.16	62	474	<1	474	<1	2,000	NA	NA
	9-Feb-17	0.24	<0.1	6.4	153	<1	153	<1	24,000	0.48	207
	25-May-17	1	0.2	120	459	<1	459	<1	180	1.30	80
MW-15	01-Oct-15	4.3	<0.1	96	522	<1	522	<1	8	2.29	95
	10-Nov-16	1.8	<0.1	140	833	<1	833	<1	1,200	NA	NA
	9-Feb-17	0.24	<0.1	280	738	<1	738	<1	9,600	0.61	104
	25-May-17	0.41	<0.1	370	871	<1	871	<1	130	2.27	110
MW-16	01-Oct-15	0.27	<0.1	49	253	<1	253	<1	900	0.35	-31
	10-Nov-16	0.92	0.13	57	320	<1	320	<1	2,200	NA	NA
	9-Feb-17	<0.1	<0.1	1.0	31.9	<1	31.9	<1	21,000	0.54	245
	25-May-17	0.89	<0.1	46	216	<1	216	<1	190	0.26	64

Table 5 Summary of Inorganic Constituent Results

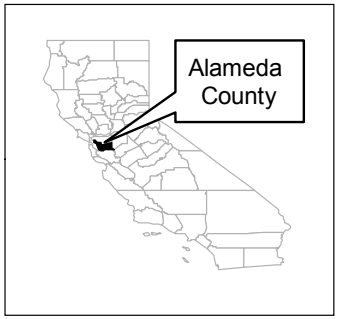
Well Number	Date Sampled	Nitrate as N (mg/l)	Nitrite as N (mg/l)	Sulfate (mg/l)	Total Alkalinity (mg/l)	Carbonate (mg/l)	Bicarbonate (mg/l)	Hydroxide (mg/l)	Heterotrophic Plate Count (CFU/ml)	DO (mg/l)	ORC (mV)
MW-17	01-Oct-15	0.13	<0.1	6.6	422	<1	422	<1	210	0.28	72
	10-Nov-16	0.18	<0.1	5.1	503	<1	503	<1	320	NA	NA
	9-Feb-17	<0.1	<0.1	6.3	165	<1	165	<1	34,000	0.81	-43
	25-May-17	1.1	0.18	37	451	<1	451	<1	320	0.34	-8
MW-19	01-Oct-15	<0.1	<0.1	1.2	476	<1	476	<1	950	0.60	-101
	10-Nov-16	<0.1	<0.1	0.18	544	<1	544	<1	160	NA	NA
	9-Feb-17	0.73	<0.1	53	742	<1	742	<1	8,500	0.28	270
	25-May-17	<0.1	<0.1	11	576	<1	576	<1	1,100	0.48	-103
MW-20	01-Oct-15	1.3	<0.1	56	296	<1	296	<1	350	1.20	20
	10-Nov-16	0.91	<0.1	57	393	<1	393	<1	96	NA	NA
	9-Feb-17	0.64	<0.1	28	113	<1	113	<1	15,000	0.47	270
	25-May-17	1.1	<0.1	58	304	<1	304	<1	180	2.78	26
MW-21	01-Oct-15	3.8	0.27	160	626	<1	626	<1	21,000	0.78	1
	10-Nov-16	5.5	0.24	130	792	<1	792	<1	1,800	NA	NA
	9-Feb-17	4.7	0.78	160	930	<1	930	<1	110,000	0.63	113
	25-May-17	5.3	0.34	1600	897	<1	897	<1	670	0.75	93

Notes:
mg/l = milligrams per liter
DO = Dissolved Oxygen
mV = millivolts
CFU/ml = Colony forming unit/milliliter
ORC = Oxidation Reduction Potential
NA = Not available

PLATES



Drawn by PAD. January 2014. Base layers are unmodified Alameda County Digital Data Sets.



0 1,000 2,000

Scale in Feet

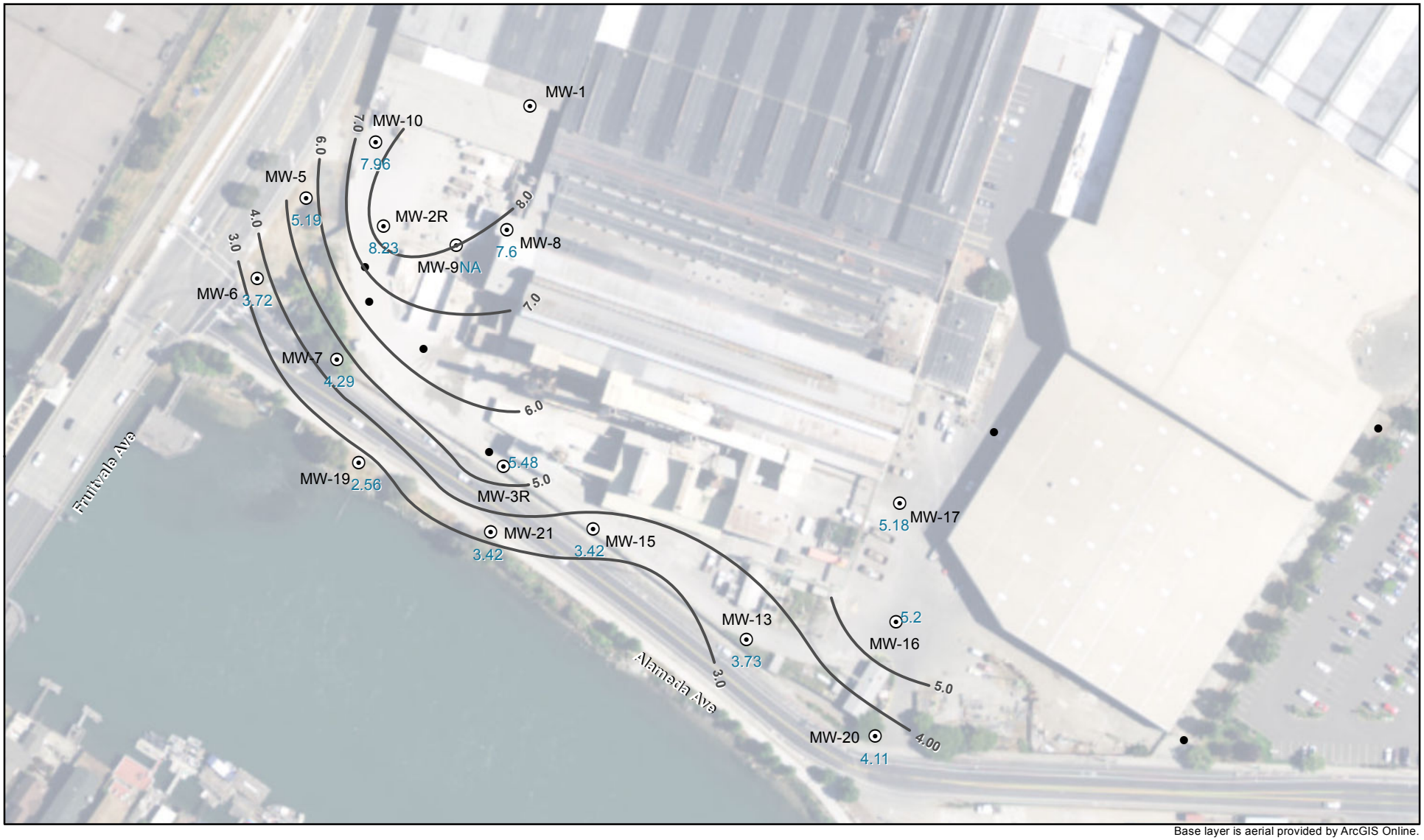
N

S

CKG Environmental, Inc.

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

PLATE
1



Base layer is aerial provided by ArcGIS Online.

EXPLANATION

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

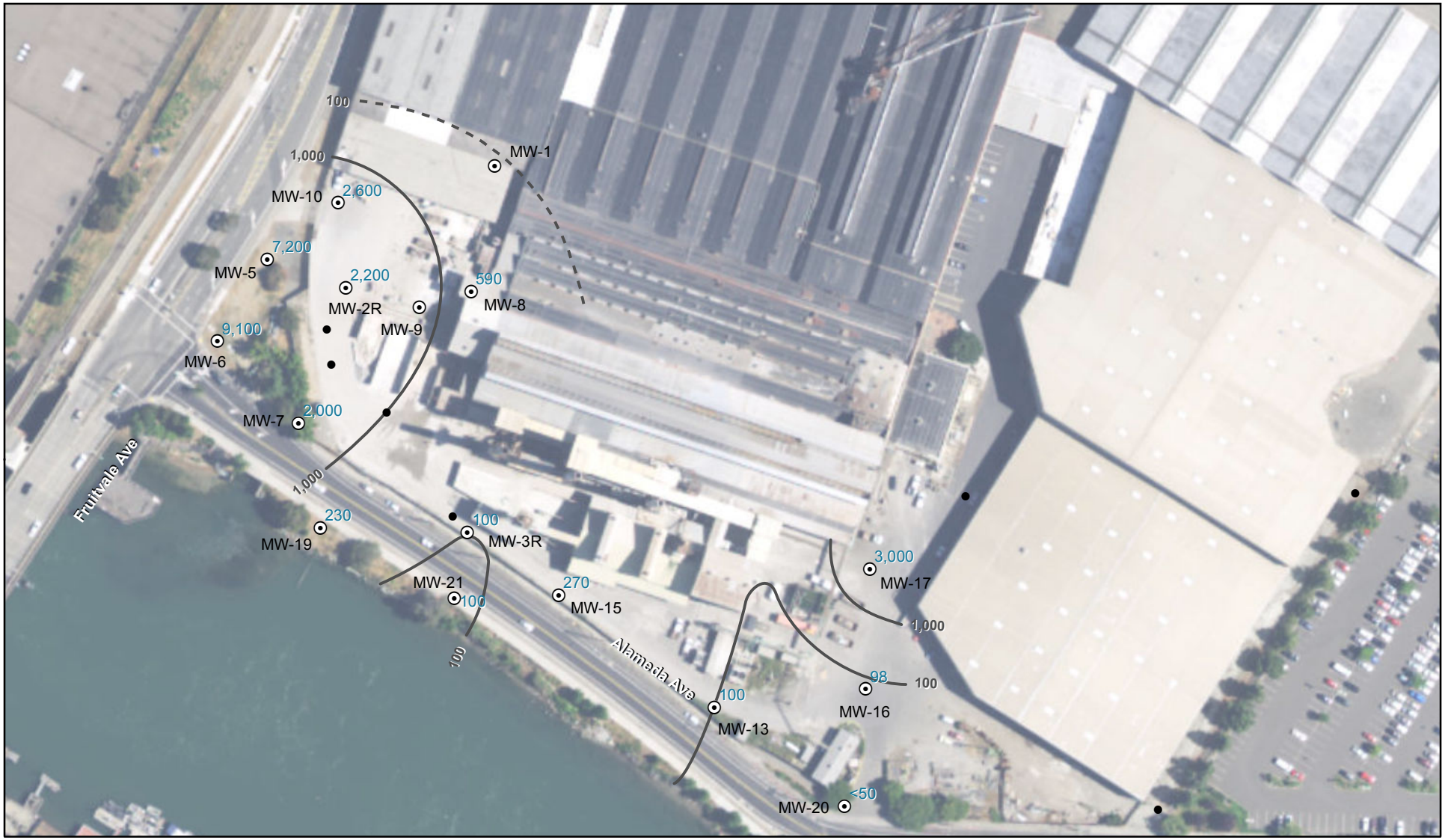
0 75 150

Scale in Feet

CKG Environmental, Inc.

Groundwater Elevation Contour Map, May 25, 2017
Owens-Brockway Glass Container Facility
3600 Alameda Avenue, Oakland California

PLATE
2



Base layer is aerial provided by ArcGIS Online.

EXPLANATION

- Monitoring Well
- Destroyed Well
- Line of Equal Concentration
- Dashed where approximate

490 TPHd Concentration ug/L

NA Not Available

0 75 150

Scale in Feet

CKG Environmental, Inc.

Fuel Oil/Diesel Contour Map, May 25, 2017
Owens-Brockway Glass Container Facility
3600 Alameda Avenue, Oakland California

PLATE
3

APPENDIX A

WELL GAUGING DATA

Project # 170525-GR1 Date 5/25/2017 Client CKG

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	*	Unable to locate		—	—	—	—	—		
MW-2R	~~0846~~	2	NO/YES	—	—	—	9.94	22.66		
MW-3R	0859	2	NO/YES	—	—	—	11.70	22.07		
MW-5	0835	2	NO odor	—	—	—	11.00	22.90		
MW-6	0810	2	NO odor	—	—	—	13.76	~~22.95~~ ~~16.93~~ (ND)		sock
MW-7	0845	2	NO odor	—	—	—	11.82	16.93		sock
MW-8	0909	2	NO/NO	—	—	—	8.97	23.43		sock
MW-9	*	Unable to locate		—	—	—	—	—		
MW-10	0920	2	NO/NO	—	—	—	8.00	19.30		
MW-13	0853	2	NO/NO	—	—	—	10.25	18.24		Socks
MW-15	0900	2	NO/NO	—	—	—	11.74	27.94		
MW-16	0838	2	NO/NO	—	—	—	8.78	19.32		Socks
MW-17	0844	2	YES/YES	—	—	—	8.99	15.90		Socks
MW-19	0855	2	NO/NO	—	—	—	13.28	25.10		
MW-20	0825	2	NO/NO	—	—	—	8.63	28.85		Socks
MW-21	0900	2	NO/NO	—	—	—	12.78	21.88		

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CLG
Sampler: DH	Date: 5/25/17
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: _____

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

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* Unable to locate well						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

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 #: 170525-6R1	Client: CKG
Sampler: ND	Date: 5/25/17
Well I.D.: MW-2R	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 22.66	Depth to Water (DTW): 9.94
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]: 12.48	

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: _____

2.0 (Gals.) X 3 = 6.0 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	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0933	65.2	12.11	2223	219	2.0	
0938	65.6	12.02	1875	174	4.0	
0945	65.6	11.98	1864	181	6.0	
						* bailer stained
1205	66.9	11.77	1919	109	GRAB	w/ SPH

Did well dewater? Yes (No) Gallons actually evacuated: 6.0

Sampling Date: 5/25/17 Sampling Time: 1210 Depth to Water: 10.93

Sample I.D.: MW-2R Laboratory: 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:	* 2.13	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	* 147	mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: ND	Date: 5/25/17
Well I.D.: MW-3R	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 22.07	Depth to Water (DTW): 11.70
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]: 13.77	

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: _____

1.7 (Gals.) X 3 = 5.1 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	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1109	64.4	7.51	1769	>1000	1.7	dark brown
1110	we	11	dewatered @		3.0	↓
1250	69.1	7.58	1853	>1000	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 3.0

Sampling Date: 5/25/17 Sampling Time: 1255 Depth to Water: 12.10

Sample I.D.: MW-3R Laboratory: 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:	2.81 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	73 mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CLG
Sampler: DH	Date: 5/25/17
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 27.90	Depth to Water (DTW): 11.08
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]: 13.34	

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: _____

1.9 (Gals.) X	3	=	5.7 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0915	16.3	6.83	1402	Moderate	2	brown
0918	16.5	6.78	1397	Moderate	4	brown
0921	16.4	6.74	1395	Moderate	6	light brown

Did well dewater? Yes (No) Gallons actually evacuated: 6.0

Sampling Date: 5/25/17 Sampling Time: 1215 Depth to Water: 11.77

Sample I.D.: MW-5 Laboratory: 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:	0.78 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	-101 mV

WELL MONITORING DATA SHEET

Project #: 110525-GT21	Client: CLC
Sampler: DA	Date: 5/25/17
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 27.95	Depth to Water (DTW): 13.76
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]: 15.00	

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: _____

1.5 (Gals.) X	3	=	4.5 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	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0933	17.7	7.24	1092	>1000	1.5	brown
	well dewatered @				2	
1230	19.2	7.38	1052	>1000	Grab	brown

Did well dewater? (Yes) No		Gallons actually evacuated: 2	
Sampling Date: 5/25/17	Sampling Time: 1230	Depth to Water: 13.68	
Sample I.D.: MW-6		Laboratory: McCampbell	
Analyzed for: TPH-G BTEX MTBE TPH-D		Oxygenates (5)	Other: See rec
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:	2.12 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	22 mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: DH	Date: 5/25/17
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 16.93	Depth to Water (DTW): 11.82
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]: 12.84	

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: _____

0.9 (Gals.) X 3 = 2.7 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0950	20.1	7.92	(6068)	>1000	1.0	brown
	well	dewatered @			1.5	
1245	20.7	7.08	618	>1000		brown

Did well dewater? (Yes) No Gallons actually evacuated: 1.5

Sampling Date: 5/24/17 Sampling Time: 1245 Depth to Water: 11.26

Sample I.D.: MW-7 Laboratory: McCampbell

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

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:	1.12	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	72	mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: ND	Date: 5/25/17
Well I.D.: MW-8	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 23.43	Depth to Water (DTW): 8.97
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]: 11.86	

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: _____

2.3 (Gals.) X 3 = 6.9 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	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1029	60.0	7.39	2603	29	2.3	
1040	60.4	7.31	2719	146	4.6	light yellow
1047	60.3	7.30	2742	153	6.9	↓
1235	66.4	7.31	2777	131	GRAB	

Did well dewater? Yes (No) Gallons actually evacuated: 6.9

Sampling Date: 5/25/17 Sampling Time: 1240 Depth to Water: 9.75

Sample I.D.: MW-8 Laboratory: 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:	1.77	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	55	mV

ELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: DH	Date: 5/25/17
Well I.D.: MW-9	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: _____

