

ENVIRONMENTAL  
PROTECTION

59 DEC-7 AM10:12

1921 Ringwood Avenue  
San Jose, CA 95131-1721  
Tel. 408.453.7300  
Fax. 408.437.9526

#1138

Date: December 3, 1999

Project: 360-014.2B

To: Mr. Barney Chan  
Alameda County Environmental  
Health Services  
1131 Harbor Bay Pkwy, Suite 250  
Alameda, CA 94502

Need to include D.O. & some  
evaluation of the results of  
ORC slurry injection & socks.

We have enclosed:

Copies	Description
1	Quarterly Report – Third Quarter 1999, Former Dorr-Oliver Site 2901 Glascock Street, Oakland, California
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

For your:  Use  
 Approval  
 Review  
 Information

Comments We would like to meet with you in early January to discuss this site.

If you have any questions, please call me at (408) 453-7300 x 682. Thank you.

Diane Sarmiento  
Senior Engineer



1921 Ringwood Avenue  
San Jose, CA 95131-1721  
Tel. 408.453.7300  
Fax. 408.437.9526

December 1, 1999  
Project 360-014.2B

Mr. Dennis Buran  
Glascoc~~k~~ Street Properties  
383 Diablo Road, Suite 100  
Danville, California 94526

Re: **Quarterly Report - Third Quarter 1999**  
Former Dorr-Oliver Site  
2901 Glascoc~~k~~ Street  
Oakland, California

Dear Mr. Buran:

This letter has been prepared for Glascoc~~k~~ Street Properties by IT Corporation (IT), formerly Pacific Environmental Group, Inc. The following presents results of the third quarter 1999 groundwater monitoring program for the site at 2901 Glascoc~~k~~ Street in Oakland, California.

#### **QUARTERLY GROUNDWATER MONITORING PROGRAM**

All seven existing groundwater monitoring wells (MW-1 through MW-4, and MW-6 through MW-8; Figure 1) were gauged and sampled by IT on September 13, 1999. The depth to groundwater and groundwater analytical data are presented in Tables 1 and 2. The wells were sampled and analyzed for the presence of total purgeable petroleum hydrocarbons quantified as gasoline (TPPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), total extractable petroleum hydrocarbons quantified as diesel (TEPH-d), total extractable petroleum hydrocarbons quantified as motor oil (TEPH-mo), and methyl tert-butyl ether (MtBE). Figure 1 presents the results of the interpreted water elevation contours and the chemical analysis results for groundwater.

#### **Groundwater Levels**

With the exception of MW-8 (0.17 foot rise), all monitoring wells exhibited a decrease (0.13 to 0.56 feet) in groundwater elevation (Table 1) compared with the prior quarter. Groundwater elevations were within the historic range for the site. The groundwater flow direction continues to be to the south/southwest (toward the Oakland Estuary at a gradient of approximately 0.012).

### Groundwater Quality

Table 2 presents the groundwater analytical data; Figure 1 illustrates the results of the chemical analysis. Certified analytical results, chain-of-custody documentation, and field data sheets are contained in Attachment A.

No separate phase hydrocarbons (SPH) were observed in any site monitoring wells this quarter. Detectable concentrations of TPPH-g were reported for samples collected from four wells this quarter, ranging from 80 to 523 micrograms per liter ( $\mu\text{g/L}$ ) (see Table 2). Benzene was detected in three wells, MW-1, MW-2, and MW-6 with concentrations ranging from 1.28 to 4.74  $\mu\text{g/L}$ . Toluene was reported at concentrations of 1.24 ug/l and 3.98 ug/l in groundwater from wells MW-6 and MW-2, respectively. Ethyl-benzene was not detected in any of the groundwater samples. Xylenes were reported at concentration of 1.22 ug/l in the sample from MW-2, and 3.64 ug/l in the sample from MW-6. Detectable concentrations of MtBE were reported in groundwater samples from Wells MW-3, MW-6, and MW-7 at concentrations of 12.7, 6.2, and 55.3  $\mu\text{g/L}$ , respectively. Well MW-7 is an upgradient well located off-site at the intersection of Glascock and Peterson Streets. Based on the concentrations observed in Well MW-7, it appears that an upgradient source of MtBE continues to impact monitoring wells at this site.

Total extractable petroleum hydrocarbons in the diesel range (TEPH-d) were reported in groundwater samples from four wells (MW-1, -2, -3,-6) at concentrations between 203 ug/l to 1380 ug/l (0.2 to 1.4 mg/l or parts per million). Concentrations of TEPH-motor oil were reported in Wells MW-2 and MW-6, at concentrations of 617 and 694  $\mu\text{g/L}$ , respectively.

### ADDITIONAL ACTIVITIES

On September 13, 1999, "socks" containing oxygen releasing compounds (ORC) were installed in wells, MW-1, MW-2 and MW-6. The ORC releases oxygen into the water in the well in order to promote growth of naturally occurring biological organisms that degrade petroleum hydrocarbons. The effectiveness of addition of oxygen will be assessed based on the fourth quarter sampling and analysis results.

### CONCLUSIONS

Concentrations of petroleum hydrocarbons in monitoring wells at the site appear to have declined or remained constant compared with prior sampling events beginning in October of 1994. Fluctuations in concentrations occur with variations in the depth to groundwater and with tidal fluctuations in the adjacent estuary. Concentrations of MtBE are reported for groundwater from an offsite, upgradient monitoring well (MW-7) and at lower concentrations

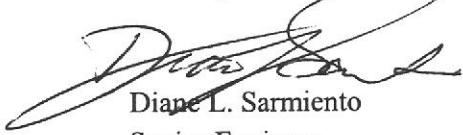
12/03/99

Page 3

for the nearest on-site, downgradient, monitoring well. These results are indicative of an upgradient, offsite source of MtBE.

Sincerely,

IT Corporation



Diane L. Sarmiento  
Senior Engineer



Attachments:    Table 1 -    Groundwater Elevation Data  
                    Table 2 -    Groundwater Analytical Data  
                    Figure 1    Groundwater Elevation Contours  
                    Attachment A Certified Analytical Reports, Chain-of-Custody  
                                    Documentation, and Field Data Sheets

cc: Mr. Barney Chan, ACHCSA

**Table 1**  
**Groundwater Elevation Data**

Former Dorr-Oliver Site  
2901 Glascock Street  
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-1	10/06/94	10.76	NA	NA
	01/20/95		6.67	4.09
	05/15/95		7.08	3.68
	08/28/95		8.06	2.70
	12/06/95		8.24	2.52
	01/18/96	10.76	6.35	4.41
	03/08/96		6.52	4.24
	07/02/96		8.35	2.41
	12/17/96		6.85	3.91
	03/21/97		7.90	2.86
	06/25/97		9.20	1.56
	09/29/97		8.90	1.86
	12/11/97		7.10	3.66
	03/27/98		7.50	3.26
	06/26/98		8.65	2.11
	09/11/98		8.35	2.41
	12/24/98		8.50	2.26
	03/31/99		7.75	3.01
MW-2	06/17/99		8.70	2.06
	09/13/99		8.83	1.93
	10/06/94	10.62	7.17	3.45
	01/20/95		4.64	5.98
	05/15/95		5.66	4.96
	08/28/95		6.26	4.36
	12/06/95		7.30	3.32
	01/18/96	10.63	4.85	5.78
	03/08/96		4.38	6.25
	07/02/96		6.60	4.03
	12/17/96		5.10	5.53
	03/21/97		6.25	4.38
	06/25/97		8.01	2.62
	09/29/97		8.45	2.18
	12/11/97		5.63	5.00
	03/27/98		6.50	4.13
	06/26/98		7.55	3.08
MW-3	09/11/98		7.15	3.48
	12/24/98		6.77	3.86
	03/31/99		5.80	4.83
	06/17/99		7.10	3.53
	09/13/99		7.66	2.97
	10/06/94	9.87	6.57	3.30
	01/20/95		4.47	5.40
	05/15/95		5.08	4.79
	08/28/95		6.18	3.69
	12/06/95		6.44	3.43

**Table 1**  
**Groundwater Elevation Data**

Former Dorr-Oliver Site  
2901 Glascock Street  
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
	03/21/97		5.72	4.15
	06/25/97		6.35	3.52
	09/29/97		6.35	3.52
	12/11/97		4.70	5.17
	03/27/98		5.15	4.72
	06/26/98		6.17	3.70
	09/11/98		6.40	3.47
	12/24/98		6.27	3.60
	03/31/99		5.35	4.52
	06/17/99		6.60	3.27
	09/13/99		6.85	3.02
MW-4	10/06/94	10.64	7.96	2.68
	01/20/95		5.95	4.69
	05/15/95		6.28	4.36
	08/28/95		7.38	3.26
	12/06/95		7.80	2.84
	01/18/96	10.64	5.60	5.04
	03/08/96		5.93	4.71
	07/02/96		7.95	2.69
	12/17/96		6.35	4.29
	03/21/97		7.30	3.34
	06/25/97		7.95	2.69
	09/29/97		7.65	2.99
	12/11/97		5.75	4.89
	03/27/98		6.60	4.04
	06/26/98		7.85	2.79
	09/11/98		7.85	2.79
	12/24/98		7.93	2.71
	03/31/99		7.15	3.49
	06/17/99		8.25	2.39
	09/13/99		8.40	2.24
MW-5	05/15/95	10.61	7.54	3.07
	08/28/95		8.44	2.17
	12/06/95		8.34	2.27
	01/18/96	10.61	7.15	3.46
	03/08/96		7.54	3.07
	07/02/96		9.45	1.16
	12/17/96		NA	a
	09/13/99		NA	NA
MW-6	05/15/95	10.27	7.46	2.81
	08/28/95		8.06	2.21
	12/06/95		8.78	1.49
	01/18/96	10.28	7.85	2.43
	03/08/96		8.64	1.64
	07/02/96		11.50	-1.22
	12/17/96		9.40	0.88
	03/21/97		9.00	1.28
	06/25/97		11.50	-1.22
	09/29/97		9.95	0.33

