OWENS-BROCKWAY

GLASS CONTAINERS a unit of Owens-Illinois



February 15, 2002

Mr. Barney M. Chan Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577



Subject: Annual Groundwater Monitoring Report

Owens-Brockway Glass Plant - Oakland

Dear Mr. Chan:

The annual monitoring report for Owens-Brockway's Oakland plant is enclosed. Results of this monitoring are consistent with results from previous monitoring events. None of the water samples contained detectable concentrations of BETX which is consistent with historic results. Note consultant findings section 5.2, page 8 of the report. Consequently, I am requesting your approval to discontinue BETX analysis of future samples since they are not constituents of concern in groundwater at this site.

The plant continues to use the static Soakease pads to remove small quantities of product from specified wells. Use of the Soakease pads has eliminated free product from MW-5, MW-7, MW-16 and MW-17. We will continue this recovery activity.

If you have questions regarding the report or product recovery efforts, please give me a call at 510-436-2174.

Sincerely,

Robert C. Neal, P.E.

Robert C. Weal

Environmental Administrator

cc: Mark Tussing
Dwayne Wendler
Jim Hamrick
Merideth Durant - Kennedy/Jenks

Kennedy/Jenks Consultants

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Annual Groundwater Monitoring Report Owens-Brockway Glass Containers

11 February 2002

Prepared for

Owens-Brockway Glass Containers

3600 Alameda Avenue Oakland, California 94601

K/J 950007.30

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Section 1: Introduction

Kennedy/Jenks Consultants (Kennedy/Jenks) prepared this Report on behalf of Owens-Brockway Glass Containers (Owens-Brockway). The groundwater monitoring activities described in this Report were performed in accordance with the Work Plan dated 16 February 2000 (Kennedy/Jenks 2000) submitted to the Alameda County Department of Environmental Health (ACDEH). The ACDEH approved the Work Plan in a letter dated 24 February 2000.

Section 2: Background

The Owens-Brockway plant is located at 3600 Alameda Avenue, Oakland, California (the Site). The Site location is shown on Figure 1.

The Oakland plant was constructed in 1936 and occupies a city block that is bounded by Alameda and Fruitvale Avenues, the Inner Harbor Channel, and 37th and 8th Streets. The plant includes a glass manufacturing operation, warehouses, and paved outdoor storage areas. The Site plan is shown on Figure 2.

2.1 Historical Investigation and Remedial Activities

Historically, fuel oil (or furnace fuel) used to operate the plant was stored in large underground storage tanks (USTs) on the west side of the plant until the late 1980s. Soil containing petroleum hydrocarbons (PHCs) was encountered in July 1986 during construction of a forklift ramp to the plant's basement.

As a result of this discovery, sixteen exploratory soil borings were advanced by Exceltech, Inc. during July 1986 in the vicinity of the ramp, the USTs and the former maintenance building. Eighteen groundwater monitoring wells were subsequently installed at the Site from July 1986 through December 1986, the deepest of which was advanced to approximately 32 feet below ground surface (bgs). The well construction details are summarized in Table 1. The soil and groundwater samples collected in the vicinity of the USTs contained low boiling range (purgeable) PHCs and high boiling range (extractable) PHCs. In addition, benzene, toluene, ethylbenzene and total xylenes (BTEX) were detected in soil and groundwater samples. Several groundwater samples in the vicinity of the tanks and the maintenance shop contained detectable levels of halogenated volatile organic compounds (HVOCs). The results of these activities were documented in Exeltech's February 1987 report entitled *Soil and Groundwater Contamination Investigation*.

In September 1986, a 16,000-gallon fuel oil UST was removed, its source pipeline was capped, and 148 cubic yards of petroleum-impacted soil was excavated and disposed at Chemical Waste Management's Kettleman Hills Class I facility. A 36-inch diameter recovery well was installed in the tank excavation and equipped with a product recovery device in 1987. The original recovery well (R-1) was upgraded and a second recovery well (R-2) was installed near Monitoring Well MW-2 in 1989. The two recovery wells were operated for several months without collecting any PHCs. The inoperable pumps, piping and electrical equipment were removed, and these two wells were filled with concrete in July 2001.

Owens-Brockway also operated four USTs (one 350-gallon, two 8,000-gallon and one 12,000-gallon) located adjacent to the power building. These four USTs were removed and replaced with two double-walled fiberglass, monitored USTs (gasoline and diesel) in 1986. According to Exceltech, visual evidence of releases from these tanks was noted during the removal activities. Three of the monitoring wells (MW-16, MW-17 and MW-18) were installed in the vicinity of these tanks. These gas and diesel USTs, installed in 1986, were removed on 9 October 1998 under the oversight of the Oakland Fire Department.

The September Quarterly Ground-Water Sampling Report, prepared by Ensco Environmental Services in November 1988, reported that the monitoring well network at the Site was sampled six times between April 1987 and September 1988 (Table 2 summarizes the historical groundwater analytical data). The field measurements indicated that several wells contained separate-phase petroleum product.

Since the monitoring wells were initially installed, Wells MW-3 and MW-18 have been destroyed during construction activities at the plant.

2.2 Investigation and Sampling Activities (1997 to Present)

In a letter to Owens-Brockway dated 28 April 1997, ACDEH requested that Owens-Brockway resume groundwater monitoring at the Site. ACDEH requested that Wells MW-1, 2, 5, 6, 7, 8, 9, 10, 13, 15, and 17 be sampled and analyzed for total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd) and motor oil (TPHmo); BTEX; and all wells except MW-13, 15, and 17 should be analyzed for HVOCs and polychlorinated biphenyls (PCBs).

Prior to conducting groundwater sampling, the groundwater depth and petroleum product thickness in Wells MW-2, 5, 6, 7, 8, 9 and 17 were measured twice during the week of 11 August 1997, and then once per week for three consecutive weeks beginning 26 August 1997. Following the thickness measurement in each well, the recoverable petroleum product from each well was removed with a bailer and contained in a 55-gallon drum for disposal to the oil-water separator associated with the plant. Wells MW-5, 6, 7, 9, and 17 were also cleaned by attaching absorbent pads to PVC pipe and swabbing the inside of the casings.

Following the measurement of depth to groundwater and purging operations, groundwater samples were collected on 16 September 1997 from Wells MW-1, 5, 7, 8, 9, 10, 13, 15, and 17. Wells MW-2 and MW-6 contained separate-phase petroleum product; therefore, groundwater samples were not collected from them, although a product sample was obtained from Well MW-2 and analyzed by gas chromatography techniques in order to compare the product sample to hydrocarbon fuel standards ("fingerprinting").

Samples collected from Wells MW-1, 5, 7, 8, 9, 10, 13, 15, and 17 were analyzed for purgeable and extractable petroleum hydrocarbons by EPA Method 8015 Modified and for BTEX by EPA Method 8020. The groundwater samples collected from Wells MW-1, 5, 7, 8, 9, and 10 were also analyzed for HVOCs by EPA Method 8260 and for PCBs by EPA Method 8080.

No HVOCs or PCBs were detected in the samples analyzed. Results of the groundwater analyses for PHCs and BTEX are summarized in Table 2. The chromatogram for the product sample collected from Well MW-2 contained hydrocarbons in the C10 to C22 range; however, the pattern did not match the laboratory's diesel standard. Extractable PHCs (TPHd and TPHmo) were detected in groundwater in all the monitoring wells sampled on 16 September 1997. Purgeable PHCs (TPHg) were detected in the groundwater samples collected from Wells MW-7, 9, and 17. The analytical results typically did not match the gasoline, diesel, and motor oil standards. The results of this sampling event and the product thickness monitoring were presented in the 19 November 1997 letter report prepared by Kennedy/Jenks.

A groundwater monitoring event was conducted on 2 November 1998. Groundwater samples were collected from Wells MW-1, MW-8, MW-10, MW-13, MW-15 and MW-17 following depth to groundwater measurements and purging operations. Five wells (MW-2, MW-5, MW-6, MW-7 and MW-9) were not sampled due to the presence of separate-phase petroleum. The analytical results are presented in Table 2. A detailed description of this monitoring event and the results were provided in the 19 November 1998 report entitled *Groundwater Monitoring Event – 2 November 1998* prepared by Kennedy/Jenks.

On 26 and 27 January 1999, Kennedy/Jenks advanced five soil borings to collect reconnaissance groundwater samples to further assess the extent of PHCs in shallow groundwater downgradient of the western portion of the Site. Groundwater samples collected from Borings KB-3, KB-4 and KB-5 contained PHCs measured as total purgeable petroleum hydrocarbons (TPPHs) and total extractable petroleum hydrocarbons (TEPHs) as well as low concentrations of benzene and total xylenes (Kennedy/Jenks 1999).

On 16 February 2000, Owens-Brockway submitted a Work Plan to ACDEH. The Work Plan described procedures for installation of two shallow groundwater monitoring wells. The proposed locations were MW-19 near Boring KB-5, located on the bank of the Oakland estuary, offsite and downgradient of the Site, and Monitoring Well MW-20 located at the Site, downgradient of Monitoring Well MW-16.

One groundwater monitoring well was installed at the Site on 1 December 2000. Monitoring Well MW-20 was installed in the driveway to the Site, approximately 125 feet south of Monitoring Well MW-16. The initial water sample was collected from the Monitoring Well MW-20 on 11 December 2000.

On behalf of Owens-Brockway, Kennedy/Jenks obtained a permit for destruction of Monitoring Well MW-14 from the ACPW. Monitoring Well MW-14 was destroyed by West Hazmat Drilling under the direction of Kennedy/Jenks on 1 December 2000. Monitoring Well MW-14 was destroyed by pressure grouting.

The annual groundwater monitoring event at the Site was performed in December 2000. As required by the ACDEH, groundwater samples were collected on a quarterly basis from Monitoring Well MW-20 during 2001. The analytical results from these previous monitoring events are presented in Table 2.

2.3 Historical Product Removal Activities

As described in Section 2.1, two product recovery wells were placed in service in 1989 and were operated for several months each without recovering any PHCs. These wells are now closed.

During August and September 1997, as discussed in Section 2.2, recoverable petroleum product was removed from Wells 2, 5, 6, 7, 8, 9 and 17 using a bailer and absorbent pads. This activity did remove small amounts of PHCs, but was labor intensive and was discontinued in October 1997.

On 30 June 1999, Owens-Brockway installed a Petro-TrapTM device in Well MW-2. This device is a static or passive oil skimmer. The Petro-TrapTM was removed several times over the next month to assess its performance. During this time only groundwater was recovered in the device's collection

container. The Petro-Trap[™] and a sample of the Site's petroleum were sent to the manufacturer, EnviroProducts, for inspection and evaluation. According to EnviroProducts, the filter swells in the presence of the petroleum causing the filter to pop out of the holder. This prevents the petroleum from entering the collection container. Envirotech was unable to provide a satisfactory resolution to this problem and Owens-Brockway rescinded their purchase of the Petro-Trap[™].

A Work Plan dated 16 February 2000 addressed the installation of oil absorbent devices in several of the monitoring wells. After the Petro-Trap™ equipment was unsuccessful, other passive/static removal devices were evaluated and Owens-Brockway selected Soakease™ absorbent devices for installation in Wells 2, 5, 6, 7, 8, 9 and 17. This device has replaceable absorbent pads encased in holders, and it was anticipated these devices would work as promised by absorbing PHCs that enter the well casing through the screened interval. Once used, the pads are removed and replaced. The used absorbent pads are stored onsite in a 55-gallon drum pending appropriate offsite disposal.

Section 3: Field Activities

3.1 PHC Product Removal Activities

During the measurement of depth to groundwater in Site wells, Owens-Brockway personnel removed the SoakeaseTM devices in each of the wells and replaced each with a new SoakeaseTM absorbent pad. The used SoakeaseTM pads were stored onsite in a 55-gallon drum pending appropriate offsite disposal.

3.2 Groundwater Monitoring

On 11 and 12 December 2001, twelve monitoring wells (Wells MW-2, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-13, MW-15, MW-16, MW-17, and MW-20) were monitored in accordance with the procedures described in the Work Plan.

In accordance with the Work Plan, Monitoring Wells MW-1, MW-4 and MW-12 were not sampled; Monitoring Wells MW-3 and MW-14 have been destroyed. Groundwater samples were not collected from three wells (MW-2, MW-6, and MW-9). Samples were not collected from Wells MW-2 and MW-6 because they contained separate-phase PHCs. The product thickness was measured and recorded in these two wells. Monitoring Well MW-9 was observed to be flooded and its well casing is damaged. Maintenance personnel also reported that a SoakeaseTM device had been dropped to the bottom of Monitoring Well MW-9 and they had been unable to recover it.

The samples were stored at about 4 degrees Centigrade in a cooled container until delivery under chain-of-custody procedures to STL Chromalab, a California-certified laboratory in Pleasanton, California.

The groundwater samples were submitted for analysis of TPPH and TEPH using EPA Method 8015 modified and for BTEX by EPA Method 8020. The analytical results are summarized in Table 2, and the analytical data reports are included in Appendix A. Well purge and sample forms are included in Appendix B.

3.3 Management of Monitoring Well Purge Water

Purge water generated during sampling was discharged to the onsite oil/water separator.

Section 4: Quality Assurance/Quality Control

In order to validate the groundwater sample results, one duplicate groundwater sample was collected and analyzed by EPA Method 8015 Modified for TPPH and TEPH, and for BTEX by EPA Method 8020. Duplicate samples measure consistency in sampling and analysis. The duplicate sample (MW-DUP), collected from Well MW-10, indicated the analytical results for the duplicate sample were consistent with those for the sample.

A travel blank accompanied the sample container during the monitoring event and was analyzed for BTEX. No analytes were detected in the travel blank.

The analytical data reports indicate that the samples were analyzed within appropriate holding times. With respect to the laboratory quality control procedures, the surrogate recoveries were within acceptable limits with the exception of sample MW-17, in which the surrogate recovery was not reportable due to dilution. Laboratory control spikes and spike duplicates were also within acceptable laboratory control limits.

Section 5: Findings

5.1 Depth to Groundwater and Estimated Gradient

As shown in Table 3, the depth to groundwater measured in the monitoring wells in December 2001 varied from 3.73 feet below ground surface (bgs) in Well MW-20 to 8.35 feet bgs in Well MW-8.

The groundwater elevations are tabulated in Table 3 and presented on Figure 3. On 11 December 2001, the hydraulic gradient was approximately 0.020 feet/foot in a south to southwesterly direction toward the Harbor Channel. This is consistent with historical information.

5.2 Groundwater Sample Analytical Results

As shown in Table 2, the results are consistent with results from previous groundwater monitoring events at the Site.

In samples where TEPH was detected, the analytical data reports indicate that the chromatographic patterns do not match the laboratory standard for diesel fuel.

None of the samples contained detectable concentrations of BTEX. These results from the December 2001 monitoring event are consistent with past results and indicate that BTEX are not constituents of concern in groundwater at the Site.

Section 6: References

- Ensco 1988. September Quarterly Groundwater Sampling and Analysis for O.I. Glass Container Division, S.T.S., 3600 Alameda Avenue, Oakland, California. Ensco Environmental Services, Inc. November 1988.
- Exceltech 1987. Soil and Groundwater Contamination Investigation, Owens-Illinois Glass Container Division, 3600 Alameda Avenue, Oakland, California. Exceltech, Inc. February 1987.
- Kennedy/Jenks 1997. Groundwater Monitoring, Owens-Brockway Oakland Plant, Kennedy/Jenks Consultants. 19 November 1997.
- Kennedy/Jenks 1998. Groundwater Monitoring Event 2 November 1998, Owens-Brockway Oakland Plant. 19 November 1998.
- Kennedy/Jenks 1999. Groundwater Investigation Report, Owens-Brockway Glass Containers, 3600 Alameda Avenue, Oakland, California. 22 April 1999.
- Kennedy/Jenks 2000. Work Plan Owens-Brockway Glass Containers, 3600 Alameda Avenue, Oakland, California. 16 February 2000.
- Kennedy/Jenks 2001. Report on Well Installation and Groundwater Monitoring, Owens-Brockway Glass Containers, 3600 Alameda Avenue, Oakland, California. 27 March 2001.