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

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
*	Unable to	locate	well			

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 #: 170525-GR1	Client: CKG
Sampler: ND	Date: 5/25/17
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 19.30	Depth to Water (DTW): 8.00
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.26	

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: _____

1.8 (Gals.) X 3 = 5.4 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	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1002	64.4	8.19	844	>1000	1.8	grey | black
1007	64.6	8.11	879	>1000	3.6	↓
1015	64.6	8.10	888	>1000	5.4	
1220	65.9	8.11	903	>1000	6 OAB	

Did well dewater? Yes (No) Gallons actually evacuated: 5.4

Sampling Date: 5/25/17 Sampling Time: 1225 Depth to Water: 8.99

Sample I.D.: MW-10 Laboratory: 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:	1.73	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	-32	mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: GR	Date: 5/25/2017
Well I.D.: MW-13	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 18.24	Depth to Water (DTW): 10.25
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]: 11.85	

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: _____

1.3 (Gals.) X 3 = 3.9 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0950	18.0	7.17	1453	>1000	1.5	
0953	18.0	7.20	1311	>1000	3.0	
0956	17.9	7.24	1315	>1000	4.5	DTW- 11.15

Did well dewater? Yes (No) Gallons actually evacuated: 4.5

Sampling Date: 5/25/17 Sampling Time: 1230 Depth to Water: 10.23

Sample I.D.: MW-13 Laboratory: 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:)	1.30	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge:)	80	mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: GR	Date: 5/25/2017
Well I.D.: MW-15	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 27.94	Depth to Water (DTW): 11.74
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]: 14.98	

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:_____

2.5 (Gals.) X	3	=	7.5 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0940	19.0	6.90	2318	>1000	2.5	
0943	———	WELL	DEWATERED	@	4.0	
1215	18.9	7.13	2099	622	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 4.0

Sampling Date: 5/25/17 Sampling Time: 1215 Depth to Water: 11.40

Sample I.D.: MW-15 Laboratory: 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:)	2.27	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge:)	110	mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: GR	Date: 5/25/2017
Well I.D.: MW-16	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 19.32	Depth to Water (DTW): 8.78
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.89	

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: _____

1.7 (Gals.) X	3	=	5.1 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1027	19.9	7.28	561	245	2.0	
1030	19.9	7.01	550	366	4.0	
1033	19.9	6.99	570	248	6.0	DTW - 10.77

Did well dewater? Yes (No) Gallons actually evacuated: 6.0

Sampling Date: 5/25/17 Sampling Time: 1300 Depth to Water: 8.78

Sample I.D.: MW-16 Laboratory: 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:)	0.26	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge:)	64	mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: GR	Date: 5/25/2017
Well I.D.: MW-17	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 15.90	Depth to Water (DTW): 8.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.37	

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: _____

1.1 (Gals.) X	3	=	3.3 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1006	18.8	6.87	919	652	1.1	
1008	18.8	6.79	932	>1000	2.2	
1011	18.7	6.80	934	>1000	3.3	DTW - 13.78

Did well dewater? Yes (No) Gallons actually evacuated: 3.3

Sampling Date: 5/25/17 Sampling Time: 1245 Depth to Water: 9.25

Sample I.D.: MW-17 Laboratory: 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:)	0.34	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge:)	~8	mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: Chevron
Sampler: DH	Date: 5/25/17
Well I.D.: MW-19	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 25.10	Depth to Water (DTW): 13.28
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]: 15.64	

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: _____

1.9 (Gals.) X	3	=	5.7 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1038	18.5	6.98	1187	27	2.0	clear
1041	18.7	6.95	1177	23	4.0	clear
1044	19.0	6.93	1180	22	6.0	clear

Did well dewater? Yes (No)		Gallons actually evacuated: 6.0	
Sampling Date: 5/25/17	Sampling Time: 1220	Depth to Water: 14.08	
Sample I.D.: MW-19		Laboratory: 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:	0.48 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	-103 mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: CKG
Sampler: GR	Date: 5/25/2017
Well I.D.: MW-20	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 28.95	Depth to Water (DTW): 8.63
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]: 12.67	

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: _____

3.2 (Gals.) X 3 = 9.6 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1051	18.5	7.28	762	416	3.5	
1055	18.7	7.21	795	>1000	7.0	
1101	18.7	7.26	810	>1000	10.5	DTW - 26.13
1305	19.1	7.70	784	142	Grab	

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Date: 5/25/17 Sampling Time: 1305 Depth to Water: 9.18

Sample I.D.: MW-20 Laboratory: 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)	2.78 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	(Post-purge)	76 mV

WELL MONITORING DATA SHEET

Project #: 170525-GR1	Client: OKG
Sampler: OH	Date: 5/25/17
Well I.D.: MW-21	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 21.88	Depth to Water (DTW): 12.78
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]: 14.60	

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: _____

1.5 (Gals.) X 3 = 4.5 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	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1015	19.4	7.44	2206	744	1.5	light brown
1019	19.2	7.96	2202	751	3.0	↓
1021	19.1	7.42	2197	810	4.5	↓

Did well dewater? Yes (No) Gallons actually evacuated: 4.5

Sampling Date: 5/25/17 Sampling Time: 1235 Depth to Water: 13.01

Sample I.D.: MW-21 Laboratory: 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:	0.75 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	93 mV

WELLHEAD INSPECTION CHECKLIST

Date 5/25/2017 Client CKG

Site Address OWENS BROCKWAY GLASS PLANT - OAKLAND, CA

Job Number 170525-GR1 Technician GR/ND/DH.

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1							X	*1
MW-2R							X	
MW-3R	X							
MW-5							X	
MW-6		X						
MW-7	X							
MW-8	X							
MW-9							X	*1
MW-10							X	
MW-13							X	
MW-15							X	
MW-16							X	
MW-17							X	
MW-19	X							
MW-20							X	
MW-21	X							

NOTES: *MW-1 + MW-9 = UNABLE TO LOCATE WELLS

MW-2R = 1/2 BOLTS MISSING; MW-5 = 2/2 BOLTS MISSING; MW-10 = WELL BOX LID BROKEN + FULL OF DEBRIS; MW-13 = WELL BOX LID BROKEN; MW-15 = 2/2 BOLTS MISSING; MW-16 = 2/2 BOLTS MISSING; MW-17 = 2/2 BOLTS MISSING; MW-20 = 2/2 BOLTS MISSING

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME CKG @ OWENS BROADWAY GLASS - OAKLAND				PROJECT NUMBER 170525-GR1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
MYRON L ULTRAMETER	6219985	5/25/17 @ 0800	7.0 10.0 4.0 pH	7.00 10.00 3.98	YES	20.0°C	GR
			3900 µs COND	3897	YES	20.3°C	GR
YSI 550	06E1424.AI	@ 0815	100% D.O	99.4%	YES	20.1°C	GR

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME CRG @ 3600 Alameda Ave				PROJECT NUMBER 170525-GR1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Myron L	62384923	0700 5/25/17	4/7/10 pH 3900 cond 237 ORP	4-7-10 3900 235.9	✓	17.1	NJ
YSI 550	BTS #1	0730 5/25/17	1001.0	99.71.	✓	16.9	NJ

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	CKG Owens Brockway Glass Plant			PROJECT NUMBER	120125-GR1		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Myron L ultrameter II	6215722	5/25/17	pH 7.0 4.0 10.0	7.0 4.0 10.0	y	16.7	DIT
↓	↓	↓	Cond 3900µs	3900µs	y	16.9	DIT
↓	↓	↓	ORP 231.5	233	y	17.4	DH

APPENDIX B

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1705B44

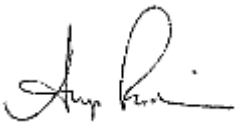
Report Created for: CKG Environmental

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

Project Contact: Christina Kennedy
Project P.O.:
Project Name: Owens Brockway Glass Plant

Project Received: 05/25/2017

Analytical Report reviewed & approved for release on 06/05/2017 by:



Angela Rydelius,
Laboratory Manager

McCampbell 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: Owens Brockway Glass Plant
WorkOrder: 1705B44

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
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
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

McCampbell 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: Owens Brockway Glass Plant
WorkOrder: 1705B44

Analytical Qualifiers

S	Surrogate spike recovery outside accepted recovery limits
b1	Aqueous sample that contains greater than ~1 vol. % sediment
b6	Lighter than water immiscible sheen/product is present
c2	Surrogate recovery outside of the control limits due to matrix interference.
c4	Surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.
d7	Strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9	No recognizable pattern
e2	Diesel range compounds are significant; no recognizable pattern
e3	Aged diesel is significant
e4	Gasoline range compounds are significant.
e7	Oil range compounds are significant
e11/e4	Pattern resembles stoddard solvent/mineral spirit; and/or Gasoline range compounds are significant.

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	E300.1
Date Prepared:	5/25/17-5/26/17	**Analytical Method:**	E300.1
Project:	Owens Brockway Glass Plant	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2R	**1705B44-001C**	**Water**	**05/25/2017 12:10**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.15**	0.10	1	05/25/2017 17:42
Nitrate as $NO3^{-}$	**0.66**	0.44	1	05/25/2017 17:42
Nitrite as N	**1.2**	0.10	1	05/25/2017 17:42
Nitrite as $NO2^{-}$	**4.0**	0.33	1	05/25/2017 17:42
Nitrate & Nitrite as N	**1.4**	0.10	1	05/25/2017 17:42
Sulfate	**78**	10	100	05/26/2017 13:27

Surrogates	REC (%)	Limits	
Formate	97	85-115	05/25/2017 17:42

Analyst(s): TD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3R	**1705B44-002D**	**Water**	**05/25/2017 12:55**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.12**	0.10	1	05/25/2017 18:32
Nitrate as $NO3^{-}$	**0.53**	0.44	1	05/25/2017 18:32
Nitrite as N	ND	0.10	1	05/25/2017 18:32
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 18:32
Nitrate & Nitrite as N	**0.12**	0.10	1	05/25/2017 18:32
Sulfate	**150**	10	100	05/26/2017 13:11

Surrogates	REC (%)	Limits	
Formate	96	85-115	05/25/2017 18:32

Analyst(s): TD

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	E300.1
Date Prepared:	5/25/17-5/26/17	**Analytical Method:**	E300.1
Project:	Owens Brockway Glass Plant	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1705B44-003C**	**Water**	**05/25/2017 12:15**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	05/25/2017 18:49
Nitrate as $NO3^{-}$	ND	0.44	1	05/25/2017 18:49
Nitrite as N	ND	0.10	1	05/25/2017 18:49
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 18:49
Nitrate & Nitrite as N	ND	0.10	1	05/25/2017 18:49
Sulfate	**19**	1.0	10	05/26/2017 12:54

Surrogates	REC (%)	Limits	
Formate	94	85-115	05/25/2017 18:49

Analyst(s): TD Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1705B44-004C**	**Water**	**05/25/2017 12:30**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	05/25/2017 19:05
Nitrate as $NO3^{-}$	ND	0.44	1	05/25/2017 19:05
Nitrite as N	ND	0.10	1	05/25/2017 19:05
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 19:05
Nitrate & Nitrite as N	ND	0.10	1	05/25/2017 19:05
Sulfate	**100**	10	100	05/26/2017 12:37

Surrogates	REC (%)	Limits	
Formate	96	85-115	05/25/2017 19:05

Analyst(s): TD Analytical Comments: b1

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	E300.1
Date Prepared:	5/25/17-5/26/17	**Analytical Method:**	E300.1
Project:	Owens Brockway Glass Plant	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1705B44-005C**	**Water**	**05/25/2017 12:45**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	05/25/2017 19:22
Nitrate as $NO3^{-}$	ND	0.44	1	05/25/2017 19:22
Nitrite as N	ND	0.10	1	05/25/2017 19:22
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 19:22
Nitrate & Nitrite as N	ND	0.10	1	05/25/2017 19:22
Sulfate	**1300**	100	1,000	05/26/2017 12:20

Surrogates	REC (%)	Limits	
Formate	102	85-115	05/25/2017 19:22

Analyst(s): TD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-8	**1705B44-006C**	**Water**	**05/25/2017 12:40**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.54**	0.10	1	05/25/2017 19:39
Nitrate as $NO3^{-}$	**2.4**	0.44	1	05/25/2017 19:39
Nitrite as N	ND	0.10	1	05/25/2017 19:39
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 19:39
Nitrate & Nitrite as N	**0.54**	0.10	1	05/25/2017 19:39
Sulfate	**44**	2.0	20	05/26/2017 12:03

Surrogates	REC (%)	Limits	
Formate	96	85-115	05/25/2017 19:39

Analyst(s): TD

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	E300.1
Date Prepared:	5/25/17-5/26/17	**Analytical Method:**	E300.1
Project:	Owens Brockway Glass Plant	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-10	**1705B44-007C**	**Water**	**05/25/2017 12:25**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	05/25/2017 20:29
Nitrate as $NO3^{-}$	ND	0.44	1	05/25/2017 20:29
Nitrite as N	ND	0.10	1	05/25/2017 20:29
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 20:29
Nitrate & Nitrite as N	ND	0.10	1	05/25/2017 20:29
Sulfate	**0.89**	0.10	1	05/25/2017 20:29

Surrogates	REC (%)	Limits	
Formate	93	85-115	05/25/2017 20:29

Analyst(s): TD Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-13	**1705B44-008C**	**Water**	**05/25/2017 12:30**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**1.0**	0.10	1	05/25/2017 20:46
Nitrate as $NO3^{-}$	**4.6**	0.44	1	05/25/2017 20:46
Nitrite as N	**0.20**	0.10	1	05/25/2017 20:46
Nitrite as $NO2^{-}$	**0.66**	0.33	1	05/25/2017 20:46
Nitrate & Nitrite as N	**1.2**	0.10	1	05/25/2017 20:46
Sulfate	**120**	10	100	05/26/2017 11:13

Surrogates	REC (%)	Limits	
Formate	95	85-115	05/25/2017 20:46

Analyst(s): TD

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	E300.1
Date Prepared:	5/25/17-5/26/17	**Analytical Method:**	E300.1
Project:	Owens Brockway Glass Plant	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-15	**1705B44-009D**	**Water**	**05/25/2017 12:15**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.41**	0.10	1	05/25/2017 21:03
Nitrate as $NO3^{-}$	**1.8**	0.44	1	05/25/2017 21:03
Nitrite as N	ND	0.10	1	05/25/2017 21:03
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 21:03
Nitrate & Nitrite as N	**0.41**	0.10	1	05/25/2017 21:03
Sulfate	**370**	10	100	05/26/2017 10:56

Surrogates	REC (%)	Limits	
Formate	96	85-115	05/25/2017 21:03

Analyst(s): TD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-16	**1705B44-010C**	**Water**	**05/25/2017 13:00**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.89**	0.10	1	05/25/2017 21:20
Nitrate as $NO3^{-}$	**3.9**	0.44	1	05/25/2017 21:20
Nitrite as N	ND	0.10	1	05/25/2017 21:20
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 21:20
Nitrate & Nitrite as N	**0.89**	0.10	1	05/25/2017 21:20
Sulfate	**46**	2.0	20	05/26/2017 10:23

Surrogates	REC (%)	Limits	
Formate	94	85-115	05/25/2017 21:20

Analyst(s): TD

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	E300.1
Date Prepared:	5/25/17-5/26/17	**Analytical Method:**	E300.1
Project:	Owens Brockway Glass Plant	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-17	**1705B44-011C**	**Water**	**05/25/2017 12:45**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**1.1**	0.10	1	05/25/2017 21:36
Nitrate as $NO3^{-}$	**4.9**	0.44	1	05/25/2017 21:36
Nitrite as N	**0.18**	0.10	1	05/25/2017 21:36
Nitrite as $NO2^{-}$	**0.58**	0.33	1	05/25/2017 21:36
Nitrate & Nitrite as N	**1.3**	0.10	1	05/25/2017 21:36
Sulfate	**37**	2.0	20	05/26/2017 10:06

Surrogates	REC (%)	Qualifiers	Limits	
Formate	125	S	85-115	05/25/2017 21:36

Analyst(s): TD Analytical Comments: c4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-19	**1705B44-012D**	**Water**	**05/25/2017 12:20**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	05/25/2017 21:53
Nitrate as $NO3^{-}$	ND	0.44	1	05/25/2017 21:53
Nitrite as N	ND	0.10	1	05/25/2017 21:53
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 21:53
Nitrate & Nitrite as N	ND	0.10	1	05/25/2017 21:53
Sulfate	**11**	1.0	10	05/26/2017 09:49

Surrogates	REC (%)	Limits	
Formate	91	85-115	05/25/2017 21:53

Analyst(s): TD

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	E300.1
Date Prepared:	5/25/17-5/26/17	**Analytical Method:**	E300.1
Project:	Owens Brockway Glass Plant	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-20	**1705B44-014C**	**Water**	**05/25/2017 13:05**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**1.1**	0.10	1	05/25/2017 22:10
Nitrate as $NO3^{-}$	**5.0**	0.44	1	05/25/2017 22:10
Nitrite as N	ND	0.10	1	05/25/2017 22:10
Nitrite as $NO2^{-}$	ND	0.33	1	05/25/2017 22:10
Nitrate & Nitrite as N	**1.1**	0.10	1	05/25/2017 22:10
Sulfate	**58**	2.0	20	05/26/2017 09:33

Surrogates	REC (%)	Limits	
Formate	93	85-115	05/25/2017 22:10

Analyst(s): TD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-21	**1705B44-015D**	**Water**	**05/25/2017 12:35**	**IC3**	**139537**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**5.3**	0.20	2	05/26/2017 08:59
Nitrate as $NO3^{-}$	**23**	0.88	2	05/26/2017 08:59
Nitrite as N	**0.34**	0.10	1	05/25/2017 22:27
Nitrite as $NO2^{-}$	**1.1**	0.33	1	05/25/2017 22:27
Nitrate & Nitrite as N	**5.7**	0.20	2	05/26/2017 08:59
Sulfate	**1600**	100	1,000	05/26/2017 09:16

