RS287

OWENS-ILLINOIS

GLASS CONTAINERS

North America

January 22, 2007

Mr. Amir Gholami Alameda County Health Care Services Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577



Subject: 2006 Groundwater Monitoring Report

Owens-Brockway Glass Container - Oakland, CA

Dear Mr. Gholami:

Attached is the 2006 Groundwater Monitoring Report for the Owens-Brockway Glass Container facility in Oakland. If there are questions regarding its content, please give Chris Kennedy a call at 707-967-8080.

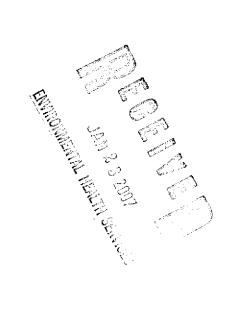
Sincerely,

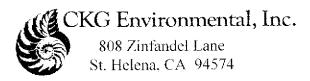
Robert C. Neal, P.E.

**Environmental Administrator** 

### 2006 GROUNDWATER MONITORING REPORT

OWENS-BROCKWAY
GLASS CONTAINER FACILITY
OAKLAND, CALIFORNIA





#### A Report Prepared for:

Mr. Mark Tussing Owens-Brockway Glass Container, Inc. One Seagate-30L Toledo, OH 43666

2006 GROUNDWATER MONITORING REPORT

OWENS-BROCKWAY GLASS CONTAINER FACILITY, OAKLAND, CALIFORNIA

January 12, 2007

Prepared by:

Christina J. Kennedy R.G. Principal

CKG Environmental, Inc. 808 Zinfandel Lane St. Helena, California 94574 (707) 967-8080



### TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	2
2.0	INTRODUCTION	3
2.1	SITE DESCRIPTION	3
3.0	GROUNDWATER MONITORING	4
3.1 3.2 3.3 3.4	GROUNDWATER GRADIENT	4 5
4.0	FINDINGS	7
4	SUMMARY OF GROUNDWATER RESULTS	7 7
5.0 5.1 5.2	CONCLUSIONS AND RECOMMENDATIONS  CONCLUSIONSRECOMMENDATIONS	8
6.0	REFERENCES	9
7.0	LIMITATIONS	10

### **TABLES**

Table 1	Monitoring Well Construction Details
Table 2	Groundwater Elevations

Table 3 Summary of Groundwater Analytical Results

#### **PLATES**

Plate 1	Site Location Map
Plate 2	Groundwater Elevation Contour Map
Plate 3	Fuel Oil Distribution Map
Plate 4	Gasoline Distribution Map

### **APPENDICES**

Appendix A Well Sampling Logs Appendix B Analytical Laboratory Report

#### 1.0 EXECUTIVE SUMMARY

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

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

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

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 substantially over time. The fuel oil release appears to extend only slightly off site. CKG recommends that Owens-Brockway submit this report to the Alameda County Health Agency.

#### 2.0 INTRODUCTION

The following report presents the results and conclusions of the annual of groundwater monitoring in 2006. The work was performed in general accordance with CKG's proposal dated November 15, 2002 with slight modifications as discussed below.

#### 2.1 SITE DESCRIPTION

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

#### **Fuel Oil USTs**

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

#### Gasoline USTs

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

#### 3.0 GROUNDWATER MONITORING

#### 3.1 GROUNDWATER GRADIENT

Depth to groundwater measurements were made on September 11, 2006, 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 June 30 the groundwater flow direction is generally to the south. 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 September 11, 2006 a round of groundwater sampling in the monitoring wells was performed. Sheen was observed in MW-2, MW-6, and MW-17 but they were sampled anyway. The product appeared as a sheen so a thickness could not be measured. MW-1 was covered with glass and was not accessible, however the glass was removed over the next few weeks so MW-1 was accessible on October 19 and was sampled at that time. MW-9, which is located in the middle of the loading ramp, could not be safely accessed. MW-19 could not be located on September 11 however Owens-Brockway personnel located the well and it was sampled later on September 19.

On September 11 it was noted that the wellhead on MW-17 was broken and that the water was unusually dirty, with a visible sheen, which had not been noted previously. The well was sampled however CKG was concerned that the well may have been impacted by surface runoff. Owens-Brockway was performing facility maintenance at the time which including using a vacuum truck to clean out equipment. CKG coordinated with Owens-Brockway and NRC Environmental Services to use the vacuum truck to extract as much water as possible from MW-17. This work was performed to evaluate whether or not there would be a difference in the

analytical result after a significant volume of water was extracted. The water extraction was completed on October 17, 2006. MW-17 was resampled on October 19, 2006.

The wells were sampled using the following protocol.

- The depth-to-water was measured using a conductivity-based water level indicator.
- The volume of water standing in each well was calculated by subtracting the depth-to-water measurement from the total depth of the well, and multiplying by the appropriate volume conversion factor.
- A minimum of three well volumes of water was purged from each well using a centrifugal pump. The pump was decontaminated prior to use in each well by washing with TSP and rinsing with distilled water. Fresh tubing was used for each well
- Physical parameters of pH and temperature were monitored for stability during purging.
- Sample bottles, provided by the analytical laboratory were filled from a new clean disposable bailer at each well.
- Samples were immediately labeled and placed in an iced sample container. The samples
  were picked up by the analytical laboratory, under chain-of-custody control the following
  day.

#### 3.3 CHEMICAL ANALYSIS

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

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



### 3.4 INVESTIGATION DERIVED WASTES (IDW)

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

The following describes the results of the annual groundwater monitoring at the Owens-Brockway Glass Container facility in Oakland, California. Comparisons are made between the data and appropriate regulatory standards and risk based screening levels where they are available. Groundwater sample results are presented in Table 3. Analytical laboratory reports are included in Appendix B. Sample locations and pertinent data are presented on Plates 3 and 4.

#### 4.1 SUMMARY OF GROUNDWATER RESULTS

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

Petroleum hydrocarbons quantified as diesel/fuel oil, were detected in all of the water samples collected as summarized in Table 3. Diesel concentrations are shown and contoured on Plate 3. Detected TPHd concentrations in groundwater range from 1700 to 830,000 µg/l. The highest concentrations were detected in MW-2. Separate phase sheen was observed in MW-2, MW-5, MW-6, and MW-7. The estimated outline of the product plume is illustrated on Plate 3. In general the overall size of the product plume is the same as has been observed over the last 18 years of monitoring.

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

Petroleum hydrocarbons quantified as gasoline, were detected in one water sample as summarized in Table 3. TPHg was detected in MW-17 at 26,000 µg/l which was substantially higher than observed in the past. As discussed in Section 3.2 CKG was concerned that the water in MW-17 may have been affected by surface runoff because the wellhead was damaged. After the well was cleaned and resampled the TPHg result was 1,600 µg/l, which was similar to that observed in 2005. This detection illustrates the very limited area where gasoline remains in the subsurface at the site. The extent of the gasoline plume is illustrated on Plate 4. TPH quantified as diesel/motor oil was detected at MW-17 at 2,300,000 µg/l (September 11 sampling). After the well was cleaned out the TPHd concentration was 1,100,000 µg/l (October 19 sampling), which was similar to that observed in 2005. A review of the historical data for TPHd at MW-17 illustrates that the concentration of TPHd has increased over the monitoring time.

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

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

#### 5.1 CONCLUSIONS

The recent groundwater monitoring, as well as a review of historic data, shows that the petroleum hydrocarbon plumes at the site are stable and have attenuated substantially over time, with the exception of TPHd in the vicinity of MW-17. The fuel oil release appears to extend only slightly off site.

#### 5.2 RECOMMENDATIONS

CKG recommends that Owens-Brockway submit this report to the Alameda County Health Agency. CKG Environmental submitted a work plan to prepare a Site Conceptual Model (SCM) on April 6, 2005. The SCM must be completed before any request for case closure, or any other action will be considered by Alameda County. Alameda County has not yet approved or commented on the SCM work plan.

#### 6.0 REFERENCES

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

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

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

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

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

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

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

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

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

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

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

#### 7.0 LIMITATIONS

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

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

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

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

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

<sup>(</sup>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.

<sup>(</sup>b) Depth to top of screened interval (feet below top of casing)

<sup>(</sup>c) Depth to bottom of screened interval (feet below top of casing)

<sup>(</sup>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.

<sup>(</sup>e) NM = Not measured

<sup>(</sup>f) NA = Not available

Table 2 Groundwater Depths and Elevation September 11, 2006

		1 op of Casing	T 1 1 TT	Groundwater
Well Number	Date Installed	Elelvation <sup>(a)</sup>	Depth to Water	Elevation
MW-1	9/12/1986	16.02	NM	
MW-2	12-Sep-86	17.11	12.5	4.61
MW-4	12-Sep-86	16.02	NM	
MW-5	12-Sep-86	16.19	11.78	4.41
MW-6	12-Sep-86	17.48	13.49	3.99
MW-7	12-Sep-86	16.11	12.76	3.35
MW-8	12-Sep-86	16.57	9.05	7.52
MW-9	12-Sep-86	7.33 <sup>(d)</sup>	NM	
MW-10	12-Sep-86	15.96	9.54	6.42
MW-11	12-Sep-86	13.99	NM	
MW-12	12-Sep-86	13.83	NM	
MW-13	12-Sep-86	13.98	10.03	3.95
MW-15	12-Sep-86	15.16	11.46	3.7
MW-16	12-Sep-86	13.48	9.23	4.25
MW-17	12-Sep-86	14.17	9.58	4.59
MW-19	01-May-03	NA	NM	
MW-20	01-Dec-00	12.74	9.81	2.93

<sup>(</sup>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.

<sup>(</sup>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.

<sup>(</sup>e) NM = Not measured

<sup>(</sup>f) NA = Not available

		able 3 Sur	nmary of	Groundwa	ater Analy	tical Resu	lts	
						, Oakland,		
MW-1	Date	В	T	Ε	X	TPHd	TPHg	TOG/TPHmo
	9/23/1986	<10	<10	NA	<10	<.01	<.01	25,000
	4/9/1987	<10	<10	NA	<10	<.01	NA	NA
	9/16/1987	not accessible	le					
	12/1/1987	not accessib	le					
	3/7/1988	not accessib	le					
	6/8/1988	not accessib	le					
	9/14/1988	not accessib	le					
	9/16/1997	<0.5	<0.5	<0.5	<0.5	190 <sup>(a)</sup>	<50	NA
	11/2/1998	<0.5	<0.5	<0.5	<0.5	160 <sup>(a)</sup>	<50	NA
	12/11/2001	not accessib	le					
	12/6/2002	<0.5	<0.5	<0.5	<0.5	69 <sup>(a)</sup>	<50	NA
	3/15/2004	not accessib	le					
	6/30/2005	not accessib	le					
	10/19/2006	<0.5	<0.5	<0.5	<0.5	5400	120	3300
MW-2	4/9/1987	floating prod	uct					
	9/16/1987	floating prod	uct					
	12/1/1987	floating prod	uct					
	3/7/1988	floating prod	uct					
	1 1	floating prod						
		floating prod						
		floating prod						
		floating prod						
		floating prod						
		floating prod		1				
		floating prod	1					4 000 000
	6/30/2005	1	<0.5	<0.5	<0.5	1,600,000	2900	1,200,000
	9/11/2006		4.4	19	60	830,000	13000 <sup>(b)</sup>	530,000
MW-3	9/23/1986	l .	<10	NA	<10	NA NA	<10	18
	4/9/1987		BDL	NA	BDL	NA NA	370	NA NA
		floating prod				İ		
		floating prod	•	l			414	
	3/7/1988	1	NA	NA 	NA 	190,000	NA	NA NA
	6/8/1988	1	NA	NA NA	NA	16,000	NA	NA
	9/14/1988	floating prod	luct I					1
		Destroyed		1	1			

#### 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 - Thylbenzene 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

	Date	В	T	E	X	TPHd	TPHg	TOG
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	NΑ	BDL	660	1.3	NA
	12/1/1987	BOL	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 NA
		Destroyed						
!								04.000
MW-5	10/3/1986	<5	<5	NA	6.6	NA	1400	24,000
	4/9/1987	<5	<5	NA	<5	NA	54	NA I
	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 NA
	6/8/1988	NA	NA	NA	NA	12,000	NA	NA
	9/14/1988	NA	NA	NA	NA	6,300	NA 55	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	11,600	<50	NA
		floating prod				(a)		
	12/6/2000	<0.5	<0.5	<0.5	<0.5	11,700 <sup>(a)</sup>	1000	NA
	12/12/2001	<0.5	<0.5	<0.5	<0.5	10,000 <sup>(a)</sup>	360 <sup>(b)</sup>	NA
	12/6/2002	<0.5	<0.5	<0.5	<0.5	5,200 <sup>(a)</sup>	150 <sup>(b)</sup>	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	46,000 <sup>(a)</sup>	180 <sup>(b)</sup>	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 <sup>(a)</sup>	33,000
MW-6	4/9/1987	floating prod						
	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	1	NA	NA NA	NA	63,000	NA	NA
	9/14/1988	L	NA	NA	NA	140,000	NA	NA
	9/16/1997	floating proc	luct			]		
	11/2/1998	floating proc	luct			ŀ		
	12/11/2001	floating proc	luct	1		•		
		floating proc						
	1	floating prod	luct					
	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 <sup>(a)</sup>	77,000

#### NOTES:

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

B - Benzene in ug/l

X - Xylenes in ug/l

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

T - Toluene in ug/l

E - Thylbenzene 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

	Date	В		E	N	TPHd	TPHg	TOG
MW-7	10/3/1986	<5	<b>&lt;</b> 5	NA	<5	NA	260	8,000
	t I	floating prod	uct					
	9/16/1987	NA	NA	NΑ	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 <sup>(a)</sup>	850	NA
	11/2/1998	floating prod	uct					
	12/6/2000	<5	<.05	<.05	1.90	3,580 <sup>(a)</sup>	540	NA
	12/12/2001	<1	<1	<1	<1	12,600 <sup>(a)</sup>	1200 <sup>(b)</sup>	NA
	12/6/2002	<0.5	<0.5	<0.5	<0.5	27,600 <sup>(a)</sup>	480 <sup>(b)</sup>	NA
	3/15/2004	<0.5	<0.5	0.57	1.10	1 <b>7</b> 0,000 <sup>(a)</sup>	890 <sup>(b)</sup>	NA
	6/30/2005	<.05	<.05	3.1	<.05	290,000	3000	150,000
	9/11/2006	<5	<5	<5	<5	310,000	6600 <sup>(a)</sup>	150,000
MW-8	10/23/1986	<0.2	<0.2	NA	<1	NA	1300	14,000
	4/9/1987	<0.5	<0.2	NA	<1	NΑ	73	NA
	9/16/1987	floating prod	uct					
	12/1/1987	NA	NA	NA	NA	630	NA	NA
	3/9/1988	NA NA	NA	NA	NA	2,600	NA	NA
	6/9/1988	NA NA	NA	NA NA	NA	1,700	NA .	NA.
	9/14/1988	NA NA	NA	NA	N,A	150	NA	NA NA
	8/12/1997	floating prod	luct			, ,		E
	9/16/1997	<0.5	<0.5	<0.5	<0.5	290 <sup>(a)</sup>	<50	NA.
	11/2/1998	<0.5	<0.5	<0.5	<0.5	1,300 <sup>(a)</sup>	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	160 <sup>(a)</sup>	<50	NA
	12/12/2001	<0.5	<0.5	<0.5	<0.5	<50	<50	NA NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	170 <sup>(a)</sup>	55 <sup>(b)</sup>	NA NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	3,000 <sup>(a)</sup>	320 <sup>(b)</sup>	NA NA
	6/30/2005	<0.5	<0.5	<0.5	<0.5	4,600	1100	1,400