Tables

Table 1: Summary of Well Construction Details

Well Number	Date Installed	Measurement Elevation ^(a)	Top of Screen ^(b)	Screen Length	Weil Depth ^(c)	Casing Diameter (inches)	Comments
MW-1	9/12/86	16.02	8	21	29	2	
MW-2	9/12/86	17.11	10	20	30	2	
MW-3	9/12/86	15.46	10	20	30	2	Destroyed
MW-4	9/29/86	16.02	8.5	20	28.5	2	TOCE = 18.05 (11/88 report)
MW-5	9/29/96	16.19	8.5	20	28.5	2	
MW-6	9/29/96	17.48	12.5	16	28.5	2	
MW-7	9/30/86	16.11	12.5	11	23.5	2	TOCE = 15.76 (11/88 report)
MW-8	10/22/86	16.57	15	13.5	28.5	2	
MW-9	7/23/86	7.33 ^(d)	5	10	20	2	
MW-10	10/22/86	15.96	10	15	25	2	
MW-11	11/24/86	13.99	10	20	30	2	
MW-12	11/24/86	13.83	11	15	26	2	
MW-13	12/11/86	13.98	9.5	15	24.5	2	
MW-14	11/25/86	14.78	10	15	25	2	Destroyed 12/1/00
MW-15	12/17/86	15.16	9.5	20	29.5	2	
MW-16	12/12/86	13.48	10	14.5	24.5	2	
MW-17	12/15/86	14.17	9.5	15	24.5	2	
MW-18	12/15/86	14.89	9	15	24	· 2	Destroyed
MW-20	12/1/00	12.74	6.9	15	21.9	2	
R-1	1987	NM ^(e)	NA ^(f)	NA	24	36	Closed
R-2	1989	NM	NA	NA	NA	12	Closed

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

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

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

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

⁽e) NM = not measured

⁽f) NA = not available

Table 2: Summary of Groundwater Analytical Results

Well Number	Date Sampled	ΤΡΡΗ ^(a) (μg/l) ^(h)	TEPH ^(b) (mg/l)	O&G ^(c) (mg/l)	B ^(d) (µg/l)	T ^(e) (µg/l)	E ^(f) (µg/l)	X ^(g) (µg/l)
MW-1	9/23/86	<0.01 ⁽ⁱ⁾	NA (I)	25	<10	<10	NA	<10
_	4/9/87	BDL (K)	NA	NA	BDL	BDL	NA	BDL
=	9/16/87 ^(I)	-	_					_
_	12/1/87 (1)	_	-					
_	3/7/88 ^(I)			_				
_	6/8/88 ^(f)			***				
_	9/14/88 ⁽¹⁾					<u> </u>		
_	9/16/97	<50	0.190_	<0.300	<0.5	<0.5	<0.5	<0.5
<u>-</u>	11/2/98	<50	0.160	NA _	<0.5	<0.5	<0.5	<0.5
	12/11/01 ⁽¹⁾		_					
MW-2	4/9/87 ^(m)							
_	9/16/87 ^(m)							
_	12/1/87 ^(m)							
	3/7/88 ⁽¹⁾	-						
	6/8/88 ⁽¹⁾							
_	9/14/88 ^(I)							
	9/16/97 ^(m)							
	11/2/98 ^(m)	_	_	-	_			
-	12/11/01 ^(m)		_					_
MW-3 (n)	9/23/86	<10	NA	18	<10	<10	NA	<10
•	4/9/87	370	NA	NA	BDL	BDL	NA	BDL
•	9/16/87 ^(m)	-		-			<u> </u>	
-	12/1/87 ^(m)		-	_				
•	3/7/88	NA	190	NA	NA	NA	NA	NA
-	6/9/88	NA	16	NA	NA	NA	NA	NA
•	9/14/88 ^(m)		_					
MW-4	10/3/86	20	NA	7.2	< <u>5</u>	<5	NA	<5
-	4/9/87	BDL	NA	NA	BDL	BDL	NA	BDL
•	9/16/87	1.3	0.66	NA	BDL	BDL	NA	BDL
•	12/1/87	BDL	0.100	NA	BDL	BDL	NA	8.9
,	3/7/88	BDL	BDL	NA_	BDL	BDL	NA	BDL
•	6/8/88	BDL	BDL_	NA	BDL	BDL	NA_	BDL
•	9/14/88	BDL	0.100	NA	BDL	BDL	NA_	BDL
MW-5	10/3/86	1,400	NA	24	<5	<5	NA_	6.6
•	4/9/87	54	NA	NA	BDL	BDL	NA	BDL
•	9/16/87	NA	96	NA	NA	NA	NA_	NA
•	12/1/87	NA	2	NA	NA	NA_	NA	NA_
•	3/9/88	NA	BDL	NA	NA	NA_	NA	NA
	6/9/88	NA	12	NA	NA	NA	NA_	NA
	9/14/88	NA	6.3	NA	NA	NA	NA	NA
	9/16/97	<50	7.5	4.1	<0.5	<0.5	<0.5	<0.5
	11/2/98 ^(m)	_		_				
	12/6/00	1,000	7.7	NA	<0.5	<0.5	<0.5	<0.5
	12/12/01	360 ^(q)	5.7 ^(r)	NA	<0.5	<0.5	<0.5	<0.5

Table 2: Summary of Groundwater Analytical Results

Well Number	Date Sampled	ΤΡΡΗ ^(a) (μg/l) ^(h)	TEPH ^(b) (mg/l)	O&G ^(c) (mg/l)	B ^(d) (µg/l)	T ^(e) (µg/l)	Ε ^(f) (μg/l)	Χ ^(g) (μg/l)
MW-6	4/9/87 ^(m)	(I-Q-7	(*** 3 **/					
	9/16/87	NA	400	NA	NA	NA	NA	NA
=	12/1/87	NA	30	NA	NA	NA	NA	NA
-	3/9/88	NA	9.8	NA	NA	NA	NA	NA
***	6/9/88	NA	63	NA	NA	NA	NA	NA
-	9/14/88	NA	140	NA	NA	NA	NA	NA
-	9/16/97 ^(m)		<u>:</u>	_				-
-	11/2/98 ^(m)	_	_	_	_		-	
-	12/11/01 ^(m)	_	_		_		_	
MW-7	10/3/86	260	NA	8	<5	<5	NA	<5
-	4/9/87 ^(m)					-		_
-	9/16/87	· NA	790	NA	NA	NA	NA	NA
-	12/1/87	NA	5.3	NA	NA	NA	NA	NA
•	3/9/88	NA	BDL	NA	NA	NA	NA	NA
-	6/9/88	NA	12	NA	NA	NA	NA	NA
-	9/14/88	NA	67	NA	NA	NA	NA	NA
-	9/16/97	850	26	11	<0.5	<0.5	<0.5	<0.5
-	11/2/98 ^(m)							
-	12/6/00	540	2.6	NA	<0.5	<0.5	<0.5	1.9
-	12/12/01	1,200 ^(q)	8.1 ^(r)	NA	<1.0	<1.0	<1.0	<1.0
MW-8	10/23/86	1,300	NA	14	<0.2	<0.2	NA	<1
10100	4/9/87	73	NA	NA	BDL	BDL	NA	BDL
	9/16/87 ^(m)							
	12/1/87	NA	0.630	NA	NA	NA	NA	NA
	3/9/88	NA	2.6	NA	NA	NA	NA	NA
	6/9/88	NA NA	1.7	NA	NA	NA	NA	NA
	9/14/88	NA	0.150	NA NA	NA	NA NA	NA	NA
	8/12/97 ^(m)		-					
	9/16/97	<50	0.29	<0.300	<0.5	<0.5	<0.5	<0.5
	11/2/98	<50 <50	1.3	NA	<0.5	<0.5	<0.5	<0.5
	12/6/00	<50	0.160	NA NA	<0.5	<0.5	<0.5	<0.5
	12/11/01	<50	<0.05	NA NA	<0.5	<0.5	<0.5	<0.5
MW-9	4/9/87 ^(m)		-				_	
10100	9/16/87	NA	1.3	NA	NA	NA	NA	NA
	12/1/87	NA NA	18	NA	NA	NA	NA	NA
	3/9/88	NA	47	NA	NA	NA	NA	NA
	6/8/88 ^(m)							
	9/14/88 ^(m)		_				_	_
	9/16/97	6,000	19	9	<13	<13	<13	18
	11/2/98 ^(m)	0,000						
	12/6/00	790	69	NA NA	<0.5	<0.5	<0.5	<0.5
	12/11/01 (1)	- 190						_
MW-10	10/23/86	380	NA	7.2	<0.2	<0.2	NA	<0.2
17144-10	4/9/87	300	NA NA	NA	BDL	BDL	NA NA	BDL
	9/16/87	NA	3.8	NA NA	NA	NA	NA	NA
	12/1/87	NA NA	0.59	NA NA	NA NA	NA NA	NA NA	NA NA
	3/8/88	NA NA	BDL	NA NA	NA NA	NA	NA NA	NA NA
	3/0/00	INA	DUL	INA	INA	11/7	NA	13/7

Table 2: Summary of Groundwater Analytical Results

								f1
		TPPH (a)	TEPH (b)	O&G ^(c)	B ^(d)	T (e)	E ^(f)	X (g)
Well Number	Date Sampled	(µg/l) ^(h)	(mg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-10	6/8/88	NA	3.8	NA	NA	NA	NA	NA
Cont'd ~	9/14/88	NA	0.570	NA	NA	NA	NA_	NA
	9/16/97	<50	1.3	<0.300	<0.5	<0.5	<0.5	<0.5
_	11/2/98	<50	1.4	NA	<0.5	<0.5	<0.5	<0.5
	12/6/00	150	0.730	NA	<0.5	<0.5	<0.5	0.70
_	12/6/00 (dup)	160	0.810	NA	<0.5	<0.5	<0.5	0.71
_	12/11/01	210 ^(q)	0.630 ^(r)	NA	<0.5	<0.5	<0.5	<0.5
ale.	12/11/01	160 ^(q)	0.620 ^(r)	NA	<0.5	<0.5	<0.5	<0.5
	(MW-DUP)							
MW-11	12/5/86	<8	NA	1.2	<0.4	<0.4	NA	1.4
-	4/9/87	BDL	NA	NA	BDL	BDL	NA _	BDL
-	9/16/87	BDL	NA	NA	BDL	BDL	NA_	BDL
•	12/1/87	BDL	NA	NA	0.8	BDL	NA_	10
•	3/7/88	BDL	BDL	NA	BDL	BDL_	NA	BDL
-	6/8/88	BDL	BDL	NA	BDL	BDL	NA_	BDL
-	9/14/88	BDL	100	NA	BDL	BDL	NA _	BDL
MW-12	12/5/86	100	NA	2.5	0.49	1	NA	1.3
-	4/9/87	BDL	NA	NA	BDL	BDL	NA	BDL
-	9/16/87	BDL	NA	NA	BDL	BDL	NA	BDL_
-	12/1/87	BDL	NA	NA	BDL	BDL	NA	13
•	3/7/88	BDL	BDL	NA	BDL	BDL	NA	BDL
-	6/8/88	BDL	BDL	NA	BDL	BDL_	NA	BDL
-	9/14/88	BDL	0.120	NA	BDL	BDL	NA	BDL
MW-13	12/24/86	<10	NA	57	<0.2	<0.9	NA	<0.9
•	4/9/87	BDL	NA	NA	BDL	BDL	NA	BDL
•	9/16/87	BDL	NA	NA	BDL	BDL	NA	BDL
•	12/1/87	BDL	NA	NA	1.6	BDL	NA	12
-	3/8/88	7.7	BDL	NA	BDL	BDL	NA	BDL
•	6/8/88	BDL	BDL	NA	BDL	BDL	NA_	BDL
	9/14/88	BDL	0.130	NA	BDL	BDL	NA	BDL
	9/16/97	<50	0.120	<0.300	<0.5	<0.5	<0.5	<0.5
•	11/2/98	<50	0.120	NA	<0.5	<0.5	<0. <u>5</u>	<0.5
•	12/6/00	<50	0.200	NA	<0.5	<0.5	<0.5	<0.5
	12/11/01	<50	0.091 ^(r)	NA	<0.5	<0.5	<0.5	<0.5
MW-14 ⁽ⁿ⁾	12/5/86 ^(o)	<8	NA	3.2	<0.4	<0.2	NA	<0.2
	4/9/87	BDL	NA	NA	BDL	BDL	NA	BDL
	9/16/87	1.7	0.056	NA	BDL	BDL	NA_	BDL
	12/1/87	BDL	0.066	NA	1.2	4	NA	10
	3/7/88	20	BDL	NA	BDL	BDL	NA	BDL
	6/8/88 ⁽¹⁾	_	_	_				-
	9/14/88 ^(f)	_	_	_		-		
MW-15	12/24/86	120	NA	1.6	<0.2	<0.9	NA_	9.2
	4/9/87	BDL	NA	NA	BDL	BDL	NA	BDL
	9/16/87	8.4	BDL	NA	BDL	BDL	NA	BDL
	12/1/87	BDL	NA	NA	3.3	0.84	NA	14
	3/8/88	90	BDL	NA	0.8	BDL	NA	BDL
	6/9/88	53	BDL	NA	BDL	BDL	NA	BDL

Table 2: Summary of Groundwater Analytical Results

Mell Number Date Sampled (µg/I)			TPPH (a)	TEPH (b)	O&G ^(c)	B ^(d)	T ^(e)	E ^(f)	X ^(g)
Control 9/16/97 <50 0.890 0.380 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	Well Number	Date Sampled	(µg/l) ^(h)	(mg/l)	(mg/l)	(µg/l)	(µg/i)	(µg/l)	(µg/i)
11/2/98									
12/6/00 <50 0.400 NA <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	Cont'd								
12/11/01	_	11/2/98							
MW-16	_			0.400					
4/9/87 BDL NA NA BDL BDL NA BDL									
9/16/87 BDL 0.064 NA BDL BDL NA BDL 12/1/87 120 0.150 NA 1 0.37 NA 9.1 3/7/88 10 BDL NA 0.5 BDL NA BDL 6/8/88 BDL BDL NA BDL BDL NA BDL 9/14/88 BDL 0.190 NA BDL BDL NA BDL 9/16/90	MW-16	12/24/86	<10	NA	1.2	<0.2			
12/1/87		4/9/87	BDL	NA	NA	BDL			
3/7/88						BDL			
6/8/88 BDL BDL NA BDL BDL NA BDL 9/14/88 BDL 0.190 NA BDL BDL NA BDL 9/16/97		12/1/87	120	0.150	NA	-			
9/14/88 BDL 0.190 NA BDL BDL NA BDL 9/16/97 (m)									
9/16/97	_	6/8/88	BDL	BDL	NA	BDL	BDL	NA	BDL
12/6/00 <50 0.097 NA <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5			BDL	0.190	NA	BDL	BDL	NA	BDL
12/11/01	_	9/16/97 ^(m)		_	_		_	_	-
MW-17 12/24/86 240 NA 2.4 5 1.2 NA 14 4/9/87 BDL NA NA BDL BDL NA BDL 9/16/87 44 0.680 NA BDL BDL NA 0.55 12/1/87 540 1.3 NA 7.8 2.4 NA 28 3/8/88 4,300 3.8 NA 83 BDL NA 46 6/8/88(0) -		12/6/00	<50	0.097	NA	<0.5	<0.5	<0.5	<0.5
4/9/87 BDL NA NA BDL BDL NA BDL 9/16/87 44 0.680 NA BDL BDL NA 0.55 12/1/87 540 1.3 NA 7.8 2.4 NA 28 3/8/88 4,300 3.8 NA 83 BDL NA 46 6/8/88 ⁽¹⁾	-	12/11/01	<50	<0.050	NA	<0.5	<0.5	<0.5	<0.5
4/9/87 BDL NA NA BDL BDL NA BDL 9/16/87 44 0.680 NA BDL BDL NA 0.55 12/1/87 540 1.3 NA 7.8 2.4 NA 28 3/8/88 4,300 3.8 NA 83 BDL NA 46 6/8/88(0)	MW-17	12/24/86	240	NA	2.4	5	1.2	NA	14
12/1/87 540 1.3 NA 7.8 2.4 NA 28	-	4/9/87		NA	NA	BDL	BDL	NA	BDL
12/1/87 540 1.3 NA 7.8 2.4 NA 28	-	9/16/87	44	0.680	NA	BDL	BDL	NA	0.55
6/8/88 ⁽¹⁾	=		540		NA	7.8	2.4	NA	28
9/14/88	=	3/8/88	4,300	3.8	NA	83	BDL	NA	46
9/16/97	*	6/8/88 ⁽¹⁾	_		_	-	_	_	-
11/2/98 <50 16	~	9/14/88	54,000	64	NA	BDL	BDL	NA	BDL
12/6/00 (p) 340 42 NA <0.5 <0.5 <0.5 <0.5	-	9/16/97	1,900	110	9.6	<0.5	<0.5	<0.5	<0.5
12/11/01 5,300 91 (f) (s) NA <10 <10 <10 <10 <10	-		<50	16	NA	<0.5	<0.5	<0.5	0.6
12/11/01 5,300 91 (f) (s) NA <10 <10 <10 <10 <10	-	12/6/00 ^(p)	340	42	NA	<0.5	<0.5	<0.5	<0.5
4/9/87 BDL NA NA BDL BDL NA BDL 9/16/87 BDL 0.480 NA BDL BDL NA BDL 12/1/87 BDL 0.18 NA BDL BDL NA 6.6 3/7/88 BDL BDL NA BDL BDL NA BDL 6/8/88 BDL BDL NA BDL BDL NA BDL 9/14/88 BDL 0.190 NA BDL BDL NA BDL MW-20 12/11/00 <50	-		5,300 ^(q)	91 ^{(r) (s)}	NA	<10	<10	<10	<10
4/9/87 BDL NA NA BDL BDL NA BDL 9/16/87 BDL 0.480 NA BDL BDL NA BDL 12/1/87 BDL 0.18 NA BDL BDL NA 6.6 3/7/88 BDL BDL NA BDL BDL NA BDL 6/8/88 BDL BDL NA BDL BDL NA BDL 9/14/88 BDL 0.190 NA BDL BDL NA BDL MW-20 12/11/00 <50	MW-18 ⁽ⁿ⁾	12/24/86	<20	NA	1.6	<0.3	<0.3	NA	0.99
12/1/87 BDL 0.18 NA BDL BDL NA 6.6 3/7/88 BDL BDL NA BDL BDL BDL NA BDL BDL BDL NA BDL BD	-			NA	NA	BDL	BDL	NA	BDL
3/7/88 BDL BDL NA BDL BDL NA BDL 6/8/88 BDL BDL NA BDL BDL NA BDL 9/14/88 BDL 0.190 NA BDL BDL NA BDL MW-20 12/11/00 <50	-	9/16/87	BDL	0.480	NA	BDL	BDL	NA	BDL
6/8/88 BDL BDL NA BDL BDL NA BDL 9/14/88 BDL 0.190 NA BDL BDL NA BDL MW-20 12/11/00 <50	-	12/1/87	BDL	0.18	NA	BDL	BDL	NA	6.6
9/14/88 BDL 0.190 NA BDL BDL NA BDL MW-20 12/11/00 <50	-	3/7/88	BDL	BDL	NA	BDL	BDL	NA	BDL
MW-20	-	6/8/88	BDL	BDL	NA	BDL	BDL	NA	BDL
MW-20	•	9/14/88	BDL	0.190	NA	BDL	BDL	NA	BDL
4/6/01 ^(t) <50 0.057 NA <0.5 <0.5 <0.5 <0.5 7/6/01 <50	MW-20				NA	<0.5	<0.5	<0.5	<0.5
7/6/01 <50 0.120 NA <0.5 <0.5 <0.5 <0.5 9/19/01 <50 0.160 NA <0.5 <0.5 <0.5 <0.5	-		<50		NA	<0.5	<0.5	<0.5	<0.5
9/19/01 <50 0.160 NA <0.5 <0.5 <0.5 <0.5	-								<0.5
	•								<0.5
	-								