Surrogates	REC (%)	Limits	
Formate	92	85-115	05/25/2017 22:27

Analyst(s): TD

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW3510C
Date Prepared:	5/25/17	**Analytical Method:**	SW8082
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Polychlorinated Biphenyls (PCBs) Aroclors (Decanted)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3R	**1705B44-002C**	**Water**	**05/25/2017 12:55**	**GC20**	**139527**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.50	1	05/26/2017 16:00
Aroclor1221	ND	0.50	1	05/26/2017 16:00
Aroclor1232	ND	0.50	1	05/26/2017 16:00
Aroclor1242	ND	0.50	1	05/26/2017 16:00
Aroclor1248	ND	0.50	1	05/26/2017 16:00
Aroclor1254	ND	0.50	1	05/26/2017 16:00
Aroclor1260	ND	0.50	1	05/26/2017 16:00
PCBs, total	ND	0.50	1	05/26/2017 16:00

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	104	70-130	05/26/2017 16:00

Analyst(s): CK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-15	**1705B44-009C**	**Water**	**05/25/2017 12:15**	**GC20**	**139527**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.50	1	05/26/2017 16:50
Aroclor1221	ND	0.50	1	05/26/2017 16:50
Aroclor1232	ND	0.50	1	05/26/2017 16:50
Aroclor1242	ND	0.50	1	05/26/2017 16:50
Aroclor1248	ND	0.50	1	05/26/2017 16:50
Aroclor1254	ND	0.50	1	05/26/2017 16:50
Aroclor1260	ND	0.50	1	05/26/2017 16:50
PCBs, total	ND	0.50	1	05/26/2017 16:50

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	106	70-130	05/26/2017 16:50

Analyst(s): CK

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW3510C
Date Prepared:	5/25/17	**Analytical Method:**	SW8082
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Polychlorinated Biphenyls (PCBs) Aroclors (Decanted)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-19	**1705B44-012C**	**Water**	**05/25/2017 12:20**	**GC20**	**139527**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.50	1	05/26/2017 17:40
Aroclor1221	ND	0.50	1	05/26/2017 17:40
Aroclor1232	ND	0.50	1	05/26/2017 17:40
Aroclor1242	ND	0.50	1	05/26/2017 17:40
Aroclor1248	ND	0.50	1	05/26/2017 17:40
Aroclor1254	ND	0.50	1	05/26/2017 17:40
Aroclor1260	ND	0.50	1	05/26/2017 17:40
PCBs, total	ND	0.50	1	05/26/2017 17:40

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	99	70-130	05/26/2017 17:40

Analyst(s): CK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-21	**1705B44-015C**	**Water**	**05/25/2017 12:35**	**GC20**	**139527**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.50	1	05/26/2017 18:31
Aroclor1221	ND	0.50	1	05/26/2017 18:31
Aroclor1232	ND	0.50	1	05/26/2017 18:31
Aroclor1242	ND	0.50	1	05/26/2017 18:31
Aroclor1248	ND	0.50	1	05/26/2017 18:31
Aroclor1254	ND	0.50	1	05/26/2017 18:31
Aroclor1260	ND	0.50	1	05/26/2017 18:31
PCBs, total	ND	0.50	1	05/26/2017 18:31

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	101	70-130	05/26/2017 18:31

Analyst(s): CK

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2R	**1705B44-001B**	**Water**	**05/25/2017 12:10**	**GC28**	**139689**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	05/31/2017 02:16
1,2-Dibromoethane (EDB)	ND	0.50	1	05/31/2017 02:16
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/31/2017 02:16
Ethylbenzene	ND	0.50	1	05/31/2017 02:16
Methyl-t-butyl ether (MTBE)	ND	0.50	1	05/31/2017 02:16
Naphthalene	ND	0.50	1	05/31/2017 02:16
Toluene	ND	0.50	1	05/31/2017 02:16
Xylenes, Total	ND	0.50	1	05/31/2017 02:16

Surrogates	REC (%)	Limits	
Dibromofluoromethane	125	70-130	05/31/2017 02:16
Toluene-d8	105	70-130	05/31/2017 02:16
4-BFB	99	70-130	05/31/2017 02:16

Analyst(s): HK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3R	**1705B44-002B**	**Water**	**05/25/2017 12:55**	**GC18**	**139627**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 04:27
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 04:27
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 04:27
Ethylbenzene	ND	0.50	1	06/02/2017 04:27
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 04:27
Naphthalene	ND	0.50	1	06/02/2017 04:27
Toluene	ND	0.50	1	06/02/2017 04:27
Xylenes, Total	ND	0.50	1	06/02/2017 04:27

Surrogates	REC (%)	Limits	
Dibromofluoromethane	113	70-130	06/02/2017 04:27
Toluene-d8	104	70-130	06/02/2017 04:27
4-BFB	115	70-130	06/02/2017 04:27

Analyst(s): HK

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1705B44-003B**	**Water**	**05/25/2017 12:15**	**GC18**	**139627**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 05:06
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 05:06
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 05:06
Ethylbenzene	ND	0.50	1	06/02/2017 05:06
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 05:06
Naphthalene	ND	0.50	1	06/02/2017 05:06
Toluene	ND	0.50	1	06/02/2017 05:06
Xylenes, Total	ND	0.50	1	06/02/2017 05:06

Surrogates	REC (%)	Limits	
Dibromofluoromethane	114	70-130	06/02/2017 05:06
Toluene-d8	104	70-130	06/02/2017 05:06
4-BFB	116	70-130	06/02/2017 05:06

Analyst(s): HK Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1705B44-004B**	**Water**	**05/25/2017 12:30**	**GC18**	**139627**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 05:45
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 05:45
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 05:45
Ethylbenzene	ND	0.50	1	06/02/2017 05:45
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 05:45
Naphthalene	ND	0.50	1	06/02/2017 05:45
Toluene	ND	0.50	1	06/02/2017 05:45
Xylenes, Total	ND	0.50	1	06/02/2017 05:45

Surrogates	REC (%)	Limits	
Dibromofluoromethane	113	70-130	06/02/2017 05:45
Toluene-d8	104	70-130	06/02/2017 05:45
4-BFB	108	70-130	06/02/2017 05:45

Analyst(s): HK Analytical Comments: b1

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1705B44-005B**	**Water**	**05/25/2017 12:45**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/01/2017 23:41
1,2-Dibromoethane (EDB)	ND	0.50	1	06/01/2017 23:41
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/01/2017 23:41
Ethylbenzene	ND	0.50	1	06/01/2017 23:41
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/01/2017 23:41
Naphthalene	**0.99**	0.50	1	06/01/2017 23:41
Toluene	ND	0.50	1	06/01/2017 23:41
Xylenes, Total	ND	0.50	1	06/01/2017 23:41

Surrogates	REC (%)	Limits	
Dibromofluoromethane	119	70-130	06/01/2017 23:41
Toluene-d8	110	70-130	06/01/2017 23:41
4-BFB	104	70-130	06/01/2017 23:41

Analyst(s): JEM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-8	**1705B44-006B**	**Water**	**05/25/2017 12:40**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 00:21
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 00:21
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 00:21
Ethylbenzene	ND	0.50	1	06/02/2017 00:21
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 00:21
Naphthalene	**2.5**	0.50	1	06/02/2017 00:21
Toluene	ND	0.50	1	06/02/2017 00:21
Xylenes, Total	ND	0.50	1	06/02/2017 00:21

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	118		70-130	06/02/2017 00:21
Toluene-d8	111		70-130	06/02/2017 00:21
4-BFB	137	S	70-130	06/02/2017 00:21

Analyst(s): JEM Analytical Comments: c2

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-10	**1705B44-007B**	**Water**	**05/25/2017 12:25**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 01:02
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 01:02
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 01:02
Ethylbenzene	ND	0.50	1	06/02/2017 01:02
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 01:02
Naphthalene	**1.2**	0.50	1	06/02/2017 01:02
Toluene	ND	0.50	1	06/02/2017 01:02
Xylenes, Total	ND	0.50	1	06/02/2017 01:02

Surrogates	REC (%)	Limits	
Dibromofluoromethane	120	70-130	06/02/2017 01:02
Toluene-d8	112	70-130	06/02/2017 01:02
4-BFB	106	70-130	06/02/2017 01:02

Analyst(s): JEM Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-13	**1705B44-008B**	**Water**	**05/25/2017 12:30**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 01:42
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 01:42
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 01:42
Ethylbenzene	ND	0.50	1	06/02/2017 01:42
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 01:42
Naphthalene	ND	0.50	1	06/02/2017 01:42
Toluene	ND	0.50	1	06/02/2017 01:42
Xylenes, Total	ND	0.50	1	06/02/2017 01:42

Surrogates	REC (%)	Limits	
Dibromofluoromethane	120	70-130	06/02/2017 01:42
Toluene-d8	112	70-130	06/02/2017 01:42
4-BFB	112	70-130	06/02/2017 01:42

Analyst(s): JEM

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-15	**1705B44-009B**	**Water**	**05/25/2017 12:15**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 02:23
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 02:23
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 02:23
Ethylbenzene	ND	0.50	1	06/02/2017 02:23
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 02:23
Naphthalene	ND	0.50	1	06/02/2017 02:23
Toluene	ND	0.50	1	06/02/2017 02:23
Xylenes, Total	ND	0.50	1	06/02/2017 02:23

Surrogates	REC (%)	Limits	
Dibromofluoromethane	119	70-130	06/02/2017 02:23
Toluene-d8	112	70-130	06/02/2017 02:23
4-BFB	110	70-130	06/02/2017 02:23

Analyst(s): JEM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-16	**1705B44-010B**	**Water**	**05/25/2017 13:00**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 03:03
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 03:03
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 03:03
Ethylbenzene	ND	0.50	1	06/02/2017 03:03
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 03:03
Naphthalene	ND	0.50	1	06/02/2017 03:03
Toluene	ND	0.50	1	06/02/2017 03:03
Xylenes, Total	ND	0.50	1	06/02/2017 03:03

Surrogates	REC (%)	Limits	
Dibromofluoromethane	120	70-130	06/02/2017 03:03
Toluene-d8	112	70-130	06/02/2017 03:03
4-BFB	110	70-130	06/02/2017 03:03

Analyst(s): JEM

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-17	**1705B44-011B**	**Water**	**05/25/2017 12:45**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 03:44
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 03:44
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 03:44
Ethylbenzene	ND	0.50	1	06/02/2017 03:44
Methyl-t-butyl ether (MTBE)	**2.5**	0.50	1	06/02/2017 03:44
Naphthalene	**0.61**	0.50	1	06/02/2017 03:44
Toluene	ND	0.50	1	06/02/2017 03:44
Xylenes, Total	ND	0.50	1	06/02/2017 03:44

Surrogates	REC (%)	Limits	
Dibromofluoromethane	119	70-130	06/02/2017 03:44
Toluene-d8	110	70-130	06/02/2017 03:44
4-BFB	108	70-130	06/02/2017 03:44

Analyst(s): JEM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-19	**1705B44-012B**	**Water**	**05/25/2017 12:20**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 04:24
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 04:24
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 04:24
Ethylbenzene	ND	0.50	1	06/02/2017 04:24
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 04:24
Naphthalene	ND	0.50	1	06/02/2017 04:24
Toluene	ND	0.50	1	06/02/2017 04:24
Xylenes, Total	ND	0.50	1	06/02/2017 04:24

Surrogates	REC (%)	Limits	
Dibromofluoromethane	120	70-130	06/02/2017 04:24
Toluene-d8	112	70-130	06/02/2017 04:24
4-BFB	109	70-130	06/02/2017 04:24

Analyst(s): JEM

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TB	**1705B44-013B**	**Water**	**05/25/2017 12:00**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 05:05
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 05:05
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 05:05
Ethylbenzene	ND	0.50	1	06/02/2017 05:05
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 05:05
Naphthalene	ND	0.50	1	06/02/2017 05:05
Toluene	ND	0.50	1	06/02/2017 05:05
Xylenes, Total	ND	0.50	1	06/02/2017 05:05

Surrogates	REC (%)	Limits	
Dibromofluoromethane	118	70-130	06/02/2017 05:05
Toluene-d8	113	70-130	06/02/2017 05:05
4-BFB	108	70-130	06/02/2017 05:05

Analyst(s): JEM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-20	**1705B44-014B**	**Water**	**05/25/2017 13:05**	**GC16**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 05:45
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 05:45
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 05:45
Ethylbenzene	ND	0.50	1	06/02/2017 05:45
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 05:45
Naphthalene	ND	0.50	1	06/02/2017 05:45
Toluene	ND	0.50	1	06/02/2017 05:45
Xylenes, Total	ND	0.50	1	06/02/2017 05:45

Surrogates	REC (%)	Limits	
Dibromofluoromethane	120	70-130	06/02/2017 05:45
Toluene-d8	112	70-130	06/02/2017 05:45
4-BFB	110	70-130	06/02/2017 05:45

Analyst(s): JEM

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/31/17-6/2/17	**Analytical Method:**	SW8260B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-21	**1705B44-015B**	**Water**	**05/25/2017 12:35**	**GC10**	**139832**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	06/02/2017 17:50
1,2-Dibromoethane (EDB)	ND	0.50	1	06/02/2017 17:50
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/02/2017 17:50
Ethylbenzene	ND	0.50	1	06/02/2017 17:50
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/02/2017 17:50
Naphthalene	ND	0.50	1	06/02/2017 17:50
Toluene	ND	0.50	1	06/02/2017 17:50
Xylenes, Total	ND	0.50	1	06/02/2017 17:50

Surrogates	REC (%)	Limits	
Dibromofluoromethane	120	70-130	06/02/2017 17:50
Toluene-d8	107	70-130	06/02/2017 17:50
4-BFB	80	70-130	06/02/2017 17:50

Analyst(s): JEM

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM2320 B-1997
Date Prepared:	5/31/17	**Analytical Method:**	SM2320 B
Project:	Owens Brockway Glass Plant	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2R	**1705B44-001E**	**Water**	**05/25/2017 12:10**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**712**	1.00	1	05/31/2017 10:25
Carbonate	**560**	1.00	1	05/31/2017 10:25
Bicarbonate	ND	1.00	1	05/31/2017 10:25
Hydroxide	**152**	1.00	1	05/31/2017 10:25

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3R	**1705B44-002F**	**Water**	**05/25/2017 12:55**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**722**	1.00	1	05/31/2017 10:23
Carbonate	ND	1.00	1	05/31/2017 10:23
Bicarbonate	**722**	1.00	1	05/31/2017 10:23
Hydroxide	ND	1.00	1	05/31/2017 10:23

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1705B44-003E**	**Water**	**05/25/2017 12:15**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**680**	1.00	1	05/31/2017 10:41
Carbonate	ND	1.00	1	05/31/2017 10:41
Bicarbonate	**680**	1.00	1	05/31/2017 10:41
Hydroxide	ND	1.00	1	05/31/2017 10:41

Analyst(s): HN Analytical Comments: b1

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM2320 B-1997
Date Prepared:	5/31/17	**Analytical Method:**	SM2320 B
Project:	Owens Brockway Glass Plant	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1705B44-004E**	**Water**	**05/25/2017 12:30**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**382**	1.00	1	05/31/2017 11:52
Carbonate	ND	1.00	1	05/31/2017 11:52
Bicarbonate	**382**	1.00	1	05/31/2017 11:52
Hydroxide	ND	1.00	1	05/31/2017 11:52

Analyst(s): HN Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1705B44-005E**	**Water**	**05/25/2017 12:45**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**621**	1.00	1	05/31/2017 10:57
Carbonate	ND	1.00	1	05/31/2017 10:57
Bicarbonate	**621**	1.00	1	05/31/2017 10:57
Hydroxide	ND	1.00	1	05/31/2017 10:57

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-8	**1705B44-006E**	**Water**	**05/25/2017 12:40**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**898**	1.00	1	05/31/2017 11:16
Carbonate	ND	1.00	1	05/31/2017 11:16
Bicarbonate	**898**	1.00	1	05/31/2017 11:16
Hydroxide	ND	1.00	1	05/31/2017 11:16

Analyst(s): HN

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM2320 B-1997
Date Prepared:	5/31/17	**Analytical Method:**	SM2320 B
Project:	Owens Brockway Glass Plant	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-10	**1705B44-007E**	**Water**	**05/25/2017 12:25**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**436**	1.00	1	05/31/2017 11:27
Carbonate	ND	1.00	1	05/31/2017 11:27
Bicarbonate	**436**	1.00	1	05/31/2017 11:27
Hydroxide	ND	1.00	1	05/31/2017 11:27

Analyst(s): HN Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-13	**1705B44-008E**	**Water**	**05/25/2017 12:30**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**459**	1.00	1	05/31/2017 12:03
Carbonate	ND	1.00	1	05/31/2017 12:03
Bicarbonate	**459**	1.00	1	05/31/2017 12:03
Hydroxide	ND	1.00	1	05/31/2017 12:03

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-15	**1705B44-009F**	**Water**	**05/25/2017 12:15**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**871**	1.00	1	05/31/2017 12:25
Carbonate	ND	1.00	1	05/31/2017 12:25
Bicarbonate	**871**	1.00	1	05/31/2017 12:25
Hydroxide	ND	1.00	1	05/31/2017 12:25

Analyst(s): HN

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM2320 B-1997
Date Prepared:	5/31/17	**Analytical Method:**	SM2320 B
Project:	Owens Brockway Glass Plant	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-16	**1705B44-010E**	**Water**	**05/25/2017 13:00**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**216**	1.00	1	05/31/2017 12:31
Carbonate	ND	1.00	1	05/31/2017 12:31
Bicarbonate	**216**	1.00	1	05/31/2017 12:31
Hydroxide	ND	1.00	1	05/31/2017 12:31

