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Southwest Division
Naval Facilities Engineering Command
Contracts Department
1220 Pacific Highway, Building 127, Room 112
San Diego, California 92132-5190

CONTRACT NO. N68711-98-D-5713
CTO NO. 0026

FINAL

FIRST SEMIANNUAL 2001 GROUNDWATER MONITORING REPORT FOR MULTIPLE 13 AREA SITES

Revision 0
March 30, 2001

MARINE CORPS BASE
CAMP PENDLETON, CALIFORNIA

DCN: FWSD-RAC-01-0413

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March 30, 2001
FWSD-RAC-01-0413
CTO No. 0026

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Subject: **Final First Semiannual 2001Groundwater Monitoring Report for Multiple 13 Area Sites, Marine Corps Base Camp Pendleton, California**

Reference: SWDIV Contract No. N68711-98-D-5713, CTO No. 0026, Environmental Remedial Action Contract for Sites in Southern California, Arizona, New Mexico, and Southern Nevada

Dear Ed:

Attached is a copy of the subject Report presenting groundwater analytical results for the first semiannual 2001 groundwater monitoring event at multiple underground storage tank (UST) sites in the 13 Area. The report also includes a description of the field activities recently completed which modified the groundwater monitoring well network at Site 1.

Results from this monitoring event indicate that the plumes of groundwater contamination have not migrated significantly since the last monitoring event completed in August 2000. Increased reporting of TPH-purgeable (in the shallow aquifer) and TPH-extractable (in both the shallow and deep aquifers) is largely attributable to lowering the laboratory reporting limits for these analytes below Water Quality Objectives.

If you have any questions, please call.

Sincerely,

Foster Wheeler Environmental Corporation

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	FWENC Project File	San Diego (unbound copy)

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ABBREVIATIONS AND ACRONYMS

bgs	below ground surface
CTO	Contract Task Order
1,2-DCA	1,2-dichloroethane
DEH	Department of Environmental Health
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
ft/ft	foot per foot
FWENC	Foster Wheeler Environmental Corporation
LCS	laboratory control spike
LCSD	laboratory control spike duplicate
µg/L	micrograms per liter
MCB	Marine Corps Base
mg/L	milligrams per liter
MS/MSD	matrix spike / matrix spike duplicate
MTBE	methyl tertiary butyl ether
NA	natural attenuation
ORP	oxidation/reduction potential
PAH	polynuclear aromatic hydrocarbon
PRD	product recovery device
PSH	phase-separated hydrocarbon
RWQCB	Regional Water Quality Control Board
SAM	Site Assessment and Mitigation
TCE	trichloroethene
TOC	total organic carbon
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
UST	underground storage tank
VOC	volatile organic compound
WQO	Water Quality Objective

1.0 INTRODUCTION

This quarterly groundwater monitoring report summarizes the results of the first semiannual 2001 groundwater monitoring event (covering the period October 2000 through March 2001), at multiple sites in 13 Area, Marine Corps Base (MCB) Camp Pendleton, California. The groundwater sampling conducted at the site, as well as the associated reporting activities, were performed by Foster Wheeler Environmental Corporation (FWENC) under Contract Task Order (CTO) No. 0026 for the Naval Facilities Engineering Command, Southwest Division, Contract No. N68711-98-D-5713.

1.1 SCOPE OF WORK

Prior to groundwater sampling activities, three wells were destroyed, and two replacement wells were installed by FWENC in the 13 Area. A summary of well destruction and installation activities is included as Attachment 1 to this report. Sampling of the new wells was performed during this semiannual monitoring event.

Semiannual monitoring included measurement of groundwater and phase-separated hydrocarbon (PSH) levels, as well as collection and analysis of groundwater samples. Monitored wells are listed in Section 2.0. Groundwater samples were analyzed for some or all of the following: total petroleum hydrocarbons (TPH) extractable, TPH-purgeable, total recoverable petroleum hydrocarbons (TRPH), volatile organic compounds (VOCs) including methyl tertiary butyl ether (MTBE) and other oxygenates, polynuclear aromatic hydrocarbons (PAHs), and several parameters used to monitor natural attenuation.

1.2 SITE BACKGROUND

The 13 Area sites are located in the eastern portion of MCB Camp Pendleton (Figure 1-1) and include multiple former underground storage tank (UST) sites, including Sites 1, 5, 6, 7, 8, 9, and 17. The 13 Area sites have been combined into three groups based on proximity. The groups include Site 1, Site 5/8/9/17, and Site 6/7 (Figure 1-2).

Site 1 contained a 10,000-gallon metal UST used to store gasoline for a former fueling station. Site 5/8/9/17 includes the former locations of three USTs and a Pipeline. Site 5 was a 1,500-gallon underground concrete tank and Site 8 was a 200-gallon underground metal tank; both were used to store diesel fuel for heating. Site 9 was a 650-gallon underground concrete tank used to store waste oil. Site 17 was a 1-inch pipeline that connected USTs at Sites 5 and 8. Site 6/7 contained both a former 350-gallon underground concrete tank and a former 500-gallon underground concrete tank. Both tanks were used to store oily waste from a motor pool wash pad.

1.3 SITE HYDROGEOLOGY

Groundwater beneath Site 1 is present at approximately 20 feet below ground surface (bgs) at elevations ranging from 307 to 315 feet above mean sea level. Groundwater flows generally to the west and south, and is primarily present within relatively low permeability sediments including sands rich in clays. The saturated thickness of the water-bearing zone, referred to as the shallow aquifer, is estimated to range from 5 to 20 feet (Parsons, 1999).

Groundwater within the shallow aquifer at Sites 5/8/9/17 and 6/7 is encountered at approximately 20 to 25 feet bgs. Groundwater in the shallow aquifer flows to the west and north, and is primarily present within silts and clays. The average thickness of the shallow aquifer at Sites 5/8/9/17 and 6/7 is estimated to be 5 feet or less (Parsons, 1999).

A deeper aquifer has also been identified at Sites 5/8/9/17 and 6/7 at approximately 50 feet bgs. Groundwater flows to the southwest, and is present within fine- to medium-grained, weakly cemented sands. The average thickness of the deeper aquifer is at least 5 to 10 feet (Parsons, 1999).

2.0 FIELD ACTIVITIES

Monitoring activities at 13 Area included measuring of groundwater and PSH levels, and groundwater sampling and analysis. Between February 14, 2001 and February 26, 2001, 39 wells were sampled.

2.1 WATER LEVEL MEASUREMENTS

Prior to groundwater sampling, the depth to water and the total depth to the bottom of each well were measured and recorded on a water-level log and well development/sampling log form (Appendix A). The depths were measured to the top of the surveyed casing in each well. Table 2-1 is a record of current groundwater elevation data, and Table 2-2 summarizes historical groundwater elevations. Groundwater elevation contour maps for the shallow and deep aquifers were prepared based on the recorded water levels (Figures 2-1 and 2-2). Groundwater was not sampled in the following wells in which PSH or product recovery devices (PRDs) were observed: S5/8/9/17-MW40, S5/8/9/17-MW48, S6/7-MW15, S6/7-MW18. Figure 2-3 summarizes historical PSH removal from well S5/8/9/17-MW40, the well historically with the most PSH.

2.2 FIELD PROCEDURES

Groundwater samples were collected in accordance with the sampling procedures described in the *Groundwater Sampling Plan for Multiple 12 and 13 Area Sites* (FWENC, 2000). Prior to groundwater sampling, each well was purged of stale casing and borehole water. Monitoring wells were purged either by hand using a disposable bailer or using a portable, submersible Grundfos® pump. Field data sheets, presented in Appendix A, indicate the purge method and purge volume for each well. Temperature, pH, electrical conductivity, turbidity, oxidation/reduction potential (ORP) and dissolved oxygen (DO) were monitored during purging activities (see Appendix A). All non-disposable downhole equipment was decontaminated between wells.

Groundwater samples were collected with disposable polyethylene bailers that were lowered into each well with a nylon string. A new bailer and string were used for each monitoring well to prevent cross-contamination of samples. All sample containers were completely filled, labeled, and placed in a cooler with ice immediately after sample collection for delivery to the laboratory.

2.3 CONTAMINANT SAMPLE ANALYSES

Groundwater at Site 13 wells was analyzed for some or all of the following analytical parameters for contaminants of concern:

- TPH-extractable by U.S. Environmental Protection Agency (EPA) Method 8015B
- TPH-purgeable by EPA Method 8015B

- TRPH by EPA Method 418.1
- VOCs by EPA Method 8260B, including MTBE and other oxygenates
- PAHs by EPA Method 8310

2.4 NATURAL ATTENUATION SAMPLE ANALYSES

To evaluate natural attenuation of contaminants at the 13 Area sites, groundwater from all wells was also analyzed for several additional parameters. In the field, pH, temperature, conductivity, ORP and dissolved oxygen (DO) were measured using field instruments. Ferrous iron analyses were performed on select wells using a Hach® IR-18C field test kit. Groundwater analyses were also performed at a fixed laboratory for the parameters listed below.

- Chloride, sulfate, and nitrate by EPA Method 300.0
- Alkalinity by EPA Method 310.1
- Total Organic Carbon (TOC) by EPA Method 9060
- Methane, ethane, and ethane (dissolved gases) by Method RSK-175

2.5 WASTE MANAGEMENT

All equipment decontamination water and groundwater generated from well purging and sampling was contained in a liquid waste storage tank located in 13 Area, MCB Camp Pendleton. Samples from the liquid waste storage tank were collected, analyzed and used for waste profiling. All waste water was transported to Onyx Environmental Services in Azusa, California, for disposal. No wastes were present on site longer than 60 days. A copy of the non-hazardous waste manifest is included as Appendix C.

3.0 GROUNDWATER MONITORING RESULTS

The following sections describe the results of the first semiannual 2001 groundwater monitoring event at 13 Area.

3.1 GROUNDWATER FLOW DIRECTION

Both shallow and deep aquifers are monitored at 13 Area, however, only the shallow aquifer is present below Site 1. Groundwater elevations and flow directions for the shallow and deep aquifers in 13 Area are presented in Figures 2-1 and 2-2, respectively. A summary of groundwater and PSH elevation data is presented in Table 2-1.

During February 2001, shallow aquifer groundwater was encountered at depths ranging from 10.86 feet bgs at well S5/8/9/17-MW47 to 52.83 feet bgs at well S1-MW21, which is located approximately 500 feet away at a higher ground surface elevation. Shallow aquifer groundwater elevations have changed little, generally less than 0.5 foot, from the last monitoring event in August 2000 (Table 2-2). Based on the February 2001 groundwater elevation measurements, shallow aquifer groundwater flow is generally to the west and south; however, flow is to the north from Site 5/8/9/17 toward Site 6/7 (Figure 2-1). Groundwater gradients are relatively flat near both Site 1 and Site 5/8/9/17, and are steeper near Site 6/7, and between Site 1 and Site 5/8/9/17. Groundwater gradients average between 0.01 foot/foot (ft/ft) and 0.02 ft/ft across 13 Area.

Deep aquifer groundwater (Figure 2-2), was encountered at depths ranging from 43.64 feet bgs at well S6/7-MW12 to 63.10 feet bgs at well S5/8/9/17-MW34. Deep aquifer groundwater elevations also vary little from the last monitoring event in August 2000, with changes ranging up to a decrease in elevation of approximately 0.5 feet. Based on the February 2001 groundwater elevation measurements, deep aquifer groundwater flow is generally to the west (Figure 2-2), with a gradient averaging approximately 0.006 ft/ft.

3.2 CONTAMINANT ANALYTICAL RESULTS

Contaminant analytical results from this semiannual sampling event and previous events are summarized in Tables 3-1, 3-2, and 3-3. The results from this event are also shown in Figures 3-1, 3-2, and 3-3. The laboratory analytical reports are included in Appendix B.

3.2.1 SHALLOW AQUIFER ANALYTICAL RESULTS

The first semiannual 2001 monitoring event detected TPH-purgeable, TPH-extractable, or VOCs exceeding water quality objectives (WQOs), as specified in the San Diego Regional Water Quality Board Basin Plan (RWQCB, 1994) in 20 shallow aquifer wells. Shallow aquifer wells with contaminants exceeding WQOs are shown on Figures 3-1 and 3-2, and are also summarized on Tables 3-1, 3-2, and 3-3. Specific contaminants found in excess of WQO's are: TPH-

purgeable [(WQO 0.05 milligrams per liter (mg/L)]; TPH-extractable (WQO 1.0 mg/L); benzene [(WQO 1.0 micrograms per liter (µg/L)]; toluene (WQO 150 µg/L); trichloroethene (TCE) (WQO 5 µg/L); carbon tetrachloride (WQO 0.5 µg/L); 1,2-dichloroethane (1,2-DCA) (WQO 0.5 µg/L); and cis-1,2-dichloroethene (WQO 6 µg/L).

The highest level of TPH-purgeable contamination encountered in the shallow aquifer was in well S1-MW22, at 81 mg/L (Figure 3-1). This well is located adjacent to former well S1-MW13171-1, slightly southwest of the former gasoline UST tank cavity at Site 1. The plume of TPH-purgeable extends southward toward the vicinity of well S1-MW19. Some TPH-purgeable (0.14 mg/L) was detected to the southeast in well S1-MW14, where the last monitoring event in August 2000 did not detect TPH-purgeable above 0.5 mg/L. Concentrations of ether oxygenates, up to 830 µg/L, were also detected in the vicinity of the former tank cavity at Site 1 (Table 3-1). The additional sampling of 3 wells at Site 2, S2-MW2, S2-MW3, and S2-MW5, during this monitoring event did not detect any migration of contaminants to the west. No contaminants were detected in wells S1-MW8, S1-MW17, or S1-MW18, indicating there has been no additional plume migration to the north or northeast.

The highest concentration of TPH-extractable in the shallow aquifer was detected in well S5/8/9/17-MW41 (12 mg/L). Due to the presence of phase separated hydrocarbons over a large area in the vicinity of Sites 5/8/9/17 and Site 6/7, as indicated on Figure 2-1, several wells were not sampled. Active product removal (manual bailing) is being performed at the site. The plume of TPH-extractable in excess of the WQO extends from well S1-MW19, to the southwest, to well S6/7-MW17, to the northeast. Figure 3-1 depicts specific concentrations of TPH-extractable in the shallow wells.

The concentration of TCE was highest (200 µg/L) in well S5/8/9/17-MW50, and was detected in most wells in the central and eastern portions of the monitored area (Figure 3-2).

The results for shallow groundwater at 13 Area are consistent with results from the previous sampling event [Navy Public Works Center (PWC), 2000]. The sampling of additional shallow aquifer wells during this event indicates that the contaminant plumes are generally stable since the last monitoring event.

3.2.2 DEEP AQUIFER ANALYTICAL RESULTS

Contaminants with concentrations exceeding WQOs (see Section 3.2.1) in the deep aquifer at 13 Area during the February 2001 monitoring event were TPH-extractable, TCE, and 1,2-DCA. Deep aquifer wells with contaminants exceeding WQOs are shown on Figure 3-3, and are also summarized on Tables 3-1, 3-2, and 3-3. TPH-extractable exceeded the WQO in 10 of the 12 deep aquifer wells analyzed, with the maximum concentration detected at well S5/8/9/17-MW10 (0.72 mg/L). TCE exceeded the WQO in only 2 of the 12 deep aquifer wells, with the maximum concentration detected in well S5/8/9/17-MW15 (7.6 µg/L). Concentrations of 1,2-DCA

exceeded the WQO in 5 of the 12 deep aquifer wells, with the maximum concentrations occurring in wells S5/8/9/17-MW10 and S6/7-MW7 (1.1 µg/L).

The results for the deep aquifer groundwater at 13 Area are also consistent with the last monitoring event in August 2000. Increased detection of TPH-extractable is attributable to lower laboratory reporting limits (0.1 mg/L) versus most previous monitoring events at 13 Area (0.5 mg/L).

3.3 NATURAL ATTENUATION PARAMETERS ANALYTICAL RESULTS

Groundwater parameters analyzed in both the shallow and deep aquifer wells for the assessment of natural attenuation at 13 Area are presented in Tables 3-4, 3-5, and 3-6, and the sample collection logs in Appendix A. Results from this semiannual monitoring event for chloride, sulfate, nitrate, ferrous iron, TOC, alkalinity, and dissolved gases (methane, ethane, and ethene), along with previous analytical results, are summarized in Table 3-2. Field forms with results of temperature, conductivity, pH, ORP and DO for each well are included in Appendix A.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

Groundwater samples were collected and preserved in accordance with the San Diego County Department of Environmental Health, *Site Assessment and Mitigation (SAM) Manual 2000* (DEH, 2000), and were delivered to the laboratory within 24 hours of sample collection. The samples were analyzed within the analytical holding times. EMAX Laboratories, a California State-certified and Navy-evaluated laboratory, analyzed the groundwater samples.

VOCs were detected in several trip blank and equipment rinsate samples. Sample results for those analytes on the relevant days are therefore qualified on the data tables (Tables 3-1, 3-2, and 3-3). The analytical results for the trip blanks, field duplicates, matrix spike / matrix spike duplicates (MS/MSD), laboratory control spikes (LCS), laboratory control spike duplicates (LCSD), and method blanks will be evaluated by the FWENC project chemist after receipt of the third party validation report, and will be incorporated into the annual groundwater monitoring report for 13 Area.

5.0 SUMMARY

Groundwater results for 13 Area, from the February 2001 monitoring event (Table 3-1, 3-2, and 3-3; and Figures 3-1, 3-2, and 3-3) indicate that the plumes of groundwater contamination have not migrated significantly since the last monitoring event in August 2000. Increased reporting of TPH-purgeable and TPH-extractable in the shallow aquifer, and TPH-extractable in the deep aquifer is largely attributable to lower laboratory reporting limits for these contaminants (lowered below the WQO). TCE concentrations, in both the shallow and deep aquifer, for this monitoring event are similar to the August 2000 monitoring event results.

Because the extent of the contaminant plumes and contaminant concentrations has not changed appreciably since the last monitoring event, including the results from sampling numerous additional wells in both aquifers, it is recommended that future monitoring events resume sampling the previously identified representative subset of the monitoring wells in each aquifer, similar to those wells sampled during the last monitoring event in August 2000. The increased number of wells containing PSH since the last monitoring event indicates that continued active removal of PSH from well S5/8/9/17 should be continued, and that other wells containing PSH should be monitored regularly for PSH levels, and product removal activities commenced if PSH thickness increases significantly.

Continued semiannual monitoring of natural attenuation parameters is recommended for a representative subset of both deep and shallow aquifer wells, similar to those wells sampled during the August 2000 monitoring event. All sampled wells in the 13 Area will continue to be monitored for all field-tested natural attenuation parameters (pH, temperature, conductivity, ORP and DO).

6.0 REFERENCES

California Regional Water Quality Control Board (RWQCB). 1994. *Water Quality Control Plan for the San Diego Basin)(amended).*

Foster Wheeler Environmental Corporation (FWENC). 2000. *Final Groundwater Sampling Plan for Multiple 12 and 13 Area Sites*, Marine Corps Base, Camp Pendleton, California. (DCN: FWSD-RAC-01-0290).

Parsons. 1999. *Final Remedial Action Work Plan for the 13 Area Sites*. Marine Corps Base Camp Pendleton. January.

Navy Public Works Center (PWC), San Diego. 2000. *Semiannual Groundwater Monitoring Report for April 2000 to September 2000, 12 and 13 Areas, MCB Camp Pendleton, California*. October.

San Diego County, Department of Environmental Health (DEH), Land and Water Quality Division. *San Diego County Site Assessment and Mitigation (SAM) Manual 2000.*

TABLES

Table 2-1
Groundwater Elevations, 13 Area, February 2001,
MCB Camp Pendleton

Well Identification	Screen Interval Depth (ft bgs)	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Groundwater Elevation (ft msl)	Comments
S1-MW4	13 - 29	326.78	14.76	312.02	
S1-MW8	14 - 35	328.60	17.95	310.65	(1)
S1-MW13	24 - 40	340.17	30.36	309.81	
S1-MW14	16.5 - 32.5	333.93	20.89	313.04	
S1-MW15	20 - 36	334.85	23.45	311.40	
S1-MW16	26 -42.5	339.60	29.80	309.80	
S1-MW17	11 - 32	321.89	11.86	310.03	
S1-MW18	7 - 28.5	322.40	11.70	310.70	
S1-MW19	33.5 - 50	345.02	36.80	308.22	
S1-MW20	31 - 61	354.15	47.12	307.03	
S1-MW21	30 - 60	359.21	52.83	306.38	(1)
S1-MW22	18 - 33	329.46	19.80	309.66	(1)
S1-MW23	14 - 34	327.52	17.43	310.09	(1)
S1-MW13171-1	Unknown	330.46	--	--	Destroyed
S1-MW13171-2	Unknown	327.48	--	--	Destroyed
S1-MW13171-3	Unknown	328.14	--	--	Destroyed
S2-MW1	25.5 - 41.5	340.66	29.12	311.54	
S2-MW2	22 - 38	337.23	--	--	
S2-MW3	27 - 48	345.28	37.39	307.89	
S2-MW4	20 - 41	334.75	--	--	
S2-MW5	20 - 41	337.89	26.14	311.75	
S2-MW6	29 - 45	341.53	--	--	
S5/8/9/17-MW1 (deep)	43 - 64	337.80	53.52	284.28	
S5/8/9/17-MW4 (deep)	43.5 - 64.5	337.67	53.08	284.59	
S5/8/9/17-MW7 (deep)	43 - 64	336.52	52.35	284.17	
S5/8/9/17-MW10 (deep)	44 - 57	330.72	45.92	284.80	
S5/8/9/17-MW15 (deep)	57 - 78	341.62	58.00	283.62	
S5/8/9/17-MW23 (deep)	60 - 81	346.49	62.92	283.57	
S5/8/9/17-MW25 (deep)	49 - 65	337.49	52.80	284.69	
S5/8/9/17-MW31 (deep)	49 - 65	337.41	52.46	284.95	
S5/8/9/17-MW34 (deep)	53 - 74	347.98	63.10	284.88	
S5/8/9/17-MW36 (deep)	52 - 73	343.90	60.90	283.00	
S5/8/9/17-MW37 (deep)	50 - 66	336.72	53.27	283.45	
S5/8/9/17-MW38	12 - 28	331.22	16.36	314.86	
S5/8/9/17-MW39	15 - 31	331.13	12.88	318.25	water level above screen
S5/8/9/17-MW40	44 - 65	337.62	19.32	318.30	PSH; water @ 20.32
S5/8/9/17-MW41	19 - 35	336.21	19.57	316.64	
S5/8/9/17-MW44	17 - 33	337.03	18.35	318.68	
S5/8/9/17-MW46	14 - 30	330.88	15.10	315.78	
S5/8/9/17-MW47	14 - 30	328.03	10.86	317.17	water level above screen
S5/8/9/17-MW48	13 - 34	338.33	20.46	317.87	PSH sheen
S5/8/9/17-MW50	19 - 35	340.64	29.16	311.48	

Table 2-1
Groundwater Elevations, 13 Area, February 2001, MCB Camp Pendleton
(Page 2 of 2)

Well Identification	Screen Interval Depth (ft bgs)	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Groundwater Elevation (ft msl)	Comments
S6/7-MW7 (deep)	40 - 56	332.09	47.00	285.09	
S6/7-MW12 (deep)	38 - 59	328.68	43.64	285.04	
S6/7-MW13	16 - 32	332.53	17.85	314.68	
S6/7-MW15	14 - 30	332.24	- -	- -	PSH
S6/7-MW16	? - 28	327.83	15.70	312.13	
S6/7-MW17	? - 33	332.57	20.40	312.17	
S6/7-MW18	? - 28	333.20	- -	- -	PRD

deep - Denotes that well is located in the next deeper aquifer below the shallow aquifer.
ft msl - Feet above mean sea level.
ft btoc - Feet below top of well casing.
PSH - Phase-separated hydrocarbon.
PRD - PSH product recovery device in well
(1) - Well recently installed or resurveyed; casing elevation adjusted -1.67 feet for datum normalization
- - not measured

Table 2-2
Summary of Historical Groundwater Elevations, 13 Area
MCB Camp Pendleton
(Sheet 1 of 2)

Well Identification	Well Elevation (toc)	Screened Interval (ft msl) Top	Bottom	Aug-95 (Baseline)	Nov-95	Feb-96	May-96	Aug-96	Oct-96	Apr-97	Jul-97	Apr-98	Dec-98	Mar-00	Aug-00	Feb-01
S1-MW4	326.78	313.78	297.78	312.37	311.65	310.88	311.51	311.32	311.02	311.66	311.23	311.51	310.75	311.99	312.03	312.02
S1-MW8	328.60	314.60	293.60	311.46	311.73	311.04	310.98	311.32	311.33	--	310.96	310.37	310.94	310.55	311.04	310.65
S1-MW13	340.17	316.17	300.17	309.29	309.38	309.17	309.27	309.33	309.36	309.38	309.11	308.91	309.05	309.28	309.60	309.81
S1-MW14	333.93	317.43	301.43	313.39	313.49	313.15 b	313.08 b	313.30	313.40	313.04	312.94	312.84	313.41	312.94	313.76	313.04
S1-MW15	334.85	314.85	298.85	311.43	311.08	310.42	310.84	310.75	310.57	310.94	310.59	310.52	310.24	311.25	311.40	311.40
S1-MW16	339.60	313.60	297.10	309.49	309.35	309.08	309.34	309.25	309.27	309.37	309.18	308.91	308.98	309.66	309.91	309.80
S1-MW17	321.89	310.89	289.89	311.37	311.01	310.03	310.82	310.81	310.53	310.82	--	--	--	310.29	310.89	310.03
S1-MW18	322.40	315.40	293.90	311.82	310.81	310.08	310.93	310.73	310.30	--	--	--	--	311.01	311.11	310.70
S1-MW19	345.02	311.52	295.02	307.90	307.87	307.70	307.88	307.91	307.93	308.00	307.78	306.82	307.60	307.87	308.20	308.22
S1-MW20	354.15	323.15	293.15	--	--	306.85	306.78	306.77	306.76	306.88	306.63	--	306.63	306.66	307.02	307.03
S1-MW21	359.21	329.21	299.21	--	--	--	--	--	--	--	--	--	--	--	--	306.38
S1-MW22	329.46	311.46	296.46	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	309.66
S1-MW23	327.52	313.52	293.52	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	310.09
S1-MW13171-1	330.46	unk	unk	308.61	306.92 b	306.74 c	306.13 b	307.31 b	308.14	PSH	308.38	307.05	305.70	306.21	307.69	Destroyed
S1-MW13171-2	327.48	unk	unk	310.59 c	310.76 c	309.65 c	310.34 b	310.51 b	310.27	PSH	310.19	prd	309.57	310.19	310.67	Destroyed
S1-MW13171-3	328.14	unk	unk	310.99	310.98	310.11	310.44	310.67	310.55		310.47		310.11	310.29	310.78	Destroyed
S2-MW1	340.66	315.16	299.16	a	a	a	a	a	a	a	a	a	a	a	a	311.54
S2-MW3	345.28	318.28	297.28	a	a	a	a	a	a	a	a	a	a	a	a	307.89
S2-MW5	337.89	317.89	296.89	a	a	a	a	a	a	a	a	a	a	a	a	311.75
S5/8/9/17-MW1 (deep)	337.80	294.80	273.80	283.74	283.76	283.64	283.74	283.93	283.86	283.98	284.08	283.79	283.93	284.23	284.49	284.28
S5/8/9/17-MW4 (deep)	337.67	294.17	273.17	284.32	284.21	284.05	284.22	284.35	284.36	284.33	284.53	284.27	284.30	284.67	284.91	284.59
S5/8/9/17-MW7 (deep)	336.52	293.52	272.52	283.42	282.66	283.51	283.62	283.83	283.84	283.77	283.86	283.78	284.02	284.06	284.29	284.17
S5/8/9/17-MW10 (deep)	330.72	286.72	273.72	283.61	283.90	284.06	284.39	284.45	284.05	283.97	284.27	285.16	284.32	284.68	284.99	284.80
S5/8/9/17-MW15 (deep)	341.62	284.62	263.62	283.06	283.07	282.94	283.12	283.33	283.36	283.25	283.44	283.20	283.30	283.64	283.79	283.62
S5/8/9/17-MW23 (deep)	346.49	286.49	265.49	282.75	282.80	282.74	282.83	283.00	282.95	282.92	283.03	283.19	283.03	283.36	283.56	283.57
S5/8/9/17-MW25 (deep)	337.49	288.49	272.49	284.29	284.21	284.05	284.25	284.38	284.32	284.28	283.95	--	284.35	--	284.95	284.69
S5/8/9/17-MW31 (deep)	337.41	288.41	272.41	284.54	284.51	284.28	284.63	284.67	284.61	--	284.68	284.55	284.62	285.53	285.15	284.95
S5/8/9/17-MW34 (deep)	347.98	294.98	273.98	284.42	284.54	284.41	284.53	284.71	284.58	284.53	284.58	284.33	284.63	284.96	285.23	284.88
S5/8/9/17-MW36 (deep)	343.90	291.90	270.90	282.35	282.22	282.08	282.34	282.39	282.44	279.23	282.64	282.42	282.47	282.78	283.02	283.00
S5/8/9/17-MW37 (deep)	336.72	286.72	270.72	282.68	282.67	282.57	282.76	282.88	282.81	282.84	283.04	--	--	283.22	283.46	283.45
S5/8/9/17-MW38	331.22	319.22	303.22	316.99	316.14	315.78	315.87	315.71	314.48	315.66	316.07	--	--	314.74	315.43	314.86
S5/8/9/17-MW39	331.13	316.13	300.13	318.52	317.78	318.44	318.09	318.60	318.76	318.40	318.26	--	--	318.13	318.40	318.25
S5/8/9/17-MW40	337.62	293.62	272.62	304.20 c	304.09 c	308.43 c	312.67 c	315.27 c	315.90	317.50	319.01	--	--	--	315.85	318.30
S5/8/9/17-MW41	336.21	317.21	301.21	316.70 b	317.06	316.87	316.70	316.93	317.10	316.65	316.73	--	--	316.63	316.74	316.64
S5/8/9/17-MW44	337.03	320.03	304.03	313.38	318.19	317.63	317.17	318.36	318.82	--	316.81	--	--	318.91	319.43	318.68
S5/8/9/17-MW46	330.88	316.88	300.88	316.12	316.23	315.91	315.85	316.09	315.22	315.84	315.88	--	--	315.75	316.03	315.78

Table 2-2
Summary of Historical Groundwater Elevations, 13 Area
MCB Camp Pendleton
(Sheet 2 of 2)

Well Identification	Well Elevation (toc)	Screened Interval (ft msl) Top	Screened Interval (ft msl) Bottom	Aug-95 (Baseline)	Nov-95	Feb-96	May-96	Aug-96	Oct-96	Apr-97	Jul-97	Apr-98	Dec-98	Mar-00	Aug-00	Feb-01
S5/8/9/17-MW47	328.03	314.03	298.03	317.84	317.83	317.63	317.35	317.32	317.46	317.36	317.46	--	--	317.32	317.51	317.17
S5/8/9/17-MW48	338.33	325.33	304.33	316.54	317.03 b	317.74 b	316.94 b	317.48 c	316.08	317.38	317.17	--	--	316.63	317.80	317.87
S5/8/9/17-MW50	340.64	321.64	305.64	--	--	310.30	310.27	310.47	310.61	310.70	310.79	--	--	311.09	311.31	311.48
S6/7-MW7 (deep)	332.09	292.09	276.09	284.58	284.63	284.44	284.59	284.86	285.81	284.66	284.66	--	--	285.14	285.43	285.09
S6/7-MW12 (deep)	328.68	290.68	269.68	284.73	284.64	284.43	284.66	284.82	284.72	284.70	284.92	--	--	285.11	285.31	285.04
S6/7-MW13	332.53	316.53	300.53	315.69 d	315.49	315.50	315.45	315.42	315.36	315.40	315.56	--	--	315.07	315.43	314.68
S6/7-MW15	332.24	318.24	302.24	316.94 c	315.85 c	315.65 c	315.75 c	315.60 c	PSH	315.01	PSH	--	--	--	--	PSH
S6/7-MW16	327.83	--	299.83	--	--	309.79	312.50	312.22	312.39	312.35	312.46	--	--	312.03	312.20	312.13
S6/7-MW17	332.57	--	299.57	--	--	312.40	312.93	312.85	312.87	313.10	314.39	--	--	312.71	312.48	312.17
S6/7-MW18	333.20	--	305.20	--	--	305.31 c	313.58 c	311.97 c	311.95		307.48	--	--	--	--	PRD

Notes:

All groundwater elevations are shown in feet above mean sea level (ft msl)

-- Not measured, or data not available

deep: denotes that well is located in the next deeper aquifer below the shallow aquifer

PSH: phase seperated hydrocarbons

PRD: PSH recovery device in well

toc: top of surveyed casing

unk: unknown

(a) Well used only to calculate groundwater gradients

(b) Indication of free product from paste placed on water-level meter probe

(c) PSH reported, probably affecting water level

(d) Well not developed at time of groundwater level measurement

(e) Well considered dry and therefore not developed

TABLE 3-1
Summary of Historical Groundwater Analytical Results,
Site 1, 13 Area
MCB Camp Pendleton, California
(Sheet 1 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TPH Purgeable mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	Trichloroethene µg/L	Carbon Tetrachloride µg/L	1,2-Dichloroethane µg/L	Tetrachloroethene µg/L	Chloroform µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dichlorobenzene µg/L	1,3,5-Trimethylbenzene µg/L	1,4-Dichlorobenzene µg/L	Isopropylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Naphthalene µg/L	Lead µg/L	Other µg/L
Water Quality Objectives:		**0.1**	**0.05**	**1**	**150**	**680**	**1750**	**5**	**0.5**	**0.5**	**5**	**100**	(1)	**10**(2)	(1)	**5**	(1)	(1)	(1)	(1)	(1)	(1)	
Laboratory Reporting Limit (3)		**0.1**	**0.05**	**0.50**	**0.5**	**0.50**	**1.5**	**5.00**	**0.50**	**0.5**	**5**	**5**	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	**10**	**5**	
S1-MW4	8/1/1995	na	na	--	0.53	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	4/28/1998	na	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/15/2001	na	--	0.46 J *	--	--	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	Methyl Chloride: 0.37 J *
S1-MW8	8/9/1995	na	na	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	11/22/1995	na	na	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	2/27/1996	na	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/21/1996	na	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	--	**1.1**	**1.1**	--	2.6	na	--	na	na	na	na	na	na	na	na	
	8/1/1996	na	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/27/1996	na	na	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	10/23/1996	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/9/1997	na	na	--	--	--	--	--	--	**1.0**	--	2.00	--	--	--	--	--	--	--	--	--	na	
	4/3/1997	na	na	--	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	na	
	7/15/1997	na	na	--	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	na	
	10/7/1997	na	na	--	--	--	--	--	**1.0**	--	--	2.00	--	--	--	--	--	--	--	--	--	na	
	4/30/1998	na	na	--	--	--	--	1.4	**0.66 NJ**	--	--	--	--	--	--	--	--	--	--	--	--	na	
	12/10/1998	na	na	--	--	--	--	2.0	**1.6**	**1.6**	--	3.4	--	--	--	--	--	--	--	--	--	na	
	3/15/2000	na	na	--	1.2	--	--	1.7	**0.51 J**	**0.72 J**	--	2.2	--	--	--	--	--	--	--	--	--	na	
	8/9/2000	na	na	--	--	--	--	2.0	**0.75 J**	**0.66 J**	--	2.2	--	--	--	--	--	--	--	--	--	na	
	2/15/2001	na	--	0.37 J *	0.41 J *	--	--	3.6 J	**1.1**	**1.1**	--	3.2 J	na	na	na	na	na	na	na	na	na	na	1,2-Dichloropropane: 0.4 J
S1-MW13	8/1/1995	na	na	**6.25**	0.68	0.80	1.14	**30.6**	--	**5.87**	--	2.33	na	--	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	**4.80**	--	--	--	**34**	--	**4.90**	--	2.00	na	--	na	na	na	na	na	na	na	na	
	2/20/2001	**0.59**	**0.21**	**8.9**	--	--	2.2	**40 ***	**0.55 J**	--	0.76 J	1.8 J **	na	na	na	na	na	na	na	na	na	na	Methylene Chloride: 1.1 J ** 1,1-Dichloroethane 1.3 J DIPE: 1.6 J, TRPH: --
S1-MW14	8/8/1995	na	**0.86**	**3.33**	1.58	1.63	14.87	**20**	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	5/22/1996	**0.21**	**0.82**	0.4	1.0	1.0	13	**16**	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	6/1/1996	na	na	--	--	2.0	17	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/28/1996	**4.14**	**0.96**	--	--	1.5	19	**28**	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	10/1/1996	na	**0.6**	**1.0**	--	1.0	16	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	12/16/1996	na	**0.6**	**1.0**	--	1.5	16	**40**	--	--	--	--	--	5.00	--	--	--	--	--	--	--	na	
	1/7/1997	na	--	**1.0**	--	0.7	11	**30**	--	--	2.0	--	8.0	3.0	7.0	3.0	2.0	2.0	3.0	1.0	8.0	na	n-Butylbenzene: 3.0
	4/3/1997	na	--	0.9	--	0.7	14	**29**	--	--	--	--	5.0	3.0	4.0	2.0	2.0	2.0	2.0	1.0	7.0	na	
	7/15/1997	na	--	**1.2**	--	3.1	19	**32**	--	--	--	--	10	3.0	3.0	2.0	2.0	2.0	2.0	1.0	13 B	na	n-Butylbenzene: 2.0