Table 2: Summary of Groundwater Analytical Results

- (a) TPPH = total purgeable petroleum hydrocarbons using EPA Method 8015 modified.
- (b) TEPH = total extractable petroleum hydrocarbons using EPA Method 8015 modified. Value listed for samples collected in December 2000 is value reported by lab as TPH diesel. Sample chromatographic patterns did not match lab standard for diesel.
- (c) O&G = total oil and grease.
- (d) B = benzene using EPA Method 8020
- (e) T = toluene using EPA Method 8020
- (f) E = ethylbenzene using EPA Method 8020
- (g) X = total xylenes using EPA Method 8020
- (h) $(\mu g/l)$ = micrograms per liter; (mg/l) = milligrams per liter
- (i) <= analyte not present in the sample at or above the indicated detection limit
- (j) NA = not analyzed
- (k) BDL = below detection limit; actual limit not available for compilation of this table.
- (I) Not sampled; well inaccessible.
- (m) Not sampled; separate-phase petroleum product present.
- (n) Well destroyed.
- (o) Other volatile organic compounds were detected in the 12/5/86 sample collected from Well MW-14 using EPA Method 8010 (the sum of 1,1,2,2-tetrachloroethane, 1,1,1,2-tetrachloroethane and perchloroethene was 190 μg/l).
- (p) Sample collected from MW-17 on 12/6/00 was also analyzed for MtBE. MtBE was not detected, with a detection limit of 25 μg/l (raised due to interference from non-target compounds).
- (q) Value listed for samples collected in December 2001 is value reported by the laboratory as gasoline. Hydrocarbon reported in the gasoline range does not match laboratory gasoline standard.
- (r) Value listed for samples collected in December 2001 is value reported by lab as TPH diesel. Sample chromatographic patterns did not match laboratory standard for diesel.
- (s) Sample surrogate recovery not reportable due to required dilution.
- (t) Sample collected from MW-20 on 4/6/01 was also analyzed for MtBE. MtBE was not detected, with a detection limit of 5 μg/l.

Table 3: Summary of Groundwater Depths and Elevations

Well Number	Date Sampled	Depth to Water ^(a) (feet)	Groundwater Elevation ^(b) (feet)
MW-1	9/23/86	NM ^(c)	_
	4/9/87	8.98	7.04
	9/16/87	NM	
	12/1/87	NM	•
	3/7/88	NM	_
	6/8/88	NM	-
	9/14/88	NM	
	9/16/97	9.35	6.67
	11/2/98	9.16	6.86
	12/11/00	NM	-
	12/11/01	NM	-
MW-2	4/9/87	NM	-
	9/16/87	NM	_
	12/1/87	20.19	-3.08
	3/7/88	NM	_
	6/8/88	NM	-
	9/14/88	NM	_
	8/12/97	15.15	1.96
	8/14/97	12.58	4.53
	8/26/97	11.58	5.53
	9/2/97	11.29	5.82
	9/9/97	11.50	5.61
	9/16/97	11.83	5.28
•	11/2/98	12.10	5.01
	12/11/00	12.55	4.56
	12/11/01	11.25	5.86
MW-3 (d)	9/23/86	NM	_
	4/9/87	10.53	4.93
	9/16/87	11.44	4.02
	12/1/87	12.73	2.73
	3/7/88	15.22	0.24
	6/9/88	14.78	0.68
	9/14/88	NM	_
MW-4	10/3/86	NM	-
14144	4/9/87	8.73	7.29
	9/16/87	10.53	5.49
	12/1/87	9.08	6.94
	3/7/88	9.05	6.97
	6/8/88	9.25	6.77
	9/14/88	10.47	5.55
	11/2/98	NM	-
	12/11/00	NM	
	12/11/01	NM	

Table 3: Summary of Groundwater Depths and Elevations

Well Number	Date Sampled	Depth to Water ^(a) (feet)	Groundwater Elevation ^(b) (feet)
MW-5	10/3/86	NM	
IVIVY-O	4/9/87	12.02	4.17
	9/16/87	11.77	4.42
	12/1/87	11.37	4.82
	3/9/88	13.06	3.13
	6/9/88	12.74	3.45
	9/14/88	13.38	2.81
	8/12/97	11.81	4.38
	8/14/97	11.91	4.28
	8/26/97	11.42	4.77
	9/2/97	10.50	5.69
	9/9/97	11.25	4.94
	9/16/97	12.30	3.89
	11/2/98	11.48	4.71
	12/11/00	12.07	4.12
	12/11/01	10.22	5.97
MW-6	4/9/87	13.28	4.20
14144-0	9/16/87	13.40	4.08
	12/1/87	13.04	4.44
	3/9/88	15.00	2.48
	6/9/88	14.56	2.92
	9/14/88	14.90	2.58
		13.96	3.52
	8/12/97		3.57
	8/14/97	13.91	3.90
	8/26/97	13.58	8.57
	9/2/97	8.91	6.57
	9/9/97	10.91	5.52
	9/16/97	11.96	
	11/2/98	13.20	4.28 3.62
	12/11/00	13.86	
	12/11/01	11.38	6.10
MW-7	10/3/86	NM	
	4/9/87	12.13	3.98
	9/16/87	12.29	3.82
	12/1/87	11.24	4.87
	3/9/88	11.85	4.26
	6/9/88	12.46	3.65
	9/14/88	12.97	3.14
	8/12/97	11.91	4.20
	8/14/97	11.83	4.28
	8/26/97	11.00	5.11
	9/2/97	10.83	5.28
,	9/9/97	11.58	4.53
	9/16/97	12.15	3.96
	11/2/98	12.24	3.87
	12/11/00	12.29	3.82
	12/11/01	11.31	4.80

Table 3: Summary of Groundwater Depths and Elevations

Well Number	Date Sampled	Depth to Water ^(a) (feet)	Groundwater Elevation (feet)
MW-8	10/23/86	NM	
14171 -0	4/9/87	10.35	6.22
	9/16/87	10.71	5.86
	12/1/87	9.89	6.68
	3/9/88	9.61	6.96
	6/9/88	9.96	6.61
	9/14/88	10.71	5.86
	8/12/97	10.04	6.53
	9/16/97	9.90	6.67
	11/2/98	9.80	6.77
	12/11/00	9.78	6.79
	12/11/01	8.22	8.35
MW-9 ^(e)	4/9/87	NM	-
IVIVV-3	9/16/87	NM	
	12/1/87	6.83	
	3/9/88	6.44	_
	6/8/88	NM	-
	9/14/88	7.70	_
	8/12/97	6.83	
	8/14/97	6.46	
	8/26/97	6.29	_
	9/2/97	6.33	
	9/9/97	6.58	_
	9/16/97	6.62	
	11/2/98	6.90	
	12/11/00	6.95	
	12/11/01	NM	
MW-10	10/23/86	NM	
14144-10	4/9/87	10.29	5.67
	9/16/87	11.19	4.77
	12/1/87	10.08	5.88
	3/8/88	10.36	5.60
	6/8/88	10.89	5.07
	9/14/88	11.34	4.62
	9/16/97	10.27	5.69
	11/2/98	10.30	5.66
	12/11/00	10.56	5.40
	12/11/01	8.74	7.22
MW-11	12/5/86	<u> </u>	<u> </u>
IVIV V ~ 1 1	4/9/87	9.02	4.97
	9/16/87	9.96	4.03
	12/1/87	9.44	4.55
	3/7/88	9.31	4.68
	6/8/88	9.42	4.57
	9/14/88	9.10	4.89
	11/2/98	NM	1.00

Table 3: Summary of Groundwater Depths and Elevations

Well Number	Date Sampled	Depth to Water ^(a) (feet)	Groundwater Elevation (feet)
MW-11	12/11/00	NM	
Cont'd	12/11/01	NM	_
MW-12	 	NM	<u>-</u>
IVIVV - 1 Z	12/5/86		7.00
	4/9/87	6.83 7.80	6.03
	9/16/87	7.59	6.24
	12/1/87 3/7/88	7.02	6.81
		7.02	6.45
	6/8/88		5.69
	9/14/88	8.14	5.09
	11/2/98	NM NM	
	12/11/00	NM	
	12/11/01	NM	
MW-13	12/24/86	NM_	
	4/9/87	10.79	3.19
	9/16/87	10.98	3.00
	12/1/87	10.21	3.77
	3/8/88	10.51	3.47
	6/8/88	10.85	3.13
	9/14/88	10.93	3.05
	9/16/97	10.55	3.43
	11/2/98	10.98	3.00
	12/11/00	9.67	4.31
	12/11/01	9.69	4.29
MW-14 ^(a)	12/5/86	NM	_
	4/9/87	7.17	7.61
	9/16/87	8.78	6.00
	12/1/87	8.26	6.52
	3/7/88	7.26	7.52
	6/8/88	NM	_
	9/14/88	NM	-
	11/2/98	NM	-
	12/11/00	NM	-
MW-15	12/24/86	NM	_
	4/9/87	11.88	3.28
	9/16/87	11.77	3.39
	12/1/87	11.25	3.91
	3/8/88	11.24	3.92
	6/9/88	12.15	3.01
	9/14/88	12.34	2.82
	9/16/97	11.92	3.24
	11/2/98	11.60	3.56
	12/11/00	11.95	3.21
	12/11/01	10.80	4.36

Table 3: Summary of Groundwater Depths and Elevations

Well Number	Date Sampled	Depth to Water ^(a) (feet)	Groundwater Elevation ^{(t} (feet)
MW-16	12/24/86	NM	_
	4/9/87	9.47	4.01
	9/16/87	10.07	3.41
	12/1/87	9.23	4.25
	3/7/88	9.46	4.02
	6/8/88	9.56	3.92
	9/14/88	9.99	3,49
	9/16/97	7.32	6.16
	11/2/98	NM	-
	12/11/00	9.47	4.01
	12/11/01	7.57	5.91
MW-17	12/24/86	NM	_
	4/9/87	9.95	4.22
	9/16/87	10.59	3.58
	12/1/87	9.87	4.30
	3/8/88	10.10	4.07
	6/8/88	NM	_
	9/14/88	10.58	3.59
	8/12/97	9.54	4.63
	8/14/97	9.58	4.59
	8/26/97	9.25	4.92
	9/2/97	9.50	4.67
	9/9/97	9.58	4.59
	9/16/97	9.74	4.43
	11/2/98	9.96	4.21
	12/11/00	9.84	4.33
	12/11/01	8.74	5.43
MW-18 (d)	12/24/86	NM	
	4/9/87	9.91	4.98
	9/16/87	10.37	4.52
	12/1/87	10.19	4.7
	3/7/88	9.60	5.29
	6/8/88	10.01	4.88
•	9/14/88	10.82	4.07
	12/11/00	NM	-
MW-20	12/11/00	9.81	2.93
····· ••	12/11/01	9.01	3.73

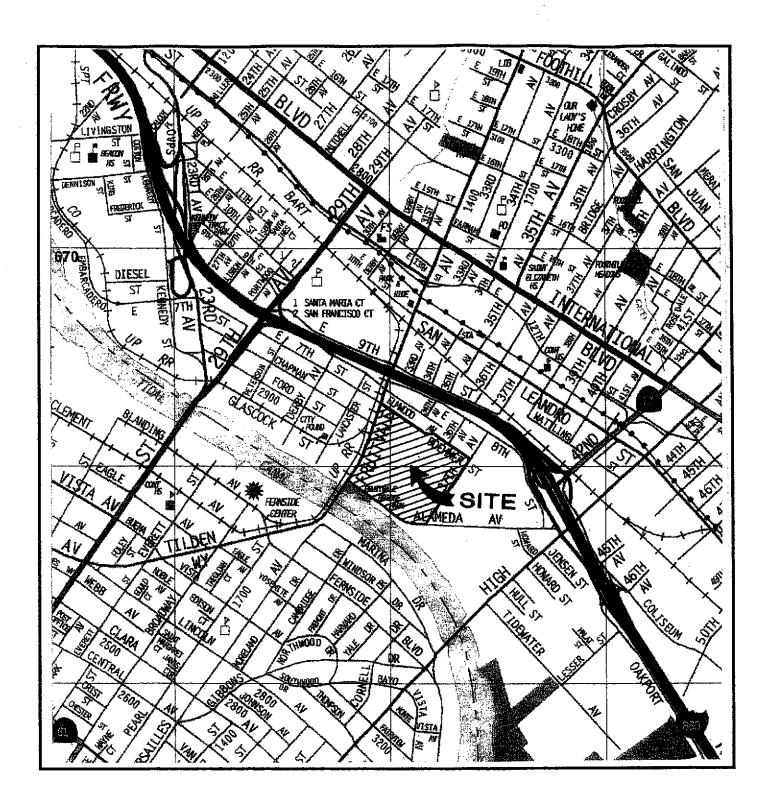
⁽a) Depth to water measured from the top of the well casing. Not corrected for product thickness.

⁽b) Groundwater elevations are reported in feet above mean sea level.

⁽c) NM = not measured

⁽d) Well destroyed.

⁽e) Casing elevation not measured.