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-17	**1705B44-011E**	**Water**	**05/25/2017 12:45**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**451**	1.00	1	05/31/2017 12:41
Carbonate	ND	1.00	1	05/31/2017 12:41
Bicarbonate	**451**	1.00	1	05/31/2017 12:41
Hydroxide	ND	1.00	1	05/31/2017 12:41

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-19	**1705B44-012F**	**Water**	**05/25/2017 12:20**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**576**	1.00	1	05/31/2017 12:54
Carbonate	ND	1.00	1	05/31/2017 12:54
Bicarbonate	**576**	1.00	1	05/31/2017 12:54
Hydroxide	ND	1.00	1	05/31/2017 12:54

Analyst(s): HN

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM2320 B-1997
Date Prepared:	5/31/17	**Analytical Method:**	SM2320 B
Project:	Owens Brockway Glass Plant	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-20	**1705B44-014E**	**Water**	**05/25/2017 13:05**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**304**	1.00	1	05/31/2017 13:02
Carbonate	ND	1.00	1	05/31/2017 13:02
Bicarbonate	**304**	1.00	1	05/31/2017 13:02
Hydroxide	ND	1.00	1	05/31/2017 13:02

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-21	**1705B44-015F**	**Water**	**05/25/2017 12:35**	**Titrino**	**139690**

Analytes	Result	RL	DF	Date Analyzed
Total Alkalinity	**897**	1.00	1	05/31/2017 13:22
Carbonate	ND	1.00	1	05/31/2017 13:22
Bicarbonate	**897**	1.00	1	05/31/2017 13:22
Hydroxide	ND	1.00	1	05/31/2017 13:22

Analyst(s): HN

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2R	**1705B44-001A**	**Water**	**05/25/2017 12:10**	**GC12**	**139701**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**150**	50	1	05/31/2017 20:46
MTBE	---	5.0	1	05/31/2017 20:46
Benzene	---	0.50	1	05/31/2017 20:46
Toluene	---	0.50	1	05/31/2017 20:46
Ethylbenzene	---	0.50	1	05/31/2017 20:46
Xylenes	---	1.5	1	05/31/2017 20:46

Surrogates	REC (%)	Limits	
aaa-TFT	108	89-115	05/31/2017 20:46

Analyst(s): IA Analytical Comments: d7,d9

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3R	**1705B44-002A**	**Water**	**05/25/2017 12:55**	**GC12**	**139701**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	05/30/2017 14:35
MTBE	---	5.0	1	05/30/2017 14:35
Benzene	---	0.50	1	05/30/2017 14:35
Toluene	---	0.50	1	05/30/2017 14:35
Ethylbenzene	---	0.50	1	05/30/2017 14:35
Xylenes	---	1.5	1	05/30/2017 14:35

Surrogates	REC (%)	Limits	
aaa-TFT	106	89-115	05/30/2017 14:35

Analyst(s): IA

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1705B44-003A**	**Water**	**05/25/2017 12:15**	**GC12**	**139701**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**390**	50	1	05/30/2017 15:06
MTBE	**---**	5.0	1	05/30/2017 15:06
Benzene	**---**	0.50	1	05/30/2017 15:06
Toluene	**---**	0.50	1	05/30/2017 15:06
Ethylbenzene	**---**	0.50	1	05/30/2017 15:06
Xylenes	**---**	1.5	1	05/30/2017 15:06

Surrogates	REC (%)	Limits	
aaa-TFT	103	89-115	05/30/2017 15:06

Analyst(s): IA Analytical Comments: d7,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1705B44-004A**	**Water**	**05/25/2017 12:30**	**GC7**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**110**	50	1	06/02/2017 06:02
MTBE	**---**	5.0	1	06/02/2017 06:02
Benzene	**---**	0.50	1	06/02/2017 06:02
Toluene	**---**	0.50	1	06/02/2017 06:02
Ethylbenzene	**---**	0.50	1	06/02/2017 06:02
Xylenes	**---**	1.5	1	06/02/2017 06:02

Surrogates	REC (%)	Limits	
aaa-TFT	95	89-115	06/02/2017 06:02

Analyst(s): IA Analytical Comments: d7,d9,b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1705B44-005A**	**Water**	**05/25/2017 12:45**	**GC7**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**86**	50	1	06/02/2017 05:32
MTBE	**---**	5.0	1	06/02/2017 05:32
Benzene	**---**	0.50	1	06/02/2017 05:32
Toluene	**---**	0.50	1	06/02/2017 05:32
Ethylbenzene	**---**	0.50	1	06/02/2017 05:32
Xylenes	**---**	1.5	1	06/02/2017 05:32

Surrogates	REC (%)	Limits	
aaa-TFT	90	89-115	06/02/2017 05:32

Analyst(s): IA Analytical Comments: d7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-8	**1705B44-006A**	**Water**	**05/25/2017 12:40**	**GC7**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**1200**	100	2	06/02/2017 06:32
MTBE	**---**	10	2	06/02/2017 06:32
Benzene	**---**	1.0	2	06/02/2017 06:32
Toluene	**---**	1.0	2	06/02/2017 06:32
Ethylbenzene	**---**	1.0	2	06/02/2017 06:32
Xylenes	**---**	3.0	2	06/02/2017 06:32

Surrogates	REC (%)	Limits	
aaa-TFT	102	89-115	06/02/2017 06:32

Analyst(s): IA Analytical Comments: d7,d9

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-10	**1705B44-007A**	**Water**	**05/25/2017 12:25**	**GC3**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**190**	50	1	06/02/2017 11:39
MTBE	**---**	5.0	1	06/02/2017 11:39
Benzene	**---**	0.50	1	06/02/2017 11:39
Toluene	**---**	0.50	1	06/02/2017 11:39
Ethylbenzene	**---**	0.50	1	06/02/2017 11:39
Xylenes	**---**	1.5	1	06/02/2017 11:39

Surrogates	REC (%)	Limits	
aaa-TFT	102	89-115	06/02/2017 11:39

Analyst(s): IA Analytical Comments: d7,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-13	**1705B44-008A**	**Water**	**05/25/2017 12:30**	**GC7**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/01/2017 02:57
MTBE	**---**	5.0	1	06/01/2017 02:57
Benzene	**---**	0.50	1	06/01/2017 02:57
Toluene	**---**	0.50	1	06/01/2017 02:57
Ethylbenzene	**---**	0.50	1	06/01/2017 02:57
Xylenes	**---**	1.5	1	06/01/2017 02:57

Surrogates	REC (%)	Limits	
aaa-TFT	100	89-115	06/01/2017 02:57

Analyst(s): IA

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-15	**1705B44-009A**	**Water**	**05/25/2017 12:15**	**GC7**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/01/2017 03:27
MTBE	---	5.0	1	06/01/2017 03:27
Benzene	---	0.50	1	06/01/2017 03:27
Toluene	---	0.50	1	06/01/2017 03:27
Ethylbenzene	---	0.50	1	06/01/2017 03:27
Xylenes	---	1.5	1	06/01/2017 03:27

Surrogates	REC (%)	Limits	
aaa-TFT	100	89-115	06/01/2017 03:27

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-16	**1705B44-010A**	**Water**	**05/25/2017 13:00**	**GC7**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/01/2017 03:56
MTBE	---	5.0	1	06/01/2017 03:56
Benzene	---	0.50	1	06/01/2017 03:56
Toluene	---	0.50	1	06/01/2017 03:56
Ethylbenzene	---	0.50	1	06/01/2017 03:56
Xylenes	---	1.5	1	06/01/2017 03:56

Surrogates	REC (%)	Limits	
aaa-TFT	104	89-115	06/01/2017 03:56

Analyst(s): IA

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-17	**1705B44-011A**	**Water**	**05/25/2017 12:45**	**GC3**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**300**	50	1	06/02/2017 12:11
MTBE	**---**	5.0	1	06/02/2017 12:11
Benzene	**---**	0.50	1	06/02/2017 12:11
Toluene	**---**	0.50	1	06/02/2017 12:11
Ethylbenzene	**---**	0.50	1	06/02/2017 12:11
Xylenes	**---**	1.5	1	06/02/2017 12:11

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	123	S	89-115	06/02/2017 12:11

Analyst(s): IA Analytical Comments: d7,d9,c4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-19	**1705B44-012A**	**Water**	**05/25/2017 12:20**	**GC7**	**139755**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**200**	50	1	06/01/2017 04:26
MTBE	**---**	5.0	1	06/01/2017 04:26
Benzene	**---**	0.50	1	06/01/2017 04:26
Toluene	**---**	0.50	1	06/01/2017 04:26
Ethylbenzene	**---**	0.50	1	06/01/2017 04:26
Xylenes	**---**	1.5	1	06/01/2017 04:26

Surrogates	REC (%)	Limits	
aaa-TFT	94	89-115	06/01/2017 04:26

Analyst(s): IA Analytical Comments: d7

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TB	**1705B44-013A**	**Water**	**05/25/2017 12:00**	**GC12**	**139771**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	05/31/2017 21:18
MTBE	---	5.0	1	05/31/2017 21:18
Benzene	---	0.50	1	05/31/2017 21:18
Toluene	---	0.50	1	05/31/2017 21:18
Ethylbenzene	---	0.50	1	05/31/2017 21:18
Xylenes	---	1.5	1	05/31/2017 21:18

Surrogates	REC (%)	Limits	
aaa-TFT	114	89-115	05/31/2017 21:18

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-20	**1705B44-014A**	**Water**	**05/25/2017 13:05**	**GC12**	**139771**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	05/31/2017 21:50
MTBE	---	5.0	1	05/31/2017 21:50
Benzene	---	0.50	1	05/31/2017 21:50
Toluene	---	0.50	1	05/31/2017 21:50
Ethylbenzene	---	0.50	1	05/31/2017 21:50
Xylenes	---	1.5	1	05/31/2017 21:50

Surrogates	REC (%)	Limits	
aaa-TFT	115	89-115	05/31/2017 21:50

Analyst(s): IA

(Cont.)

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW5030B
Date Prepared:	5/30/17-6/2/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-21	**1705B44-015A**	**Water**	**05/25/2017 12:35**	**GC12**	**139771**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/01/2017 00:29
MTBE	---	5.0	1	06/01/2017 00:29
Benzene	---	0.50	1	06/01/2017 00:29
Toluene	---	0.50	1	06/01/2017 00:29
Ethylbenzene	---	0.50	1	06/01/2017 00:29
Xylenes	---	1.5	1	06/01/2017 00:29

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	117	S	89-115	06/01/2017 00:29

Analyst(s): IA Analytical Comments: c11

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM9215B
Date Prepared:	5/25/17	**Analytical Method:**	SM9215B
Project:	Owens Brockway Glass Plant	**Unit:**	CFU/ml

Heterotrophic Bacteria

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2R	1705B44-001D	Water	05/25/2017 12:10	MICROBIOLOGY	139525

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**2.0**	1.0	1	---	05/25/2017 16:31

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3R	1705B44-002E	Water	05/25/2017 12:55	MICROBIOLOGY	139525

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**12,000**	100	100	---	05/25/2017 16:33

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1705B44-003D	Water	05/25/2017 12:15	MICROBIOLOGY	139525

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**89**	1.0	1	---	05/25/2017 16:34

Analyst(s): AB Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1705B44-004D	Water	05/25/2017 12:30	MICROBIOLOGY	139525

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**5500**	100	100	---	05/25/2017 16:35

Analyst(s): AB Analytical Comments: b1

(Cont.)

CDPH ELAP 1644

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM9215B
Date Prepared:	5/25/17	**Analytical Method:**	SM9215B
Project:	Owens Brockway Glass Plant	**Unit:**	CFU/ml

Heterotrophic Bacteria

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1705B44-005D**	**Water**	**05/25/2017 12:45**	**MICROBIOLOGY**	**139525**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**2200**	10	10	---	05/25/2017 16:36

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-8	**1705B44-006D**	**Water**	**05/25/2017 12:40**	**MICROBIOLOGY**	**139525**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**69**	1.0	1	---	05/25/2017 16:37

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-10	**1705B44-007D**	**Water**	**05/25/2017 12:25**	**MICROBIOLOGY**	**139525**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**920**	10	10	---	05/25/2017 16:38

Analyst(s): AB Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-13	**1705B44-008D**	**Water**	**05/25/2017 12:30**	**MICROBIOLOGY**	**139525**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**180**	1.0	1	---	05/25/2017 16:39

Analyst(s): AB

(Cont.)

CDPH ELAP 1644

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM9215B
Date Prepared:	5/25/17	**Analytical Method:**	SM9215B
Project:	Owens Brockway Glass Plant	**Unit:**	CFU/ml

Heterotrophic Bacteria

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-15	**1705B44-009E**	**Water**	**05/25/2017 12:15**	**MICROBIOLOGY**	**139525**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**130**	1.0	1	---	05/25/2017 16:40

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-16	**1705B44-010D**	**Water**	**05/25/2017 13:00**	**MICROBIOLOGY**	**139525**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**190**	1.0	1	---	05/25/2017 16:41

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-17	**1705B44-011D**	**Water**	**05/25/2017 12:45**	**MICROBIOLOGY**	**139526**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**320**	10	10	---	05/25/2017 16:43

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-19	**1705B44-012E**	**Water**	**05/25/2017 12:20**	**MICROBIOLOGY**	**139526**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**1100**	10	10	---	05/25/2017 16:45

Analyst(s): AB

(Cont.)

CDPH ELAP 1644

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SM9215B
Date Prepared:	5/25/17	**Analytical Method:**	SM9215B
Project:	Owens Brockway Glass Plant	**Unit:**	CFU/ml

Heterotrophic Bacteria

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-20	**1705B44-014D**	**Water**	**05/25/2017 13:05**	**MICROBIOLOGY**	**139526**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**180**	1.0	1	---	05/25/2017 16:46

Analyst(s): AB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-21	**1705B44-015E**	**Water**	**05/25/2017 12:35**	**MICROBIOLOGY**	**139526**

Analytes	Result	RL	DF	95% Interval	Date Analyzed
Heterotrophic Bacteria	**670**	10	10	---	05/25/2017 16:47

Analyst(s): AB

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/25/17	**Analytical Method:**	SW8015B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2R	**1705B44-001A**	**Water**	**05/25/2017 12:10**	**GC9b**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2200**	250	5	05/31/2017 16:11
TPH-Motor Oil (C18-C36)	**2600**	1200	5	05/31/2017 16:11

Surrogates	REC (%)	Limits	
C9	94	66-138	05/31/2017 16:11

Analyst(s): TK Analytical Comments: e2,e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3R	**1705B44-002A**	**Water**	**05/25/2017 12:55**	**GC11B**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**100**	50	1	05/27/2017 17:54
TPH-Motor Oil (C18-C36)	ND	250	1	05/27/2017 17:54

Surrogates	REC (%)	Limits	
C9	101	66-138	05/27/2017 17:54

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1705B44-003A**	**Water**	**05/25/2017 12:15**	**GC6B**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**7200**	1000	20	05/30/2017 21:53
TPH-Motor Oil (C18-C36)	**7500**	5000	20	05/30/2017 21:53

Surrogates	REC (%)	Limits	
C9	135	66-138	05/30/2017 21:53

Analyst(s): TK Analytical Comments: e2,e7,e4,b6,b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/25/17	**Analytical Method:**	SW8015B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1705B44-004A**	**Water**	**05/25/2017 12:30**	**GC11A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**9100**	150	1	05/27/2017 21:09
TPH-Motor Oil (C18-C36)	**7800**	750	1	05/27/2017 21:09

Surrogates	REC (%)	Limits	
C9	104	66-138	05/27/2017 21:09

Analyst(s): TK Analytical Comments: e2,e7,e11/e4,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1705B44-005A**	**Water**	**05/25/2017 12:45**	**GC11A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2000**	50	1	05/27/2017 22:27
TPH-Motor Oil (C18-C36)	**630**	250	1	05/27/2017 22:27

Surrogates	REC (%)	Limits	
C9	99	66-138	05/27/2017 22:27

Analyst(s): TK Analytical Comments: e11/e4,e2,e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-8	**1705B44-006A**	**Water**	**05/25/2017 12:40**	**GC9b**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**590**	50	1	05/31/2017 15:32
TPH-Motor Oil (C18-C36)	ND	250	1	05/31/2017 15:32

Surrogates	REC (%)	Limits	
C9	98	66-138	05/31/2017 15:32

Analyst(s): TK Analytical Comments: e4

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/25/17	**Analytical Method:**	SW8015B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-10	**1705B44-007A**	**Water**	**05/25/2017 12:25**	**GC6A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2600**	50	1	05/27/2017 12:25
TPH-Motor Oil (C18-C36)	**3200**	250	1	05/27/2017 12:25

Surrogates	REC (%)	Limits	
C9	85	66-138	05/27/2017 12:25

Analyst(s): TK Analytical Comments: e7,e2,e4,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-13	**1705B44-008A**	**Water**	**05/25/2017 12:30**	**GC6A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**100**	50	1	05/27/2017 08:32
TPH-Motor Oil (C18-C36)	ND	250	1	05/27/2017 08:32

Surrogates	REC (%)	Limits	
C9	86	66-138	05/27/2017 08:32

Analyst(s): TK Analytical Comments: e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-15	**1705B44-009A**	**Water**	**05/25/2017 12:15**	**GC6A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**270**	50	1	05/27/2017 09:50
TPH-Motor Oil (C18-C36)	**330**	250	1	05/27/2017 09:50