<0.5

#### NOTES:

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

B - Benzene in ug/l

1800

X - Xylenes in ug/l

1200

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

9/11/2006

T - Toluene in ug/l

E - Thylbenzene in ug/l

760

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

< 0.5

<sup>(</sup>a) - Quantified as diesel but chromatogram did not match diesel pattern

1	Date	В	Т	E	X	TPHd	TPHg	TOG
MW-9	4/9/1987	floating produ	ict					
	9/16/1987	NA	NA	NA	NA	1,300	NA	NA
	12/1/1987	NA	NA	NA I	NA	18,000	NA	NA
	3/9/1988	NA	NA	NA	NA	47,000	NA	NA
	6/8/1988	floating produ	uct					
	9/14/1988	floating produ	uct					
	9/16/1997	<13	<13	<13	18.00	28,000 <sup>(a)</sup>	6000	NA
	11/2/1998	floating produ	uct					
	12/6/2000	<5	<.5	<.5	<.5	102,000 <sup>(a)</sup>	790	NA
	12/12/2001	innaccessible	•					
	12/5/2002	innaccessible	•			İ		
		innaccessible						
		innaccessib						
		innaccessit						7.000
MW-10	10/23/1986	<0.2	<0.2	NA	<0.2	NA	380	7,200
	4/9/1987	<0.2	<0.2	NA NA	<0.2	NA	300	NA NA
	9/16/1987	NA	NA	NA	NA	3,800	NA	NA NA
	12/1/1987	NΑ	NA	NA	NA	590	NA	NA NA
	3/8/1988	NA	NA	NA	NA	<50	NA NA	NA NA
	6/8/1988	NA	NA	NA	NA	3,800	NA	NA NA
	9/14/1988		ÑΑ	NA	NA	570	NA 	1
	9/16/1997	<0.5	<0.5	<0.5	<0.5	1,300 <sup>(a)</sup>	<50	NA NA
	11/2/1998	1 :	<0.5	<0.5	<0.5	1400 <sup>(a)</sup>	<50	NA I
	12/6/2000		<0.5	<0.5	0.70	730 <sup>(a)</sup>	150	NA
,	12/11/2001	<0.5	<0.5	<0.5	<0.5	630 <sup>(a)</sup>	210 <sup>(b)</sup>	NA
	12/5/2002		<0.5	<0.5	<0.5	840 <sup>(a)</sup>	210 <sup>(b)</sup>	NA
	3/15/2004	•	<0.5	<0.5	8.0	2,500 <sup>(a)</sup>	160 <sup>(b)</sup>	NA
	6/30/2005	1	<0.5	<0.5	<0.5	2900	140	2300
	9/11/2006		<0.5	<0.5	0.81	3400	270	2600
MW-11	9/23/1986	1	<0.4	NA	1.4	NA	<8	1,200
	4/9/1987	į.	BDL	NA	BDL	NA	BDL	NA NA
	9/16/1987		BDL	NA NA	BDL	NA	BDL	NA NA
	12/1/1987		BDL	NA	10	NA NA	BDL	NA NA
	3/7/1988		BDL	NA	BDL	BDL	BDL	NA NA
	6/8/1988	1	BDL	NA	BDL	BDL	BDL	NA NA
	9/14/1988	1	BDL	NA	BOL	100,000	BDL	NA
	ļ.	Destroyed					Ì	
	L		<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>

#### 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 - Thylbenzene 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

<sup>(</sup>a) - Quantified as diesel but chromatogram did not match diesel pattern

	Date	В	T	E	X	TPHd	TPHg	TOG
MW-12	9/23/1986	0.49	1	NA	1.3	NA	100	2,500
	4/9/1987	BDL	BDL	NA	BDL	NA	BDL.	NA
	9/16/1987	BDL.	BDL	NA	BDL	NA	BDL	NA
	12/1/1987	BDL	BDL	NA	13	NA	BDL	NA
	3/7/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	6/8/1988	BDL	BDL	NA	BDL	BDL	BDL	NA
	9/14/1988	BDL	BDL	NA	BDL	120	BDL	NA
	6/30/2005	Destroyed						
MW-13	12/24/1986	<0.2	<0.9	NA	<0.9	NA	<10	57,000
	4/9/1987	<b>&lt;</b> 5	<5	NA NA	<b>&lt;</b> 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 <sup>(a)</sup>	<50	NA
	11/2/1998	<5	<5	<5	<5	120 <sup>(a)</sup>	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	200 <sup>(a)</sup>	<50	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	91 <sup>(a)\</sup>	<50	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	190 <sup>(a)</sup>	<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
MW-14	9/23/1986	<0.4	<0.2	NA	<0.2	NA 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 1
	12/1/1987		4	NA I	10	66	BDL	NA
	3/7/1988	BDL	BDL.	NA	BDL	BDL	20	NA
	6/8/1988	inaccessible		]				,
	9/14/1988	inaccessible	_			1		
		Destroyed						[
						<u>                                     </u>	<u> </u>	<u> </u>

#### 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 - Thylbenzene 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

	Date	В	T	E	X	TPHd	TPHg	TOG
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	NΑ	NA	NA	100	NA	NA
	9/16/1997	<0.5	<0.5	<0.5	<0.5	127 <sup>(a)</sup>	<50	NA
	11/2/1998	<0.5	<0.5	<0.5	<0.5	340 <sup>(a)</sup>	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	400 <sup>(a)</sup>	<50	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	290 <sup>(a)</sup>	<50	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	440 <sup>(a)</sup>	<50	NA 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
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 NA
	6/8/1988	<5	<5	NA	<5	<100	<0.5	NA NA
	9/14/1988	<5	<5	NA	<5	190	<0.5	NA NA
	9/16/1997	floating prod	uct				1	
	12/6/2000	<0.5	<0.5	<0.5	<0.5	97 <sup>(a)</sup>	<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 <sup>(a)</sup>	<50	NA 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

#### NOTES:

X - Xylenes in ug/l TPH-g - Total Petroleum Hydrocarbons as Gasoline in ug/l B - Benzene in ug/I E - Thylbenzene in ug/l T - Toluene in ug/l TPH-d - Total Petroleum Hydrocarbons as Diesel 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

	Date	В	Ţ	E	X	TPHd ·	TPHg	TOG
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	NΑ	28	1,300	540	NA
	3/8/1988	83.00	<5	NA	46	3,800	4300	NA
	6/8/1988	innaccessible	е					
	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 <sup>(a)</sup>	1900	NA
	11/2/1998	<0.5	<0.5	<0.5	0.60	16,000 <sup>(a)</sup>	<50	NA
	12/6/2000	<0.5	<0.5	<0.5	<0.5	47,800 <sup>(a)</sup>	340	NA I
	12/11/2001	<10	<10	<10	<10	101,000 <sup>(a)</sup>	5300 <sup>(b)</sup>	NA
	12/5/2002	<0.5	<0.5	<0.5	<0.5	71,000 <sup>(a)</sup>	700 <sup>(b)</sup>	NA NA
	3/15/2004	2.1	0.71	<0.5	1.5	660,000 <sup>(a)</sup>	1400 <sup>(b)</sup>	NA
	6/30/2005	<0.5	2.4	<0.5	1.1	1,600,000	1700	NA 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
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 NA
		Destroyed						
MW-19	6/23/2004	<0.5	<0.5	<0.5	<0.5	1,100	480	NA
	3/15/2004	<0.5	<0.5	<0.5	<0.5	1,100 <sup>(a)</sup>	330 <sup>(b)</sup>	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
MW-20	12/11/2000	<0.5	<0.5	<0.5	<0.5	110 <sup>(a)</sup>	<50	NA
	4/6/2001	<0.5	<0.5	<0.5	<0.5	57 <sup>(a)</sup>	<50	NA
	7/6/2001	<0.5	<0.5	<0.5	<0.5	120 <sup>(a)</sup>	<50	NA
	9/19/2001	<0.5	<0.5	<0.5	<0.5	160 <sup>(a)</sup>	<50	NA
	12/11/2001	<0.5	<0.5	<0.5	<0.5	82 <sup>(a)</sup>	86 <sup>(b)</sup>	NA
	2/6/2002	<0.5	<0.5	<0.5	<0.5	85 <sup>(a)</sup>	<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

#### 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 - Thylbenzene in ug/l

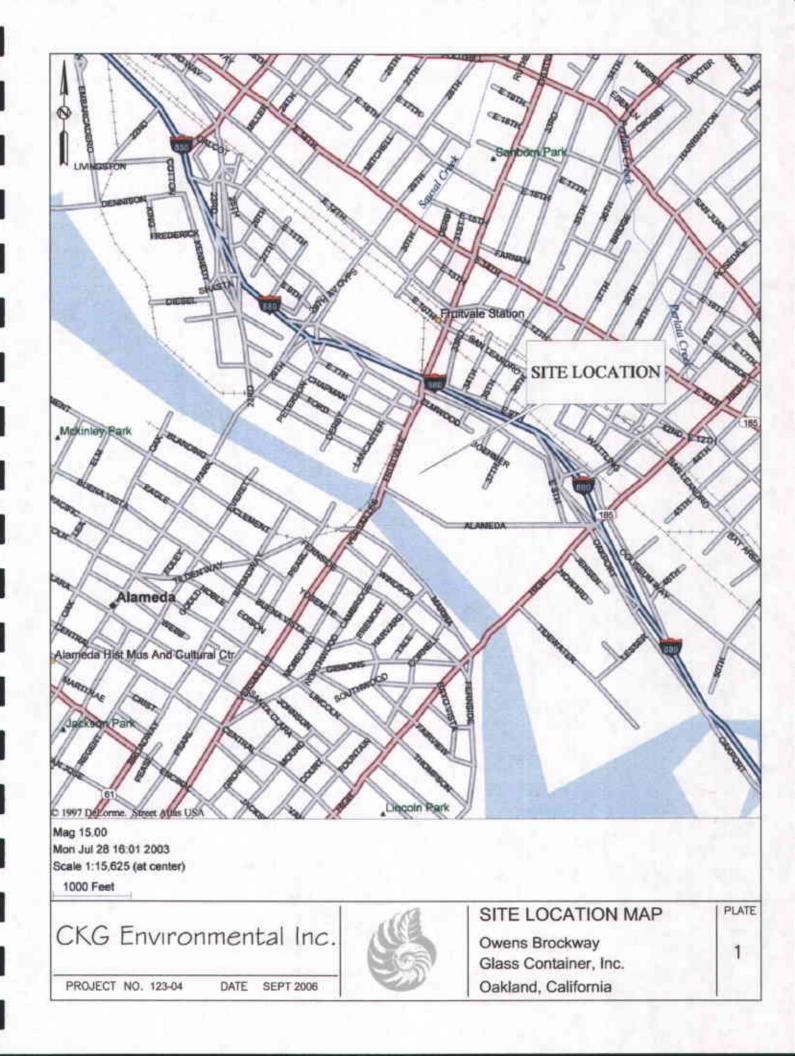
TOG - Total Oil and Grease in ug/l

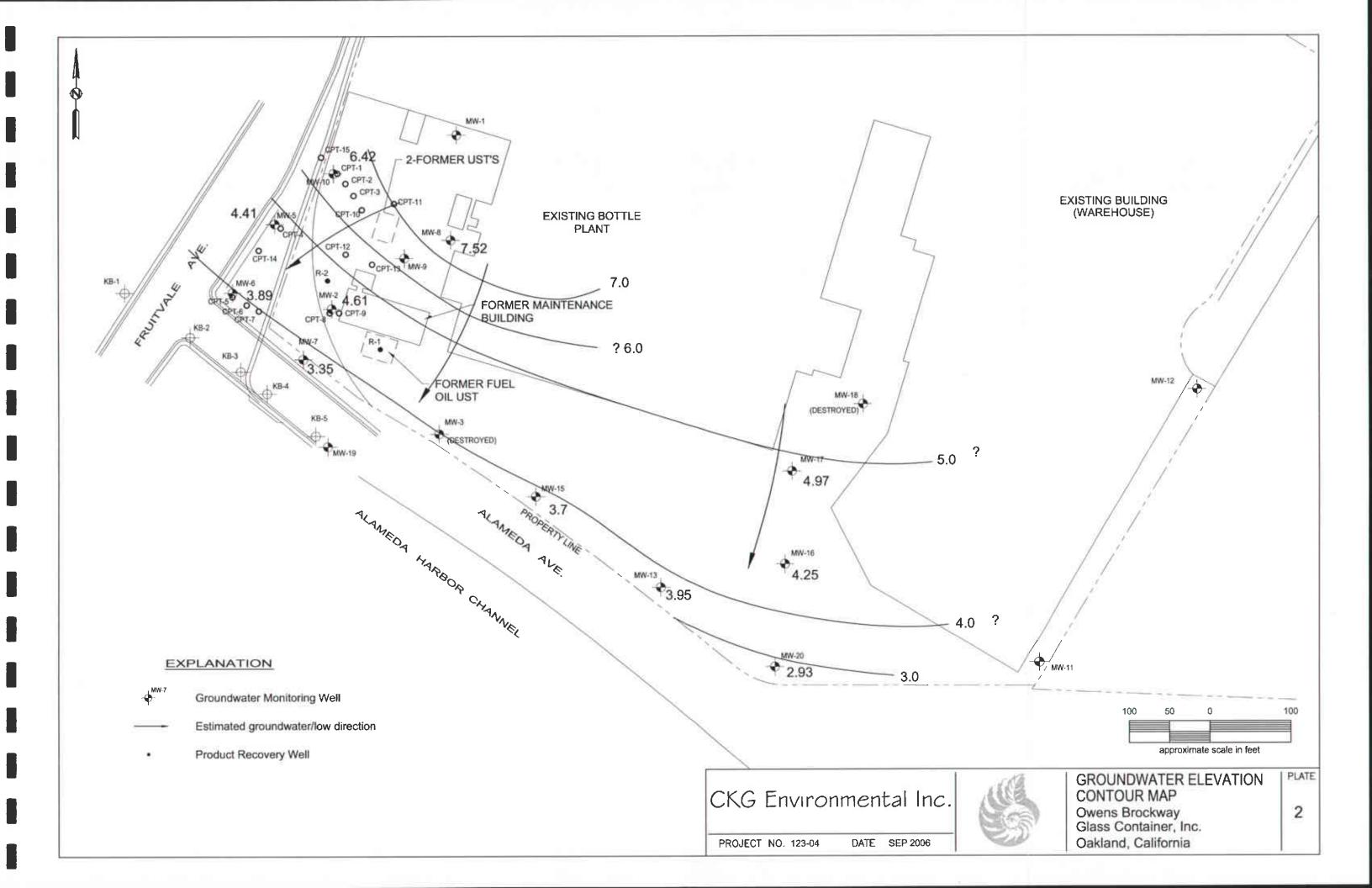
TPHmo - Total Petroleum Hydrocarbons as Motor Oil ug/l (after 2004)