Table 1  
Groundwater Elevation Data

Former Dorr-Oliver Site  
2901 Glascock Street  
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-7	12/11/97		8.50	1.78
	03/27/98		10.10	0.18
	06/26/98		12.10	-1.82
	09/11/98		9.90	0.38
	12/24/98		10.15	0.13
	03/31/99		10.18	0.10
	06/17/99		11.05	-0.77
	09/13/99		10.63	-0.35
MW-7	05/15/95	9.85	3.46	6.39
	08/28/95		4.49	5.36
	12/06/95		5.04	4.81
	01/18/96	9.86	3.10	6.76
	03/08/96		3.18	6.68
	07/02/96		4.40	5.46
	12/17/96		3.45	6.41
	03/21/97		3.75	6.11
	06/25/97		4.75	5.11
	09/29/97		5.05	4.81
	12/11/97		3.45	6.41
	03/27/98		3.45	6.41
	06/26/98		4.00	5.86
	09/11/98		4.95	4.91
	12/24/98		4.30	5.56
	03/31/99		3.50	6.36
	03/31/99		4.85	5.01
	09/13/99		5.30	4.56
MW-8	01/18/96	10.61	7.15	3.46
	03/08/96		NA	NA
	07/02/96		10.80	-0.19
	12/17/96		8.52	2.09
	03/21/97		8.60	2.01
	06/25/97		10.27	0.34
	09/29/97		8.75	1.86
	12/11/97		7.20	3.41
	03/27/98		8.85	1.76
	06/26/98		10.70	-0.09
	09/11/98		9.40	1.21
	12/24/98		9.85	0.76
	03/31/99		9.58	1.03
	03/31/99		10.55	0.06
	09/13/99		10.38	0.23
<hr/>				
MSL = Mean sea level TOC = Top of casing NA = Not available a. Well MW-5 was destroyed in September 1996.				

Table 2  
**Groundwater Analytical Data**  
 Total Petroleum Hydrocarbons  
 (TPPH as Gasoline, BTEX Compounds, TEPH as Diesel, Motor Oil, and MtBE)

Former Dorr-Oliver Site  
 2901 Glascock Street  
 Oakland, California

Well Number	Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TEPH as Diesel (1) (µg/L)	TEPH as Motor Oil (µg/L)	MtBE (µg/L)
MW-1	10/06/94	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/95	670	5.3	ND	ND	1.1	1,900	NA	NA
	05/15/95	290	7.9	ND	ND	1.4	3,400	NA	NA
	08/28/95	250	5.4	ND	ND	1.1	1,800	NA	NA
	11/29/95	NA	NA	NA	NA	NA	ND	ND	NA
	12/06/95	770	4.8	ND	ND	1.3	39,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	23,000	NA	NA
	03/08/96	360	2,600	ND	ND	1.9	16,000	NA	24
	07/02/96	5,300 a	ND	ND	ND	6,600	ND	ND	ND
	12/17/96	540 b	3.4	ND	ND	0.83	2,800 c	1,600 d	60
	03/21/97	590	5.5	0.66	ND	ND	5,500 e	5,000 d	71
	05/16/97	NA	NA	NA	NA	NA	NA	NA	NA
	06/25/97	470 h	ND	ND	ND	ND	39,000 e	26,000 d	45
	09/29/97	510 h	2.2	ND	ND	ND	5,000 e	4,000 d	37
	12/11/97	ND	ND	ND	ND	ND	1,900 e	1,300 d	ND
	03/27/98	280 k	5.0	0.60	ND	ND	4,600 e	3,900 d	890
	06/26/98	450 f	2.6	ND	ND	ND	1,700 e	1,300 d	41
	09/11/98	230 l	2.8	ND	ND	1.8	3,000 m	ND	8.7
	09/11/98	NA	NA	NA	NA	NA	620 g	520 d	NA
	12/24/98	380 b	5.0	ND	ND	ND	2,100 g	1,600 d	ND
	03/31/99	190 b	3.0	ND	ND	1.4	10,000 e	6,600 d	55
	06/17/99	133	3.27	ND	ND	ND	1,920 g	2,770 d	11.9
	09/13/99	523	2.70	ND	ND	ND	493	ND	ND
MW-2	10/06/94	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/95	520	2.2	1.9	ND	1.3	4,000	NA	NA
	05/15/95	310	2.3	1.9	ND	1.4	5,100	NA	NA
	08/28/95	320	2.9	2.9	ND	2.6	4,100	NA	NA
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/95	210	2.0	2.2	ND	0.57	17,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	22,000	NA	NA
	03/08/96	310	2.4	1.9	ND	1.4	56,000	NA	ND
	07/02/96	9,300 a	ND	ND	ND	ND	19,000	ND	ND
	12/17/96	140 b	1.1	2.0	ND	1.4	10,000 e	5,400 d	ND
	03/21/97	230	2.1	1.9	ND	ND	17,000 e	16,000 d	ND
	05/16/97	NA	NA	NA	NA	NA	NA	NA	NA
	06/25/97	630 h	ND	ND	ND	ND	16,000 e	13,000 d	ND
	09/29/97	300 h	1.3	0.66	ND	ND	32,000 e	20,000 d	ND
	12/11/97	ND	ND	ND	ND	ND	4,800 e	4,000 d	ND
	03/27/98	94 k	1.3	1.30	ND	ND	15,000 e	11,000 d	18
	06/26/98	490 b	ND	ND	ND	ND	11,000 e	5,900 d	ND
	09/11/98	550 l	ND	ND	ND	ND	11,000 n	ND	ND
	09/11/98	NA	NA	NA	NA	NA	6,100 g	ND	NA
	12/24/98	990 b	ND	6.8	9.1	17	2,000 g	1,200 d	ND
	3/3/199	580 p	1.3	2.2	ND	0.99	21,000 g	14,000 d	ND
	06/17/99	525	ND	ND	ND	ND	ND	ND	ND
	09/13/99	392	1.28	3.98	ND	1.22	1,380	617	ND

**Table 2**  
**Groundwater Analytical Data**  
**Total Petroleum Hydrocarbons**  
(TPPH as Gasoline, BTEX Compounds, TEPH as Diesel, Motor Oil, and MtBE)

Former Dorr-Oliver Site  
2901 Glascock Street  
Oakland, California

Well Number	Date Sampled	TPPH as Gasoline ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	TEPH as Diesel (1) ( $\mu\text{g/L}$ )	TEPH as Motor Oil ( $\mu\text{g/L}$ )	MtBE ( $\mu\text{g/L}$ )
MW-3	10/06/94	NA	ND	ND	ND	ND	320	NA	NA
	01/20/95	86	ND	ND	ND	ND	460	NA	NA
	05/15/95	60	ND	ND	ND	ND	310	NA	NA
	08/28/95	ND	ND	ND	ND	ND	310	NA	NA
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/95	120	ND	ND	ND	ND	1,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	210	NA	NA
	03/08/96	67	ND	ND	ND	ND	1,000	NA	7.2
	07/02/96	230 a	ND	ND	ND	ND	640	ND	ND
	12/17/96	240 f	ND	ND	ND	ND	560 e	ND	ND
	03/21/97	760 h	ND	ND	ND	0.94	2,100 e	1900 d	5.6
	05/16/97	NA	NA	NA	NA	NA	NA	NA	NA
	06/25/97	180 h	ND	ND	ND	0.58	610 g	ND	5.3
	09/29/97	84 i	ND	ND	ND	ND	470 g	ND	ND
	12/11/97	ND	ND	ND	ND	ND	380 e	ND	ND
	03/27/98	ND	ND	ND	ND	ND	220 g	ND	ND
	06/26/98	68 b	ND	ND	ND	ND	210 g	ND	ND
	09/11/98	110 l	ND	ND	ND	ND	320 o	ND	ND
	09/11/98	NA	NA	NA	NA	NA	210 g	ND	NA
	12/24/98	ND	ND	ND	ND	ND	220 g	ND	ND
	03/31/99	73 q	ND	ND	ND	ND	680 r	580 r	ND
	06/17/99	72	ND	ND	ND	0.696	325 g	516 d	ND
	09/13/99	80	ND	ND	ND	ND	203	ND	12.7
MW-4	10/06/94	NA	ND	ND	ND	ND	ND	NA	NA
	01/20/95	ND	ND	ND	ND	ND	ND	NA	NA
	05/15/95	ND	ND	ND	ND	ND	ND	NA	NA
	08/28/95	ND	ND	ND	ND	ND	ND	NA	NA
	11/29/95	NA	NA	NA	NA	NA	NA	NA	NA
	12/06/95	ND	ND	ND	ND	ND	57	NA	NA
	01/18/96	NA	NA	NA	NA	NA	ND	NA	NA
	03/08/96	ND	ND	ND	ND	ND	100	NA	ND
	07/02/96	ND	ND	ND	ND	ND	ND	ND	ND
	12/17/96	ND	ND	ND	ND	ND	310 g	530 d	ND
	03/21/97	ND	ND	ND	ND	ND	180 g	500 d	ND
	06/25/97	ND	ND	ND	ND	ND	120 g	ND	ND
	09/29/97	ND	ND	ND	ND	ND	130 g	ND	ND
	12/11/97	ND	ND	ND	ND	ND	57 g	ND	ND
	03/27/98	ND	ND	ND	ND	ND	ND	ND	ND
	06/26/98	ND	ND	ND	ND	ND	ND	ND	ND
	09/11/98	ND	ND	ND	ND	ND	ND	ND	ND
	09/11/98	NA	NA	NA	NA	NA	230 g	ND	NA
	12/24/98	ND	ND	ND	ND	ND	65 g	ND	ND
	03/31/99	ND	ND	ND	ND	ND	140 r	ND	ND
	06/17/99	ND	ND	ND	ND	ND	ND	ND	ND
	09/13/99	ND	ND	ND	ND	ND	ND	ND	ND
MW-5	05/15/95	ND	ND	ND	ND	ND	490	NA	NA
	08/28/95	ND	ND	ND	ND	ND	170	NA	NA
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/95	ND	ND	ND	ND	ND	250	NA	NA
	01/18/96	NA	NA	NA	NA	NA	49	NA	NA
	03/08/96	ND	ND	ND	ND	ND	210	ND	12
	07/02/96	200 a	ND	ND	ND	ND	110	ND	ND