TABLE 3-1
Summary of Historical Groundwater Analytical Results,
Site 1, 13 Area
MCB Camp Pendleton, California
(Sheet 2 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TPH Purgeable mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	Trichloroethene µg/L	Carbon Tetrachloride µg/L	1,2-Dichloroethane µg/L	Tetrachloroethene µg/L	Chloroform µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dichlorobenzene µg/L	1,3,5-Trimethylbenzene µg/L	1,4-Dichlorobenzene µg/L	Isopropylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Naphthalene µg/L	Lead µg/L	Other µg/L
Water Quality Objectives:		**0.1**	**0.05**	**1**	**150**	**680**	**1750**	**5**	**0.5**	**0.5**	**5**	**100**	(1)	**10**(2)	(1)	**5**	(1)	(1)	(1)	(1)	(1)	(1)	
Laboratory Reporting Limit (3)		**0.1**	**0.05**	**0.50**	**0.5**	**0.50**	**1.5**	**5.00**	**0.50**	**0.5**	**5**	**5**	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	**10**	**5**	
S1-MW14 (continued)	10/7/1997	na	**0.7**	**2.8**	--	1.0	17	**29**	--	--	1.0	--	9.0	4.0	3.0	2.0	3.0	2.0	3.0	2.0	9.0	na	Carbon Disulfide: 6.0
	12/18/1998	**6.20**	--	--	--	--	7	**20**	--	--	2.0	--	1.0	4.0	1.0	1.0	2.0	2.0	2.0	2.0	--	na	n-Butylbenzene: 1.0
	3/16/2000	na	--	--	--	--	5.5	**22**	--	--	--	--	2.0	2.0	--	--	1.3	--	--	--	--	na	Acetone: 14 , Bromodichloromethane: 1.6
	8/10/2000	na	--	--	--	--	6.7	**23**	--	--	1.1	--	2.7	3.9	--	1.9	2.0	1.1	1.5	1.3	2.8	na	Acetone: 15 , n-Butylbenzene: 1.1
	2/20/2001	**5.5**	**0.14**	**0.48 J**	--	--	6.2	**22 ***	--	--	1.0J	--	na	na	na	na	na	na	na	na	na	na	Acetone: 12 J *, TPRH: 4.1 mg/L Methylene Chloride: 0.38 J *
S1-MW15	8/8/1995	na	--	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	11/22/1995	na	--	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	2/27/1995	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/23/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	--	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	8/27/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/23/1996	na	--	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	1/7/1997	na	--	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	4/3/1997	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	7/15/1997	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/8/1997	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	Carbon Disulfide: 15 TB
	4/29/1998	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	Bromoform: 0.41 NJ
	12/10/1998	na	--	--	--	--	--	--	0.3 J	--	--	0.3 J	--	--	--	--	--	--	--	--	--	na	
	3/15/2000	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	8/8/2000	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/16/2001	na	--	--	--	--	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	
S1-MW16	8/1/1995	na	**7.0**	**4,553**	**1,519**	186	1,020	--	--	**541**	--	--	na	--	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	**5,960**	**1,840**	240	1,600	--	--	**570**	--	--	na	--	na	na	na	na	na	na	na	na	
	2/16/2001	na	**7.9**	**2,800**	**630**	79	610	--	**0.53**	--	--	1.2J	na	na	na	na	na	na	na	na	na	na	Acetone: 28 J DIPE: 2.7 J
S1-MW17	8/9/1995	na	--	--	--	--	--	1.0	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	11/22/1995	na	--	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	2/28/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/21/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	1.4	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	8/27/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/23/1996	na	--	--	--	--	--	--	--	--	--	--	na	--	na	na	na	na	na	na	na	na	
	1/8/1997	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	

TABLE 3-1
Summary of Historical Groundwater Analytical Results,
Site 1, 13 Area
MCB Camp Pendleton, California
(Sheet 3 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TPH Purgeable mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	Trichloroethene µg/L	Carbon Tetrachloride µg/L	1,2-Dichloroethane µg/L	Tetrachloroethene µg/L	Chloroform µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dichlorobenzene µg/L	1,3,5-Trimethylbenzene µg/L	1,4-Dichlorobenzene µg/L	Isopropylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Naphthalene µg/L	Lead µg/L	Other µg/L
Water Quality Objectives:		**0.1**	**0.05**	**1**	**150**	**680**	**1750**	**5**	**0.5**	**0.5**	**5**	**100**	(1)	**10**(2)	(1)	**5**	(1)	(1)	(1)	(1)	(1)	(1)	
Laboratory Reporting Limit (3)		**0.1**	**0.05**	**0.50**	**0.5**	**0.50**	**1.5**	**5.00**	**0.50**	**0.5**	**5**	**5**	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	**10**	**5**	
S1-MW17 (continued)	4/7/1997	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	7/16/1997	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/8/1997	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	Carbon Disulfide: 5.0 *
	12/10/1998	na	--	--	--	--	--	0.9 J	--	--	--	--	--	--	--	--	--	--	--	--	--	na	Carbon Disulfide: 3.1
	3/15/2000	na	na	--	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	8/8/2000	na	--	--	--	--	--	1.0	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/15/2001	na	--	--	0.48 J *	--	--	1.2J	--	--	--	--	na	na	na	na	na	na	na	na	na	na	
S1-MW18	8/1/1995	--	--	--	--	--	--	--	na	na	--	--	na	--	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	--	na	na	--	--	na	--	na	na	na	na	na	na	na	na	
	2/15/2001	na	--	--	--	--	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	Methylene Chloride: 0.44 J *
S1-MW19	8/8/1995	na	**0.6**	**185**	0.72	5.51	15.51	--	--	**139**	--	5.7	--	--	--	--	--	--	--	--	--	na	
	11/22/1995	na	**0.51**	**507**	--	6.95	14.25	--	--	**188**	--	9.28	--	--	--	--	--	--	--	--	--	--	
	2/1/1996	na	na	**240**	--	6.7	11.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/21/1996	na	**0.54**	**280**	1.0	4.0	8.2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	**350**	--	10.0	26.0	1.1	--	**160**	--	6.80	na	--	na	na	na	na	na	na	na	na	
	8/27/1996	na	**0.85**	**350**	1.60	9.2	19.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/23/1996	na	**1**	**450**	--	10	40	--	--	**140**	--	8.0	--	--	--	--	--	--	--	--	--	--	
	1/8/1997	na	**0.5**	**190**	1.0	20	30	2.0	**1.0**	**100**	--	8.0	16	--	4.0	--	1.0	2.0	--	10.00	5.0	--	2-Hexanone: 4.0
	4/7/1997	na	--	**137**	0.8	7	18	2.0	--	**72**	--	6.0	9.0	--	2.0	--	--	--	--	--	2.0	--	
	7/15/1997	na	**0.56**	**243**	1.1	11	31	2.0	--	**76**	--	8.0	13.0	--	3.0	--	1.0	1.0	--	--	5 B	--	
	10/8/1997	na	--	**67**	--	3	12	3.0	**1.0**	**55**	--	8.0	5.0	--	--	--	--	--	--	--	2.0	--	
	5/4/1998	na	--	--	--	--	--	4.8	**0.65 NJ**	**27**	--	6.0	--	--	--	--	--	--	--	--	--	na	
	12/11/1998	na	--	**56.1J**	0.6 J	2.7	3.4	3.9	**1.0 J**	**53.6 J**	0.9 J	6.6	0.7 J	--	--	--	0.3 J	--	--	--	1.6	na	1,2-Dichloropropane: 0.2 J Methylene chloride: 0.4 J
	3/16/2000	na	--	--	--	--	--	**6.5**	**0.61 J**	**18**	--	5.4	--	--	--	--	--	--	--	--	--	na	
	8/10/2000	na	--	**42**	--	--	2.1	4.8	**0.77 J**	**34**	--	5.4	--	--	--	--	--	--	--	--	--	na	Tert butyl alcohol: 36
	2/16/2001	**1.3**	**0.11**	**48**	--	--	2.2	**7**	**0.6**	**53**	--	6.9	na	na	na	na	na	na	na	na	na	na	1,1-Dichloroethane: 0.64 J Methylene Chloride: 0.45 J * DIPE: 1.2 J, TBA: 62 TRPH: --

TABLE 3-1
Summary of Historical Groundwater Analytical Results,
Site 1, 13 Area
MCB Camp Pendleton, California
(Sheet 4 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TPH Purgeable mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	Trichloroethene µg/L	Carbon Tetrachloride µg/L	1,2-Dichloroethane µg/L	Tetrachloroethene µg/L	Chloroform µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dichlorobenzene µg/L	1,3,5-Trimethylbenzene µg/L	1,4-Dichlorobenzene µg/L	Isopropylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Naphthalene µg/L	Lead µg/L	Other µg/L
Water Quality Objectives:		**0.1**	**0.05**	**1**	**150**	**680**	**1750**	**5**	**0.5**	**0.5**	**5**	**100**	(1)	**10**[2]	(1)	**5**	(1)	(1)	(1)	(1)	(1)	(1)	
Laboratory Reporting Limit [3]		**0.1**	**0.05**	**0.50**	**0.5**	**0.50**	**1.5**	**5.00**	**0.50**	**0.5**	**5**	**5**	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	**10**	**5**	
S1-MW20	2/28/1996	na	--	--	--	--	--	--	--	**58.55**	--	5.38	--	--	--	--	--	--	--	--	--	na	
	5/22/1996	na	--	--	--	--	--	--	--	**34**	--	4.0	--	--	--	--	--	--	--	--	--	na	
	6/1/1996	na	--	--	--	--	na	--	**1.80**	**51**	--	5.3	na	--	na	na	na	na	na	na	na	na	
	8/28/1996	na	--	--	--	--	--	--	--	**55**	--	7.0	--	--	--	--	--	--	--	--	--	na	
	10/23/1996	na	--	--	--	--	--	--	--	**49**	--	6.0	--	--	--	--	--	--	--	--	--	na	
	1/8/1997	na	--	**4.0**	--	--	3.00	1.0	**2.0**	**40**	--	5.0	--	--	--	--	--	--	--	--	--	na	
	4/7/1997	na	--	**2.7**	--	--	--	--	**2.0**	**28**	--	4.0	--	--	--	--	--	--	--	--	--	na	
	7/15/1997	na	--	--	--	--	--	1.0	**2.0**	**23**	--	5.0	--	--	--	--	--	--	--	--	--	na	
	10/8/1997	na	--	**2.0**	--	--	--	1.0	**2.0**	**29**	--	6.0	--	--	--	--	--	--	--	--	--	na	
	5/4/1998	na	--	**12**	--	--	--	1.5	**1.5 NJ**	**19**	--	4.2	--	--	--	--	--	--	--	--	--	na	
	12/11/1998	na	--	--	--	--	--	2.2	**1.7**	**15.0**	--	4.6	--	--	--	--	--	--	--	--	--	na	
	3/16/2000	na	--	--	--	--	--	**5.4**	**1.8**	**7.8**	--	3.9	--	--	--	--	--	--	--	--	--	na	
	8/9/2000	na	--	--	--	--	--	4.5	**1.6**	**9.7**	--	3.7	--	--	--	--	--	--	--	--	--	na	
	2/15/2001	na	--	--	--	--	--	**8.8**	**2.8**	**16**	--	5.5	na	na	na	na	na	na	na	na	na	na	1,1-Dichloroethane: 036 J; TRPH: --
S1-MW21	5/27/1997	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/8/1997	na	--	0.60	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/1/1998	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	12/11/1998	na	--	--	--	--	--	--	--	**1.4**	--	0.4 J	--	--	--	--	--	--	--	--	--	na	Bromoform: 1.4
	3/16/2000	na	--	--	--	--	--	--	--	**2.3**	--	--	--	--	--	--	--	--	--	--	--	na	
	8/9/2000	na	--	--	--	--	--	--	--	**4.4**	--	--	--	--	--	--	--	--	--	--	--	na	Tert butyl alcohol: 6.4
	2/15/2001	na	--	--	--	--	--	--	--	**10**	--	1.7 J	na	na	na	na	na	na	na	na	na	na	
S1-MW22	2/14/2001	na	**81**	**15,000**	**14,000**	330	**4,400**	0.94 J	0.46 J	--	--	--	na	na	na	na	na	na	na	na	na	na	1,1-Dichloroethane: 5.4 Methyl Ethyl Ketone: 140 J DIPE: 200 J Chloroethane: 3 J
S1-MW23	2/14/2001	na	**21**	**5,300**	**1,900**	440	1,200	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	1,1-Dichloroethane: 2.3 J Chlorethane: 2.3 J TBA: 830 J DIPE: 110 J

TABLE 3-1
Summary of Historical Groundwater Analytical Results,
Site 1, 13 Area
MCB Camp Pendleton, California
(Sheet 5 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TPH Purgeable mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	Trichloroethene µg/L	Carbon Tetrachloride µg/L	1,2-Dichloroethane µg/L	Tetrachloroethene µg/L	Chloroform µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dichlorobenzene µg/L	1,3,5-Trimethylbenzene µg/L	1,4-Dichlorobenzene µg/L	Isopropylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Naphthalene µg/L	Lead µg/L	Other µg/L
Water Quality Objectives:		**0.1**	**0.05**	**1**	**150**	**680**	**1750**	**5**	**0.5**	**0.5**	**5**	**100**	(1)	**10**[(2)]	(1)	**5**	(1)	(1)	(1)	(1)	(1)	(1)	
Laboratory Reporting Limit [(3)]		**0.1**	**0.05**	**0.50**	**0.5**	**0.50**	**1.5**	**5.00**	**0.50**	**0.5**	**5**	**5**	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	**10**	**5**	
S1-MW13171-1	8/10/1995	na	**18**	**>1,384**	**13,898**	**1,824**	**6,297**	--	na	**2,632**	na	--	na	--	na	na	na	na	na	na	na	130	
	5/28/1996	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	240	
	8/20/1996	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	195	
	10/1/1997	PSH	PSH	PSH	PSH	PSH	PSH	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/1/1998	PSH	PSH	PSH	PSH	PSH	PSH	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/21/2000	na	**48**	**8,300**	**8,100**	600	**2,430**	--	--	**840**	--	--	410	--	--	--	--	--	--	--	200	na	1,2-Dibromoethane: 88, Methylene chloride: 87 B
	8/10/2000	na	**69**	**10,000**	**11,000**	**910**	**3,800**	--	--	**940**	--	--	650	--	170	--	--	--	--	--	--	na	1,2-Dibromoethane: 83 J, MTBE: 840, DIPE: 210
S1-MW13171-3	8/1/1995	na	**9.1**	**2,993**	**186**	**815**	553	--	--	**445**	--	--	na	--	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	**1,940**	30	**890**	320	--	--	**470**	--	--	na	--	na	na	na	na	na	na	na	na	
	5/4/1998	na	na	**430**	3.0	21	1.2	--	--	**170**	--	0.37	--	--	3.30	--	3.3	1.4	--	0.41 NJ	1.9	na	1,2-Dichloropropane: 1.5, Bromoform: 0.27 NJ
S2-MW1	2/16/2001	na	--	--	--	--	--	0.62 J	**1.2**	--	--	1.3 J	na	na	na	na	na	na	na	na	na	na	
S2-MW3	2/16/2001	na	--	--	--	--	--	--	**1.4**	--	--	0.83 J	na	na	na	na	na	na	na	na	na	na	
S2-MW5	2/16/2001	na	--	--	--	--	--	--	--	--	--	0.57 J	na	na	na	na	na	na	na	na	na	na	

Notes:

Values in **bold** are in excess of established water quality objectives.

-- Not detected above method detection limit
na - Not analyzed
(1) No established Water Quality Objective
(2) Secondary Maximum Contaminant Level
(3) Reporting limits are effective beginning February 2001; previous reporting limits may have varied from these values.
(4) Not analyzed as part of this monitoring event.

NJ - Tentatively identified
J - Estimated value; results is above method detection limit (MDL). and below reporting limit.
B - Compound reported in method blank
* - Compound reported in trip blank
** - Compound reported in equipment rinsate sample
mg/L milligrams per liter
µg/L micrograms per liter

TPH - Total petroleum hydrocarbons
TRPH - Total recoverable petroleum hydrocarbons
PSH - Phase separated hydrocarbons noted in well
MTBE - Methyl tertiary butyl ether
DIPE - diisopropyl ether
TBA - tert-butyl alcohol

TABLE 3-2
Summary of Historical Groundwater Analytical Results
Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 1 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TRPH mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	MTBE µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dibromoethane µg/L	1,2-Dichlorobenzene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloropropane µg/L	1,3,5-Trimethylbenzene µg/L	1,3-Dichlorobenzene µg/L	1,4-Dichlorobenzene µg/L	Acetone µg/L	Carbon tetrachloride µg/L	Chlorobenzene µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L	Isopropylbenzene µg/L	Methyl Isobutyl Ketone µg/L	Methylene Chloride µg/L	n-Butylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Tetrachloroethene µg/L	Trichloroethene µg/L	Naphthalene µg/L	Lead mg/L	Other µg/L
Water Quality Objectives:		**0.1**	(1)	**1**	**150**	**680**	**1750**	**13**	**5**	**6**	(1)	(1)	**10**(2)	**0.5**	**5**	(1)	**600**	**5**	(1)	**0.5**	**30**	**100**	**6**	(1)	(1)	**5**	(1)	(1)	(1)	(1)	**5**	**5**	(1)	(1)	
Laboratory Reporting Limits:		**0.1**	**1**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**5**	(3)	(3)	(3)	**0.5**	**5**	(3)	(3)	(3)	**50**	**0.5**	**5**	**5**	(3)	(3)	(3)	**5**	(3)	(3)	(3)	(3)	**5**	**5**	**10**	**5**	
S5/8/9/17-MW1 (deep)	8/15/1995	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	11/20/1995	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/4/1996	0.09	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/24/1996	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/21/1996	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/28/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/9/1997	--	0.65	--	--	--	--	na	--	na	--	--	--	**1.0**	--	--	na	--	--	na	--	1.0	--	--	--	--	--	--	--	--	--	2.0	--	na	
	4/7/1997	--	--	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	1.0	--	na	
	7/16/1997	--	--	--	--	--	--	na	--	na	--	1.0	--	--	--	--	na	--	--	na	--	1.0	--	--	--	--	--	--	--	--	--	2.0	--	na	
	10/9/1997	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	na	--	--	na	--	2.0	--	--	--	--	--	--	--	--	--	2.0	--	na	
	4/30/1998	--	na	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	2.9	--	na	
	12/15/1998	--	--	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2	--	--	--	--	--	--	--	--	--	2.9	--	na	bromoform: 1.4
	3/22/2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.4	--	--	--	--	--	--	--	--	--	3.1	--	na	
	8/14/2000	--	--	**3.3**	4.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.6	--	--	--	--	--	--	--	--	--	2.8	--	na	
	2/22/2001	**0.15**	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	--	--	--	4.3 J	--	na	na	0.37 J *	na	na	na	na	--	**5.1**	na	na	bromoform: 0.44 J
S5/8/9/17-MW4 (deep)	8/15/1995	--	1.2	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	11/16/1995	**0.93**	2.6	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/4/1996	**2.7**	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/28/1996	**0.38**	3.0	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/20/1996	0.074	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/28/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/9/1997	**0.6 J**	0.51	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	1.03	--	na	
	4/7/1997	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	7/16/1997	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/9/1997	**0.7 J**	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/5/1998	--	--	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	1.4	--	na	
	12/15/1998	--	--	--	--	--	--	na	--	--	--	--	--	0.3 J	0.3 J	--	--	--	--	--	--	0.4 J	--	--	--	--	--	--	--	--	--	0.9 J	--	na	
	3/22/2000	--	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	8/15/2000	--	--	--	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/22/2001	**0.23**	--	--	--	--	--	--	--	--	na	na	na	--	0.52 J	na	na	na	10 J **	--	--	0.74 J	--	na	na	0.43 J *	na	na	na	na	--	1.0 J	na	na	
S5/8/9/17-MW7 (deep)	8/1/1995	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	4/29/1998	na	na	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	0.37 NJ	--	na	
	2/22/2001	**0.28**	--	--	--	--	--	--	--	--	na	na	na	**0.71**	0.61 J	na	na	na	7.8 J **	--	--	--	--	na	na	0.63 J *	na	na	na	na	--	0.69 J	na	na	
S5/8/9/17-MW10 (deep)	8/1/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/21/2001	**0.72**	--	--	--	--	--	--	--	--	na	na	na	1.1	0.93 J	na	na	na	--	--	--	--	--	na	na	--	na	na	na	na	--	0.99 J	na	na	

TABLE 3-2
Summary of Historical Groundwater Analytical Results
Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 2 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TRPH mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	MTBE µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dibromoethane µg/L	1,2-Dichlorobenzene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloropropane µg/L	1,3,5-Trimethylbenzene µg/L	1,3-Dichlorobenzene µg/L	1,4-Dichlorobenzene µg/L	Acetone µg/L	Carbon tetrachloride µg/L	Chlorobenzene µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L	Isopropylbenzene µg/L	Methyl Isobutyl Ketone µg/L	Methylene Chloride µg/L	n-Butylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Tetrachloroethene µg/L	Trichloroethene µg/L	Naphthalene µg/L	Lead mg/L	Other µg/L
Water Quality Objectives:		**0.1**	(1)	**1**	**150**	**680**	**1750**	**13**	**5**	**6**	(1)	(1)	**10**(2)	**0.5**	**5**	(1)	**600**	**5**	(1)	**0.5**	**30**	**100**	**6**	(1)	(1)	**5**	(1)	(1)	(1)	(1)	**5**	**5**	(1)	(1)	
Laboratory Reporting Limits:		**0.1**	**1**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**5**	(3)	(3)	(3)	**0.5**	**5**	(3)	(3)	(3)	**50**	**0.5**	**5**	**5**	(3)	(3)	(3)	**5**	(3)	(3)	(3)	(3)	**5**	**5**	**10**	**5**	
S5/8/9/17-MW15 (deep)	8/21/1995	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	11/20/1995	--	--	1.1	6.9	1.5	12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/4/1996	**0.45**	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/24/1996	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/22/1996	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/29/1996	**0.6**	na	--	0.6	--	2.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/10/1997	--	0.53	--	--	--	na	na	--	na	--	--	--	--	--	--	na	--	--	na	--	5.0	--	--	--	--	--	--	--	--	--	**7.0**	--	na	
	4/8/1997	--	--	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	5.0	--	--	--	--	--	--	--	--	--	**6.0**	--	na	
	7/16/1997	--	--	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	8.0	--	--	--	--	--	--	--	--	--	**9.0**	--	na	
	10/9/1997	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	na	--	--	na	--	7.0	--	--	--	--	--	--	--	--	--	**6.0**	--	na	
	5/5/1998	--	--	--	--	--	0.32NJ	na	--	na	--	--	--	--	--	--	na	--	--	na	na	5.5	--	--	na	--	--	--	--	--	--	**7.2**	--	na	
	12/17/1998	--	--	--	--	--	0.8 J	na	--	--	--	--	--	--	--	--	--	--	--	0.2 J	--	5.1	--	--	--	--	--	--	--	0.8 J	**5.8**	--	na	
	3/23/2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.5	--	--	--	--	--	--	--	--	**4.3**	--	na	
	8/17/2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.2	--	--	--	--	--	--	--	--	**5.7**	--	na	TBA: 17
	2/26/2001	**0.14**	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	--	0.3 J	--	6.8 *	na	na	na	0.42 *	na	na	na	na	--	**7.6**	na	na	1,1,2,2-tetrachloroethane: 0.55 J
S5/8/9/17-MW23 (deep)	8/1/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	4/28/1998	na	na	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	0.6	--	na	
	2/23/2001	0.072 J	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	10 J **	--	--	0.68 J	--	na	na	--	na	na	na	na	--	1.5 J	na	na	bromoform: 0.31 J
S5/8/9/17-MW25 (deep)	8/1/1995	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	2/26/2001	--	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	6.6 J **	--	--	2.8 J *	--	na	na	--	na	na	na	na	--	3.8 J	na	na	
S5/8/9/17-MW31 (deep)	8/1/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	1.2	--	--	--	--	--	--	--	--	--	1.8	--	na	
	4/30/1998	na	na	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	3.3	--	--	na	0.57	--	--	--	--	--	3.8	--	na	
	2/21/2001	**0.55**	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	--	--	--	2.7 J	--	na	na	0.73 J *	na	na	na	na	--	3.3 J	na	na	
S5/8/9/17-MW34 (deep)	8/1/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	6/1/1996	na	na	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	4/28/1998	na	na	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	0.31	--	--	na	--	--	--	--	--	--	0.7	--	--	
	2/26/2001	**0.44**	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	8.6 J **	--	--	--	--	na	na	0.31 J *	na	na	na	na	--	0.98 J	na	na	bromoform: 0.31 J
S5/8/9/17-MW36	4/28/1998	na	na	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	--	na	na	
S5/8/9/17-MW37 (deep)	8/15/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/1/1996	**0.54**	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/22/1996	--	na	--	--	--	--	na	--	na	--	--	--	**0.60**	--	--	na	--	--	na	--	--	--	--	2.00	0.90	2.0	--	--	--	--	--	--	na	2-Hexanone: 2
	8/26/1996	**0.51**	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/28/1996	**0.85J**	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/10/1997	**0.7J**	0.67	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	4/7/1997	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	7/16/1997	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/9/1997	--	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	

TABLE 3-2
Summary of Historical Groundwater Analytical Results
Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 3 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TRPH mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	MTBE µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dibromoethane µg/L	1,2-Dichlorobenzene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloropropane µg/L	1,3,5-Trimethylbenzene µg/L	1,3-Dichlorobenzene µg/L	1,4-Dichlorobenzene µg/L	Acetone µg/L	Carbon tetrachloride µg/L	Chlorobenzene µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L	Isopropylbenzene µg/L	Methyl Isobutyl Ketone µg/L	Methylene Chloride µg/L	n-Butylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Tetrachloroethene µg/L	Trichloroethene µg/L	Naphthalene µg/L	Lead mg/L	Other µg/L
Water Quality Objectives:		**0.1**	(1)	**1**	**150**	**680**	**1750**	**13**	**5**	**6**	(1)	(1)	**10**(2)	**0.5**	**5**	(1)	**600**	**5**	(1)	**0.5**	**30**	**100**	**6**	(1)	(1)	**5**	(1)	(1)	(1)	(1)	**5**	**5**	(1)	(1)	
Laboratory Reporting Limits:		**0.1**	**1**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**5**	(3)	(3)	(3)	**0.5**	**5**	(3)	(3)	(3)	**50**	**0.5**	**5**	**5**	(3)	(3)	(3)	**5**	(3)	(3)	(3)	(3)	**5**	**5**	**10**	**5**	
S5/8/9/17-MW37 (deep) (continued)	4/30/1998	**0.75**	--	--	--	--	--	na	--	--	--	--	--	--	0.68	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	--	--	na	
	12/17/1998	--	--	--	--	--	--	na	--	--	--	--	--	0.4 J	0.4 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	3/22/2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	8/17/2000	--	--	--	1.0	--	--	--	--	--	--	--	--	**0.60 J**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/23/2001	**0.41**	--	--	--	--	--	--	--	--	na	na	na	**0.62**	0.49 J	na	na	na	11 J**	--	--	--	--	na	na	0.32 J *	na	na	na	na	--	--	na	na	
S5/8/9/17-MW38	2/21/2001	**3.1**	3.2 J	**14**	17	4.4	18	--	--	--	na	na	na	--	--	na	na	na	20 J	--	--	--	0.5 J	na	na	0.74 J *	na	na	na	na	--	**7.2**	na	na	DIPE: 1.2 J
S5/8/9/17-MW39	2/22/2001	**3.6**	--	**1.1**	--	--	--	--	--	--	na	na	na	**3.5 J**	--	na	na	na	47 J **	--	0.62 J	--	**90**	na	na	--	na	na	na	na	--	4.4 J	na	na	TBA: 18 J, DIPE: 2.7 J
S5/8/9/17-MW40	11/1/1995	PSH	na	PSH	PSH	PSH	PSH	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	2/6/1996	**660**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
S5/8/9/17-MW41	8/18/1995	**5.5**	5.6	**5.29**	15.90	--	63.19	na	--	na	--	--	--	**1.71**	--	--	na	--	7.54	na	--	--	--	--	--	--	--	--	--	--	--	--	**43**	--	na	
	3/1/1996	**4.1**	na	**1.3**	--	9.3	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/29/1996	**7.0**	na	**3.4**	--	3.0	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/22/1996	**25**	na	**6.6**	1.9	5.9	2.6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/29/1996	**15**	na	**5.2**	3.4	12	5.4	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	**53**	--	na	acenaphthene: 5.0, fluorene: 10, naphthalene: 60, phenathrene: 10, 2-methylphenathrene: 90
	1/13/1997	**64**	12	**5.0**	1.0	8.0	3.0	na	--	na	30	--	6.0	**2.0**	--	6.0	na	2.0	--	na	1.0	--	--	2.0	--	--	--	2.0	3.0	1.0	1.0	**45**	160	na	naphthalene: 53, phenanthrene: 5.0
	4/10/1997	**9.3**	6.1	**6.7**	2.8	5.2	6.1	na	--	na	20	--	5.0	**2.0**	--	5.0	na	2.0	5.0	na	--	--	1.0	--	--	--	--	--	3.0	--	--	**42**	72	--	
	7/18/1997	**81**	20	**4.6**	2.3	3.8	3.9	na	--	na	36	--	6.1	**2.2**	--	10	na	2.0	--	na	--	--	--	1.6	--	--	--	1.8	3.2	1.1	1.4	**48**	105	--	benzo(a)pyrene: 0.62, fluorene: 27, naphthalene: 7.0, phenanthrene: 31.3, carbon disulfide: 5.1
	10/16/1997	**8.1**	10	**4.3**	1.9	5.8	6.1	--	--	na	28	--	6.0	**2.0**	--	2.0	na	2.0	--	na	--	--	--	2.0	--	--	--	1.0	4.0	1.0	1.0	**39**	60	--	fluorene: 5.2, naphthalene: 25, phenanthrene: 4.5
	12/17/1998	**55.8**	27	**2.2**	0.8 J	6.3	1.7	na	0.7 J	--	3.0	--	6.0	--	--	2.0	--	--	--	--	1.0	0.2 J	0.6 J	1.8	--	--	--	2.6	1.7	2.1	1.7	**42**	--	na	styrene: 0.9 J
	3/23/2000	**0.85**	0.8	**2.3**	3.0	1.3	2.6	--	--	--	2.2	--	2.8	**1.6**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**29**	51.0	na	
	8/17/2000	--	1.8	**4.6**	5.6	7.4	3.3	--	1.3	--	3.8	--	5.9	**2.9**	--	2.4	--	1.7	9.7	--	1.0	--	1.1	2.0	--	--	3.7	2.5	1.8	1.4	1.0	**46**	92	na	DIPE: 1.3, Carbon Disulfide: 9.7
	2/20/2001	**12**	36J	**4.3**	1.6	8.6	2.1	--	1.2 J	0.31 J	na	na	na	**4.4**	--	na	na	na	14 J *	--	1.1 J	--	2.5 J	na	na	1.5 J *	na	na	na	na	1.2 J	**48 ***	120 J	na	fluorene: 13 J,phenanthrene: 16 J DIPE: 1.9 J
S5/8/9/17-MW44	8/22/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	11/20/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/5/1996	0.09	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/29/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/21/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/29/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	

TABLE 3-2
Summary of Historical Groundwater Analytical Results
Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 4 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TRPH mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	MTBE µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dibromoethane µg/L	1,2-Dichlorobenzene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloropropane µg/L	1,3,5-Trimethylbenzene µg/L	1,3-Dichlorobenzene µg/L	1,4-Dichlorobenzene µg/L	Acetone µg/L	Carbon tetrachloride µg/L	Chlorobenzene µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L	Isopropylbenzene µg/L	Methyl Isobutyl Ketone µg/L	Methylene Chloride µg/L	n-Butylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Tetrachloroethene µg/L	Trichloroethene µg/L	Naphthalene µg/L	Lead mg/L	Other µg/L
Water Quality Objectives:		**0.1**	(1)	**1**	**150**	**680**	**1750**	**13**	**5**	**6**	(1)	(1)	$10^{(2)}$	**0.5**	**5**	(1)	**600**	**5**	(1)	**0.5**	**30**	**100**	**6**	(1)	(1)	**5**	(1)	(1)	(1)	(1)	**5**	**5**	(1)	(1)	
Laboratory Reporting Limits:		**0.1**	**1**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**5**	(3)	(3)	(3)	**0.5**	**5**	(3)	(3)	(3)	**50**	**0.5**	**5**	**5**	(3)	(3)	(3)	**5**	(3)	(3)	(3)	(3)	**5**	**5**	**10**	**5**	
S5/8/9/17-MW44 (continued)	1/13/1997	--	--	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	3.0	5.0	na	
	4/9/1997	--	--	**1.0**	2.0	1.4	7.4	na	--	na	2.0	--	--	--	--	--	na	--	--	na	--	--	2.0	--	--	--	--	--	--	--	--	4.0	1.0	na	
	7/17/1997	--	--	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	2.1	--	na	
	10/15/1997	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	2.0	--	na	
	4/29/1998	na	--	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	1.7	--	na	
	12/18/1998	--	--	--	--	0.6 J	1.8 J	na	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 J	--	--	--	--	--	--	--	1.1	2.4	--	na	
	3/22/2000	--	--	--	2.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0	--	na	
	8/15/2000	--	--	**12**	16	--	41	--	--	--	--	--	--	**0.55 J**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.6	--	na	
	2/21/2001	**2.1**	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	7.2 J **	--	--	--	--	na	na	--	na	na	na	na	--	2.2 J	na	na	
S5/8/9/17-MW46	8/21/1995	**0.8**	na	**4.5**	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/5/1996	**0.51**	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/29/1996	**0.35**	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/22/1996	**1.0**	na	2.4	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/28/1996	**2.0**	na	--	--	--	2.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/10/1997	**0.8 J**	0.86	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	1.0	--	na	
	4/8/1997	--	--	0.5	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	1.0	--	na	
	7/17/1997	--	--	--	--	--	--	na	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	1.3	--	na	
	10/15/1997	**1.6 J**	1.2	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/3/1998	**0.54**	na	--	--	--	--	na	--	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	1.2	2.4	na	
	12/15/1998	--	--	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3 J	--	--	--	--	--	--	--	1.3	--	na	
	3/21/2000	--	--	1.9	5.0	--	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3B	--	--	--	--	--	--	--	na	
	8/14/2000	--	--	8.3	17	1.2	4.9	--	--	--	--	--	--	**0.53 J**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/22/2001	**1.3**	--	--	--	--	--	--	--	--	na	na	na	--	--	na	na	na	10 J **	--	--	--	--	na	na	0.49 J *	na	na	na	na	--	1.8 J	na	na	
S5/8/9/17-MW47	8/14/1995	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	11/20/1995	**0.59**	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	3/5/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/29/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/22/1996	--	na	--	--	--	3.2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/28/1996	--	na	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/10/1997	--	--	--	--	--	--	na	2.0	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	4/8/1997	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	7/17/1997	--	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/15/1997	--	--	--	--	--	--	--	--	na	--	--	--	--	--	--	na	--	--	na	--	--	--	--	--	--	--	--	--	--	--	1	--	na	
	4/29/1998	**0.4**	--	--	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	--	--	--	--	--	1	--	na	
	12/15/1998	--	--	0.4 J	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 J	--	--	--	0.9 J	1	--	na	
	3/21/2000	--	--	**3.8**	10	1.2	6	--	--	--	1.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.9B	--	--	--	--	--	--	--	na	
	8/14/2000	--	--	**4.4**	9.7	--	1.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	na	
	2/26/2001	--	--	--	0.56	0.7	3.3	--	--	--	na	na	na	--	--	na	na	na	8.6 J **	na	na	--	--	na	na	--	na	na	na	na	--	1.8 J	na	na	bromoform: 0.63 J, dibromochloromethane: 0.44 J

TABLE 3-2
Summary of Historical Groundwater Analytical Results
Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 5 of 5)

Well Location	Date Sampled	TPH Extractable mg/L	TRPH mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	MTBE µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dibromoethane µg/L	1,2-Dichlorobenzene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloropropane µg/L	1,3,5-Trimethylbenzene µg/L	1,3-Dichlorobenzene µg/L	1,4-Dichlorobenzene µg/L	Acetone µg/L	Carbon tetrachloride µg/L	Chlorobenzene µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L	Isopropylbenzene µg/L	Methyl Isobutyl Ketone µg/L	Methylene Chloride µg/L	n-Butylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Tetrachloroethene µg/L	Trichloroethene µg/L	Naphthalene µg/L	Lead mg/L	Other µg/L
Water Quality Objectives:		**0.1**	(1)	**1**	**150**	**680**	**1750**	**13**	**5**	**6**	(1)	(1)	**10**(2)	**0.5**	**5**	(1)	**600**	**5**	(1)	**0.5**	**30**	**100**	**6**	(1)	(1)	**5**	(1)	(1)	(1)	(1)	**5**	**5**	(1)	(1)	
Laboratory Reporting Limits:		**0.1**	**1**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**5**	(3)	(3)	(3)	**0.5**	**5**	(3)	(3)	(3)	**50**	**0.5**	**5**	**5**	(3)	(3)	(3)	**5**	(3)	(3)	(3)	(3)	**5**	**5**	**10**	**5**	
5/8/9/17-MW48	11/1/1995	PSH	na	PSH	PSH	PSH	PSH	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	2/6/1996	**86**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/22/1996	na	na	**41**	3.0	19.0	3.0	na	4.0	na	--	--	--	**30**	--	--	na	--	22	na	3.0	--	170	--	17	0.9	--	--	--	--	--	**8.0**	--	na	
	10/31/1996	**30**	15	**56**	3.2	12	8.4	na	na	na	na	na	na	**na**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/13/1997	**140**	61	**50**	--	13	43	na	**5.0**	na	8.0	--	7.0	**50**	1.0	--	na	4.0	--	na	2.0	1.0	180	4.0	40	--	5.0	5.0	5.0	3.0	--	**10.0**	50	na	
	4/8/1997	**41**	100	**62**	2.7	16	7.5	na	**5.0**	na	4.0	--	7.0	**42**	--	2.0	na	4.0	--	na	2.0	--	226*	3.0	15	--	3.0	5.0	2.0	2.0	--	**5.0**	42	na	
S5/8/9/17-MW50	3/8/1996	**1.6**	na	**3.0**	--	--	--	na	na	na	na	na	na	**na**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	5/29/1996	**2.7**	na	**3.1**	--	--	4.2	na	na	na	na	na	na	**na**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	8/21/1996	**1.4**	na	**4.5**	0.91	--	5.1	na	na	na	na	na	na	**na**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	10/29/1996	**4.0**	na	**3.9**	2.3	1.6	15	na	na	na	na	na	na	**na**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	1/13/1997	**1.5**	1.0	**6.0**	1.0	1.0	7.0	na	3.0	na	6.0	--	2.0	**15**	2.0	1.0	na	3.0	--	na	2.0	3.0	3.0	--	--	2.0	--	--	--	--	2.0	**100**	10	na	
	4/9/1997	**1.7**	1.6	**6.7**	1.4	0.9	11	na	3.0	na	--	--	2.0	**16**	1.0	1.0	na	2.0	--	na	1.0	2.0	3.0	--	--	2.0	--	--	--	--	1.0	**87**	3.0	na	
	7/17/1997	**2.0**	--	**8.0**	2.0	1.1	16	na	**5.2**	na	5.6	--	2.9	**20**	1.9	1.4	na	3.2	--	na	1.9	3.7	--	--	--	3.1	--	--	--	--	2.2	**143**	--	na	
	5/4/1998	**6.6**	--	--	1.9	--	9.2	na	2.1	--	1.9	--	0.42	**12**	--	--	--	--	--	--	--	1.6	--	--	na	1.5	--	--	--	--	--	**38**	4.0	na	Carbon disulfide: 0.24NJ
	12/17/1998	**4.8 J**	--	**11.5**	1.8	1.1	31.6	na	4.9	0.6 J	11.1	--	5.9	**20.2**	1.8	2.6	0.4 J	3.3	--	--	2.3	3.1	0.7 J	1.1	--	3.4	0.7 J	0.9 J	--	0.5 J	2.1	**150**	26.4 B	na	
	3/23/2000	**0.74 J**	1.3	**9.2**	3.9	--	17	--	3.7	--	6.2	--	2.2	**13.0**	1.6	1.2	--	1.1	--	--	1.2	2.6	--	--	--	2.9B	--	--	--	--	--	**91**	14.0	na	
	8/17/2000	**2.0**	4.9	**15**	17	2.1	28	--	4.8	--	8.4	--	4.3	**18**	2.0	2.1	--	2.3	--	--	1.8	2.9	--	1.2	--	3.1	--	--	--	--	1.6	**140**	21	na	TBA: 15, DIPE: 13
	2/20/2001	**2.5**	--	**13**	1.4	0.91 J	28	--	**6.4 J**	0.82 J	na	na	na	**29**	2.5 J	na	na	na	--	--	2.5 J	4.4 J **	--	na	na	4.7 J **	na	na	na	na	2.7 J	**200** *	na	na	DIPE: 16

Notes:

Values in **bold** are in excess of established water quality objectives.
-- Not detected above method detection limit
na - Not analyzed
(1) No established Water Quality Objective
(2) Secondary Maximum Contaminant Level
(3) Reporting limits are effective beginning February 2001; previous reporting limits may have varied from these values.
(4) Not ananlyzed as part of this monitoring event.