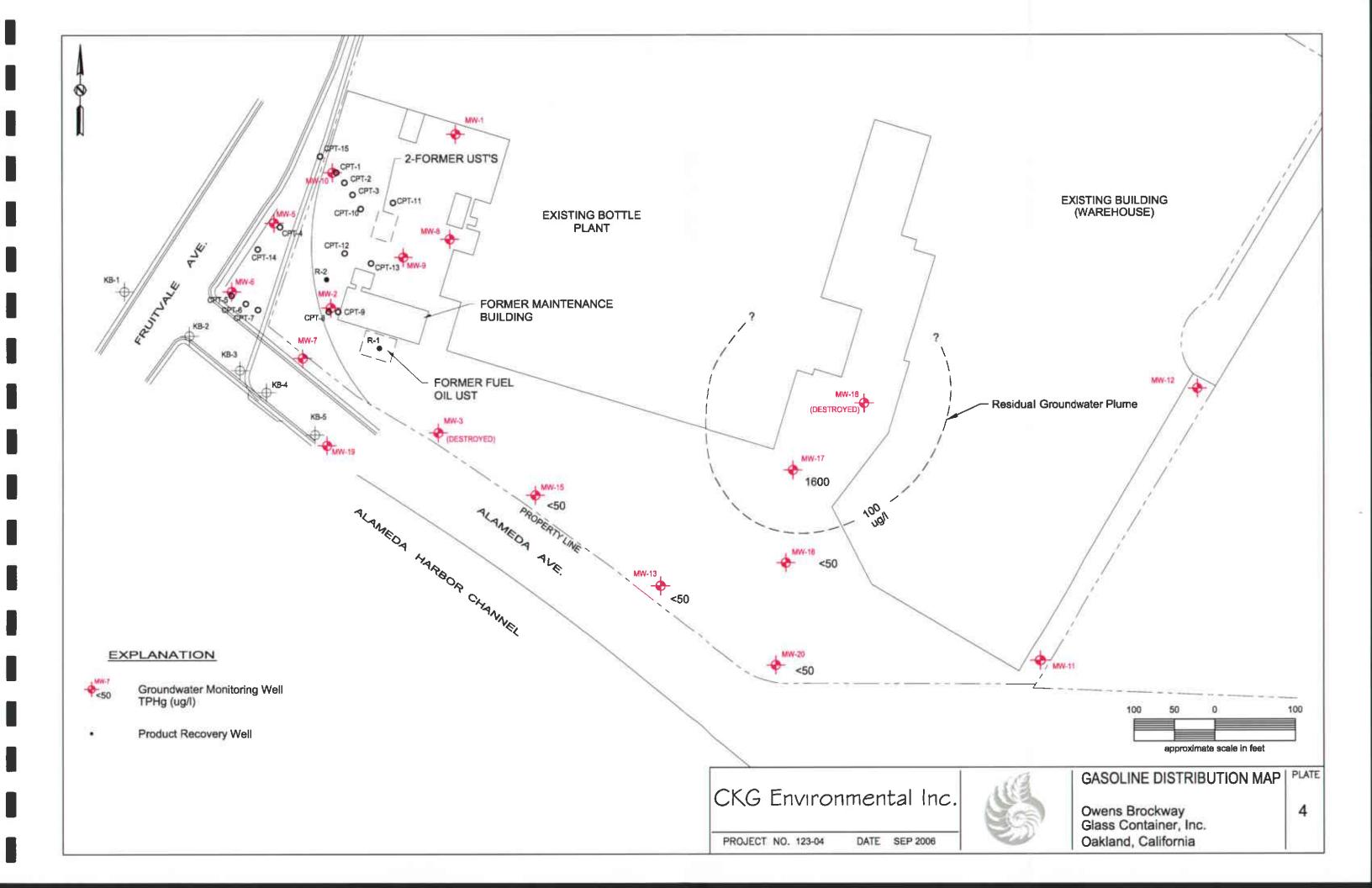
BDL - Below detection limit

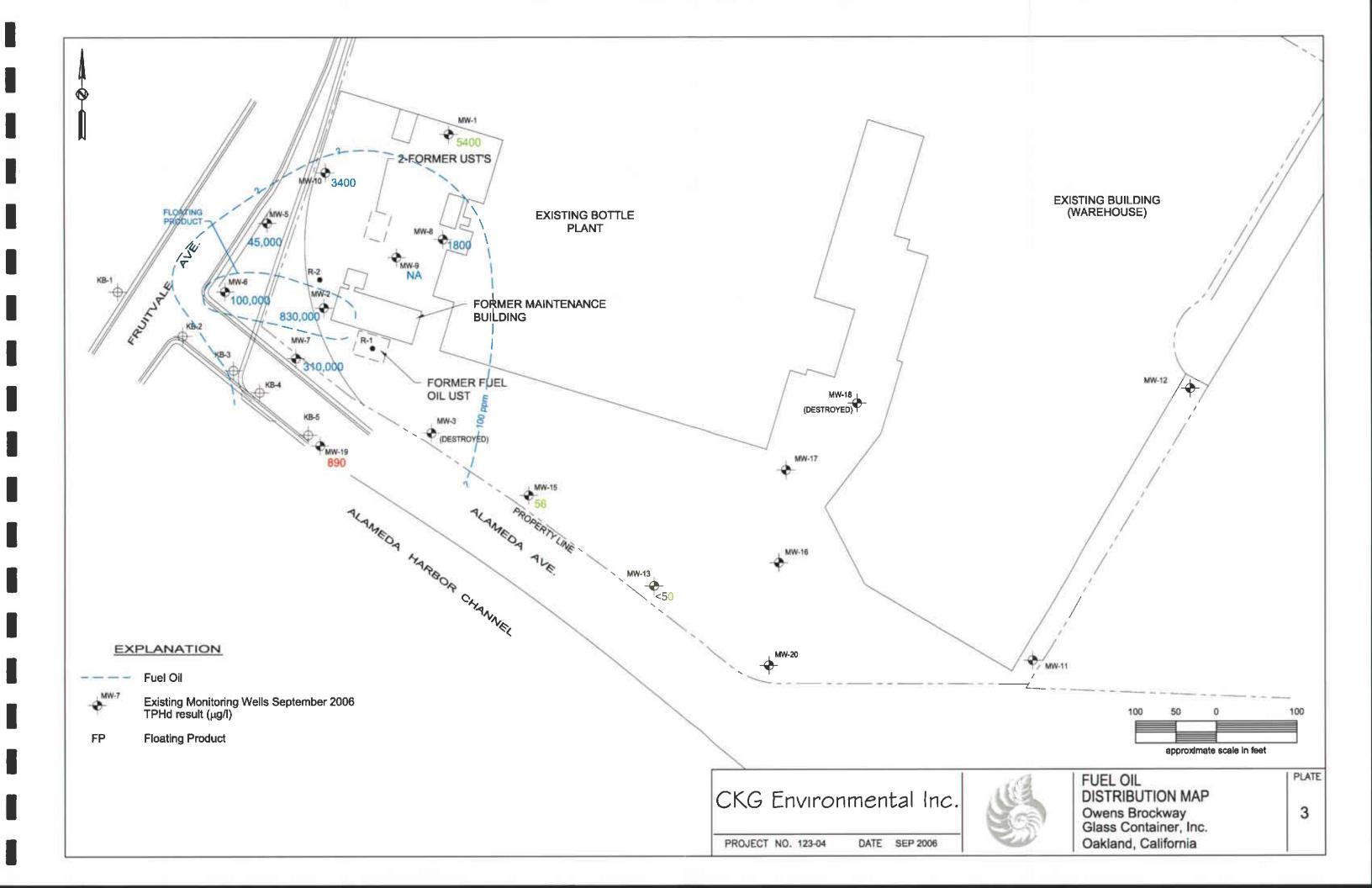
NA - Not analyzed

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









### **WELL GAUGING DATA**

Project #	<b>2607 (8-853</b> Date	9/18/86 Client	CKS
Site	Manda Ar	e BANGANO	

	<del></del>		· · · · · · · · · · · · · · · · · · ·	r		1.0				
					Thickness				Survey	
		Well	[	Depth to	of	Immiscibles			Point:	
		Size	Sheen /	Immiscible	Immiscible	Removed	Depth to water	Depth to well	TOB or	
Well ID \	Time	(in.)	Odor	Liquid (ft.)	Liquid (ft.)	(ml)	(ft.)	bottom (ft.)	TOB or	Notes
HW-19	155	2					1237	25.05	1	
						<del> </del>	10. 71	25 703		
		11111	-							
						ļ				. •
					<u> </u>					
			T							
						,				
					•		_			
				<u> </u>				·		
							_			
									·	
·										
		-							1	· · · · · · · · · · · · · · · · · · ·
					<u></u>					
										-
							<u> </u>			<u>.                                    </u>
	<del> </del>									
			<u>L</u>							

#### WELL MONITORING DATA SHEET

				<u> </u>		
Project #:		060918	11553	Client: acc	<u>-</u>	
Sampler:	.50	boch		Start Date:	9/18/06	
Well I.D.	: MV	۰۰ رط		Well Diameter	A /	6 8
Total We	ll Depth:	25.0	25	Depth to Wate	r: 12.37	
Before:		After:	·	Before:		After:
Depth to	Free Produc	et:		Thickness of F	ree Product (feet	):
Reference		yvc )	Grade	D.O. Meter (if	req'd):	YSI HACH
Purge Metho	od: Bailer Disposable Bai Positive Air Dis Electric Subme	splacement	Waterra Peristaltic Extraction Pump Other		thod: Bailer Disposable Extraction Dedicated Other:	Port Tubing
2 1 Case Volun	(Gals.) X ne Spe	3 =	Gals. Calculated Volume	Well Diame 1" 2" 3"	0.04 4" 0.16 6" 0.37 Other	ameter Multiplier 0.65 1.47 radius <sup>2</sup> • 0.163
Time	Temp.	рН	Conductivity (mS	Turbidity (NTU)	Gals. Removed	Observations
1703	78.9	7.0	644	79	2	clear
1706	77.5	7.0	623	60	4	ir
1709	76.8	7-1	611	58	6	"
	,					
Did well	dewater?	Yes	No	Gallons actual	ly evacuated:	6
Sampling	Time:	1715		Sampling Date	: 9/18/06	
Sample I.	D.:	w·19		Laboratory:	STL L	(Coupal
Analyzed	for: TI	H-G BTEX	MTBE TPH-D	Other:	u <b>co</b> .c	
Equipmen	nt Blank I.I	).:	@ Time	Duplicate I.D.		
Analyzed	for: π	H-G BTEX	MTBE TPH-D	Other:	*******	
D.O. (if r	eq'd):	,	Pre-purge:	mg/ <sub>L</sub>	Post-purge:	mg/I
ORP (if r	eq'd):		Pre-purge:	mV	Post-purge:	mV

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

	NIC	DAN	   AAC   A4	LA LEADE	ERS AVEN	UE	L	CON	ADUC.	T ANALYSIS	TO DETECT	LAB	McCampbe	114	DHS#
TECH SERV	/ICES, INC			FAX	NA 95112-1 (408) 573-77 (408) 573-05	771						BY CALIFORNIA D	UST MEET SPECIFICA	ATIONS AND DE	ETECTION LIMITS S
	ODT	BTS#		<b>.</b>		စ္ဆ	ے ا	ے ا	a a			☐ OTHER			
CLIENT	CKG En	vironm	ental				802	n es	clean			SPECIAL INSTRUC	CTIONS		
SITE	Owens F	Brockwa	y Glas	s Plan	t	CONTAINERS	(8015/8021)	gel clean up	ge			Invoice and Re	eport to : CKG E	avironmenta	1
	3600 Ala	meda A	Avenue	)		¥.	×		ica ica			1	Lane, St Helena,		
	Oakland,	CA		1 35.		STE	ME	/silis	w/silica			Attn: Christin			
	1		FR 02H=M		ITAINERS	= COMPOSITE	TPHg / BTEX	TPHd w/silica	TPHmo			Dissolved prod	uct in samples M	W-2 and MW	<b>/-6</b>
SAMPLE I.D.	DATE	TIME		TOTAL		5		T	E	<del>                                     </del>		ADD'L INFORMA	TION STATUS	CONDITION	LAB SAMPLE #
16-19	JINOP	21715	7	3			X	X	X						
<del></del>						-									
						<u> </u>						<u> </u>			
· · · · · · · · · · · · · · · · · · ·	·														
		-	-												
							_								
<del> </del>	<u></u>				· · · · · · · · · · · · · · · · · · ·										
<u> </u>															
AMPLING	In its	1 mars about													,
OMPLETED 0	115/06	, ,	SAMPLIN PERFOR		5	40	Neo	۷ ۷	n i	2		RESULTS NEEDED NO LATER THAN	Per Client		
ELEASED BY	1/	2	/	•		DATE	18/0	ر de	TIME 18	ا سرّه	RECEIVED BY			DATE /O	11ME 6 /810
ELEASED BY	~ <	<u>-</u>	0	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		DATE		, 1	TIME	15	RECEIVED BY			DATE /	TIME
ELEASED BY				, <del>-</del>		DATE	U	1	TIME	<u>.</u>	RECEIVED BY			DATE	TIME

Page \_\_\_\_ of \_\_\_

### **WELLHEAD INSPECTION CHECKLIST**

Date	10/1	a/	06		Client	CKG	000	vens	Drock	caway	Glass
Site A	ddress	360	06 00 Ala	~	<u>eda</u>	Ave.	Oale	land			
			31019					hnician	h	): 11	***************************************
<del>W</del> €	ell ID		Well Inspected - No Corrective Action Required	1	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Nut Inspected (explain below)
i	<u>v-17</u>		<u> </u>	-	1. 1		· · · · · · · · · · · · · · · · · · ·		7011	<u></u>	
M	<u> </u>	-	Mell		1:2	16N	sec			<del>\&amp;</del>	
			* TOC	-	is j	agge	4/	Dolphi	h loc	K/ M	97
			easil	Y	acces	Sale	due	to	avae	mound	ot
<del></del>			broken	٠	glass	•					
	<del></del>			$\left\{ \right.$							
-		··		-							
ļ				-							
				-				<u> </u>			<u></u>
				-							
	<del></del>	i		-	<u> </u>			<u> </u>	<u> </u>		
	·			-	· 		 				
ļ						<del>,</del>	!				
	··			$\frac{1}{4}$							
			······	4					<u> </u>		
<u> </u>											
NC	TES:										
									············		
			· · · · · · · · · · · · · · · · · · ·								- 1774
		<u> </u>				· · · · · · · · · · · · · · · · · · ·					

### WELL GAUGING DATA

Project # <u>061019- wc-1</u>	Date 10/19/06	Client CKG @	Brockaway
Site 3600 Alameda	Avery Oakland		

Well ID	Time	Well Size (in.)	Sheen / Odor	1	Thickness of Immiscible Liquid (ft.)	Immiscibles Removed	Depth to water	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
mw-17	0216	2					9.68	16.22	Toc	<b>&amp;</b>
		807	MOh	e ch	ecked	07	B. M	consist.	ent a	his
was	es	tort	، رگ	able	to co	meirm	B, in well i	dentity	by	B:11 B
mw-1	0930	2					7.43	29.06	TOC	
									-	
, ,										
,										
									,	
	1									
									-	
		<del>                                     </del>								