Surrogates	REC (%)	Limits	
C9	84	66-138	05/27/2017 09:50

Analyst(s): TK Analytical Comments: e2,e7

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/25/17	**Analytical Method:**	SW8015B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-16	**1705B44-010A**	**Water**	**05/25/2017 13:00**	**GC6A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**98**	50	1	05/27/2017 11:07
TPH-Motor Oil (C18-C36)	ND	250	1	05/27/2017 11:07

Surrogates	REC (%)	Limits	
C9	84	66-138	05/27/2017 11:07

Analyst(s): TK Analytical Comments: e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-17	**1705B44-011A**	**Water**	**05/25/2017 12:45**	**GC6B**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**3000**	250	5	05/30/2017 16:42
TPH-Motor Oil (C18-C36)	**1800**	1200	5	05/30/2017 16:42

Surrogates	REC (%)	Limits	
C9	94	66-138	05/30/2017 16:42

Analyst(s): TK Analytical Comments: e3,e4,b6

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-19	**1705B44-012A**	**Water**	**05/25/2017 12:20**	**GC11A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**230**	50	1	05/27/2017 18:33
TPH-Motor Oil (C18-C36)	ND	250	1	05/27/2017 18:33

Surrogates	REC (%)	Limits	
C9	99	66-138	05/27/2017 18:33

Analyst(s): TK Analytical Comments: e4

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell 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

Analytical Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Received:	5/25/17 14:45	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/25/17	**Analytical Method:**	SW8015B
Project:	Owens Brockway Glass Plant	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-20	**1705B44-014A**	**Water**	**05/25/2017 13:05**	**GC11A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	05/27/2017 19:51
TPH-Motor Oil (C18-C36)	ND	250	1	05/27/2017 19:51

Surrogates	REC (%)	Limits	
C9	102	66-138	05/27/2017 19:51

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-21	**1705B44-015A**	**Water**	**05/25/2017 12:35**	**GC6A**	**139465**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**100**	50	1	05/27/2017 07:15
TPH-Motor Oil (C18-C36)	ND	250	1	05/27/2017 07:15

Surrogates	REC (%)	Limits	
C9	86	66-138	05/27/2017 07:15

Analyst(s): TK Analytical Comments: e2

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/25/17	**BatchID:**	139537
Date Analyzed:	5/25/17	**Extraction Method:**	E300.1
Instrument:	IC3	**Analytical Method:**	E300.1
Matrix:	Water	**Unit:**	mg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS-139537 1705B44-001CMS/MSD

QC Summary Report for E300.1

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Nitrate as N	ND	0.967	0.10	1	-	97	85-115
Nitrate as $NO3^{-}$	ND	4.28	0.44	4.4	-	97	85-115
Nitrite as N	ND	0.978	0.10	1	-	98	85-115
Nitrite as $NO2^{-}$	ND	3.21	0.33	3.3	-	97	85-115
Sulfate	ND	1.04	0.10	1	-	104	85-115
Surrogate Recovery							
Formate	0.08859	0.0888		0.10	89	89	85-115

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Nitrate as N	1.05	1.05	1	0.1500	90	90	85-115	0	15
Nitrate as $NO3^{-}$	4.63	4.64	4.4	0.6645	90	90	85-115	0	15
Nitrite as N	2.29	2.30	1	1.224	107	108	85-115	0.598	15
Nitrite as $NO2^{-}$	7.52	7.57	3.3	4.023	106	107	85-115	0.598	15
Sulfate	NR	NR	1	100	NR	NR	85-115	NR	15
Surrogate Recovery									
Formate	0.102	0.102	0.10		102	102	85-115	0	10

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/25/17	**BatchID:**	139527
Date Analyzed:	5/26/17	**Extraction Method:**	SW3510C
Instrument:	GC40	**Analytical Method:**	SW8082
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139527

QC Summary Report for SW8082

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.50	-	-	-
Aroclor1221	ND	0.50	-	-	-
Aroclor1232	ND	0.50	-	-	-
Aroclor1242	ND	0.50	-	-	-
Aroclor1248	ND	0.50	-	-	-
Aroclor1254	ND	0.50	-	-	-
Aroclor1260	ND	0.50	-	-	-
PCBs, total	ND	0.50	-	-	-
Surrogate Recovery					
Decachlorobiphenyl	1.284		1.25	103	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	3.89	3.98	3.75	104	106	70-130	2.34	20
Aroclor1260	3.58	3.58	3.75	95	95	70-130	0	20
Surrogate Recovery								
Decachlorobiphenyl	1.39	1.34	1.25	111	107	70-130	3.62	20

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	6/1/17	**BatchID:**	139627
Date Analyzed:	6/1/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139627

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
tert-Amyl methyl ether (TAME)	ND	0.50	-	-	-
Benzene	ND	0.50	-	-	-
t-Butyl alcohol (TBA)	ND	2.0	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
Diisopropyl ether (DIPE)	ND	0.50	-	-	-
Ethanol	ND	50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.50	-	-	-
Naphthalene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
Xylenes, Total	ND	0.50	-	-	-
Surrogate Recovery					
Dibromofluoromethane	27.45		25	110	70-130
Toluene-d8	26.02		25	104	70-130
4-BFB	3.011		2.5	120	70-130

(Cont.)

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	6/1/17	**BatchID:**	139627
Date Analyzed:	6/1/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139627

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	8.21	9.85	10	82	98	54-140	18.2	20
Benzene	9.28	9.26	10	93	93	47-158	0	20
t-Butyl alcohol (TBA)	25.6	37.7	40	64	94	42-140	38.1,F2	20
1,2-Dibromoethane (EDB)	8.41	9.70	10	84	97	44-155	14.2	20
1,2-Dichloroethane (1,2-DCA)	8.79	9.68	10	88	97	66-125	9.58	20
Diisopropyl ether (DIPE)	8.65	9.18	10	87	92	57-136	5.92	20
Ethanol	423	523	500	85	105	48-114	21.3,F2	20
Ethylbenzene	9.23	8.87	10	92	89	60-152	4.03	20
Ethyl tert-butyl ether (ETBE)	8.52	9.49	10	85	95	55-137	10.8	20
Methyl-t-butyl ether (MTBE)	8.13	9.71	10	81	97	53-139	17.7	20
Naphthalene	7.40	8.87	10	74	89	66-127	18.1	20
Toluene	8.81	8.56	10	88	86	52-137	2.87	20
Xylenes, Total	27.6	26.4	30	92	88	70-130	4.21	20
Surrogate Recovery								
Dibromofluoromethane	27.2	28.0	25	109	112	70-130	2.85	20
Toluene-d8	26.2	25.7	25	105	103	70-130	1.80	20
4-BFB	3.07	2.93	2.5	123	117	70-130	4.74	20

(Cont.)

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/30/17	**BatchID:**	139689
Date Analyzed:	5/30/17	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139689

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
tert-Amyl methyl ether (TAME)	ND	0.50	-	-	-
Benzene	ND	0.50	-	-	-
t-Butyl alcohol (TBA)	ND	2.0	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
Diisopropyl ether (DIPE)	ND	0.50	-	-	-
Ethanol	ND	50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.50	-	-	-
Naphthalene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
Xylenes, Total	ND	0.50	-	-	-
Surrogate Recovery					
Dibromofluoromethane	31.14		25	125	70-130
Toluene-d8	27.4		25	110	70-130
4-BFB	2.021		2.5	81	70-130

(Cont.)

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/30/17	**BatchID:**	139689
Date Analyzed:	5/30/17	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139689

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	11.0	11.2	10	110	112	54-140	2.34	20
Benzene	12.6	12.5	10	126	125	47-158	0.378	20
t-Butyl alcohol (TBA)	39.8	50.4	40	100	126	42-140	23.4,F2	20
1,2-Dibromoethane (EDB)	9.68	10.5	10	97	105	44-155	8.30	20
1,2-Dichloroethane (1,2-DCA)	12.3	12.7	10	123	127, F2	66-125	3.37	20
Diisopropyl ether (DIPE)	11.6	12.0	10	116	120	57-136	3.70	20
Ethanol	457	579	500	91	116	48-114	23.5,F2	20
Ethylbenzene	11.1	10.9	10	111	109	60-152	2.12	20
Ethyl tert-butyl ether (ETBE)	11.4	11.4	10	114	114	55-137	0	20
Methyl-t-butyl ether (MTBE)	11.1	12.7	10	111	127	53-139	13.1	20
Naphthalene	9.60	11.4	10	96	114	66-127	16.9	20
Toluene	11.0	10.7	10	110	107	52-137	2.84	20
Xylenes, Total	33.2	33.0	30	111	110	70-130	0.712	20
Surrogate Recovery								
Dibromofluoromethane	30.0	30.9	25	120	124	70-130	2.90	20
Toluene-d8	27.7	26.9	25	111	107	70-130	3.00	20
4-BFB	2.87	2.72	2.5	115	109	70-130	5.42	20

(Cont.)

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	6/1/17	**BatchID:**	139832
Date Analyzed:	6/1/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139832

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
tert-Amyl methyl ether (TAME)	ND	0.50	-	-	-
Benzene	ND	0.50	-	-	-
t-Butyl alcohol (TBA)	ND	2.0	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
Diisopropyl ether (DIPE)	ND	0.50	-	-	-
Ethanol	ND	50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.50	-	-	-
Naphthalene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
Xylenes, Total	ND	0.50	-	-	-
Surrogate Recovery					
Dibromofluoromethane	29		25	116	70-130
Toluene-d8	28.64		25	115	70-130
4-BFB	2.744		2.5	110	70-130

(Cont.)

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	6/1/17	**BatchID:**	139832
Date Analyzed:	6/1/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139832

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	8.51	9.56	10	85	96	54-140	11.6	20
Benzene	9.29	9.61	10	93	96	47-158	3.32	20
t-Butyl alcohol (TBA)	28.2	36.9	40	71	92	42-140	26.6,F2	20
1,2-Dibromoethane (EDB)	8.54	9.29	10	85	93	44-155	8.37	20
1,2-Dichloroethane (1,2-DCA)	9.21	10.0	10	92	100	66-125	8.52	20
Diisopropyl ether (DIPE)	9.07	9.57	10	91	96	57-136	5.28	20
Ethanol	403	518	500	81	104	48-114	25.0,F2	20
Ethylbenzene	8.88	9.08	10	89	91	60-152	2.21	20
Ethyl tert-butyl ether (ETBE)	8.88	9.88	10	89	99	55-137	10.6	20
Methyl-t-butyl ether (MTBE)	8.52	9.83	10	85	98	53-139	14.3	20
Naphthalene	7.39	8.63	10	74	86	66-127	15.5	20
Toluene	9.03	8.93	10	90	89	52-137	1.07	20
Xylenes, Total	25.7	26.9	30	86	90	70-130	4.55	20
Surrogate Recovery								
Dibromofluoromethane	28.8	29.5	25	115	118	70-130	2.21	20
Toluene-d8	28.7	27.9	25	115	112	70-130	2.88	20
4-BFB	2.71	2.63	2.5	108	105	70-130	2.87	20

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/31/17	**BatchID:**	139690
Date Analyzed:	5/31/17	**Extraction Method:**	SM2320 B-1997
Instrument:	Titrino	**Analytical Method:**	SM2320 B
Matrix:	Water	**Unit:**	mg $CaCO_3$/L
Project:	Owens Brockway Glass Plant		

QC Summary Report for Alkalinity

SampID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	RPD	Acceptance Criteria (%)
1705B44-007E	436	1	469	1	7.30	<20

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/30/17	**BatchID:**	139701
Date Analyzed:	5/30/17	**Extraction Method:**	SW5030B
Instrument:	GC12	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS-139701 1705B44-003AMS/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	56.6	40	60	-	94	78-116
MTBE	ND	8.67	5.0	10	-	87	72-122
Benzene	ND	9.63	0.50	10	-	96	81-123
Toluene	ND	9.62	0.50	10	-	96	83-129
Ethylbenzene	ND	9.17	0.50	10	-	92	88-126
Xylenes	ND	26.0	1.5	30	-	87	87-131
Surrogate Recovery							
aaa-TFT	10.64	10.7		10	106	107	89-116

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		ND	NR	NR	-	NR	-
MTBE	NR	NR		ND	NR	NR	-	NR	-
Benzene	NR	NR		ND	NR	NR	-	NR	-
Toluene	NR	NR		ND	NR	NR	-	NR	-
Ethylbenzene	NR	NR		ND	NR	NR	-	NR	-
Xylenes	NR	NR		ND	NR	NR	-	NR	-
Surrogate Recovery									
aaa-TFT	NR	NR			NR	NR	-	NR	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/31/17 - 6/1/17	**BatchID:**	139755
Date Analyzed:	5/31/17 - 6/1/17	**Extraction Method:**	SW5030B
Instrument:	GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS-139755 1705B44-010AMS/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	53.5	40	60	-	89	78-116
MTBE	ND	10.6	5.0	10	-	106	72-122
Benzene	ND	9.95	0.50	10	-	99	81-123
Toluene	ND	11.4	0.50	10	-	114	83-129
Ethylbenzene	ND	10.6	0.50	10	-	107	88-126
Xylenes	ND	30.3	1.5	30	-	101	87-131
Surrogate Recovery							
aaa-TFT	9.987	10.7		10	100	107	89-116

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	55.5	55.1	60	ND	92	92	63-133	0	20
MTBE	10.7	9.40	10	ND	107	94	69-122	12.7	20
Benzene	10.2	9.60	10	ND	101	96	84-125	5.52	20
Toluene	11.1	10.8	10	ND	111	108	87-131	2.64	20
Ethylbenzene	10.6	10.4	10	ND	106	103	92-126	2.87	20
Xylenes	31.0	30.8	30	ND	103	102	88-132	0.646	20
Surrogate Recovery									
aaa-TFT	10.8	10.3	10		108	103	90-117	4.04	20

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/31/17	**BatchID:**	139771
Date Analyzed:	5/31/17	**Extraction Method:**	SW5030B
Instrument:	GC12	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS-139771 1705B44-014AMS/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	55.3	40	60	-	92	78-116
MTBE	ND	12.0	5.0	10	-	120	72-122
Benzene	ND	11.8	0.50	10	-	118	81-123
Toluene	ND	12.0	0.50	10	-	119	83-129
Ethylbenzene	ND	10.5	0.50	10	-	105	88-126
Xylenes	ND	27.6	1.5	30	-	92	87-131
Surrogate Recovery							
aaa-TFT	10.51	11.9		10	105	119, F2	89-116

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	55.4	55.0	60	ND	92	92	63-133	0	20
MTBE	12.4	12.4	10	ND	119	119	69-122	0	20
Benzene	11.5	11.8	10	ND	115	118	84-125	2.14	20
Toluene	11.2	11.5	10	ND	112	115	87-131	2.66	20
Ethylbenzene	10.0	10.1	10	ND	100	101	92-126	0.962	20
Xylenes	26.6	26.7	30	ND	89	89	88-132	0	20
Surrogate Recovery									
aaa-TFT	11.6	11.7	10		115	117	90-117	1.61	20

McCampbell 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

Quality Control Report

Client: CKG Environmental
Date Prepared: 5/25/17
Date Analyzed: 5/25/17
Instrument: MICROBIOLOGY
Matrix: Water
Project: Owens Brockway Glass Plant

WorkOrder: 1705B44
BatchID: 139525
Extraction Method: SM9215B
Analytical Method: SM9215B

QC Summary Report for Heterotrophic Bacteria

Lab ID	Analyte	Reporting Units	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	RPD	Acceptance Criteria (%)
1705B44-001D	Heterotrophic Bacteria	CFU/ml	2.0	1	2.0	1	0	<50

Client: CKG Environmental
Date Prepared: 5/25/17
Date Analyzed: 5/25/17
Instrument: MICROBIOLOGY
Matrix: Water
Project: Owens Brockway Glass Plant

WorkOrder: 1705B44
BatchID: 139526
Extraction Method: SM9215B
Analytical Method: SM9215B

QC Summary Report for Heterotrophic Bacteria

Lab ID	Analyte	Reporting Units	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	RPD	Acceptance Criteria (%)
1705B44-011D	Heterotrophic Bacteria	CFU/ml	320	10	340	10	6.06	<50

McCampbell 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

Quality Control Report

Client:	CKG Environmental	**WorkOrder:**	1705B44
Date Prepared:	5/24/17	**BatchID:**	139465
Date Analyzed:	5/25/17	**Extraction Method:**	SW3510C/3630C
Instrument:	GC9a	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	Owens Brockway Glass Plant	**Sample ID:**	MB/LCS/LCSD-139465

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	674.5		625	108	79-111

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1040	989	1000	104	99	88-134	5.01	30
Surrogate Recovery								
C9	690	679	625	110	109	79-111	1.67	30

NELAP 4033ORELAP

QA/QC Officer

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1705B44 **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/3rd Party:
PO:
ProjectNo: Owens Brockway Glass Plant

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

Requested TAT: 5 days;

Date Received: 05/25/2017
Date Logged: 05/25/2017

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
1705B44-001	MW-2R	Water	5/25/2017 12:10	☐	C		B	E	A	D	A					
1705B44-002	MW-3R	Water	5/25/2017 12:55	☐	D	C	B	F	A	E	A					
1705B44-003	MW-5	Water	5/25/2017 12:15	☐	C		B	E	A	D	A					
1705B44-004	MW-6	Water	5/25/2017 12:30	☐	C		B	E	A	D	A					
1705B44-005	MW-7	Water	5/25/2017 12:45	☐	C		B	E	A	D	A					
1705B44-006	MW-8	Water	5/25/2017 12:40	☐	C		B	E	A	D	A					
1705B44-007	MW-10	Water	5/25/2017 12:25	☐	C		B	E	A	D	A					
1705B44-008	MW-13	Water	5/25/2017 12:30	☐	C		B	E	A	D	A					
1705B44-009	MW-15	Water	5/25/2017 12:15	☐	D	C	B	F	A	E	A					
1705B44-010	MW-16	Water	5/25/2017 13:00	☐	C		B	E	A	D	A					
1705B44-011	MW-17	Water	5/25/2017 12:45	☐	C		B	E	A	D	A					
1705B44-012	MW-19	Water	5/25/2017 12:20	☐	D	C	B	F	A	E	A					
1705B44-013	TB	Water	5/25/2017 12:00	☐			B		A							
1705B44-014	MW-20	Water	5/25/2017 13:05	☐	C		B	E	A	D	A					
1705B44-015	MW-21	Water	5/25/2017 12:35	☐	D	C	B	F	A	E	A					

Test Legend:

1	300_1_W	2	8082_PCB_Decant	3	8260VOC_W	4	Alk_W
5	G-MBTEX_W	6	HPC-POUR_DWW	7	TPH(DMO)WSG_W	8	
9		10		11		12	

Prepared by: Maria Venegas

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 014A, 015A contain testgroup Multi RangeWSG_W.