Not to Scale

SOURCE

The Thomas Guide Digital Edition 1999 Bay Area, Thomas Bros. Maps

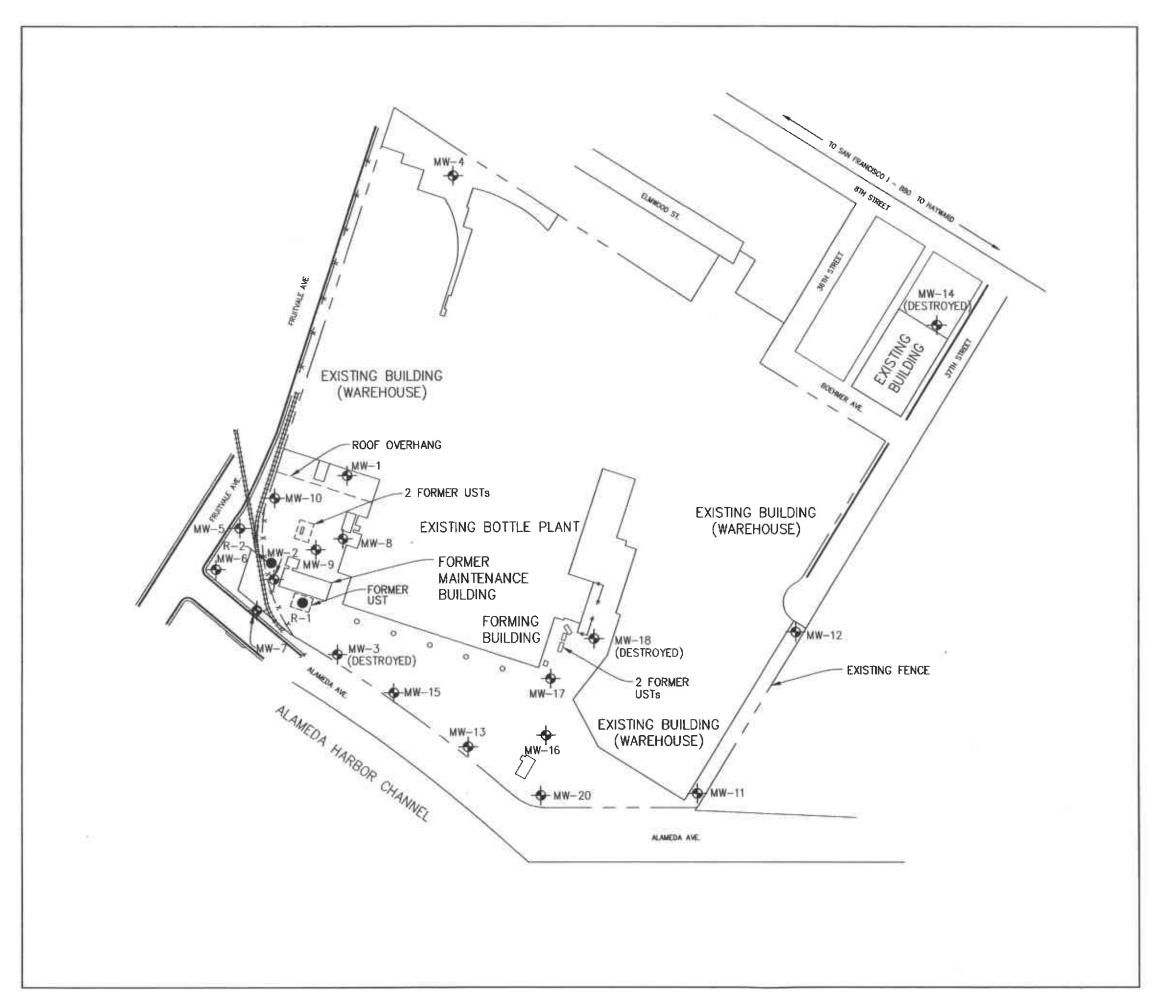
Kennedy/Jenks Consultants

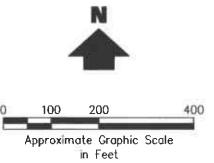
Owens Brockway Oakland, California

Site Location Map

K/J 950007.30 January 2002

Figure 1





LEGEND

→ MW-2 GROUNDWATER MONITORING WELL

• R-1 PRODUCT RECOVERY WELL

SOURCE

Site Plan for Soil and Groundwater Investigation, Exceltech, February 1987.

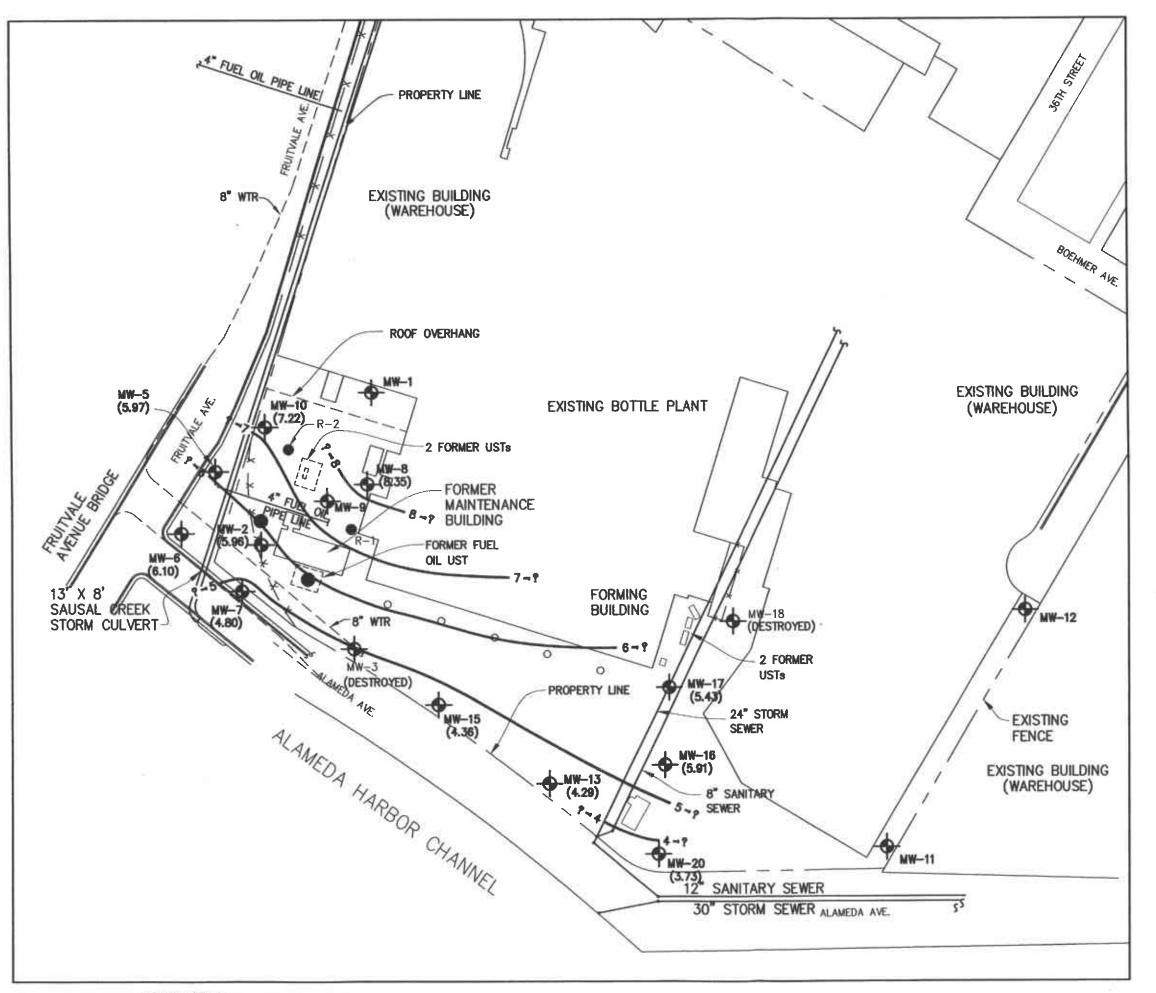
Kennedy/Jenks Consultants

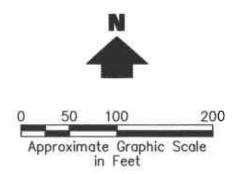
Owens Brockway Oakland, California

Site Plan

K/J 950007.30 January 2002

Figure 2





LEGEND

-₩₩-2

GROUNDWATER MONITORING WELL

● R-1

PRODUCT RECOVERY WELL



GROUNDWATER ELEVATION ISOCONTOUR LINE

(3.62)

GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL, BASED ON 11 DECEMBER 2001 DEPTH TO WATER MEASUREMENTS (NOT CORRECTED FOR PRESENCE OF

FREE PRODUCT)

(NM)

NOT MEASURED

SOURCE

SITE PLAN FOR SOIL AND GROUNDWATER INVESTIGATION, EXCELTECH, FEBRUARY 1987.

NOTE

GROUNDWATER ELEVATION CONTOURS LINES ARE INFERRED.

Kennedy/Jenics Consultants

Owens Brockway Oakland, California

Groundwater Elevation Isocontours

K/J 950007.30 January 2002

Figure 3

Appendix A

Analytical Data Reports and Chain of Custody Forms

Date: December 26, 2001

KENNEDY/JENKS CONSULTANTS

SEVERN TRENT

SERVICES

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com CA DHS ELAP#1094

Kennedy/Jenks-San Francisco

622 Folsom Street San Francisco, CA 94107-1366

Ms. Meredith Durant

Project:

950007.30

Owens Brockway

Dear Meredith,

Attached is our report for your samples received on Wednesday December 12, 2001 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after January 26, 2002 unless you have requested otherwise.

Surida Southy.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: ssidhu@chromalab.com

Sincerely,

Surinder Sidhu

Project Manager

Gas/BTEX by 8015M/8021

SEVERN
TRENT
SERVICES

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 www.sti-inc.com www.chromalab.com

CA DHS ELAP#1094

Kennedy/Jenks-San Francisco☑622 Folsom Street
San Francisco, CA 94107-1366Attn: Meredith DurantPhone: (415) 243-2534 Fax: (415) 896-0999950007.30Project: Owens Brockway

Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
MW-5	Water	12/12/2001 08:50	1
MW-7	Water	12/12/2001 09:40	2
MW-8	Water	12/11/2001 14:50	3
MW-10	Water	12/11/2001 13:50	4
MW-DUP	Water	12/11/2001	5
MW-13	Water	12/11/2001 12:45	6
MW-15	Water	12/11/2001 14:05	7
MW-16	Water	12/11/2001 12:15	8
MW-17	Water	12/11/2001 11:25	9
MW-20	Water	12/11/2001 15:40	10

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

8015M 8021B

5030

STL Chromalab

SEVERN

TRENT SERVICES

1220 Quarry Lane Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Prep Method:

Attn: Meredith Durant

Sample ID: MW-5

950007.30

Owens Brockway

12/12/2001 08:50

Lab Sample ID:

2001-12-0219-001

Received:

12/12/2001 17:40

Extracted:

12/20/2001 11:04

QC-Batch:

2001/12/20-01.01

Sampled: Matrix:

Project:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	360	50	ug/L	1.00	12/20/2001 11:04	g
Benzene	ND	0.50	ug/L	1.00	12/20/2001 11:04	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 11:04	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 11:04	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 11:04	
Surrogate(s)						
Trifluorotoluene	71.9	58-124	%	1.00	12/20/2001 11:04	
4-Bromofluorobenzene-FID	77.7	50-150	%	1.00	12/20/2001 11:04	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

Prep Method:

8015M

5030

Attn: Meredith Durant

8021B

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

SERVICES

SEVERN TRENT

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com

www.chromalab.com

CA DHS ELAP#1094

Sample ID:

MW-7

950007.30

Owens Brockway

Lab Sample ID: Received:

2001-12-0219-002 12/12/2001 17:40

Extracted:

QC-Batch:

12/20/2001 11:34

12/12/2001 09:40

2001/12/20-01.01

Sampled: Matrix:

Project:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1200	100	ug/L	2,00	12/20/2001 11:34	g
Benzene	ND	1.0	ug/L	2.00	12/20/2001 11:34	
Toluene	ND	1.0	ug/L	2.00	12/20/2001 11:34	
Ethyl benzene	ND	1.0	ug/L	2.00	12/20/2001 11:34	
Xylene(s)	ND	1.0	ug/L	2.00	12/20/2001 11:34	
Surrogate(s)						
Trifluorotoluene	74.8	58-124	%	2.00	12/20/2001 11:34	
4-Bromofluorobenzene-FID	77.0	50-150	%	2.00	12/20/2001 11:34	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

8015M

8021B

Prep Method:

5030

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

SEVERN

TRENT

SERVICES

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Attn: Meredith Durant Sample ID:

MW-8

950007.30

Water

Owens Brockway

Received:

2001-12-0219-003 12/12/2001 17:40

Lab Sample ID:

Extracted:

12/20/2001 12:17

Sampled: Matrix:

Project:

12/11/2001 14:50

QC-Batch:

2001/12/20-01.05

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/20/2001 12:17	
Benzene	ND	0.50	ug/L	1.00	12/20/2001 12:17	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 12:17	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 12:17	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 12:17	
Surrogate(s)						
Trifluorotoluene	64.2	58-124	%	1.00	12/20/2001 12:17	
4-Bromofluorobenzene-FID	81.0	50-150	%	1.00	12/20/2001 12:17	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

8015M

STL Chromalab

1220 Quarry Lane Pleasanton, CA 94566

SEVERN

TRENT

SERVICES

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

8021B

5030

Prep Method:

Attn: Meredith Durant

Sample ID: MW-10

950007.30

Owens Brockway

Lab Sample ID:

2001-12-0219-004

Received:

12/12/2001 17:40

Extracted:

12/20/2001 12:05

Sampled:

Project:

12/11/2001 13:50

QC-Batch:

2001/12/20-01.01

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	210	50	ug/L	1.00	12/20/2001 12:05	g
Benzene	ND	0.50	ug/L	1.00	12/20/2001 12:05	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 12:05	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 12:05	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 12:05	
Surrogate(s)						
Trifluorotoluene	74.2	58-124	%	1.00	12/20/2001 12:05	
4-Bromofluorobenzene-FID	79.1	50-150	%	1.00	12/20/2001 12:05	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method: 8

8015M

8021B

Prep Method:

5030

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

SEVERN

TRENT

SERVICES

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Attn: Meredith Durant

MW-DUP

950007.30

Owens Brockway

Lab Sample ID:

2001-12-0219-005

Received:

12/12/2001 17:40

Extracted:

12/20/2001 12:34

Sampled:

Project:

Sample ID:

12/11/2001

QC-Batch:

2001/12/20-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	160	50	ug/L	1.00	12/20/2001 12:34	g
Benzene	ND	0.50	ug/L	1.00	12/20/2001 12:34	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 12:34	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 12:34	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 12:34	
Surrogate(s)						
Trifluorotoluene	78.6	58-124	%	1.00	12/20/2001 12:34	
4-Bromofluorobenzene-FID	74.1	50-150	%	1.00	12/20/2001 12:34	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

8015M 8021B

STL Chromalab

Attn: Meredith Durant

Prep Method:

5030

1220 Quarry Lane Pleasanton, CA 94566

SEVERN

TRENT

SERVICES

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Sample ID: MW-13

950007.30

Owens Brockway

Received:

Lab Sample ID:

2001-12-0219-006 12/12/2001 17:40

Extracted:

12/20/2001 12:49

Sampled:

Project:

12/11/2001 12:45

QC-Batch:

2001/12/20-01.05

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/20/2001 12:49	
Benzene	ND	0.50	ug/L	1.00	12/20/2001 12:49	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 12:49	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 12:49	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 12:49	
Surrogate(s)						
Trifluorotoluene	72.4	58-124	%	1.00	12/20/2001 12:49	
4-Bromofluorobenzene-FID	84.0	50-150	%	1.00	12/20/2001 12:49	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

8015M

8021B

5030

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

SEVERN

TRENT

SERVICES

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Attn: Meredith Durant

MW-15

Lab Sample ID:

2001-12-0219-007

Prep Method:

950007.30 Owens Brockway Received:

12/12/2001 17:40

Extracted:

12/20/2001 13:22

Sampled:

Project:

Sample ID:

12/11/2001 14:05

QC-Batch:

2001/12/20-01.05

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/20/2001 13:22	
Веплепе	ND	0.50	ug/L	1.00	12/20/2001 13:22	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 13:22	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 13:22	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 13:22	
Surrogate(s)						
Trifluorotoluene	58.8	58-124	%	1.00	12/20/2001 13:22	
4-Bromofluorobenzene-FID	65.4	50-150	%	1.00	12/20/2001 13:22	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

MW-16

950007.30

Owens Brockway

12/11/2001 12:15

Test Method:

8015M

Prep Method:

8021B 5030 STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

SEVERN

TRENT

SERVICES

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Attn: Meredith Durant

Lab Sample ID:

2001-12-0219-008

Received:

12/12/2001 17:40

Extracted:

12/20/2001 13:54

QC-Batch:

2001/12/20-01.05

Sampled: Matrix:

Sample ID:

Project:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/20/2001 13:54	
Benzene	ND	0.50	ug/L	1.00	12/20/2001 13:54	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 13:54	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 13:54	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 13:54	
Surrogate(s)						
Trifluorotoluene	72.3	58-124	%	1.00	12/20/2001 13:54	
4-Bromofluorobenzene-FID	86.1	50-150	%	1.00	12/20/2001 13:54	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Attn: Meredith Durant

Test Method:

8015M 8021B

5030

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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CA DHS ELAP#1094

MW-17

Water

950007.30

Prep Method:

2001-12-0219-009

Lab Sample ID:

Received:

12/12/2001 17:40

Extracted:

12/20/2001 13:03

Sampled:

Sample ID:

Project:

12/11/2001 11:25

Owens Brockway

QC-Batch:

2001/12/20-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	5300	1000	ug/L	20.00	12/20/2001 13:03	g
Benzene	ND	10	ug/L	20.00	12/20/2001 13:03	
Toluene	ND	10	ug/L	20.00	12/20/2001 13:03	
Ethyl benzene	ND	10	ug/L	20.00	12/20/2001 13:03	
Xylene(s)	ND	10	ug/L	20.00	12/20/2001 13:03	
Surrogate(s)						
Trifluorotoluene	84.5	58-124	%	1.00	12/20/2001 13:03	
4-Bromofluorobenzene-FID	72.1	50-150	%	1.00	12/20/2001 13:03	

Gas/BTEX by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

8015M

8021B

Prep Method:

5030

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CA DHS ELAP#1094

Sample ID: MW-20

Attn: Meredith Durant

950007.30

Owens Brockway

Lab Sample ID: Received:

2001-12-0219-010 12/12/2001 17:40

Extracted:

12/20/2001 13:33

12/11/2001 15:40

QC-Batch:

2001/12/20-01.01

Water Matrix:

Project:

Sampled:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	86	50	ug/L	1.00	12/20/2001 13:33	g
Benzene	ND	0.50	ug/L	1.00	12/20/2001 13:33	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 13:33	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 13:33	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 13:33	
Surrogate(s)						
Trifluorotoluene	83.6	58-124	%	1.00	12/20/2001 13:33	
4-Bromofluorobenzene-FID	75.9	50-150	%	1.00	12/20/2001 13:33	

Gas/BTEX by 8015M/8021

Water

Batch QC report

Test Method:

Method Blank

MB: 2001/12/20-01.01-003

8015M 8021B

Prep Method: 5030

QC Batch # 2001/12/20-01.01

Date Extracted: 12/20/2001 08:02:

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CA DHS ELAP#1094

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/20/2001 08:02	
Benzene	ND	0.5	ug/L	12/20/2001 08:02	
Toluene	ND	0.5	ug/L	12/20/2001 08:02	1
Ethyl benzene	ND	0.5	ug/L	12/20/2001 08:02	
Xylene(s)	ND	0.5	ug/L	12/20/2001 08:02	
Surrogate(s)					
Trifluorotoluene	90.6	58-124	%	12/20/2001 08:02	
4-Bromofluorobenzene-FID	79.3	50-150	%	12/20/2001 08:02	

Gas/BTEX by 8015M/8021

Batch QC report

Test Method:

8015M 8021B

Prep Method: 5030

%

12/20/2001 08:56

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CA DHS ELAP#1094

Method Blank

Water

88.5

QC Batch # 2001/12/20-01.05 Date Extracted: 12/20/2001 08:56

MB: 2001/12/20-01.05-003

4-Bromofluorobenzene-FID

Rep.Limit Analyzed Compound Result Unit Flag ND 50 ug/L 12/20/2001 08:56 Gasoline 12/20/2001 08:56 ND 0.5 ug/L Benzene 12/20/2001 08:56 ND 0.5 ug/L Toluene 12/20/2001 08:56 ND 0.5 ug/L Ethyl benzene ND 0.5 ug/L 12/20/2001 08:56 Xylene(s) Surrogate(s) % 12/20/2001 08:56 Trifluorotoluene 87.0 58-124

50-150

Batch QC report

Extracted:

Extracted:

Water

12/20/2001 08:32

12/20/2001 09:01

Test Method:

LCS:

8021B

Laboratory Control Spike (LCS/LCSD)

2001/12/20-01.01-004

LCSD: 2001/12/20-01.01-005

Prep Method: 5030

QC Batch # 2001/12/20-01.01

Analyzed: 12/20/2001 08:32

Analyzed: 12/20/2001 09:01

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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ÇA DHS ELAP#1094

Compound	Conc. [ug/	'L]	Exp.Conc. [ug	/L]	Recover	y [%]	RPD	Ctrl.Limits [%]	F	lags
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	106	104	100.0	100.0	106.0	104.0	1.9	77-123	20		
Toluene	110	108	100.0	100.0	110.0	108.0	1.8	78-122	20		
Ethyl benzene	106	102	100.0	100.0	106.0	102.0	3.8	70-130	20		
Xylene(s)	320	315	300	300	106.7	105.0	1.6	75-125	20		
Surrogate(s)											
Trifluorotoluene	535	525	500	500	107.0	105.0		58-124			

Batch QC report

Extracted:

Extracted:

Water

12/20/2001 09:31

12/20/2001 10:00

Test Method:

LCS:

8015M

Laboratory Control Spike (LCS/LCSD)

2001/12/20-01.01-006

LCSD: 2001/12/20-01.01-007

Prep Method: 5030

QC Batch # 2001/12/20-01.01

Analyzed: 12/20/2001 09:31

Analyzed: 12/20/2001 10:00

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CA DHS ELAP#1094

Compound	Conc. [ug/	(L)	Exp.Conc. [ug	/L]	Recover	y [%]	RPD	Ctrl.Limits [%]	FI	lags
	LCS	LC\$D	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	487	495	500	500	97.4	99.0	1.6	75-125	20		
Surrogate(s)											
4-Bromofluorobenzene-	376	374	500	500	75.2	74.8		50-150			ļ

Batch QC report

Extracted:

Extracted:

Water

12/20/2001 10:33

12/20/2001 11:05

Test Method:

LCS:

8015M

Laboratory Control Spike (LCS/LCSD)

2001/12/20-01.05-006

LCSD: 2001/12/20-01.05-007

Prep Method: 5030

Analyzed:

12/20/2001 10:33

QC Batch # 2001/12/20-01.05

Analyzed: 12/20/2001 11:05

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CA DHS ELAP#1094

Compound	Conc. [ug	/L]	Exp.Conc. [uç	g/L]	Recover	у [%]	RPD	Ctrl.Limits [[%]	F	lags
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	416	458	500	500	83.2	91.6	9.6	75-125	20		
Surrogate(s)											
4-Bromofluorobenzene-	477	522	500	500	95.4	104.4		50-150			

Batch QC report

Extracted:

Extracted:

Water

12/20/2001 09:28

12/20/2001 10:01

Test Method:

LCS:

8021B

Laboratory Control Spike (LCS/LCSD)

2001/12/20-01.05-025

LCSD: 2001/12/20-01.05-026

Prep Method:

Analyzed:

5030

12/20/2001 09:28

QC Batch # 2001/12/20-01.05

Anaiyzed: 12/20/2001 10:01

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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CA DH\$ ELAP#1094

Compound	Conc. [ug/L]	Exp.Conc.	[ug/L]	Recover	y [%]	RPD	Ctrl.Limits [%]	F	lags
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	97.0	96.2	100.0	100.0	97.0	96.2	0.8	77-123	20		
Toluene	89.1	88.0	100.0	100.0	89.1	88.0	1.2	78-122	20		
Ethyl benzene	93.0	92.9	100.0	100.0	93.0	92.9	0.1	70-130	20		
Xylene(s)	275	273	300	300	91.7	91.0	0.8	75-125	20		
Surrogate(s)											
Trifluorotoluene	457	476	500	500	91.4	95.2		58-124	0		

Gas/BTEX by 8015M/8021

Legend & Notes

Test Method: 8021B

8015M

Prep Method:

5030

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CA DHS ELAP#1094

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Gas/BTEX Compounds by 8015M/8021



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CA DHS ELAP#1094

Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
TRIP BLANK	Water	12/12/2001	11

Gas/BTEX Compounds by 8015M/8021

Kennedy/Jenks-San Francisco

Test Method:

8021B

Prep Method:

5030

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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CA DHS ELAP#1094

Sample ID: TRIP BLANK
Project: 950007.30

Attn: Meredith Durant

Lab Sample ID:

2001-12-0219-011

Received:

12/12/2001 17:40

Extracted:

12/20/2001 11:45

Sampled: 12/12/2001

Matrix:

Water

Owens Brockway

QC-Batch:

2001/12/20-01.05

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Benzene	ND	0.50	ug/L	1.00	12/20/2001 11:45	
Toluene	ND	0.50	ug/L	1.00	12/20/2001 11:45	
Ethyl benzene	ND	0.50	ug/L	1.00	12/20/2001 11:45	
Xylene(s)	ND	0.50	ug/L	1.00	12/20/2001 11:45	
Surrogate(s)						
Trifluorotoluene	71.9	58-124	%	1.00	12/20/2001 11:45	

Gas/BTEX Compounds by 8015M/8021

Batch QC report

Test Method:

Method Blank

8015M

8021B

Prep Method: 5030

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www.chromalab.com CA DHS ELAP#1094

Water

QC Batch # 2001/12/20-01.05

MB: 2001/12/20-01.05-003

Date Extracted: 12/20/2001 08:56

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Benzene	ND	0.5	ug/L	12/20/2001 08:56	
Toluene	ND	0.5	ug/L	12/20/2001 08:56	}
Ethyl benzene	ND	0.5	ug/L	12/20/2001 08:56	
Xylene(s)	ND	0.5	ug/L	12/20/2001 08:56	
Surrogate(s)					
Trifluorotoluene	87.0	58-124	%	12/20/2001 08:56	

Gas/BTEX Compounds by 8015M/8021

Batch QC report

Extracted:

Extracted:

Water

12/20/2001 09:28

12/20/2001 10:01

Test Method:

LCS:

8021B

Laboratory Control Spike (LCS/LCSD)

2001/12/20-01.05-025

LCSD: 2001/12/20-01.05-026

Prep Method:

5030

QC Batch # 2001/12/20-01.05

Analyzed: 12/20/2001 09:28

Analyzed: 12/20/2001 10:01

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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CA DHS ELAP#1094

Compound	Conc. [Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		Ctrl.Limits [%]		Flags	
·	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	97.0	96.2	100.0	100.0	97.0	96.2	0.8	77-123	20		
Toluene	89.1	88.0	100.0	100.0	89.1	88.0	1.2	78-122	20		
Ethyl benzene	93.0	92.9	100.0	100.0	93.0	92.9	0.1	70-130	20		
Xylene(s)	275	273	300	300	91.7	91.0	0.8	75-125	20		
Surrogate(s)											
Trifluorotoluene	457	476	500	500	91.4	95.2		58-124	0		

Total Extractable Petroleum Hydrocarbons (TEPH)

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CA DHS ELAP#1094

Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
MW-5	Water	12/12/2001 08:50	1
MW-7	Water	12/12/2001 09:40	2
MW-8	Water	12/11/2001 14:50	3
MW-10	Water	12/11/2001 13:50	4
MW-DUP	Water	12/11/2001	5
MW-13	Water	12/11/2001 12:45	6
MW-15	Water	12/11/2001 14:05	7
MW-16	Water	12/11/2001 12:15	8
MW-17	Water	12/11/2001 11:25	9
MW-20	Water	12/11/2001 15:40	10

Total Extractable Petroleum Hydrocarbons (TEPH)

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Attn: Meredith Durant

Test Method:

8015M

Prep Method: 3510/8015M

1.00

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

Sample ID:

MW-5

Water

Lab Sample ID:

2001-12-0219-001

Tel 925 484 1919 Fax 925 484 1096

Project:

950007.30

Received:

12/12/2001 17:40

12/14/2001 23:19

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Owens Brockway

Extracted:

12/14/2001 10:11

CA DHS ELAP#1094

Sampled: Matrix:

o-Terphenyl

12/12/2001 08:50

90.8

QC-Batch:

60-130

2001/12/14-01.10

%

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	5700	50	ug/L	1.00	12/14/2001 23:19	ndp
Motor Oil	4300	500	ug/L	1.00	12/14/2001 23:19	
Surrogate(s)						

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

Attn: Meredith Durant

Test Method:

8015M

Prep Method:

3510/8015M

Sample ID: Project:

Sampled:

MW-7

Lab Sample ID:

2001-12-0219-002

950007.30 Owens Brockway

12/12/2001 09:40

Received:

12/12/2001 17:40

Extracted:

12/14/2001 10:11

QC-Batch:

2001/12/14-01.10

CA DHS ELAP#1094

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Matrix: Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	8100	50	ug/L	1.00	12/14/2001 23:56	ndp
Motor Oil	4500	500	ug/L	1.00	12/14/2001 23:56	
Surrogate(s)						
o-Terphenyl	91.1	60-130	%	1.00	12/14/2001 23:56	

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

Test Method:

8015M

Prep Method:

3510/8015M

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CA DHS ELAP#1094

Attn: Meredith Durant

Sample ID: MW-8

950007.30

Owens Brockway

Lab Sample ID: Received:

2001-12-0219-003 12/12/2001 17:40

12/14/2001 10:11

Extracted: QC-Batch:

2001/12/14-01.10

Sampled: Matrix:

Project:

12/11/2001 14:50

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/14/2001 21:10	
Motor Oil	ND	500	ug/L	1.00	12/14/2001 21:10	
Surrogate(s)						
o-Terphenyl	89.4	60-130	%	1.00	12/14/2001 21:10	

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

8015M Test Method:

3510/8015M

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CA DHS ELAP#1094

Attn: Meredith Durant

Sample ID:

Project:

Matrix:

MW-10

950007.30

Owens Brockway

Received:

Lab Sample ID:

2001-12-0219-004 12/12/2001 17:40

Prep Method:

Extracted:

12/14/2001 10:11

Sampled: 12/11/2001 13:50

Water

QC-Batch:

2001/12/14-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel Motor Oil	630 ND	50 500	ug/L ug/L	1.00 1.00	12/14/2001 21:47 12/14/2001 21:47	ndp
Surrogate(s) o-Terphenyl	89.4	60-130	%	1.00	12/14/2001 21:47	

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

Test Method:

8015M

Prep Method:

3510/8015M

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CA DHS ELAP#1094

Sample ID:	MW-DUP
Project:	950007.30
	Owens Brockway

Attn: Meredith Durant

Lab Sample ID: Received: 2001-12-0219-005 12/12/2001 17:40

Extracted:

12/14/2001 10:11

QC-Batch:

2001/12/14-01.10

Sampled: Matrix:

Water

12/11/2001

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	620	50	ug/L	1.00	12/14/2001 22:24	ndp
Motor Oil	ND	500	ug/L	1.00	12/14/2001 22:24	
Surrogate(s)						
o-Terphenyl	89.7	60-130	%	1.00	12/14/2001 22:24	

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

Attn: Meredith Durant

Test Method:

8015M

Prep Method:

3510/8015M

Sample ID: MW-13 Project:

950007.30 Owens Brockway

12/11/2001 12:45

Lab Sample ID:

2001-12-0219-006

Received:

12/12/2001 17:40

Extracted:

12/14/2001 10:11

Sampled: Matrix:

Water

QC-Batch:

2001/12/14-01.10

CA DHS ELAP#1094

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Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	91	50	ug/L	1.00	12/14/2001 23:01	ndp
Motor Oil	ND	500	ug/L	1.00	12/14/2001 23:01	
Surrogate(s)						
o-Terphenyl	92.2	60-130	%	1.00	12/14/2001 23:01	

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

Test Method:

8015M

3510/8015M

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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CA DHS ELAP#1094

MW-15

950007.30

Owens Brockway

12/11/2001 14:05

Attn: Meredith Durant

Lab Sample ID:

2001-12-0219-007

Prep Method:

Received:

12/12/2001 17:40

Extracted:

12/14/2001 10:11

QC-Batch:

2001/12/14-01.10

Sampled: Matrix:

Sample ID:

Project:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	290	50	ug/L	1.00	12/14/2001 23:39	ndp
Motor Oil	ND	500	ug/L	1.00	12/14/2001 23:39	
Surrogate(s)						
o-Terphenyl	89.4	60-130	%	1.00	12/14/2001 23:39	

Total Extractable Petroleum Hydrocarbons (TEPH)

Test Method:

8015M

Prep Method:

3510/8015M

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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CA DHS ELAP#1094

Kennedy/Jenks-San Francisc	O
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950007.30

Owens Brockway

12/11/2001 12:15

Attn: Meredith Durant

Sample ID: MW-16

Project:

Sampled:

Lab Sample ID:

Received:

2001-12-0219-008 12/12/2001 17:40

12/14/2001 10:11

Extracted: QC-Batch:

2001/12/14-01.10

Matrix:

Compound	Result Re		Rep.Limit Units		Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/15/2001 00:16	
Motor Oil	ND	500	ug/L	1.00	12/15/2001 00:16	
Surrogate(s)						
o-Terphenyl	91.8	60-130	%	1.00	12/15/2001 00:16	

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

Test Method:

8015M

Prep Method:

3510/8015M

Sample ID: MW-17 Project:

Lab Sample ID:

2001-12-0219-009

Attn: Meredith Durant

950007.30 Owens Brockway

12/11/2001 11:25

Received:

12/12/2001 17:40

Extracted:

12/14/2001 10:11

QC-Batch:

Water Matrix:

Sampled:

2001/12/14-01.10

www.chromalab.com CA DHS ELAP#1094

SEVERN

TRENT

SERVICES

STL Chromalab

1220 Quarry Lane Pleasanton, CA 94566

Tel 925 484 1919

Fax 925 484 1096

www.stl-inc.com

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel Motor Oil	91000 10000	1000 10000	ug/L ug/L	20.00 20.00	12/17/2001 11:00 12/17/2001 11:00	ndp
Surrogate(s) o-Terphenyl	NA	60-130	%	20.00	12/17/2001 11:00	sd

Total Extractable Petroleum Hydrocarbons (TEPH)

Kennedy/Jenks-San Francisco

Attn: Meredith Durant

Test Method:

8015M

Prep Method:

3510/8015M

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

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Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

950007.30 Owens Brockway

12/11/2001 15:40

Received:

Lab Sample ID:

2001-12-0219-010 12/12/2001 17:40

Extracted:

12/14/2001 10:11

QC-Batch:

2001/12/14-01.10

Sampled: Matrix:

Project:

Compound	Result	Result Rep.Limit		Dilution	Analyzed	Flag
Diesel	82	50	ug/L	1,00	12/14/2001 23:56	ndp
Motor Oil	ND	500	ug/L	1.00	12/14/2001 23:56	
Surrogate(s)						
o-Terphenyl	107.1	60-130	%	1,00	12/14/2001 23:56	

MB: 2001/12/14-01.10-001

Total Extractable Petroleum Hydrocarbons (TEPH)

Batch QC report

Test Method:

8015M

Prep Method:

3510/8015

М

...