### W. \_L MONITORING DATA SHE. \_

Project #:	061019-	wel		Client: C KG	1 @ Devents P.	rockery Gless
Sampler: 1				Date: \0/10		(
Well I.D.:	MW-1			Well Diameter	: <b>0</b> 3 4	6 8
Total Well	Depth (TD	): 29.	06	Depth to Water	r (DTW): 7.4	<b>ર</b> ાજ
Depth to F	ree Product	4		Thickness of F	ree Product (feet	):
Referenced		Ø	Grade	D.O. Meter (if	req'd):	YSI HACH
DTW with	80% Recha	arge [(H	eight of Water	Column x 0.20	) + DTW]:	2-16
Purge Method:	Disposable B Positive Air I Electric Subn	Displacement of the control of the c	nt Extrac	Waterra Peristaltic tion Pump  Well Diamete	Sampling Method:  Other:  or Multiplier Well Divided 4" 0.04 4" 0.16 6"	0.65 1.47
1 Case Volume	(Gals.) X	fied Volum		– p t"	0.37 Other	radius² * 0.163
Time	Temp	pН	Cond. (mS or ⋈S)	Turbidity (NTUs)	Gals. Removed	Observations
0945	62.6	7.0	768	251	3.5	cloudy
0950	62.7	6.9	793	275	7.0	
0954	62.4	69	794	306	10.5	V.
Did well d	lewater?	Yes	Ø₹)	Gallons actual	ly evacuated:	105
Sampling	Date:   0 /1	9/06	Sampling Tim	ie: 1000	Depth to Water	r: 9.24
	D.: MW-			Laboratory:	Kiff CalScience	Other McCanche
Analyzed			мтве ТР	Oxygenates (5)	Other: Tell-n	no
EB I.D. (i	f applicable		@ Time	Duplicate I.D	. (if applicable):	
Analyzed			МТВЕ ТРН-D	Oxygenates (5)	Other:	
D.O. (if re	eq'd): I	Pre-purge:		mg/L	Post-purge:	mg <sub>/</sub>
O.R.P. (if	req'd): I	re-purge:		mV	Post-purge:	m\

### W. LL MONITORING DATA SHE.

Project #: c	961019-	wc-	!	Client: C	KGG	2 Owens	<u>An</u>	calvy Oclass
Sampler: 6	se			Date: 1	0/1	9106	· · · · •	
Well I.D.:	Mw-1	7		Well Dia	meter:	<b>Ø</b> 3	4	6 8
Total Well		_	22	Depth to	Water	(DTW):	9.6	58
Depth to Fr	ee Product			Thicknes	s of Fr	ee Product	(feet	):
Referenced	to:	PVO	Grade	D.O. Met	ter (if r	req'd):	,	(SI HACH
DTW with	80% Recha	arge [(H	eight of Water	Column x	0.20)	+ DTW]:		0.79
Purge Method:	Bailer Disposable Ba Positive Air E Electric Subm	Displaceme		Waterra Peristaltic tion Pump	olt Diameter	<u>.                                    </u>	ethod: Other: Well Di	Bailer Disposable Bailer Extraction Port Dedicated Tubing  ameter Multiplier 0.65
1 Case Volume	Gals.) X Speci	3 fied Volum	es Calculated Vo	_ Gals.	2" 3"	0.16 0.37	6" Other	1.47 radius² * 0.163
Time	Temp  or °C)	pН	Cond. (mS or <b>us</b> )	Turbic (NTU	-	Gals. Remo	oved	Observations
0828	70.0	6.8	989	31	3	1_		sheen/cloud
0831	70.2	6.7	1036	>1000	<b>&gt;</b>	2		sheen/dork
0834	69.9	6.7	1018	> 100	0	3		Sheen/dark
Did well d	ewater?	Yes	<u> </u>	Gallons	actuall	y evacuate	d:	3
Sampling I	Date: 10/	19/06	Sampling Tim	ne: 084	10	Depth to	Water	
Sample I.I	).: \$ M	.w-1	7	Laborato	ory:	Kiff Cals	cience	Other McCampbe V
Analyzed	for: THE	BZEX	мтве туй-г	Oxygenat	es (5)	Other: Tf	°H-,	no
EB I.D. (if	applicable	):	@ . Tinte	Duplicat	te I.D.	(if applical	ble):	
Analyzed	for: трн-G	втех	МТВЕ ТРН-D	Oxygenat	es (5)	Other:		Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market
D.O. (if re	q'd): P	re-purge		<sup>mg</sup> /∟	I	Post-purge:		mg/L
O.R.P. (if	reg'd): F	re-purge		mV	I	Post-purge:		mV

## Repair Data Sheet

Client	$\underline{C}$	<u>k(</u>	, フ	E	ny	110	ሰጥ	nt					- ·		Dat	<u>e</u>	10-	- 10-	06	
Site Address		3	60		_/	la	N	1/2	1	الا	•	_(	<u>)^</u>	<u>k1</u>	nu					
Job Number	06 K	90	AA		· .	Ţ,	ech	nicia	ın '		Α̈́	ul Ir	ow	, /	1/1	nolf;				
							CI	ieck l	ndica	tes de	ficie	юу			1					
Inspection Point (Well ID or description of location)	Well Inspected, Cleaned, Labeled - No Further Corrective Action Required	Replaced Cap	Replaced Lock	Replaced Ud Seal	Casing	Annular Seat	Tabs / Bolts	Box Structure	Apron	Trip Hazard	Below Grade	Not Securable by Design (12" dâmeter or less)	Lid not marked with words "MONITORING WELL"	Other Deficiency	Not Securable by Design (greater than 12" diameter)	Well Not Inspected (explain in notes)	Deficiency Logged on Repair Order	Deficiency Remains Uncorrected/Logged on Site Inspection Checklist	Partial Repair Completed/Outstanding Deficiency Logged on Repair Order	All Repairs Completed
		X	$\times$		X									X						$\times$
MW-17	Notes:				(	10	w	-12	l	2	a5	in	<u> </u>	٠ (	2		18p	lacel	wit	h
		10	$\mathcal{L}^a$	ı	אאכ	<i>(</i>						C				4	, ,			
14 W-2	Notes:	X	X						$\lambda$		, 1¢			X						X
				<del>-,</del>	rr	2114	<u>Zzl</u>	W1	Th_	10	<u> </u>	<u></u> !	7 OY			<del></del> -				<del></del>
······································										<u>_</u>		·T		1						
	Notes:													ļ						
	140163.																		<del></del>	
						_														
																	<u> </u>			
	Notes:							<del></del>									·	····	<u> </u>	
						<del></del> -														
																		•		
ļ	Notes:																			
			$\neg$																	
	Notes:			1.	·										L		<u> </u>			
						<del></del> , .										<del>. ·</del>	<del></del>			
																	· · · · · · · · · · · · · · · · · · ·	<u>.</u>		

### Repair Data Sheet

Client		<u> </u>	, フ	E	ָ עמ	ir	) /\ <sub>Y</sub>	~(g)	(A)						Date	<u> </u>	10-	11-0	6	
Site Address		<u>3</u>	6	00		110	بسرد	da		<u>4</u>	ć,	Ć	) <u>,</u>	kl,	rad					
Job Number	06	0	0/	1		T	echi	nicia	an		A	de	cw	<u>,                                    </u>	10	10/F				
							Ci	neck l	ndica	tes de	ficier	су			1					
Inspection Point (Well ID or description of location)	Well Inspected, Cleaned, Labeled - No Further Corrective Action Required	Replaced Cap	Replaced Lock	Replaced Lid Seal	Casing	Annular Seal	Tabs / Bolts	Box Structure	Apron	Trip Hazard	Below Grade	Not Securable by Design (12" damater or less)	Lidner marked with wards "MONITORING WELL"	Other Deficiency	Not Securable by Design (gregiet than 12" diemeter)	Well Not Inspected (explain in notes)	Deficiency Logged on Repair Order	Deficiency Remains Uncorrected/Logged on Site Inspection Checklist	Partial Repair Completed/Outstanding Deficiency Logged on Rapair Order	All Repairs Completed
		<u> </u>							_					X						X
MW-5	Notes:						$R_{\ell}$	<u> </u>			WÌ.	th		<b>3</b> "		·0×	anv	50	notub	;
	<u></u> ,			· •	<del></del>				,						·····					
MW-7														X						$\checkmark$
[1004]	Notes:			<del></del>			22	0/2	(c √	<b>b</b>	4/2	<u>n</u>	1	<u>₹</u>	50	X_	and	Sor	ntub=	
		<del></del>					· · ·	·							- 1					
mw-8														X						Z
[ ]	Notes:					R	لم	AL	<u> </u>	WI	, ,		X		<u>20X</u>					
İ	Notes:													•	•					
			****			•												<del></del>		
											T									
	Notes:		1	<u> H</u>	<u> </u>	£			<u>         i</u>							1				
					********					<del>-</del>		•				<del></del>		····	<del></del>	
·				[	Ť			$\neg$			T									
·	Notes:			1				- 1	l					1	1		]			
															<del> , .</del>	<del> </del>	<del>- `</del>			

Repair Data Sheet

	3	ŀ		í
Page	!	<u>.</u>	ρĖ	į .

Client	<u></u>	<u>t(</u>		дc	E	ovie Ala	<u>ON</u>	nen Sa	<i>\frac{1}{4}</i>	4ve		Date 10-12-06									
Job Number	06					, T	ech	nicia	an		P	nd.	/y\v	. <u>A</u>	ding	<i>[</i>					
Check indicates deficiency																					
Inspection Point (Well ID or description of location)	Well Inspected, Cleaned, Labeled - No Further Corrective Action Required	Replaced Cap	Replaced Lock	Replaced Lid Seat	Casing	Annular Seal	Tabs / Bolts	Box Structure	Apron	Trip Hezard	Below Grade	Not Securable by Design (12" dismeter or less)	Lideret mateca with words	Other Deficiency	Not Securable by Design (greater than 12" diameter)	Well Not Inspected (explain in notes)	Deficiency Logged on Repair Order	Defiziency Remains Uncorrected/Logged on Site Inspection Checklist	Partial Repair Completed/Outstanding Deliciency Logged on Repair Order	All Repairs Completed	
M-15														Х						$\times$	
	Notes: Replaced with 8" box															<u>.</u>					
				_				T			,			· -							
MW-16														×						$\times$	
	Notes: Replaced with 12 1 box																				
II.								7			<u> </u>	<u> </u>									
	Notes:	Voles:																			
							_~														
;	Notes:													<u> </u>							
		-	<del></del> -	-						· · · · · ·									<del> </del>		
			1	ī					$\neg$			<del></del>			1		<del></del>				
	Notes:		l			i								i		J	:				
:	:40105.					<del>,</del>	<del></del>							-		···········	·	<del></del>	<del> </del>		
		I	<u> </u>			T		-		ī	1	<u> </u>		<del></del> i							
-			ļ												<u> </u>			ï			
	Notes:				<del></del> -											·	<del></del>				
					•									·							

2 m

	W	ELLHEAI	) INSPE	CTION (	CHECKL	JST	Page	
Date 9/11/ Site Address	06	Client	CKO	9				
Site Address	3600	Ala	made	7	0	Na	<del>م</del>	
Job Number	60911	-641	<u> </u>		chnician	50		
-	1	,			l Debris	<del></del>	l con	
Well ID	Well Inspected - No Corrective Action Required	Water Balled From Wellbox	Wellbox Components Cleaned	Cap Replaced	Removed From	Lock Replaced	Other Action Taken (explain	Well Not Inspected (explain
MW-1	,	bucie		201	Wellhox DYOKE	006	below)	below)
MW.Z		PALIC		<u> </u>	VIOLE	190	<del>22</del>	
MW-5						<u> </u>		
MW-6	X							
MW-7 6	Dayle						又	
MM-8							X	
MW-10		X						
MW-13	X							
111W-15							X	
1011117	,			···	-		X	
MW-17		1100			41.6	,	<u> </u>	
My 20		unab	e 40	pd	240			
111111-20							<u> </u>	
					<del></del>			
							<del></del>	
NOTES AWS	Lia L	Cab -	1 11.	را	1.)1.			
MW-20 -	1/2-	10 W	oka	1/5	112-1	roken	1-1-	. · · ·
MW-16-	1.0 6	10 ken	, 14	11-8	5-16	7 / 13	1.0	
T-WM-7	- No	:0	7	· · · · · · ·			~	<del></del>
NIV-2 -	DVYIG	20, U 10	p/ 06	2010	9-3	0:11	roula	- 40
Dure	-110	UNO	KIN					•

## **WELL GAUGING DATA**

Project # 0609/1-51/ Date 9/11/06 Client CKG

Site 3600 Algueras Oakland

						Thickness	Volume of			Survey	
ļ			Well		Depth to	of	Immiscibles			Point:	Ì
			Size	Sheen /	Immiscible	Immiscible		Depth to water	Depth to well	TOB or	
	Well ID	Time	(in.)	Odor	Liquid (ft.)	Liquid (ft.)		(ft.)	bottom (ft.)	100	Notes
	MW-1		Z	DVI	ried	unde	y love	oken	7/455	1	
r	MW-Z	1515	2	9	ock,	nue	1	12.50	2650		
#	MW-S	0800	2	St	rck i	nwel		11.18	22.75		
#	MW-6	0804	2	G	xkii	nue1		13.49	25.76		
K	MW-7	0809	Z	L	xkir	ae		12.76	22.30		
	MWS	0929	Z				9	9.05	20.30		
W	MAS	0815	2	<u></u>				9.54	19.65		
	MW-13	1675	2					10.03	20.40		
. ا	NW-15	0830	2		las	1	1	11.46	2905		
	MW-16	1705	Z	$\mathcal{L}$	xk!	we		7.23	20,49		
¥	MW-17	0900	2					9.58	19.65		
	MW-A		2	una	ble.	00	C2 C				
	NW-ZC	0915	11					981	21.90		
			10		~	, , 1			(	~	
75			4	garge	ed w	rint	ex-ac	e pro	be		
											ļ
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<u> </u>				-		

Project #: 0609 [[-SL]				Client: CKG				
Sampler:	SL'			Date: 9/11/06				
Well I.D.:	MW-			Well D	Well Diameter 2 3 4 6 8			
Total Well Depth (TD):				Depth	le Water	r (DTW):		
Depth to Free Product:					ess of E	ree Produ	ct (fee	t):
Referenced to: PVC Grade					leter (if	req'd):		YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:								
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displaceme	nt Extrac	Waterra Peristaltic tion Pump	Well Djamete	Sampling Sampling	Method: Other;	Bailer Disposable Bailer Extraction Port Dedicated Tubing
1 Case Volume	Gals.) XSpeci	fied Volum	= nes Calculated Vo	Gals. olume	l" 2" 3"	0.04 0.16 0.37	4" 6" Other	0.65 1.47 radius <sup>2</sup> * 0.163
Time	Temp (°F or °C)	pН	Cond. (mS or μS)	•	oidity ΓUs)	Gals. Rer	noved	Observations
	bur	nav ieo	under	M	DUVE	do	P	
		80VC	oleen	912	155			
				$\vdash$				
Did well de	water?	Yes	No	Gallon	s actuall	ly evacua	ted:	· · · · · · · · · · · · · · · · · · ·
Sampling I	Date:	<u> </u>	Sampling Tim		7	Depth to		C:
Sample I.D	\		-2.2.	Labora	itory:		lScience	
Analyzed f	or: трн-G	BNEX	MTBE TPH-D	Oxygen	ates (5)	Other:		
EB I.D. (if	applicable)	):	@ Time	Duplic	ate I.D.	(if applic	able):	
Analyzed f	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other:		
D.O. (if rec	ı'd): P	re-purge:		mg/L	F	ost-purge:		
O.R.P. (if r	eq'd): P	re-purge:		mV	F	ost-purge:		mV