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.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-001A	MW-2R	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:10	5 days	Present	☐	
1705B44-001B	MW-2R	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:10	5 days	Present	☐	
1705B44-001C	MW-2R	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:10	5 days	Present	☐	
1705B44-001D	MW-2R	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:10	5 days	Present	☐	
1705B44-001E	MW-2R	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:10	5 days	Present	☐	
1705B44-002A	MW-3R	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 1-aVOAs (multi-range)	☐	5/25/2017 12:55	5 days	Present	☐	
1705B44-002B	MW-3R	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:55	5 days	Present	☐	
1705B44-002C	MW-3R	Water	SW8082 (PCBs Only) (Decanted)	1	aVOA	☐	5/25/2017 12:55	5 days	Present	☐	
				1	8OZ GJ	☐			Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-002D	MW-3R	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:55	5 days	Present	☐	
1705B44-002E	MW-3R	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:55	5 days	Present	☐	
1705B44-002F	MW-3R	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:55	5 days	Present	☐	
1705B44-003A	MW-5	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:15	5 days	1%+	☐	
1705B44-003B	MW-5	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:15	5 days	1%+	☐	
1705B44-003C	MW-5	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:15	5 days	1%+	☐	
1705B44-003D	MW-5	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:15	5 days	1%+	☐	
1705B44-003E	MW-5	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:15	5 days	1%+	☐	
1705B44-004A	MW-6	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:30	5 days	5%+	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-004B	MW-6	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:30	5 days	5%+	☐	
1705B44-004C	MW-6	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:30	5 days	5%+	☐	
1705B44-004D	MW-6	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:30	5 days	5%+	☐	
1705B44-004E	MW-6	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:30	5 days	5%+	☐	
1705B44-005A	MW-7	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-005B	MW-7	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-005C	MW-7	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-005D	MW-7	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:45	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-005E	MW-7	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-006A	MW-8	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:40	5 days	Present	☐	
1705B44-006B	MW-8	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:40	5 days	Present	☐	
1705B44-006C	MW-8	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:40	5 days	Present	☐	
1705B44-006D	MW-8	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:40	5 days	Present	☐	
1705B44-006E	MW-8	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:40	5 days	Present	☐	
1705B44-007A	MW-10	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:25	5 days	1%+	☐	
1705B44-007B	MW-10	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:25	5 days	1%+	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-007C	MW-10	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:25	5 days	1%+	☐	
1705B44-007D	MW-10	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:25	5 days	1%+	☐	
1705B44-007E	MW-10	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:25	5 days	1%+	☐	
1705B44-008A	MW-13	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:30	5 days	Present	☐	
1705B44-008B	MW-13	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:30	5 days	Present	☐	
1705B44-008C	MW-13	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:30	5 days	Present	☐	
1705B44-008D	MW-13	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:30	5 days	Present	☐	
1705B44-008E	MW-13	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:30	5 days	Present	☐	
1705B44-009A	MW-15	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 1-aVOAs (multi-range)	☐	5/25/2017 12:15	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-009B	MW-15	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:15	5 days	Present	☐	
1705B44-009C	MW-15	Water	SW8082 (PCBs Only) (Decanted)	1	aVOA	☐	5/25/2017 12:15	5 days	Present	☐	
				1	8OZ GJ	☐			Present	☐	
1705B44-009D	MW-15	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:15	5 days	Present	☐	
1705B44-009E	MW-15	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:15	5 days	Present	☐	
1705B44-009F	MW-15	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:15	5 days	Present	☐	
1705B44-010A	MW-16	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 13:00	5 days	Present	☐	
1705B44-010B	MW-16	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 13:00	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-010C	MW-16	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 13:00	5 days	Present	☐	
1705B44-010D	MW-16	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 13:00	5 days	Present	☐	
1705B44-010E	MW-16	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 13:00	5 days	Present	☐	
1705B44-011A	MW-17	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-011B	MW-17	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-011C	MW-17	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-011D	MW-17	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-011E	MW-17	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:45	5 days	Present	☐	
1705B44-012A	MW-19	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 1-aVOAs (multi-range)	☐	5/25/2017 12:20	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-012B	MW-19	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:20	5 days	Present	☐	
1705B44-012C	MW-19	Water	SW8082 (PCBs Only) (Decanted)	1	aVOA	☐	5/25/2017 12:20	5 days	Present	☐	
				1	16OZ GJ	☐			Present	☐	
1705B44-012D	MW-19	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:20	5 days	Present	☐	
1705B44-012E	MW-19	Water	Pour Plate - Heterotrophic Bacteria	2	120ML w/ Na2S2O3	☐	5/25/2017 12:20	5 days	Present	☐	
1705B44-012F	MW-19	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:20	5 days	Present	☐	
1705B44-013A	TB	Water	SW8021B/8015Bm (G/MBTEX)	1	VOA/HCL	☐	5/25/2017 12:00	5 days	None	☐	
1705B44-013B	TB	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	VOA/HCL	☐	5/25/2017 12:00	5 days	None	☐	
1705B44-014A	MW-20	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	5/25/2017 13:05	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-014B	MW-20	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 13:05	5 days	Present	☐	
1705B44-014C	MW-20	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 13:05	5 days	Present	☐	
1705B44-014D	MW-20	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 13:05	5 days	Present	☐	
1705B44-014E	MW-20	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 13:05	5 days	Present	☐	
1705B44-015A	MW-21	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 1-aVOAs (multi-range)	☐	5/25/2017 12:35	5 days	Present	☐	
1705B44-015B	MW-21	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	2	VOA w/ HCl	☐	5/25/2017 12:35	5 days	Present	☐	
1705B44-015C	MW-21	Water	SW8082 (PCBs Only) (Decanted)	1	aVOA	☐	5/25/2017 12:35	5 days	Present	☐	
				1	8OZ GJ	☐			Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell 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

WORK ORDER SUMMARY

Client Name: CKG ENVIRONMENTAL
Client Contact: Christina Kennedy
Contact's Email: ckennedy@geologist.com

Project: Owens Brockway Glass Plant
Comments:

Work Order: 1705B44
QC Level: LEVEL 2
Date Logged: 5/25/2017

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705B44-015D	MW-21	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	5/25/2017 12:35	5 days	Present	☐	
1705B44-015E	MW-21	Water	Pour Plate - Heterotrophic Bacteria	1	120ML w/ Na2S2O3	☐	5/25/2017 12:35	5 days	Present	☐	
1705B44-015F	MW-21	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	5/25/2017 12:35	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1705B44

BLAINE
TECH SERVICES, INC.

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

CHAIN OF CUSTODY BTS # 170525-GR1

CLIENT: CKG Environmental

SITE: Owens Brockway Glass Plant
3600 Alameda Avenue
Oakland, CA

LAB: McCampbell DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ LIA ☐ OTHER ☐ RWQCB REGION _____

SPECIAL INSTRUCTIONS
Invoice and Report to : CKG Environmental Attn: Chris Kennedy
808 Zinfandel Lane, St Helena, CA 94574

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_2O	CONTAINERS TOTAL	MIXED	C = COMPOSITE ALL CONTAINERS	CONDUCT ANALYSIS TO DETECT: TPH-g (8015)	BTEX, MTBE, Naphthalene, 1,2-DCA, EDB (8260B)	TPH-d, TPH-mo w/silica gel clean up (8015)	Nitrate, Nitrite, Sulfate (300.0)	Alkalinity (310.1)	Heterotrophic Plate Count (SM 9215) -SHORT HOLD	PCB's (8082) - Lab Filtered prior to running sample	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-2R	5/25/17	1210	W	9			X	X	X	X	X	X					
MW-3R		1255	W	10			X	X	X	X	X	X	X				
MW-5		1215	W	9			X	X	X	X	X	X					
MW-6		1230	W	9			X	X	X	X	X	X					
MW-7		1245	W	9			X	X	X	X	X	X					
MW-8		1240	W	9			X	X	X	X	X	X					
MW-10		1225	W	9			X	X	X	X	X	X					
MW-13		1230	W	9			X	X	X	X	X	X					
MW-15		1215	W	10			X	X	X	X	X	X	X				
MW-16		1300	W	9			X	X	X	X	X	X					

SAMPLING COMPLETED DATE 5/25/17 TIME 1330
SAMPLING PERFORMED BY GREG ROBERTS

RESULTS NEEDED NO LATER THAN Per Client

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	5/25/17	1350		5-25-17	1350
	5-25-17	1445		5/25/17	1445

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

CHAIN OF CUSTODY BTS # 170525-GR1

CLIENT: CKG Environmental

SITE: Owens Brockway Glass Plant
3600 Alameda Avenue
Oakland, CA

LAB: McCampbell | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ LIA ☐ OTHER ☐ RWQCB REGION _____

SPECIAL INSTRUCTIONS
Invoice and Report to : CKG Environmental Attn: Chris Kennedy
808 Zinfindel Lane, St Helena, CA 94574

Dissolved product in samples MW-2 and MW-6
Please provide EDF and PDF of results

CONDUCT ANALYSIS TO DETECT

SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H_2O	CONTAINERS TOTAL	CONTAINERS MIXED	C = COMPOSITE ALL CONTAINERS	TPH-g (8015)	BTEX, MTBE, Naphthalene, 1,2-DCA, EDB (8260B)	TPH-d, TPH-mo w/silica gel clean up (8015)	Nitrate, Nitrite, Sulfate (300.0)	Alkalinity (310.1)	Heterotrophic Plate Count (SM 9215) -SHORT HOLD	PCB's (8082) - Lab Filtered prior to running sample		ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
+ MW-17	5/25/17	1245	W	9	↓		X	X	X	X	X	X						
+ MW-19	↓	1220	W	10	↓		X	X	X	X	X	X	X					
✓ TB	↓	1200	W	2	HCL VOA		X	X										
+ MW-20	↓	1305 @1230	W	9	MIXED		X	X	X	X	X	X						
+ MW-21	↓	1235	W	10	↓		X	X	X	X	X	X	X					

ICE/t° 4.6
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
pH ADJUSTED IN LAB

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED NO LATER THAN
	5/25/17	1330	GREG ROBERTS	Per Client

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	5/25/17	1350		5-25-17	1750
	5-25-17	1445		5/25/17	1745

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

McCampbell 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

Sample Receipt Checklist

Client Name:	**CKG Environmental**	Date and Time Received	**5/25/2017 14:45**
Project Name:	**Owens Brockway Glass Plant**	Date Logged:	**5/25/2017**
		Received by:	Maria Venegas
WorkOrder №:	**1705B44** Matrix: Water	Logged by:	Maria Venegas
Carrier:	David Shaver (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 ☐	NA ☐
Sample/Temp Blank temperature	Temp: 4.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	
	(Ice Type: WET ICE)		

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments:

APPENDIX C

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
4/3/2017 through 4/7/2017

	Date	4/3/2017		4/4/2017		4/5/2017		4/6/2017		4/7/2017			
	Time	10:45 AM		N/A		1:15 PM		4:15 PM		9:30 AM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	3.7	10.0	-	-	5.4	11.0	4.5	11.0	4.0	10.0	4.4	10.5
	3	5.5	13.0	-	-	4.3	15.0	4.5	12.0	5.8	12.0	5.0	13.0
	5	4.0	9.0	-	-	3.4	13.0	3.0	10.0	2.1	10.0	3.1	10.5
	12	7.1	11.0	-	-	6.4	13.0	6.5	11.0	7.0	11.0	6.8	11.5
	13	4.7	9.0	-	-	4.5	11.0	4.3	10.0	3.8	9.0	4.3	9.8
	15	14.8	12.0	-	-	13.5	14.0	14.0	14.0	14.7	12.0	14.3	13.0
	Total	**39.8**	**64.0**	**0.0**	**0.0**	**37.5**	**77.0**	**36.8**	**68.0**	**37.4**	**64.0**	**37.9**	**68.3**
2	1B	4.2	6.0	-	-	4.3	8.0	3.1	6.0	4.1	7.0	3.9	6.8
	4	7.8	10.0	-	-	7.0	14.0	6.9	11.0	5.7	11.0	6.9	11.5
	8	4.7	13.0	-	-	5.5	14.0	6.0	11.0	4.4	14.0	5.2	13.0
	10	7.6	8.0	-	-	8.1	8.0	7.9	6.0	8.1	6.0	7.9	7.0
	11	7.4	9.0	-	-	5.9	13.0	7.0	9.0	7.3	9.0	6.9	10.0
	14	7.0	7.0	-	-	7.2	8.0	6.7	8.0	6.9	8.0	7.0	7.8
	16	6.7	11.0	-	-	5.6	14.0	6.0	12.0	6.5	12.0	6.2	12.3
	Total	**45.4**	**64.0**	**0.0**	**0.0**	**43.6**	**79.0**	**43.6**	**63.0**	**43.0**	**67.0**	**43.9**	**68.3**
3	2A	6.3	8.0	-	-	6.5	8.0	6.2	7.0	6.0	8.0	6.3	7.8
	2B	5.1	12.0	-	-	5.3	12.0	6.7	11.0	7.4	11.0	6.1	11.5
	6A	8.5	10.0	-	-	8.6	10.0	9.0	8.0	8.6	8.0	8.7	9.0
	6B	2.0	21.0	-	-	2.1	21.0	1.5	21.0	1.5	21.0	1.8	21.0
	7	7.5	12.0	-	-	7.4	11.0	8.0	9.0	8.0	8.0	7.7	10.0
	9	11.0	4.0	-	-	11.0	4.0	10.3	5.0	10.1	5.0	10.6	4.5
	17	9.0	8.0	-	-	9.1	8.0	8.4	9.0	8.4	9.0	8.7	8.5
	Total	**49.4**	**75.0**	**0.0**	**0.0**	**50.0**	**74.0**	**50.1**	**70.0**	**50.0**	**70.0**	**49.9**	**72.3**

Notes: Flow and Pressure readings not recorded on 4/4/2017 due to online interface timeout.

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
4/10/2017 through 4/14/2017

	Date	4/10/2017		4/11/2017		4/12/2017		4/13/2017		4/14/2017			
	Time	11:45 AM		3:30 PM		8:45 AM		8:45 AM		3:30 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	4.3	10.0	3.5	10.0	5.3	10.0	4.5	11.0	4.5	11.0	4.4	10.4
	3	6.0	13.0	5.7	13.0	5.7	13.0	5.8	13.0	6.0	12.0	5.8	12.8
	5	3.1	10.0	4.0	10.0	4.1	10.0	3.5	10.0	4.0	10.0	3.7	10.0
	12	7.6	11.0	7.2	11.0	7.5	11.0	7.6	11.0	7.5	11.0	7.5	11.0
	13	4.4	9.0	3.9	9.0	4.5	9.0	4.5	9.0	4.0	9.0	4.3	9.0
	15	15.5	12.0	15.0	12.0	15.3	12.0	15.3	12.0	15.1	12.0	15.2	12.0
	Total	**40.9**	**65.0**	**39.3**	**65.0**	**42.4**	**65.0**	**41.2**	**66.0**	**41.1**	**65.0**	**41.0**	**65.2**
2	1B	4.0	6.0	5.0	6.0	5.1	6.0	4.6	6.0	4.5	6.0	4.6	6.0
	4	6.7	10.0	7.0	11.0	7.2	10.0	7.1	10.0	7.0	10.0	7.0	10.2
	8	7.3	8.0	6.6	10.0	5.0	14.0	5.9	11.0	6.0	11.0	6.2	10.8
	10	7.4	9.0	5.9	12.0	8.1	6.0	8.3	5.0	8.5	5.0	7.6	7.4
	11	7.4	8.0	7.7	9.0	7.7	9.0	7.7	9.0	7.1	9.0	7.5	8.8
	14	7.1	7.0	7.2	7.0	7.2	7.0	7.2	7.0	7.0	7.0	7.1	7.0
	16	6.0	12.0	6.4	12.0	6.5	12.0	6.5	12.0	6.5	12.0	6.4	12.0
	Total	**45.9**	**60.0**	**45.8**	**67.0**	**46.8**	**64.0**	**47.3**	**60.0**	**46.6**	**60.0**	**46.5**	**62.2**
3	2A	6.0	7.0	6.1	9.0	6.1	7.0	6.3	7.0	6.5	7.0	6.2	7.4
	2B	8.2	11.0	8.8	11.0	6.7	11.0	8.7	11.0	8.8	11.0	8.2	11.0
	6A	8.7	8.0	8.9	8.0	8.6	8.0	8.8	8.0	8.8	8.0	8.8	8.0
	6B	1.7	20.0	1.5	21.0	1.5	20.0	1.5	21.0	1.5	21.0	1.5	20.6
	7	8.0	8.0	8.2	8.0	8.1	8.0	8.3	8.0	8.3	8.0	8.2	8.0
	9	10.2	5.0	10.3	5.0	10.2	5.0	10.3	5.0	10.5	5.0	10.3	5.0
	17	8.3	8.0	27.9	8.0	9.3	8.0	8.3	9.0	8.0	9.0	12.4	8.4
	Total	**51.1**	**67.0**	**71.7**	**70.0**	**50.5**	**67.0**	**52.2**	**69.0**	**52.4**	**69.0**	**55.6**	**68.4**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
4/17/2017 through 4/21/2017