NJ - Tentatively identified
J - Estimated value; results is above method detection limit (MDL). and below reporting limit.
B - Compound reported in method blank
* - Compound reported in trip blank
** - Compound reported in equipment rinsate sample
mg/L milligrams per liter
µg/L micrograms per liter

Deep - Deep aquifer well
TPH - Total petroleum hydrocarbons
TRPH - Total recoverable petroleum hydrocarbons
PSH - Phase separated hydrocarbons noted in well
DIPE - diisopropyl ether
TBA - tert-butyl alcohol

TABLE 3-3
Summary of Historical Groundwater Analytical Results, Site 6/7, 13 Area,
MCB Camp Pendleton, California
(Sheet 1 of 2)

Well Location	Date Sampled	TPH Extractable mg/L	TRPH mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	MTBE µg/L	1,1-Dichloroethane µg/L	1,2-Dichloroethane µg/L	Trichloroethene µg/L	1,2-Dichlorobenzene µg/L	1,2,4-Trimethylbenzene µg/L	1,3,5-Trimethylbenzene µg/L	Methylene Chloride µg/L	cis-1,2-Dichloroethene µg/L	Isopropylbenzene µg/L	n-Butylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Acetone µg/L	Naphthalene µg/L	Lead mg/l	Other µg/L
Water Quality Objectives:		**0.1**	(1)	**1**	**150**	**680**	**1,750**	**13**	**5**	**0.5**	**5**	**10**(2)	(1)	(1)	**5**	**6**	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
Laboratory Reporting Limits: (3)		**0.1**	**1**	**0.5**	**0.5**	**0.5**	**1.5**	**1**	**5**	**0.5**	**5**	(3)	(3)	(3)	**5**	(3)	(3)	(3)	(3)	(3)	(3)	**50**	(3)	**5**	
S6/7-MW7 (deep)	7/26/1995	na	3.9	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	11/14/1995	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	3/6/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	5/28/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	8/20/1996	na	--	**1.1**	--	--	2.9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	1/22/1997	--	1.5	--	--	--	2	na	--	--	--	--	1.0	--	--	--	--	--	--	--	--	--	--		
	4/9/1997	--	--	**1.0**	--	0.6	3.5	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	7/17/1997	--	--	**1.3**	1.2	0.9	4.4	na	--	**1.3**	1.3	--	1.1	--	1.2	--	--	--	--	--	--	34	1.3		
	10/15/1997	--	--	0.9	--	0.6	3.7	--	na	**1.0**	na	na	na	na	1.0	na	na	na	na	na	na	na	na		
	5/1/1998	na	--	0.91	--	--	2.13	na	--	--	0.71	--	0.70 NJ	--	1.0	--	--	--	--	--	--	--	0.84		
	12/18/1998	--	--	**1.0**	--	0.9 J	3.8	na	--	--	0.9 J	--	1.1	1.0	0.8 J	--	0.3 J	--	1.0 J	--	--	--	--		Chloroform: 0.2J, 1,2-Dichloropropane: 0.4J
	3/27/2000	--	--	--	--	--	1.1	--	--	**0.53J**	--	--	--	--	--	--	--	--	--	--	--	--	--		
	8/23/2000	--	--	--	1.5	--	1.5	--	--	**0.64 J**	--	--	--	--	3.2 B	--	--	--	--	--	--	--	--		
	2/20/2001	**0.31**	--	0.99	--	0.61	3	--	--	**1.1**	1.4 J *	na	na	na	1.4 J *	--	na	na	na	na	na	10 J *	na		1,2-Dichloropropane: 0.51J
S6/7-MW12 (deep)	8/1/1995	na	3.9	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	2/23/2001	**0.14**	--	--	--	--	--	--	--	**0.96**	0.94J	na	na	na	0.34J *	--	na	na	na	na	na	10 J **	na		1,2-Dichloropropane: 0.57J
S6/7-MW13	8/10/1995	na	--	**3.3**	14	11	62	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	11/14/1995	na	--	**6.7**	21.45	13.89	83.04	na	2.42	**2.03**	**5.45**	na	na	-	2.76	na	na	na	na	na	na	14.38	na		Methyl Isobutyl Ketone: 14.37 2-Butanone: 15.62
	10/31/1996	na	0.72	**6.6**	19	16	72	na	--	--	**10**	--	na	-	--	na	na	na	na	na	na	--	na		
	1/14/1997	--	1.3	**4.0**	13	9	43	na	1.0	**2.0**	**8.0**	--	31	8.0	--	1.0	3.0	--	4.0	2.0	--	15	59		Methyl Isobutyl Ketone: 5
	4/9/1997	**1.0 J**	--	**6.0**	16	12	58	na	1.0	**2.0**	**8.0**	--	25	6.0	--	3.0	2.0	--	3.0	1.0	--	7	26		Methyl Isobutyl Ketone: 5
	7/17/1997	**0.9**	--	**6.5**	21	17	81	na	1.4	**1.2**	**8.1**	1.3	44	9.9	--	--	3.3	--	4.9	1.6	1.3	10	66		
	10/15/1997	**2.2 J**	0.64	**6.9**	20	13	70	--	1.0	**1.0**	**9.0**	2.0	40	4.0	1.0	na	4.0	na	5.0	3	1.0	na	61		
	5/14/1998	na	--	**2.4**	9.3	4.3	24	na	1.8	--	**6.0**	0.36	6.5	1.8	1.1	--	--	0.22NJ	0.79	--	--	9.9 NJ	25		2-Butanone: 5.7NJ
	12/21/1998	**0.5 J**	--	**8.0**	8.1	20.1	109.1	na	1.4	--	**8.9**	1.4	37.5	8.9	0.5 J	1.2	3.5	--	4.6	--	--	--	96.0 JB		Tetrachloroethene: 0.3J Chloroform: 0.1J
	3/27/2000	--	1.2	**10**	12	24	102	--	--	**0.78J**	**8.5**	1.3	68	12	--	--	4.8	4.9	7.5	2.3	1.4	5.2	140		
	8/23/2000	--	2.7	**8.3**	15	17	90	--	--	**0.81 J**	**5.9**	1.2	34	6.8	--	--	2.2	--	3.6	1.2	--	--	64		Carbon Disulfide: 1.5
	2/26/2001	**1.5**	--	**9.4**	20	21	110	--	1.3J	--	**8.6 J**	na	na	na	1.3 J *	--	na	na	na	na	na	--	na		
S6/7-MW15	8/14/1995	na	69	**29.33**	84.35	34.36	172.75	na	--	**4.53**	**21.24**	--	na	na	--	na	na	na	na	na	na	35.33	na		2-Butanone: 21.45
	2/6/1996	**35,000**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	1/14/1997	**25**	7.3	**38**	48	26	120	na	--	**8.0**	**30**	2.0	100	35	--	--	10	8.0	15	8.0	5.0	--	140		Tetrachloroethene: 1
	2/13/2001	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	
S6/7-MW16	3/14/1996	na	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	5/28/1996	na	--	**1.7**	2.9	--	2.8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	8/21/1996	na	--	**6.1**	12	3.2	15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	10/31/1996	na	0.9	**9.4**	14	6.3	27	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	1/22/1997	**1.1**	1.3	**17**	10	8.0	37	na	--	**3.0**	**12**	--	18	4.0	--	--	2.0	--	2.0	--	--	4.0 B	26		fluoranthene: 0.2, fluorene: 0.5J, naphthalene: 67, phenanthrene: 0.4J

TABLE 3-3
Summary of Historical Groundwater Analytical Results, Site 6/7, 13 Area,
MCB Camp Pendleton, California
(Sheet 2 of 2)

Well Location	Date Sampled	TPH Extractable mg/L	TRPH mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes (total) µg/L	MTBE µg/L	1,1-Dichloroethane µg/L	1,2-Dichloroethane µg/L	Trichloroethene µg/L	1,2-Dichlorobenzene µg/L	1,2,4-Trimethylbenzene µg/L	1,3,5-Trimethylbenzene µg/L	Methylene Chloride µg/L	cis-1,2-Dichloroethene µg/L	Isopropylbenzene µg/L	n-Butylbenzene µg/L	n-Propylbenzene µg/L	p-Isopropyltoluene µg/L	sec-Butylbenzene µg/L	Acetone µg/L	Naphthalene µg/L	Lead mg/l	Other µg/L
Water Quality Objectives:		**0.1**	(1)	**1**	**150**	**680**	**1,750**	**13**	**5**	**0.5**	**5**	**10**(2)	(1)	(1)	**5**	**6**	(1)	(1)	(1)	(1)	(1)	(1)	(1)		
Laboratory Reporting Limits: (3)		**0.1**	**1**	**0.5**	**0.5**	**0.5**	**1.5**	**1**	**5**	**0.5**	**5**	(3)	(3)	(3)	**5**	(3)	(3)	(3)	(3)	(3)	(3)	**50**	(3)	**5**	
S6/7-MW16 (continued)	4/10/1997	**0.8**	0.5	**9.9**	15	8.8	31	na	--	--	**15**	--	16	4.0	--	--	1.0	--	2.0	--	--	--	9.0	0.01	
	7/18/1997	**0.6**	0.5	**17**	3.9	10	43	na	--	**2.4**	**12**	--	15	3.8	--	--	1.5	--	2.1	--	--	--	23	--	naphthalene:15
		na	na	**na**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		pyrene: 0.45
	10/16/1997	**0.7 J**	1.1	**14**	4	6.3	28	--	--	**3.0**	**11**	--	13	1.0	--	--	1.0	--	1.0	--	--	--	16	--	phenanthrene: 0.3J
	5/13/1998	na	--	**2.6**	2.0	2.1	4.5	na	--	--	**9.6**	--	0.84 NJ	--	--	--	--	--	--	--	--	--	1.5		
	12/18/1998	**1.2 J**	--	**32.2**	8.7	10.7	67.3	na	0.2 J	--	**14.4**	0.7 J	22.0	4.8	0.5 J	--	1.9	0.9 J	2.5	1.1	0.7 J	--	42.9		Tetrachloroethene: 0.4J, Chloromethane: 0.7J, Chloroform: 0.4J
	3/27/2000	--	1.2	**21**	8.7	5.3	40	--	--	**1.5**	**9.9**	--	18	4.2	--	--	1.6	--	1.6	--	--	--	28		
	8/23/2000	--	--	**26**	12	10	61	--	--	**2.1**	**14**	--	19	4.7	--	--	1.9	--	2.2	--	--	--	31		
	2/20/2001	**1.5**	--	**25**	2.9	7.8	53	--	--	--	**14 ***	na	na	na	0.79 J *	0.41J	na	na	na	na	na	12 J *	29J		Tetrachloroethene: 0.49J diisopropyl ether: 1.2J Fluorene 1.2J
S6/7-MW17	3/12/1996	-	--	--	--	--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	5/28/1996	-	--	--	1.7	2.2	11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	8/20/1996	-	--	--	0.78	1.5	6.3	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	10/31/1996	-	0.3	--	0.9	0.7	4.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	1/14/1997	**1.1**	2.3	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
	3/5/1997	-	-	--	--	--	na	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	4/9/1997	--	--	0.6	0.7	0.6	3.6	na	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	7/22/1997	--	--	--	0.8	0.7	3.8	na	--	--	--	--	1.9	--	--	--	--	--	--	--	--	--	2.1		
	10/16/1997	--	--	--	1	1.3	6.6	--	--	--	--	--	6	--	--	--	--	--	--	--	--	--	4.0		Chloromethane: 1
	5/13/1998	na	--	--	--	0.63	3.1	na	--	--	--	--	2.7	1.4	0.72 NJ	--	--	0.72 NJ	0.85	1.0 NJ	0.76 NJ	6.4 NJ	2.1		Chloromethane: 0.84NJ
	12/18/1998	**0.6 J**	--	--	1.2	0.9 J	5.4	na	--	--	--	--	7.9	2.4	--	--	0.4 J	1.9	1.4	--	0.9 J	--	7.6		Chloromethane: 0.5J
	3/27/2000	--	0.65	--	1.8	--	5.2	--	--	--	--	--	7.5	1.8	--	--	--	--	1.2	1.1	--	--	6.5		
	8/23/2000	--	--	--	3.1	--	43	--	--	--	--	--	2.8	--	--	--	--	--	--	--	--	--	5.3		
	2/22/2001	**0.54**	--	--	0.96	0.76	3.6	--	--	--	--	na	na	na	--	--	na	na	na	na	na	7.7 J **	na		

Notes:

Values in **bold** are in excess of established water quality objectives.
-- Not detected above method detection limit
na - Not analyzed
(1) No established Water Quality Objective
(2) Secondary Maximum Contaminant Level
(3) Reporting limits are effective beginning February 2001; previous reporting limits may have varied from these values.
(4) Not analyzed as part of this monitoring event.

NJ - Tentatively identified
J - Estimated value; results is above method detection limit (MDL). and below reporting limit.
B - Compound reported in method blank
* - Compound reported in trip blank
** - Compound reported in equipment rinsate sample
mg/L milligrams per liter
µg/L micrograms per liter

Deep - Deep aquifer well
TPH - Total petroleum hydrocarbons
TRPH - Total recoverable petroleum hydrocarbons
PSH - Phase separated hydrocarbons noted in well

TABLE 3-4
Summary of Historical Groundwater Natural Attenuation Parameter Results, Site 1, 13 Area, MCB Camp Pendleton, California

(Sheet 1 of 2)

Well Location	Date Sampled	Nitrate (a) mg/L	Sulfate (b) mg/L	Sulfide (c) mg/L	TOC (d) mg/L	Mn (e) mg/L	Fe II (f) mg/L	Fe III (g) mg/L	Total Fe (h) mg/L	Methane (i) µg/L	Ethane (j) µg/L	Ethene (k) µg/L	Alkalinity (l) mg/L	Chloride (m) mg/L
S1-MW4	4/28/1998	15.5	391	na	25.8	na	na	na	na	0.7	--	--	200	1710
S1-MW8	1/9/1997	20	701	--	11	0.10	--	1.57	1.57	--	--	--	na	na
	4/3/1997	20	693	--	19	0.05	--	1.64	1.64	9.2	--	--	na	na
	7/15/1997	17	555	--	40	0.06	--	1.27	1.27	--	--	--	na	na
	10/7/1997	18	579	0.14	14	0.06	--	0.477	0.477	--	--	--	na	na
	4/30/1998	18.8	606	na	3.0	na	0.8	na	0.080	0.22	--	--	60	5840
	12/10/1998	19	540	na	17	na	na	na	na	--	--	--	86	4700
	3/15/2000	17	600	na	3.1	0.0368	--	na	--	--	--	--	84	na
	8/9/2000	13	258	na	10.0	0.0233	--	na	--	--	--	--	130	4280
	2/15/2001	19.3	737	na	--	na	-- (n)	na	na	0.76J	--	--	50.1	5190
S1-MW14	1/7/1997	12	425	--	27	0.50	--	--	--	3	--	--	na	na
	4/3/1997	19	430	--	64	0.60	--	0.217	0.217	31.3	--	--	na	na
	7/15/1997	14	369	--	44	0.51	--	0.433	0.433	3.4	--	--	na	na
	10/7/1997	14	443	--	37	0.43	--	--	--	6.1	--	--	na	na
	3/16/2000	10	330	na	10.3	0.424	--	na	--	71	--	--	238	2500
	8/10/2000	11.3	186	na	19.0	0.459	--	na	0.120	--	--	--	290	2390
	2/20/2001	8.71	404	na	20.9	na	0.6 (n)	na	na	96.00	--	--	185	4020
S1-MW15	1/7/1997	7.8	196	--	19	0.14	--	--	--	23.3	--	--	na	na
	4/3/1997	4.9	201	--	34	0.13	--	0.298	0.298	1.7	--	--	na	na
	7/15/1997	9.2	194	--	30	0.12	--	0.368	0.368	31.0	--	--	na	na
	10/8/1997	9.4	187	--	12	0.12	--	2.19	2.19	36	--	--	na	na
	4/29/1998	9.3	203	na	2.1	na	0.4	na	0.07	57	--	--	26	na
	12/10/1998	9	190	na	8	na	na	na	na	15	--	--	32	6200
	3/15/2000	7.9	250	na	1.9	0.118	--	na	--	--	--	--	32	na
	8/8/2000	5.7	175	na	5.8	0.137	--	na	0.254	15	--	--	32	6290
	2/16/2001	10.1	226	na	5.9	na	-- (n)	na	na	1.4	--	--	27.5	5910
S1-MW16	2/16/2001	7.16	84.4	na	9.4	na	0.2 (n)	na	na	0.76J	1	0.98J	30	6020
S1-MW17	1/8/1997	58	310	0.15	39	0.02	--	0.244	0.244	20.6	--	--	na	na
	4/7/1997	56	322	--	58	--	--	0.381	0.381	1.9	--	--	na	na
	7/16/1997	63	303	--	67	--	--	0.969	0.969	0.6	--	--	na	na
	10/8/1997	64	308	--	30	--	--	0.225	0.225	1.7	--	--	na	na
	12/10/1998	50	270	na	32	na	na	na	na	1.5	--	--	500	1500
	3/15/2000	42	300	na	13.9	0.0169	--	na	0.789	--	--	--	474	na
	8/8/2000	37.1	179	na	16.0	0.0128	--	na	0.463	--	--	--	465	1690
	2/15/2001	39.6	278	na	7.6	na	-- (n)	na	na	--	--	--	105	1670

TABLE 3-4
Summary of Historical Groundwater Natural Attenuation Parameter Results, Site 1, 13 Area, MCB Camp Pendleton, California
(Sheet 2 of 2)

Well Location	Date Sampled	Nitrate (a) mg/L	Sulfate (b) mg/L	Sulfide (c) mg/L	TOC (d) mg/L	Mn (e) mg/L	Fe II (f) mg/L	Fe III (g) mg/L	Total Fe (h) mg/L	Methane (i) µg/L	Ethane (j) µg/L	Ethene (k) µg/L	Alkalinity (l) mg/L	Chloride (m) mg/L
S1-MW19	1/8/1997	10	250	--	17	0.27	--	--	--	1	--	--	na	na
	4/7/1997	10	259	--	45	0.29	--	0.504	0.504	1.1	--	--	na	na
	7/15/1997	6	231	--	36	0.23	--	0.165	0.165	0.9	--	--	na	na
	10/8/1997	12	267	--	30	0.25	--	0.151	0.151	1.0	--	--	na	na
	5/4/1998	13.8	326	na	2.8	na	0.8	na	0.100	1.2	--	--	68	4130
	12/11/1998	11	200	na	13	na	na	na	na	--	--	--	64	5900
	3/16/2000	12	350	na	2.8	0.127	--	na	0.146	--	--	--	62	4700
	8/10/2000	9.5	257	na	9.4	0.103	--	na	--	--	--	--	65	5410
	2/16/2001	13	360	na	9.8	na	-- (n)	na	na	0.83J	--	--	65.1	5300
S1-MW20	1/8/1997	10	200	--	16	0.06	--	0.238	0.238	0.5	--	--	na	na
	4/7/1997	10	192	--	41	0.05	--	0.712	0.712	0.6	--	--	na	na
	7/15/1997	11	192	--	27	0.04	--	1.190	1.190	0.7	--	--	na	na
	10/8/1997	11	192	--	23	0.03	--	0.353	0.353	1.0	--	--	na	na
	5/4/1998	11.6	205	na	1.8	na	1.2	na	0.260	0.69	--	--	44	5310
	12/11/1998	13	250	na	13	na	na	na	na	--	--	--	50	6200
	3/16/2000	10	240	na	1.8	0.0228	--	na	0.404	--	--	--	47	4600
	8/9/2000	9.3	233	na	6.3	0.0145	--	na	0.631	--	--	--	50	4950
	2/15/2001	10.6	245	na	--	na	-- (n)	na	na	--	--	0.69J	50.1	5150
S1-MW21	10/8/1997	8.8	137	0.42	23	0.31	--	2.72	2.72	1.7	--	--	na	na
	5/1/1998	8.0	127	na	1.5	na	5.1	na	3.77	0.24	--	--	121	3740
	12/11/1998	9	110	na	7	na	na	na	na	--	--	--	145	4300
	3/16/2000	8.2	130	na	1.7	0.999	--	na	73.6	--	--	--	138	4000
	8/9/2000	7.8	142	na	5.2	0.128	--	na	7.17	--	--	--	110	4580
	2/15/2001	8.66	136	na	na	na	-- (n)	na	na	--	0.29J	--	105	4910
S1-MW22	2/14/2001	--	137	na	28.1	na	na	na	na	3.5	7.8	7	270	4550
S1-MW13171-1	3/21/2000	1.4	150	na	10.0	4.54	4.8	na	5.24	2	48	38	174	5500
	8/10/2000	--	111	na	na	4.00	5.0	na	7.29	4.4	12	3.5	170	6150

Notes

Values in **bold** are in excess of established water quality objectives.

-- Not detected above method detection limit

na - Not analyzed

(a) Nitrate as N by EPA Method 300.0

(b) Sulfate by EPA Method 300.0

(c) Sulfides, total by EPA Method 9030

(d) Total organic carbon by EPA Method 9060

(e) Manganese by EPA Method 6010A

(f) Ferrous Iron by Method SM 3500-Fe D (except where noted otherwise)

(g) Ferric Iron by Method SM 3500-Fe D

(h) Total Iron by EPA Method 6010A

(i) Methane by EPA Method 3810

(j) Ethane by EPA Method 3810

(k) Ethene by EPA Method 3810

(l) Alkalinity by SM 2320B

(m) Chloride by EPA Method 300.0

(n) Ferrous iron by Hach IR-18C field test kit

TABLE 3-5
Summary of Historical Groundwater Natural Attenuation Results, Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 1 of 3)

Well Location	Date Sampled	Nitrate (a) mg/L	Sulfate (b) mg/L	Sulfide (c) mg/L	TOC (d) mg/L	Mn (e) mg/L	Fe II (f) mg/L	Fe III (g) mg/L	Total Fe (h) mg/L	Methane (i) µg/L	Ethane (j) µg/L	Ethene (k) µg/L	Alkalinity (l) mg/L	Chloride (m) mg/L
S5/8/9/17-MW1	1/9/1997	6.4	2130	--	25	0.08	--	3.62	3.62	--	--	--	na	na
	4/7/1997	6.4	1990	--	27	0.08	--	1.69	1.69	0.6	--	--	na	na
	7/16/1997	6.9	2050	--	32	0.06	--	5.14	5.14	--	--	--	na	na
	10/9/1997	7.0	2030	0.14	21	0.05	--	1.21	1.21	--	--	--	na	na
	4/30/1998	7.8	2040	na	4.5	na	0.0	na	0.33	0.18	--	--	50	3530
	12/15/1998	7	1700	na	10	na	na	na	na	--	--	--	60	4200
	3/22/2000	5.5	1800	na	3.4	4.09	--	na	4.49	--	--	--	62	4000
	8/14/2000	5.0	79	na	6.5	2.66	--	na	0.393	--	--	--	128	3920
	2/22/2001	7.05	1810	na	--	na	-- (n)	na	na	0.4 J	--	--	60.1	4150
S5/8/9/17-MW4	1/9/1997	4.3	2030	--	37	1.80	--	3.64	3.64	--	--	--	na	na
	4/7/1997	3.8	1890	--	33	1.50	--	0.63	0.628	0.8	--	--	na	na
	7/16/1997	4.8	2080	--	46	1.70	--	2.30	2.30	--	--	--	na	na
	10/9/1997	4.6	2010	--	17	1.50	--	0.800	0.800	0.6	--	--	na	na
	5/5/1998	6.2	1810	na	3.7	na	0.1	na	0.800	0.23	--	--	104	3620
	12/15/1998	7	1900	na	14	na	na	na	na	1.1	--	--	140	4400
	3/22/2000	6.9	1900	na	5.2	2.47	--	na	14.4	--	--	--	92	3700
	8/15/2000	4.5	80	na	10	2.77	--	na	0.176	--	--	--	140	3690
	2/22/2001	7.6	2360	na	--	na	-- (n)	na	na	0.45 J	--	--	115	3430
S5/8/9/17-MW7	4/28/1998	7.9	2490	na	6.4	na	na	na	na	na	--	--	40	3130
S5/8/9/17-MW15	1/10/1997	5.8	1890	--	17	0.03	--	2.79	2.79	--	--	--	na	na
	4/8/1997	5.4	1790	--	20	0.02	--	1.01	1.01	0.6	--	--	na	na
	7/16/1997	6.1	1900	--	36	0.03	--	1.25	1.25	--	--	--	na	na
	10/9/1997	6.5	1850	--	17	0.02	--	1.07	1.07	--	--	--	na	na
	5/5/1998	6.9	1760	na	2.2	na	0.4	na	0.08	0.43	--	--	92	3710
	12/17/1998	7	1700	na	10	na	na	na	na	--	--	--	120	4700
	3/23/2000	6	1700	na	3.4	0.0479	--	na	5.76	--	--	--	90	3600
	8/17/2000	3.7	12.7	na	7.4	0.0289	--	na	1.43	--	--	--	80	4190
	2/26/2001	7.3	1660	na	7.0	na	-- (n)	na	na	7.7	--	--	89.7	4020
S5/8/9/17-MW23	4/28/1998	2.0	853	na	1.4	na	na	na	na	380	--	--	63	2330
S5/8/9/17-MW31	4/28/1998	8.1	1900	na	4.2	na	na	na	na	--	--	--	50	3870
S5/8/9/17-MW34	4/28/1998	1.4	507	na	0.7	na	na	na	na	16	--	--	160	1030
S5/8/9/17-MW36	4/28/1998	10.6	1680	na	3.4	na	na	na	na	0.60	--	--	67	3240

TABLE 3-5
Summary of Historical Groundwater Natural Attenuation Results, Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 2 of 3)

Well Location	Date Sampled	Nitrate (a) mg/L	Sulfate (b) mg/L	Sulfide (c) mg/L	TOC (d) mg/L	Mn (e) mg/L	Fe II (f) mg/L	Fe III (g) mg/L	Total Fe (h) mg/L	Methane (i) µg/L	Ethane (j) µg/L	Ethene (k) µg/L	Alkalinity (l) mg/L	Chloride (m) mg/L
S5/8/9/17-MW37	1/10/1997	1.2	1310	0.09	26	1.40	--	1.31	1.31	1.2	--	--	na	na
	4/7/1997	1.1	1350	--	34	1.50	--	0.570	0.570	1.3	--	--	na	na
	7/16/1997	1.3	1340	--	44	1.50	--	1.160	1.160	0.9	--	--	na	na
	10/9/1997	1.1	1260	--	22	1.50	--	0.703	0.703	0.9	--	--	na	na
	4/30/1998	1.4	1190	na	11.2	na	0.0	na	0.010	1.3	--	--	215	1390
	12/17/1998	2	1200	na	19	na	na	na	na	7.6	10	5.8	240	1400
	3/22/2000	1.9	1100	na	10.6	1.44	--	na	3.86	--	--	--	195	1100
	8/17/2000	1.3	3.8	na	13.0	1.30	--	na	0.362	1.5	--	--	196	1350
	2/23/2001	2.4	1280	na	--	na	-- (n)	na	na	2	--	--	164	1340
S5/8/9/17-MW38	2/21/2001	4.68	2690	na	na	na	na	na	na	na	na	na	22.9	4300
S5/8/9/17-MW41	1/13/1997	--	39	0.09	69	0.33	1.73	3.02	4.75	1.3	--	--	na	na
	4/10/1997	--	54	--	53	0.29	0.264	2.18	2.44	1.4	--	--	na	na
	7/18/1997	--	71	0.11	95	0.25	--	3.28	3.28	5.4	0.7	--	na	na
	10/16/1997	--	52	0.07	45	0.21	0.713	1.97	2.68	6.2	--	--	na	na
	12/17/1998	--	40	na	35	na	na	na	na	45	--	--	560	900
	3/23/2000	--	19	na	29.2	0.307	0.69	na	3.57	129	--	--	557	980
	8/17/2000	--	--	na	34.0	0.224	0.39	na	1.16	339	--	--	525	1030
	2/20/2001	--	10.4	na	31.1	na	0.2 (n)	na	na	660	--	--	565	1270
S5/8/9/17-MW44	1/13/1997	2.2	445	--	25	0.07	--	0.673	0.673	1.1	--	--	na	na
	4/9/1997	2.4	449	--	50	0.06	--	0.446	0.446	0.9	--	--	na	na
	7/17/1997	3.1	458	--	25	0.05	--	8.880	8.880	--	--	--	na	na
	10/15/1997	4.3	433	--	31	0.04	--	0.295	0.295	2.4	--	--	na	na
	4/29/1998	3.4	1410	na	3.9	na	na	na	na	0.7	--	--	22	8620
	12/18/1998	6	420	na	11	na	na	na	na	--	--	--	296	9000
	3/22/2000	3.7	480	na	5.1	0.0285	0.32	na	1.54	--	--	--	214	7800
	8/15/2000	--	85	na	15.0	0.0229	--	na	1.13	--	--	--	241	8920
	2/21/2001	3.32	460	na	--	na	0.6 (n)	na	na	0.33J	--	--	210	7770
S5/8/9/17-MW46	1/10/1997	4.1	658	--	12	0.15	--	0.897	0.897	26.0	--	--	na	na
	4/8/1997	3.0	629	--	40	0.22	0.224	0.748	0.972	2.5	--	--	na	na
	7/17/1997	3.5	616	--	51	0.24	--	0.716	0.716	--	--	--	na	na
	10/15/1997	3.7	580	--	16	0.21	0.490	0.050	0.540	28.5	--	--	na	na
	5/3/1998	4.8	509	na	1.3	na	0.980	na	0.080	18	--	--	123	6950

TABLE 3-5
Summary of Historical Groundwater Natural Attenuation Results, Site 5/8/9/17, 13 Area, MCB Camp Pendleton, California
(Sheet 3 of 3)

Well Location	Date Sampled	Nitrate (a) mg/L	Sulfate (b) mg/L	Sulfide (c) mg/L	TOC (d) mg/L	Mn (e) mg/L	Fe II (f) mg/L	Fe III (g) mg/L	Total Fe (h) mg/L	Methane (i) µg/L	Ethane (j) µg/L	Ethene (k) µg/L	Alkalinity (l) mg/L	Chloride (m) mg/L
S5/8/9/17-MW46 (continued)	12/15/1998	4	440	na	14	na	na	na	na	120	--	--	230	8400
	3/21/2000	2.4	580	na	2.7	0.169	--	na	0.584	94	--	--	104	7700
	8/14/2000	1.2	73	na	7.0	0.106	--	na	0.184	--	--	--	90	7730
	2/22/2001	1.29	471	na	9.0	na	-- (n)	na	na	260	--	--	140	6930
S5/8/9/17-MW47	1/10/1997	11	877	0.07	23	0.23	--	12.7	12.7	1.1	--	--	na	na
	4/8/1997	11	825	--	51	0.17	--	0.567	0.567	1.1	--	--	na	na
	7/17/1997	14	857	--	42	0.16	--	1.620	1.620	0.7	--	--	na	na
	10/15/1997	14	780	--	50	0.14	--	--	--	0.9	--	--	na	na
	4/29/1998	10.1	777	na	5.0	na	0.8	na	0.01	0.6	--	--	134	6810
	12/15/1998	12	700	na	17	na	na	na	na	1.4	--	--	144	7200
	3/21/2000	2.7	800	na	5.2	0.203	--	na	0.226	--	--	--	166	6400
	8/14/2000	2.6	43.9	na	14.0	0.111	--	na	0.452	--	--	--	150	6230
	2/26/2001	1.77	773	na	15.6	na	-- (n)	na	na	0.84 J	--	--	149	6490
S5/8/9/17-MW48	1/13/1997	--	161	0.34	149	4.20	1.18	382	383	23.4	--	--	na	na
	4/8/1997	--	110	--	199	8.60	--	354	354	67	--	--	na	na
S5/8/9/17-MW50	1/13/1997	4.3	363	--	26	0.10	1.79	0.060	1.85	1.5	--	--	na	na
	4/9/1997	3.0	361	--	47	0.12	2.29	2.15	4.44	0.9	--	--	na	na
	7/17/1997	3.6	366	--	42	0.14	0.319	3.87	4.19	1.2	2.0	--	na	na
	5/4/1998	3.6	351	na	7.9	na	0.910	na	0.40	0.74	--	--	126.0	5590
	12/17/1998	3	330	na	28	na	na	na	na	5.5	4.5	--	120	6500
	3/23/2000	1.6	360	na	10.4	0.194	--	na	2.77	--	16	--	152	4100
	8/17/2000	1.0	--	na	24.0	0.219	9.5	na	9.06	2.3	--	--	130	5300
	2/20/2001	1.54	358	na	22.0	na	2.0 (n)	na	na	1.5	--	1.9	158	5410

Notes

-- Not detected above method detection limit.
na - Not analyzed
(a) Nitrate as N by EPA Method 300.0
(b) Sulfate by EPA Method 300.0
(c) Sulfides, total by EPA Method 9030
(d) Total organic carbon by EPA Method 9060
(e) Manganese by EPA Method 6010A
(f) Ferrous Iron by Method SM 3500-Fe D (except where noted otherwise)
(g) Ferric Iron by Method SM 3500-Fe D
(h) Total Iron by EPA Method 6010A
(i) Methane by EPA Method 3810
(j) Ethane by EPA Method 3810
(k) Ethene by EPA Method 3810
(l) Alkalinity by SM 2320B
(m) Chloride by EPA Method 300.0
(n) Ferrous iron by Hach IR-18C field test kit

TABLE 3-6
Summary of Historical Groundwater Natural Attenuation Parameter Results, Site 6/7, 13 Area, MCB Camp Pendleton, California
(Sheet 1 of 2)