-- Well Destroyed in September 1996 --

Table 2  
**Groundwater Analytical Data**  
**Total Petroleum Hydrocarbons**  
(TPPH as Gasoline, BTEX Compounds, TEPH as Diesel, Motor Oil, and MtBE)

Former Dorr-Oliver Site  
2901 Glascock Street  
Oakland, California

Well Number	Date Sampled	TPPH as Gasoline ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	TEPH as Diesel (1) ( $\mu\text{g/L}$ )	TEPH as Motor Oil ( $\mu\text{g/L}$ )	MtBE ( $\mu\text{g/L}$ )
MW-6	05/15/95	120	5.6	0.88	ND	2.1	1,100	NA	NA
	08/28/95	140	6.1	0.77	ND	2.3	2,100	NA	NA
	11/29/95	NA	NA	NA	NA	NA	35,000	5,400	NA
	12/06/95	140	4.6	0.89	ND	1.7	38,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	59,000	NA	NA
	03/08/96	160	3.4	0.57	ND	1.9	14,000	NA	ND
	07/02/96	3,300 a	3.1	ND	ND	ND	2,300	1,300	ND
	12/17/96	150 b	3.4	0.93	ND	1.7	15,000 e	14,000 d	14
	03/21/97	300	3.5	0.91	ND	0.79	18,000 e	17,000 d	19
	05/16/97	NA	NA	NA	NA	NA	NA	NA	NA
	06/25/97	590 h	3.2	ND	ND	ND	9,300 e	7,900 d	15
	09/29/97	490 h	2.6	0.83	ND	1.5	7,900 e	7,900 d	13
	12/11/97	ND	ND	ND	ND	ND	5,600 e	5,100 j	ND
	03/27/98	ND	ND	ND	ND	ND	1,500 e	1,400 d	ND
	06/26/98	290 f	5.3	ND	ND	1.1	9,200 e	6,400 d	11
	09/11/98	660 l	500	ND	ND	ND	4,200 m	ND	6.5
	09/11/98	NA	NA	NA	NA	NA	1,600 g	1,300 d	NA
	12/24/98	ND	ND	ND	ND	ND	1,000 g	690 d	ND
	03/31/99	330 b	4.2	0.83	ND	1.5	22,000 e	16,000 d	ND
	06/17/99	504	4.56	0.863	0.573	1.2	1,460 s	7,090 d	9.85
	09/13/99	192	4.74	1.24	ND	3.64	826	694	6.2
MW-7	05/15/95	110	ND	ND	ND	ND	ND	NA	NA
	08/28/95	ND	ND	ND	ND	ND	ND	NA	NA
	11/29/95	NA	NA	NA	NA	NA	NA	NA	NA
	12/06/95	62	ND	ND	ND	ND	ND	NA	NA
	01/18/96	NA	NA	NA	NA	NA	ND	NA	NA
	03/08/96	ND	ND	ND	ND	ND	ND	NA	ND
	07/02/96	ND	ND	ND	ND	ND	ND	ND	580
	12/17/96	ND	ND	ND	ND	ND	120 g	ND	100
	03/21/97	ND	ND	ND	ND	ND	79 g	ND	190
	06/25/97	ND	ND	ND	ND	ND	58 g	ND	580
	09/29/97	ND	ND	ND	ND	ND	ND	ND	310
	12/11/97	ND	ND	ND	ND	ND	ND	ND	ND
	03/27/98	ND	ND	ND	ND	ND	ND	ND	ND
	06/26/98	ND	ND	ND	ND	ND	ND	ND	110
	09/11/98	ND	ND	ND	ND	ND	ND	ND	110
	09/11/98	NA	NA	NA	NA	NA	140 g	ND	NA
	12/24/98	ND	ND	ND	ND	ND	ND	ND	150
	03/31/99	ND	ND	ND	ND	ND	78 r	ND	11
	06/17/99	ND	ND	ND	ND	ND	53.7 g	ND	59.1
	09/13/99	ND	ND	ND	ND	ND	ND	ND	55.3

Table 2  
**Groundwater Analytical Data**  
**Total Petroleum Hydrocarbons**  
**(TPPH as Gasoline, BTEX Compounds, TEPH as Diesel, Motor Oil, and MtBE)**

Former Dorr-Oliver Site  
2901 Glascock Street  
Oakland, California

Well Number	Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TEPH as Diesel (1) (µg/L)	TEPH as Motor Oil (µg/L)	MtBE (µg/L)
MW-8	11/29/95	NA	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	NA	NA	NA	NA	ND	NA	NA
	03/08/96	NS	NS	NS	NS	NS	NS	NS	NS
	07/02/96	ND	0.74	0.88	ND	0.82	ND	ND	ND
	12/17/96	ND	ND	ND	ND	ND	53 g	ND	ND
	03/21/97	ND	ND	ND	ND	ND	ND	ND	ND
	06/25/97	ND	ND	ND	ND	ND	ND	ND	ND
	09/29/97	ND	ND	ND	ND	ND	ND	ND	ND
	12/11/97	270	8.0	1.8	5.7	14	ND	ND	72
	03/27/98	ND	ND	ND	ND	ND	ND	ND	ND
	06/26/98	ND	ND	ND	ND	ND	ND	ND	ND
	09/11/98	ND	ND	ND	ND	ND	ND	ND	ND
	09/11/98	NA	NA	NA	NA	NA	130 g	ND	NA
	12/24/98	ND	ND	ND	ND	ND	ND	ND	ND
	03/31/99	ND	ND	ND	ND	ND	ND	ND	ND
	06/17/99	ND	ND	ND	ND	ND	10,400 g	12,700 d	ND
	09/13/99	ND	ND	ND	ND	ND	ND	ND	ND

TPPH = Total purgeable petroleum hydrocarbons

TEPH = Total extractable petroleum hydrocarbons

MtBE = Methyl tert-butyl ether

µg/L = Micrograms per liter

NS = Not sampled

ND = Not detected (see certified analytical reports for detection limits)

NA = Not analyzed

(1) TEPH as diesel analysed with silica gel cleanup

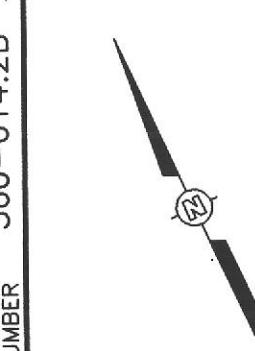
- a. Chromatogram pattern is not gasoline, but volatile fraction of diesel quantified as gasoline.
- b. Chromatogram pattern is not gasoline, but unidentified hydrocarbons in C6 - C12 range.
- c. Chromatogram pattern is a mixture of weathered diesel and unidentified hydrocarbons in C9 - C24 range.
- d. Chromatogram pattern is not motor oil, but unidentified hydrocarbons in C16 - C36 range.
- e. Chromatogram pattern is weathered diesel in C9 - C24 range.
- f. Chromatogram pattern is not gasoline, but unidentified hydrocarbons > C10.
- g. Chromatogram pattern is not diesel, but unidentified hydrocarbons in the C9 - C24 range.
- h. Chromatogram pattern is weathered gasoline.
- i. Chromatogram pattern is not gasoline, but unidentified hydrocarbons in C6 - C8 range.
- j. Chromatogram pattern is not motor oil, but unidentified hydrocarbons in the C16 to C34 range.
- k. Chromatogram pattern is not gasoline, but unidentified hydrocarbons > C5.
- l. Chromatogram pattern is not gasoline, but unidentified hydrocarbons > C12.
- m. Chromatogram pattern is a mixture of weathered diesel and unidentified hydrocarbons in the C18 - C40 range.
- n. Chromatogram pattern is a mixture of weathered diesel and unidentified hydrocarbons in the C9 - C40 range.
- o. Chromatogram pattern is not diesel, but unidentified hydrocarbons in the C9 - C40 range.
- p. Chromatogram pattern is a mixture of gasoline and unidentified hydrocarbons > C10.
- q. Chromatogram pattern is not gasoline, but unidentified hydrocarbons > C8.
- r. Chromatogram pattern is unidentified hydrocarbons in the C9 - C40 range.
- s. Chromatogram pattern is a mixture of weathered diesel and unidentified hydrocarbons in the C15 - C24 range.