	Date	4/17/2017		4/18/2017		4/19/2017		4/20/2017		4/21/2017			
	Time	11:00 AM		4:15 PM		4:15 PM		5:00 PM		4:15 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	4.6	10.0	5.1	10.0	6.1	10.0	4.8	10.0	5.8	10.0	5.3	10.0
	3	4.2	13.0	4.2	13.0	5.7	12.0	4.0	13.0	5.3	12.0	4.7	12.6
	5	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	2.5	9.0	3.8	9.0
	12	7.7	11.0	7.8	11.0	7.7	11.0	7.9	11.0	7.4	10.0	7.7	10.8
	13	4.5	9.0	4.9	9.0	4.7	8.0	5.1	9.0	5.5	8.0	4.9	8.6
	15	15.6	12.0	15.9	12.0	15.8	12.0	16.1	12.0	15.2	12.0	15.7	12.0
	Total	**40.7**	**64.0**	**42.0**	**64.0**	**44.1**	**62.0**	**42.0**	**64.0**	**41.7**	**61.0**	**42.1**	**63.0**
2	1B	5.4	6.0	5.5	6.0	4.3	8.0	5.3	6.0	3.9	6.0	4.9	6.4
	4	8.7	11.0	8.1	11.0	7.8	10.0	7.9	11.0	7.1	10.0	7.9	10.6
	8	0.5	26.0	2.5	20.0	2.8	17.0	3.2	17.0	3.4	15.0	2.5	19.0
	10	8.5	9.0	8.7	6.0	7.8	7.0	8.3	7.0	8.4	4.0	8.3	6.6
	11	8.6	9.0	8.2	9.0	7.5	7.0	7.9	9.0	7.0	8.0	7.8	8.4
	14	8.0	8.0	7.8	7.0	7.5	5.0	7.6	7.0	7.3	6.0	7.6	6.6
	16	7.5	13.0	5.9	15.0	5.5	12.0	7.2	12.0	6.4	12.0	6.5	12.8
	Total	**47.2**	**82.0**	**46.7**	**74.0**	**43.2**	**66.0**	**47.4**	**69.0**	**43.5**	**61.0**	**45.6**	**70.4**
3	2A	6.3	7.0	6.5	7.0	6.3	7.0	6.4	7.0	6.1	7.0	6.3	7.0
	2B	9.2	11.0	9.0	11.0	10.7	11.0	9.6	11.0	8.8	11.0	9.5	11.0
	6A	8.7	8.0	8.5	8.0	9.1	8.0	9.4	8.0	9.0	8.0	8.9	8.0
	6B	1.6	21.0	1.5	21.0	1.7	21.0	1.5	21.0	1.5	20.0	1.6	20.8
	7	8.2	8.0	8.3	8.0	8.2	8.0	8.5	7.0	8.1	8.0	8.3	7.8
	9	10.4	5.0	10.1	5.0	10.2	5.0	10.4	5.0	10.1	5.0	10.2	5.0
	17	28.8	8.0	8.0	9.0	9.1	8.0	8.9	8.0	8.0	8.0	12.6	8.2
	Total	**73.2**	**68.0**	**51.9**	**69.0**	**55.3**	**68.0**	**54.7**	**67.0**	**51.6**	**67.0**	**57.3**	**67.8**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
4/24/2017 through 4/28/2017

	Date	4/24/2017		4/25/2017		4/26/2017		4/27/2017		4/28/2017			
	Time	11:00 AM		N/A		N/A		11:00 AM		4:15 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	5.5	10.0	-	-	-	-	5.5	10.0	5.3	10.0	5.4	10.0
	3	4.2	13.0	-	-	-	-	4.0	12.0	6.1	12.0	4.8	12.3
	5	2.9	9.0	-	-	-	-	3.1	9.0	2.7	9.0	2.9	9.0
	12	7.6	11.0	-	-	-	-	7.5	11.0	7.4	11.0	7.5	11.0
	13	4.5	9.0	-	-	-	-	4.5	9.0	4.3	9.0	4.4	9.0
	15	16.0	12.0	-	-	-	-	15.7	12.0	15.8	12.0	15.8	12.0
	Total	**40.7**	**64.0**	**0.0**	**0.0**	**0.0**	**0.0**	**40.3**	**63.0**	**41.6**	**63.0**	**40.9**	**63.3**
2	1B	4.3	6.0	-	-	-	-	4.6	6.0	4.2	6.0	4.4	6.0
	4	7.0	10.0	-	-	-	-	7.5	10.0	7.7	10.0	7.4	10.0
	8	4.6	14.0	-	-	-	-	2.6	19.0	3.0	18.0	3.4	17.0
	10	8.7	4.0	-	-	-	-	9.5	5.0	8.3	7.0	8.8	5.3
	11	7.5	9.0	-	-	-	-	7.8	8.0	7.4	9.0	7.6	8.7
	14	7.3	7.0	-	-	-	-	7.5	6.0	7.3	7.0	7.4	6.7
	16	6.7	12.0	-	-	-	-	6.7	12.0	6.9	12.0	6.8	12.0
	Total	**46.1**	**62.0**	**0.0**	**0.0**	**0.0**	**0.0**	**46.2**	**66.0**	**44.8**	**69.0**	**45.7**	**65.7**
3	2A	6.2	7.0	-	-	-	-	6.4	7.0	6.5	7.0	6.4	7.0
	2B	9.3	11.0	-	-	-	-	10.0	11.0	10.0	11.0	9.8	11.0
	6A	8.8	8.0	-	-	-	-	8.0	8.0	8.1	8.0	8.3	8.0
	6B	1.6	20.0	-	-	-	-	1.7	21.0	1.5	21.0	1.6	20.7
	7	8.3	8.0	-	-	-	-	8.3	7.0	8.1	7.0	8.2	7.3
	9	10.2	5.0	-	-	-	-	9.8	5.0	10.3	5.0	10.1	5.0
	17	8.7	8.0	-	-	-	-	10.7	8.0	8.5	8.0	9.3	8.0
	Total	**53.1**	**67.0**	**0.0**	**0.0**	**0.0**	**0.0**	**54.9**	**67.0**	**53.0**	**67.0**	**53.7**	**67.0**

Notes: On 4/25/2017 and 4/26/2017, the online interface had a system timeout and readings were not recorded.

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
5/1/2017 through 5/5/2017

	Date	5/1/2017		5/2/2017		5/3/2017		5/4/2017		5/5/2017			
	Time	10:15 AM		10:15 AM		11:00 AM		11:00 AM		4:15 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	5.6	10.0	5.2	10.0	5.5	10.0	4.3	10.0	5.5	10.0	5.2	10.0
	3	5.3	12.0	5.5	12.0	5.0	12.0	5.5	12.0	5.0	12.0	5.3	12.0
	5	3.3	9.0	3.3	9.0	3.1	8.0	3.5	9.0	3.1	9.0	3.3	8.8
	12	7.2	10.0	7.1	10.0	7.0	10.0	7.2	10.0	7.5	10.0	7.2	10.0
	13	4.2	8.0	3.9	9.0	4.5	9.0	4.3	9.0	4.5	9.0	4.3	8.8
	15	15.0	12.0	15.3	12.0	15.3	12.0	15.1	12.0	15.3	12.0	15.2	12.0
	Total	**40.6**	**61.0**	**40.3**	**62.0**	**40.4**	**61.0**	**39.9**	**62.0**	**40.9**	**62.0**	**40.4**	**61.6**
2	1B	4.2	6.0	4.6	6.0	4.5	6.0	4.1	6.0	4.1	6.0	4.3	6.0
	4	7.7	10.0	8.0	10.0	8.0	10.0	8.5	10.0	8.7	10.0	8.2	10.0
	8	1.7	20.0	0.5	24.0	1.5	20.0	1.5	20.0	1.6	20.0	1.4	20.8
	10	7.7	9.0	7.7	11.0	7.5	11.0	7.5	11.0	7.5	11.0	7.6	10.6
	11	7.3	8.0	7.7	9.0	7.7	9.0	7.1	9.0	7.1	9.0	7.4	8.8
	14	7.5	6.0	7.5	7.0	7.3	7.0	7.0	7.0	6.8	7.0	7.2	6.8
	16	6.3	13.0	7.2	12.0	6.5	12.0	6.7	12.0	6.7	12.0	6.7	12.2
	Total	**42.4**	**72.0**	**43.2**	**79.0**	**43.0**	**75.0**	**42.4**	**75.0**	**42.5**	**75.0**	**42.7**	**75.2**
3	2A	5.8	7.0	5.7	7.0	5.5	7.0	8.0	6.0	9.0	6.0	6.8	6.6
	2B	8.7	10.0	8.9	10.0	8.5	10.0	7.7	10.0	7.7	10.0	8.3	10.0
	6A	8.5	8.0	8.6	8.0	8.7	8.0	8.0	8.0	8.5	8.0	8.5	8.0
	6B	1.6	18.0	1.6	20.0	1.5	20.0	1.5	20.0	1.5	19.0	1.5	19.4
	7	7.8	7.0	7.9	7.0	7.5	7.0	7.0	7.0	7.0	6.0	7.4	6.8
	9	9.7	4.0	9.6	4.0	9.5	4.0	9.1	4.0	9.3	4.0	9.4	4.0
	17	9.4	8.0	9.1	9.0	9.0	9.0	10.0	9.0	10.1	9.0	9.5	8.8
	Total	**51.5**	**62.0**	**51.4**	**65.0**	**50.2**	**65.0**	**51.3**	**64.0**	**53.1**	**62.0**	**51.5**	**63.6**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
5/8/2017 through 5/12/2017

	Date	5/8/2017		5/9/2017		5/10/2017		5/11/2017		5/12/2017			
	Time	11:00 AM		9:30 AM		11:00 AM		N/A		N/A			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	4.8	10.0	4.2	10.0	4.7	10.0	-	-	-	-	4.6	10.0
	3	5.2	12.0	5.3	12.0	5.5	12.0	-	-	-	-	5.3	12.0
	5	3.7	9.0	3.7	9.0	3.9	9.0	-	-	-	-	3.8	9.0
	12	7.1	10.0	7.3	10.0	7.3	10.0	-	-	-	-	7.2	10.0
	13	4.4	9.0	4.2	8.0	4.3	9.0	-	-	-	-	4.3	8.7
	15	15.1	12.0	15.0	12.0	15.2	12.0	-	-	-	-	15.1	12.0
	Total	**40.3**	**62.0**	**39.7**	**61.0**	**40.9**	**62.0**	**0.0**	**0.0**	**0.0**	**0.0**	**40.3**	**61.7**
2	1B	3.9	6.0	3.9	8.0	4.3	6.0	-	-	-	-	4.0	6.7
	4	7.3	10.0	7.2	10.0	7.8	10.0	-	-	-	-	7.4	10.0
	8	2.9	17.0	3.1	16.0	1.6	21.0	-	-	-	-	2.5	18.0
	10	7.5	9.0	7.7	8.0	7.4	10.0	-	-	-	-	7.5	9.0
	11	7.0	8.0	6.9	8.0	7.2	9.0	-	-	-	-	7.0	8.3
	14	7.2	6.0	7.1	7.0	7.4	7.0	-	-	-	-	7.2	6.7
	16	6.6	12.0	6.3	12.0	6.8	13.0	-	-	-	-	6.6	12.3
	Total	**42.4**	**68.0**	**42.2**	**69.0**	**42.5**	**76.0**	**0.0**	**0.0**	**0.0**	**0.0**	**42.4**	**71.0**
3	2A	5.4	7.0	5.6	7.0	5.3	7.0	-	-	-	-	5.4	7.0
	2B	8.4	10.0	8.7	10.0	8.2	10.0	-	-	-	-	8.4	10.0
	6A	8.7	7.0	8.5	8.0	8.5	8.0	-	-	-	-	8.6	7.7
	6B	1.8	20.0	1.8	20.0	1.8	20.0	-	-	-	-	1.8	20.0
	7	7.9	7.0	7.9	7.0	7.9	7.0	-	-	-	-	7.9	7.0
	9	9.5	4.0	9.8	4.0	9.8	4.0	-	-	-	-	9.7	4.0
	17	9.2	9.0	9.3	9.0	9.6	9.0	-	-	-	-	9.4	9.0
	Total	**50.9**	**64.0**	**51.6**	**65.0**	**51.1**	**65.0**	**0.0**	**0.0**	**0.0**	**0.0**	**51.2**	**64.7**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
5/15/2017 through 5/19/2017

	Date	5/15/2017		5/16/2017		5/17/2017		5/18/2017		5/19/2017			
	Time	11:00 AM		N/A		2:45 PM		10:15 AM		10:15 AM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	4.1	9.0	-	-	4.5	9.0	4.8	9.0	4.5	9.0	4.5	9.0
	3	5.5	12.0	-	-	5.3	12.0	5.5	12.0	5.5	12.0	5.5	12.0
	5	3.1	9.0	-	-	3.3	9.0	3.1	9.0	3.1	9.0	3.2	9.0
	12	7.3	10.0	-	-	7.2	10.0	7.5	10.0	7.3	10.0	7.3	10.0
	13	4.0	8.0	-	-	4.0	8.0	3.9	9.0	3.8	9.0	3.9	8.5
	15	15.2	11.0	-	-	15.2	11.0	15.1	12.0	15.1	12.0	15.2	11.5
	Total	**39.2**	**59.0**	**-**	**-**	**39.5**	**59.0**	**39.9**	**61.0**	**39.3**	**61.0**	**39.5**	**60.0**
2	1B	3.4	6.0	-	-	3.9	6.0	4.0	6.0	4.1	6.0	3.9	6.0
	4	7.5	10.0	-	-	7.3	10.0	7.1	10.0	7.3	10.0	7.3	10.0
	8	1.5	21.0	-	-	2.5	19.0	1.5	20.0	1.5	20.0	1.8	20.0
	10	7.8	8.0	-	-	7.7	8.0	8.0	8.0	8.1	7.0	7.9	7.8
	11	7.3	8.0	-	-	7.0	8.0	7.1	8.0	7.0	9.0	7.1	8.3
	14	7.4	6.0	-	-	7.2	6.0	7.5	6.0	7.1	7.0	7.3	6.3
	16	6.2	12.0	-	-	6.4	12.0	6.1	12.0	6.5	12.0	6.3	12.0
	Total	**41.1**	**71.0**	**-**	**-**	**42.0**	**69.0**	**41.3**	**70.0**	**41.6**	**71.0**	**41.5**	**70.3**
3	2A	5.7	7.0	-	-	5.1	7.0	5.0	7.0	4.9	7.0	5.2	7.0
	2B	8.4	10.0	-	-	8.3	9.0	8.4	9.0	8.1	9.0	8.3	9.3
	6A	8.5	7.0	-	-	8.5	7.0	8.5	7.0	8.3	7.0	8.5	7.0
	6B	1.5	20.0	-	-	1.6	19.0	1.5	19.0	1.5	19.0	1.5	19.3
	7	7.9	7.0	-	-	7.6	7.0	7.8	7.0	7.6	7.0	7.7	7.0
	9	9.5	4.0	-	-	9.8	4.0	10.0	4.0	9.6	4.0	9.7	4.0
	17	11.2	9.0	-	-	11.2	9.0	11.1	9.0	11.5	9.0	11.3	9.0
	Total	**52.7**	**64.0**	**-**	**-**	**52.1**	**62.0**	**52.3**	**62.0**	**51.5**	**62.0**	**52.2**	**62.5**

NOTE: Technician was out of the office at a worksite on 5/16/2017 and was unable to record readings.