Well Location	Date Sampled	Nitrate (a) mg/L	Sulfate (b) mg/L	Sulfide (c) mg/L	TOC (d) mg/L	Mn (e) mg/L	Fe II (f) mg/L	Fe III (g) mg/L	Total Fe (h) mg/L	Methane (i) µg/L	Ethane (j) µg/L	Ethene (k) µg/L	Alkalinity (l) mg/L	Chloride (m) mg/L
S6/7-MW7	1/22/1997	6.6	3000	--	59	10	0.276	4.36	4.67	1.1	--	--	na	na
	4/9/1997	6.3	2830	--	47	13	--	0.16	0.157	11.9	--	--	na	na
	7/17/1997	7.2	3120	--	38	13	--	0.46	0.464	19	--	--	na	na
	10/15/1997	7.4	2880	--	42	13	--	0.420	0.420	32.2	--	--	na	na
	5/1/1998	7.9	2870	na	8.3	na	0.240	na	0.080	35.0	--	--	24	2700
	12/18/1998	9	2800	na	18	na	na	na	na	54	--	--	29	3500
	3/23/2000	7.6	2700	na	8.2	12.3	--	na	0.128	20	--	--	22	2300
	8/23/2000	--	55	na	12.0	12.0	--	na	--	2.5	--	--	12	2620
	2/20/2001	7.68	3910	na	12.8	na	-- (n)	na	na	31.0	--	--	11	2780
S6/7-MW13	1/14/1997	2.2	4260	0.08	25	19	9.14	4.06	13.2	52.7	--	--	na	na
	4/9/1997	1.9	4140	--	43	23	10.4	1.70	12.1	14.1	--	--	na	na
	7/17/1997	3.0	4430	--	30	25	13.1	1.96	15.0	15.4	--	--	na	na
	10/15/1997	3.7	4090	--	28	26	14.6	--	14.6	27.7	--	--	na	na
	5/14/1998	3	3990	na	9.9	na	13.6	na	14.0	9.0	--	--	--	3170
	12/21/1998	4	3800	na	21	na	na	na	na	75	--	--	--	3800
	3/27/2000	2.4	4000	na	6.5	18.3	17.0	na	18.3	71	--	--	--	4700
	8/23/2000	--	63	12.0	na	19.1	14	na	14.5	23	--	--	na	5010
	2/26/2001	2.28	4050	na	15.9	na	13 (n)	na	na	16	--	--	--	4930
S6/7-MW15	1/14/1997	5.4	2650	--	25	12	38.1	--	31.3	18.5	--	--	na	na
S6/7/-MW16	1/22/1997	4.4	4030	0.08	27	14	23.4	74.8	98.2	14.6	0.8	--	na	na
	4/10/1997	4.5	3420	--	30	18	19.5	--	15.5	11.7	--	--	na	na
	7/18/1997	3.5	3780	--	34	19	19.6	1.6	21.2	14	--	--	na	na
	10/16/1997	3.6	3500	--	20	17	24.3	--	24.3	12.3	1.2	--	na	na
	5/13/1998	4.6	3780	na	9.2	na	16.9	na	17.6	10	--	--	--	3560
	12/18/1998	5	3000	na	17	na	na	na	na	23	--	--	--	3500
	3/27/2000	1.2	3400	na	8.7	38.1	32.0	na	46.0	12	--	--	--	3900
	8/23/2000	--	98	na	16.0	15.2	21	na	22.2	10	--	--	na	4060
	2/20/2001	1.0	4270	na	14.2	na	-- (n)	na	na	9.6	--	0.78J	--	4080

TABLE 3-6
Summary of Historical Groundwater Natural Attenuation Parameter Results, Site 6/7, 13 Area, MCB Camp Pendleton, California
(Sheet 2 of 2)

Well Location	Date Sampled	Nitrate (a) mg/L	Sulfate (b) mg/L	Sulfide (c) mg/L	TOC (d) mg/L	Mn (e) mg/L	Fe II (f) mg/L	Fe III (g) mg/L	Total Fe (h) mg/L	Methane (i) µg/L	Ethane (j) µg/L	Ethene (k) µg/L	Alkalinity (l) mg/L	Chloride (m) mg/L
S6/7-MW17	1/14/1997	12	3910	0.07	28	24	24.2	--	14.9	209	--	--	na	na
	4/9/1997	12	3710	--	65	31	9.82	--	8.01	1.4	--	--	na	na
	7/22/1997	11	4160	--	23	34	21.50	--	19.70	0.6	--	--	na	na
	10/16/1997	10	4110	--	18	31	23.2	--	23.2	1.7	--	--	na	na
	5/13/1998	15.2	4700	na	6.7	na	na	na	na	0.95	--	--	--	6830
	12/18/1998	18	3300	na	18	na	na	na	na	5.2	--	--	--	8400
	3/27/2000	1.9	3700	na	5.7	15.3	38.0	na	33.5	2	--	--	--	6700
	08/23/00	--	58	na	14.0	29.0	36	na	36.7	3.1	--	--	na	6440
	02/22/01	--	4920	na	5.1	na	16.2 (n)	na	na	2	--	--	--	6730

Notes

-- Not detected above method detection limit.
na - Not analyzed
(a) Nitrate as N by EPA Method 300.0
(b) Sulfate by EPA Method 300.0
(c) Sulfides, total by EPA Method 9030
(d) Total organic carbon by EPA Method 9060
(e) Manganese by EPA Method 6010A
(f) Ferrous Iron by Method SM 3500-Fe D (except where noted otherwise)
(g) Ferric Iron by Method SM 3500-Fe D
(h) Total Iron by EPA Method 6010A
(i) Methane by EPA Method 3810
(j) Ethane by EPA Method 3810
(k) Ethene by EPA Method 3810
(l) Alkalinity by SM 2320B
(m) Chloride by EPA Method 300.0
(n) Ferrous iron by Hach IR-18C field test kit

M00681.001407
MCB CAMP PENDLETON
SSIC # 5090.3

FIGURES

FINAL FIRST SEMIANNUAL 2001 GROUNDWATER MONITORING REPORT FOR MULTIPLE 13 AREA SITES

DATED 30 MARCH 2001

DRAWN BY: MD	CHECKED BY: JO	APPROVED BY: MC	DCN: FWSD-RAC-01-0413	DRAWING NO: 01041311.DWG
DATE: 03/20/01	REV: REVISION 0		CTO #0026	

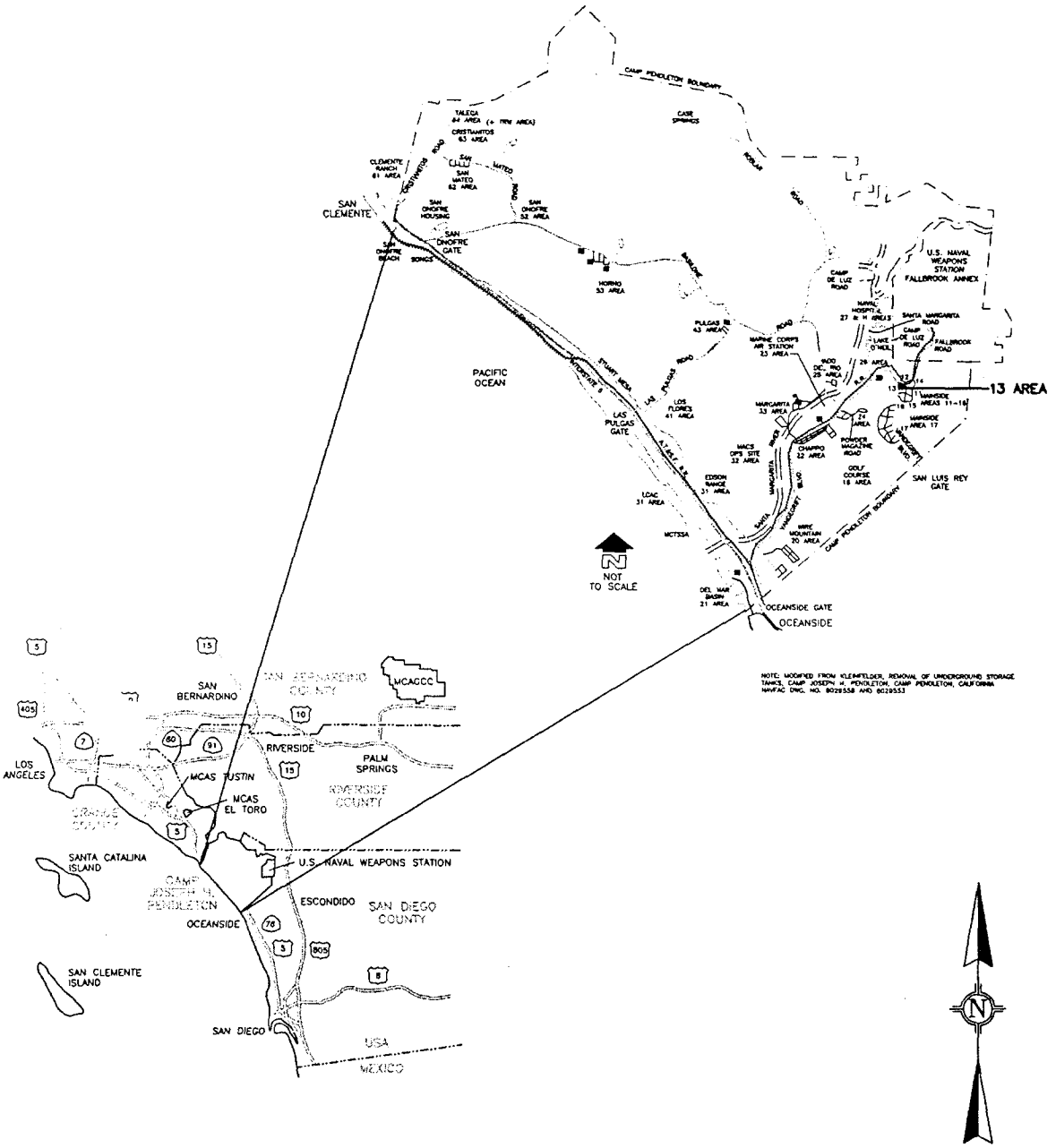


Figure 1-1

VICINITY MAP

MCB CAMP PENDLETON

FOSTER WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\010413 13 AREA GWMR, APRIL 01\DWGS\01041311.DWG
PLOT/UPDATE: MAR 20 2001 10:05:36

DRAWING NO: 01041312.DWG

DCN: FWSD-RAC-01-0413

CTO #0026

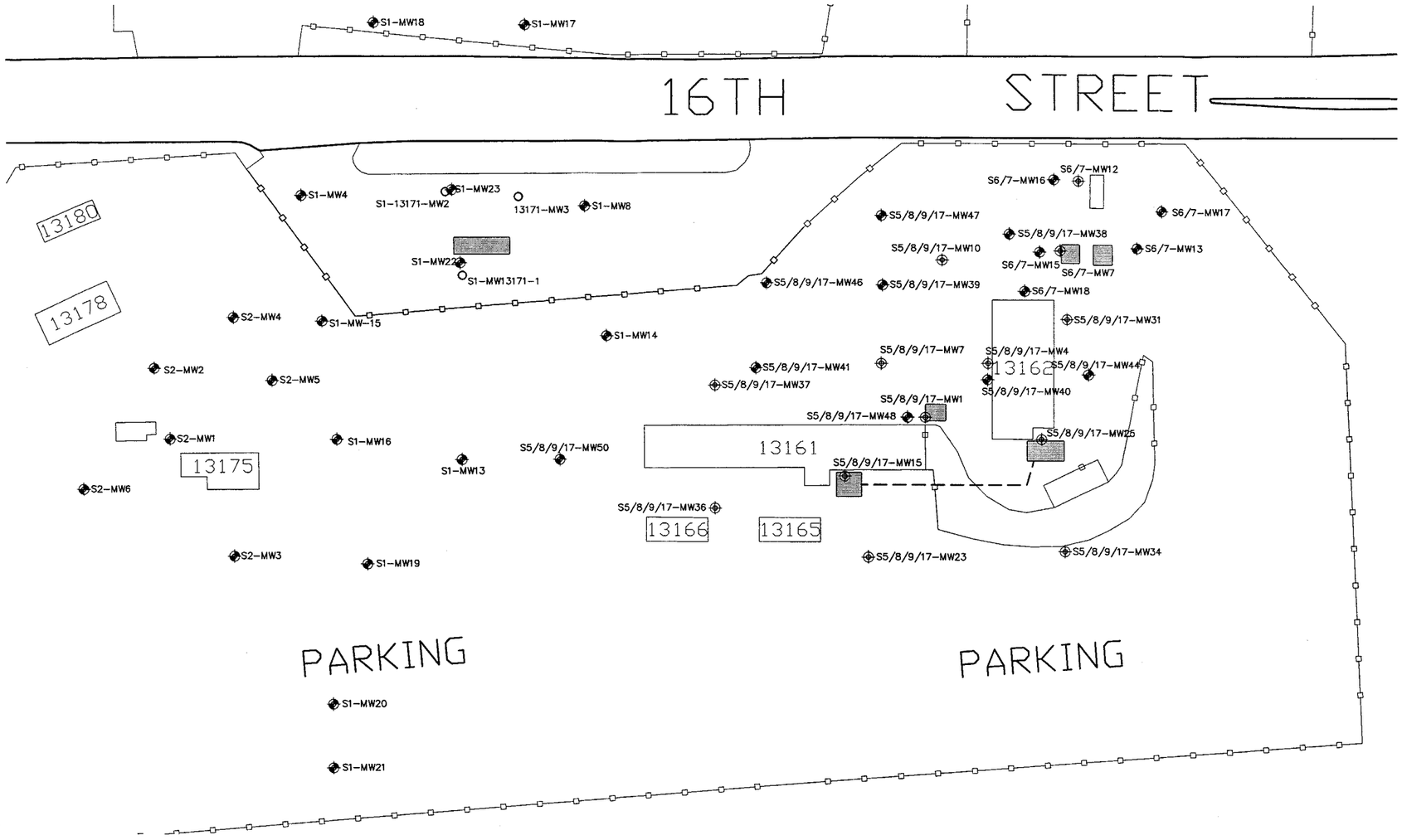
APPROVED BY: MC

CHECKED BY: JO

REV: REVISION 0

DRAWN BY: MD

DATE: 03/20/01



LEGEND:

- S5/8/9/17-MW23 — DEEP AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- S1-MW21 — SHALLOW AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- WELL DESTROYED, FEBRUARY 2001
- FORMER UST
- LOCATION OF FORMER BLDG.
- LOCATION OF FORMER PIPELINE
- FENCE LINE

100 50 0 100

SCALE IN FEET

N

Figure 1-2

WELL LOCATION MAP

13 AREA

MCB CAMP PENDLETON

FOSTER WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\010413 13 AREA GWMR, APRIL 01\DWGS\01041312.DWG
PLOT/UPDATE: MAR 30 2001 09:32:13

DRAWING NO: 01041321.DWG

DCN: FWSD-RAC-01-0413

CTO #0026

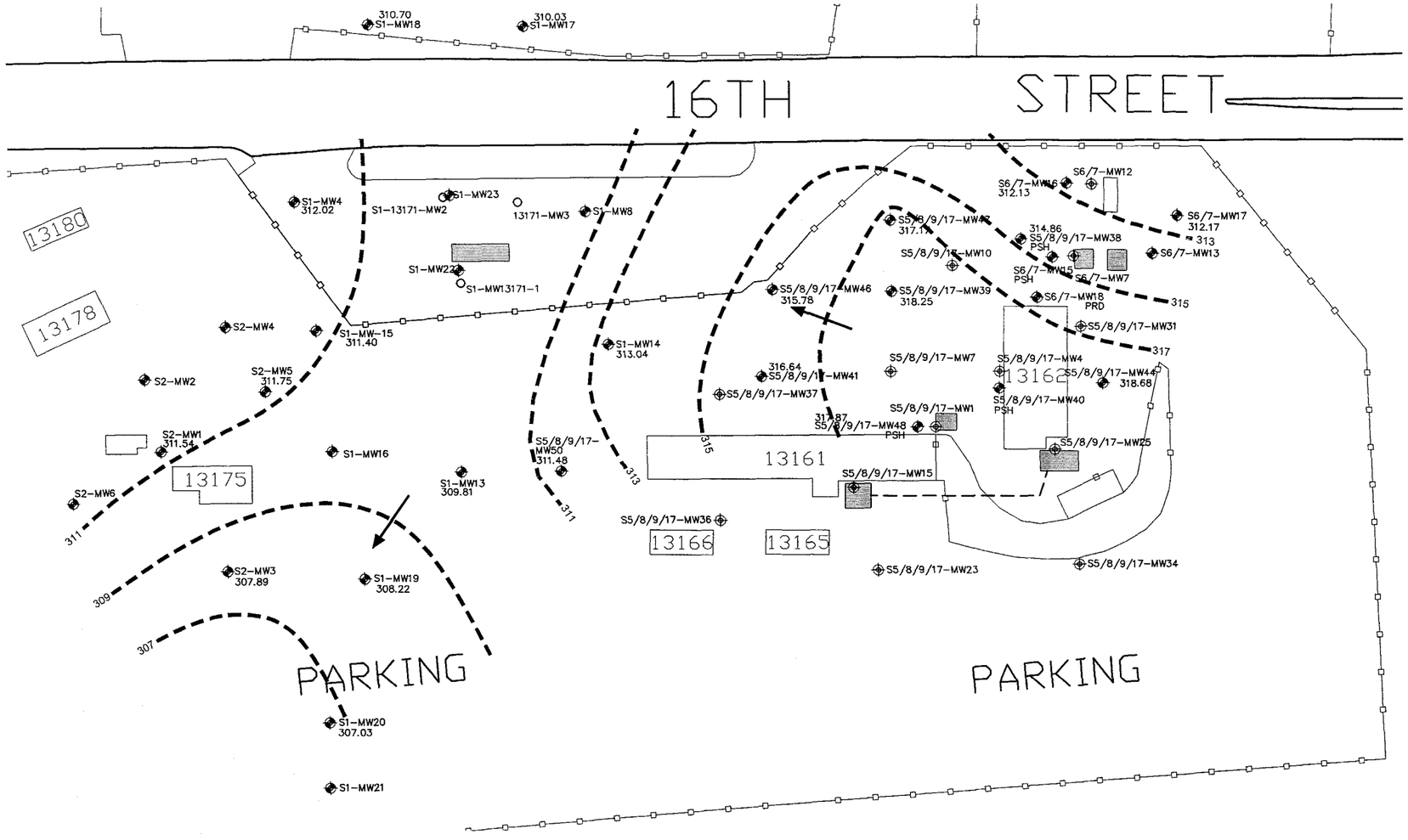
APPROVED BY: MC

CHECKED BY: JO

REV: REVISION 0

DRAWN BY: MD

DATE: 03/20/01



LEGEND:

- S5/8/9/17-MW23 — DEEP AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- S1-MW21 — SHALLOW AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- WELL DESTROYED, FEBRUARY 2001
- FORMER UST
- LOCATION OF FORMER BLDG.
- LOCATION OF FORMER PIPELINE
- FENCE LINE
- 321 — SHALLOW AQUIFER GROUNDWATER ELEVATION CONTOUR (FT MSL)
- (321.23) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- PSH — PHASE SEPARATED HYDROCARBONS IN WELL
- PRD — PSH RECOVERY DEVICE IN WELL

100 50 0 100

SCALE IN FEET

N

Figure 2-1

SHALLOW AQUIFER GROUNDWATER MAP
13 AREA, FEBRUARY 2001

MCB CAMP PENDLETON

FOSTER FW WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\0104l3 13 AREA GWMR, APRIL 01\DWGS\01041321.DWG
PLOT/UPDATE: MAR 30 2001 09:39:45

DRAWING NO: 01041322.DWG

DCN: FWSD-RAC-01-0413

CTO #0026

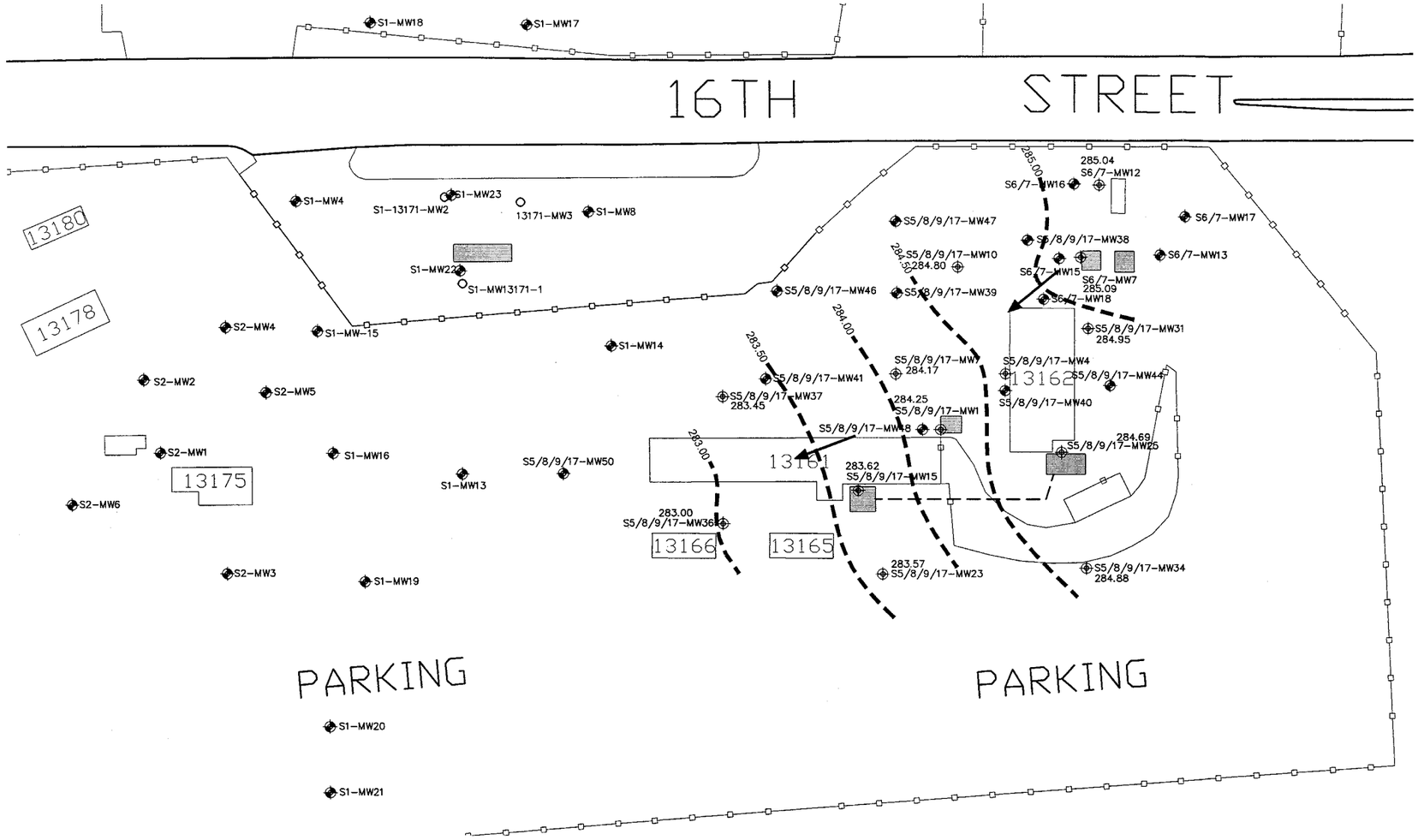
APPROVED BY: MC

CHECKED BY: JO

REV: REVISION 0

DRAWN BY: MD

DATE: 03/20/01



LEGEND:

- S5/8/9/17-MW23 — DEEP AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- S1-MW21 — SHALLOW AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- WELL DESTROYED, FEBRUARY 2001
- FORMER UST
- LOCATION OF FORMER BLDG.
- LOCATION OF FORMER PIPELINE
- FENCE LINE
- 321 — SHALLOW AQUIFER GROUNDWATER ELEVATION CONTOUR (FT MSL)
- 321.23 — GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

100 50 0 100

SCALE IN FEET

Figure 2-2

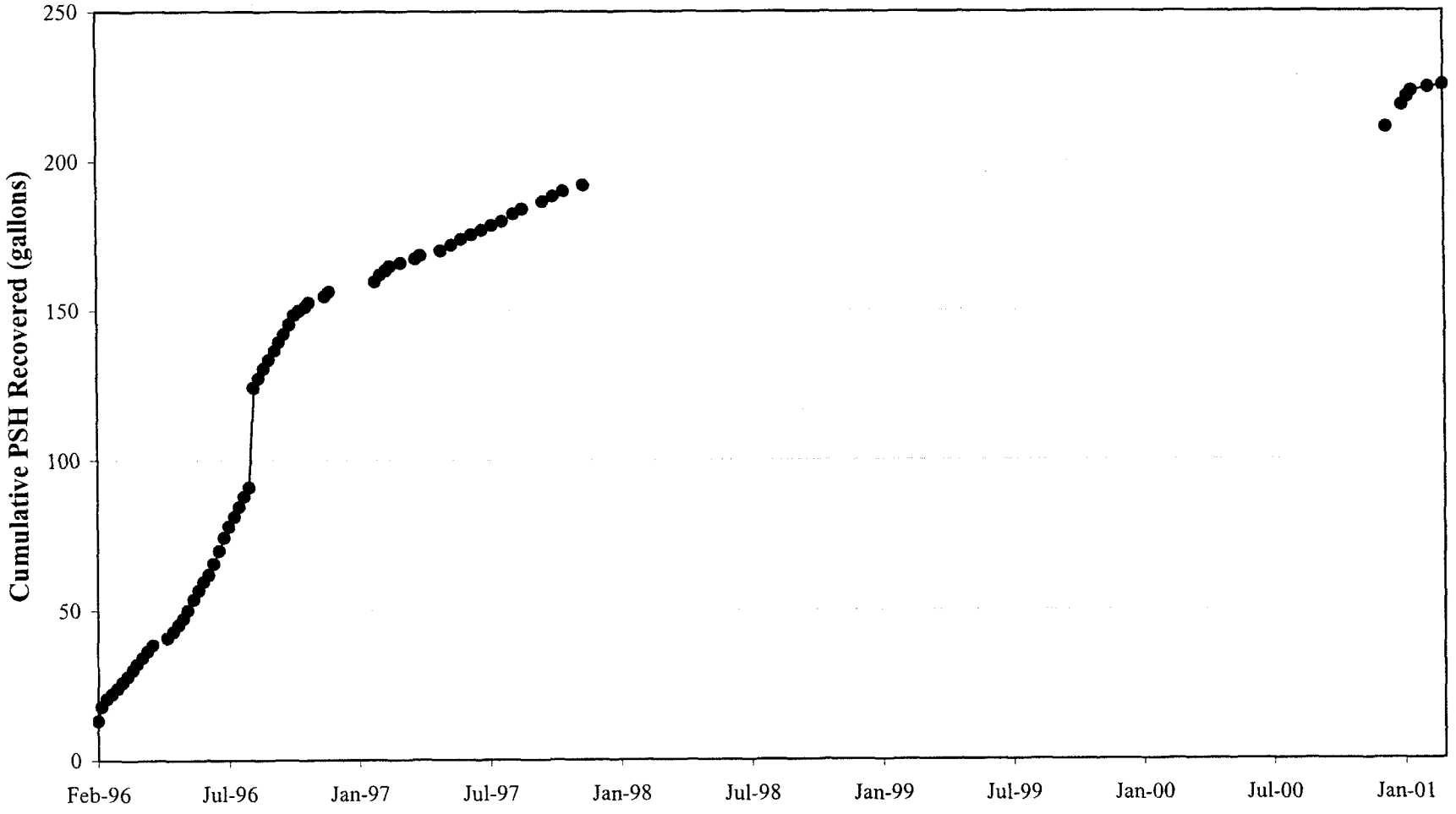
DEEP AQUIFER GROUNDWATER MAP
13 AREA, FEBRUARY 2001

MCB CAMP PENDLETON

FOSTER WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\010413 13 AREA GWMR, APRIL 01\DWGS\01041322.DWG
PLOT/UPDATE: MAR 30 2001 09:41:20

Figure 2-3
Phase-Separated Hydrocarbon (PSH) Recovery from Well S5/8/9/17-MW40



Note:
Time periods with no data indicate no active PSH recovery.

DRAWING NO: 01041331.DWG

DCN: FWSD-RAC-01-0413

CTO #0026

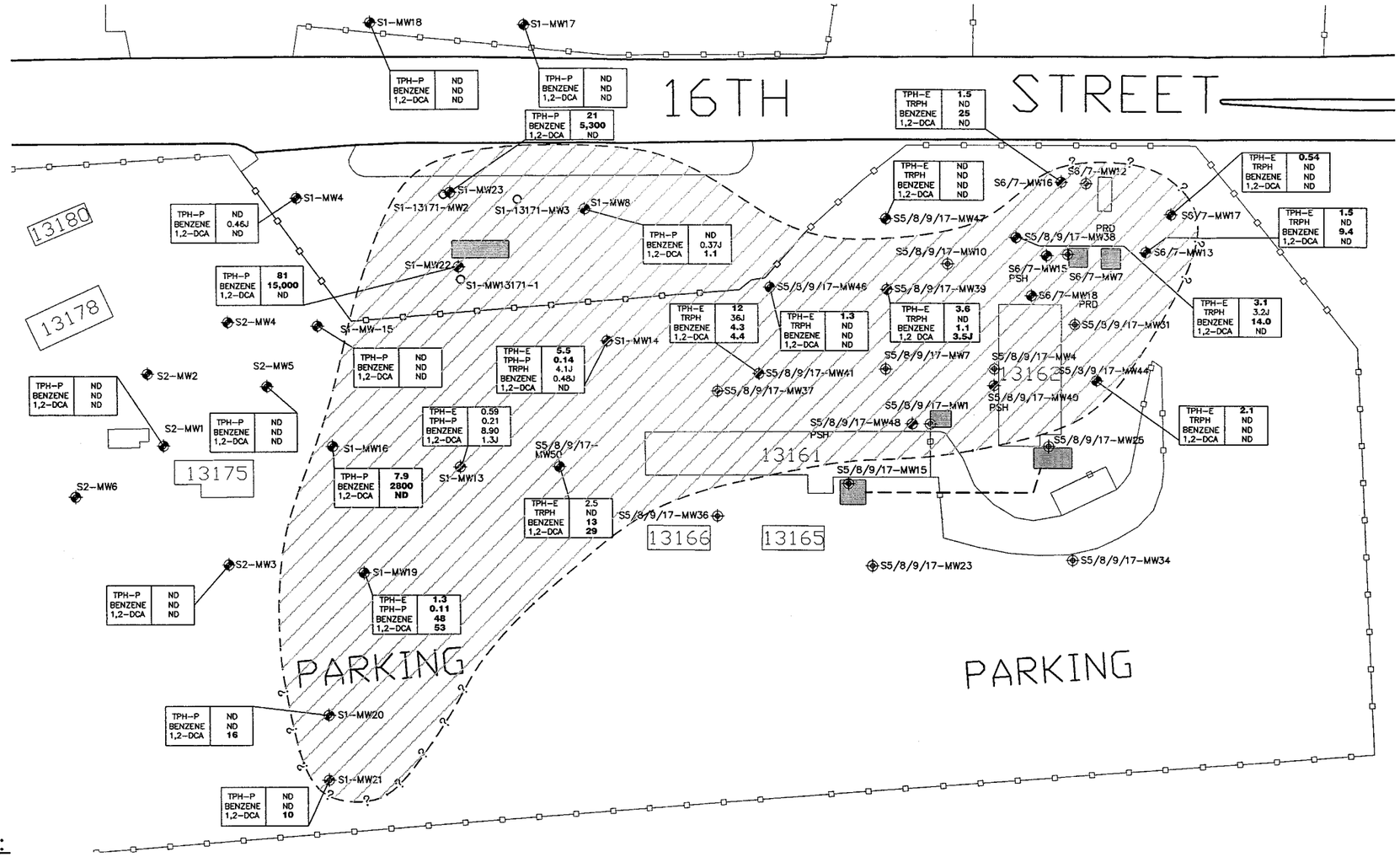
APPROVED BY: MC

CHECKED BY: JO

REV: REVISION 0

DRAWN BY: MD

DATE: 03/20/01



LEGEND:

S5/8/9/17-MW23 — DEEP AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION

S1-MW21 — SHALLOW AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION

WELL DESTROYED, FEBRUARY 2001

FORMER UST

LOCATION OF FORMER BLDG.

LOCATION OF FORMER PIPELINE

FENCE LINE

TPH–E	TOTAL EXTRACTABLE PETROLEUM HYDROCARBON IN MILLIGRAMS PER LITER (mg/L)
TPH–P	TOTAL PURGEABLE PETROLEUM HYDROCARBON (mg/L)
BENZENE	BENZENE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
1,2–DCA	1,2 DICHLOROETHANE (ug/L)
TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (mg/L)
ND	NOT DETECTED ABOVE METHOD DETECTION LIMIT
J	COMPOUND PRESENT ABOVE METHOD DETECTION LIMIT (MDL) BUT BELOW REPORTING LIMIT
	APPROXIMATE AREA EXTENT OF TPH–P, TPH–E, BENZENE AND 1,2–DCA IN SHALLOW AQUIFER GROUNDWATER >WQOs
PSH	PHASE SEPARATED HYDROCARBONS IN WELL
PRD	PSH RECOVERY DEVICE IN WELL

NOTE:

RESULTS SHOWN IN BOLD ARE ABOVE THE RESPECTIVE ANALYTE'S WATER QUALITY OBJECTIVE.

100 50 0 100

SCALE IN FEET

Figure 3–1

DISTRIBUTION OF TPH, BENZENE AND 1,2–DCA IN SHALLOW AQUIFER GROUNDWATER, 13 AREA

MCB CAMP PENDLETON

FOSTER WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\010413 13 AREA GWMR, APRIL 01\DWGS\01041331.DWG
PLOT/UPDATE: MAR 30 2001 09:44:41

DRAWING NO: 01041332.DWG

DCN: FWSD-RAC-01-0413

CTO #0026

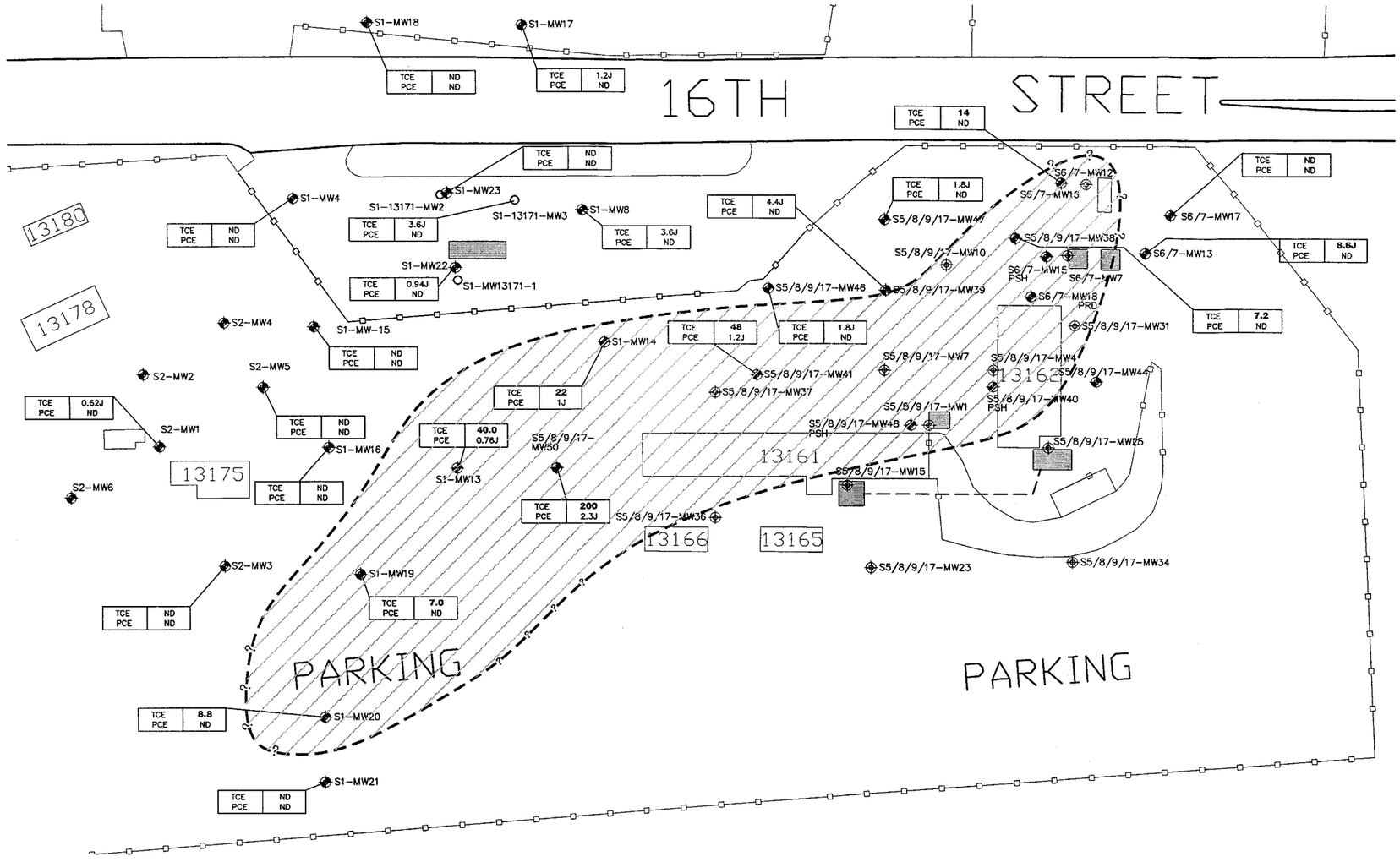
APPROVED BY: MC

CHECKED BY: JO

REV: REVISION 0

DRAWN BY: MD

DATE: 03/20/01



LEGEND:

- S5/8/9/17-MW23 — DEEP AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- S1-MW21 — SHALLOW AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- WELL DESTROYED, FEBRUARY 2001
- FORMER UST
- LOCATION OF FORMER BLDG.
- LOCATION OF FORMER PIPELINE
- FENCE LINE

TCE	TRICHLOROETHENE IN MICROGRAMS PER LITER (ug/L)
PCE	TETRACHLOROETHYLENE (ug/L)
ND	NOT DETECTED ABOVE METHOD DETECTION LIMIT
J	COMPOUND PRESENT ABOVE METHOD DETECTION LIMIT (MDL) BUT BELOW REPORTING LIMIT
PSH	PHASE SEPARATED HYDROCARBONS IN WELL
PRD	PSH RECOVERY DEVICE IN WELL
	APPROXIMATE AREA EXTENT OF TCE IN SHALLOW AQUIFER GROUNDWATER > WQO

NOTE:

RESULTS SHOWN IN BOLD ARE ABOVE THE RESPECTIVE ANALYTE'S WATER QUALITY OBJECTIVE.