**Table 3**  
**Groundwater Analytical Data**  
**PCBs, Metals, and VOCs**

Former Dorr-Oliver Site  
 2901 Glascock Street  
 Oakland, California

Well Number	Date Sampled	PCBs (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Zinc (µg/L)	VOCs (µg/L)
MW-1	11/29/95	NA	NA	NA	NA	NA	NA	ND
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
	03/27/98	NA	NA	NA	NA	NA	NA	NA
	03/31/99	NA	ND	5.8	1	21	12	ND f
MW-2	11/29/95	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
	03/27/98	NA	NA	NA	NA	NA	NA	NA
	03/31/99	NA	ND	ND	0.8	11	11	ND g
MW-3	11/29/95	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	ND	ND	ND	ND	51.2	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
	03/27/98	NA	NA	NA	NA	NA	NA	NA
	03/31/99	NA	ND	ND	ND	5.7	3.2	ND h
MW-4	11/29/95	NA	NA	NA	NA	NA	NA	ND a
	01/18/96	NA	ND	ND	ND	ND	20.5	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
	03/27/98	NA	NA	NA	NA	NA	NA	NA
	03/31/99	NA	ND	ND	ND	6.2	3.7	ND j
MW-5	11/29/95	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	ND	ND	ND	ND	22.6	NA
MW-6	11/29/95	ND	ND	822	107	1,190	851	ND
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	ND	0.14	ND	0.2	0.18	ND d
	03/27/98	NA	ND	ND	ND	ND	0.017	ND e
	03/31/99	NA	ND	13	7.2	27	45	ND k
MW-7	11/29/95	NA	NA	NA	NA	NA	NA	ND b
	01/18/96	NA	ND	ND	ND	ND	25.1	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
	03/27/98	NA	NA	NA	NA	NA	NA	NA
	03/31/99	NA	ND	ND	ND	8.5	14	ND i
MW-8	11/29/95	ND	ND	319	42.0	381	309	ND c
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	ND	0.54	ND	0.69	0.42	ND
	03/27/98	NA	ND	0.013	ND	ND	0.02	ND
	03/31/99	NA	ND	12	8.8	16	13	ND
<b>PCBs</b> = Polychlorinated bi-phenyls <b>VOCs</b> = Volatile organic compounds <b>µg/L</b> = Micrograms per liter <b>NA</b> = Not analyzed <b>ND</b> = Not detected (see certified analytical reports for detection limits)								
a. 0.61 µg/L 1,1-Dichloroethane b. 0.79 µg/L 1,1-Dichloroethane 0.74 µg/L <i>trans</i> -1,2-Dichloroethene c. 0.53 µg/L Vinyl Chloride 1.3 µg/L Trichloroethene d. 2.5 µg/L Chloroethene 0.97 µg/L 1,1-Dichloroethane 3.4 µg/L <i>trans</i> -1,2-Dichloroethene 1.4 µg/L Vinyl Chloride e. 2.1 µg/L Chlороethene 1.1 µg/L 1,1-Dichloroethane 0.85 µg/L <i>cis</i> -1,2-Dichloroethene 3.2 µg/L <i>trans</i> -1,2-Dichloroethene								

DRAWN BY L. Wohlgren APPROVED BY CHECKED BY DRAWING NUMBER 360-014.2B



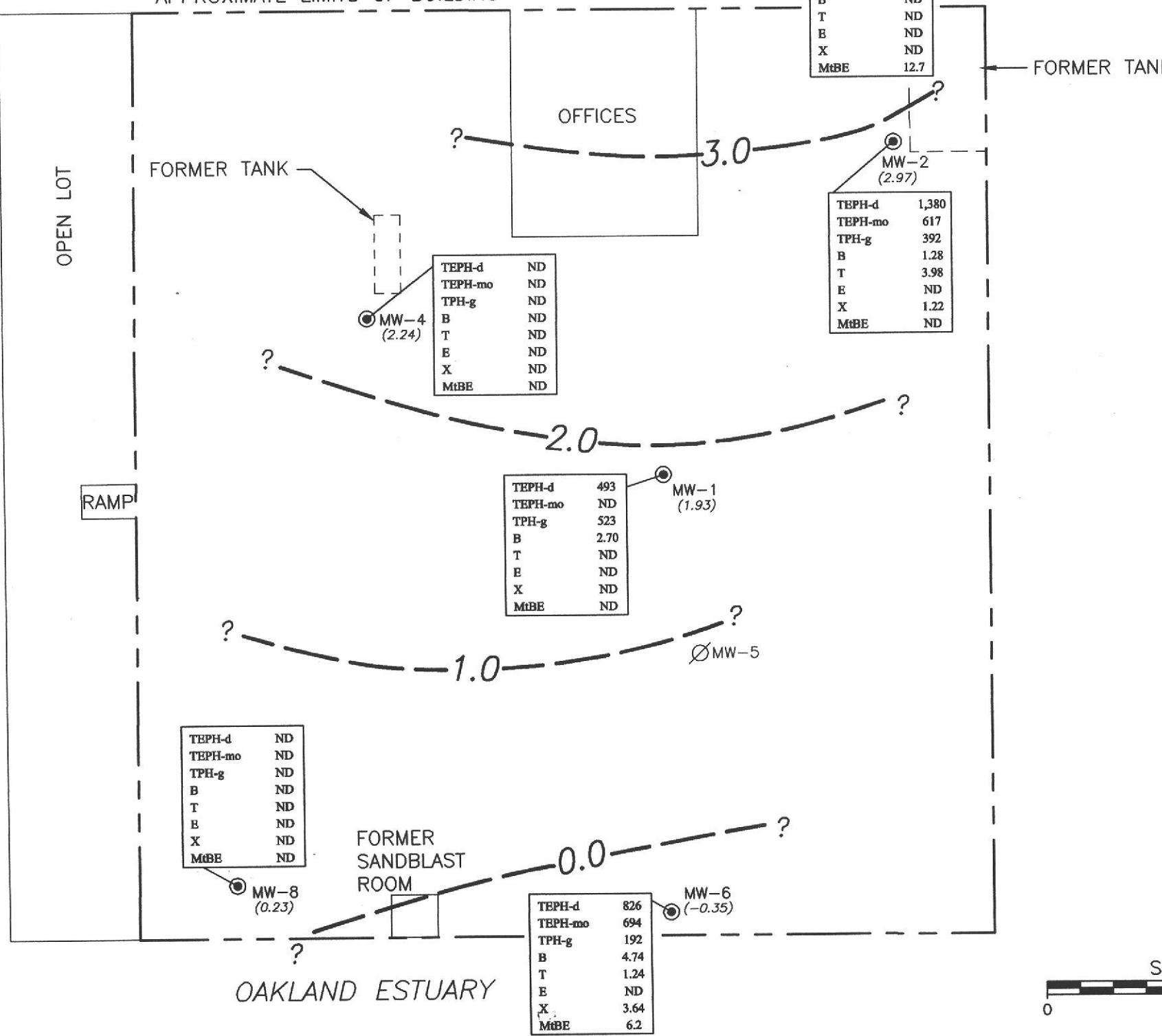
PETERSON  
STREET

TEPH-d	ND
TEPH-mo	ND
TPH-g	ND
B	ND
T	ND
E	ND
X	ND
MtBE	55.3

MW-7  
(4.56)

GLASCOCK STREET

APPROXIMATE LIMITS OF BUILDING



#### LEGEND

- Groundwater monitoring well
- ∅ Destroyed groundwater monitoring well
- (3.02) Groundwater elevation (Ft.-MSL); measured 9-13-99
- ? Groundwater elevation contour (Ft.-MSL)
- ND Not detected shown on laboratory report

#### NOTES

- 1) All concentrations in micrograms per liter or parts per billion (ug/L). Groundwater samples collected on 9-13-99.
- 2) Total extractable petroleum hydrocarbons as diesel (TEPH-d) are reported as diesel range.
- 3) Total extractable petroleum hydrocarbons (TEPH-mo) results are reported in motor oil range.
- 4) Total petroleum hydrocarbons as gasoline (TPH-g) results are reported in gasoline range.



GLASCOCK STREET PROPERTIES  
FORMER DORR-OLIVER SITE

FIGURE 1  
GROUNDWATER ELEVATION CONTOURS  
THIRD QUARTER 1999  
2901 GLASCOCK STREET  
OAKLAND, CALIFORNIA

**ATTACHMENT A**  
**CERTIFIED ANALYTICAL REPORTS,**  
**CHAIN-OF-CUSTODY DOCUMENTATION, AND**  
**FIELD DATA SHEETS**

---



# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

September 29, 1999

Kurt Lueneburger  
Pacific Environmental Group  
1921 Ringwood Avenue  
San Jose, CA 95131

RE: 3600142B/M909455

Dear Kurt Lueneburger

Enclosed are the results of analyses for sample(s) received by the laboratory on September 14, 1999. If you have any questions concerning this report, please feel free to contact me.

Please note samples for Diesel analysis were filtered, silica gel'd and . . . per instructions on COC.