		W]	ELL MONITO	RING I	DATA S	SHEET			
Project #	Project #:060911-SL					Client: CKG			
Sampler: SL			Start I	Date: C	7/11/0	6	***		
Well I.D.: MW-Z			Well I	Diamete	r: 2 3	4	6 8		
	ell Depth:		)	Depth	to Wate	er: 17.5	<u></u>		
Before:		After:		Before		10.0		After:	
Depth to	Free Produ	ict:		Thick	ness of	Free Produ	ct (feet		
Referenc		PVC	Grade	<del></del>		f req'd):		YSI HACH	
Purge Meth	od: Bailer Sposable Ba Positive Air D Electric Subm	isplacement	Waterra Peristaltic Extraction Pum Other		npling Mo	E D	ailer  posable  xtraction  edicated  ther:	Port	
2.7 1 Case Volus	(Gals.) X ne Spe	3 ecified Volumes	Gals. Calculated Volum	ıe	Well Diame 1" 2" 3"	0.04 0.16 0.37	Well D 4" 6" Other	iameter <u>Multiplier</u> 0.65 1.47 radius <sup>2</sup> * 0.163	
Time	Temp,	pН	Conductivity (mS		oidity TU)	Gals. Ren	10ved	Observations	
617	72.7	5.9	1313	フル	00	2.2	2	HEANSLE	
1521	74.2	59	1321	710	00	44	····	7	
1521	74.3	5.9	1322	710	00	66			
							*		
Did well	dewater?	Yes	(No)	Gallon	s actual	ly evacuate	ed: 6	26	
Sampling Time: 1530				Sampling Date: 9/11/06					
Sample I.	D.: MW	1-2		Labora	tory:	<i></i>	TL (	AL CAMPO	
Analyzed	for: TH	H-G BTEX	MTBE TPH-D	Other:	De	20 5	Ze	700	
Equipment Blank I.D.:					ate I.D.:		<del></del>	7	
Analyzed	for: TF	H-G BTEX	MTBE TPH-D	Other;					

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

Pre-purge:

Pre-purge:

D.O. (if req'd):

ORP (if req'd):

mg/L

mV

Post-purge:

Post-purge:

mV

## .. £LL MONITORING DATA SHEÆT

Project #:060911-5L	Client: CKG						
Sampler: SL	Date: 9/11/06						
Well I.D.: MW-5	Well Diameter 2 3 4 6 8						
Total Well Depth (TD): 72.75	Depth to Water (DTW): 11.78						
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]: 3.97							
Purge Method: Bailer Waterra Sampling Method: Bailer  Positive Air Displacement Extraction Pump  Electric Submersible Other Other:  Well Diameter Multiplier Well Diameter Multiplier  1" 0.04 4" 0.65 2" 0.16 6" 1.47							
1 Case Volume Specified Volumes Calculated	Volume.  3* 0.37 Other radius² * 0.163						
Temp Cond. Time (Fo°C) pH (mS of 15)  1215 696 7.3 1147  1219 722 7.4 1165	Turbidity (NTUs) Gals. Removed Observations  7/000 1.8 Sheet, Ode  7/000 5.6  7/000 5.4						
1009 01.1 10 1191	7000 5.7						
Did well dewater? Yes No	Gallons actually evacuated: 5.4						
Sampling Date: 9/11/06 Sampling Time: 1230 Depth to Water: 13.95							
Sample I.D.: MW-5	Laboratory: Kiff CalScience Other						
Analyzed for: TPH-G BTEX MTBE TPH-	O Oxygenates (5) Other: Secope						
EB I.D. (if applicable):	Duplicate I.D. (if applicable):						
Analyzed for: TPH-G BTEX MTBE TPH-I							
D.O. (if req'd): Pre-purge:	mg/L Post-purge: mg/L						
O.R.P. (if req'd): Pre-purge:							

## **₩ £LL MONITORING DATA SHEÆT**

Project #: 0609 11-SL1	Client: CKG			
Sampler: 60	Date: 9/11/66			
Well I.D.: <b>MW-6</b>	Well Diameter 2 3 4 6 8			
Total Well Depth (TD): 25.76	Depth to Water (DTW): 13.49			
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 94			
	Waterra Sampling Method: Bailer Peristaltic Sampling Method: Bailer Extraction Port Dedicated Tubing Other:			
	Well Diameter Multiplier Well Diameter Multiplier			
$\frac{2.0}{\text{I Case Volume}} \text{(Gals.) X } \frac{3}{\text{Specified Volumes}} = 6.0$	Gals. Gals.  Ounce  1" 0.04 4" 0.65 1.47 1.47 0.00 1.47 0.37 0.37 0.37 0.37 0.37 0.37 0.37 0.3			
Temp Cond (mS 6 µS)  161 67.8 7.5 961  154 68.6 7.4 958	Turbidity (NTUs) Gals. Removed Observations  7/000 Z.O Odor, Harry Sh 7/000 4.0			
1158 688 73 960	71000 6.0			
Did well dewater? Yes No	Gallons actually evacuated: 6.0			
Sampling Date: 9/11/06 Sampling Time	ne: 1205 Depth to Water: 13.52			
Sample I.D.: MW=6	Laboratory: Kiff CalScience Other Camp			
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5) Other: See Scope			
EB I.D. (if applicable):	Duplicate I.D. (if applicable):			
Analyzed for: трн-д втех мтве трн-д	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 #: Client: Sampler: Date: Well I.D.: Well Diameter. 6 8 Total Well Depth (TD): Depth to Water (DTW): Depth to Free Product: Thickness of Free Product (feet): Referenced to: D.O. Meter (if req'd): Grade YSI HACH DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: Purge Method: Bailer Waterra Sampling Method: Bailer Disposable Bailer Peristaltic sposable Bailer Positive Air Displacement **Extraction Pump** Extraction Port Electric Submersible Other Dedicated Tubing Other: Well Diameter Multiplier Well Diameter Multiplier ł" 0.65 2" 0.16 6" 1.47 (Gals.) X Gals. 3ª 0.37 radius2 \* 0.163 Other Specified Volumes Calculated Volume Temp Cond. **Turbidity** Time Hq (NTUs) Gals. Removed Observations Did well dewater? Yes 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: (a) EB I.D. (if applicable): Duplicate I.D. (if applicable): Analyzed for: TPH-G **BTEX** MTBE TPH-D Oxygenates (5) Other: mg/ D.O. (if req'd): mg/ Pre-purge:

mV

O.R.P. (if req'd):

Pre-purge:

Post-purge:

Post-purge:

m٧

Project #: 060911-SL1	Client: CKG			
Sampler: 50	Date: 9/11/06			
Well I.D.: MN-8	Well Diamete 3 4 6 8			
Total Well Depth (TD): 20.30	Depth to Water (DTW): 9.05			
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 Wate	r Column x 0.20) + DTW]: //. 37)			
Purge Method: Bailer  Sposable Bailer  Positive Air Displacement Extra  Electric Submersible Other	Waterra Sampling Method: Bailer Peristaltic Extraction Port Dedicated Tubing Other:			
	Well Diameter Multiplier Well Diameter Multiplier			
Calculated Volumes   Calculated V	Gals.  Gals.  Olume  1" 0.04 4" 0.65  0.16 6" 1.47  3" 0.37 Other radius 2 * 0.163			
Temp Cond. Time (°F)or °C) pH (mS or as)	Turbidity (NTUs) Gals. Removed Observations			
100 669 19 3099	7/000 1.8 Grey			
1319 66. 1.9 3264	7/000 3.6			
32066.4 1.2 3212	7/600 5.4			
rxn w	HC			
Did well dewater? Yes No	Gallons actually evacuated: 4			
Sampling Date: 9/11/06 Sampling Tir	ne: 1375 Depth to Water: 9.50			
Sample I.D.: MW-8	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:			
O.R.P. (if req'd): Pre-purge:	mV Post-purge: mV			

Project #:060911 -5V	Client: CKG					
Sampler: SU	Date: 9/11/06					
Well I.D.: MW-10	Well Diameter 2 3 4 6 8					
Total Well Depth (TD): 1965	Depth to Water (DTW): 9.54					
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]: 1.56					
	Waterra Sampling Method: Bailer  Peristaltic tion Pump  Extraction Port  Dedicated Tubing  Other:					
	Welt Diameter Multiplier Well Diameter Multiplier					
$\frac{1.6 \text{ (Gals.) X}}{1 \text{ Case Volume}} = \frac{3}{\text{Specified Volumes}} = \frac{4.8}{\text{Calculated Volumes}}$	Gals. Gals. 3" 0.04 4" 0.65 1.47 3" 0.37 Other radius <sup>2</sup> * 0.163					
Temp Cond. Time (°F or °C) pH (mS or us)	Turbidity (NTUs) Gals. Removed Observations					
1240 197/15 10/	1100 1.6 Crey					
1795 138 1.7 793	71000 5.6					
140 729 79 752	7/000 4.6					
Did well dewater? Yes No	Gallons actually evacuated: 4.8					
Sampling Date: 9/11/06 Sampling Time	e: 1300 Depth to Water: 16.14					
Sample I.D.: MW-10	Laboratory: Kiff CalScience Other Camp C					
Analyzed for: трн-G втех мтве трн-D	Oxygenates (5) Other: Scope					
EB I.D. (if applicable):	Duplicate I.D. (if applicable):					
Analyzed for: трн-д втех мтве трн-д						
D.O. (if req'd): Pre-purge:	mg/ <sub>L</sub> Post-purge: mg/ <sub>L</sub>					
O.R.P. (if req'd): Pre-purge:	mV Post-purge: mV					

			AR PARENTY I			
Project #: 060911-5	41	Client:	(G			
Sampler: SL		Date: 9/11/06				
Well I.D.: MW-13		Well Diamete	2 3 4	6 8		
Total Well Depth (TD): 20	140	Depth to Wat		2.03		
Depth to Free Product:	·		Free Product (fe			
Referenced to: PVC	Grade	D.O. Meter (i		YSI HACH		
DTW with 80% Recharge [(He	eight of Water			7-18)		
Purge Method: Bailer  Positive Air Displacemen  Electric Submersible		Waterra Peristaltic tion Pump	Sampling Method Other	Extraction Port Dedicated Tubing		
1 Case Volume Specified Volume	es = Calculated Vo	Gals.	0.04 4" 0.16 6" 0.37 Other	<u>Diameter Multiplier</u> 0.65  1.47  radius <sup>2</sup> * 0.163		
Temp Time (For °C) pH  1410 77.1 80  445 76.3 80  1470 74.9 7.9	Cond. (mS or S) 673 678	Turbidity (NTUs) 71000 71000	Gals. Removed 1.7 3.4	Observations		
	io ampling Time	Gallons actuall	y evacuated: { Depth to Wate	5.1		
Sample I.D.: MW-3		Laboratory:	· · · · · · · · · · · · · · · · · · ·	NI /		
Analyzed for: TPH-G BTEX M		Oxygenates (5)	Kiff CalScience	Other Mc ample		
EB I.D. (if applicable):	@	Duplicate I.D.		Soope		
malamad for		Oxygenates (5)	Other:			
O.O. (if req'd): Pre-purge:		mg,	ost-purge:	mg/		
).R.P. (if req'd): Pre-purge:			ost-purge:	mV		
	<del></del>			221 7		

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

Project #:	0609	11-5	4	Client: CKG			
Sampler: 5	56			Date: 9/11/06			
Well I.D.:	MW-K	7		Well Diameter	2 3 4	6 8	
Total Well	Depth (TD	): <b>29</b>	05	Depth to Water	(DTW): //4	6	
Depth to Fr	ee Product	t:		Thickness of F	ree Product (fee	et):	
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 Sisposable B Positive Air I Electric Subn	Displaceme	nt Extrac Other	Waterra Peristaltic ction Pump	Sampling Method: Other:	Bailer Sisposable Bailer Extraction Port Dedicated Tubing	
2.9 (I Case Volume	Gals.) XSpeci	3 fied Volum	es Calculated Vo	Gals. Olume  Well Diameter 1" 2" 3"	0.04 4" 0.16 6" 0.37 Other	Diameter Multiplier 0.65 1.47 radius <sup>2</sup> * 0.163	
Time	Temp (°F) or °C)	pН	Cond. (mS of µS)	Turbidity (NTUs)	Gals. Removed	Observations	
1550	10.6	1.5	2094	7/000	28	Brown	
1368	10.8	14	206	>1000	5.6		
343	70.8	7.4	2093	71000	8.4		
	<u> </u>						
Did well de	water?	Yes Z	No )	Gallons actuall	v evacuated:	**************************************	
Sampling D	$\Delta T$	<del>,                                    </del>	Sampling Tim		Depth to Wate	r:	
Sample I.D		<del></del>	<u> </u>	Laboratory:	Kiff CalScience	11/1/4	
Analyzed for	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other: See	Slove.	
EB I.D. (if	applicable)	):	@ Time	Duplicate I.D.	(if applicable):	7	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:		
D.O. (if req	'd): Pi	re-purge:		mg/L P	ost-purge:	mg/ <sub>l</sub>	
O.R.P. (if re	eq'd): Pi	re-purge:		mV P	ost-purge:	mV	

Project #: 060911-5L1	Client: CKG						
Sampler: SU	Date: 9/11/06						
Well I.D.: MW-16	Well Diameter 2 3 4 6 8						
Total Well Depth (TD): 20.45	Depth to Water (DTW): 9.2	23					
Depth to Free Product:	Thickness of Free Product (fee	et):					
Referenced to: PVC Grade	D.O. Meter (if req'd):	YSI HACH					
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 1147							
Purge Method: Bailer  Disposable Bailer  Positive Air Displacement Extrace  Electric Submersible Other	Waterra Sampling Method: Peristaltic tion Pump Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing					
1 Case Volume Specified Volumes Calculated Vo	Gals. 1" 0.04 4" 2" 0.16 6" 0.17 Other	iameter <u>Multiplier</u> 0.65 1.47 radius <sup>2</sup> * 0.163					
Time (For °C) pH (mS of µS)  1027 73.4 7.3 780	Turbidity (NTUs) Gals. Removed	Observations  724 Bown					
1029 73.1 7.3 770	71000 3.6						
1028 730 7.3 770	21000 5.4						
Did well dewater? Yes No	Gallons actually evacuated:						
Sampling Date: 9/11/06 Sampling Time	1						
Sample I.D.: WW-16	e: 099 Depth to Water Laboratory: Kiff CalScience	10 10					
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5) Other:	Scoto					
EB I.D. (if applicable):	Duplicate I.D. (if applicable):						
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5) Other:						
D.O. (if req'd): Pre-purge:	Post-purge:	mg/L					
O.R.P. (if req'd): Pre-purge:	mV Post-purge:	mV					

Project #: 060911 -SL/	Client: CKG
Sampler: SU	Date: 9/11/26
Well I.D.: MW-17	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 19.65	Depth to Water (DTW): 9.58
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]: //.59
	Waterra Sampling Method: Bailer Peristaltic Supposable Bailer Extraction Port Dedicated Tubing Other:
1 2 1/8	Well Diameter Multiplier Well Diameter Multiplier 1" 0.04 4" 0.65
1 Case Volume Specified Volumes Calculated Volume	Gals. 2" 0.16 6" 1.47 3" 0.37 Other radius <sup>2</sup> * 0.163
Time (E) r°C) pH (mS or μS)  1044 71.9 7.1 1018  1047 72.6 7.1 1034  1090 724 7.0 1036	Turbidity (NTUs)  Gals. Removed  Observations  7/000 /.6  Black 000  7/000 3.2  7/000 4.8
	Gallons actually evacuated: 4.8
Sampling Date: 9////86 Sampling Time:	://00 Depth to Water: //.57
Sample I.D.: MW-17	Laboratory: Kiff CalScience Other Mc Imp
Analyzed for: трн-G втех мтве трн-D (	Oxygenates (5) Other: See See
EB I.D. (if applicable): @ Time I	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