Method Blank Water

QC Batch # 2001/12/14-01.10

Date Extracted: 12/14/2001 10:11

T R E N T

SEVERN

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Diesel Motor Oil	ND ND	50 500	ug/L ug/L	12/14/2001 18:17 12/14/2001 18:17	
Surrogate(s) o-Terphenyl	82.4	60-130	%	12/14/2001 18:17	

Total Extractable Petroleum Hydrocarbons (TEPH)

Batch QC report

Extracted:

Extracted:

Water

12/14/2001 10:11

12/14/2001 10:11

Test Method:

LCS:

8015M

Laboratory Control Spike (LCS/LCSD)

2001/12/14-01.10-002

LCSD: 2001/12/14-01.10-003

Prep Method: 3510/8015M

QC Batch # 2001/12/14-01.10

Analyzed: 12/14/2001 18:55

Analyzed: 12/14/2001 19:32

STL Chromalab 1220 Quarry Lane Pleasanton, CA 94566

SEVERN

TRENT

SERVICES

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Compound	Conc. [ug/L]	Exp.Conc. [ug/L]		Recover	Recovery [%]		Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	898	897	1250	1250	71.8	71.8	0.0	60-130	25		
Surrogate(s)]	
o-Terphenyl	17.5	17.9	20.0	20.0	87.4	89.7		60-130	0		

Total Extractable Petroleum Hydrocarbons (TEPH)

Legend & Notes

Test Method:

8015M

Prep Method:

3510/8015M

SEVERN
TRENT
SERVICES

STL Chromatab 1220 Quarry Lane Pleasenton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP#1094

Analyte Flags

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

Analyte Flags

sd

Surrogate recovery not reportable due to required dilution.

63626 Sample Chain-of-Custody/Analysis Request Kennedy/Jenks Consultants 2001-12-0219 Possible Hazards Site Owens Brocking Company Kinney Jerks

Project No. 950007.30 Address 62 Fulson S Lab Destination STL Chrone Lab Sun Francisco CA9467 415 896 0999 Sampler Name J. Farry Carrier/Way Bill No. 21400850 Mw -5 XX 217,0940 MW-7 Ý mw-8 12 1101 1450 12/11/01 1350 MW-10 V 12/11/01 MW-DUP 2141 1245 mw-13 mw-ls 12/11/01/1405 XX × mw-16 1215 14/1/01 1125 MW-17 X X 1545 1545 MW-ZO X inde:

- (1) Write only one sample number in each space.
- (2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
- (3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
- (4) Preservation of sample.
- (5) Write each analysis requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

March March 18 and				leach i de ibraile i			
Print Name in	Signature F 25	Company	Date 1 Time	Print Name (4)	(A) (A) Signature (A)	Company	Date Time
Jasa Farrell	Juffer -	Remala Jenks	12/12/3/30 >	ERIC TAV	Tel .	SIL-CC	12/12/13:3
EACAM		Sacce	12/12/01/74/1	Harrington	W. Havergton	STL-CL	12/12/01 1740
				J		740	
	Δ.				and the second of	44.5	in the second

Kennedy/Jenks Consultants Sample Chain-of-Custody/Analysis Request Possible Hazards_ Site Owens Brockway Company Kennedy Traks Lab Destination STL Chrone Lab Project No. 950007.30 Sampler Name J, Farrel So. Francisco CA94107 415 896 0999 Telephone 415 249 250 C Carrier/Way Bill No. 2114 0850 Mw 5 X 2 1 Liter Ambers, 3 VOAs 2100940 mw-7 X mw-8 12 110 1450 12/10/ 1350 MW-10 Polor MW-DUP 1245 mw-13 × 12/11/01/1405 X γ MWT16 1215 14/1/01 1125 MW-17 X $|\mathbf{x}|\mathbf{x}$ MW-ZO 14 11/01 1540

- (1) Write only one sample number in each space.
- (2) Specify type of sample(s): Water (W), Solid (S), or indicate type.

Trip Blank

(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.

Actor

- (4) Preservation of sample.
- (5) Write each analysis requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

	40
12/12/1 3	2:≥3
1/7	Carried Co.
	12/12/1 3

Appendix B

Monitoring Well Purge and Sample Forms

Groundwater Depth Measurement Log

Kennedy/Jenks Consultants

Project Name: Owens Brockway Date: 12/11/01

Project Number: 950007.30 Time Start:

Project Manager: Meredith Durant Time End: _____ Page 1 of 1

Well Number	Time	Groundwater Depth	Total Well Depth	Measuring Point Description	Comments
MW-1 =		·			Burried under glass pile
MW-2 ~		11,25			Free product
MW-5		10,22			
MW-6		11.38			Free Product
MW-7		1131			
MW-8		8,22			
MW-9 ,					Casing is partially destroyed Soakease device is at bottom of well
MW-10		824			
MW-13		9.69			
MW-15		10.80			
MW-16		7.57			
MW-17		8,74			
MW-20 ~		9.01			
		-			
			· .	<	

Groundwater Purge and Sample Form

Date: 12/11/0 (

Kennedy/Jenks Consultants

PROJECT NAME: Owens Bookway WELL NUMBER: / PROJECT NUMBER: 950007.30 PERSONNEL:											<u>.</u>			
PROJECT NUMBER:		95c	08	7.30		PERSO	PERSONNEL: Farme!							
STATIC WATER LEV						•			SCRIPTION					
WATER LEVEL MEAS	SUREMENT M	ETHOD:	Su	"Inist	•	PURGE	METH	op: <u>人</u>	of pu	ry ed				
TIME START PURGE	E:					PURGE	DEPT	H (FT)						
TIME END PURGE:			- 1 <u>.</u>											
TIME SAMPLED:	Not	r Se	<u> </u>	<u>ed</u>										
COMMENTS:	30	5 '	of	Produ	ct	in L	ve W	. ,	Not	sam	Please	Page 1		
		L.S.L								d				
WELL VOLUME CALCULATION (FILL IN	TOTAL DE	РТН	ł	DEPTH TO		WATER		1	LTIPLIER I	R (IN)	C	ASING VOLUME		
BEFORE PURGING)	(1)		-	ATER (FT)	-	COLUMN (F)	┤×	0.16	0.64	1.44		(GAL)		
TIME		<u>_</u>			Τ	I.		<u> </u>			<u>.l.,, .l.,</u>			
VOLUME PURGED (GAL)				- -					-		,		
PURGE RATE (GPM)				_ -						·	<u></u>		
TEMPERATURE (°C)				-					_	<u>_</u>			
РН						······								
SPECIFIC CONDUCTIVITY (m (uncorrected)	1cromhos)										· , · · ·			
DISSOLVED OXYGE	N (mg/L)													
eH(MV)Pt-AgC1 r	ef.			<u> </u>										
TURBIDITY/COLOR														
ODOR	- 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -								<u> </u>		- "	-		
DEPTH OF PURGE INTAKE (FT)						· · · · · · · · · · · · · · · · · · ·								
DEPTH TO WATER PURGE (FT)	DURING				-	<u> </u>			***************************************					
NUMBER OF CASIN VOLUMES REMOVED							***********				**************************************			
DEWATERED?														

					rm					cs Consultants
ROJECT N	IAME:	<u>Oc</u>	ucni	Bro	Lluay	WELL	NUMBER	<u>M</u>	w-Z_ nell	
ROJECT N	(UMBER:	951	000	1.30		PERSO	NNEL:	<u>Fai</u>	<u>vell</u>	
AMPLE DA TIME SA	NTA: NMPLED:				cc	MMENTS: _				
							··-··.			
SAMPLIN	NG EQUIPME	NT:				_				
SAMPLE NO.	NO. OF CONTAIN- ERS		PRESER- VATIVE	FIELD FILTRA- TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UND CHAIN-OF-CU TODY AT 4°C	S-IREOUEST	COMMENTS
				į						
		:								
	,									
TOTAL	TER DISPO DISCHARGE AL METHOD	(GAL):				OMMENTS:				
		-				-				
ELL HEA	D CONDITI	ONS CHE	CKLIST (CIRCLE Y	'ES OR NO -	IF NO, AD	D COMM	IENTS):		
ELL SEC	URITY DEV	ICES OK	(BOLLAR	DS, CHRI	STY LID, C	ASING LID	AND LO	CK)?: YES	i NO	
NSIDE O	F WELL HE	AD AND	OUTER - CA	SING DRY	r: YES	NO				
ELL CAS	ING OK?:	YES	NO	٠				,		
OMMENTS	i .		· · · · · · · · · · · · · · · · · · ·							
				J . 1991 L.	 		·			
ENERAL:										

PROJECT NAME:		-			WE	.L NUMBE	R:/	nw-	5		·
PROJECT NUMBER:		95	00	07.30	PE	RSONNEL:	F	irvell			
STATIC WATER LEV	/EL (FT):		7 . آ	22	ME/	ASURING	POINT DE	SCRIPTIO	N: 10	<u> </u>	
WATER LEVEL MEAS											
TIME START PURGE		08	39		PUI	RGE DEPT	ዝ (FT) _	2	5		
TIME END PURGE:		08	77				_				
TIME SAMPLED:		08	\frac{1}{2}	50							
COMMENTS: 5	ght 5	heev	1	abseum	ed in	p	nge u	rater	,		
	<i>,</i>					, , , , , , , , , , , , , , , , , , ,	•			′ .	, , , , , , , , , , , , , , , , , , ,
								···			
WELL VOLUME CALCULATION	TOTAL DE	ЕРТН		DEPTH TO	WATE			LTIPLIER 3 DIAMETE		CA	SING VOLUME
(FILL IN BEFORE	(FT)		_ `	ATER (FT)	COLUMN	(FT) X	2	4	6	┦╸┝	(GAL)
PURGING)	28.5	5		10.22	114.2		0.16	0.64	1.44	E	7.8-9
TIME		083	9	0842	084	r 0	849				
VOLUME PURGED (GAL)	Ø	5	2	- 4		9	`			
PURGE RATE (GPM)				<u></u>	_					
TEMPERATURE (°C)	67,2	<u> </u>	64,2	MA TO THE CONTROL OF						
pH					7.25		.31	•0 <u> </u>		···	
SPECIFIC CONDUCTIVITY (m (uncorrected)	icromhos) cm	88	?0	1110	1130	11	80				
DISSOLVED OXYGE	N (mg/L)	.رر	М								
eH(MV)Pt-AgC1 r	ef.	. بر	M								
TURBIDITY/COLOR	1	gru	4				→>				
ODOR	·	g:1		Popular Company (Company)			->				
DEPTH OF PURGE INTAKE (FT)		2	5	A-rue attached	angas annicio de respecto de la companya de la comp		*				
DEPTH TO WATER PURGE (FT)	DURING	.N	M								
NUMBER OF CASIN VOLUMES REMOVED											
DEWATERED?		N	0	A STATE OF THE PARTY OF THE PAR			->				

	vater Pi					Date:	-		 	ks Consultant
ROJECT N	AME:	Our	., (wac k	way	WELL	NUMBER	Fune		
ROJECT N	UMBÉR:	95	8 66	7.32	2	PERSO	NNEL:	Fure	1/	
AMPLE DA	<u>TA</u> :		0 (To		•		C	en ab.	A. salad	2 km
TIME SA	MPLED:		2 2	2	CL	MMENIS:	<u>Sir</u>	un obs	whom	, · · · · · · · · · · · · · · · · · · ·
DEPIH S	G EQUIPM	-1);	O. co	G				<u> </u>		
SAMPLIN	NO OF	CON-	- '3"	FIELD	VOLUME			SHIPPED UNDER	ANALYSIS	
SAMPLE NO.	CONTAIN- ERS	TAINER	PRESER- VATIVE	FILTRA- TION	FILIFD	TURBIDITY	COLOR	CHAIN-OF-CUS- TODY AT 4°C?		COMMENTS
n w-5	3	WA	Ket			O.		Yes	Acc.	BTEV
w.J-5		1.	2	N		Bosson		Yes	8015	TEPH
•										
TOTAL I	TER DISPO DISCHARGE AL METHOD ESIGNATIO	(GAL): : <u> </u>	il fu	ake s	lyste-	COMMENTS: _				
ELL HEA	D CONDITI	ONS CHE	CKLIST (CIRCLE Y	ES OR NO -	IF NO, AC	D COM	<u>4ENTS)</u> :	 	
ELL SEC	URITY DEV	ICES OK	(BOLLAR	DS, CHRI	ISTY LID, C	CASING LID	AND LO	OCK)?: TES	Ю	
NSIDE O	F WELL HE	AD AND	OUTER CA	SING DRY	17: E S	МО				
ELL CAS	ING OK?:	VES .	NO							
COMMENTS	:									
								<u> </u>		
GENERAL: WEATHE	R CONDIT	IONS:				very	le			
TEMPER	ATURE (SI	PECIFY °	C OR °F)	:						
PROBLE	MS ENCOU	NTERED C	URING PL	IRGING O	R SAMPLING	? <u>k</u>	20			

Other:

Groundwater Purge and Sample Form

Date: 12/12/6/ Kennedy/Jenks Consultants

															
PROJECT NAME:	Ou	N	1	1	3 mck	an.	₩ELL	NUMBE	R:	nw-	6				
PROJECT NUMBER:		75	00	0	7,30)	PERSO	NNEL:		Fan	يار	11			
STATIC WATER LEV	/EL (FT):				,38		MEASU	RING	POINT DE	SCRIPTION	4 : _	T	0	e .	
WATER LEVEL MEAS	SUREMENT M	ETHOE):	2	al nist	-	PURGE	METH	oo:	Bail	<i>e</i> =				
TIME START PURG	E:		<u>.</u>				PURGE	DEPT	H (FT) _	2	۲	<u> </u>			
TIME END PURGE:									_		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
TIME SAMPLED: _															
COMMENTS:	Vicib	le	<u>.</u>	Þ	velue	å	n bum	<u> </u>	Jates) (2	l n	g f	Ss.	mele
							· · ·						/		`
							1		T				T		
WELL VOLUME CALCULATION (FILL IN	TOTAL DE	EPTH			DEPTH TO		WATER COLUMN (F	r)		LTIPLIER G DIAMETE 4				CA:	SING VOLUME
BEFORE PURGING)	26.1	0	-	/	1,38	-		→ x	0.16	0.64	1	.44	1-		· · · · ·
TIME			<u> </u>			T									
VOLUME PURGED (GAL)					_							-		
PURGE RATE (GPM)					- -								-	
TEMPERATURE (°C)		* 1			- -							~~~~		
pH			····			_									
SPECIFIC CONDUCTIVITY (m (uncorrected)	icromhos)														
DISSOLVED OXYGE	N (mg/L)						· ·								
eH(MV)Pt-AgCl r	ef.					_									
TURBIDITY/COLOR			*********					-			-				
ODOR						- -	·								
DEPTH OF PURGE INTAKE (FT)	,		 			_									
DEPTH TO WATER PURGE (FT)	DURING														
NUMBER OF CASIN															
DEWATERED?		Ş													

	water Po			ipio i o	************	Date:				s Consultant
ROJECT I						WELL	NUMBER	:		
SAMPLE D	ATA:				:					
	NG EQUIPME					· . —				
SAMPLE NO.	NO. OF CONTAIN- ERS	CON- TAINER TYPE	PRESER- VATIVE	FIELD FILTRA- TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
									-	
·										
•										
DISPOS DRUM D	SAL METHOD DESIGNATIO AD CONDITI	: N(S)/VO	CKLIST (GAL):_	 	IF NO, AD	D COMM			
	OF WELL HE	•	•			NO FID	AND LU	CK)!: 1E3	NO	
	SING OK?:	YES	NO							
WELL CAS	S:									
								· · ·		
COMMENTS										
COMMENTS						:				
COMMENTS GENERAL WEATHI	: ER CONDITI	ОН5:								