Sincerely,

Ron Chew  
Project Manager

CA ELAP Certificate Number 1210





Pacific Environmental Group  
1921 Ringwood Avenue  
San Jose, CA 95131

Project: -  
Project Number: 3600142B/Dor Oliver  
Project Manager: Kurt Lueneburger

Sampled: 9/13/99  
Received: 9/14/99  
Reported: 9/29/99

## ANALYTICAL REPORT FOR M909455

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	M909455-01	Water	9/13/99
MW-2	M909455-02	Water	9/13/99
MW-3	M909455-03	Water	9/13/99
MW-4	M909455-04	Water	9/13/99
MW-6	M909455-05	Water	9/13/99
MW-7	M909455-06	Water	9/13/99
MW-8	M909455-07	Water	9/13/99





# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

Pacific Environmental Group 1921 Ringwood Avenue San Jose, CA 95131	Project: - Project Number: 3600142B/Dor Oliver Project Manager: Kurt Lueneburger	Sampled: 9/13/99 Received: 9/14/99 Reported: 9/29/99
---	--	--

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>MW-1</b>								
Purgeable Hydrocarbons	9090625	9/21/99	9/21/99		50.0	523	ug/l	1
Benzene	"	"	"		0.500	2.70	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		240	%	2
<b>MW-2</b>								
Purgeable Hydrocarbons	9090692	9/23/99	9/23/99		100	392	ug/l	1
Benzene	"	"	"		1.00	1.28	"	
Toluene	"	"	"		1.00	3.98	"	
Ethylbenzene	"	"	"		1.00	ND	"	
Xylenes (total)	"	"	"		1.00	1.22	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		93.0	%	
<b>MW-3</b>								
Purgeable Hydrocarbons	9090665	9/22/99	9/22/99		50.0	80.0	ug/l	1
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	12.7	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		108	%	
<b>MW-4</b>								
Purgeable Hydrocarbons	9090562	9/20/99	9/20/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		97.0	%	
<b>MW-6</b>								
Purgeable Hydrocarbons	9090692	9/23/99	9/23/99		100	192	ug/l	1
Benzene	"	"	"		1.00	4.74	"	
Toluene	"	"	"		1.00	1.24	"	
Ethylbenzene	"	"	"		1.00	ND	"	
Xylenes (total)	"	"	"		1.00	3.64	"	

\*Refer to end of report for text of notes and definitions.





Pacific Environmental Group  
1921 Ringwood Avenue  
San Jose, CA 95131

Project: -  
Project Number: 3600142B/Dor Oliver  
Project Manager: Kurt Lueneburger

Sampled: 9/13/99  
Received: 9/14/99  
Reported: 9/29/99

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>MW-6 (continued)</b>								
<b>Methyl tert-butyl ether</b>	9090692	9/23/99	9/23/99		5.00	<b>6.20</b>	<b>Water</b> ug/l	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70.0-130		93.0	%	
<b>MW-7</b>								
Purgeable Hydrocarbons	9090624	9/21/99	9/21/99		50.0	ND	<b>Water</b> ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	"		2.50	<b>55.3</b>	"	<i>Upgradient</i>
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70.0-130		121	%	
<b>MW-8</b>								
Purgeable Hydrocarbons	9090564	9/20/99	9/20/99		50.0	ND	<b>Water</b> ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	"		2.50	ND	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70.0-130		93.0	%	





Pacific Environmental Group 1921 Ringwood Avenue San Jose, CA 95131	Project: - Project Number: 3600142B/Dor Oliver Project Manager: Kurt Lueneburger	Sampled: 9/13/99 Received: 9/14/99 Reported: 9/29/99
---	--	--

**Hydrocarbons as Motor Oil by DHS LUFT  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>MW-1</b>								
Motor Oil (C16-C36)	9090514	9/17/99	9/28/99		0.500	ND	mg/l	3
Diesel Range Hydrocarbons	"	"	"		0.0500	0.493	"	4
Surrogate: n-Pentacosane	"	"	"	40.0-140		68.0	%	
<b>MW-2</b>								
Motor Oil (C16-C36)	9090514	9/17/99	9/28/99		0.500	0.617	Water mg/l	3
Diesel Range Hydrocarbons	"	"	"		0.0500	1.38	"	4
Surrogate: n-Pentacosane	"	"	"	40.0-140		74.0	%	
<b>MW-3</b>								
Motor Oil (C16-C36)	9090514	9/17/99	9/28/99		0.500	ND	mg/l	
Diesel Range Hydrocarbons	"	"	"		0.0500	0.203	"	4
Surrogate: n-Pentacosane	"	"	"	40.0-140		66.0	%	
<b>MW-4</b>								
Motor Oil (C16-C36)	9090514	9/17/99	9/28/99		0.500	ND	mg/l	
Diesel Range Hydrocarbons	"	"	"		0.0500	ND	"	
Surrogate: n-Pentacosane	"	"	"	40.0-140		59.0	%	discharge
<b>MW-6</b>								
Motor Oil (C16-C36)	9090514	9/17/99	9/28/99		0.500	0.694	Water mg/l	3
Diesel Range Hydrocarbons	"	"	"		0.0500	0.826	"	5
Surrogate: n-Pentacosane	"	"	"	40.0-140		82.0	%	
<b>MW-7</b>								
Motor Oil (C16-C36)	9090514	9/17/99	9/28/99		0.500	ND	mg/l	
Diesel Range Hydrocarbons	"	"	"		0.0500	ND	"	
Surrogate: n-Pentacosane	"	"	"	40.0-140		78.0	%	
<b>MW-8</b>								
Motor Oil (C16-C36)	9090514	9/17/99	9/28/99		0.500	ND	mg/l	
Diesel Range Hydrocarbons	"	"	"		0.0500	ND	"	
Surrogate: n-Pentacosane	"	"	"	40.0-140		75.0	%	





# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

Pacific Environmental Group  
1921 Ringwood Avenue  
San Jose, CA 95131

Project: -  
Project Number: 3600142B/Dor Oliver  
Project Manager: Kurt Lueneburger

Sampled: 9/13/99  
Received: 9/14/99  
Reported: 9/29/99

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9090562</b>	<b>Date Prepared: 9/20/99</b>					<b>Extraction Method: EPA 5030B [P/T]</b>				
<b>Blank</b>	<b>9090562-BLK1</b>									
Purgeable Hydrocarbons	9/20/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.50				
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		12.0	"	70.0-130	120			
<b>LCS</b>	<b>9090562-BS1</b>									
Benzene	9/20/99	10.0		8.40	ug/l	70.0-130	84.0			
Toluene	"	10.0		9.70	"	70.0-130	97.0			
Ethylbenzene	"	10.0		10.0	"	70.0-130	100			
Xylenes (total)	"	30.0		31.0	"	70.0-130	103			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		11.8	"	70.0-130	118			
<b>Matrix Spike</b>	<b>9090562-MS1</b>		<b>M909321-12</b>							
Benzene	9/20/99	10.0	ND	7.70	ug/l	60.0-140	77.0			
Toluene	"	10.0	ND	8.90	"	60.0-140	89.0			
Ethylbenzene	"	10.0	ND	9.50	"	60.0-140	95.0			
Xylenes (total)	"	30.0	ND	30.5	"	60.0-140	102			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		10.0	"	70.0-130	100			
<b>Matrix Spike Dup</b>	<b>9090562-MSD1</b>		<b>M909321-12</b>							
Benzene	9/20/99	10.0	ND	7.90	ug/l	60.0-140	79.0	25.0	2.56	
Toluene	"	10.0	ND	9.10	"	60.0-140	91.0	25.0	2.22	
Ethylbenzene	"	10.0	ND	9.70	"	60.0-140	97.0	25.0	2.08	
Xylenes (total)	"	30.0	ND	30.8	"	60.0-140	103	25.0	0.976	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		10.3	"	70.0-130	103			
<b>Batch: 9090564</b>	<b>Date Prepared: 9/20/99</b>					<b>Extraction Method: EPA 5030B [P/T]</b>				
<b>Blank</b>	<b>9090564-BLK1</b>									
Purgeable Hydrocarbons	9/20/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.50				
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		9.60	"	70.0-130	96.0			





# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

Pacific Environmental Group 1921 Ringwood Avenue San Jose, CA 95131	Project: - Project Number: 3600142B/Dor Oliver Project Manager: Kurt Lueneburger	Sampled: 9/13/99 Received: 9/14/99 Reported: 9/29/99
---	--	--

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD %	Notes*
<b>LCS</b>										
Benzene	9/20/99	10.0		9.60	ug/l	70.0-130	96.0			
Toluene	"	10.0		7.53	"	70.0-130	75.3			
Ethylbenzene	"	10.0		9.30	"	70.0-130	93.0			
Xylenes (total)	"	30.0		28.1	"	70.0-130	93.7			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		9.70	"	70.0-130	97.0			
<b>Matrix Spike</b>										
Benzene	9/20/99	10.0	ND	7.50	ug/l	60.0-140	75.0			
Toluene	"	10.0	ND	9.30	"	60.0-140	93.0			
Ethylbenzene	"	10.0	ND	9.20	"	60.0-140	92.0			
Xylenes (total)	"	30.0	ND	28.6	"	60.0-140	95.3			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		9.10	"	70.0-130	91.0			
<b>Matrix Spike Dup</b>										
Benzene	9/20/99	10.0	ND	7.60	ug/l	60.0-140	76.0	25.0	1.32	
Toluene	"	10.0	ND	9.40	"	60.0-140	94.0	25.0	1.07	
Ethylbenzene	"	10.0	ND	9.50	"	60.0-140	95.0	25.0	3.21	
Xylenes (total)	"	30.0	ND	28.4	"	60.0-140	94.7	25.0	0.632	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		9.60	"	70.0-130	96.0			
<b>Batch: 9090624</b>										
<b>Blank</b>										
Purgeable Hydrocarbons	9/21/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.50				
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		11.1	"	70.0-130	111			
<b>LCS</b>										
Purgeable Hydrocarbons	9/21/99	250		288	ug/l	70.0-130	115			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		12.8	"	70.0-130	128			
<b>LCS Dup</b>										
Purgeable Hydrocarbons	9/21/99	250		273	ug/l	70.0-130	109	25.0	5.36	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		13.0	"	70.0-130	130			
<b>Batch: 9090625</b>										
<b>Blank</b>										
Purgeable Hydrocarbons	9/21/99			ND	ug/l	50.0				

\*Refer to end of report for text of notes and definitions.





# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

Pacific Environmental Group 1921 Ringwood Avenue San Jose, CA 95131	Project: - Project Number: 3600142B/Dor Oliver Project Manager: Kurt Lueneburger	Sampled: 9/13/99 Received: 9/14/99 Reported: 9/29/99
---	--	--

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Blank (continued)</b>										
Benzene	9/21/99			ND	ug/l	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.50				
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.70	"	70.0-130	97.0			
<b>LCS</b>										
Purgeable Hydrocarbons	9/21/99	250		285	ug/l	70.0-130	114			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		11.1	"	70.0-130	111			
<b>LCS Dup</b>										
Purgeable Hydrocarbons	9/21/99	250		289	ug/l	70.0-130	116	25.0	1.74	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		11.3	"	70.0-130	113			
<b>Batch: 9090665</b>										
<b>Blank</b>										
9090665-BLK1										
Purgeable Hydrocarbons	9/22/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.50				
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.6	"	70.0-130	106			
<b>LCS</b>										
Benzene	9/22/99	10.0		7.35	ug/l	70.0-130	73.5			
Toluene	"	10.0		8.60	"	70.0-130	86.0			
Ethylbenzene	"	10.0		9.90	"	70.0-130	99.0			
Xylenes (total)	"	30.0		29.8	"	70.0-130	99.3			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.4	"	70.0-130	104			
<b>LCS Dup</b>										
9090665-BSD1										
Benzene	9/22/99	10.0		6.90	ug/l	70.0-130	69.0	25.0	6.32	6
Toluene	"	10.0		8.30	"	70.0-130	83.0	25.0	3.55	
Ethylbenzene	"	10.0		9.70	"	70.0-130	97.0	25.0	2.04	
Xylenes (total)	"	30.0		29.0	"	70.0-130	96.7	25.0	2.65	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.90	"	70.0-130	99.0			



Pacific Environmental Group 1921 Ringwood Avenue San Jose, CA 95131	Project: - Project Number: 3600142B/Dor Oliver Project Manager: Kurt Lueneburger	Sampled: 9/13/99 Received: 9/14/99 Reported: 9/29/99
---	--	--

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD % Notes*
<b>Batch: 9090692</b>									
<b>Date Prepared: 9/23/99</b>									
<b>9090692-BLK1</b>									
Purgeable Hydrocarbons	9/23/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Methyl tert-butyl ether	"			ND	"	2.50			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.60	"	70.0-130	96.0		
<b>LCS</b>									
<b>9090692-BS1</b>									
Purgeable Hydrocarbons	9/23/99	250		238	ug/l	70.0-130	95.2		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		12.3	"	70.0-130	123		
<b>Matrix Spike</b>									
<b>9090692-MS1 M909580-04</b>									
Purgeable Hydrocarbons	9/23/99	250	ND	232	ug/l	60.0-140	92.8		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		11.6	"	70.0-130	116		
<b>Matrix Spike Dup</b>									
<b>9090692-MSD1 M909580-04</b>									
Purgeable Hydrocarbons	9/23/99	250	ND	230	ug/l	60.0-140	92.0	25.0	0.866
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		11.9	"	70.0-130	119		





# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

Pacific Environmental Group 1921 Ringwood Avenue San Jose, CA 95131	Project: - Project Number: 3600142B/Dor Oliver Project Manager: Kurt Lueneburger	Sampled: 9/13/99 Received: 9/14/99 Reported: 9/29/99
---	--	--

## Hydrocarbons as Motor Oil by DHS LUFT/Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9090514</b>										
<b>Blank</b>										
Motor Oil (C16-C36)										
Surrogate: n-Pentacosane	9/22/99	"	0.100	ND	mg/l	0.500				
				ND	"	0.0500				
Diesel Range Hydrocarbons										
Surrogate: n-Pentacosane	"	0.100		0.0910	"	40.0-140	91.0			
<b>LCS</b>										
Diesel Range Hydrocarbons										
Surrogate: n-Pentacosane	9/22/99	1.00		0.535	mg/l	40.0-140	53.5			
	"	0.100		0.0620	"	40.0-140	62.0			
<b>LCS Dup</b>										
Diesel Range Hydrocarbons										
Surrogate: n-Pentacosane	9/22/99	1.00		0.0786	mg/l	40.0-140	7.86	50.0	149	7
	"	0.100		0.00930	"	40.0-140	9.30			
										8





Pacific Environmental Group  
1921 Ringwood Avenue  
San Jose, CA 95131

Project: -  
Project Number: 3600142B/Dor Oliver  
Project Manager: Kurt Lueneburger

Sampled: 9/13/99  
Received: 9/14/99  
Reported: 9/29/99

## Notes and Definitions

#	Note
1	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
2	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
3	Chromatogram pattern: Unidentified Hydrocarbons C16-C36.
4	Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
5	Chromatogram Pattern: Weathered Diesel C9-C24
6	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
7	LCSD spike results are below control limits; however, the LCS results are acceptable. The LCSD results are anomalous results that do not affect data quality.
8	The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference



PROJECT No. 3600 C/4/03Facility No. Toe Dorol's site

CLIENT engineer:

## Chain of Custody

Pacific Environmental Group, Inc.

1921 RINGWOOD AV. SAN JOSE CA 95131

Phone 408 453 7300 Fax 408 453 0452

Facility Address: 2901 GLASSCOCK ST OAKLAND CABilling Refence Number: 821PACIFIC Point of Contact: DIANE SARVAN Sampler: PEDRO E. RUIZLaboratory Name: SEQUOIA

Comments:

M909455

Fuel Fingerprint  
AS Diesel &  
Motor oil w/  
Filtration by  
0.7 MICRON  
TCP GLASS  
Filter followed  
by  
SILICAGEL CLEAN UP  
OF EXTRACT BY  
EPA METHOD 3630B  
WITHOUT SOLVENT  
EXCHANGE

Sample I.D.	Cont. No.	Container	Size (ml)	Sample Preserv.	Matrix	Sampling Type	Sampling Date	Sampling Time	BTEX/VPHgas	TPH	Oil and Grease	Total Dislvd.	VOC (EPA 624/8240)	SVOC (EPA 627/8270)	HVOOC (EPA 601/8010)	Fuel Fingerprint As Diesel Oil			
Mw 1 ✓ 5		40mL	1/2	H2O	W G		9/13/99	10:45	X						X		01		
Mw 2 ✓								11:00									02		
Mw 3 ✓								10:00									03		
Mw 4 ✓								9:25									04		
Mw 5 ✓								10:20									05		
Mw 6 ✓								8:35									06		
Mw 7 ✓								9:55									07		
Mw 8 ✓																			

## Condition of Sample:

## Temperature Received:

## Mail original Analytical Report to:

Pacific Environmental Group

## Turnaround Time:

Priority Rush (1 day) Rush (2 days) Expedited (5 days) Standard (10 days) 

Relinquished by

Date

Time 9/13/99 15:00

Received by

Finger

Date 9/14/99

Time 10:05

1921 RINGWOOD AV  
SAN JOSE CA 95131

Relinquished by

Date

Time 9/14/99

Received by

Perry

Date 9/14/99

Time 12:09

620 Contra Costa Blvd. #209  
Pleasant Hill, CA 94523

Relinquished by

Date

Time

Received by

lly

Date

Time

25725 Jeronimo Rd. #576C  
Mission Viejo, CA 92622  
4020 148th Ave NE #B

Relinquished by

Date

Time

Received by laboratory

Date

Time

PROJECT No. 3600142B

Facility Name: Fox Doroliversite

CLIENT engineer:

## Chain of Custody

Pacific Environmental Group, Inc.

1921 RINGWOOD AV. SAN JOSE CA. 95131  
Phone 408 953 7300 Fax 408 953 0952

Billing Reference Number: 824

Laboratory Name: Sediment

Comments:

Sample I.D.	Cont. No.	Container	Size (ml)	Sample Preserv.	Matrix	Type	Sampling Date	Sampling Time	BTEX	VPHgas	TPH	Oil and Grease	Oil svld.	Total	VOC (EPA 624/8240)	SVOC (EPA 627/8270)	HVOC (EPA 601/8010)	Fuel Fingerprint As Diesel & Motor oil w/ Filtration by 0.7 MICRON TCLP GLASS Filter followed by Silicagel cleanup of Extract by EPA Method 3610B without solvent exchange
Mw1	5	40mL	TC	H2O	Up	w	9/13/99	10:15	X									
Mw2								11:00										
Mw3								9:00										
Mw4								9:25										
Mw5								10:00										
Mw7								8:35										
Mw8								9:55										

Condition of Sample:

Date 9/13/99 Time 15:00  
Relinquished by

Temperature Received:

Received by   
Date 9/14/99 Time 9:00 AM  
Received byMail original Analytical Report to:  
Pacific Environmental Group1921 RINGWOOD AV.  
SAN JOSE CA 95131620 Contra Costa Blvd. #209  
Pleasant Hill, CA 9452325725 Jeronimo Rd. #576C  
Mission Viejo, CA 92622

4020 148th Ave NE #B

Date Time

Turnaround Time:

Priority Rush (1 day) Rush (2 days) Expedited (5 days) Standard (10 days) 

398

## FIELD DATA SHEET

## WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 360001928 LOCATION: 29016 Hwy 51 WELL ID #: MW-1

CLIENT/STATION No.: Former Dorpolwerke FIELD TECHNICIAN: KEDRO RUIZ

WELL INFORMATION

Depth to Liquid: \_\_\_\_\_ TOB \_\_\_\_\_ TOC \_\_\_\_\_

Depth to water: \_\_\_\_\_ TOB \_\_\_\_\_ TOC \_\_\_\_\_

Total depth: \_\_\_\_\_ TOB \_\_\_\_\_ TOC \_\_\_\_\_

Date: \_\_\_\_\_ Time (2400): \_\_\_\_\_

Probe Type  
and  
I.D. #

Oil/Water interface \_\_\_\_\_  
 Electronic indicator \_\_\_\_\_  
 Other: \_\_\_\_\_

CASINGDIAMETERGAL/LINEAR FT.