Project #:	0609	11-50	41	Client: CKG									
Sampler:	SL			Start Date: 9/11/06									
Well I.D.	: MW -	19		Well Diameter: 2 3 4 6 8									
Total We	ll Depth:	•		Depth to Water:									
Before:		After:		Before	<b>:</b>			After:					
Depth to	Free Produc	et:		Thick	ness of F	ree Prod	ist (feet)	):					
Reference	ed to:	PVC	Grade	D.O. 1	Meter (if	req'd):		YSI	HACH				
Purge Metho	Dailer  Disposable Bail  Positive Air Dis  Electric Subme	splacement	Waterra Peristaltic Extraction Pump Other		mpling Me		Bailer Disposable Extraction I Dedicated T Other:	Port	\				
					Well Diame	ter Multiplic			ultiplier				
i Case Volum	(Gals.) X	= cified Volumes	Gals. Calculated Volume	e	1" 2" 3"	0.04 0.16 0.37	4" 6" Other	1.	65 47 dius <sup>2</sup> * 0.163				
	Temp.		Conductivity (mS	Tur	bidity								
Time	(°F or °C)	pН	or μS)	(I)	TU)	Gals. Re	moved	Obse	rvations				
	UN	able	to 52	nP	e								
	ラ We	211 1/	neerne	24	1 4	rge	amo	off					
	af	Mulc	h S V	120	10-	0 10	cat	e					
	afi	er -	20 min	1	· of	- GE	arch	ring					
		· · · · · · · · · · · · · · · · · · ·	*				-						
Did well	dewater?	Yes	No	Gallor	ns actual	ly evacua	ited:	_					
Sampling	Time:			Samp	ling Date	<b>3:</b>							
Sample I.	D.:			Labor	atory:		STL						
Analyzed	for: TP	H-G BTEX	мтве трн-d	Other:									
Equipmen	nt Blank I.D	).:	@\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Dupli	cate I.D.	•	\						
Analyzed	for: TP	H-G BTEX	мтве трн-р	Other:				<u> </u>					
D.O. (if r	eq'd):		Pre-purge:		mg/L	Po	ost-purge:		mg/[				
ORP (if r	eq'd):		Pre-purge:		mV	Po	ost-purge		mV				
Blaine	Tech Serv	ices, Inc	. 1680 Rogers	Ave.,	San Jo	se, CA 9	5112 (	08) 57	'3 <b>-</b> 0555				

## .. LLL MONITORING DATA SHLLT

Project #: 060911-5L1	Client: CKG
Sampler: SU	Date: 9/11/06
Well I.D.: MW-ZO	Well Diameter 2 3 4 6 8
Total Well Depth (TD): 21,90	Depth to Water (DTW): 98/
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]: 12.23
Purge Method: Bailer  Sposable Bailer  Positive Air Displacement Extrace  Electric Submersible Other	Waterra Sampling Method: Bailer Peristaltic Disposable Bailer Extraction Port Dedicated Tubing Other:
$\frac{19}{1 \text{ Case Volume}} \text{ (Gals.) X } \frac{3}{\text{Specified Volumes}} = \frac{57}{\text{Calculated Volumes}}$	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
Temp Cond. (mS μS)  1001 77.0 7.1 1006  1003 70.8 7.1 985  1005 70.1 7.1 952	Turbidity (NTUs) Gals. Removed Observations  792 /.9 Brown  71000 3.8  >1000 5.7
Did well dewater? Yes No	Gallons actually evacuated: \$7.7
Sampling Date: 9/1/06 Sampling Time	: 1010 Depth to Water: 11.00
Sample I.D.: MW-20	Laboratory: Kiff CalScience Other Campo
	Oxygenates (5) Other: See Score
EB I.D. (if applicable):	Duplicate I.D. (if applicable):
	Oxygenates (5) Other:
D.O. (if req'd): Pre-purge:	mg/L Post-purge: mg/L
O.R.P. (if req'd): Pre-purge:	mV Post-purge: mV

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

BLAINE
TECH SERVICES, INC.
CHAIN OF CUSTODY

CLIENT

SAMPLE I.D.

MW-8

SAMPLING COMPLETED

SITE

															10+2 a
<b>.</b> :-			80 ROGERS				CON	DUCT	ANALYSIS	TO DETE	CT	LAB	McCampbell		DHS#
NE	SAN.	IOSE, CA	L!FORNIA 9 FAX (408)									ALL ANALYSES MUST M BY CALIFORNIA DHS AN		IONS AND DE	FECTION LIMITS SET
/ICES,	INC,	P	HONE (408)			l						EPA	_	RWQC8 REC	GION
FODY	BTS#	0600	711-52		တ္ဆ		ďι	dn ı				☐ LIA ☐ OTHER			
CKG Environmental				AINE	802	an r	lear				SPECIAL INSTRUCTION	3			
Owen	s Brockw	ay Glas	s Plant		CONTAINERS	015	gel clean up	gel clean				Invoice and Report	to : CKG En	vironmental	l
3600 Alameda Avenue				¥	TPHg / BTEX (8015/8021)						808 Zinfindel Lane	, St Helena, C	CA 94574		
Oaklan	d, CA	To a a wrong	CONTAI	WEDE	18 18 18 18 18 18 18 18 18 18 18 18 18 1	BTE	/silli	w/si				Attn: Christina Ker	nnedy		
		MATRIX	CONTAI	, terto	COMPOSITE	Ig/	<b>TPHd w/silica</b>	TPHmo w/silica				Dissolved product i	n samples M\	V-2 and MW	-6
DATE	TIME		TOTAL		5	Ē	TP	TPI				ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
911/00	1230	W	3		- [	X	X	X						!	
. +	1205	4	3			X	X	X							
1	1140	W	3		$\neg$	X	<del>く</del>	ン		1				1	<u> </u>
· +-		1				V	$\overline{\checkmark}$	~		+				!	
	325	1 7	3			<del>-</del>	$\bigcirc$	<del>                                     </del>		+			<del> </del>		
	1300		3			X	Z,	X	<b></b>				<u> </u>		
	_ 1425	W	3			区	又	×							
	1345	1W	3		ı	X	X	X	1		İ				<u> </u>
-	1035	T	3			X	X	X							
+	_ <u>1100</u>	T	3		$\neg$	攵	X	X		1 1	<u> </u>		1		
+	_	1	3		$\dashv$	V	$\overrightarrow{\mathbf{v}}$	令		+-+					
DATE	1010	SAMPL				$\mathcal{A}$	$\triangle$	<u>N</u>	<u></u>			RESULTS NEEDED		[	
	64 1600		RMED BY	5	. (	_7	21	0	-		A _	NO LATER THAN	Per Client		•

	ו מיסו שאויון		,	V —	A - 1	1 01 01011	
RELEASED BY	< (4		9/11/06	1745	RECEIVE BY Sunde	Custodus) 9/11/06	TIME
RELEASED BY		***************************************	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	· ·		DATE	TIME	RECEIVED BY	DATE	TIME
SHIPPED VIA			DATE SENT	TIME SENT	COOLER#		

2.+2 (a)

1680 ROGERS AVENUE McCampbell CONDUCT ANALYSIS TO DETECT BLAINE SAN JOSE, CALIFORNIA 95112-1105 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET FAX (408) 573-7771 BY CALIFORNIA DHS AND TECH SERVICES, INC. PHONE (408) 573-0555 EPA RWQCB REGION ☐ LIA OTHER CHAIN OF CUSTODY BTS # 060911-SL TPHd w/silica gel clean up = COMPOSITE ALL CONTAINERS TPHg / BTEX (8015/8021) clean SPECIAL INSTRUCTIONS CLIENT CKG Environmental SITE Invoice and Report to: CKG Environmental Owens Brockway Glass Plant TPHmo w/silica 808 Zinfindel Lane, St Helena, CA 94574 3600 Alameda Avenue Attn: Christina Kennedy Oakland, CA CONTAINERS MATRIX Dissolved product in samples MW-2 and MW-6 S= SOIL W=H<sub>2</sub>0 ADD'L INFORMATION CONDITION LAB SAMPLE # **STATUS** TOTAL SAMPLE I.D. RESULTS NEEDED SAMPLING 9/11/06/600 PERFORMED BY S. LANC NO LATER THAN COMPLETED Per Client DATE 11/06 TIME DATE , TIME RECEIVED BY RELEASED BY "Sample Custoday 1750 DATE TIME RECEIVED BY **RELEASED BY** DATE TIME RECEIVED BY DATE TIME RELEASED BY TIME SENT COOLER# DATE SENT SHIPPED VIA

CKG Environmental	Client Project ID: #061019-WC-1	Date Sampled: 10/19/06
808 Zinfandel Lane		Date Received: 10/20/06
St. II. 1 CA 04574	Client Contact: Chris Kennedy	Date Reported: 10/26/06
St. Helena, CA 94574	Client P.O.:	Date Completed: 10/26/06

WorkOrder: 0610440

October 26, 2006

Dear Chris:

Enclosed are:

- 1). the results of 2 analyzed samples from your #061019-WC-1 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

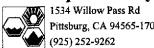
All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

# BTSS #0610440

DI 4					SERS AVENI			CON	DUCT	ANALY	SIS T	ODET	ECT	LAB		McCampbell		DHS#		
BLA	BLAINE SAN JOSE, CALIFORNIA 95112-1105 FAX (408) 573-7771															IONS AND DET	FECTION LIMITS SET			
TECH SER			F		(408) 573-77 (408) 573 <b>-</b> 05			ļ						- 1 -	IFORNIA DHS AND ] EPA		T RWOCE REG	SION		
					· · · · · · · · · · · · · · · · · · ·	_						ļ			LIA	٤.	JAMAGERIE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
CHAIN OF CU	STODY	BTS#	061	019	-wx-1	ွှ		효	E E					-	OTHER		·			
CLIENT	CKC Fr	wiemm	ental			CONTAINERS	20	=	clean					SPECIA	L INSTRUCTIONS					
SITE	3600 Alameda Avenue Oakland, CA				<b>₹</b>	3/8	3		1					A CHARLES						
0116					] Ŝ	30	3	3e					Invok	Invoice and Report to : CKG Environmental						
					1	×	2 ET	[ <u>.</u>	:				808 Zinfindel Lane, St Helena, CA 94574 Attn: Christina Kennedy							
					COMPOSITE ALL	TPHg / BTEX (8015/8021)	TPHd w/silica gel clean up	w/silica												
			MATRIX	COI	NTAINERS	٦ĕ	<b>8</b>	*										\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
	1 1		팀양		1	Š	Hg	Hq	분					Disso	lved product in	<del>-samples MV</del> 1	V-2 and MW	<b>-6</b>		
SAMPLE I.D.	DATE	TIME	S= SOIL W=H <sub>2</sub> 0	TOTAL	_	5	I.	TP	TPHmo					ADD'	LINFORMATION	STATUS	CONDITION	LAB SAMPLE #		
MW-17	10/19/06	0840	الدا	3	HCI		$ \times $	X	X					1 tite	- Amber WHCL					
mw 1	10 1/1	1000	IN.	3	2 HCI VOA	1	X	X	V			1		1 Liter	glass - den Pas					
Mary (		1000		┼─-	1 L glass	+-	· ·	, ,					<del></del>		,					
			<u> </u>		<del> </del>	-	<del> </del> -	<del> </del>	├—	<del> </del>		-					<del>                                     </del>			
				<u></u>				<u> </u>	<u> </u>								<u> </u>			
	, ,																			
		<del></del>		1		1	1	†···-						1						
			<u> </u>	1			+	<del> </del>	<del> </del>	-					100% 2 14		<del> </del>			
			ļ				<del> </del>	ļ	↓						GUGD COSTATION	AP	PROPRIATE			
															DEAD SPACE ARSI DECHLORINATED	CO: CO	NIAINERS L			
	···			1			<u> </u>										ETALS OTHER	AB		
			<del>                                     </del>	+	<del>                                     </del>	+	+	+	+	1		1			THE TOTAL PROPERTY OF THE PROP	<u> </u>				
la	0.75	TIME	CANADI	1110				ļ <u>.</u>	<u> </u>	<u> </u>				preii	TS NEEDED					
SAMPLING COMPLETED	DATE	6 <b>C</b> 400	SAMPL PERFO		BY ()	J;	11		`~~	> نہ	)				TER THAN	Per Client				
RELEASED B		0 100	<u> </u>			IDA	TE		TIME	, , , -		RECE	IVED BY	<u> </u>	~ 1	1 0	DATE / /	TIME		
'7\\\						100	19/0	6		15		10	41C	<i>ـــ</i>	(suple	" possion	DATE / /0/19/0	17/5		
RELEASED B	y w	· ·				DA	TE_		TIME			RECE	IVED BY	7 3		· · · · · · · · · · · · · · · · · · ·	DATE			
	5	~				A	kol	66	15	05		0/	Mi K	10-	pro Karamana manager	·	10/20			
RELEASED B	9 /					DA	TE ,		TIME			RECE	IVED BY	<u> </u>			DATE	TIME		
11/16	بالموح	*	- No.			•	2/20			30/2				<u></u>			· .			
SHIPPED VIA						DA	TE SE	NT	TIME	SENT		COOL	.ER#							
												1								



## **CHAIN-OF-CUSTODY RECORD**

Page 1 of I

(925) 252-926	52			EDF		work. □F		06104	r40 ∏Emai			): CKGS lardCopy		Thire	lParty		
Report to: Chris Kennedy CKG Environmel 808 Zinfandel La St. Helena, CA	ine	TEL:	ckennedy@g (707) 967-802 #061019-WC	eologist.com 22 FAX: (707) !	967-80		Bill to: Ac CK 80	counts I G Envir 3 Zinfan Helena	onmen idel Lai	ital ne			Date	ested Rece Prin	eived:	10/20/ 10/20/	
	· · · · · · · · · · · · · · · · · · ·								Re	queste	d Tests	(See lege	nd bek	ow)			
Sample ID	ClientSampID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
0610440-001	MW-17		Water	10/19/06 8:40:00		A	С	1	<u> </u>	<del></del>	<u> </u>					T .	T-
0610440-002	MW-1	<u> </u>	Water	10/19/06 10:00:00		A	С				1			_			
Test Legend:																	

Prepared by: Mark Robinson

#### Comments:

12

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

	McCamp
<u></u>	McCamp

## bell Analytical, Inc.

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

	"When Quality Counts"	1 eleptione: 8/7-232-92	202 Fax. 923-232-9209	
CKG Environmental	Client Project I	D: #061019-WC-1	Date Sampled:	10/19/06
808 Zinfandel Lane			Date Received:	10/20/06
St. Helena, CA 94574	Client Contact	: Chris Kennedy	Date Extracted:	10/25/06-10/26/06
St. Heletia, CA 94574	Client P.O.:		Date Analyzed:	10/25/06-10/26/06

	Gasolin	e Range (	C6-C12) Vola	tile Hydrocar	bons as Gasol	ine with BTI	EX and MTBE	* Work Orde				
Extraction me	Extraction method: SW5030B Analytical methods: SW8021B/8015Cm											
Lab ID	ab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene											
001A	MW-17	w	1600,g,m,h		5.9	ND<1.0	ND<1.0	3.7	2	109		
002A	MW-1	w	120,g		ND	ND	ND	ND	1	103		
			. ,									
				·								
						1						
								:	<del>                                     </del>			
	ting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5	1	μg/L		
	eans not detected at or e the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/K		

above the reporting faint
* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe,
,
broduct/oil/non-agreeus liquid samples in mg/L

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

McCampbell Analytical, Inc.
"When Quality Counts"