100 50 0 100

SCALE IN FEET

N

Figure 3-2

DISTRIBUTION OF TCE AND PCE IN SHALLOW AQUIFER GROUNDWATER, 13 AREA

MCB CAMP PENDLETON

FOSTER FW WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\010413 13 AREA GWMR, APRIL 01\DWGS\01041332.DWG
PLOT/UPDATE: MAR 30 2001 09:47:07

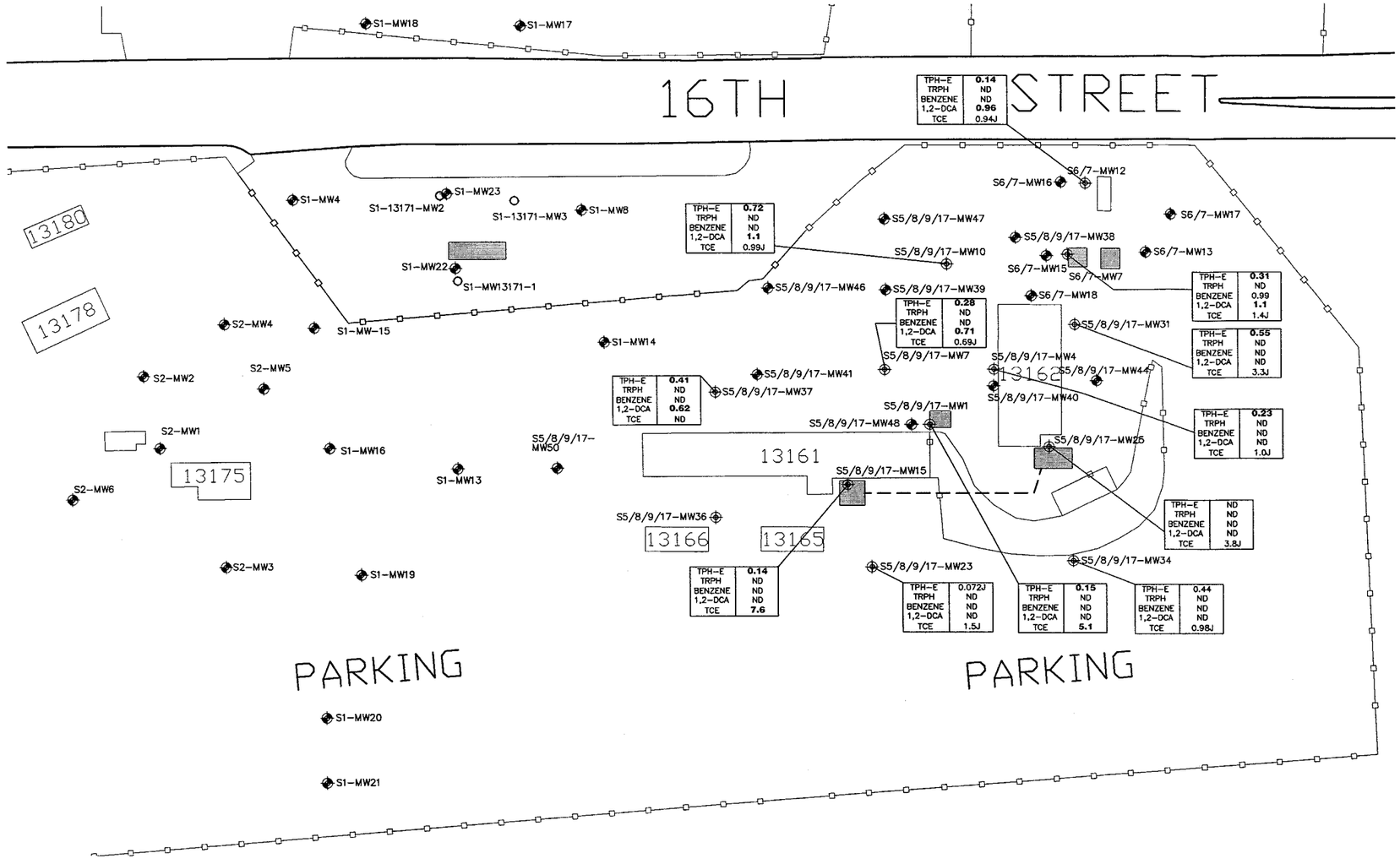
DRAWING NO: 01041333.DWG

DCN: FWSD-RAC-01-0413 | CTO #0026

APPROVED BY: MC

CHECKED BY: JO | REV: REVISION 0

DRAWN BY: MD | DATE: 03/20/01



LEGEND:

- S5/8/9/17-MW23 — DEEP AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- S1-MW21 — SHALLOW AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- WELL DESTROYED, FEBRUARY 2001
- FORMER UST
- LOCATION OF FORMER BLDG.
- LOCATION OF FORMER PIPELINE
- FENCE LINE

TPH–E	TOTAL EXTRACTABLE PETROLEUM HYDROCARBON IN MILLIGRAMS PER LITER
TPH–P	TOTAL PURGEABLE PETROLEUM HYDROCARBON IN MILLIGRAMS PER LITER
1,2–DCA	1,2 DICHLOROETHANE IN MICROGRAMS PER LITER
TCE	TRICHLOROETHENE IN MICROGRAMS PER LITER
TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS IN MILLIGRAMS PER LITER
ND	NOT DETECTED ABOVE METHOD DETECTION LIMIT
J	COMPOUND PRESENT ABOVE METHOD DETECTION LIMIT (MCL) BUT BELOW REPORTING LIMIT

APPROXIMATE AREA EXTENT OF TPH–P, TPH–E, BENZENE AND 1,2–DCA IN SHALLOW AQUIFER GROUNDWATER >WQOs

NOTE:

RESULTS SHOWN IN BOLD ARE ABOVE THE RESPECTIVE ANALYTE'S WATER QUALITY OBJECTIVE.

100 50 0 100
SCALE IN FEET

N

Figure 3–3
DISTRIBUTION OF TPH, BENZENE, 1,2–DCA, AND TCE IN DEEP AQUIFER GROUNDWATER,13 AREA
MCB CAMP PENDLETON

FOSTER WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\01041333.DWG
PLOT/UPDATE: MAR 30 2001 10:00:44

APPENDIX A

GROUNDWATER SAMPLE COLLECTION LOGS AND LIQUID LEVEL MEASUREMENTS

FOSTER WHEELER ENVIRONMENTAL CORPORATION

Field Water Level Measurements

Date: 2/13/01
Personnel: JSO / TTK / JD
Weather: OVCST, 60°F

Project Name: UST Sites 1 & 2
Project OFS: 1990.026D
Measurement Device: Solonist
Comments:

Well I.D.	Depth to Water from Measuring Point (feet)	Depth to Bottom from Measuring Point (feet)	Comments
S2-MW1	29.12	41.50	
S2-MW3	37.39	47.88	
S2-MW5	26.14	41.78	
S1-MW4	14.76	29.38	
S1-MW8	17.95	35.63	
S1-MW13	30.36	40.00	
S1-MW14	20.89	31.93	
S1-MW15	23.45	36.02	
S1-MW16	29.80	42.41	
S1-MW17	11.86	31.82	
S1-MW18	11.70	28.18	
S1-MW19	36.80	49.60	
S1-MW20	47.12	60.20	
S1-MW21	52.83	60.26	
S1-MW22	19.80	33.0	GAS ODOR (TPH)
S1-MW23	17.43	29.0	GAS ODOR (TPH)

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 51
Project Number: 1990.026D
Date: 2/15/01
Site Engineer: T. Turpyn-Keaske/

Well Number: 51-MW4
Equipment: Bailer, Horiba Orion
Sample ID: 0026-060

	Before	Reference	After
Depth to Water (ft)	17.76	Top of Casing	17.5
Depth to Sediment (ft)	29.38	Top of Casing	29.38
Thickness of Sediment (ft)	0.22		0.22

Depth of Well (ft): 29.6
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 17.62
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)]$(Water Column Height) = 17.43 gal

Total Volume Purged (gals): 27 GAL
Casing Volumes Purged: 1.55

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0948	6.70	4	1.56	21.6	2.05	143.8	INITIAL
1009	6.57	244	4.87	23.6	2.06	128.9	10 GAL
1022	6.49	304	7.25	23.6	2.32	122.0	15 GAL
1032	6.54	227	5.70	24.0	2.34	126.1	20 GAL
1042	6.55	113	5.72	24.2	2.33	124.8	25 GAL
1051	6.60	185	5.74	24.0	2.51	120.6	27 GAL; WW LOWER SAMPLED

1 = Stability parameter

Ferrous Iron = NOT at THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 51
Project Number: 1990.026D
Date: 2/15/01
Site Engineer: T. Turpyn-Kessler

Well Number: 51-MW8
Equipment: Grundfos, Bailer
Horiba, Orion
Sample ID: 0026-067

	Before	Reference	After
Depth to Water (ft)	17.95	Top of Casing	29.63
Depth to Sediment (ft)	35.88	Top of Casing	35.48
Thickness of Sediment (ft)	3.92		3.92

Depth of Well (ft) 39.4
Filter Pack Porosity = 25%
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 12.41
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)](\text{Water Column Height})$ = 18.62

Total Volume Purged (gals) 30 GAL
Casing Volumes Purged 1.61

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0956	6.43	4	15.0	19.7	4.90	167.1	INITIAL ~1 gpm @ 29 ft
1007	5.85	1	17.3	23.8	5.40	150.3	10 GAL
1020	5.91	1	13.1	24.3	4.31	153.0	~~20~~ 15 GAL
1036	5.90	4	17.2	24.7	3.60	163.4	20 GAL
1057	5.94	6	17.3	25.1	4.62	146.3	~~30~~ 25 GAL
1112	6.08	2	17.9	25.0	4.45	142.9	30 GAL; WILL
							COLLECT SAMPLE

1 = Stability parameter

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST S1
Project Number: 1990.0260
Date: 2/20/01
Site Engineer: T. Turpin-Keasler

Well Number: S1-MW13
Equipment: Bailer, Horiba Orion
Sample ID: 0026-033

	Before	Reference	After
Depth to Water (ft)	30.36	Top of Casing	32.70
Depth to Sediment (ft)	40.00	Top of Casing	40.00
Thickness of Sediment (ft)	0.10		0.10

Depth of Well (ft): 40.10
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.88
Water Column Height (ft): 9.64

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height}) =$ 14.46

Total Volume Purged (gals): 23 gals
Casing Volumes Purged: 1.59

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0906	5.53	>1	9.7	23.4	1.07	+293.7/23.0	INITIAL
0921	5.66	13	7.59	23.9	1.10	-283.8/23.9	5 GAL
0939	5.74	23	7.83	23.8	1.52	-304.2/23.8	10 GAL
0955	5.79	15	8.12	23.9	1.55	-299.6/23.6	15 GAL
1010	5.83	33	8.14	23.6	1.57	-296.8/23.1	20 GAL
1025	5.85	17	7.97	23.7	1.46	-302.1/23.1	23 GAL; WELL COLLECT SAMPLE

1 = Stability parameter

Ferrous Iron = NOT @ THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 51
Project Number: 1990.026D
Date: 2/20/01
Site Engineer: T. Turpyn-Keasler

Well Number: 51-MW14
Equipment: GroundFos, Horiba ORION
Sample ID: 0026-0816

	Before	Reference	After
Depth to Water (ft)	20.89	Top of Casing	23.15
Depth to Sediment (ft)	31.93	Top of Casing	31.93
Thickness of Sediment (ft)	0.27		0.27
Depth of Well (ft)	~~38.40~~ 32.20	Filter Pack Porosity = 25%	
Casing Diameter (CD in ft)	0.33		
Borehole Diameter (BD in ft)	0.83		
Water Column Height (ft)	11.04		

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)]$(Water Column Height) = 16.56

Total Volume Purged (gals) 22 gals Casing Volumes Purged 1.32

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0911	6.50	10	5.22	23.1	1.58	-367.5/22.2	INITIAL petroleum
0925	6.21	10	7.59	23.8	0.67	-319.9/23.4	5 slight petroleum odor *
0939	6.13	4	8.83	23.3	1.23	-319.1/23.1	10 possible light sheen
0954	6.09	3	8.99	23.6	1.07	-322.3/23.7	15
1013	6.19	9	9.09	23.5	1.17	-293.8/23.4	20
1025	—	—	—	—	—	—	~~25~~ DRY @ 22 gal
							WL = 31.12'

1 = Stability parameter * lots of ~~vehicle~~ heavy duty vehicle traffic

80% rising = 22.94

Ferrous Iron = 0.6 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST S1
Project Number: 1990.026D
Date: 2/16/01
Site Engineer: T. Turpijn-Keasler

Well Number: ~~S2~~ S1 TTK-MW15
Equipment: Grundfos, Bailer
Horiba, Orion
Sample ID: 0026-075

	Before	Reference	After
Depth to Water (ft)	23.45	Top of Casing	28.80
Depth to Sediment (ft)	36.02	Top of Casing	36.02
Thickness of Sediment (ft)	0.38		0.38

Depth of Well (ft) 36.40
Filter Pack Porosity = 25
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 12.57
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}(BD^2 - CD^2)](\text{Water Column Height})$ = 18.90

Total Volume Purged (gals) 30 gal
Casing Volumes Purged 1.59

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0930	5.46	6	22.3	24.6	5.06	197.1/24.7	INITIAL; PUMP ON
0947	5.48	7	22.1	25.5	4.91	167.6/25.7	10 GAL
0958	5.50	4	22.3	25.9	4.33	120.2/26.1	20 GAL
1009	5.50	3	22.4	25.9	4.50	119.9/26.2	25 GAL
1028	5.51	2	22.5	26.6	4.48	117.5/27.1	30 GAL WILL
							COLLECT SAMPLE

1 = Stability parameter

ORION 263.3 @ 20.1°C

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: ~~1990.026D~~ UST S1
Project Number: 1990.026D
Date: 2/16/01
Site Engineer: T. Turpijn-Keasler

Well Number: ~~S2~~ S1MW-MW16
Equipment: Bailer, Horiba Orion
Sample ID: 0026-076

	Before	Reference	After
Depth to Water (ft)	29.80	Top of Casing	31.50
Depth to Sediment (ft)	42.40	Top of Casing	42.40
Thickness of Sediment (ft)	0.10		0.10

Depth of Well (ft) 42.50
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 12.60

Filter Pack Porosity = 25%

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}(BD^2 - CD^2)](\text{Water Column Height})$ = ~~18.58~~ 18.9

Total Volume Purged (gals) 30 gal

Casing Volumes Purged 1.59

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0931	5.18	0	18.5	22.9	321	187.1	INITIAL;
1002	5.43	45	19.8	24.5	1.41	175.2	10 GALLONS
1030	5.60	18	20.5	24.5	1.90	43.0/26.4°	20 GALLONS
1054	5.65	10	21.0	24.5	1.64	40.2/25.5	25 GALLONS
1110	5.64	17	20.9	24.8	1.72	353/24.8	30 GALLONS
							WILL COLLECT
							SAMPLE

1 = Stability parameter

Orion 263.3 @ 20.1

Ferrous Iron = 0.2 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 51
Project Number: 1990.0262
Date: 2/15/01
Site Engineer: T. Turpin-Keasler

Well Number: 51-MW17
Equipment: Grundfos, Bailer
Horiba Prior
Sample ID: 0026-07D

	Before	Reference	After
Depth to Water (ft)	19.86	Top of Casing	20.10
Depth to Sediment (ft)	31.82	Top of Casing	31.82
Thickness of Sediment (ft)	0.38		0.38

Depth of Well (ft) 32.2
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 19.96

Filter Pack Porosity = 25

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)]$(Water Column Height) = 29.94

Total Volume Purged (gals) 45 gal

Casing Volumes Purged 1.50

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1416	7.00	15	6.33	23.8	4.44	-41.6	INITIAL, PUMP ON
1421	7.19	6	5.58	24.2	4.49	-46.5	10 GAL
1425	7.13	12	6.46	24.5	4.27	-48.5	20 GAL
1438	6.98	10	6.80	25.2	3.90	-41.5	30 GAL
1449	7.02	5	6.54	25.2	4.06	-27.6	40 GAL
1456	7.02	3	6.51	25.2	4.09	-23.1	45 GAL; WILL COLLECT
							SAMPLE
1458	—	—	—	—	—	—	PUMP OFF

1 = Stability parameter

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST S1
Project Number: 1990.026D
Date: 2/15/01
Site Engineer: T. TURPIN - KEASLER

Well Number: S1-MW18
Equipment: GRUNDFOS, BAILER
HORIBA, ORION
Sample ID: 0026-069

	Before	Reference	After
Depth to Water (ft)	11.70	Top of Casing	16.00
Depth to Sediment (ft)	28.18	Top of Casing	28.18
Thickness of Sediment (ft)	— ?		— ?

Depth of Well (ft) ~~29?~~ ~~27.2?~~ NA Filter Pack Porosity = 25
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 16.48
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height})$ = 24.72

Total Volume Purged (gals) 40 gal Casing Volumes Purged 1.62

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1302	6.92	6	6.19	23.9	2.62	-44.9	INITIAL; PUMP ON
1311	6.86	8	6.32	24.4	2.47	-52.5	10 GALLONS
1320	6.83	40	6.17	24.5	2.21	-64.5	20 GALLONS
1334	6.79	42	5.82	24.7	2.45	-63.2	30 GALLONS
1343	6.79	51	5.77	24.7	2.65	-61.4	40 GALLONS
							~~50~~

1 = Stability parameter

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST S1
Project Number: 1990.026D
Date: 2/16/01
Site Engineer: T. Turpin - KEASLER

Well Number: S1-MW17
Equipment: Grundfos, bailer
Horiba, Orion
Sample ID: 0026-79/80

	Before	Reference	After
Depth to Water (ft)	36.80	Top of Casing	38.26
Depth to Sediment (ft)	49.66	Top of Casing	49.66
Thickness of Sediment (ft)	0.30		0.30

Depth of Well (ft) 49.90
Filter Pack Porosity = 25
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 12.80
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height}) =$ 19.2

Total Volume Purged (gals) 30 GAL
Casing Volumes Purged 1.56

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1352	5.72	10	19.6	24.8	.48	-74.2	INITIAL
~~1356~~ 356	5.75	13	18.7	25.0	.86	-76.2	10
1400	5.73	4	19.5	25.2	.52	-94.8	15
1405	5.74	2	19.7	25.3	.47	-97.2	20
1410	5.75	1	19.8	25.2	.48	-98.4	25
1417	5.75	1	19.8	25.2	.67	-41.6	30

1 = Stability parameter

Ferrous Iron = 0.0 mg/L DUP = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST SITE 1
Project Number: 1990.0261D
Date: 2/15/01
Site Engineer: T. Turpin-Keasler

Well Number: S1-MW20
Equipment: Grundfos, bailer
Horiba, Orion
Sample ID: 0026-072/073

	Before	Reference	After
Depth to Water (ft)	47.12	Top of Casing	47.12
Depth to Sediment (ft)	60.20	Top of Casing	60.20
Thickness of Sediment (ft)	0.80		0.80

Depth of Well (ft): 61.00
Filter Pack Porosity = 25
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 13.08
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height})$ = 19.62

Total Volume Purged (gals): 30
Casing Volumes Purged: 1.53

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1548	6.40	1	16.9	23.4	5.10	-39.4	INITIAL, PUMP ON
1557	6.33	2	16.9	24.3	5.13	-28.2	10 GAL
1602	6.35	7	16.9	24.3	5.20	-15.6	20 GAL
1610	6.38	2	17.1	24.5	4.30	-17.8	25 GAL
1615	6.37	1	17.0	24.5	4.33	-17.0	30 GAL; WELL CALLED SAMPLE

1 = Stability parameter

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST SITE 1
Project Number: 1990.026D
Date: 2/15/01
Site Engineer: T. Turpyn-Keasler

Well Number: S1-MW21
Equipment: Bailer, Horiba Orion
Sample ID: 0026-071

	Before	Reference	After
Depth to Water (ft)	52.83	Top of Casing	59.20
Depth to Sediment (ft)	60.26	Top of Casing	60.26
Thickness of Sediment (ft)	~~7~~		~~7~~

Depth of Well (ft): 60.00
Filter Pack Porosity = 25
Casing Diameter (CD in ft): 0.17
Borehole Diameter (BD in ft): 0.75
Water Column Height (ft): 7.43

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height}) =$ 7.11

Total Volume Purged (gals): 6 gal
Casing Volumes Purged: 0.84

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1535	7.02	1	~~21.5~~ 162	~~16.2~~ 21.5	4.96	-45.3	INITIAL
1545	6.97	24	~~22.1~~ 163	~~16.3~~ 22.1	4.91	-53.4	2.5 gal
1551	6.94	53	~~22.6~~ 161	~~16.1~~ 22.6	4.84	-37.5	4.0 Gal
1600	—	—	—	—	—	—	6 gal DRY @
							WL = 59.20

1 = Stability parameter

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST SITE 1
Project Number: 1990.0260
Date: 2/14/01
Site Engineer: TANIA TURPIN-KENSLER

Well Number: SI-MW22
Equipment: BAILER, HORIBA ORION
Sample ID: — 0026-061

	Before	Reference	After
Depth to Water (ft)	19.80	Top of Casing	21.65
Depth to Sediment (ft)	33.00	Top of Casing	33.00
Thickness of Sediment (ft)	—		—

Depth of Well (ft): 33.00
Filter Pack Porosity = 25
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 13.20

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)](\text{Water Column Height}) =$ 19.80

Total Volume Purged (gals): 20
Casing Volumes Purged: 1.01

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1035	6.50	10	~~22.2~~ 9.50	22.2	0.90	125.4	INITIAL, ODOR
1105	6.17	170	19.8	23.6	1.33	115.8	10 GAL
1130	6.49	999	19.2	23.6	1.59	70.9	20 GAL DRY
							25 GAL
							30 GAL

1 = Stability parameter

1335 Water level = 31.34
1415 WL = 24.5

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 51
Project Number: 1990.0260
Date: 2/14/01
Site Engineer: T. Turpin-Keasler

Well Number: 51-MW23
Equipment: Bailer, ~~Grundfos~~ HORIBA & ORION
Sample ID: 0026-062

	Before	Reference	After
Depth to Water (ft)	17.43	Top of Casing	18.85
Depth to Sediment (ft)	–	Top of Casing	–
Thickness of Sediment (ft)	–		–

Depth of Well (ft) 29.0
Filter Pack Porosity = 0.25
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 11.57

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height}) =$ 18.35

Total Volume Purged (gals) 30 gal
Casing Volumes Purged 1.63

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1310	6.28	79	19.7	22.7	0.77	118.8	INITIAL - ODOR
1333	6.10	486	23.8	23.9	0.91	99.5	10
1356	5.98	122	24.6	22.2	0.92	?	20
1415	5.95	47	24.7	22.7	0.90	?	25
1435	5.97	131	24.9	22.2	0.98	?	30 g. WELL COLLECT SAMPLE

1 = Stability parameter

ORP PROBE DISCONNECTED - NOT REPAIRABLE

SLIGHT PETROLEUM ODOR DID NOT LOWER SOUNDER TO BOTTOM

Ferrous Iron = ~~NOT AT THIS WELL~~ TNK 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 81
Project Number: 1990.0260
Date: 2/16/01
Site Engineer: T. Turpyn-Keasler

Well Number: 52-MW1
Equipment: ~~Bailer, Grundfos~~ ITR
Horiba Orion
Sample ID: 0026-078

	Before	Reference	After
Depth to Water (ft)	29.12	Top of Casing	33.50
Depth to Sediment (ft)	41.50	Top of Casing	41.50
Thickness of Sediment (ft)	0.10		0.10

Depth of Well (ft) 41.60
Filter Pack Porosity = 25
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 12.38

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)]$(Water Column Height) = 18.57

Total Volume Purged (gals) 28 gal
Casing Volumes Purged 1.51

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1217	5.83	0	9.9	23.4	3.54	25.3/23.1°C	INITIAL
1235	5.62	29	11.2	23.7	3.63	-0.4/24.0°C	10 GAL
1250	5.66	12	11.5	23.0	3.64	7.5/22.9°C	15 GAL
1303	5.63	5	11.3	23.0	3.13	-11.3/22.7°C	20 GAL
1320	5.62	6	11.4	22.7	2.93	-28.8/22.3	25 GAL
1331	5.63	7	11.5	22.4	2.86	-26.5/22.1	28 GAL

1 = Stability parameter

1238 Orion ref solution = 217.9 @ 25.9°C

Ferrous Iron = Not at this well

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST SJ
Project Number: 1990.0260
Date: 2/16/01
Site Engineer: T. Turpyn-Keasler

Well Number: S2-MW3
Equipment: WATERRA PUMP
HORIBA, ORION
Sample ID: 0026-091

	Before	Reference	After
Depth to Water (ft)	37.85	Top of Casing	38.50
Depth to Sediment (ft)	47.88	Top of Casing	47.88
Thickness of Sediment (ft)	0.22		0.2

Depth of Well (ft) 48.10
Filter Pack Porosity = 25
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 10.03
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height})$ = 15.05

Total Volume Purged (gals) 22 gals
Casing Volumes Purged 1.46

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1409	5.44	30	16.5	23.8	4.44	+2.3	INITIAL
1420	5.40	315	17.7	24.1	4.75	+5.1	7 GALS
1437	5.47	116	17.5	23.9	4.43	+0.4	14 gals
1456	5.60	89	16.6	24.1	4.83	+1.4	22 Gallons

1 = Stability parameter

Ferrous Iron = NOT @ THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST S1
Project Number: 1990.026D
Date: 2/16/01
Site Engineer: T. Turpyn-Kaslor

Well Number: S2-MW5
Equipment: Grundfos, bailer
Horiba, Orion
Sample ID: 0026-077

	Before	Reference	After
Depth to Water (ft)	26.14	Top of Casing	35.50
Depth to Sediment (ft)	41.74	Top of Casing	41.74
Thickness of Sediment (ft)	0.12		0.12

Depth of Well (ft) 41.90
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 15.64

Filter Pack Porosity = 25

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)]$(Water Column Height) = 23.48

Total Volume Purged (gals) 38 gal

Casing Volumes Purged 1.62

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1215	5.64	3	14.5	24.4	3.90	25.1°C 16.6	INITIAL; PUMP ON
1222	5.65	1	13.1	25.2	3.74	25.4° 6.0	10 GAL set @ 144 mHz
1232	5.60	2	14.4	25.5	3.72	-1.7 / 25.6°C	20 GAL
1244	5.59	1	15.5	25.3	3.60	*21.4 / 25.6°C	30 GAL
1253	5.59	2	15.8	25.2	3.65	20.8 / 25.4°C	35 GAL
1257	5.59	2	160	25.5	3.61	20.9 / 25.7°C	38 GAL WILL COLLECT SAMPLE

1 = Stability parameter

ORION 763.3 @ 20.1°C
* 1238 217.9 @ 25.9°C
DAY SLOW TO READ STEADY after ref check

Ferrous Iron = Not @ this well

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORPORATION

Field Water Level Measurements

Date: 2/13/01
Personnel: TTK / JD / JSO
Weather: OVCST 60°F

Project Name: SITES 5/8/9/17, 13 AREA
Project OFS: 1990.026D
Measurement Device: Solonist
Comments:

Well I.D.	Depth to Water from Measuring Point (feet)	Depth to Bottom from Measuring Point (feet)	Comments
MW1	53.52	63.90	
MW4	53.08	65.98	
MW7	52.35	64.31	
MW10	45.92	59.31	
MW15	58.00	77.60	
MW23	62.92	80.91	
MW25	52.80	65.40	
MW31	52.46	66.55	
MW34	63.10	73.96	
MW36	60.90	73.34	
MW37	53.27	67.05	
MW38	16.36	28.00	PSH SHEEN
MW39	12.88	31.00	
MW40	FREE PRODUCT		PSH
MW41	19.57	33.15	
MW44	18.35	30.14	
MW46	15.10	30.20	
MW47	10.86	34.14	
MW48	20.46 PSH SHEEN	34.70	PSH SHEEN
MW50	29.16	35.00	

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: 5/8/9/17
Project Number: 6490.0261
Date: 2/22/01
Site Engineer: T. Tunpyn-Kensler

Well Number: MW1
Equipment: Grundfos, Bailer, Horiba, Orion
Sample ID: 0026-114

	Before	Reference	After
Depth to Water (ft)	53.70	Top of Casing	53.95
Depth to Sediment (ft)	63.90	Top of Casing	63.90
Thickness of Sediment (ft)	0.10		0.10

Depth of Well (ft): 64.00
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 10.2
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height}) =$ 15.3

Total Volume Purged (gals): 35
Casing Volumes Purged: 2.29

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1435	5.82	31	15.5	22.4	2.82	-209.2/22.4	INITIAL
1440	5.83	10	16.9	22.7	1.87	-205.5/22.9	10 gallons
1444	5.72	9	17.6	23.2	1.71	-203.0/23.3	15 gallons
1447	5.64	5	17.8	23.2	1.72	-202.4/23.3	20 gallons
1449	5.66	3	17.9	23.3	1.76	-201.1/23.4	25 gallons
1452 ~~1455~~	5.67	3	18.0	23.3	1.87	-197.0/23.4	30 gallons, will collect sample
1454	—	—	—	—	—	—	pump off

1 = Stability parameter

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: Site 5/8/9/17
Project Number: 1990.026D
Date: 2/22/01
Site Engineer: T. Turpyn-Keasler

Well Number: MW4
Equipment: Grundfos, Baler, Horiba, Orion
Sample ID: 0026-109

	Before	Reference	After
Depth to Water (ft)	53.09	Top of Casing	53.60
Depth to Sediment (ft)	65.98	Top of Casing	65.98
Thickness of Sediment (ft)	~~4~~		~~4~~

Depth of Well (ft): ~~65.4~~ NA
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 12.9
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)]$(Water Column Height) = 19.35

Total Volume Purged (gals): 33
Casing Volumes Purged: 1.71

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0942	5.61	237	18.3	19.8	1.05	-236.4/21.0	INITIAL
0951	5.65	58	17.2	22.9	1.63	-222.8/22.9	10
1002	5.69	5	17.4	23.6	0.95	-227.8/23.8	20
1007	5.71	6	17.1	23.5	0.91	-235.5/23.6	25
1015	5.75	5	17.1	23.6	0.85	-233.9/23.7	~~30~~ 30; WILL COLLECT ~~30~~ SAMPLES
1018	—	—	—	—	—	—	PUMP OFF

1 = Stability parameter

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: SITE 5/8/9/17
Project Number: 1990.026D
Date: 2/22/01
Site Engineer: T. Turpyn-Keasler

Well Number: MW7
Equipment: Grundfos, Bailer
Orion, Horiba
Sample ID: 0026-111

	Before	Reference	After
Depth to Water (ft)	52.35	Top of Casing	52.63
Depth to Sediment (ft)	65.98	Top of Casing	65.98
Thickness of Sediment (ft)	NA		NA

Depth of Well (ft): ~~64.3~~ NA
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 13.63
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)](\text{Water Column Height}) =$ 20.45

Total Volume Purged (gals): 42
Casing Volumes Purged: 2.05

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1210	5.61	14	12.7	21.9	3.35	-200.8/21.9	INIT. AC
1215	5.61	11	14.8	23.3	1.51	-222.4/23.5	10 gallons
1219	5.50	16	15.0	23.6	0.81	-225.8/23.7	15 gallons
1223	5.48	18	15.1	23.6	0.68	-228.0/23.9	20 gallons
1228	5.32	22	15.3	23.9	0.47	-237.0/24.0	25 gallons
1234	5.32	4	15.3	23.9	0.44	-248.6/24.0	30 gallons ORP NOT READY
1238	5.32	2	15.3	23.9	0.40	-241.9/24.0	35 gallons ORP NOT READY
1242	5.32	1	15.3	23.9	0.40	-226.8/24.0	40 gallons; will
							COLLECT SAMPLE
1244	—	—	—	—	—	—	pump off

1 = Stability parameter WHITE CRYSTALINE POWDER ON WATER IN PUMP TUBE

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 5/8/9/17
Project Number: 1990.026D
Date: 2/21/01
Site Engineer: T. Turpyn-Keasler

Well Number: MW10
Equipment: Bailer, Horiba Orion
Sample ID: 0026-093

	Before	Reference	After
Depth to Water (ft)	46.46	Top of Casing	46.55
Depth to Sediment (ft)	59.31	Top of Casing	59.31
Thickness of Sediment (ft)	~		~

Depth of Well (ft): ~~57.60~~ NA
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 12.85
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)](\text{Water Column Height}) =$ 19.28

Total Volume Purged (gals): ~~12.85~~ TTL 30 gallons
Casing Volumes Purged: 1.56

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0930	5.54	745	13.7	22.1	1.31	-310.5/23.6	INITIAL
1002	5.71	96	138	23.4	0.92	-336.5/23.6	10 gallons
1022	5.74	116	139	22.7	1.20	-341.6/23.1	15 gallons
1040	5.76	54	13.9	23.2	1.15	-338.7/23.2	20 gallons
1126	5.74	45	14.1	23.6	~~1.17~~ 1.10 TTL	-334.7/24.4	25 gallons
1130	5.74	29	14.3	23.7	1.19	-324.5/24.5	30 gallons; will collect samples

[1] = Stability parameter

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: 55/8/9/17
Project Number: 1990.026D
Date: 2/26/01
Site Engineer: T. Turpin-Keasler

Well Number: MW15
Equipment: Grundfos, Bailer, Orion, Horiba
Sample ID: 0026.128/129

	Before	Reference	After
Depth to Water (ft)	58.15	Top of Casing	
Depth to Sediment (ft)	77.60	Top of Casing	77.60
Thickness of Sediment (ft)	0.50		0.50

Depth of Well (ft): 78.1
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 19.45
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)](\text{Water Column Height}) =$ 29.18

Total Volume Purged (gals): 52
Casing Volumes Purged: 1.78

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1235	6.42	404	11.9	20.8	5.89	-47.5/21.5	INITIAL
1240	6.14	23	15.7	23.2	0.70	-143.5/23.2	10 gallons
1248	6.13	64	15.8	23.7	0.74	-149.8/23.7	20 gallons
1256	6.13	7	16.8	23.8	1.08	-108.4/23.8	30 gallons
1304	6.12	21	16.8	23.9	1.43	-94.8/23.9	40 gallons
1308	6.13	23	16.7	24.0	1.57	-91.6/24.0	45 gallons
1312	6.14	25	16.7	23.9	1.73	-84.1/23.9	50 gallons; WELL
1315							COLLECT SAMPLE

1 = Stability parameter

Ferrous Iron = 0.0 mg/L DUP = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: S5/8/9/17
Project Number: 1990.026D
Date: 2/23/01
Site Engineer: T. Turpyn-Keusler

Well Number: MW23
Equipment: Grundfos, Bailer, Horiba, Orion
Sample ID: 0026-122

	Before	Reference	After
Depth to Water (ft)	62.92	Top of Casing	64.85
Depth to Sediment (ft)	80.91	Top of Casing	80.91
Thickness of Sediment (ft)	0.29		0.29

Depth of Well (ft): 81.20
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 17.99

Filter Pack Porosity = 25%

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height})$ = 26.99

Total Volume Purged (gals): 28 gallons
Casing Volumes Purged: 1.04

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0908	6.22	10	10.7	20.2	0.84	-195/20.9	INITIAL pumpout
0918	5.94	8	10.6	21.5	1.16	-137.6/	10
0926	5.93	10	11.0	22.4	1.42	-121.3/22.5	20
0935	—	—	—	—	—	—	30 28 well dry
							3040 Wt. l. = 76
							35
							40

1 = Stability parameter

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: S 5/8/9/17
Project Number: 1990.026D
Date: 2/26/01
Site Engineer: T. Turpyn-Keaslen

Well Number: MW25
Equipment: Grundfos, Bailer
Horiba, Orion
Sample ID: 0026-127

	Before	Reference	After
Depth to Water (ft)	52.80	Top of Casing	53.40
Depth to Sediment (ft)	65.40	Top of Casing	65.40
Thickness of Sediment (ft)	2.5		2.5

Depth of Well (ft) 67.9'
Filter Pack Porosity = 25%
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 12.6
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}(BD^2 - CD^2)](\text{Water Column Height})$ = 18.9

Total Volume Purged (gals) 37 gallons
Casing Volumes Purged 1.96

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1123	6.35	259	10.2	21.1	4.85	-97.0/20.5	INITIAL
1128	6.15	23	11.4	22.9	2.53	-136.9/22.9	10 gallons
1131	6.13	21	11.9	23.1	2.32	-136.9/23.1	15 gallons
1134	6.11	22	12.4	23.2	2.23	-136.2/23.3	20 gallons
1138	6.09	14	12.7	23.6	2.35	-129.3/23.6	25 gallons
1142	6.09	11	12.9	23.7	2.39	-127.7/23.8	30 gallons
1146	6.09	11	12.9	23.6	2.41	-127.6/23.7	35 gallons; well
							COLLECT SAMPLE
1148	—	—	—	—	—	—	PUMP OFF

1 = Stability parameter

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 5/8/9/17
Project Number: 1990.0260
Date: 2/21/01
Site Engineer: T. Turpyn-Keasler

Well Number: MW31
Equipment: Bailer, Horiba, Orion
Sample ID: 0026-094

	Before	Reference	After
Depth to Water (ft)	52.78	Top of Casing	52.85
Depth to Sediment (ft)	66.55	Top of Casing	66.55
Thickness of Sediment (ft)	~~7~~		~~7~~

Depth of Well (ft): ~~64.4~~ NA
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 13.77
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height})$ = 20.65 (31)

Total Volume Purged (gals): 31 gallons
Casing Volumes Purged: 1.50

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1259	5.42	12	16.3	23.1	3.01	-309.5/233	INITIAL
1334	5.70	59	16.1	23.0	2.08	-314.9/232	10 gallons
1406	5.86	59	16.1	22.6	2.05	-324.6/22.0	20 gallons
1424	5.95	47	16.3	22.1	1.76	-310.3/22.4	25 gallons
1448	5.76	40	16.3	22.6	1.59	-299.4/23.0	31 gallons; will collect sample

1 = Stability parameter

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: 55/8/9/17
Project Number: 1990.0260
Date: 2/26/01
Site Engineer: T. Tumpyn-KEASLER

Well Number: MW34
Equipment: Grundfos, Bailer, Horiba, Orion
Sample ID: 0026-126

	Before	Reference	After
Depth to Water (ft)	63.15	Top of Casing	64.95
Depth to Sediment (ft)	73.96	Top of Casing	73.96
Thickness of Sediment (ft)	1.84		1.84

Depth of Well (ft): 75.80
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 10.81
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height}) =$ 16.22

Total Volume Purged (gals): 28 gallons
Casing Volumes Purged: 1.73

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1006	6.75	23	4.99	18.5	4.08	-158.2/19.2	INITIAL 230 Hz
1010	6.42	9	4.36	21.3	2.37	-148.4/21.5	5 gallons
1018	6.53	10	4.78	22.8	1.37	-311.7/23.2	10 gallons TURNED PUMP DOWN 200 Hz
1021	6.56	5	4.71	23.2	0.98	-244.5/23.6	15 gallons
1030	6.56	3	4.69	23.6	1.06	-198.4/23.8	20 gallons
1043	6.55	1	4.68	24.3	1.33	-154.0/24.4	25 gallons; will collect samples
1045	—	—	—	—	—	—	pump off

[1] = Stability parameter

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 5/8/9/17
Project Number: 1990.0261D
Date: 2/23/01
Site Engineer: T. Turpyn-keasler

Well Number: MW37
Equipment: Grundfos, Bailer
Horiba, Orion
Sample ID: 0026-123

	Before	Reference	After
Depth to Water (ft)	53.27	Top of Casing	53.48
Depth to Sediment (ft)	67.05	Top of Casing	67.05
Thickness of Sediment (ft)	?		?