Groundwater	Purge a	nd Sample	Form	Date:	12/12/	<u> </u>	Kenn	edy/Jer	nks C	onsultants
PROJECT NAME: _ PROJECT NUMBER:					INEL: 🖣	"M. W"				
STATIC WATER LE	VEL (FT):	[] C.	1.31	MEASU	RING POI	NT DE	SCRIPTION	: <u>TD</u>	Car.	
WATER LEVEL MEA	SUREMENT M	ETHOD:		PURGE	METHUU:		7	 >		
TIME START PURG	E:	<u> </u>	7	PURGE	DEPTH (FT) _	Same Sales		 	
TIME END PURGE:			17)			-				
TIME SAMPLED:						-				
COMMENTS:	· · · · · · · · · · · · · · · · · · ·	\$ 1	1 Carlotte	Sheen					/	
		<u>.</u>			<u></u>			_		
WELL VOLUME CALCULATION (FILL IN	TOTAL DE		DEPTH TO ATER (FT)	WATER COLUMN (FT) _c	ASING	TIPLIER 1		c	ASING VOLUME
BEFORE PURGING)	23.5		.31	12.19	ᅴ x -	.16	0.64	1.44	- 7	2×1-6
TIME		0925	1930	0938						ļ
VOLUME PURGED (GAL)	ø	***							
PURGE RATE (GPM	()	7								
TEMPERATURE (°C	;)	67.1	65.1	61,2						
рН		7,05	7,09	7.21						
SPECIFIC CONDUCTIVITY (<u>m</u> (uncorrected)	n1cromhos)	1210	1190	1190						
DISSOLVED OXYGE	EN (mg/L)	<i>yn</i>								
eH(MV)Pt-AgCl r	ref.	Nn	est a submodel the species as the last							
TURBIDITY/COLOR	R	dk Brown	Brown	Doors			· · · · · · · · · · · · · · · · · · ·			
ODOR		o'ily	Paragraphy of the Control of the Con							
DEPTH OF PURGE INTAKE (FT)		20	CONTRACTOR OF CO	The transfer and the contract of the contract						
DEPTH TO WATER PURGE (FT)	DURING	NM	- Trough the contract of the c	Company of Street, Str	Dr.					
NUMBER OF CASIN										
DEWATERED?		No								

DJECT N	AME:		95	000	rchway 7.30	WELL I	NEL:	: Mic-	_17 {	
MPLE DA TIME SA DEPTH S	TA: MPLED: AMPLED (F	T):)947 20)	co	MMENTS:	'''			
SAMPLIN SAMPLE NO.	NO. OF CONTAIN- ERS	CON-		FIELD	VOLUME	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
hw-17	3	VOA	4C +	N	FN	Drows		¥15	γο2 Ο	o Tex
nw-1)	2	1 L Anber	N	K.J	Full	B.	*	Yes	TEP	TEX I S H, TOOH
-										
TOTAL DISPOS	TER DISPO DISCHARGE SAL METHOD DESIGNATION	(GAL): D: <u>//</u>	:11w			COMMENTS: _				
					YES OR NO	- IF NO, A	DD COM	MENTS):		· · · · · · · · · · · · · · · · · · ·
INSIDE (OF WELL H	ead and	OUTER C	ASING DR	ISTY LID, (' NO		OCK)?: YES	МО	
GENERAL WEATH	: ER CONDII	TONS:		Son	my l	50"				
TEMPE	RATURE (S	SPECIFY	°C OR °F	·):						

Page 2 of 2

Date: | 3 | 11 | 0 | Kennedy/Jenks Consultants Groundwater Purge and Sample Form WELL NUMBER: ___ MW - ? PROJECT NAME: Overs Orchusel Farrell PROJECT NUMBER: 950007.30 PERSONNEL: OC MEASURING POINT DESCRIPTION: PURGE METHOD: WATER LEVEL MEASUREMENT METHOD: TIME START PURGE: _________1430 PURGE DEPTH (FT) ____25,0 TIME END PURGE: ____ 1445 COMMENTS: Well Box was Flowled with dirty water Recalibrated ett meter WELL VOLUME MULTIPLIER FOR TOTAL DEPTH CASING VOLUME CALCULATION DEPTH TO WATER CASING DIAMETER (IN) WATER (FT) (FILL IN COLUMN (FT) (GAL) (FT) BEFORE X 29.5 8.22 3.2 x 3= 9.6 PURGING) 0.16 0.64 1.44 20,29 TIME 1433 1430 1438 1445 VOLUME PURGED (GAL) 25 5.0 10.0 PURGE RATE (GPM) TEMPERATURE (°C) 61,4 622 80,2 60.5 Нα 6,90 7.24 11.03 T.OK SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm 910 1090 840 Q 40 DISSOLVED OXYGEN (mg/L) NU eH(MV)Pt-AgC1 ref. MIA TURBIDITY/COLOR tun ODOR MAME DEPTH OF PURGE INTAKE (FT) DEPTH TO WATER DURING PURGE (FT) NA NUMBER OF CASING **VOLUMES REMOVED DEWATERED?** No

Groundy	water Pu	urge al	nd San	ıple Fo	rm	Date:	121	Ken	nedy/Jen	nks Consultants
PROJECT N	IAME:	02	ens	300c	kuaj 30	WELL	NUMBER	:	T	
DEPTH S	SAMPLED: SAMPLED (F	FT):	25	,0						
SAMPLE NO.	NO. OF CONTAIN- ERS		PRESER- VATIVE	FIELD FILTRA- TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?		COMMENTS
MU-8	3	VOA	ge e	N	[JI	Jan		Yes	1 1	BIEV
MU-8 MU-8	2	1 to Ander	N	N		Jun			Cois	TEPH
								·		
-	:	ote o								
TOTAL (TER DISPO DISCHARGE AL METHOD	(GAL):		uneta	c systen	:OMMENTS: _				
	ESIGNATIO		e			· · · · · · · · · · · · · · · · · · ·				
WELL SEC	URITY DEV	ICES OK	(BOLLAR	DS, CHRI		_		MENTS): DCK)?: YES	NO	
	ING OK?:			-lood	ul c	ith	Q ra	y water		
					,					
cc: Pro	oject Mana o File:	lger:		plant Committee the Annual Committee that the						A STATE OF THE STA

Other:

Date: 12/11/01 Kennedy/Jenks Consultants **Groundwater Purge and Sample Form** PROJECT NAME: Ouen Brockway WELL NUMBER: PROJECT NUMBER: _____ 950007.00 PERSONNEL: MEASURING POINT DESCRIPTION: 10 STATIC WATER LEVEL (FT): PURGE METHOD: WATER LEVEL MEASUREMENT METHOD: PURGE DEPTH (FT) TIME START PURGE: TIME END PURGE: Dil not sample TIME SAMPLED: with WELL YOLUME MULTIPLIER FOR CALCULATION TOTAL DEPTH WATER CASING DIAMETER (IN) CASING VOLUME DEPTH TO WATER (FT) (FILL IN (FT) COLUMN (FT) 2 (GAL) BEFORE X PURGING) 0.16 0.64 1.44 TIME VOLUME PURGED (GAL) PURGE RATE (GPM) TEMPERATURE (°C) pН SPECIFIC CONDUCTIVITY (m1cromhos) (uncorrected) DISSOLVED OXYGEN (mg/L) eH(MV)Pt-AgC1 ref. TURBIDITY/COLOR ODOR DEPTH OF PURGE INTAKE (FT) DEPTH TO WATER DURING PURGE (FT) NUMBER OF CASING VOLUMES REMOVED **DEWATERED?**

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ROJECT N	IUMBER:					PERSO	NNEL:			
AMPLE DA	TA:									
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SAMPLE NO.		CON-		FIELD	VOLUME FILLED		COLOR	SHIPPED UNDEL CHAIN-OF-CUS- TODY AT 4°C?	- REQUEST	COMMENTS
	-									
			:							
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PURGE WA	TER DISPO DISCHARGE	SAL NOT (GAL):	ES:		(COMMENTS: _				
	AL METHOD ESIGNATIO		_			-				
						- IF NO, AL				
			_					OCK)?: YES	NO	
INSIDE O	F WELL HE	AD AND	OUTER CA	SING DRY	'?: YES	NO				
ELL CAS	ING OK?:	YES	МО							
COMMENTS	•				E-07-78-01		·			
GENERAL: WEATHE		ONS:								W
TEMPER	ATURE (SP	ECIFY °	C OR °F)	:						····
PROBLE	MS ENCOUN	ITERED D	URING PL	JRGING O	R SAMPLING	?	<u> </u>			<u></u>
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Groundwater Purge and Sample Form

Kennedy/Jenks Consultants

Date:	12	uld(
July.			

Kennedy/Jenks Consultants

PROJECT NAME:	Due	ens Br	عد ا	l ware		WELL	NUMBER	t:/	<u>Mw-1</u>	0		
PROJECT NAME: PROJECT NUMBER:		75000	7, 3	30		_ PERSO	NNEL:		m) and	e V		
STATIC WATER LEV						MEASU			ESCRIPTION		٠ ر	
WATER LEVEL MEAS	SUREMENT M	IETHOD:	50	linist		PURGE	METHO	OD:		len		
TIME START PURGE	I:	133	0			PURGE	DEPTI	H (FT)	20			
TIME END PURGE:		124	15			_				··		
TIME SAMPLED:						_						
COMMENTS:		Collec.	ted	MU] and [) JUP .	<u>V</u> e	2 v y S	light	She	eu	
···		** ** *********************************						•		/	•	
								1				
WELL VOLUME CALCULATION	TOTAL DE			PTH TO		WATER		CASIN	LTIPLIER (R (IN)		ASING VOLUME
(FILL IN BEFORE	(FT)	 -		ER (FT)	- }	COLUMN (FT	⊢ x	<u> </u>	4	6		(GAL)
	25.0		8.	.74		16.26		0.16	0.64	1.44	. 5	16 × 3=7,5
TIME		1330	<u> </u>	(334	1	340	134	13				
VOLUME PURGED (G	GAL)	ø		2.5		5.0	7.	5				
PURGE RATE (GPM))								*		-	
TEMPERATURE (°C))	64.2		54.1	10	12.	67.1		· · · · · · · · · · · · · · · · · · ·			
pH				6,80			6.9					
SPECIFIC CONDUCTIVITY (mt) (uncorrected)	1cromhos)	1580		1770		270	15,					
DISSOLVED OXYGE	N (mg/L)	NM	_ -		_ -		Assaura son					
eH(MV)Pt-AgC1 re	ef.	NM			ment discrete	CHANGE STORY OF THE SECOND	a-promonent 430					
TURBIDITY/COLOR		,										
ODOR		Egg	}				2000000	*				
DEPTH OF PURGE INTAKE (FT)		20	_ -	a secure			Mark Science of Street	>				
DEPTH TO WATER I	DURING	NM	-	* The same of the			anne managar and an article and an article and an article and an article and article article and article article and article article article and article article and article artic	>				
NUMBER OF CASING VOLUMES REMOVED				l		Z	-	\$				
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PROJECT N	UMBER:		43	000	130	PERSO	NNEL:	<u> </u>	* /	
SAMPLE DA TIME SA	<u>TA</u> : MPLED:	1	350	<u>'a</u>	co	MMENTS:	ė.	Slight.	Shee.	<u> </u>
DEPTH S	AMPLED (F	T):	20	>		_				
SAMPLIN	IG EQUIPME	ENT:	Pisp	Dal	ler					
SAMPLE NO.	NO. OF CONTAIN- ERS	CON- TAINER TYPE	PRESER- VATIVE	FIELD FILTRA- TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
MW-10	3	Vok	4	Ž		bray	opinsessire	Ye 3	Pole	BTEY
p14-10	2	* T		N	Full	braj		les	801. TE	SON, TOPH
My 44	7	VQ.A.	MC C	N	Kill	Gay		Yes	for	0
mui-Dut	Ž	i Lo Ander	N	N	Full	6-4		Yes	So.	TEPH
TOTAL I	TER DISPO	(GAL):		1,5	c	OMMENTS: _				
DISPOSA	AL METHOD	: <u>[]</u> [<u>l f has</u>	Nr S	<u> </u>					
	ESIGNATIO					· · · · · · · · · · · · · · · · · · ·				
WELL HEA	CONDITI	ONS CHE	CKLIST (CIRCLE Y	'ES OR NO -	IF NO, AD	D COMM	IENTS):	· · · · · · · · · · · · · · · · · · ·	-
WELL SEC	URITY DEV	ices ok	(BOLLAR	DS, CHRI	STY LID, C	ASING LID	AND LO	OCK)?: ÆS	NO	
INSIDE O	F WELL HE	AD AND (OUTER CA	SING DRY	7: (YES)	NO				
WELL CAS	ING OK?:	χ € S)	NO							
COMMENTS	•	THE STATE OF THE S								
										<u> </u>
GENERAL: WEATHE	R CONDITI									
cc: Pro	ject Mana File:	ger:								

Other:

Date: 12 11 10 (Kennedy/Jenks Consultants Groundwater Purge and Sample Form PROJECT NAME: DWAYS BOOKWAY WELL NUMBER: Mal-13 PERSONNEL: Favrell PROJECT NUMBER: 450 007.30 STATIC WATER LEVEL (FT): 9.69 MEASURING POINT DESCRIPTION: TOC__ WATER LEVEL MEASUREMENT METHOD: Solicist PURGE METHOD: Bailer TIME START PURGE: ____(225 TIME END PURGE: 239 TIME SAMPLED: 3245 Que Groken Pluz does not seel COMMENTS: MULTIPLIER FOR WELL VOLUME CASING DIAMETER (IN) CASING VOLUME CALCULATION TOTAL DEPTH DEPTH TO WATER WATER (FT) COLUMN (FT) (GAL) (FILL IN (FT) X REFORE 2500 1531 1.44 2.7×3=9.1 0.16 0.64 PURGING) 9,69 TIME 1252 1239 1228 PCSI VOLUME PURGED (GAL) 2.5 5.0 5.0 PURGE RATE (GPM) TEMPERATURE (°C) 65.2 651 65.4 654 рΗ 7,48 7.737,41 7.32 SPECIFIC CONDUCTIVITY (m1cromhos) (uncorrected) cm 1300 12.50 1210 1300 DISSOLVED OXYGEN (mg/L) NM eH(MV)Pt-AqC1 ref. NM TURBIDITY/COLOR Mear Clean clean ODOR none DEPTH OF PURGE INTAKE (FT) 20 DEPTH TO WATER DURING PURGE (FT) annegation NM NUMBER OF CASING VOLUMES REMOVED DEWATERED?