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: \_\_\_\_\_

$$TD \underline{1980} \text{ DTW } \underline{883} = \underline{10.97} \text{ Gal/Linear Foot } \underline{.17} = \underline{186} \times \text{ Number of Casings } \underline{3} \text{ Calculated Purge } \underline{5.59}$$

DATE PURGED:	<u>9.13.99</u>	START:	<u>10:08</u>	END (2400 hr):	<u>—</u>	PURGED BY:	<u>RE</u>
DATE SAMPLED:	<u>9.13.99</u>	START:	<u>10:45</u>	END (2400 hr):	<u>—</u>	SAMPLED BY:	<u>RE</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>10:31</u>	<u>1.75</u>	<u>6.83</u>	<u>1130</u>	<u>61.5</u>	<u>Cloudy</u>	<u>Nod</u>	<u>Nod</u>
<u>10:34</u>	<u>3.5</u>	<u>6.76</u>	<u>1150</u>	<u>61.6</u>	<u>Cloudy</u>	<u>Nod</u>	<u>Nod</u>
<u>10:38</u>	<u>5.05</u>	<u>6.71</u>	<u>1140</u>	<u>61.7</u>	<u>Cloudy</u>	<u>Nod</u>	<u>Nod</u>

Pumped dry Yes /No

Cobalt 0-100	NTU 0-200	Strong
Clear	Heavy	Moderate
Cloudy	Moderate	Faint
Yellow	Light	None
Brown	Trace	

## FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: \_\_\_\_\_ TOB/TOC \_\_\_\_\_

## PURGING EQUIPMENT/I.D. #

- Bailer: \_\_\_\_\_
- Centrifugal Pump: 15
- Other: \_\_\_\_\_
- Airlift Pump: \_\_\_\_\_
- Dedicated: \_\_\_\_\_

## SAMPLING EQUIPMENT/I.D. #

- Bailer: 15-10
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-1</u>	<u>9.13.99</u>	<u>10:45</u>	<u>3</u>	<u>10ml</u>	<u>Obs</u>	<u>H2O</u>	<u>TPH6 / 37EX / mTBE</u>
				<u>1L</u>	<u>Amb</u>	<u>up</u>	<u>TPH6, TPHmo</u>

ARKS:

DO NOT USE

## FIELD DATA SHEET

## WATER SAMPLE FIELD DATA SHEET

OBJECT No.: 3600/12B LOCATION: 29016/Ascock St WELL ID #: Mw-2

CLIENT/STATION No.: Former Dorrpower FIELD TECHNICIAN: PEDRO RUIZ

WELL INFORMATION

Depth to Liquid: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Depth to water: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Total depth: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Date: \_\_\_\_\_ Time (2400): \_\_\_\_\_

CASINGDIAMETERGAL/LINEAR FT.

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: \_\_\_\_\_

Probe Type  
and  
I.D. #  
Probe Type  
and  
I.D. #  
Probe Type  
and  
I.D. #

- Oil/Water interface \_\_\_\_\_
- Electronic indicator \_\_\_\_\_
- Other: \_\_\_\_\_

$$TD \underline{19.75} - DTW \underline{7.00} = \underline{12.05} \times \frac{\text{Gal/Linear}}{\text{Foot}} \underline{.17} = \underline{2.05} \times \frac{\text{Number of}}{\text{Casings}} \underline{3} \quad \text{Calculated} \\ = \text{Purge} \underline{.316}$$

DATE PURGED:	<u>9-13-99</u>	START:	<u>10:18</u>	END (2400 hr):	<u>—</u>	PURGED BY:	<u>PE</u>
DATE SAMPLED:	<u>9-13-99</u>	START:	<u>11:00</u>	END (2400 hr):	<u>—</u>	SAMPLED BY:	<u>PE</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (μmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
10:51	2	6.80	1530	61.8	Cloudy	Mod	Mod
10:54	4	6.80	1510	61.9	Cloudy	Mod	Unod
10:57	6	6.90	1550	61.8	Cloudy	Mod	Mod

Pumped dry Yes /

Cobalt 0-100  
Clear  
Cloudy  
Yellow  
Brown

NTU 0-200  
Heavy  
Moderate  
Light  
Trace

Strong  
Moderate  
Faint  
None

## FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: \_\_\_\_\_ TOB/TOC \_\_\_\_\_

PURGING EQUIPMENT/I.D. #

- Bailer: \_\_\_\_\_
- Airlift Pump: \_\_\_\_\_
- Centrifugal Pump: 15
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMPLING EQUIPMENT/I.D. #

- Bailer: 15-18
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
Mw-a	<u>9-13-99</u>	<u>11:00</u>	<u>3</u>	<u>10ml</u>	<u>10A</u>	<u>HCC</u>	<u>TPH/G/3tex/mTB</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NP</u>	<u>TPHD, TPHmo</u>

ARKS:

*Spotty sheen floating  
on top of water*

## FIELD DATA SHEET

## WATER SAMPLE FIELD DATA SHEET

OBJECT No.: 36001928 LOCATION: 29016th street WELL ID #: MW-3

CLIENT/STATION No.: Former Dorpoler site FIELD TECHNICIAN: PEDRO RUIZ

## WELL INFORMATION

Depth to Liquid: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Depth to water: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Total depth: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Date: \_\_\_\_\_ Time (2400): \_\_\_\_\_

## CASING

## DIAMETER

## GAL/

## LINEAR FT.

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

## SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: \_\_\_\_\_

Probe Type  
and  
I.D. #  
 Oil/Water interface  
 Electronic indicator \_\_\_\_\_  
 Other: \_\_\_\_\_

$$\text{TD } 19.80 \text{ DTW } 6.85 = 12.95 \times \frac{\text{Gal/Linear}}{\text{Foot}} \cdot 17 = 200 \times \frac{\text{Number of Casings}}{3} = \text{Calculated Purge } 6.60$$

DATE PURGED:	<u>9-13-99</u>	START:	<u>8:42</u>	END (2400 hr):	<u>—</u>	PURGED BY:	<u>RE</u>
DATE SAMPLED:	<u>9-13-99</u>	START:	<u>9:00</u>	END (2400 hr):	<u>—</u>	SAMPLED BY:	<u>RE</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>8:46</u>	<u>205</u>	<u>6.59</u>	<u>1140</u>	<u>61.0</u>	<u>Clear</u>	<u>Nod</u>	<u>Faint</u>
<u>8:50</u>	<u>15</u>	<u>6.70</u>	<u>1130</u>	<u>61.4</u>	<u>Clear</u>	<u>Nod</u>	<u>Faint</u>
<u>8:54</u>	<u>615</u>	<u>6.82</u>	<u>1130</u>	<u>61.5</u>	<u>Clear</u>	<u>Nod</u>	<u>Faint</u>

Pumped dry Yes / No

Cobalt 0-100  
 Clear  
 Cloudy  
 Yellow  
 Brown

NTU 0-200  
 Heavy  
 Moderate  
 Light  
 Trace

Strong  
 Moderate  
 Faint  
 None

## FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: \_\_\_\_\_ TOB/TOC: \_\_\_\_\_

## PURGING EQUIPMENT/I.D. #

- Bailer: \_\_\_\_\_
- Centrifugal Pump: 15
- Other: \_\_\_\_\_
- Airlift Pump: \_\_\_\_\_
- Dedicated: \_\_\_\_\_

## SAMPLING EQUIPMENT/I.D. #

- Bailer: 15-9
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-3</u>	<u>9-13-99</u>	<u>9:00</u>	<u>3</u>	<u>10ml</u>	<u>Wa</u>	<u>HCl</u>	<u>TPHg / BTEX / MTBE</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NP</u>	<u>TPHD, TPHmo</u>

1 ARKS: \_\_\_\_\_

# FIELD DATA SHEET

## WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 36001428 LOCATION: 2901 Glycerin St WELL ID #: MW-1

CLIENT/STATION No.: Former Dorro Properties FIELD TECHNICIAN: Kerro Ruiz

### WELL INFORMATION

Depth to Liquid: TOB TOC  
 Depth to water: TOB TOC  
 Total depth: TOB TOC  
 Date: \_\_\_\_\_ Time (2400): \_\_\_\_\_

### CASING

#### DIAMETER

### GAL/

#### LINEAR FT.

### SAMPLE TYPE

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: \_\_\_\_\_

Probe Type  
and  
I.D. #  
 Oil/Water interface  
 Electronic indicator \_\_\_\_\_  
 Other: \_\_\_\_\_

TD 19.70 - DTW 8.10 = 11.3 Gal/Linear  
 x Foot .17 = 1.92 Number of Casings 3 Calculated = Purge 5.76