CKG Environmental	Client Project ID: #061019-WC-1	Date Sampled: 10/19/06
808 Zinfandel Lane		Date Received: 10/20/06
St. Helena, CA 94574	Client Contact: Chris Kennedy	Date Extracted: 10/20/06
St. Helelia, CA 94374	Client P.O.:	Date Analyzed: 10/21/06-10/23/06

Die Extraction method: SW3510			actable Hydrocarbons w ethods: SW8015C	with Silica Gel Clean-Up*  Work Order: 0610440						
Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS				
0610440-001C	MW-17	w	1,100,000,a,h	480,000	200	#				
0610440-002C	MW-1	w	5400,a/m	3300	1	109				
				-						
						<u> </u>				
Reporting	Limit for DF =1;		50	250		g/L				

Reporting Limit for DF =1;	w	50	250	μg/L
ND means not detected at or	6	NA	NA	mg/Kg
above the reporting limit	3	NA.	NA .	mg/Kg

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

<sup>#)</sup> cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to matrix interference; k) kerosene/kerosene range; I) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

## QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0610440

EPA Method SW8021B	/8015Cm E	xtraction	SW503	0B		Batchil	D: 24393		Spiked San	nple ID	: 0610416-0	)04A	
Analida	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
Analyte	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex <sup>£</sup>	ND	60	99.4	105	5,52	100	88	12.9	70 - 130	30	70 - 130	30	
МТВЕ	ND	10	113	112	0.990	105	103	1.84	70 - 130	30	70 - 130	30	
Benzene	ND	10	93.4	98.9	5.75	103	87.7	15.7	70 - 130	30	70 - 130	30	
Toluene	ND	10	79.9	92.1	14.1	93.8	73.6	24.1	70 - 130	30	70 - 130	30	
Ethylbenzene	ND	10	98.3	98.5	0.196	90.1	78.2	14.2	70 - 130	30	70 - 130	30	
Xylenes	ND	30	94.3	91	3.60	92.3	94.7	2.50	70 - 130	30	70 - 130	30	
%SS:	115	10	99	98	1.14	97	98	2.02	70 - 130	30	70 - 130	30	

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

#### BATCH 24393 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0610440-001	10/19/06 8:40 AM	10/25/06	10/25/06 2:43 PM	0610440-002	)/19/06 10:00 AM	10/26/06	10/26/06 7:48 AM

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

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

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

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

QA/QC Officer

## QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0610440

EPA Method: SW8015C Extraction: SW3510C/3630C					Batchil	D: <b>24383</b>	Spiked Sample ID: N/A							
Analyte	Sample Spiked  µg/L µg/L		MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)					
Allalyle			% Rec.	,	% RPD	% Rec.	% Rec.	% RPD	MS/MSD	RPD	LCS/LCSD	RPD		
TPH(d)	N/A	1000	N/A	N/A	N/A	101	103	1.31	N/A	N/A	70 - 130	30		
%SS:	N/A	2500	N/A	N/A	N/A	115	117	1.35	N/A	N/A	70 - 130	30		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

#### BATCH 24383 SUMMARY

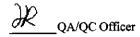
Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0610440-001	10/19/06 8:40 AM	10/20/06	10/23/06 2:29 PM	0610440-002	)/19/06 10:00 AM	10/20/06	10/21/06 5:32 PM

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

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

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

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





"When Quality Counts"

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

CKG Environmental	Client Project ID: Owens Brockway Glass	Date Sampled: 09/18/06
808 Zinfandel Lane	Plant	Date Received: 09/19/06
St. Helena, CA 94574	Client Contact: Christina Kennedy	Date Reported: 09/26/06
Bi. Helena, CA 94374	Client P.O.:	Date Completed: 09/26/06

WorkOrder: 0609372

September 26, 2006

Dear Christina:

Enclosed are:

- 1). the results of 1 analyzed sample from your Owens Brockway Glass Plant project,
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

		4~	16	80 ROGE	ERS AVENU	JΕ		CON	IDUCI	T ANALYS	IS TO DE	TECT		TLAB	McCampbell		DHS#
BLA	INE	SAN J		LIFORNI	A 95112-11	05				AIVALIO	10 10 00			ALL ANALYSES MUST ME	ET SPECIFICAT	IONS AND DET	
TECH SER			F	_	408) 573-77: 408) 573-05:		1							BY CALIFORNIA DHS AND EPA		T PWOCE REG	SION
						-								LIA	L	] MYQCD NEC	
CHAIN OF CU	STODY	BTS#							dn					OTHER			
CLIENT		013#			<del></del>	ER.	[7]	d <sub>n</sub>	E E					SPECIAL INSTRUCTIONS		P-0-1	
	CKG En	vironm	ental			Į ₹	88	еап	cle								
SITE	Owens E	Brockwa	y Glas	s Plant	t	CONTAINERS	BTEX (8015/8021)	gel clean	gel clean up					Invoice and Report t	o : CKG Env	vironmental	
	3600 Ala					ALLO	<b>8</b>	) ag 1	83					808 Zinfindel Lane,	St Helena, C	A 94574	
			1101140	<u></u>		¥ E	É	ic.	w/silica					Attn: Christina Ken			
	Oakland,	CA	IMATELY	Z CON	TAINERS	OSITE	BT	v/silica	3					Atm. Christma Ken	neuy		
İ				1							İ	1	ĺ	Dissolved product in	samples MV	/-∠ and Mvv-	<b>-</b> б
			S= SOIL W=H <sub>2</sub> 0			= CON	TPHg	TPHd	TPHn								
SAMPLE I.D.	DATE	TIME	\$ \$	TOTAL		Ö	Η	느	E	+		<b> </b>		ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE#
MW-19	9/18/06	1715	W	3			$\perp X$	X	X								
	1 -1-																
<del></del>						1	1										
						<del> </del>	+	<del> </del>	┼	1 1		<del> </del>					
	<del></del>			ļ		<del> </del>	<b>↓</b>	ļ	├	1 1	<del></del>	ļ				<del>                                     </del>	
			<u> </u>					<u> </u>								<u> </u>	
			<b>†</b>	1		$\top$			<del> </del>			<u> </u>					
			1	1		╁┈	-	$\vdash$		<del></del>		<del>                                     </del>			-		
			ļ	<b>.</b>		ļ	ļ	ļ	<u> </u>	<u> </u>		ļ		DOOD CONDITION	APPROPRIAT		
						<u> </u>	l							HEAD SPACE ABSENT	CONTAINERS PRESERVED	: 1	
				,										PRESERVATION VOAS   O	G METALS OT		
SAMPLING	DATE	TIME	SAMPLI				,	· · · · · ·		<del></del>		<del></del>		RESULTS NEEDED			
COMPLETED	MILLION	1715	PERFO	RMED B	<u> </u>	40	heo	`	<u>5n</u>	ng				NO LATER THAN	Per Client		
RELEASED B	Y 1/					DAT	F	/	TIME		RECI	IVED	BY /	7.0		DATE/	TIME
<del></del>	1/2	1	<del>//</del> _			9	18/	00	/ <u>/</u> !:-	(¢)(	7	- 17 1 mm brs	<u>,                                    </u>			7/3/0	
RELEASED B						DAT N	401	/	PIIME	45		IVED			<u> </u>	DATE HUNDY	
RELEASED B						DAT	FO	7	TIME	- F	REC	INED	BY			DATE 9/14	TIME
					<i>:</i>		· .	[4]	1/		1000					7/14	2.00
SHIPPED VIA		,			′ .	JDAT 1	E SE	П "	TIME	SENT	coo	LER#					
									<u>i                                      </u>		L						

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

## **CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

WorkOrder: 0609372

ClientID: CKGS

EDF: NO

Report to:

Christina Kennedy **CKG** Environmental

808 Zinfandel Lane

St. Helena, CA 94574

Email:

TEL: (707) 967-8022

FAX: (707) 967-8080 ProjectNo: Owens Brockway Glass Plant

PO:

Bill to: Accounts Payable

> **CKG Environmental** 808 Zinfandel Lane

St. Helena, CA 94574

Requested TAT:

5 days

Date Received:

09/19/2006

Date Printed:

09/26/2006

Requested Tests (See legend below)																		
Sample ID	ClientSampID	Matrix	Collection Date	Hold	1		2	3	1	4	5	3	7	8	9	10	11	12
0609372-001	MW-19	Water	09/18/2006		Α		В											

#### Test Legend:

1 G-MBTEX_W	2 TPH(DMO)_W	3	4	5
6	7	8	9	10
11	12			

Prepared by: Nickole White

#### Comments:

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

	, All	0
4	♪	₹
-	⋖	Ì

\*When Quality Counts"

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

CKG Environmental	Client Project ID: Owens Brockway Glass Plant	Date Sampled: 09/18/06
808 Zinfandel Lane		Date Received: 09/19/06
St. Helena, CA 94574	Client Contact: Christina Kennedy	Date Extracted: 09/23/06
or Hololid, OH 91971	Client P.O.:	Date Analyzed: 09/23/06

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

Extraction meth	od: SW5030B		Analy	tical methods: SV	/8021B/8015Cm			Work Ord	ler: 0609	372	
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	
001A	MW-19	w	280,b		ND	ND	ND	0.83	1	112	
						- Andrews Valority of the Control of			ļ		
										-	
			······································								
Reporti	ng Limit for DF =1;	w	50	5.0	0.5	0.5	0.5	0.5	1	μg	
	the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/	

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

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range nontarget isolated peaks subtracted out of the TPH(g) concentration at the client's request, p) see attached narrative.



-	
AWA	
	1
/ \\ <b>\\</b>	
	-
\/	

"When Quality Counts"

CKG Environmental	Clear Plant	Date Sampled: 09/18/06
808 Zinfandel Lane	Glass Plant	Date Received: 09/19/06
St. Helena, CA 94574	Client Contact: Christina Kennedy	Date Extracted: 09/19/06
	Client P.O.:	Date Analyzed: 09/23/06

#### Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil\*

traction method; SW3510	c	Analytical met	hods: SW8015C		Work Order: 0609372					
Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS				
0609372-001B	MW-19	w	890,d,b	280	1	105				
Reporting	Limit for DF =1;	w	50	250	μ	g/L				
	s not detected at or ne reporting limit	S	NA	NA		/Kg				

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

<sup>#</sup> cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant, h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirits; p) see Case Narrative.

### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0609372

EPA Method: SW8021B/	8015Cm E	xtraction	: SW503	0B		Batchi	D: 23826	S	Spiked Sam	płe ID:	0609357-0	15A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)					
, may co	µg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD		
TPH(btex) <sup>£</sup>	ND	60	127	128	0.921	97.7	101	3.39	70 - 130	30	70 - 130	30		
МТВЕ	ND	10	120	120	0	109	110	0.617	70 - 130	30	70 - 130	30		
Benzene	ND	10	101	103	1.18	93.1	92.9	0.196	70 - 130	30	70 - 130	30		
Toluene	ND	10	102	104	1.49	85.7	86.9	1.36	70 - 130	30	70 - 130	30		
Ethylbenzene	ND	10	106	108	1.03	93.4	94.6	1.26	70 - 130	30	70 - 130	30		
Xylenes	ND	30	120	120	0	86	89.7	4.17	70 - 130	30	70 - 130	30		
%SS:	103	10	92	93	1.63	98	98	0	70 - 130	30	70 - 130	30		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 23826 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0609372-001A	9/18/06 5:15 PM	9/23/06	9/23/06 6:11 AM				

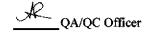
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

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

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

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

# cluttered chromatogram; sample peak coelutes with surrogate peak.



1534 Willow Pass Road, Pittsburg, CA 94565-1701

Web: www.mccampbell.com E-mail: main@mccampbell.com

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

### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0609372

EPA Method SW8015C	E	xtraction	SW351		Batchic	): 23806	Spiked Sample ID: N/A					
Analyte			MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
			% RPD	% Rec. % Rec.		% RPD	MS/MSD RPD LCS		LCS/LCSD	RPD		
TPH(d)	N/A	1000	N/A	N/A	N/A	92.4	90	2.60	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	110	104	5.11	N/A	N/A	70 - 130	30

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

### BATCH 23806 SUMMARY

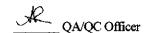
Sample ID	Date Sampled			Sample ID	Date Sampled	Date Extracted	Date Analyzed
0609372-001	9/18/06 5:15 PM	9/19/06	9/23/06 3:17 AM				

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

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

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

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



CKG Environmental	Client Project ID: Owens Brockway Glass	Date Sampled: 09/11/06
808 Zinfandel Lane	Plant	Date Received: 09/13/06
St. Helena, CA 94574	Client Contact: Chris Kennedy	Date Reported: 09/21/06
St. Holding, O/1 743/4	Client P.O.:	Date Completed: 01/12/07

WorkOrder: 0609262

January 12, 2007

Dear Chris:

Enclosed are:

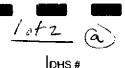
- 1). the results of 11 analyzed samples from your Owens Brockway Glass Plant project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0609262



	1680 ROGERS AVENU						IUE CONDUCT ANALYSIS TO D					DETECT	LAB McCampbell DHS #  ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SE					
BLAI	NF	SAN JO	SE, CAI		A 95112-110												IONS AND DET	ECTION LIMITS SET
					108) 573-777							1			LIFORNIA DHS ANI			
TECH SERV	ICES, INC.		P	HONE (4	108) 573-055	5					- {				EPA		] RWQCB REG	ION
						,	1		İ		- [				LIA			
CHAIN OF CUST	ODY	BTS#	NAM	1112	~) }	ŀ	_	۱ ـ	ďn		- 1	i		1	OTHER			
		BIS#	DOU	///==	221	SS.	=	Ē				i						
CLIENT	CKG Env		usto l			y Y	<u>S</u>	I≘	clean	<u> </u>				SPECI	AL INSTRUCTIONS	5		
	CNG EIN	/HOHIII	mai			CONTAINERS	(8015/8021	gel clean	ಶ		Ţ							
SITE	Owens B	rockwa	v Glas	s Plant		8		3	gel		1	1 1		Invoi	ce and Report	to : CKG Env	vironmental	
			<u> </u>				∞	ge			-	1 1		000 5	*' ' ' 1 1 T	College C	34 04574	
	3600 Ala	meda A	venue		_	<b> </b>	1	55	w/silica		1	1 1		808 Z	Zinfindel Lane,	St Helena, C	A 94374	
	0 11: 11						(F)	ij		1 1				Attn.	Christina Ker	medy		
	Oakland, (	υA		1 001	TAINEDO	COMPOSITE	E	į.s.	\$		- 1			1	Ciminina ite			
			MATRIX	CON	TAINERS	ĬĔ	=	\$	2					D:	olved product in	s complet MV	V-2 and MW.	.e
1 .			분양	l .		[ 5	1 🚆		上三		ĺ			DISSU	nveu product ii	i sampies inv		•
	ŀ		S= SOIL			l O	TPHg / BTEX	TPHd w/silica	TPHmo					١		OTATUS.	CONDITION	I AD CAMOLE #
SAMPLE I.D.	DATE	TIME	″s 🕏	TOTAL		U_	<u> </u>			<b> </b>	_			ADD	'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-5	911/06	1230	W	3		ł	X	X	ert  imes ert	<b> </b>								
MW-6	1111	1205	W	3			×	X	X		十							
	-		1	1		╂	1	1/	<del>                                     </del>	<del> </del>	$\dashv$			+			1	
MW-7		1140	W	3	<u>.                                    </u>		1	X	X		4							
MW-8		1325	W	3			X	X	X									
MW-10		1300	W	3			V	X	X									
			<del> </del>	3		<u> </u>	┢	V	V	1	寸							
MW-13	- —	1425	W		<u> </u>	-	$\left\langle \cdot \right\rangle$	1/	₩	1	-			1			1 /	
MW-15		1345	W	3		<u> </u>	IX.	X						Cic	000 COXBILION 7	APPERO	HATE V	
MW-16		1035	W	3			ΙX	łХ	X	J				111	AD SPACE ARSENT.		BURDINLAR.	
MN-17		1100	W	3			X	X	X						VOA RESERVATION	4	LS OTHER	
			W	3		+	女		$\downarrow$	1				1 - 1	CESTROATION			
-MW-20		1010			l <u>.</u>		1/						<u> </u>	DEGII	LTS NEEDED			
SAMPLING	DATE)	TIME	SAMPL PERFO		$_{\scriptscriptstyle \cup}$ $<$		/ -	71		<b>,</b>					TER THAN			
COMPLETED	9/11/06	1600	PERFU	KMED 0	<u> </u>	<i>-</i> -		71					_	1		Per Client		TILE
RELEASED BY		7 /	1		)	DA		1.	Tim		- 🛋	RECEIVED	BY_		10 10	٠, , )	DATE	TIME
۸.		(	4	~~		.'9	$/n_{I}$	106	- 7	74S	7	47	<del>7 -</del>	<u> </u>	Sande (	us feature)	2/11/04	
RELEASED BY		<del>/</del>				DA	TE		TIM			RECEIVED					DATE	TIME
						-	1/13/	106	18	570	7	RECEIVED	Sk.	200			9/17/0	6 180
RELACED BY			<del></del>			DA			TIM	=		RECEIVED	BY	1/	0.1	OO	DATE 9/13/0	TIME
Mikola	-					` <i>Ч</i>	; } TE SE	06		2010	7				~ Va		9115/0	2010
SHIPPED VIA						DÁ	TE SE	NT	TIM	ESENT		COOLER#						
ŀ												· · · · · · · · · · · · · · · · · · ·						