Depth of Well (ft) ~~81.2~~ 67.0 TIC Filter Pack Porosity = 25%
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 13.78
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)]$(Water Column Height) = 20.67

Total Volume Purged (gals) 38 Casing Volumes Purged 1.84

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1305	6.31	23	~~5~~.77	19.3	5.85	112.5 | 10.3	INITIAL ORP NOT RECORDED
1311	6.13	10	6.16	23.2	0.46		10
1314	6.11	16	6.21	23.8	0.21		20
1316	6.10	10	6.26	23.9	0.15		25
1320	6.11	10	6.26	24.0	0.5		30
1324	6.10	10	6.25	24.0	0.17		35; WELL
						↓	COLLECT SAMPLES

1 = Stability parameter NO ORP METER

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST SITE 5/8/9/17
Project Number: 1990.026D
Date: 2/21/01
Site Engineer: T. Turpyn-Keasler

Well Number: S5/8/9/17-MW38
Equipment: Grundfos bailer
horiba
Sample ID: 0026-092

	Before	Reference	After
Depth to Water (ft)	TTK ~~45.92~~ 16.36	Top of Casing	24.95
Depth to Sediment (ft)	~~59.31~~ 28.00	Top of Casing	28.0
Thickness of Sediment (ft)	0.40		0.40

Depth of Well (ft) 28.4
Casing Diameter (CD in ft) 0.33
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 11.64

Filter Pack Porosity = 25%

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}(BD^2 - CD^2)]$(Water Column Height) = 17.46

Total Volume Purged (gals) 30

Casing Volumes Purged 1.72

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0934	6.38	74	6.58	23.3	0.95	-336.9/24.4	INITIAL
0953	6.15	12	8.54	24.3	0.99	-338.1/25.1	10 gallons
1008	6.06	8	13.2	23.5	1.29	-329.7/24.5	15 gallons
1024	6.06	9	13.1	23.5	1.35	-332.8/24.1	20 gallons
1043	6.07	176	13.5 TTK ~~13.[illegible]~~	23.8	1.26	-339.5/24.3	25 gallons
1056	5.83	43	15.8	24.5	1.98	-315.8/25.1	27 gallons
1107	5.75	113	16.4	24.1	2.30	-318.2/24.3	30 gallons; will
							collect sample
1130	5.39	17	17.9	24.2	~~6.57~~ TTK	-268.3/25.0	FINALS

1 = Stability parameter This well did begin to go dray the WL @ 1107 was 26.5' @ 1130 WL = 24.8' collected sample after slight recharge - parameters no longer stable

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

Definite Diesel Odor

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: SITE 5/8/9/17
Project Number: 1990.0260
Date: 2/22/01
Site Engineer: T. Turpyn-Keasler

Well Number: MW39
Equipment: Bailer, Horiba Orion
Sample ID: 0026-112

	Before	Reference	After
Depth to Water (ft)	12.88	Top of Casing	
Depth to Sediment (ft)	31.00	Top of Casing	31.00
Thickness of Sediment (ft)	0.20		0.20
Depth of Well (ft)	31.20	Filter Pack Porosity = 25%	
Casing Diameter (CD in ft)	0.33		
Borehole Diameter (BD in ft)	0.83		
Water Column Height (ft)	18.32		

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)]$(Water Column Height) = 27.33

Total Volume Purged (gals) 25 Casing Volumes Purged 0.91

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
0928	6.76	11	5.55	22.9	0.94	-283.2/23.7	INITIAL
0957	6.86	12	5.87	23.3	1.22	-265.4/23.5	10 VERY SLIGHT ODOR
1022	6.90	3	5.98	23.3	0.90	-273.5/23.3	20 gallons
1058	6.92	49	5.94	23.1	0.99	-273.4/22.5	30 25 gal DRY
							35 WL = 30.2'
							40

1 = Stability parameter

80% recharge = 17.14'

1317 WL = 27.6' - COLLECTING SAMPLE

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 5/8/9/17
Project Number: 1990.026D
Date: 2/20/01
Site Engineer: T. Turpin-Lemler

Well Number: 55/8/9/17-MW41
Equipment: Baclar, Horiba
Orion
Sample ID: 0026-089

	Before	Reference	After
Depth to Water (ft)	19.57	Top of Casing	31.35
Depth to Sediment (ft)	33.15	Top of Casing	33.5
Thickness of Sediment (ft)	0.45		0.48

Depth of Well (ft): 33.60
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 13.58

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)]$(Water Column Height) = 20.37

Total Volume Purged (gals): 31.35
Casing Volumes Purged: 1.54

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1419	6.92	2	3.32	23.3	0.57	-368.0/23.4	INITIAL
1439	6.80	11	~~5.934~~ 4.51	23.8	0.35	-387.7/23.5	10
1455	6.74	15	4.53	23.7	0.47	-363.5/23.3	~~20~~ 15 GAL
1535	6.84	25	4.50	23.0	0.96	-339/22.8	~~25~~ 20 DRY
							30 WL-31.35

1 = Stability parameter

80%-21.93'

Ferrous Iron = 0.2 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 5/8/9/17
Project Number: 1990.026D
Date: 2/21/01
Site Engineer: T. Turpin - KEASLER

Well Number: MW 44
Equipment: Bailer, Horiba Orion
Sample ID: 0026-096

	Before	Reference	After
Depth to Water (ft)	18.66	Top of Casing	28.60
Depth to Sediment (ft)	30.14	Top of Casing	30.14
Thickness of Sediment (ft)	0.86		0.86

Depth of Well (ft): 31.0
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 11.48

Filter Pack Porosity = 25%

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)]$(Water Column Height) = 17.22 (25.83)

Total Volume Purged (gals): 20 gals
Casing Volumes Purged: 1.16

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1303	6.44	3	26.5	23.4	2.62	-326.1/23.6	INITIAL
1327	6.49	7	27.4	23.7	1.86	-327.8/23.9	10 gallons
1342	6.45	9	27.5	23.3	1.24	-339.4/23.5	15 gallons
1409	6.49	43	27.0	22.6	2.45	-352.8/22.5	20 20 DRY 29.3 ft TOC
							20

[1] = Stability parameter

80% RECHG = 20.79

Ferrous Iron = 0.6 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: SITE 5/8/9/17
Project Number: 1990.026D
Date: 2/22/01
Site Engineer: T. Turpyn-Keasler

Well Number: MW46
Equipment: BAILER, HORIBA ORION
Sample ID: 0026-115

	Before	Reference	After
Depth to Water (ft)	15.45	Top of Casing	29.3'
Depth to Sediment (ft)	30.20	Top of Casing	30.20
Thickness of Sediment (ft)	~~8.7~~		~~+~~

Depth of Well (ft): ~~29.9~~ NA
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 14.75

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)]$(Water Column Height) = 22.13

Total Volume Purged (gals): 23 gal
Casing Volumes Purged: 1.04

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1200	6.01	5	24.3	~~24.2~~ 22.9 TK	0.99	-274.2/22.7	INITIAL
1230	6.26	12	~~23.4~~ 24.1 TK	23.4	~~1.14~~ 0.98 TK	—	10 gallons — NOT STABLE
1257	6.23	2	25.4	22.9	1.17	-286.1/23.1	20
1316	6.39	6	24.3	20.1	1.73	+344.1/20.1	~~20~~ 23 gal DRY
							25 WL = 29.3'
							30

1 = Stability parameter

Ferrous Iron = ~~mg/L~~ TK 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: 5S/8/9/17
Project Number: 1990.0260
Date: 2/26/01
Site Engineer: T. Turpyn - KLEINFELDER

Well Number: MW47
Equipment: Grundfos bailer
Horiba, Orion
Sample ID: 0026-130

	Before	Reference	After
Depth to Water (ft)	~~10.86~~ 11.30 TIC	Top of Casing	29.4
Depth to Sediment (ft)	34.14	Top of Casing	
Thickness of Sediment (ft)	?		?

Depth of Well (ft): 34.0
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): ~~23.28~~ 22.84 TIC
Borehole Volume (gals) = (7.48π/4)[CD² + Porosity (BD² - CD²)](Water Column Height) = 34.~~26~~ (52)

Total Volume Purged (gals): 36 gallons
Casing Volumes Purged: 1.05

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1455	6.59	9	14.8	19.8	5.61	-92.8/20.4	INITIAL
1458	6.35	7	20.4	23.2	0.69	-126.5/23.3	~~20~~ 5 gallons
1502	6.33	5	20.7	24.0	0.52	-159.2/24.1	10 gallons
1510	6.17	8	~~19.3~~ 23.7 TIC	23.7	1.25	-183.6/23.8	20 gallons
1522	6.42	5	21.3	24.7	0.19	-246.7/24.7	30 gallons
1528	6.54	11	21.3	24.7	0.20	-258.3/24.7	~~40~~ 35 TIC gallons
1530							36 gallons - DRY
							WC = 32.5'

[1] = Stability parameter

80% r. chg = 15.54'

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST S 5/8/9/17
Project Number: 1990.026D
Date: 2/20/01
Site Engineer: T. Turpyn-Keasler

Well Number: 5S/8/9/17-MW50
Equipment: Bailer, Horiba ORION
Sample ID: 0026-088

	Before	Reference	After
Depth to Water (ft)	29.16	Top of Casing	32.64
Depth to Sediment (ft)	35.00	Top of Casing	35.00
Thickness of Sediment (ft)	0.80		0.80

Depth of Well (ft): 35.8
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 5.84
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)](\text{Water Column Height})$ = 8.76

Total Volume Purged (gals): 8 gal.
Casing Volumes Purged: 0.91

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1410	6.29	1	18.2	23.8	1.00	-289.0/23.2	INITIAL
1421	6.28	9	17.8	24.0	1.07	-302.7/23.9	5
1431	6.31	16	18.0	24.1	1.15	-298.7/24.9	8 gallons DRY
							8 WL = 28.66

1 = Stability parameter

80% r'chg = 29.93' BOLTS DON'T TIGHTEN
1630 WL = 28.66

Ferrous Iron = 2.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORPORATION

Field Water Level Measurements

Date: 2/13/01
Personnel: T. Turpin-Keasler
J. Donnay
Weather: OVCST, 60°F

Project Name: UST 56/7
Project OFS: [illegible]90.026D
Measurement Device: SOLONIST
Comments:

Well I.D.	Depth to Water from Measuring Point (feet)	Depth to Bottm from Measuring Point (feet)	Comments
MW7	47.00	56.32	
MW12	43.64	58.76	
MW13	17.85	32.25	
* MW15	—	—	PSH
MW16	15.70	27.81	
MW17	20.40	32.30	
* MW18	—	—	PRD

* POSSIBLE PRODUCT

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 6/7
Project Number: 1990.026D
Date: 2/20/01
Site Engineer: T. Turpyn-Kaster

Well Number: 56/7 - MW7
Equipment: Bailer, Horiba, ORION
Sample ID: U026-83/84

	Before	Reference	After
Depth to Water (ft)	47.00	Top of Casing	49.53
Depth to Sediment (ft)	56.32	Top of Casing	56.32
Thickness of Sediment (ft)	0.08		0.08

Depth of Well (ft): 56.40
Filter Pack Porosity = 25% (E)
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 9.32

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\,(BD^2 - CD^2)](\text{Water Column Height}) =$ 13.98

Total Volume Purged (gals): 22
Casing Volumes Purged: 1.57

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)/	Comments
1140	4.79	2	14.7	22.5	1.01	-219.7/22.5	INITIAL
1145	4.94	6	14.6	22.9	1.07	-225.2/22.6	5
1152	4.89	17	14.5	22.9	0.75	-242.2/22.9	10
1200	4.89	15	14.4	22.8	1.01	-227.3/21.9	15
1207	4.85	11	14.6	22.7	1.15	-217.8/21.3	20
1211	4.86	9	14.7	22.8	1.35	-204.7/22.7	22 WILL COLLECT SAMPLE & DUPLICATE

1 = Stability parameter

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: 56/7
Project Number: 1990.026D
Date: 2/23/01
Site Engineer: T. Turpin-Keasler

Well Number: MW12
Equipment: Grundfos Baila
Horiba, Orion
Sample ID: 2026-019/120

	Before	Reference	After
Depth to Water (ft)	43.64	Top of Casing	45.32
Depth to Sediment (ft)	58.76	Top of Casing	58.76
Thickness of Sediment (ft)	~~2~~		~~2~~

Depth of Well (ft): ~~58.00~~ NA
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 15.12
Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height}) =$ 22.68

Total Volume Purged (gals): 50 gallons
Casing Volumes Purged: 2.20

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1050	5.29	505	14.2	20.3	2.66	-63.7	INITIAL ORP NOT READY
1054	5.25	40	14.0	22.7	2.12	-90.7/22.9	10
1100	5.26	10	14.7	23.2	1.56	-100.4/23.4	20
1102	5.26	10	14.9	23.3	1.42	-105.0/23.6	25
1104	5.25	10	15.0	23.5	1.15	-109.1/23.7	30
1106	5.25	10	15.1	23.6	1.06	-115.7/23.7	35
1108	5.25	10	15.2	23.7	0.93	-115.0/23.8	40 gallons
1110	5.25	10	15.2	23.7	0.85	-118.9/23.9	45 gallons;
1112	5.25	10	15.2	23.7	0.78	-121.9/23.9	50 gallons

1 = Stability parameter

Ferrous Iron = NOT AT THIS WELL

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: S6/7
Project Number: 1990.026D
Date: 2/26/01
Site Engineer: T. Turpyn-KEASLER

Well Number: MW13
Equipment: Grundfos, Bailer, Horiba, Orion
Sample ID: 0026-130

	Before	Reference	After
Depth to Water (ft)	17.65	Top of Casing	~~24.98~~ ~~31.15 TK~~
Depth to Sediment (ft)	32.15	Top of Casing	32.15
Thickness of Sediment (ft)	0.35		0.35

Depth of Well (ft): 32.50
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 14.5

Filter Pack Porosity = 25%

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)](\text{Water Column Height})$ = 21.75

Total Volume Purged (gals): 21 gallons
Casing Volumes Purged: 0.97

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1415	4.62	20	14.1	20.0	5.35	-51.7/19.8	INITIAL
1421	3.68	12	19.8	23.6	0.91	-19.3/23.7	10 gallons
1431	3.80	9	21.0	24.1	0.20	-35.8/24.1	20 gallons: DRY
~~1431 TK~~							~~25~~ ~21 gallons
							~~30~~ WL = 31.15'
							~~35~~

1 = Stability parameter

80% = 21.35'

Ferrous Iron = ~~mg/L~~ TK 5.2 mg/L with a 3:2 dilution 20 ml sample 15 ml DI

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: UST 56/7
Project Number: 1990.0260
Date: 2/20/01
Site Engineer: T. Turpin-Kensler

Well Number: 56/7-MW16
Equipment: Bailer Horiba Grundfos
Sample ID: 0026-037

	Before	Reference	After
Depth to Water (ft)	15.70	Top of Casing	27.17
Depth to Sediment (ft)	27.81	Top of Casing	27.81
Thickness of Sediment (ft)	0.89		0.89

Depth of Well (ft): 28.7
Filter Pack Porosity = 25%
Casing Diameter (CD in ft): 0.33
Borehole Diameter (BD in ft): 0.83
Water Column Height (ft): 12.11

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}\ (BD^2 - CD^2)]$(Water Column Height) = 18.17

Total Volume Purged (gals): 27.00
Casing Volumes Purged: 1.50

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1130	3.77	1	18.9	23.4	0.93	-136.9/21.5	INITIAL
1139	3.79	52	18.9	23.5	0.94	-142.6/21.3	5 very slight odor
1200	3.87	42	18.9	23.0	1.13	-172.7/22.9	10 and slight sheen
1211	3.90	17	19.0	23.4	1.48	-186.6/23.0	~~2015~~
1235	3.95	15	18.8	23.1	1.69	-162.1/23.4	~~2522~~ DRY ~~28~~ WL=27.00'

1 = Stability parameter

80% recharge 18.77' 1245 ref = 229.9 mV @ 19.9

Ferrous Iron = 0.0 mg/L

Note: (7.48p/4) = 5.87

FOSTER WHEELER ENVIRONMENTAL CORP.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: Site 6/7
Project Number: 1990.026D
Date: 2/21/01
Site Engineer: T. Turpyn-Keasler

Well Number: MW 17
Equipment: Bailer, Horiba Orion
Sample ID: 0026-097

	Before	Reference	After
Depth to Water (ft)	20.80	Top of Casing	28.52 ~~23.52~~ TK
Depth to Sediment (ft)	32.30	Top of Casing	32.30
Thickness of Sediment (ft)	0.80		0.80

Depth of Well (ft) 33.10
Casing Diameter (CD in ft) 0.83
Borehole Diameter (BD in ft) 0.83
Water Column Height (ft) 11.50

Filter Pack Porosity = 25%

Borehole Volume (gals) = $(7.48\pi/4)[CD^2 + \text{Porosity}(BD^2 - CD^2)](\text{Water Column Height})$ = 17.25 (26)

Total Volume Purged (gals) ~~1.5~~ TK 26 gals

Casing Volumes Purged 1.50

Time	pH[1]	Turbidity (NTU)	Conductivity[1] (mS/cm)	Temp.[1] (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Comments
1529	3.67	11	22.9	23.3	1.56	-252.4/23.4	INITIAL
1548	3.62	1	26.2	23.5	0.78	-254.4/23.2	10 gallons
1600	3.64	Ø	26.3	23.0	0.72	-251.6/22.8	15 gallons
1628	3.67	2	26.3	23.5	0.79	-243.2/23.1	20 gallons
1650	3.69	6	26.4	23.1	1.08	-237.3/22.7	26 gallons
							VERY SLOW
							RECHARGE

1 = Stability parameter

~~15mg~~ 10ml sample to ~~10 mg/dl~~ 15ml DI dilution (GAS PER TIK)

Ferrous Iron = 6.5 mg/L

Note: (7.48p/4) = 5.87

APPENDIX B

LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS

FOSTER WHEELER ENVIRONMENTAL CORPORATION

1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01365

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: UST SITE 1	PURCHASE ORDER NO.: 020848 ~~020464~~ TASK 84	LABORATORY NAME: EMAX
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.076D	
SAMPLER NAME: Jan Zuzga	SAMPLER SIGNATURE: Tanya Tupinkevska	LABORATORY ID (FOR LABORATORY): 01336
PROJECT CONTACT: LISA BIENKOWSKI	AIRBILL NUMBER: COURIER	

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	TPH-P	VOCs 8260B ON TCE/BENZENE	EPA 300.0 NITRATE SULFATE CHLORIDE	RSK 175M ETHENE ETHANE METHANE	EPA 310.1 ALKALINITY	EPA 9060 (TOC)	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-060	2/14/01	0930	3	X		W	10 day		X						S1 TRIP BLANK	-	-	TB
0026-061	2/14/01	1430	12	X		W	10 day	X	X	X	X	X	X		~~WASTE DISPOSAL~~ S1-MW22	-	-	REG
0026-062	2/14/01	1500	6	X		W	10 day	X	X						S1-MW23	-	-	REG
~~0026-063~~	~~2/14/01~~	~~1400~~		~~X~~		~~W~~	10 day								WASTE DISPOSAL ROUND	-	-	REG
~~0026-064~~	2/14/01	1205		X		W	10 day								WASTE DISPOSAL SAMPLE	-	-	REG

RELINQUISHED BY (Signature): Jan Zuzga	DATE: 2/14/01	RECEIVED BY (Signature):	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY: FWENC	TIME: 1530	COMPANY:	
RELINQUISHED BY (Signature):	DATE:	RECEIVED BY (Signature):	COMPOSITE DESCRIPTION
COMPANY:	TIME:	COMPANY: EMAX	
RELINQUISHED BY (Signature):	DATE:	RECEIVED BY (Signature):	SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
COMPANY:	TIME:	COMPANY:	TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
QUARTER 1
GROUNDWATER
SAMPLING

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/14/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/14/01
Batch No.	: 01B136	Date Extracted:	02/16/01 19:33
Sample ID:	0026-060	Date Analyzed:	02/16/01 19:33
Lab Samp ID:	B136-01R	Dilution Factor:	1
Lab File ID:	RBH255	Matrix :	WATER
Ext Btch ID:	VOB2541	% Moisture :	NA
Calib. Ref.:	RBH249	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.64J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	62-139
TOLUENE-D8	103	75-125
BROMOFLUOROBENZENE	104	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/14/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/14/01
Batch No.	: 01B136	Date Extracted:	02/16/01 09:43
Sample ID:	0026-061	Date Analyzed:	02/16/01 09:43
Lab Samp ID:	B136-02	Dilution Factor:	1
Lab File ID:	RBH244	Matrix	: WATER
Ext Btch ID:	VOB2341	% Moisture	: NA
Calib. Ref.:	RBH229	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	5.4	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	140E	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	720E	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	.46J	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	3J	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	140E	.5	.12
XYLENES	600E	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	1100E	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.94J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	110E	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	0.00*	62-139
TOLUENE-D8	47*	75-125
BROMOFLUOROBENZENE	113	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/14/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/14/01
Batch No. : 01B136	Date Extracted: 02/16/01 21:27
Sample ID: 0026-061DL	Date Analyzed: 02/16/01 21:27
Lab Samp ID: B136-02T	Dilution Factor: 500
Lab File ID: RBH258	Matrix : WATER
Ext Btch ID: VOB2541	% Moisture : NA
Calib. Ref.: RBH249	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	2500	210
1,1,2,2-TETRACHLOROETHANE	ND	500	96
1,1,2-TRICHLOROETHANE	ND	2500	86
1,1-DICHLOROETHANE	ND	2500	79
1,1-DICHLOROETHENE	ND	2500	51
1,2-DICHLOROETHANE	ND	250	100
1,2-DICHLOROPROPANE	ND	2500	71
METHYL ETHYL KETONE	ND	25000	1100
2-HEXANONE	ND	25000	510
4-METHYL-2-PENTANONE (MIBK)	ND	25000	610
ACETONE	ND	25000	1400
BENZENE	15000	250	74
BROMODICHLOROMETHANE	ND	2500	87
BROMOFORM	ND	2500	62
BROMOMETHANE	ND	2500	92
CARBON TETRACHLORIDE	ND	250	45
CHLOROBENZENE	ND	2500	69
CHLOROETHANE	ND	2500	220
CHLOROFORM	ND	2500	200
CHLOROMETHANE	ND	2500	120
CIS-1,2-DICHLOROETHENE	ND	2500	80
CIS-1,3-DICHLOROPROPENE	ND	250	110
DIBROMOCHLOROMETHANE	ND	2500	71
ETHYLBENZENE	330	250	59
XYLENES	4400	750	140
MTBE	ND	500	110
METHYLENE CHLORIDE	250J	2500	110
STYRENE	ND	2500	77
TETRACHLOROETHYLENE	ND	2500	68
TOLUENE	14000	250	69
TRANS-1,2-DICHLOROETHENE	ND	2500	92
TRANS-1,3-DICHLOROPROPENE	ND	250	110
TRICHLOROETHENE	ND	2500	77
VINYL ACETATE	ND	25000	160
VINYL CHLORIDE	ND	250	100
TERT-BUTYL ALCOHOL	ND	10000	1200
DIISOPROPYL ETHER	200J	2500	190
ETHYL TERT-BUTYL ETHER	ND	2500	440
TERT-AMYL METHYL ETHER	ND	2500	620

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	62-139
TOLUENE-D8	105	75-125
BROMOFLUOROBENZENE	109	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/14/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/14/01
Batch No. : 01B136	Date Extracted: 02/16/01 10:21
Sample ID: 0026-062	Date Analyzed: 02/16/01 10:21
Lab Samp ID: B136-03	Dilution Factor: 1
Lab File ID: RBH245	Matrix : WATER
Ext Btch ID: VOB2341	% Moisture : NA
Calib. Ref.: RBH229	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	2.3J	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	490E	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	2.3J	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	140E	.5	.12
XYLENES	310E	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	430E	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	510E	20	2.3
DIISOPROPYL ETHER	77E	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	0.00*	62-139
TOLUENE-D8	114	75-125
BROMOFLUOROBENZENE	111	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2007

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/14/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/14/01
Batch No. : 018136	Date Extracted: 02/16/01 22:05
Sample ID: 0026-062DL	Date Analyzed: 02/16/01 22:05
Lab Samp ID: B136-03T	Dilution Factor: 250
Lab File ID: RBH259	Matrix : WATER
Ext Btch ID: VOB2541	% Moisture : NA
Calib. Ref.: RBH249	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1200	110
1,1,2,2-TETRACHLOROETHANE	ND	250	48
1,1,2-TRICHLOROETHANE	ND	1200	43
1,1-DICHLOROETHANE	ND	1200	39
1,1-DICHLOROETHENE	ND	1200	25
1,2-DICHLOROETHANE	ND	120	52
1,2-DICHLOROPROPANE	ND	1200	35
METHYL ETHYL KETONE	ND	12000	530
2-HEXANONE	ND	12000	250
4-METHYL-2-PENTANONE (MIBK)	ND	12000	310
ACETONE	ND	12000	680
BENZENE	5300	120	37
BROMODICHLOROMETHANE	ND	1200	43
BROMOFORM	ND	1200	31
BROMOMETHANE	ND	1200	46
CARBON TETRACHLORIDE	ND	120	23
CHLOROBENZENE	ND	1200	35
CHLOROETHANE	ND	1200	110
CHLOROFORM	ND	1200	100
CHLOROMETHANE	ND	1200	60
CIS-1,2-DICHLOROETHENE	ND	1200	40
CIS-1,3-DICHLOROPROPENE	ND	120	53
DIBROMOCHLOROMETHANE	ND	1200	35
ETHYLBENZENE	440	120	30
XYLENES	1200	370	68
MTBE	ND	250	54
METHYLENE CHLORIDE	ND	1200	54
STYRENE	ND	1200	38
TETRACHLOROETHYLENE	ND	1200	34
TOLUENE	1900	120	34
TRANS-1,2-DICHLOROETHENE	ND	1200	46
TRANS-1,3-DICHLOROPROPENE	ND	120	57
TRICHLOROETHENE	ND	1200	39
VINYL ACETATE	ND	12000	80
VINYL CHLORIDE	ND	120	50
TERT-BUTYL ALCOHOL	830J	5000	580
DIISOPROPYL ETHER	110J	1200	97
ETHYL TERT-BUTYL ETHER	ND	1200	220
TERT-AMYL METHYL ETHER	ND	1200	310

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	62-139
TOLUENE-D8	106	75-125
BROMOFLUOROBENZENE	113	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

METHOD 5030B/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B136

Matrix : WATER
Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VAB4339B	ND	98	1	NA	.05	.012	02/26/0108:10	02/26/0108:10	EB18032A	EB18025A	VAB4339	NA	02/26/01
LCS1W	VAB4339L	.533	120	1	NA	.05	.012	02/26/0107:04	02/26/0107:04	EB18030A	EB18025A	VAB4339	NA	02/26/01
LCD1W	VAB4339C	.573	118	1	NA	.05	.012	02/26/0107:37	02/26/0107:37	EB18031A	EB18025A	VAB4339	NA	02/26/01
0026-061	B136-02	81	105	100	NA	5	1.2	02/26/0112:06	02/26/0112:06	EB18039A	EB18035A	VAB4339	02/14/01	02/14/01
0026-062	B136-03	21	109	100	NA	5	1.2	02/26/0112:39	02/26/0112:39	EB18040A	EB18035A	VAB4339	02/14/01	02/14/01

RL : Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/14/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/14/01
Batch No.	: 01B136	Date Extracted:	02/20/01 15:15
Sample ID:	0026-061	Date Analyzed:	02/20/01 20:10
Lab Samp ID:	B136-02	Dilution Factor:	1
Lab File ID:	FB0320A	Matrix :	WATER
Ext Btch ID:	GAB004W	% Moisture :	NA
Calib. Ref.:	FB0313A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	7.8	1	.26
ETHYLENE	7	1	.18
METHANE	3.5	1	.26

RL: Reporting Limit

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B136

Matrix : WATER
Instrument ID : NA

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALB006WB	ND	1	NA	5	.469	02/22/0113:00	NA	ALB006W-01	NA	ALB006W	NA	NA
LCS1W	ALB006WL	73.1	1	NA	5	.469	02/22/0113:15	NA	ALB006W-02	NA	ALB006W	NA	NA
LCD1W	ALB006WC	75.6	1	NA	5	.469	02/22/0113:30	NA	ALB006W-03	NA	ALB006W	NA	NA
0026-061	B136-02	270	1	NA	5	.469	02/22/0116:15	NA	ALB006W-14	NA	ALB006W	02/14/01	02/14/01

RL: Reporting Limit

2008

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B136

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TCB006WB	ND	1	NA	5	.551	02/22/0110:05	NA	TCB006W-7	TCB006W-5	TCB006W	NA	NA
LCS1W	TCB006WL	19.9	1	NA	5	.551	02/22/0110:20	NA	TCB006W-8	TCB006W-5	TCB006W	NA	NA
LCD1W	TCB006WC	19.7	1	NA	5	.551	02/22/0110:35	NA	TCB006W-9	TCB006W-5	TCB006W	NA	NA
0026-061	B136-02	28.1	1	NA	5	.551	02/22/0110:55	NA	TCB006W-10	TCB006W-5	TCB006W	02/14/01	02/14/01

RL : Reporting Limit

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B136

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB035WB	ND	1	NA	.2	.047	02/27/0119:04	NA	AB27027A	AB27025A	ICB035W	NA	NA
LCS1W	ICB035WL	4.8	1	NA	.2	.047	02/27/0119:21	NA	AB27028A	AB27025A	ICB035W	NA	NA
LCD1W	ICB035WC	4.73	1	NA	.2	.047	02/27/0119:38	NA	AB27029A	AB27025A	ICB035W	NA	NA
0026-061	B136-02	4550	1000	NA	200	47	02/28/0100:28	NA	AB27046A	AB27037A	ICB035W	02/14/01	02/14/01

RL : Reporting Limit

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018136

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB020WB	ND	1	NA	.1	.0206	02/15/0118:15	NA	AB16019A	AB16017A	ICB020W	NA	NA
LCS1W	ICB020WL	3.76	1	NA	.1	.0206	02/15/0118:32	NA	AB16020A	AB16017A	ICB020W	NA	NA
LCD1W	ICB020WC	3.76	1	NA	.1	.0206	02/15/0118:49	NA	AB16021A	AB16017A	ICB020W	NA	NA
0026-061	8136-02	ND	25	NA	2.5	.515	02/15/0123:55	NA	AB16039A	AB16029A	ICB020W	02/14/01	02/14/01

RL: Reporting Limit

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B136

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB020WB	ND	1	NA	.5	.101	02/15/0118:15	NA	AB16019A	AB16017A	ICB020W	NA	NA
LCS1W	ICB020WL	18.5	1	NA	.5	.101	02/15/0118:32	NA	AB16020A	AB16017A	ICB020W	NA	NA
LCD1W	ICB020WC	18.5	1	NA	.5	.101	02/15/0118:49	NA	AB16021A	AB16017A	ICB020W	NA	NA
0026-061	8136-02	137	25	NA	12.5	2.53	02/15/0123:55	NA	AB16039A	AB16029A	ICB020W	02/14/01	02/14/01

RL : Reporting Limit

FOSTER WHEELER ENVIRONMENTAL CORPORATION

1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01372

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: UST 51	PURCHASE ORDER NO.: 020848 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.076D
SAMPLER NAME: Tami Turpin-Kemsley	SAMPLER SIGNATURE: Tami Turpin-Kemsley
PROJECT CONTACT: Lisa Bilkowski	AIRBILL NUMBER: COURIER

ANALYSES REQUIRED

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 01B173

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	8260B + OXYGENATES INCLUDING NITRATE	TPH-ID	EPA 300.0 NITRATE SULFATE / CHLORIDE	RSK 175 SM ETHANE ETHANE METHANE	EPA 310.1 ALKALINITY	TPA 9060 (TOC)	EPA 6010B (Mn, Fe, Mg)	TPH-E	EPA 418.1 TRPH	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-074	2/14/01	0945	3	X		W	10 day	X										S1 TRIP BLANK	-	-	TB
0026-075	2/16/01	1045	12	X		W	10 day	X	X	X	X	X	X					S1-MW15	-	-	REG
0026-076	2/16/01	1130	13	X		W	10 day	X	X	X	X	X	X	X				S1-MW16	-	-	REG
0026-077	2/16/01	1310	6	X		W	10 day	X	X									S1-MW5	-	-	REG
0026-078	2/16/01	1350	6	X		W	10 day	X	X									S1-MW1	-	-	REG
0026-079	2/16/01	1420	14		X	W	10 day	X	X	X	X	X	X		X	X		S1-MW19	-	-	REG
0026-080	2/16/01	1440	11	X		W	10 day	X	X	X	X	X	X		X	X		S1-MW19	-	-	FD
0026-081	2/16/01	1500	6	X		W	10 day	X	X									S1-MW3	-	-	REG
0026-082	2/16/01	1520	8	X		W	10 day	X	X						X	X		EQUIP BLANK	-	-	EB
			2/16/01																		

RELINQUISHED BY (Signature): Tami Turpin-Kemsley	DATE: 2/16/01	RECEIVED BY (Signature):	
COMPANY: FWENC	TIME: 1535	COMPANY: EMAX	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)

TEMPERATURE: SAMPLE CONDITION: ☐ INTACT ☐ BROKEN

COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:

QUARTER 1 GW SAMPLING

Copies: Project File - Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/27/01 16:09
Sample ID:	0026-074	Date Analyzed:	02/27/01 16:09
Lab Samp ID:	B173-01	Dilution Factor:	1
Lab File ID:	RBH386	Matrix :	WATER
Ext Btch ID:	VOB3541	% Moisture :	NA
Calib. Ref.:	RBH381	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.47JB	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	112	62-139
TOLUENE-D8	112	75-125
BROMOFLUOROBENZENE	124	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/16/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/16/01
Batch No. : 01B173	Date Extracted: 03/01/01 19:30
Sample ID: 0026-075	Date Analyzed: 03/01/01 19:30
Lab Samp ID: B173-02R	Dilution Factor: 1
Lab File ID: RCH015	Matrix : WATER
Ext Btch ID: VOC0241	% Moisture : NA
Calib. Ref.: RCH003	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	108	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2005