DATE PURGED:	<u>9-13-99</u>	START:	<u>9:10</u>	END (2400 hr):	<u>—</u>	PURGED BY:	<u>RE</u>
DATE SAMPLED:	<u>9-13-99</u>	START:	<u>9:25</u>	END (2400 hr):	<u>—</u>	SAMPLED BY:	<u>RE</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
<u>9:11</u>	<u>2</u>	<u>6.74</u>	<u>7.33</u>	<u>60.6</u>	<u>Cloudy light</u>	<u>NONE</u>	
<u>9:17</u>	<u>4</u>	<u>6.71</u>	<u>7.35</u>	<u>60.9</u>	<u>Cloudy light</u>	<u>NONE</u>	
<u>9:21</u>	<u>6</u>	<u>6.86</u>	<u>7.37</u>	<u>61.0</u>	<u>Cloudy f.g.n.</u>	<u>NONE</u>	

Pumped dry Yes /

Cobalt 0-100	NTU 0-200	Strong
Clear	Heavy	Moderate
Cloudy	Moderate	Faint
Yellow	Light	None
Brown	Trace	

### FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: \_\_\_\_\_ TOB/TOC: \_\_\_\_\_

### PURGING EQUIPMENT/I.D. #

- Bailer: \_\_\_\_\_
- Airlift Pump: \_\_\_\_\_
- Centrifugal Pump: 15
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

### SAMPLING EQUIPMENT/I.D. #

- Bailer: 158
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-1</u>	<u>9-13-99</u>	<u>9:25</u>	<u>3</u>	<u>10ml</u> <u>2</u>	<u>USA</u> <u>Amb</u>	<u>HCC</u> <u>NP</u>	<u>TPHG / 3TEX / mTBE</u> <u>TPHD, TPH MO</u>

MARKS:

# FIELD DATA SHEET

## WATER SAMPLE FIELD DATA SHEET

OBJECT No.: 36001928 LOCATION: 2901 Glazier st WELL ID #: MW-0

CLIENT/STATION No.: Former Doppower site FIELD TECHNICIAN: PEDRO RUIZ

### WELL INFORMATION

Depth to Liquid: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Depth to water: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Total depth: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Date: \_\_\_\_\_ Time (2400): \_\_\_\_\_

Probe Type  Oil/Water interface \_\_\_\_\_  
 and  Electronic indicator \_\_\_\_\_  
 I.D. #  Other: \_\_\_\_\_

CASING	GAL/
DIAMETER	LINEAR FT.
<input checked="" type="checkbox"/> 2	0.17
<input type="checkbox"/> 3	0.38
<input type="checkbox"/> 4	0.66
<input type="checkbox"/> 4.5	0.83
<input type="checkbox"/> 5	1.02
<input type="checkbox"/> 6	1.5
<input type="checkbox"/> 8	2.6

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: \_\_\_\_\_

$$TD \underline{1950} \quad DTW \underline{1063.887} \times \frac{\text{Gal/Linear}}{\text{Foot}} \underline{17} = \underline{150} \times \frac{\text{Number of}}{\text{Casings}} \underline{3} \quad \text{Calculated} \underline{3.52} \\ = \text{Purge}$$

DATE PURGED:	<u>9-13-99</u>	START:	<u>10:01</u>	END (2400 hr):	<u>—</u>	PURGED BY:	<u>JE</u>
DATE SAMPLED:	<u>9-13-99</u>	START:	<u>10:20</u>	END (2400 hr):	<u>—</u>	SAMPLED BY:	<u>JE</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
10:05	13	7.50	1350	60.4	Cloudy	Mod	Strong
10:09	3	7.50	1300	63.0	Cloudy	Mod	Strong
10:13	16	7.38	1290	60.5	Cloudy	Light	Strong

Pumped dry Yes / No

Cobalt 0-100	NTU 0-200
Clear	Heavy
Cloudy	Moderate
Yellow	Light
Brown	Trace

### FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: \_\_\_\_\_ TOB/TOC: \_\_\_\_\_

### PURGING EQUIPMENT/I.D. #

Bailer: \_\_\_\_\_  Airlift Pump: \_\_\_\_\_  
 Centrifugal Pump: 15  Dedicated: \_\_\_\_\_  
 Other: \_\_\_\_\_

### SAMPLING EQUIPMENT/I.D. #

Bailer: 15- \_\_\_\_\_  
 Dedicated: \_\_\_\_\_  
 Other: \_\_\_\_\_

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW6	<u>9-13-99</u>	<u>10:20</u>	<u>3</u>	<u>10ml</u>	<u>Lab</u>	<u>H2O</u>	<u>TPH/G/BTEX/mTBE</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NP</u>	<u>TPHD, TPHmo</u>

MARKS:

*Do. 28*  
*Heavy oily sheen on Bailer &*  
*on top of water*

# FIELD DATA SHEET

## WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 360001928 LOCATION: 29016 Glasgow St WELL ID #: MW-7

CLIENT/STATION No.: Former Dorpcutter FIELD TECHNICIAN: Pedro Ruiz

### WELL INFORMATION

Depth to Liquid: \_\_\_\_\_ TOB \_\_\_\_\_ TOC \_\_\_\_\_

Depth to water: \_\_\_\_\_ TOB \_\_\_\_\_ TOC \_\_\_\_\_

Total depth: \_\_\_\_\_ TOB \_\_\_\_\_ TOC \_\_\_\_\_

Date: \_\_\_\_\_ Time (2400): \_\_\_\_\_

Probe Type  
and  
I.D. #  
 Oil/Water interface \_\_\_\_\_  
 Electronic indicator \_\_\_\_\_  
 Other: \_\_\_\_\_

### CASING

#### DIAMETER

### GAL/

#### LINEAR FT.

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

### SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: \_\_\_\_\_

$$TD 17.75 - DTW 5.30 = 12.45 \times \frac{\text{Gal/Linear}}{\text{Foot}} \cdot 17 = 211 \times \frac{\text{Number of Casings}}{3} = \text{Calculated Purge} 6.34$$

DATE PURGED: 9-13-99 START: 8:19 END (2400 hr): — PURGED BY: PE

DATE SAMPLED: 9-13-99 START: 8:35 END (2400 hr): — SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
8:23	2	6.99	1300	69.1	Clear	Faint	None
8:26	4	6.44	1290	69.1	Clear	Light	None
8:30	6	6.48	1290	69.3	Clear	Light	None

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: \_\_\_\_\_ TOB/TOC: \_\_\_\_\_

### PURGING EQUIPMENT/I.D. #

- Bailer: \_\_\_\_\_
- Airlift Pump: \_\_\_\_\_
- Centrifugal Pump: i5
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

Cobalt 0-100  
Clear  
Cloudy  
Yellow  
Brown

NTU 0-200  
Heavy  
Moderate  
Light  
Trace

Strong  
Moderate  
Faint  
None

### SAMPLING EQUIPMENT/I.D. #

- Bailer: 15-10
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-7</u>	<u>9-13-99</u>	<u>8:35</u>	<u>3</u>	<u>10ml</u>	<u>100A</u>	<u>HCC</u>	<u>TPHG/3TEX/mTBE</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NP</u>	<u>TPHD, TPHMO</u>

MARKS: \_\_\_\_\_

## FIELD DATA SHEET

## WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 36001928LOCATION: 2901 Glaycoy StWELL ID #: MW-8CLIENT/STATION No.: Former Dero Power Site FIELD TECHNICIAN: KEDRO RUIZWELL INFORMATION

Depth to Liquid: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Depth to water: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Total depth: \_\_\_\_\_ TOB \_\_\_\_\_ TOC  
 Date: \_\_\_\_\_ Time (2400): \_\_\_\_\_

CASINGDIAMETERGAL/LINEAR FT.

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: \_\_\_\_\_

Probe Type \_\_\_\_\_  
 and \_\_\_\_\_  
 I.D. # \_\_\_\_\_  
 Probe Type \_\_\_\_\_  
 and \_\_\_\_\_  
 I.D. # \_\_\_\_\_  
 Other: \_\_\_\_\_

$$\text{TD } \underline{1770} \text{ DTW } \underline{1038} \text{ Gal/Linear Foot } \underline{.17} = \underline{104} \text{ Number of Casings } \underline{3} \text{ Calculated Purge } \underline{3.73}$$

DATE PURGED:	<u>9-13-99</u>	START:	<u>9:46</u>	END (2400 hr):	<u>—</u>	PURGED BY:	<u>RE</u>
DATE SAMPLED:	<u>9-13-99</u>	START:	<u>9:55</u>	END (2400 hr):	<u>—</u>	SAMPLED BY:	<u>RE</u>

TIME (2400 hr)	VOLUME (gal)	pH (units)	E.C. (μmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
9:43	105	6.80	2130	60.6	Cloudy	Mod	NONE
9:45	25	6.73	2160	60.7	Cloudy	Mod	NONE
9:48	375	6.56	2160	60.5	Cloudy	Mod	NONE

Pumped dry Yes / No

Cobalt 0-100  
 Clear  
 Cloudy  
 Yellow  
 Brown

NTU 0-200  
 Heavy  
 Moderate  
 Light  
 Trace

Strong  
 Moderate  
 Faint  
 None

## FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: \_\_\_\_\_ TOB/TOC \_\_\_\_\_

PURGING EQUIPMENT/I.D. #

- Bailer: \_\_\_\_\_
- Airlift Pump: \_\_\_\_\_
- Centrifugal Pump: 15
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMPLING EQUIPMENT/I.D. #

- Bailer: 15-14
- Dedicated: \_\_\_\_\_
- Other: \_\_\_\_\_

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW8</u>	<u>9-13-99</u>	<u>9:55</u>	<u>3</u>	<u>10ml</u>	<u>Obs</u>	<u>H2O</u>	<u>TOH/G/BTEX/mIBP</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NP</u>	<u>TPHd, TPHmo</u>

ARKS: \_\_\_\_\_