2.+2 a

		168	BD ROGE	RS AVENU	E		CON	DUCT	ANAL	YSIS T	O DET	ECT		LAB	McCampbell		DHS#
BLAINE	SAN JO	OSE, CAI	_IFORNI	A 95112-110	<b>3</b> 5							T		ALL ANALYSES MUST ME	T SPECIFICAT	IONS AND DET	ECTION LIMITS SET
			FAX (4	108) 573-777	11									BY CALIFORNIA DHS AND			
TECH SERVICES, INC	ì.	P	HONE (4	108) 573-055	55		ļ							☐ EPA		] RWQCB REG	ION
					1			_						LIA			
CHAIN OF CUSTODY	DTC #	060	311-6	11	١,,		0.	dn				İ		OTHER			
	B15#	Vav	111-5	»L-1	X	7	ln	=				]		SPECIAL INSTRUCTIONS			
CKG En	vironm	ental			CONTAINERS	(8015/8021)	TPHd w/silica gel clean up	gel clean	1			1		SPECIAL ING TRECTIONS			
OUTE					1 ₿	v.	le	1						7 1 D	. CVC Em	aironmontal	
Owens I	3rockwa	ay Glas	s Plant	ː	] ਨੇ		ᇹ	36						Invoice and Report t	o : CKG En	vii Omnicinai	
3600 Al	omada /	Augnue			¥.		50	g						808 Zinfindel Lane,	St Helena, C	A 94574	
3000 AI	ameua 7	Avenue			I ₹		<u> </u>	ij	•			1		1			
Oakland,	CA				I E	ΙĘ	Sil	, ×		ŀ				Attn: Christina Ken	nedy		
		MATRIX	CON	TAINERS	٦ö	<b>9</b>	₹	0		[							•
			ļ		COMPOSITE	<u>⊅£</u>	2	E						Dissolved product in	samples MV	y-2 and Myy-	·b
		S= SOIL W=H <sub>2</sub> 0			Ü	TPHg / BTEX	PH	TPHmo w/silica									1 4 D C 4 4 D C 5 4
SAMPLE I.D. DATE	TIME	# \$ \$	TOTAL		ပ	F		L						ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
	1530	- T	N			X	$\mathbf{X}$	$ \nabla$				Ì				1	
11110 2 11110	770	VO	-/		$\vdash$	(-	/ >	_	<del>                                     </del>	├──						1	
						l			l								
												1				1	
			<u> </u>		₩	╁	<del>                                     </del>	-	1	<del> </del>					<u> </u>	<del>                                     </del>	
			[		1											1	
			1	<u> </u>	1	1											
				<u> </u>	<b>_</b>	ــــــ	-	ļ	<del> </del>	↓					<del></del>	-	
			1	1	1	1		1									
		+	<del></del>		+	<del> </del>		<del> </del>	1	1	† —	r t					
			<u> </u>		<u> </u>	<u> </u>	ļ <u>.</u>	<u> </u>	ļ		ļ				<del> </del>	<del></del>	
					1				1							1	
			<del> </del>	<del> </del>	+	<del> </del>	<del> </del>	<del> </del>	<del> </del>	┼──	+				<u> </u>		
					1		1	l		<u> </u>	1						<u> </u>
						1				Ĭ						1	
		0.145		<u> </u>			<u> </u>		1	1	<u> </u>			RESULTS NEEDED			
SAMPLING DATE	TIME	SAMPL	ING	Y <u> </u>	· /	پرسه ا	10	2						NO LATER THAN	Day Client		
COMPLETED 9/11/	06 1600	PERFO	KNED D		. (	- 4	V ( 5								Per Client	IDATE	TIME
RELEASED BY	1 1	,	<u></u>		DA	TE/	1.	TIME		I	RECI	17/9	BY.	CC. 11.	\	DATE 1/1/(3	وردر
$\sim \sim 10^{-1}$	4		~		9		106	_//	45	, .	7 (	(+)		- (Scrupte Lus)	com)	1= .==	- (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
RELEASED BY	<u></u>				DÁ	TE/13	J	TIME	810	\	RECI	IVED I	BY	<i>N</i> = 1		DATE	TIME
1/4					-	1//3	106		010	<i>'</i>	7 <i>A</i>	1. K	م اسلام	lune		9/13/	
RELEASED BY					DA		,				RECI	EIVED	ву	- f. ii.		DATE	TIME
					' 6	1/17	106	, 2	40	ļ							
				·	ID4	TE SE			E SEN	т	Too	LER#					
SHIPPED VIA					150	06				-							
					- 1			1			I					·	······································

## **CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

5 days

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

WorkOrder: 0609262

ClientID: CKGS

EDF: NO

Requested TAT:

Report to:

Chris Kennedy CKG Environmental 808 Zinfandel Lane

St. Helena, CA 94574

Email: TEL:

TEL: (707) 967-8022 FAX: (707 ProjectNo: Owens Brockway Glass Plant

FAX: (707) 967-8080

PO:

Bill to: Accounts Payable

CKG Environmental 808 Zinfandel Lane

St. Helena, CA 94574

Date Received: 09/13/2006

Date Printed: 09/13/2006

	· · · · · · · · · · · · · · · · · · ·				Requested Tests (See legend below)												
Sample ID	ClientSamplD	Matrix	Collection Date	Hold	1	2	3		4	5	6	7	8	9	10	11	12
0609262-001	MW-5	Water	09/11/2006		A	В				<u> </u>	T		<u> </u>			<u> </u>	1
0609262-002	MVV-6	Water	09/11/2006		Α	8											
0609262-003	MW-7	Water	09/11/2006		Α	В											
0609262-004	MVV-8	Water	09/11/2006		Α	В											<u> </u>
0609262-005	MW-10	Water	09/11/2006		Α	В											
0609262-006	MW-13	Water	09/11/2006		Α	В											<u> </u>
0609262-007	MW-15	Water	09/11/2006		Α	В										1	
0609262-008	MW-16	Water	09/11/2006		Α	В									<u> </u>		
0609262-009	MW-17	Water	09/11/2006		Α	В									L		
0609262-010	MW-20	Water	09/11/2006		Α	В											
0609262-011	MW-2	Water	09/11/2006		Α	В									1		

#### Test Legend:

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

Prepared by: Melissa Valles

#### Comments:

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



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

CKG Environmental	Client Project ID: Owens Brockway Glass Plant	Date Sampled: 09/11/06
808 Zinfandel Lane		Date Received: 09/13/06
St. Helena, CA 94574	Client Contact: Chris Kennedy	Date Extracted: 09/18/06-09/20/06
St. Helena, CA 94574	Client P.O.:	Date Analyzed: 09/18/06-09/20/06

	Gasoline	Range (	C6-C12) Vola	tile Hydrocai	rbons as Gaso	line with BTT	EX and MTBE	*		
Extraction m	nethod: SW5030B		Analy	tical methods: SV	V8021B/8015Cm			Work Order	r: 0609	9262
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-5	w	300,g,h,i		ND	ND	ND	ND	1	89
002A	MW-6	w	700,g,h,i		ND	ND	ND	ND	1	104
003A	MW-7	w	6600,g,h,i		ND<5.0	ND<5.0	ND<5.0	ND<5.0	10	89
004A	MW-8	w	1200,b,m,i		ND	ND	ND	2.1	1	98
005A	MW-10	w	270,b,m		ND	ND	ND	0.81	1	97
006A	MW-13	w	ND,i		ND	ND	ND	ND	1	101
007A	MW-15	w	ND,i		ND	ND	ND	ND	1	96
008A	MW-16	w	ND,i		ND	ND	ND	ND	1	95
009A	MW-17	w	26,000,g,m,h		ND<2.5	36	9.5	79	5	86
010A	MW-20	w	ND	+1-	ND	ND	ND	ND	1	97
011 <b>A</b>	MW-2	w	13,000,g,m,h,i		ND<2.5	4.4	19	60	5	103
									igspace	_
									_	-
-	rting Limit for DF =1;	w	50	5.0	0.5	0.5	0.5	0.5	1	μg/L
	eans not detected at or ve the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

CKG Environmental	Client Project ID: Owens Brockway	Date Sampled: 09/11/06
808 Zinfandel Lane	Glass Plant	Date Received: 09/13/06
St. Helena, CA 94574	Client Contact: Chris Kennedy	Date Extracted: 09/13/06
St. Heidia, CA 94374	Client P.O.:	Date Analyzed: 09/18/06-09/20/06

#### Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons with Silica Gel Clean-Up\*

Extraction method: SW3510	0C/3630C	Analytical n	nethods: SW8015C	Work Order: 0609262				
Lab ID	Client 1D	Matrix	TPH(d)	TPH(mo)	DF	% SS		
0609262-001B	MW-5	w	45,000,b,g,h,i	33,000	10	99		
0609262-002B	MW-6	W	100,000,b,g,h,i	77,000	40	90		
0609262-003B	MW-7	w	310,000,a/m,h,i	150,000	100	117		
0609262-004B	MW-8	w	1800,d,g,b,i	760	1	114		
0609262-005B	MW-10	w	3400,a,g	2600	1	115		
0609262-006B	MW-13	w	ND,i	ND	1	91		
0609262-007B	MW-15	w	56,b,i	ND	1	92		
0609262-008B	MW-16	w	140,g,b,i	550	1	91		
0609262-009B	MW-17	w	2,300,000,a,h	810,000	1000	#		
0609262-010В	MW-20	w	ND	ND	1	105		
0609262-011B	MW-2	w	830,000,a,g,d,h,i	530,000	200	#		

Reporting Limit for DF =1;	w	50	250	μg/L
ND means not detected at or	S	NA	NA	mg/Kg
above the reporting limit	1 °	1771		

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

<sup>#)</sup> cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to matrix interference; k) kerosene/kerosene range; I) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0609262

EPA Method SW8021B/	/8015Cm E	xtraction	SW503	0B	BatchiD: 23731 Spiked Sample ID: 0609262-008/								
Analyte	Sample	Spiked	MS	MS MSD N		LCS	S LCSD	LCS-LCSD	Ad	cceptan	nce Criteria (%)		
, way to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS/MSD	RPD	LCS/LCSD	RPD	
TPH(btex)	ND	60	95.2	95.2	0	98.7	103	4.17	70 - 130	30	70 - 130	30	
МТВЕ	ND	10	104	115	10.8	96.2	97.4	1.20	70 - 130	30	70 - 130	30	
Benzene	ND	10	103	93.4	9.62	100	104	3.19	70 - 130	30	70 - 130	30	
Toluene	ND	10	94.3	83	12.8	93.2	97.1	4.14	70 - 130	30	70 - 130	30	
Ethylbenzene	ND	10	87.6	99.2	12.4	100	103	2.32	70 - 130	30	70 - 130	30	
Xylenes	ND	30	88.3	95	7.27	95	95.3	0.350	70 - 130	30	70 - 130	30	
%SS:	95	10	98	97	0.311	100	100	0	70 - 130	30	70 - 130	30	

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

#### BATCH 23731 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0609262-001	9/11/06 12:30 PM	9/19/06	9/19/06 7:35 AM	0609262-002	9/11/06 12:05 PM	9/19/06	9/19/06 9:47 AM
0609262-003	9/11/06 11:40 AM	9/18/06	9/18/06 4:05 PM	0609262-004	9/11/06 1:25 PM	9/20/06	9/20/06 5:17 AM
0609262-005	9/11/06 1:00 PM	9/20/06	9/20/06 8:45 AM	0609262-006	9/11/06 2:25 PM	9/18/06	9/18/06 2:13 PM
0609262-007	9/11/06 1:45 PM	9/18/06	9/18/06 2:45 PM	0609262-008	3/11/06 10:35 AM	9/18/06	9/18/06 3:16 PM
0609262-009	9/11/06 11:00 AM	9/19/06	9/19/06 7:16 PM	0609262-010	9/11/06 10:10 AM	9/18/06	9/18/06 3:48 PM
0609262-011	9/11/06 3:30 PM	9/19/06	9/19/06 7:47 PM	İ			

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

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

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

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

# cluttered chromatogram; sample peak coelutes with surrogate peak.

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

QA/QC Officer

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com

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

### **QC SUMMARY REPORT FOR SW8015C**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0609262

EPA Method SW8015C	E	xtraction	SW351	0C/3630	<b>C</b>	Batchil	D: 23730	Spiked Sample ID: N/A					
Analyta	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	A	cceptan	ce Criteria (	%)	
Analyte	μg/L	μg/L	% Rec. % Rec. % RPD		% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD		
TPH(d)	N/A	1000	N/A	N/A	N/A	103	107	3.91	N/A	N/A	70 - 130	30	
%SS:	N/A	2500	N/A	N/A	N/A	107	109	1.51	N/A	N/A	70 - 130	30	

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

#### BATCH 23730 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0609262-001	9/11/06 12:30 PM	9/13/06	9/19/06 11:19 PM	0609262-002	9/11/06 12:05 PM	9/13/06	9/20/06 2:37 PM
0609262-003	9/11/06 11:40 AM	9/13/06	9/20/06 5:25 PM	0609262-004	9/11/06 1:25 PM	9/13/06	9/18/06 3:37 PM
0609262-005	9/11/06 1:00 PM	9/13/06	9/18/06 4:46 PM	0609262-006	9/11/06 2:25 PM	9/13/06	9/18/06 5:56 PM
0609262-007	9/11/06 1:45 PM	9/13/06	9/18/06 7:05 PM	0609262-008	3/11/06 10:35 AM	9/13/06	9/19/06 10:09 PM
0609262-009	9/11/06 11:00 AM	9/13/06	9/20/06 2:37 PM	0609262-010	9/11/06 10:10 AM	9/13/06	9/20/06 12:27 AM
0609262-011	9/11/06 3:30 PM	9/13/06	9/20/06 5:25 PM				

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

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

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

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte