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
5/22/2017 through 5/26/2017

	Date	5/22/2017		5/23/2017		5/24/2017		5/25/2017		5/26/2017			
	Time	1:15 PM		11:00 AM		11:00 AM		4:15 PM		8:45 AM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	4.7	9.0	4.2	9.0	4.1	9.0	4.0	9.0	4.5	9.0	4.3	9.0
	3	5.2	12.0	4.6	12.0	5.0	12.0	5.1	12.0	5.1	12.0	5.0	12.0
	5	2.3	9.0	2.7	9.0	3.1	9.0	3.0	9.0	2.5	9.0	2.7	9.0
	12	6.7	10.0	6.9	10.0	6.7	10.0	6.8	10.0	6.7	10.0	6.8	10.0
	13	3.5	9.0	3.7	8.0	3.5	10.0	3.4	10.0	3.5	10.0	3.5	9.4
	15	14.8	11.0	14.8	11.0	14.5	12.0	14.2	12.0	14.1	12.0	14.5	11.6
	Total	**37.2**	**60.0**	**36.9**	**59.0**	**36.9**	**62.0**	**36.5**	**62.0**	**36.4**	**62.0**	**36.8**	**61.0**
2	1B	4.0	6.0	3.7	6.0	3.0	7.0	2.8	7.0	3.0	6.0	3.3	6.4
	4	8.2	10.0	8.0	10.0	7.8	9.0	7.0	9.0	6.9	9.0	7.6	9.4
	8	4.4	15.0	5.1	14.0	4.5	12.0	5.1	12.0	5.1	12.0	4.8	13.0
	10	0.4	21.0	0.4	21.0	7.5	6.0	7.7	6.0	7.7	6.0	4.7	12.0
	11	7.1	9.0	7.2	8.0	6.5	8.0	6.3	8.0	6.5	8.0	6.7	8.2
	14	7.5	7.0	7.5	6.0	6.8	6.0	6.8	6.0	6.9	6.0	7.1	6.2
	16	6.8	13.0	6.6	13.0	6.5	12.0	5.4	12.0	5.3	12.0	6.1	12.4
	Total	**38.4**	**81.0**	**38.5**	**78.0**	**42.6**	**60.0**	**41.1**	**60.0**	**41.4**	**59.0**	**40.4**	**67.6**
3	2A	5.0	7.0	4.9	7.0	4.5	7.0	4.4	7.0	5.5	7.0	4.9	7.0
	2B	7.9	9.0	15.3	9.0	7.5	9.0	7.7	9.0	8.0	10.0	9.3	9.2
	6A	8.4	7.0	8.4	7.0	8.5	7.0	8.2	8.0	8.2	9.0	8.3	7.6
	6B	1.5	20.0	1.6	19.0	1.8	19.0	1.6	19.0	1.7	19.0	1.6	19.2
	7	7.5	7.0	7.6	7.0	7.5	8.0	7.6	8.0	7.6	8.0	7.6	7.6
	9	10.0	4.0	9.2	4.0	9.8	4.0	9.5	4.0	9.6	4.0	9.6	4.0
	17	10.0	9.0	11.9	9.0	11.5	10.0	11.5	10.0	11.4	10.0	11.3	9.6
	Total	**50.3**	**63.0**	**58.9**	**62.0**	**51.1**	**64.0**	**50.5**	**65.0**	**52.0**	**67.0**	**52.6**	**64.2**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
5/29/2017 through 6/2/2017

	Date	5/29/2017		5/30/2017		5/31/2017		6/1/2017		6/2/2017			
	Time	Memorial Day		10:15 AM		1:15 PM		1:15 PM		2:45 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	-	-	3.9	10.0	4.3	9.0	3.5	10.0	3.4	9.0	3.8	9.5
	3	-	-	4.9	12.0	5.1	12.0	5.0	11.0	4.5	11.0	4.9	11.5
	5	-	-	3.5	10.0	2.5	10.0	3.7	10.0	1.8	10.0	2.9	10.0
	12	-	-	7.0	10.0	7.1	10.0	7.1	10.0	6.7	10.0	7.0	10.0
	13	-	-	3.5	9.0	3.7	9.0	3.3	9.0	3.6	8.0	3.5	8.8
	15	-	-	14.2	12.0	14.6	11.0	14.1	12.0	14.2	11.0	14.3	11.5
	Total	-	-	**37.0**	**63.0**	**37.3**	**61.0**	**36.7**	**62.0**	**34.2**	**59.0**	**36.3**	**61.3**
2	1B	-	-	3.1	6.0	3.0	6.0	3.5	6.0	3.8	6.0	3.4	6.0
	4	-	-	7.2	10.0	6.9	10.0	6.8	10.0	7.4	10.0	7.1	10.0
	8	-	-	5.7	11.0	5.1	11.0	5.7	11.0	5.7	11.0	5.6	11.0
	10	-	-	4.9	13.0	6.9	8.0	3.5	12.0	1.4	16.0	4.2	12.3
	11	-	-	7.0	9.0	6.4	8.0	6.5	9.0	6.7	8.0	6.7	8.5
	14	-	-	7.1	7.0	6.8	6.0	7.0	5.0	7.1	6.0	7.0	6.0
	16	-	-	6.2	12.0	5.5	12.0	6.5	12.0	6.2	12.0	6.1	12.0
	Total	-	-	**41.2**	**68.0**	**40.6**	**61.0**	**39.5**	**65.0**	**38.3**	**69.0**	**39.9**	**65.8**
3	2A	-	-	5.6	7.0	5.5	7.0	4.5	7.0	4.7	7.0	5.1	7.0
	2B	-	-	8.2	10.0	8.1	10.0	8.1	9.0	7.3	9.0	7.9	9.5
	6A	-	-	8.1	8.0	8.0	8.0	8.1	8.0	8.0	8.0	8.1	8.0
	6B	-	-	1.7	20.0	1.5	20.0	1.5	19.0	1.5	19.0	1.6	19.5
	7	-	-	7.7	8.0	7.6	8.0	7.5	8.0	7.4	8.0	7.6	8.0
	9	-	-	9.9	4.0	10.1	4.0	10.0	4.0	9.8	3.0	10.0	3.8
	17	-	-	10.6	10.0	10.5	10.0	10.5	10.0	10.6	9.0	10.6	9.8
	Total	-	-	**51.8**	**67.0**	**51.3**	**67.0**	**50.2**	**65.0**	**49.3**	**63.0**	**50.7**	**65.5**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
6/5/2017 through 6/9/2017

	Date	6/5/2017		6/6/2017		6/7/2017		6/8/2017		6/9/2017			
	Time	11:00 AM		8:45 AM		8:45 AM		11:30 AM		11:30 AM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	4.7	9.0	4.8	9.0	5.0	9.0	5.0	9.0	4.9	9.0	4.9	9.0
	3	4.8	12.0	5.5	12.0	5.1	12.0	5.0	12.0	5.1	12.0	5.1	12.0
	5	2.1	10.0	2.5	10.0	3.0	10.0	2.5	10.0	2.3	10.0	2.5	10.0
	12	7.2	10.0	7.3	10.0	7.0	10.0	7.1	10.0	7.1	9.0	7.1	9.8
	13	4.0	9.0	4.2	9.0	3.9	8.0	4.0	8.0	4.0	8.0	4.0	8.4
	15	15.2	12.0	15.2	12.0	14.9	11.0	14.9	11.0	15.1	11.0	15.1	11.4
	Total	**38.0**	**62.0**	**39.5**	**62.0**	**38.9**	**60.0**	**38.5**	**60.0**	**38.5**	**59.0**	**38.7**	**60.6**
2	1B	2.9	6.0	3.0	6.0	3.1	6.0	3.4	6.0	3.5	6.0	3.2	6.0
	4	6.9	10.0	7.2	10.0	7.0	10.0	7.1	10.0	7.0	10.0	7.0	10.0
	8	5.9	10.0	5.5	11.0	5.5	11.0	5.6	12.0	5.5	12.0	5.6	11.2
	10	7.8	6.0	7.8	8.0	7.8	8.0	7.9	7.0	8.0	7.0	7.9	7.2
	11	6.5	8.0	6.7	8.0	6.1	9.0	6.9	9.0	6.9	9.0	6.6	8.6
	14	6.8	6.0	6.9	6.0	7.3	7.0	7.1	7.0	7.2	7.0	7.1	6.6
	16	5.7	12.0	6.0	12.0	6.0	13.0	5.7	13.0	5.5	13.0	5.8	12.6
	Total	**42.5**	**58.0**	**43.1**	**61.0**	**42.8**	**64.0**	**43.7**	**64.0**	**43.6**	**64.0**	**43.1**	**62.2**
3	2A	4.1	7.0	5.4	7.0	5.0	7.0	4.9	8.0	5.0	8.0	4.9	7.4
	2B	7.9	9.0	8.3	10.0	8.0	10.0	8.7	10.0	8.8	10.0	8.3	9.8
	6A	8.2	9.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.0	8.1	8.2
	6B	1.7	19.0	1.8	19.0	1.5	19.0	1.8	20.0	1.7	19.0	1.7	19.2
	7	7.4	8.0	7.6	8.0	7.5	8.0	7.6	8.0	7.5	8.0	7.5	8.0
	9	10.0	3.0	10.0	3.0	9.8	4.0	10.1	4.0	10.0	4.0	10.0	3.6
	17	10.1	9.0	10.5	9.0	11.0	9.0	11.2	9.0	11.0	9.0	10.8	9.0
	Total	**49.4**	**64.0**	**51.6**	**64.0**	**50.8**	**65.0**	**52.4**	**67.0**	**52.0**	**66.0**	**51.2**	**65.2**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
6/12/2017 through 6/16/2017

	Date	6/12/2017		6/13/2017		6/14/2017		6/15/2017		6/16/2017			
	Time	8:45 AM		5:15 PM		8:45 AM		4:30 PM		4:30 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	3.4	9.0	3.4	9.0	3.3	9.0	3.3	9.0	3.3	9.0	3.3	9.0
	3	4.7	12.0	4.5	12.0	3.5	12.0	3.6	12.0	3.9	11.0	4.0	11.8
	5	1.5	11.0	1.7	11.0	2.0	11.0	2.0	11.0	2.1	11.0	1.9	11.0
	12	5.5	10.0	5.9	10.0	6.0	10.0	6.8	10.0	6.7	9.0	6.2	9.8
	13	3.2	9.0	3.3	9.0	3.5	8.0	3.4	8.0	3.2	8.0	3.3	8.4
	15	14.3	11.0	14.5	11.0	14.2	11.0	14.4	11.0	14.1	11.0	14.3	11.0
	Total	**32.6**	**62.0**	**33.3**	**62.0**	**32.5**	**61.0**	**33.5**	**61.0**	**33.3**	**59.0**	**33.0**	**61.0**
2	1B	3.0	6.0	3.0	6.0	3.0	6.0	3.4	7.0	4.2	6.0	3.3	6.2
	4	7.3	10.0	7.0	10.0	7.0	10.0	7.6	11.0	7.5	11.0	7.3	10.4
	8	6.1	10.0	6.0	10.0	5.1	12.0	2.8	18.0	3.0	17.0	4.6	13.4
	10	7.0	9.0	7.1	9.0	6.1	9.0	4.4	14.0	4.8	13.0	5.9	10.8
	11	5.8	8.0	5.5	8.0	6.5	8.0	7.0	8.0	6.9	8.0	6.3	8.0
	14	7.1	6.0	7.0	6.0	6.9	6.0	7.5	6.0	7.3	6.0	7.2	6.0
	16	6.0	12.0	5.9	12.0	5.5	12.0	6.6	12.0	6.3	12.0	6.1	12.0
	Total	**42.3**	**61.0**	**41.5**	**61.0**	**40.1**	**63.0**	**39.3**	**76.0**	**40.0**	**73.0**	**40.6**	**66.8**
3	2A	5.0	7.0	5.0	7.0	4.9	7.0	4.6	7.0	4.9	7.0	4.9	7.0
	2B	8.0	10.0	8.1	10.0	8.0	9.0	8.4	9.0	8.1	9.0	8.1	9.4
	6A	7.5	8.0	8.1	8.0	7.8	8.0	7.9	8.0	7.9	8.0	7.8	8.0
	6B	1.5	20.0	1.7	20.0	1.7	19.0	1.7	19.0	1.8	19.0	1.7	19.4
	7	7.8	8.0	7.5	8.0	7.3	8.0	7.3	8.0	7.2	9.0	7.4	8.2
	9	10.1	3.0	10.3	3.0	10.0	3.0	10.1	3.0	9.9	3.0	10.1	3.0
	17	10.0	9.0	10.0	9.0	10.7	9.0	10.8	9.0	10.6	9.0	10.4	9.0
	Total	**49.9**	**65.0**	**50.7**	**65.0**	**50.4**	**63.0**	**50.8**	**63.0**	**50.4**	**64.0**	**50.4**	**64.0**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
6/19/2017 through 6/23/2017

	Date	6/19/2017		6/20/2017		6/21/2017		6/22/2017		6/23/2017			
	Time	1:30 PM		3:00 PM		1:30 PM		4:30 PM		4:30 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	3.7	9.0	3.7	9.0	3.5	9.0	3.2	9.0	3.3	9.0	3.5	9.0
	3	4.8	12.0	3.6	12.0	4.0	12.0	4.0	12.0	3.9	11.0	4.1	11.8
	5	1.6	12.0	1.6	12.0	1.5	12.0	2.0	11.0	2.1	11.0	1.8	11.6
	12	6.9	10.0	6.8	10.0	6.8	10.0	6.5	9.0	6.7	9.0	6.7	9.6
	13	3.5	9.0	3.3	9.0	3.3	9.0	3.2	9.0	3.2	8.0	3.3	8.8
	15	14.5	12.0	14.3	12.0	14.1	11.0	14.2	11.0	14.1	11.0	14.2	11.4
	Total	**35.0**	**64.0**	**33.3**	**64.0**	**33.2**	**63.0**	**33.1**	**61.0**	**33.3**	**59.0**	**33.6**	**62.2**
2	1B	3.2	6.0	3.2	6.0	4.0	6.0	3.2	6.0	4.2	6.0	3.6	6.0
	4	7.5	11.0	7.4	11.0	7.5	11.0	7.4	11.0	7.5	11.0	7.5	11.0
	8	2.8	18.0	2.3	19.0	2.8	20.0	2.8	18.0	3.0	17.0	2.7	18.4
	10	4.4	13.0	4.5	13.0	4.5	12.0	5.1	12.0	4.8	13.0	4.7	12.6
	11	6.7	8.0	6.6	8.0	6.9	7.0	7.0	7.0	6.9	8.0	6.8	7.6
	14	7.4	6.0	7.3	6.0	7.5	6.0	7.2	6.0	7.3	6.0	7.3	6.0
	16	6.1	12.0	6.4	12.0	6.5	12.0	6.1	12.0	6.3	12.0	6.3	12.0
	Total	**38.1**	**74.0**	**37.7**	**75.0**	**39.7**	**74.0**	**38.8**	**72.0**	**40.0**	**73.0**	**38.9**	**73.6**
3	2A	3.4	7.0	3.8	7.0	3.8	7.0	4.0	7.0	3.8	7.0	3.8	7.0
	2B	8.0	9.0	7.5	9.0	7.5	9.0	7.3	9.0	7.5	9.0	7.6	9.0
	6A	7.7	9.0	7.6	9.0	7.4	9.0	7.4	9.0	7.4	9.0	7.5	9.0
	6B	1.7	19.0	1.7	19.0	1.8	19.0	1.5	19.0	1.8	19.0	1.7	19.0
	7	7.2	8.0	7.1	9.0	7.0	9.0	7.1	8.0	7.2	8.0	7.1	8.4
	9	10.0	3.0	10.1	3.0	10.3	3.0	10.0	3.0	10.2	3.0	10.1	3.0
	17	10.6	9.0	10.8	9.0	14.1	9.0	13.5	10.0	13.2	10.0	12.4	9.4
	Total	**48.6**	**64.0**	**48.6**	**65.0**	**51.9**	**65.0**	**50.8**	**65.0**	**51.1**	**65.0**	**50.2**	**64.8**

Daily Monitoring Form
CKG - Biobarrier Groundwater Treatment
6/26/2017 through 6/30/2017

	Date	6/26/2017		6/27/2017		6/28/2017		6/29/2017		6/30/2017			
	Time	11:15 AM		Panel Timeout		9:00 AM		4:30 PM		4:30 PM			
Group #	Well	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Flowrate (SCFM)	Pressure (PSI)	Avg. Flowrate (SCFM)	Avg. Pressure (PSI)
1	1A	4.0	10.0	-	-	4.1	10.0	4.1	9.0	4.0	9.0	4.1	9.5
	3	4.8	12.0	-	-	4.4	12.0	4.9	12.0	4.5	12.0	4.7	12.0
	5	1.6	13.0	-	-	1.7	13.0	1.7	12.0	1.5	12.0	1.6	12.5
	12	7.3	10.0	-	-	7.2	11.0	7.1	10.0	7.0	10.0	7.2	10.3
	13	4.0	9.0	-	-	3.6	10.0	3.9	9.0	4.1	9.0	3.9	9.3
	15	13.9	12.0	-	-	14.5	12.0	14.6	12.0	14.2	12.0	14.3	12.0
	Total	**35.6**	**66.0**	**-**	**-**	**35.5**	**68.0**	**36.3**	**64.0**	**35.3**	**64.0**	**35.7**	**65.5**
2	1B	4.5	6.0	-	-	4.9	7.0	4.9	7.0	4.0	6.0	4.6	6.5
	4	7.5	11.0	-	-	7.7	11.0	7.8	11.0	7.8	11.0	7.7	11.0
	8	1.3	22.0	-	-	1.9	21.0	1.2	23.0	1.5	23.0	1.5	22.3
	10	3.1	14.0	-	-	4.1	15.0	5.0	14.0	3.0	14.0	3.8	14.3
	11	7.3	9.0	-	-	7.4	9.0	7.4	8.0	7.5	9.0	7.4	8.8
	14	7.6	6.0	-	-	7.8	7.0	7.7	6.0	8.1	6.0	7.8	6.3
	16	6.1	13.0	-	-	6.4	13.0	6.7	13.0	6.0	13.0	6.3	13.0
	Total	**37.4**	**81.0**	**-**	**-**	**40.2**	**83.0**	**40.7**	**82.0**	**37.9**	**82.0**	**39.1**	**82.0**
3	2A	5.1	7.0	-	-	5.4	7.0	5.0	7.0	5.5	7.0	5.3	7.0
	2B	7.5	9.0	-	-	18.1	10.0	13.1	10.0	8.0	10.0	11.7	9.8
	6A	6.8	10.0	-	-	7.2	10.0	7.1	10.0	7.0	10.0	7.0	10.0
	6B	1.8	19.0	-	-	1.7	20.0	1.8	20.0	1.8	19.0	1.8	19.5
	7	7.0	9.0	-	-	7.3	9.0	7.2	8.0	7.3	7.0	7.2	8.3
	9	10.2	3.0	-	-	10.8	3.0	10.8	3.0	10.8	3.0	10.7	3.0
	17	11.4	10.0	-	-	11.7	10.0	10.8	10.0	11.8	10.0	11.4	10.0
	Total	**49.8**	**67.0**	**-**	**-**	**62.2**	**69.0**	**55.8**	**68.0**	**52.2**	**66.0**	**55.0**	**67.5**