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/27/01 21:17
Sample ID:	0026-076	Date Analyzed:	02/27/01 21:17
Lab Samp ID:	B173-03	Dilution Factor:	1
Lab File ID:	RBH394	Matrix :	WATER
Ext Btch ID:	VOB3541	% Moisture :	NA
Calib. Ref.:	RBH381	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	28J	50	2.7
BENZENE	430E	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	.53	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	1.2J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	76E	.5	.12
XYLENES	290E	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	320E	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	2.7J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	62-139
TOLUENE-D8	123	75-125
BROMOFLUOROBENZENE	120	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/28/01 16:33
Sample ID:	0026-076DL	Date Analyzed:	02/28/01 16:33
Lab Samp ID:	B173-03T	Dilution Factor:	100
Lab File ID:	RBH407	Matrix	: WATER
Ext Btch ID:	VOB3641	% Moisture	: NA
Calib. Ref.:	RBH402	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	500	42
1,1,2,2-TETRACHLOROETHANE	ND	100	19
1,1,2-TRICHLOROETHANE	ND	500	17
1,1-DICHLOROETHANE	ND	500	16
1,1-DICHLOROETHENE	ND	500	10
1,2-DICHLOROETHANE	ND	50	21
1,2-DICHLOROPROPANE	ND	500	14
METHYL ETHYL KETONE	ND	5000	210
2-HEXANONE	ND	5000	100
4-METHYL-2-PENTANONE (MIBK)	ND	5000	120
ACETONE	ND	5000	270
BENZENE	2800	50	15
BROMODICHLOROMETHANE	ND	500	17
BROMOFORM	ND	500	12
BROMOMETHANE	ND	500	18
CARBON TETRACHLORIDE	ND	50	9.1
CHLOROBENZENE	ND	500	14
CHLOROETHANE	ND	500	43
CHLOROFORM	ND	500	41
CHLOROMETHANE	ND	500	24
CIS-1,2-DICHLOROETHENE	ND	500	16
CIS-1,3-DICHLOROPROPENE	ND	50	21
DIBROMOCHLOROMETHANE	ND	500	14
ETHYLBENZENE	79	50	12
XYLENES	610	150	27
MTBE	ND	100	22
METHYLENE CHLORIDE	ND	500	22
STYRENE	ND	500	15
TETRACHLOROETHYLENE	ND	500	14
TOLUENE	630	50	14
TRANS-1,2-DICHLOROETHENE	ND	500	18
TRANS-1,3-DICHLOROPROPENE	ND	50	23
TRICHLOROETHENE	ND	500	15
VINYL ACETATE	ND	5000	32
VINYL CHLORIDE	ND	50	20
TERT-BUTYL ALCOHOL	ND	2000	230
DIISOPROPYL ETHER	ND	500	39
ETHYL TERT-BUTYL ETHER	ND	500	88
TERT-AMYL METHYL ETHER	ND	500	120

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	130	62-139
TOLUENE-D8	118	75-125
BROMOFLUOROBENZENE	126*	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/16/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/16/01
Batch No. : 01B173	Date Extracted: 02/27/01 19:23
Sample ID: 0026-077	Date Analyzed: 02/27/01 19:23
Lab Samp ID: B173-04	Dilution Factor: 1
Lab File ID: RBH391	Matrix : WATER
Ext Btch ID: VOB3541	% Moisture : NA
Calib. Ref.: RBH381	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	.57J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	125	62-139
TOLUENE-D8	124	75-125
BROMOFLUOROBENZENE	132*	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/16/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/16/01
Batch No. : 018173	Date Extracted: 02/28/20 0 :4:
Sample ID: 0026-078	Date Analyzed: 02/28/20 0 :4:
Lab Samp ID: B173-05R	Dilution Factor: 1
Lab File ID: RBQ219	Matrix : WATER
Ext Btch ID: VOB2305	% Moisture : NA
Calib. Ref.: RBQ212	Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	1.2	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	1.3J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.62J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	93	62-139
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	101	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	03/01/01 15:05
Sample ID:	0026-079	Date Analyzed:	03/01/01 15:05
Lab Samp ID:	B173-06	Dilution Factor:	1
Lab File ID:	RCH008	Matrix :	WATER
Ext Btch ID:	VOC0241	% Moisture :	NA
Calib. Ref.:	RCH003	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	.64J	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	57E	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	54E	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	.6	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	6.9	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	2.2	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.45J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	7	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	62	20	2.3
DIISOPROPYL ETHER	1.2J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	113	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	104	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/16/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/16/01
Batch No. : 01B173	Date Extracted: 03/01/01 15:43
Sample ID: 0026-079DL	Date Analyzed: 03/01/01 15:43
Lab Samp ID: B173-06T	Dilution Factor: 5
Lab File ID: RCH009	Matrix : WATER
Ext Btch ID: VOC0241	% Moisture : NA
Calib. Ref.: RCH003	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	25	2.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.96
1,1,2-TRICHLOROETHANE	ND	25	.86
1,1-DICHLOROETHANE	ND	25	.79
1,1-DICHLOROETHENE	ND	25	.51
1,2-DICHLOROETHANE	53	2.5	1
1,2-DICHLOROPROPANE	ND	25	.71
METHYL ETHYL KETONE	ND	250	11
2-HEXANONE	ND	250	5.1
4-METHYL-2-PENTANONE (MIBK)	ND	250	6.1
ACETONE	ND	250	14
BENZENE	48	2.5	.74
BROMODICHLOROMETHANE	ND	25	.87
BROMOFORM	ND	25	.62
BROMOMETHANE	ND	25	.92
CARBON TETRACHLORIDE	ND	2.5	.45
CHLOROBENZENE	ND	25	.7
CHLOROETHANE	ND	25	2.2
CHLOROFORM	6.3J	25	2
CHLOROMETHANE	ND	25	1.2
CIS-1,2-DICHLOROETHENE	ND	25	.81
CIS-1,3-DICHLOROPROPENE	ND	2.5	1.1
DIBROMOCHLOROMETHANE	ND	25	.71
ETHYLBENZENE	ND	2.5	.6
XYLENES	2.1J	7.5	1.4
MTBE	ND	5	1.1
METHYLENE CHLORIDE	ND	25	1.1
STYRENE	ND	25	.77
TETRACHLOROETHYLENE	ND	25	.68
TOLUENE	ND	2.5	.69
TRANS-1,2-DICHLOROETHENE	ND	25	.92
TRANS-1,3-DICHLOROPROPENE	ND	2.5	1.1
TRICHLOROETHENE	5.9J	25	.78
VINYL ACETATE	ND	250	1.6
VINYL CHLORIDE	ND	2.5	1
TERT-BUTYL ALCOHOL	ND	100	12
DIISOPROPYL ETHER	ND	25	1.9
ETHYL TERT-BUTYL ETHER	ND	25	4.4
TERT-AMYL METHYL ETHER	ND	25	6.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	105	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/28/20 0 :5:
Sample ID:	0026-080	Date Analyzed:	02/28/20 0 :5:
Lab Samp ID:	B173-07	Dilution Factor:	1
Lab File ID:	RBQ221	Matrix	: WATER
Ext Btch ID:	VOB2305	% Moisture	: NA
Calib. Ref.:	RBQ212	Instrument ID	: T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	.52J	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	43E	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	39	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	.48J	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	5.6	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	2	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.34J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	.18J	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	5.6	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	68	20	2.3
DIISOPROPYL ETHER	.82J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	94	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 018173	Date Extracted:	03/01/01 16:21
Sample ID:	0026-080DL	Date Analyzed:	03/01/01 16:21
Lab Samp ID:	B173-07T	Dilution Factor:	5
Lab File ID:	RCH010	Matrix	: WATER
Ext Btch ID:	VOC0241	% Moisture	: NA
Calib. Ref.:	RCH003	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	25	2.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.96
1,1,2-TRICHLOROETHANE	ND	25	.86
1,1-DICHLOROETHANE	ND	25	.79
1,1-DICHLOROETHENE	ND	25	.51
1,2-DICHLOROETHANE	46	2.5	1
1,2-DICHLOROPROPANE	ND	25	.71
METHYL ETHYL KETONE	ND	250	11
2-HEXANONE	ND	250	5.1
4-METHYL-2-PENTANONE (MIBK)	ND	250	6.1
ACETONE	ND	250	14
BENZENE	40	2.5	.74
BROMODICHLOROMETHANE	ND	25	.87
BROMOFORM	ND	25	.62
BROMOMETHANE	ND	25	.92
CARBON TETRACHLORIDE	ND	2.5	.45
CHLOROBENZENE	ND	25	.7
CHLOROETHANE	ND	25	2.2
CHLOROFORM	5.8J	25	2
CHLOROMETHANE	ND	25	1.2
CIS-1,2-DICHLOROETHENE	ND	25	.81
CIS-1,3-DICHLOROPROPENE	ND	2.5	1.1
DIBROMOCHLOROMETHANE	ND	25	.71
ETHYLBENZENE	ND	2.5	.6
XYLENES	ND	7.5	1.4
MTBE	ND	5	1.1
METHYLENE CHLORIDE	ND	25	1.1
STYRENE	ND	25	.77
TETRACHLOROETHYLENE	ND	25	.68
TOLUENE	ND	2.5	.69
TRANS-1,2-DICHLOROETHENE	ND	25	.92
TRANS-1,3-DICHLOROPROPENE	ND	2.5	1.1
TRICHLOROETHENE	5.4J	25	.78
VINYL ACETATE	ND	250	1.6
VINYL CHLORIDE	ND	2.5	1
TERT-BUTYL ALCOHOL	ND	100	12
DIISOPROPYL ETHER	ND	25	1.9
ETHYL TERT-BUTYL ETHER	ND	25	4.4
TERT-AMYL METHYL ETHER	ND	25	6.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	104	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 018173	Date Extracted:	03/01/01 16:58
Sample ID:	0026-081	Date Analyzed:	03/01/01 16:58
Lab Samp ID:	B173-08	Dilution Factor:	1
Lab File ID:	RCH011	Matrix	: WATER
Ext Btch ID:	VOC0241	% Moisture	: NA
Calib. Ref.:	RCH003	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	1.4	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	.83J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/16/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/16/01
Batch No. : 01B173	Date Extracted: 02/28/20 0 :6:
Sample ID: 0026-082	Date Analyzed: 02/28/20 0 :6:
Lab Samp ID: B173-09	Dilution Factor: 1
Lab File ID: RBQ223	Matrix : WATER
Ext Btch ID: VOB2305	% Moisture : NA
Calib. Ref.: RBQ212	Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	3.3J	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	.24J	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	91	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	98	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

METHOD 5030B/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : THE IT GROUP
Project : PG&E - BAKERSFIELD
Batch No. : 01B173

Matrix : WATER
Instrument ID : GCT055

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VAB0455B	ND	110	1	NA	.05	.012	02/22/0109:56	02/22/0109:56	UB07052A	UB07049A	VAB0455	NA	02/22/01
LCS1W	VAB0455L	.599	121	1	NA	.05	.012	02/22/0102:46	02/22/0102:46	UB07050A	UB07049A	VAB0455	NA	02/22/01
LCD1W	VAB0455C	.602	125	1	NA	.05	.012	02/22/0103:20	02/22/0103:20	UB07051A	UB07049A	VAB0455	NA	02/22/01
0026-075	B173-02	ND	121	1	NA	.05	.012	02/22/0112:22	02/22/0112:22	UB07055A	UB07054A	VAB0455	02/16/01	02/16/01
0026-076	B173-03	7.9	113	50	NA	2.5	.6	02/22/0116:58	02/22/0116:58	UB07063A	UB07054A	VAB0455	02/16/01	02/16/01
0026-077	B173-04	ND	97	1	NA	.05	.012	02/22/0113:31	02/22/0113:31	UB07057A	UB07054A	VAB0455	02/16/01	02/16/01
0026-078	B173-05	ND	116	1	NA	.05	.012	02/22/0114:05	02/22/0114:05	UB07058A	UB07054A	VAB0455	02/16/01	02/16/01
0026-079	B173-06	.11	118	1	NA	.05	.012	02/22/0114:40	02/22/0114:40	UB07059A	UB07054A	VAB0455	02/16/01	02/16/01
0026-080	B173-07	.11	109	1	NA	.05	.012	02/22/0115:14	02/22/0115:14	UB07060A	UB07054A	VAB0455	02/16/01	02/16/01
0026-081	B173-08	ND	117	1	NA	.05	.012	02/22/0115:49	02/22/0115:49	UB07061A	UB07054A	VAB0455	02/16/01	02/16/01
0026-082	B173-09	ND	112	1	NA	.05	.012	02/22/0116:23	02/22/0116:23	UB07062A	UB07054A	VAB0455	02/16/01	02/16/01

RL : Reporting Limit

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B173

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB030WB	ND	98	1	NA	.1	.067	02/21/0103:24	02/20/0115:00	TB05020A	TB05014A	DSB030W	NA	02/20/01
LCS1W	DSB030WL	4.31	93	1	NA	.1	.067	02/21/0104:12	02/20/0115:00	TB05021A	TB05014A	DSB030W	NA	02/20/01
LCD1W	DSB030WC	4.64	101	1	NA	.1	.067	02/21/0105:00	02/20/0115:00	TB05022A	TB05014A	DSB030W	NA	02/20/01
0026-079 *	B173-06	1.3	101	.96	NA	.096	.0643	02/23/0107:28	02/20/0115:00	TB05083A	TB05074A	DSB030W	02/16/01	02/16/01
0026-080 *	B173-07	2.4	121	.95	NA	.095	.0637	02/23/0108:16	02/20/0115:00	TB05084A	TB05074A	DSB030W	02/16/01	02/16/01
0026-082 *	B173-09	1.5	120	.99	NA	.099	.0663	02/23/0109:05	02/20/0115:00	TB05085A	TB05074A	DSB030W	02/16/01	02/16/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

* : Not a typical fuel pattern, quantitated againts Diesel calibration

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B173

Matrix : WATER
Instrument ID : 118

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB001WB	ND	1	NA	10	.558	02/26/0110:40	02/24/0114:50	TRB006-03	TRB006CC	TRB001W	NA	02/24/01
LCS1W	TRB001WL	ND	1	NA	10	.558	02/26/0110:45	02/24/0114:50	TRB006-04	TRB006CC	TRB001W	NA	02/24/01
LCD1W	TRB001WC	ND	1	NA	10	.558	02/26/0110:50	02/24/0114:50	TRB006-05	TRB006CC	TRB001W	NA	02/24/01
0026-079	B173-06	ND	.94	NA	9.4	.525	02/26/0111:05	02/24/0114:50	TRB006-08	TRB006CC	TRB001W	02/16/01	02/16/01
0026-080	B173-07	ND	.95	NA	9.5	.53	02/26/0111:10	02/24/0114:50	TRB006-09	TRB006CC	TRB001W	02/16/01	02/16/01
0026-082	B173-09	ND	.97	NA	9.7	.541	02/26/0111:15	02/24/0114:50	TRB006-10	TRB006CC	TRB001W	02/16/01	02/16/01

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/22/01 12:30
Sample ID	: 0026-075	Date Analyzed:	02/22/01 17:53
Lab Samp ID	: B173-02	Dilution Factor:	1
Lab File ID	: FB0417A	Matrix :	WATER
Ext Btch ID	: GAB005W	% Moisture :	NA
Calib. Ref.	: FB04009A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	1.4	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/22/01 12:30
Sample ID	: 0026-076	Date Analyzed:	02/22/01 17:59
Lab Samp ID	: B173-03	Dilution Factor:	1
Lab File ID	: FB0418A	Matrix :	WATER
Ext Btch ID	: GAB005W	% Moisture :	NA
Calib. Ref.	: FB04009A	Instrument ID :	GCTO10

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	1	1	.26
ETHYLENE	.98J	1	.18
METHANE	.76J	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/23/01 13:00
Sample ID:	0026-079	Date Analyzed:	02/23/01 14:26
Lab Samp ID:	B173-06R	Dilution Factor:	1
Lab File ID:	FB0504A	Matrix :	WATER
Ext Btch ID:	GAB006W	% Moisture :	NA
Calib. Ref.:	FB05002A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	.83J	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/16/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/16/01
Batch No.	: 01B173	Date Extracted:	02/22/01 12:30
Sample ID:	0026-080	Date Analyzed:	02/22/01 18:43
Lab Samp ID:	B173-07	Dilution Factor:	1
Lab File ID:	FB0421A	Matrix :	WATER
Ext Btch ID:	GAB005W	% Moisture :	NA
Calib. Ref.:	FB04020A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	.83J	1	.26

RL: Reporting Limit

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B173

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
0026-075	B173-02	5.9	1	NA	5	.551	02/26/0111:15	NA	TCB007W-10	TCB007W-5	TCB007W	02/16/01	02/16/01
0026-076	B173-03	9.4	1	NA	5	.551	02/26/0111:40	NA	TCB007W-11	TCB007W-5	TCB007W	02/16/01	02/16/01
0026-079	B173-06	9.8	1	NA	5	.551	02/26/0112:05	NA	TCB007W-12	TCB007W-5	TCB007W	02/16/01	02/16/01
0026-080	B173-07	9.3	1	NA	5	.551	02/26/0112:30	NA	TCB007W-13	TCB007W-5	TCB007W	02/16/01	02/16/01
MBLK1W	TCB007WB	ND	1	NA	5	.551	02/26/0110:30	NA	TCB007W-7	TCB007W-5	TCB007W	NA	NA
LCS1W	TCB007WL	21.4	1	NA	5	.551	02/26/0110:45	NA	TCB007W-8	TCB007W-5	TCB007W	NA	NA
LCD1W	TCB007WC	20.8	1	NA	5	.551	02/26/0111:00	NA	TCB007W-9	TCB007W-5	TCB007W	NA	NA

RL : Reporting Limit

2008

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B173

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICC002WB	ND	1	NA	.5	.101	03/03/0102:54	NA	AC02027A	AC02025A	ICC002W	NA	NA
LCS1W	ICC002WL	20.1	1	NA	.5	.101	03/03/0103:11	NA	AC02028A	AC02025A	ICC002W	NA	NA
LCD1W	ICC002WC	20.1	1	NA	.5	.101	03/03/0103:28	NA	AC02029A	AC02025A	ICC002W	NA	NA
0026-075	B173-02	226	25	NA	12.5	2.53	03/03/0108:01	NA	AC02045A	AC02037A	ICC002W	02/16/01	02/16/01
0026-076	B173-03	84.4	25	NA	12.5	2.53	03/03/0108:18	NA	AC02046A	AC02037A	ICC002W	02/16/01	02/16/01
0026-079	B173-06	360	25	NA	12.5	2.53	03/03/0108:35	NA	AC02047A	AC02037A	ICC002W	02/16/01	02/16/01
0026-080	B173-07	362	25	NA	12.5	2.53	03/03/0108:52	NA	AC02048A	AC02037A	ICC002W	02/16/01	02/16/01

RL : Reporting Limit

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B173

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICC004WB	ND	1	NA	.1	.0206	03/03/0114:50	NA	AC02069A	AC02067A	ICC004W	NA	NA
LCS1W	ICC004WL	3.99	1	NA	.1	.0206	03/03/0115:07	NA	AC02070A	AC02067A	ICC004W	NA	NA
LCD1W	ICC004WC	4.03	1	NA	.1	.0206	03/03/0115:24	NA	AC02071A	AC02067A	ICC004W	NA	NA
0026-075	B173-02	10.1	5	NA	.5	.103	03/03/0115:59	NA	AC02073A	AC02067A	ICC004W	02/16/01	02/16/01
0026-076	B173-03	7.16	5	NA	.5	.103	03/03/0116:16	NA	AC02074A	AC02067A	ICC004W	02/16/01	02/16/01
0026-079	B173-06	13	5	NA	.5	.103	03/03/0116:33	NA	AC02075A	AC02067A	ICC004W	02/16/01	02/16/01
0026-080	B173-07	14.3	5	NA	.5	.103	03/03/0116:50	NA	AC02076A	AC02067A	ICC004W	02/16/01	02/16/01

RL: Reporting Limit

8008

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B173

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICC001WB	ND	1	NA	.2	.047	03/02/0120:05	NA	AC02003A	AC02001A	ICC001W	NA	NA
LCS1W	ICC001WL	4.97	1	NA	.2	.047	03/02/0120:23	NA	AC02004A	AC02001A	ICC001W	NA	NA
LCD1W	ICC001WC	4.97	1	NA	.2	.047	03/02/0120:40	NA	AC02005A	AC02001A	ICC001W	NA	NA
0026-075	B173-02	5910	1000	NA	200	47	03/03/0101:46	NA	AC02023A	AC02013A	ICC001W	02/16/01	02/16/01
0026-076	B173-03	6020	1000	NA	200	47	03/03/0102:03	NA	AC02024A	AC02013A	ICC001W	02/16/01	02/16/01
0026-079	B173-06	5300	1000	NA	200	47	03/03/0107:44	NA	AC02044A	AC02037A	ICC001W	02/16/01	02/16/01
0026-080	B173-07	5830	1000	NA	200	47	03/03/0113:42	NA	AC02065A	AC02061A	ICC001W	02/16/01	02/16/01

RL : Reporting Limit

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B173

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALB007WB	ND	1	NA	5	.469	02/27/0111:00	NA	ALB007W-1	NA	ALB007W	NA	NA
LCS1W	ALB007WL	72.6	1	NA	5	.469	02/27/0111:15	NA	ALB007W-2	NA	ALB007W	NA	NA
LCD1W	ALB007WC	70.1	1	NA	5	.469	02/27/0111:30	NA	ALB007W-3	NA	ALB007W	NA	NA
0026-075	B173-02	27.5	1	NA	5	.469	02/27/0113:30	NA	ALB007W-11	NA	ALB007W	02/16/01	02/16/01
0026-076	B173-03	30.0	1	NA	5	.469	02/27/0113:45	NA	ALB007W-12	NA	ALB007W	02/16/01	02/16/01
0026-079	B173-06	65.1	1	NA	5	.469	02/27/0114:00	NA	ALB007W-13	NA	ALB007W	02/16/01	02/16/01
0026-080	B173-07	65.1	1	NA	5	.469	02/27/0114:15	NA	ALB007W-14	NA	ALB007W	02/16/01	02/16/01

RL: Reporting Limit

FOSTER WHE. . ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01373

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: UST Site 1	PURCHASE ORDER NO.: 020848 TASK 24
PROJECT LOCATION: Camp Pendleton	PROJECT NO.: 1990.026D
SAMPLER NAME: Tonia Turpin-Kendler	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: Lisa Bienkowski	AIRBILL NUMBER: Courier

LABORATORY NAME: EMAY

LABORATORY ID (FOR LABORATORY): 018153

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	8260B INCLUDING MTBE + OXYGENATES	TPH-P	EPA 300.0 NITRATE/SULFATE/CHLORIDE	RSK 175M ETHANE ETHENE METHANE	EPA 310.1 ALKALINITY	EPA 9060 (TOC)	EPA 6010B Na, K, Ca, Mg	EPA 418.1 (TRPH)			COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-065	2/15/01	1000	3	X		W	10 day	X											TRIP BLANK	-	-	TB
0026-066	2/15/01	1115	6	X		W	10 day	X	X										S1-MW4	-	-	REG
0026-067	2/15/01	1130	12	X		W	10 day	X	X	X	X	X	X						S1-MW8	-	-	REG
0026-068	2/15/01	1200	6	X		W	10 day	X	X										EQUIP BLANK	-	-	EB
0026-069	2/15/01	1400	6	X		W	10 day	X	X										S1-MW18	-	-	REG
0026-070	2/15/01	1515	13	X		W	10 day	X	Y	Y	X	X	Y	X					S1-MW17	-	-	REG
0026-071	2/15/01	1600	12	X		W	10 day	X	X	Y	X	X	X						S1-MW21	-	-	REG
0026-072	2/15/01	1630	11		X	W	10 day	X	X	X	X	X	X	~~X~~ (6)	X				S1-MW20	-	-	~~REG~~
0026-073	2/15/01	1640	14	X		W	10 day	X	X	X	X	X	X	~~X~~ (6)	X				S1-MW20	-	-	FD
~~0026-074~~	[signature] 2/15/01																					

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/15/01	[signature]
COMPANY: FWENC	TIME: 17/5	COMPANY: EMAY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: Quarter 1 GW Sampling

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/15/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/15/01
Batch No. : 01B153	Date Extracted: 02/22/01 22:41
Sample ID: 0026-065	Date Analyzed: 02/22/01 22:41
Lab Samp ID: B153-01	Dilution Factor: 1
Lab File ID: RBH321	Matrix : WATER
Ext Btch ID: VOB2941	% Moisture : NA
Calib. Ref.: RBH308	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	11	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	1.6	.5	.12
XYLENES	1.3J	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.57J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	.71	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	117	62-139
TOLUENE-D8	108	75-125
BROMOFLUOROBENZENE	113	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/15/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/15/01
Batch No.	: 01B153	Date Extracted:	02/22/01 23:20
Sample ID	: 0026-066	Date Analyzed:	02/22/01 23:20
Lab Samp ID	: B153-02	Dilution Factor:	1
Lab File ID	: RBH322	Matrix :	WATER
Ext Btch ID	: VOB2941	% Moisture :	NA
Calib. Ref.	: RBH308	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	.46J	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.37J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	114	62-139
TOLUENE-D8	112	75-125
BROMOFLUOROBENZENE	119	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/15/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/15/01
Batch No.	: 01B153	Date Extracted:	02/22/01 23:58
Sample ID:	0026-067	Date Analyzed:	02/22/01 23:58
Lab Samp ID:	B153-03	Dilution Factor:	1
Lab File ID:	RBH323	Matrix :	WATER
Ext Btch ID:	VOB2941	% Moisture :	NA
Calib. Ref.:	RBH308	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	1.1	.5	.21
1,2-DICHLOROPROPANE	.4J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	.37J	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	1.1	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	3.2J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	.41J	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	3.6J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	62-139
TOLUENE-D8	110	75-125
BROMOFLUOROBENZENE	111	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/15/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/15/01
Batch No. : 01B153	Date Extracted: 02/23/01 00:36
Sample ID: 0026-068	Date Analyzed: 02/23/01 00:36
Lab Samp ID: B153-04	Dilution Factor: 1
Lab File ID: RBH324	Matrix : WATER
Ext Btch ID: VOB2941	% Moisture : NA
Calib. Ref.: RBH308	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	.6J	5	.17
BROMOFORM	1.2J	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	.69J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	.98J	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	62-139
TOLUENE-D8	108	75-125
BROMOFLUOROBENZENE	111	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2007

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/15/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/15/01
Batch No.	: 01B153	Date Extracted:	02/23/01 01:14
Sample ID:	0026-069	Date Analyzed:	02/23/01 01:14
Lab Samp ID:	B153-05	Dilution Factor:	1
Lab File ID:	RBH325	Matrix	: WATER
Ext Btch ID:	VOB2941	% Moisture	: NA
Calib. Ref.:	RBH308	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.44J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	62-139
TOLUENE-D8	106	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2008

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/15/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/15/01
Batch No. : 01B153	Date Extracted: 02/26/01 16:48
Sample ID: 0026-070	Date Analyzed: 02/26/01 16:48
Lab Samp ID: B153-06	Dilution Factor: 1
Lab File ID: RBH367	Matrix : WATER
Ext Btch ID: VOB3441	% Moisture : NA
Calib. Ref.: RBH361	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	.48J	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1.2J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	119	62-139
TOLUENE-D8	122	75-125
BROMOFLUOROBENZENE	123	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/15/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/15/01
Batch No.	: 01B153	Date Extracted:	02/27/01 23:11
Sample ID:	0026-071	Date Analyzed:	02/27/01 23:11
Lab Samp ID:	B153-07R	Dilution Factor:	1
Lab File ID:	RBH397	Matrix :	WATER
Ext Btch ID:	VOB3541	% Moisture :	NA
Calib. Ref.:	RBH381	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	10	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	1.7J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	120	62-139
TOLUENE-D8	114	75-125
BROMOFLUOROBENZENE	124	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/15/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/15/01
Batch No.	: 018153	Date Extracted:	02/27/01 23:49
Sample ID:	0026-072	Date Analyzed:	02/27/01 23:49
Lab Samp ID:	B153-08R	Dilution Factor:	1
Lab File ID:	RBH398	Matrix :	WATER
Ext Btch ID:	V083541	% Moisture :	NA
Calib. Ref.:	RBH381	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	.36J	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	16	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	2.8	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	5.5	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	8.8	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	124	62-139
TOLUENE-D8	113	75-125
BROMOFLUOROBENZENE	123	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2012

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/15/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/15/01
Batch No.	: 018153	Date Extracted:	02/26/01 18:42
Sample ID:	0026-073	Date Analyzed:	02/26/01 18:42
Lab Samp ID:	B153-09	Dilution Factor:	1
Lab File ID:	RBH370	Matrix	: WATER
Ext Btch ID:	VOB3441	% Moisture	: NA
Calib. Ref.:	RBH361	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	11	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	1.3	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	3.7J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	4.9J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	125	62-139
TOLUENE-D8	117	75-125
BROMOFLUOROBENZENE	117	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

METHOD 5030B/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018153
Matrix : WATER
Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
18LK1W	VAB3939B	ND	95	1	NA	.05	.012	02/22/0114:17	02/22/0114:17	EB15003A	EB15002A	VAB3939	NA	02/22/01
LCS1W	VAB3939L	.56	118	1	NA	.05	.012	02/22/0114:50	02/22/0114:50	EB15004A	EB15002A	VAB3939	NA	02/22/01
LCD1W	VAB3939C	.594	117	1	NA	.05	.012	02/22/0115:24	02/22/0115:24	EB15005A	EB15002A	VAB3939	NA	02/22/01
0026-066	B153-02	ND	105	1	NA	.05	.012	02/22/0123:45	02/22/0123:45	EB15020A	EB15013A	VAB3939	02/15/01	02/15/01
0026-067	B153-03	ND	112	1	NA	.05	.012	02/23/0100:19	02/23/0100:19	EB15021A	EB15013A	VAB3939	02/15/01	02/15/01
0026-068	B153-04	ND	92	1	NA	.05	.012	02/23/0100:52	02/23/0100:52	EB15022A	EB15013A	VAB3939	02/15/01	02/15/01
0026-069	B153-05	ND	91	1	NA	.05	.012	02/23/0101:26	02/23/0101:26	EB15023A	EB15013A	VAB3939	02/15/01	02/15/01
0026-070	B153-06	ND	87	1	NA	.05	.012	02/23/0102:00	02/23/0102:00	EB15024A	EB15013A	VAB3939	02/15/01	02/15/01
0026-071	B153-07	ND	89	1	NA	.05	.012	02/23/0103:42	02/23/0103:42	EB15027A	EB15026A	VAB3939	02/15/01	02/15/01
0026-072	B153-08	ND	86	1	NA	.05	.012	02/23/0104:16	02/23/0104:16	EB15028A	EB15026A	VAB3939	02/15/01	02/15/01
0026-073	B153-09	ND	89	1	NA	.05	.012	02/23/0104:50	02/23/0104:50	EB15029A	EB15026A	VAB3939	02/15/01	02/15/01

RL : Reporting Limit

400

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B153

Matrix : WATER
Instrument ID : I18

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB001WB	ND	1	NA	10	.558	02/26/0110:40	02/24/0114:50	TRB006-03	TRB006CC	TRB001W	NA	02/24/01
LCS1W	TRB001WL	6.66	1	NA	10	.558	02/26/0110:45	02/24/0114:50	TRB006-04	TRB006CC	TRB001W	NA	02/24/01
LCD1W	TRB001WC	6.66	1	NA	10	.558	02/26/0110:50	02/24/0114:50	TRB006-05	TRB006CC	TRB001W	NA	02/24/01
0026-072	B153-08	ND	.99	NA	9.9	.552	02/26/0110:55	02/24/0114:50	TRB006-06	TRB006CC	TRB001W	02/15/01	02/15/01
0026-073	B153-09	ND	.99	NA	9.9	.552	02/26/0111:00	02/24/0114:50	TRB006-07	TRB006CC	TRB001W	02/15/01	02/15/01

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/15/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/15/01
Batch No. : 01B153	Date Extracted: 02/20/01 15:15
Sample ID: 0026-067	Date Analyzed: 02/20/01 19:31
Lab Samp ID: B153-03	Dilution Factor: 1
Lab File ID: FB0315A	Matrix : WATER
Ext Btch ID: GAB004W	% Moisture : NA
Calib. Ref.: FB0313A	Instrument ID : GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	.76J	1	.26

RL: Reporting Limit

6005

~~4005~~

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/15/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/15/01
Batch No. : 01B153	Date Extracted: 02/20/01 15:15
Sample ID: 0026-070	Date Analyzed: 02/20/01 19:38
Lab Samp ID: B153-06	Dilution Factor: 1
Lab File ID: FB0316A	Matrix : WATER
Ext Btch ID: GAB004W	% Moisture : NA
Calib. Ref.: FB0313A	Instrument ID : GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	ND	1	.26

RL: Reporting Limit

6004
~~4004~~

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/15/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/15/01
Batch No. : 018153	Date Extracted: 02/20/01 15:15
Sample ID: 0026-071	Date Analyzed: 02/20/01 19:49
Lab Samp ID: B153-07	Dilution Factor: 1
Lab File ID: FB0317A	Matrix : WATER
Ext Btch ID: GAB004W	% Moisture : NA
Calib. Ref.: FB0313A	Instrument ID : GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	.29J	1	.26
ETHYLENE	ND	1	.18
METHANE	ND	1	.26

RL: Reporting Limit

6006
~~4006~~

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/15/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/15/01
Batch No.	: 01B153	Date Extracted:	02/20/01 15:15
Sample ID:	0026-072	Date Analyzed:	02/20/01 19:56
Lab Samp ID:	B153-08	Dilution Factor:	1
Lab File ID:	FB0318A	Matrix :	WATER
Ext Btch ID:	GAB004W	% Moisture :	NA
Calib. Ref.:	FB0313A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	.69J	1	.18
METHANE	ND	1	.26

RL: Reporting Limit

600
~~4007~~

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/15/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/15/01
Batch No. : 01B153	Date Extracted: 02/20/01 15:15
Sample ID: 0026-073	Date Analyzed: 02/20/01 20:04
Lab Samp ID: B153-09	Dilution Factor: 1
Lab File ID: FB0319A	Matrix : WATER
Ext Btch ID: GAB004W	% Moisture : NA
Calib. Ref.: FB0313A	Instrument ID : GCTO10

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	ND	1	.26

RL: Reporting Limit

600
~~400~~

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B153

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB022WB	ND	1	NA	.5	.101	02/16/0120:40	NA	AB17014A	AB17012A	ICB022W	NA	NA
LCS1W	ICB022WL	19.8	1	NA	.5	.101	02/16/0120:57	NA	AB17015A	AB17012A	ICB022W	NA	NA
LCD1W	ICB022WC	20	1	NA	.5	.101	02/16/0121:14	NA	AB17016A	AB17012A	ICB022W	NA	NA
0026-067	B153-03	737	25	NA	12.5	2.53	02/17/0104:54	NA	AB17043A	AB17036A	ICB022W	02/15/01	02/15/01
0026-070	B153-06	278	25	NA	12.5	2.53	02/17/0105:11	NA	AB17044A	AB17036A	ICB022W	02/15/01	02/15/01
0026-071	B153-07	136	25	NA	12.5	2.53	02/17/0105:28	NA	AB17045A	AB17036A	ICB022W	02/15/01	02/15/01
0026-072	B153-08	245	25	NA	12.5	2.53	02/17/0105:45	NA	AB17046A	AB17036A	ICB022W	02/15/01	02/15/01
0026-073	B153-09	242	25	NA	12.5	2.53	02/17/0106:02	NA	AB17047A	AB17036A	ICB022W	02/15/01	02/15/01

RL : Reporting Limit

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B153

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB023WB	ND	1	NA	.2	.047	02/17/0106:53	NA	AB17050A	AB17048A	ICB023W	NA	NA
LCS1W	ICB023WL	5.71	1	NA	.2	.047	02/17/0107:10	NA	AB17051A	AB17048A	ICB023W	NA	NA
LCD1W	ICB023WC	5.71	1	NA	.2	.047	02/17/0107:27	NA	AB17052A	AB17048A	ICB023W	NA	NA
0026-067	B153-03	5190	1000	NA	200	47	02/17/0107:44	NA	AB17053A	AB17048A	ICB023W	02/15/01	02/15/01
0026-070	B153-06	1670	1000	NA	200	47	02/17/0108:01	NA	AB17054A	AB17048A	ICB023W	02/15/01	02/15/01
0026-071	B153-07	4910	1000	NA	200	47	02/17/0108:18	NA	AB17055A	AB17048A	ICB023W	02/15/01	02/15/01
0026-072	B153-08	5150	1000	NA	200	47	02/17/0108:35	NA	AB17056A	AB17048A	ICB023W	02/15/01	02/15/01
0026-073	B153-09	4820	1000	NA	200	47	02/17/0108:52	NA	AB17057A	AB17048A	ICB023W	02/15/01	02/15/01
0026-073MS	B153-09M	7500	1000	NA	200	47	02/17/0109:09	NA	AB17058A	AB17048A	ICB023W	02/15/01	02/15/01
0026-073MSD	B153-09MS	7510	1000	NA	200	47	02/17/0109:26	NA	AB17059A	AB17048A	ICB023W	02/15/01	02/15/01

RL : Reporting Limit

0000

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B153

Matrix : WATER
Instrument ID : T1006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB022WB	ND	1	NA	.1	.0206	02/16/0120:40	NA	AB17014A	AB17012A	ICB022W	NA	NA
LCS1W	ICB022WL	3.98	1	NA	.1	.0206	02/16/0120:57	NA	AB17015A	AB17012A	ICB022W	NA	NA
LCD1W	ICB022WC	4.00	1	NA	.1	.0206	02/16/0121:14	NA	AB17016A	AB17012A	ICB022W	NA	NA
0026-067	B153-03	19.3	25	NA	2.5	.515	02/17/0104:54	NA	AB17043A	AB17036A	ICB022W	02/15/01	02/15/01
0026-070	B153-06	39.6	25	NA	2.5	.515	02/17/0105:11	NA	AB17044A	AB17036A	ICB022W	02/15/01	02/15/01
0026-071	B153-07	8.66	25	NA	2.5	.515	02/17/0105:28	NA	AB17045A	AB17036A	ICB022W	02/15/01	02/15/01
0026-072	B153-08	10.6	25	NA	2.5	.515	02/17/0105:45	NA	AB17046A	AB17036A	ICB022W	02/15/01	02/15/01
0026-073	B153-09	10.4	25	NA	2.5	.515	02/17/0106:02	NA	AB17047A	AB17036A	ICB022W	02/15/01	02/15/01