No

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					k w/	WELL	NUMBER	: Mw-13 Fane		
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AMPLE DA	TA: MPLED: _	,	1245		cc	MMENTS:				
DELIU 3	AMPLED (F	· · / · ·	- (<u> </u>			·	
SAMPLE NO.	NO. OF	CON- TAINER TYPE		FIELD FILTRA- TION	VOLUME FILLED	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
nw-B	3-	VOA	T		Full	alea.		Yes	SOZO	GIEN
Mw-13	2	h-b-	N	N	Full	clem		ĭes	Pols	TERH, TPPH
-										
PURGE WAT TOTAL (TER DISPO DISCHARGE AL METHOD	SAL NOTI (GAL):		1.5 ten 51	ester c	OMMENTS:				
	ESIGNATIO		E	•						
IELL HEAI	CONDITI	ONS CHE	CKLIST (CIRCLE Y	'ES OR NO -	IF NO, AD	D COMM	IENTS):		
IELL SEC	URITY DEV	ICES OK	(BOLLAR	DS, CHRI	STY LID, C	ASING LID	AND LO	OCK)?: (ES)	NO	
NSIDE O	F WELL HE	AD AND	OUTER CA	SING DRY	7: ÆS	NO				
IELL CAS	ING OK?:	YES	NO N							
OMMENTS	:			O.	soken	Pu C	<u>A</u>	ocs nots	ied J	2103
										· · · · · · · · · · · · · · · · · · ·
GENERAL: WEATHE	R CONDITI	ONS :	<u> </u>	runn	y 63					
PROBLE	MS ENCOUN	ITERED D	URING PU	RGING OF	₹ SAMPLING?	<u> </u>				
cc. Dra	fact Mana	oer.	E0-1-403//						, , , , , , , , , , , , , , , , , , , ,	
Job Oth	File:	.Ac. :	Appella Williams			Quant				

Date: 12 11 10 (Kennedy/Jenks Consultants Groundwater Purge and Sample Form WELL NUMBER: MW-15 PROJECT NAME: Owens Brock way PROJECT NUMBER: 950 007,30 PERSONNEL: STATIC WATER LEVEL (FT): 10.80 MEASURING POINT DESCRIPTION: TOC WATER LEVEL MEASUREMENT METHOD: _____Solemist PURGE METHOD: ____ | Rowley TIME END PURGE: 1310 1405 TIME SAMPLED: comments: Allowed well to recharge to 11.40 WELL VOLUME MULTIPLIER FOR CALCULATION TOTAL DEPTH DEPTH TO WATER CASING DIAMETER (IN) CASING VOLUME (FILL IN (FT) WATER (FT) COLUMN (FT) (GAL) BEFORE X PURGING) 10,80 0.64 01.50 0.16 1.44 2.9 x3= 8A 18.7 TIME 1300 1304 1310 VOLUME PURGED (GAL) 4,5 PURGE RATE (GPM) GA HAND N/k TEMPERATURE (°C) 64,1 (41 На 7.12 7,35 73SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm 14140 1450 HHD DISSOLVED OXYGEN (mg/L) NM eH(MV)Pt-AgC1 ref. NM TURBIDITY/COLOR tan tain ODOR NoNE DEPTH OF PURGE 25 INTAKE (FT) DEPTH TO WATER DURING PURGE (FT) NM NUMBER OF CASING **VOLUMES REMOVED** DEWATERED? Yes No No

OJECT N	AME:	_0	urns l	Grecho	· Ø	WELL	NUMBER	: <u>Mw-</u>	15	
OJECT N	UMBER:	<u></u>	1500	X7,3	0	PERSO	NNEL:	Far	ve 11	
MPLE DA TIME SA	MPLED:	14	05		co	MMENTS:				
DEPTH S	AMPLED (F	T):	15	Deil.	e U					
SAMPLE NO.		CON-	PRESER- VATIVE	FIELD FILTRA- TION	VOLUME	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
Aw-J	3	VOA	Her	N.	Full	1t gray		Yes	1 1	otey
w-15"	2	1 h Amber	N	N	Fell	14 gray		Yes	8015	TEPH, TOP
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URGE WAT	TER DISPO DISCHARGE	SAL NOT (GAL):	<u>ES</u> :	4.5	sten c	OMMENTS: _				
	AL METHOD ESIGNATIO					-				-
					'ES OR NO -	· IF NO. AD	D COMM	ENTS):		
								CK)?: (ES)	NÒ	
		•			r: YES	_#**		_		
ELL CAS	ING OK?:	(YES)	NO			•				
OMMENTS	:									
ENERAL: WEATHE	R CONDITI	ONS :		5 m	\$ 65					
TEMPER	ATURE (SF	ECIFY "	C OR "F):						4
PROBLE	MS ENCOUN	ITERED C	DURING P	JRGING O	R SAMPLING	? <u>0</u>	lim	end va	1/42 for	- veclage

Date: 12 11 0 / Kennedy/Jenks Consultants Groundwater Purge and Sample Form PROJECT NAME: Duens Brockway WELL NUMBER: MU-16 PERSONNEL: PROJECT NUMBER: 950 009.30 WATER LEVEL MEASUREMENT METHOD: PURGE DEPTH (FT) _____15 TIME START PURGE: 150 TIME END PURGE: 1208 TIME SAMPLED: 215 COMMENTS: No Plug seck implace MULTIPLIER FOR WELL VOLUME CASING VOLUME CASING DIAMETER (IN) TOTAL DEPTH DEPTH TO WATER CALCULATION (GAL) WATER (FT) COLUMN (FT) (FILL IN (FT) BEFORE χ 2N3-6 20.85 7.57 0.16 0.64 1.44 PURGING) 13,28 TIME 1150 1155 1209 1200 VOLUME PURGED (GAL) 5.0 2.5 6.0 PURGE RATE (GPM) NIA HAND TEMPERATURE (°C) 66,5 66,5 66.5 45.5 рΗ 7.05 17.08 17.08 7.19 SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm 1740 770 1720 740 DISSOLVED OXYGEN (mg/L) NM eH(MV)Pt-AgC1 ref. NM TURBIDITY/COLOR Brown 1000 ODOR howe DEPTH OF PURGE INTAKE (FT) DEPTH TO WATER DURING PURGE (FT) NΜ NUMBER OF CASING **VOLUMES REMOVED** DEWATERED?

TIME SAMPLED:	COMMENTS: COMMENTS: DEPTH SAMPLED: DEPTH SAMPLED (FT): SAMPLE DISPOSAL NOTES: TOTAL DISCHARGE (CAL): DEPUGGE MATER DISPOSAL NOTES: TOTAL DISCHARGE (CAL): MELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS): MELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NO COMMENTS: MELL CASING OK?: YES NO COMMENTS: TEMPERATURE (SPECIFY "C OR "F): PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?	DATEST II		A.c.	, 3	n 6	/			mu-1	6	
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DEPTH SAMPLED (FT): SAMPLING EQUIPMENT: DIP Ba/lo- SAMPLED CONTAIN- TAINER PRESER FIELD VOLUME FILLED TURBIDITY COLOR TODY AT 4°C7 (METHOD) COMMENTS FILL-16 2 1	TIME SAMPLED:	PROJECT N	UMBER:		30 0	707,3		PERSO	NNEL:	Tank	<i>''</i>	
SAMPLE CONTAIN—TAINER PRESER—FIELD VOLUME NO. OF CONTAIN—TAINER PRESER—FIELD VOLUME NO. OF CONTAIN—TAINER PRESER—FILTRA— TAINER PRESER—FILTRA—TION (ml or L) TURBIDITY COLOR TODY AT 4°C? (METHOD) COMMENTS TOTAL DISCHARGE (GAL): DISPOSAL METHOD: DRUM DESIGNATION(S)/VOLUME PER (GAL): WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF MELL HEAD AND OUTER CASING DRY?: YES NO COMMENTS: GENERAL: MEATHER CONDITIONS: GENERAL: MEATHER CONDITIONS: GENERAL: MEATHER CONDITIONS: GENERAL: MEATHER CONDITIONS: TEMPERATURE (SPECIFY °C OR °F):	SAMPLING EQUIPMENT: Disposal No. of Contine Preser Filed No. of Contine Presert Filed No. of	TIME SA	MPLED:			·	C(MMENTS:			·	
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SAMPLE CONTAIN—TAINER PRESET FILTRA— (mi or L) TURBIDITY COLOR TODY AT 4°C? (METHOD) COMMENTS No.	SAMPLE CONTAIN TAINER PRESET FILTRA- NO. TOOY AT 4°C? (METHOD) COMMENTS COLOR TOOY AT 4°C? (METHOD) COMMENTS COLOR TOOY AT 4°C? (METHOD) COMMENTS FULL BOTTOM COLOR TOOY AT 4°C? (METHOD) COMMENTS FULL BOTTOM COMMENTS: COMMENTS: COMMENTS: DISPOSAL MOTES: TOTAL DISCHARGE (GAL): DISPOSAL METHOD: DRUM DESIGNATION(S)/VOLUME PER (GAL): WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS): WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO WELL CASING DK?: YES NO COMMENTS: METHOR CONDITIONS: TEMPERATURE (SPECIFY °C OR °F): PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?	SAMPLIN	G EQUIPME	ENT:	Oisp.	Bail	eso					
SAMPLE CONTAIN—TAINER PRESE. FILTRA— (mi or L) TURBIDITY COLOR TODY AT 4°C? (METHOD) COMMENTS NO. 3 VOA 100 W Full Group Text Prov-16 Z 14 N N N Q Q VOA 100 W TEACH Prov-16 Z 14 N N N Q VOA 100 W TEACH PURGE MATER DISPOSAL NOTES: TOTAL DISCHARGE (GAL): DRUM DESIGNATION(S)/VOLUME PER (GAL): WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO — IF NO, ADD COMMENTS): WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF MELL HEAD AND OUTER CASING DRY?: YES NO MELL CASING OK?: YES NO COMMENTS: GENERAL: MEATHER CONDITIONS: TEMPERATURE (SPECIFY °C OR °F):	SAMPLE CONTAIN TAINER PRESET FILTRA- NO. ERS TYPE VATIVE TION (al or L) TURBIDITY COLOR TODY AT 4°C? (NEMBO) COMMENTS Comparison C		NO. OF	CON-		FIELD	VOLUME			SHIPPED UNDER	ANALYSIS	
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PURGE MATER DISPOSAL NOTES: TOTAL DISCHARGE (GAL): COMMENTS: DISPOSAL METHOD: DRUM DESIGNATION(S)/VOLUME PER (GAL): MELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS): WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NO WELL CASING OK?: YES NO COMMENTS: GENERAL: WEATHER CONDITIONS: TEMPERATURE (SPECIFY °C OR °F):	PURGE MATER DISPOSAL NOTES: TOTAL DISCHARGE (GAL):											
TOTAL DISCHARGE (GAL): COMMENTS: DISPOSAL METHOD: DRUM DESIGNATION(S)/VOLUME PER (GAL): WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS): WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NO WELL CASING OK?: YES NO COMMENTS: GENERAL: WEATHER CONDITIONS: TEMPERATURE (SPECIFY °C OR °F):	TOTAL DISCHARGE (GAL):							Ţ				
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DRUM DESIGNATION(S)/VOLUME PER (GAL): WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS): WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NO WELL CASING OK?: YES NO COMMENTS: GENERAL: WEATHER CONDITIONS: TEMPERATURE (SPECIFY °C OR °F):	DRUM DESIGNATION(S)/VOLUME PER (GAL): MELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS): WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NO WELL CASING OK?: YES NO COMMENTS: GENERAL: WEATHER CONDITIONS: TEMPERATURE (SPECIFY °C OR °F): PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?	IOIAL I	JISCHARGE	(GAL):			C	OMMENTS: _		· · · · · · · · · · · · · · · · · · ·		
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Date: 12/11/01 Kennedy/Jenks Consultants Groundwater Purge and Sample Form WELL NUMBER: PROJECT NAME: OWENS GIVE CHELL PERSONNEL: PROJECT NUMBER: MEASURING POINT DESCRIPTION: 9.00 STATIC WATER LEVEL (FT): WATER LEVEL MEASUREMENT METHOD: Solinist PURGE DEPTH (FT) _____) &TIME END PURGE: ____ | | 20 TIME SAMPLED: Can't detect a sheen COMMENTS: Pur Broken No Cover MULTIPLIER FOR WELL VOLUME CASING VOLUME CALCULATION TOTAL DEPTH DEPTH TO WATER CASING DIAMETER (IN) (GAL) WATER (FT) COLUMN (FT) (FILL IN (FT) BEFORE 2.9 83=75 15.76 0.16 0.64 1.44 PURGING) 6.74 TIME 100 1120 1110 ILIS VOLUME PURGED (GAL) 7 5 2.5 5.0 PURGE RATE (GPM) HANA TEMPERATURE (°C) 600 641 60.1 £2. 6,95 6.90 7.08 7.05 SPECIFIC CONDUCTIVITY (m1cromhos) (uncorrected) cm (20 960 770 850 DISSOLVED OXYGEN (mg/L) NM eH(MV)Pt-AgC1 ref. 1)M TURBIDITY/COLOR Dantborne ODOR DEPTH OF PURGE 10 INTAKE (FT) DEPTH TO WATER DURING PURGE (FT) NMNUMBER OF CASING VOLUMES REMOVED **DEWATERED?** Νa

	water P	N	·	7 ,			<u> </u>	Ken Ken	·	
PROJECT N	IAME:	0 w	eus f	Souch	uery	WELL	NUMBER	: <u>Mw-1</u> M	,	
PROJECT N	IUMBER:	95	2000	7.30		PERSO	NNEL:	Farre		
DEPTH 5	SAMPLED (F	T):	18	·						
SAMPLI	IG EQUIPME	ENT:	· Dos	posable	Bailer					
SAMPLE NO.	NO. OF CONTAIN- ERS	CON- TAINER TYPE	PRESER- VATIVE	FIELD FILTRA- TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?		COMMENTS
mw-17	3	V6A	Her	2	till	greyish		jes	go to OTEX	
mu-17	2	Anber	N	N	Full	drayish Gravish			SOIS TEPII	, Treit
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PURGE WA TOTAL DISPOS	TER DISPO DISCHARGE AL METHOD	SAL NOT (GAL):	ES:	7.5	sesten	OMMENTS: _				
	ESIGNATIO					ea				
WELL HEA	D CONDITI	ONS CHE	CKLIST (CIRCLE Y	ES OR NO -	IF NO, AD	COMM	ENTS):		
								CK)?: YES	/NO	
INSIDE O	F WELL HE	AD AND	OUTER CA	SING DRY	?: YES	(NO)				
WELL CAS	ING OK?:	YES	NO					·		
HELL ONS	:						·			
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COMMENTS						-	·			<u></u>
COMMENTS		ONS:		Sang	, 65					
COMMENTS GENERAL: WEATHE	R CONDITI			/						
GENERAL: WEATHE	R CONDITI	ECIFY °	C OR °F)	:						

F-43 2 /5-89)

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Groundwater Purge and Sample Form Date: 12 11101 Kennedy/Jenks Consultants PROJECT NAME: Much Wrockey PERSONNEL: _____taurell PROJECT NUMBER: 950 007.30 MEASURING POINT DESCRIPTION: 9.01 STATIC WATER LEVEL (FT): WATER LEVEL MEASUREMENT METHOD: TIME START PURGE: 1525 TIME SAMPLED: 1540 COMMENTS: MULTIPLIER FOR WELL VOLUME CASING VOLUME WATER CASING DIAMETER (IN) CALCULATION TOTAL DEPTH DEPTH TO (GAL) WATER (FT) COLUMN (FT) (2) (FILL IN (FT) X BEFORE 7 ×3=6 22 0.16 0.64 1.44 12,99 PURGING) 9.01 TIME 1325 1334 1230 233 VOLUME PURGED (GAL) 6.0 Z.Š 5.0 PURGE RATE (GPM) TEMPERATURE (°C) 62.M 62x1 6>3 14 Нα 0.33 7,31 7.30 7.30 SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm 920 920 900 020 DISSOLVED OXYGEN (mg/L) eH(MV)Pt-AgC1 ref. TURBIDITY/COLOR ODOR hone DEPTH OF PURGE 20 INTAKE (FT) DEPTH TO WATER DURING PURGE (FT) NM NUMBER OF CASING **VOLUMES REMOVED** DEWATERED?

NO

	vater P				T. 17:11	Date:				
ROJECT N	AME:	Our	ens l	Prock	way	WELL	NUMBER	: Mw-	20	
ROJECT N	UMBER:	ji S	150 0	0-7.3	0	PERSO	NNEL:	: nw-	/	
SAMPLE DA TIME SA	TA: MPLED:	15	40		cc	MMENTS:				
DEPTH S	AMPLED (F	FT):	20							
SAMPLIN	IG EQUIPME	ENT:	Dage	ruste	Bailor					-
SAMPLE NO.	NO. OF CONTAIN- ERS	CON-	PRESER- VATIVE	FIELD	VOLUME FILLED	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS- TODY AT 4°C?		COMMENTS
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mude	2	1 L Anber	N	N	Full	Lik		Yes	Pois	TOPH TEPH
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TOTAL I	TER DISPO DISCHARGE AL METHOD ESIGNATIO	(GAL): : <i>O</i>	1 Jun	ke s	yster	OMMENTS: _			-	
WELL HEAI	CONDITI	ONS CHE	CKLIST (CIRCLE Y	'ES OR NO -	IF NO, AD	D COMM	ENTS):		
WELL SEC	JRITY DEV	ICES OK	(BOLLAR	OS, CHRI	ISTY LID, C	ASING LID	AND LO	ock)?: 165	МО	
INSIDE O	F WELL HE	AD AND	OUTER CA	SING DRY	n: (5)	NO				
WELL CAS	ING OK?:	₩ s	NO			•				
COMMENTS	•									
										
GENERAL: WEATHE	R CONDITI	ONS:		Sun	my b	55				
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					R SAMPLING?					
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cc: Pro	ject Mana	ger:								
Job	File: er:					and the same of th				,