RL: Reporting Limit

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B153

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALB007WB	ND	1	NA	5	.469	02/27/0111:00	NA	ALB007W-1	NA	ALB007W	NA	NA
LCS1W	ALB007WL	72.6	1	NA	5	.469	02/27/0111:15	NA	ALB007W-2	NA	ALB007W	NA	NA
LCD1W	ALB007WC	70.1	1	NA	5	.469	02/27/0111:30	NA	ALB007W-3	NA	ALB007W	NA	NA
0026-067	B153-03	50.1	1	NA	5	.469	02/7/01 11:45	NA	ALB007W-4	NA	ALB007W	02/15/01	02/15/01
0026-070	B153-06	105	1	NA	5	.469	02/27/0112:00	NA	ALB007W-5	NA	ALB007W	02/15/01	02/15/01
0026-071	B153-07	105	1	NA	5	.469	02/27/0112:15	NA	ALB007W-6	NA	ALB007W	02/15/01	02/15/01
0026-072	B153-08	50.1	1	NA	5	.469	02/27/0112:30	NA	ALB007W-7	NA	ALB007W	02/15/01	02/15/01
0026-073	B153-09	50.1	1	NA	5	.469	02/27/0112:45	NA	ALB007W-8	NA	ALB007W	02/15/01	02/15/01
0026-073DUP	B153-09D	47.5	1	NA	5	.469	02/27/0113:00	NA	ALB007W-9	NA	ALB007W	02/15/01	02/15/01
0026-073MS	B153-09M	153	1	NA	5	.469	02/27/0113:15	NA	ALB007W-10	NA	ALB007W	02/15/01	02/15/01

RL: Reporting Limit

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 018153

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
0026-067	B153-03	ND	1	NA	5	.551	02/22/0111:30	NA	TCB006W-11	TCB006W-5	TCB006W	02/15/01	02/15/01
0026-070	B153-06	7.6	1	NA	5	.551	02/22/0111:55	NA	TCB006W-12	TCB006W-5	TCB006W	02/15/01	02/15/01
0026-072	B153-08	ND	1	NA	5	.551	02/22/0112:20	NA	TCB006W-13	TCB006W-5	TCB006W	02/15/01	02/15/01
0026-073	B153-09	7.2	1	NA	5	.551	02/22/0112:45	NA	TCB006W-14	TCB006W-5	TCB006W	02/15/01	02/15/01
MBLK1W	TCB006WB	ND	1	NA	5	.551	02/22/0110:05	NA	TCB006W-7	TCB006W-5	TCB006W	NA	NA
LCS1W	TCB006WL	19.9	1	NA	5	.551	02/22/0110:20	NA	TCB006W-8	TCB006W-5	TCB006W	NA	NA
LCD1W	TCB006WC	19.7	1	NA	5	.551	02/22/0110:35	NA	TCB006W-9	TCB006W-5	TCB006W	NA	NA

RL : Reporting Limit

FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01370

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: VST SI	PURCHASE ORDER NO.: 020848 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 15910.026D
SAMPLER NAME: TANIA TURPIN-KENNEDY	SAMPLER SIGNATURE:
PROJECT CONTACT: LISA BIENKOWSKI	AIRBILL NUMBER: COURIER

LABORATORY NAME: E MAY

LABORATORY ID (FOR LABORATORY): 01B200

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	TPH-P/D/MO	TPH-E w/ SILICA GEL	EPA 8260 HVOCs (MBTEX + CHLORINATED HYDROCARBONS)	EPA 418.1 (TRPH)	EPA 300.0 NITRATE, CHLORIDE, SULFATE	PERCHLORATE	EPA 6010/7000 (METALS)	EPA 8081 (PESTICIDES)	EPA 8270 (SVOCs)	EPA 8310 (PAHs)	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-083	3/20/01	1040	8	X		W	10 day	X	X	X	X								SI-MW13	-	-	RE
0026-086	3/20/01	1315	15	X		W	10 day	X	X	X	X	X	X	X	X	X	X		SI-MW14	-	-	RE
0026-090	3/20/01	1550	~~5~~ 7	X		W	10 Day	X	X	X								X	EQUIP BLANK	-	-	EB

RELINQUISHED BY (Signature):	DATE: 3/21/01	RECEIVED BY (Signature):	
COMPANY: FWENC	TIME: 0840	COMPANY: FWENC	
RELINQUISHED BY (Signature):	DATE: 3/21/01	RECEIVED BY (Signature):	
COMPANY: FWENC	TIME: 1130	COMPANY: EMAX	
RELINQUISHED BY (Signature):	DATE:	RECEIVED BY (Signature):	
COMPANY:	TIME:	COMPANY:	

LABORATORY INSTRUCTIONS/COMMENTS:

COMPOSITE DESCRIPTION:

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: °C SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
QUARTER 1
GW SAMPLING

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CT026	Date Received: 02/21/01
Batch No. : 01B200	Date Extracted: 03/03/01 23:23
Sample ID: 0026-083	Date Analyzed: 03/03/01 23:23
Lab Samp ID: B200-01	Dilution Factor: 1
Lab File ID: RCH096	Matrix : WATER
Ext Btch ID: VOC0941	% Moisture : NA
Calib. Ref.: RCH082	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	1.3J	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	8.9	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	.55J	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	1.8J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	2.2	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	1.1J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	.76J	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	40	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	1.6J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	62-139
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	105	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CT026	Date Received: 02/21/01
Batch No. : 01B200	Date Extracted: 03/04/01 00:01
Sample ID: 0026-086	Date Analyzed: 03/04/01 00:01
Lab Samp ID: B200-02	Dilution Factor: 1
Lab File ID: RCH097	Matrix : WATER
Ext Btch ID: VOC0941	% Moisture : NA
Calib. Ref.: RCH082	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	12J	50	2.7
BENZENE	.48J	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	6.2	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.38J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	1J	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	22	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	114	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	100	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CT026	Date Received: 02/21/01
Batch No. : 01B200	Date Extracted: 03/05/01 15:51
Sample ID: 0026-090	Date Analyzed: 03/05/01 15:51
Lab Samp ID: B200-03	Dilution Factor: 1
Lab File ID: RCH153	Matrix : WATER
Ext Btch ID: VOC1541	% Moisture : NA
Calib. Ref.: RCH144	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	11J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	.54J	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	.57J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.57J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1.0J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	111	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2006

METHOD 5030B/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B200

Matrix : WATER
Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VAB4339B	ND	98	1	NA	.05	.012	02/26/0108:10	02/26/0108:10	EB18032A	EB18025A	VAB4339	NA	02/26/01
LCS1W	VAB4339L	.533	120	1	NA	.05	.012	02/26/0107:04	02/26/0107:04	EB18030A	EB18025A	VAB4339	NA	02/26/01
LCD1W	VAB4339C	.573	118	1	NA	.05	.012	02/26/0107:37	02/26/0107:37	EB18031A	EB18025A	VAB4339	NA	02/26/01
0026-083	B200-01	.21	112	1	NA	.05	.012	02/26/0122:09	02/26/0122:09	EB18056A	EB18047A	VAB4339	02/20/01	02/21/01
0026-086	B200-02	.14	147*	1	NA	.05	.012	02/26/0122:42	02/26/0122:42	EB18057A	EB18047A	VAB4339	02/20/01	02/21/01
0026-090	B200-03	ND	100	1	NA	.05	.012	02/27/0100:23	02/27/0100:23	EB18060A	EB18058A	VAB4339	02/20/01	02/21/01

RL : Reporting Limit
* : Out of QC limit due to matrix interference

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018200

Matrix : WATER
Instrument ID : GCTO50

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB042WB	ND	91	1	NA	.1	.067	02/28/0106:21	02/27/0112:30	TB06021A	TB06014A	DSB042W	NA	02/27/01
LCS1W	DSB042WL	4.66	101	1	NA	.1	.067	02/28/0107:10	02/27/0112:30	TB06022A	TB06014A	DSB042W	NA	02/27/01
LCD1W	DSB042WC	4.8	103	1	NA	.1	.067	02/28/0107:59	02/27/0112:30	TB06023A	TB06014A	DSB042W	NA	02/27/01
0026-083*	B200-01	.59	103	.95	NA	.095	.0637	02/28/0115:14	02/27/0112:30	TB06032A	TB06026A	DSB042W	02/20/01	02/21/01
0026-086*	B200-02	5.5	126	.95	NA	.095	.0637	02/28/0116:03	02/27/0112:30	TB06033A	TB06026A	DSB042W	02/20/01	02/21/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

* : Presence of Diesel like fuel pattern, quanitified as Diesel

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B200

Matrix : WATER
Instrument ID : 118

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB001WB	ND	1	NA	10	.558	02/26/0110:40	02/24/0114:50	TRB006-03	TRB006CC	TRB001W	NA	02/24/01
LCS1W	TRB001WL	6.66	1	NA	10	.558	02/26/0110:45	02/24/0114:50	TRB006-04	TRB006CC	TRB001W	NA	02/24/01
LCD1W	TRB001WC	6.66	1	NA	10	.558	02/26/0110:50	02/24/0114:50	TRB006-05	TRB006CC	TRB001W	NA	02/24/01
0026-083	B200-01	ND	.94	NA	9.4	.525	02/26/0112:00	02/24/0114:50	TRB006-19	TRB007CC	TRB001W	02/20/01	02/21/01
0026-086	B200-02	4.1J	1	NA	10	.558	02/26/0112:05	02/24/0114:50	TRB006-20	TRB007CC	TRB001W	02/20/01	02/21/01

RL: Reporting Limit

SW 3520C/8310
POLYNUCLEAR AROMATIC HYDROCARBONS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B200	Date Extracted: 02/23/01 17:45
Sample ID: 0026-090	Date Analyzed: 02/23/01 22:10
Lab Samp ID: B200-03	Dilution Factor: .97
Lab File ID: RB23018A	Matrix : WATER
Ext Btch ID: PAB011W	% Moisture : NA
Calib. Ref.: RB23014A	Instrument ID : LCTO02

PARAMETERS	RESULTS (ug/L)		RL (ug/L)	MDL (ug/L)	
NAPHTHALENE	(ND)	ND	9.7	.36	.35
ACENAPHTHYLENE	(ND)	NA	9.7	1.5	NA
ACENAPHTHENE	(ND)	ND	9.7	.35	.45
FLUORENE	(ND)	ND	9.7	.11	.11
PHENANTHRENE	(ND)	ND	9.7	.05	.099
ANTHRACENE	(ND)	ND	9.7	.05	.048
FLUORANTHENE	(ND)	ND	9.7	.11	.27
PYRENE	(ND)	ND	9.7	.06	.053
BENZO(A)ANTHRACENE	(ND)	ND	.097	.053	.06
CHRYSENE	(ND)	ND	9.7	.052	.068
BENZO(B)FLUORANTHENE	(ND)	ND	.19	.09	.084
BENZO(K)FLUORANTHENE	(ND)	ND	9.7	.048	.05
BENZO(A)PYRENE	(ND)	ND	.19	.053	.08
DIBENZO(A,H)ANTHRACENE	(ND)	ND	9.7	.13	.098
BENZO(G,H,I)PERYLENE	(ND)	ND	9.7	.085	.19
INDENO(1,2,3-CD)PYRENE	(ND)	ND	9.7	.038	.078

SURROGATE PARAMETERS	% RECOVERY		QC LIMIT
P-TERPHENYL-D14	(101)	95	25-157

RL: Reporting Limit
Left of | is related to UV detector; Right of | related to FL detector
( ) included the reported data

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B200	Date Extracted: 02/24/01 10:40
Sample ID: 0026-086	Date Analyzed: 02/24/01 12:07
Lab Samp ID: B200-02	Dilution Factor: 1
Lab File ID: FB0606A	Matrix : WATER
Ext Btch ID: GAB007W	% Moisture : NA
Calib. Ref.: FB0602A	Instrument ID : GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	86E	1	.26

RL: Reporting Limit
E : Exceeding calibration range.

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/21/01
Batch No.	: D1B200	Date Extracted:	02/24/01 10:40
Sample ID	: 0026-086DL	Date Analyzed:	02/24/01 12:24
Lab Samp ID	: B200-02T	Dilution Factor:	10
Lab File ID	: FB0607A	Matrix :	WATER
Ext Btch ID	: GAB007W	% Moisture :	NA
Calib. Ref.	: FB0602A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	10	2.6
ETHYLENE	ND	10	1.8
METHANE	96	10	2.6

RL: Reporting Limit

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B200

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
0026-086	B200-02	185	1	NA	5	.469	03/03/0111:30	NA	ALC002W-16	NA	ALC002W	02/20/01	02/21/01
MBLK1W	ALC002WB	ND	1	NA	5	.469	03/03/01 9:00	NA	ALC002W-1	NA	ALC002W	NA	NA
LCS1W	ALC002WL	72.5	1	NA	5	.469	03/03/01 9:10	NA	ALC002W-2	NA	ALC002W	NA	NA
LCD1W	ALC002WC	75.0	1	NA	5	.469	03/03/01 9:20	NA	ALC002W-3	NA	ALC002W	NA	NA

RL: Reporting Limit

8028

METHOD 300.0
NITRATE/NITRITE-N

ent : FOSTER WHEELER
ject : CAMP PENDLETON, CT026
ch No. : 01B200

Matrix : WATER
Instrument ID : TI006

PLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
LK1W	ICB029WB	ND	1	NA	.1	.0206	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
S1W	ICB029WL	3.98	1	NA	.1	.0206	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
D1W	ICB029WC	3.93	1	NA	.1	.0206	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
26-086	B200-02	8.71	50	NA	5	1.03	02/22/0107:56	NA	AB21053A	AB21051A	ICB029W	02/20/01	02/21/01

: Reporting Limit

METHOD 300.0
SULFATE

ent : FOSTER WHEELER
)ject : CAMP PENDLETON, CTO26
:ch No. : 01B200

Matrix : WATER
Instrument ID : TI006

1PLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
LK1W	ICB029WB	ND	1	NA	.5	.101	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
S1W	ICB029WL	20.9	1	NA	.5	.101	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
)1W	ICB029WC	20.7	1	NA	.5	.101	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
26-086	B200-02	404	50	NA	25	5.05	02/22/0107:56	NA	AB21053A	AB21051A	ICB029W	02/20/01	02/21/01

: Reporting Limit

8008

METHOD 300.0
CHLORIDE-Cl

ent : FOSTER WHEELER
ject : CAMP PENDLETON, CTO26
ch No. : 01B200

Matrix : WATER
Instrument ID : TI006

MPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
LK1W	ICB029WB	ND	1	NA	.2	.047	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
S1W	ICB029WL	5.22	1	NA	.2	.047	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
D1W	ICB029WC	5.14	1	NA	.2	.047	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
26-086	B200-02	4020	1000	NA	200	47	02/22/0103:24	NA	AB21037A	AB21027A	ICB029W	02/20/01	02/21/01

: Reporting Limit

METHOD 9060
TOC

ent : FOSTER WHEELER
ject : CAMP PENDLETON, CTO26
ch No. : 018200

Matrix : WATER
Instrument ID :

PLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
K1W	TCB008WB	ND	1	NA	5	.551	02/28/0109:30	NA	TCB008W-7	TCB008W-5	TCB008W	NA	NA
1W	TCB008WL	22.9	1	NA	5	.551	02/28/0110:00	NA	TCB008W-8	TCB008W-5	TCB008W	NA	NA
1W	TCB008WC	19.5	1	NA	5	.551	02/28/0110:15	NA	TCB008W-9	TCB008W-5	TCB008W	NA	NA
26-086	B200-02	20.9	1	NA	5	.551	02/028/010:30	NA	TCB008W-10	TCB008W-5	TCB008W	02/20/01	02/21/01

: Reporting Limit

FOSTER WHEEL ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01366

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: UST SITE 5/8/9/17	PURCHASE ORDER NO.: 020848 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.026 D
SAMPLER NAME: TANIA TURPIN-KEASLER	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: LISA BIENKOWSKI	AIRBILL NUMBER: COURIER

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 01B198

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	TPH EXTRACTABLE	EPA 8260B INCLUDING NITRATE & OXYGENATES	EPA 418.1 (TRPH)	EPA 300.0 NITRATE SURFACE CHLORIDE	RSK 175M ETHENE ETHANE METHANE	EPA 310.1 (ALKALINITY)	EPA 9060 (TOC)	EPA 8310 (PAH, OILY)			COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-088	2/20/01	1630	11	X		W	10 day	X	X	X	X	X	X	X					5/8/9/17 MW50	-	-	REG
0026-089	2/20/01	1700	12	X		W	10 day	X	X	X	X	X	X	X	X			~~POTENTIAL~~ SLIGHT FREE PRODUCT PRESENT	5/8/9/17 MW41	-	-	REG

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/21/01	[signature]
COMPANY: FOWENC	TIME: 0830	COMPANY: [signature]
RELINQUISHED BY (Signature): [signature]	DATE: 2/21/01	RECEIVED BY (Signature): [signature]
COMPANY: [signature]	TIME: 1130	COMPANY: EMAX
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS: PLEASE BE AWARE THAT THERE WAS A SMALL AMOUNT OF DIESEL PRESENT.

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: QUARTER 1 GW SAMPLING

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B198	Date Extracted:	03/05/01 13:57
Sample ID	: 0026-088	Date Analyzed:	03/05/01 13:57
Lab Samp ID	: B198-01	Dilution Factor:	2.5
Lab File ID	: RCH150	Matrix :	WATER
Ext Btch ID	: VOC1541	% Moisture :	NA
Calib. Ref.	: RCH144	Instrument ID :	T-04

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	12	1.1
1,1,2,2-TETRACHLOROETHANE	ND	2.5	.48
1,1,2-TRICHLOROETHANE	ND	12	.43
1,1-DICHLOROETHANE	6.4J	12	.4
1,1-DICHLOROETHENE	.82J	12	.25
1,2-DICHLOROETHANE	29	1.2	.52
1,2-DICHLOROPROPANE	2.5J	12	.35
METHYL ETHYL KETONE	ND	120	5.3
2-HEXANONE	ND	120	2.5
4-METHYL-2-PENTANONE (MIBK)	ND	120	3.1
ACETONE	ND	120	6.8
BENZENE	12	1.2	.37
BROMODICHLOROMETHANE	ND	12	.44
BROMOFORM	ND	12	.31
BROMOMETHANE	ND	12	.46
CARBON TETRACHLORIDE	ND	1.2	.23
CHLOROBENZENE	2.5J	12	.35
CHLOROETHANE	ND	12	1.1
CHLOROFORM	4.3J	12	1
CHLOROMETHANE	ND	12	.6
CIS-1,2-DICHLOROETHENE	ND	12	.4
CIS-1,3-DICHLOROPROPENE	ND	1.2	.53
DIBROMOCHLOROMETHANE	ND	12	.35
ETHYLBENZENE	.91J	1.2	.3
XYLENES	28	3.7	.68
MTBE	ND	2.5	.54
METHYLENE CHLORIDE	4J	12	.54
STYRENE	ND	12	.38
TETRACHLOROETHYLENE	2.3J	12	.34
TOLUENE	1.4	1.2	.35
TRANS-1,2-DICHLOROETHENE	ND	12	.46
TRANS-1,3-DICHLOROPROPENE	ND	1.2	.57
TRICHLOROETHENE	190E	12	.39
VINYL ACETATE	ND	120	.8
VINYL CHLORIDE	ND	1.2	.51
TERT-BUTYL ALCOHOL	ND	50	5.8
DIISOPROPYL ETHER	16	12	.97
ETHYL TERT-BUTYL ETHER	ND	12	2.2
TERT-AMYL METHYL ETHER	ND	12	3.1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	62-139
TOLUENE-D8	101	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B198	Date Extracted: 03/03/01 19:35
Sample ID: 0026-088DL	Date Analyzed: 03/03/01 19:35
Lab Samp ID: B198-01T	Dilution Factor: 10
Lab File ID: RCH090	Matrix : WATER
Ext Btch ID: VOC0941	% Moisture : NA
Calib. Ref.: RCH082	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	4.2
1,1,2,2-TETRACHLOROETHANE	ND	10	1.9
1,1,2-TRICHLOROETHANE	ND	50	1.7
1,1-DICHLOROETHANE	5.8J	50	1.6
1,1-DICHLOROETHENE	ND	50	1
1,2-DICHLOROETHANE	28	5	2.1
1,2-DICHLOROPROPANE	ND	50	1.4
METHYL ETHYL KETONE	ND	500	21
2-HEXANONE	ND	500	10
4-METHYL-2-PENTANONE (MIBK)	ND	500	12
ACETONE	ND	500	27
BENZENE	13	5	1.5
BROMODICHLOROMETHANE	ND	50	1.7
BROMOFORM	ND	50	1.2
BROMOMETHANE	ND	50	1.8
CARBON TETRACHLORIDE	ND	5	.91
CHLOROBENZENE	ND	50	1.4
CHLOROETHANE	ND	50	4.3
CHLOROFORM	4.4J	50	4.1
CHLOROMETHANE	ND	50	2.4
CIS-1,2-DICHLOROETHENE	ND	50	1.6
CIS-1,3-DICHLOROPROPENE	ND	5	2.1
DIBROMOCHLOROMETHANE	ND	50	1.4
ETHYLBENZENE	ND	5	1.2
XYLENES	25	15	2.7
MTBE	ND	10	2.2
METHYLENE CHLORIDE	4.7J	50	2.2
STYRENE	ND	50	1.5
TETRACHLOROETHYLENE	2.7J	50	1.4
TOLUENE	ND	5	1.4
TRANS-1,2-DICHLOROETHENE	ND	50	1.8
TRANS-1,3-DICHLOROPROPENE	ND	5	2.3
TRICHLOROETHENE	200	50	1.5
VINYL ACETATE	ND	500	3.2
VINYL CHLORIDE	ND	5	2
TERT-BUTYL ALCOHOL	ND	200	23
DIISOPROPYL ETHER	14J	50	3.9
ETHYL TERT-BUTYL ETHER	ND	50	8.8
TERT-AMYL METHYL ETHER	ND	50	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	105	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2005

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/21/01
Batch No.	: 01B198	Date Extracted:	03/05/01 16:28
Sample ID:	0026-089	Date Analyzed:	03/05/01 16:28
Lab Samp ID:	B198-02	Dilution Factor:	1
Lab File ID:	RCH154	Matrix	: WATER
Ext Btch ID:	VOC1541	% Moisture	: NA
Calib. Ref.:	RCH144	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	1.2J	5	.16
1,1-DICHLOROETHENE	.31J	5	.1
1,2-DICHLOROETHANE	4.4	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	14J	50	2.7
BENZENE	4.3	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	1.1J	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	2.5J	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	8.6	.5	.12
XYLENES	2.1	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.56J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	1.2J	5	.14
TOLUENE	1.6	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	58E	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	1.9J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	113	62-139
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 018198	Date Extracted:	03/03/01 20:13
Sample ID:	0026-089DL	Date Analyzed:	03/03/01 20:13
Lab Samp ID:	B198-02T	Dilution Factor:	5
Lab File ID:	RCH091	Matrix :	WATER
Ext Btch ID:	VOC0941	% Moisture :	NA
Calib. Ref.:	RCH082	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	25	2.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.96
1,1,2-TRICHLOROETHANE	ND	25	.86
1,1-DICHLOROETHANE	ND	25	.79
1,1-DICHLOROETHENE	ND	25	.51
1,2-DICHLOROETHANE	4.2	2.5	1
1,2-DICHLOROPROPANE	ND	25	.71
METHYL ETHYL KETONE	ND	250	11
2-HEXANONE	ND	250	5.1
4-METHYL-2-PENTANONE (MIBK)	ND	250	6.1
ACETONE	ND	250	14
BENZENE	3.6	2.5	.74
BROMODICHLOROMETHANE	ND	25	.87
BROMOFORM	ND	25	.62
BROMOMETHANE	ND	25	.92
CARBON TETRACHLORIDE	ND	2.5	.45
CHLOROBENZENE	ND	25	.7
CHLOROETHANE	ND	25	2.2
CHLOROFORM	ND	25	2
CHLOROMETHANE	ND	25	1.2
CIS-1,2-DICHLOROETHENE	2.2J	25	.81
CIS-1,3-DICHLOROPROPENE	ND	2.5	1.1
DIBROMOCHLOROMETHANE	ND	25	.71
ETHYLBENZENE	6.6	2.5	.6
XYLENES	1.9J	7.5	1.4
MTBE	ND	5	1.1
METHYLENE CHLORIDE	1.5J	25	1.1
STYRENE	ND	25	.77
TETRACHLOROETHYLENE	ND	25	.68
TOLUENE	1.4J	2.5	.69
TRANS-1,2-DICHLOROETHENE	ND	25	.92
TRANS-1,3-DICHLOROPROPENE	ND	2.5	1.1
TRICHLOROETHENE	48	25	.78
VINYL ACETATE	ND	250	1.6
VINYL CHLORIDE	ND	2.5	1
TERT-BUTYL ALCOHOL	ND	100	12
DIISOPROPYL ETHER	ND	25	1.9
ETHYL TERT-BUTYL ETHER	ND	25	4.4
TERT-AMYL METHYL ETHER	ND	25	6.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	98	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2007

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018198

Matrix : WATER
Instrument ID : GCTO50

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB042WB	ND	91	1	NA	.1	.067	02/28/0106:21	02/27/0112:30	TB06021A	TB06014A	DSB042W	NA	02/27/01
LCS1W	DSB042WL	4.66	101	1	NA	.1	.067	02/28/0107:10	02/27/0112:30	TB06022A	TB06014A	DSB042W	NA	02/27/01
LCD1W	DSB042WC	4.8	103	1	NA	.1	.067	02/28/0107:59	02/27/0112:30	TB06023A	TB06014A	DSB042W	NA	02/27/01
0026-088	B198-01	2.5	95	.96	NA	.096	.0643	02/28/0109:36	02/27/0112:30	TB06025A	TB06014A	DSB042W	02/20/01	02/21/01
0026-089	B198-02	12	109	.96	NA	.096	.0643	02/28/0112:01	02/27/0112:30	TB06028A	TB06026A	DSB042W	02/20/01	02/21/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

5004

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B198

Matrix : WATER
Instrument ID : I18

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB001WB	ND	1	NA	10	.558	02/26/0110:40	02/24/0114:50	TRB006-03	TRB006CC	TRB001W	NA	02/24/01
LCS1W	TRB001WL	6.66	1	NA	10	.558	02/26/0110:45	02/24/0114:50	TRB006-04	TRB006CC	TRB001W	NA	02/24/01
LCD1W	TRB001WC	6.66	1	NA	10	.558	02/26/0110:50	02/24/0114:50	TRB006-05	TRB006CC	TRB001W	NA	02/24/01
0026-088	B198-01	ND	1	NA	10	.558	02/26/0111:20	02/24/0114:50	TRB006-11	TRB006CC	TRB001W	02/20/01	02/21/01
0026-089	B198-02	36J	9.7	NA	97	5.41	02/26/0111:40	02/24/0114:50	TRB006-15	TRB006CC	TRB001W	02/20/01	02/21/01

RL: Reporting Limit

SW 3520C/8310
POLYNUCLEAR AROMATIC HYDROCARBONS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B198	Date Extracted: 02/23/01 17:45
Sample ID: 0026-089	Date Analyzed: 02/23/01 22:53
Lab Samp ID: B198-02	Dilution Factor: .95
Lab File ID: RB23020A	Matrix : WATER
Ext Btch ID: PAB011W	% Moisture : NA
Calib. Ref.: RB23014A	Instrument ID : LCT002

PARAMETERS	RESULTS (ug/L)		RL (ug/L)	MDL (ug/L)	
NAPHTHALENE	(110E)	83E	9.5	.36	.34
ACENAPHTHYLENE	(ND)	NA	9.5	1.5	NA
ACENAPHTHENE	2.5J	(ND)	9.5	.34	.44
FLUORENE	(13E)	6.8J	9.5	.11	.11
PHENANTHRENE	(15E)	120E	9.5	.049	.097
ANTHRACENE	(ND)	3.1J	9.5	.049	.047
FLUORANTHENE	(ND)	10E	9.5	.11	.26
PYRENE	(ND)	ND	9.5	.059	.052
BENZO(A)ANTHRACENE	(ND)	ND	.095	.052	.059
CHRYSENE	(ND)	ND	9.5	.051	.066
BENZO(B)FLUORANTHENE	(ND)	.17J	.19	.088	.083
BENZO(K)FLUORANTHENE	(ND)	ND	9.5	.047	.049
BENZO(A)PYRENE	(ND)	ND	.19	.052	.078
DIBENZO(A,H)ANTHRACENE	(ND)	ND	9.5	.13	.096
BENZO(G,H,I)PERYLENE	(ND)	ND	9.5	.084	.19
INDENO(1,2,3-CD)PYRENE	(ND)	ND	9.5	.037	.076

SURROGATE PARAMETERS	% RECOVERY		QC LIMIT
P-TERPHENYL-D14	(192*)	561*	25-157

RL: Reporting Limit
Left of | is related to UV detector; Right of | related to FL detector
( ) included the reported data
* : Out of QC limits due to matrix interference.
E : Exceeding calibration range.

SW 3520C/8310
POLYNUCLEAR AROMATIC HYDROCARBONS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 018198	Date Extracted: 02/23/01 17:45
Sample ID: 0026-089DL	Date Analyzed: 02/24/01 11:25
Lab Samp ID: B198-02T	Dilution Factor: 47.5
Lab File ID: RB23039A	Matrix : WATER
Ext Btch ID: PAB011W	% Moisture : NA
Calib. Ref.: RB23037A	Instrument ID : LCT002

PARAMETERS	RESULTS (ug/L)		RL (ug/L)	MDL (ug/L)	
NAPHTHALENE	(120J)	97J	480	18	17
ACENAPHTHYLENE	(ND)	NA	480	76	NA
ACENAPHTHENE	(ND)	ND	480	17	22
FLUORENE	(13J)	6.6J	480	5.5	5.4
PHENANTHRENE	(16J)	130J	480	2.5	4.8
ANTHRACENE	(ND)	ND	480	2.5	2.3
FLUORANTHENE	(ND)	ND	480	5.6	13
PYRENE	(ND)	ND	480	2.9	2.6
BENZO(A)ANTHRACENE	(ND)	ND	4.8	2.6	2.9
CHRYSENE	(ND)	ND	480	2.6	3.3
BENZO(B)FLUORANTHENE	(ND)	ND	9.5	4.4	4.1
BENZO(K)FLUORANTHENE	(ND)	ND	480	2.3	2.5
BENZO(A)PYRENE	(ND)	ND	9.5	2.6	3.9
DIBENZO(A,H)ANTHRACENE	(ND)	ND	480	6.5	4.8
BENZO(G,H,I)PERYLENE	(ND)	ND	480	4.2	9.5
INDENO(1,2,3-CD)PYRENE	(ND)	ND	480	1.9	3.8

SURROGATE PARAMETERS	% RECOVERY		QC LIMIT
P-TERPHENYL-D14	(DO)	DO	25-157

RL: Reporting Limit
Left of | is related to UV detector; Right of | related to FL detector
( ) included the reported data
DO : Diluted out

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B198	Date Extracted:	02/24/01 10:40
Sample ID	: 0026-088	Date Analyzed:	02/24/01 12:45
Lab Samp ID	: B198-01	Dilution Factor:	1
Lab File ID	: FB0608A	Matrix :	WATER
Ext Btch ID	: GAB007W	% Moisture :	NA
Calib. Ref.	: FB0602A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	1.9	1	.18
METHANE	1.5	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/21/01
Batch No.	: 01B198	Date Extracted:	02/24/01 10:40
Sample ID:	0026-089	Date Analyzed:	02/24/01 12:51
Lab Samp ID:	B198-02	Dilution Factor:	1
Lab File ID:	FB0609A	Matrix	: WATER
Ext Btch ID:	GAB007W	% Moisture	: NA
Calib. Ref.:	FB0602A	Instrument ID	: GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	270E	1	.26

RL: Reporting Limit
E : Exceeding calibration range.

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B198	Date Extracted:	02/24/01 10:40
Sample ID:	0026-089DL	Date Analyzed:	02/24/01 13:21
Lab Samp ID:	B198-02T	Dilution Factor:	100
Lab File ID:	FB0610A	Matrix :	WATER
Ext Btch ID:	GAB007W	% Moisture :	NA
Calib. Ref.:	FB0602A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	100	26
ETHYLENE	ND	100	18
METHANE	660	100	26

RL: Reporting Limit

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B198

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
0026-088	B198-01	22.0	2	NA	10	1.1	02/26/0117:45	NA	TCB007W-24	TCB007W-17	TCB007W	02/20/01	02/21/01
0026-089	B198-02	31.1	2	NA	10	1.1	02/26/0118:05	NA	TCB007W-25	TCB007W-17	TCB007W	02/20/01	02/21/01
MBLK1W	TCB007WB	ND	1	NA	5	.551	02/26/0110:30	NA	TCB007W-7	TCB007W-5	TCB007W	NA	NA
LCS1W	TCB007WL	21.4	1	NA	5	.551	02/26/0110:45	NA	TCB007W-8	TCB007W-5	TCB007W	NA	NA
LCD1W	TCB007WC	20.8	1	NA	5	.551	02/26/0111:00	NA	TCB007W-9	TCB007W-5	TCB007W	NA	NA

RL : Reporting Limit

2008

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B198

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALC002WB	ND	1	NA	5	.469	03/03/0109:00	NA	ALC002W-1	NA	ALC002W	NA	NA
LCS1W	ALC002WL	72.5	1	NA	5	.469	03/03/0109:10	NA	ALC002W-2	NA	ALC002W	NA	NA
LCD1W	ALC002WC	75.0	1	NA	5	.469	03/03/0109:20	NA	ALC002W-3	NA	ALC002W	NA	NA
0026-088	B198-01	158	1	NA	5	.469	03/03/0110:30	NA	ALC002W-10	NA	ALC002W	02/20/01	02/21/01
0026-089	B198-02	565	1	NA	5	.469	03/03/0110:50	NA	ALC002W-12	NA	ALC002W	02/20/01	02/21/01

RL: Reporting Limit

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B198

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB029WB	ND	1	NA	.1	.0206	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
LCS1W	ICB029WL	3.98	1	NA	.1	.0206	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
LCD1W	ICB029WC	3.93	1	NA	.1	.0206	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
0026-088	B198-01	1.54	2	NA	.2	.0412	02/22/0103:41	NA	AB21038A	AB21027A	ICB029W	02/20/01	02/21/01
0026-089	B198-02	ND	2	NA	.2	.0412	02/22/0104:32	NA	AB21041A	AB21039A	ICB029W	02/20/01	02/21/01

RL: Reporting Limit

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B198

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB029WB	ND	1	NA	.2	.047	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
LCS1W	ICB029WL	5.22	1	NA	.2	.047	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
LCD1W	ICB029WC	5.14	1	NA	.2	.047	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
0026-088	B198-01	5410	1000	NA	200	47	02/22/0109:21	NA	AB21058A	AB21051A	ICB029W	02/20/01	02/21/01
0026-089	B198-02	1270	1000	NA	200	47	02/22/0109:38	NA	AB21059A	AB21051A	ICB029W	02/20/01	02/21/01

RL : Reporting Limit

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B198

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB029WB	ND	1	NA	.5	.101	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
LCS1W	ICB029WL	20.9	1	NA	.5	.101	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
LCD1W	ICB029WC	20.7	1	NA	.5	.101	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
0026-088	B198-01	358	50	NA	25	5.05	02/22/0105:57	NA	AB21046A	AB21039A	ICB029W	02/20/01	02/21/01
0026-089	B198-02	10.4	2	NA	1	.202	02/22/0104:32	NA	AB21041A	AB21039A	ICB029W	02/20/01	02/21/01

RL : Reporting Limit

FOSTER WI :R ENVIRONMENTAL CORPORATION

1230 Columbia Street, Suite 040 San Diego, CA 92101 (619) 234-8696

NUMBER 01385

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: UST 5/8/9/17	PURCHASE ORDER NO.: 020848 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.026D
SAMPLER NAME: TANIA TURPYN-KENSICK	SAMPLER SIGNATURE:
PROJECT CONTACT: LISA BILENKOWSKI	AIRBILL NUMBER: COURIER

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	EPA 8260B MTBE & OXYGENATES	TPH-EXTRACTABLE	EPA 418.1 TRPH	EPA 3020 NITRATE CHLORIDE SULFATE	EPA 310.1 ALKALINITY	EPA 6010B CAM 17 METALS	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-091	2/21/01	~~0730~~ 0730	2	X		W	10 day	X							TRIP BLANK	-	-	TB
0026-092	2/21/01	1130	8	X		W	10 day	X	X	X	X	X	X	POTENTIAL PRODUCT	5S/8/9/17 MW38	-	-	REG
0026-093	2/21/01	1140	13	X		W	10 day	X	X	X				RUN MS/MSD FOR 8260B & TPH-E	5S/8/9/17 MW10	-	-	REG
0026-094	2/21/01	1500	5	X		W	10 day	X	X	X					5S18/9/17 MW39	-	-	REG
0026-095	2/21/01	1530	4	X		W	10 day	X	X						EQUIP BLANK	-	-	EB

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 01B205

Project Information Section Do not submit to Laboratory

RELINQUISHED BY (Signature)	DATE 2/21/01 1600	RECEIVED BY (Signature)	
COMPANY FWENC	TIME 1600	COMPANY EMAX	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	

LABORATORY INSTRUCTIONS/COMMENTS: PLEASE BE AWARE OF POTENTIAL FOR PRODUCT IN SAMPLE 0026-092

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)

TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN

COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: QUARTER 1 G.W. SAMPLING

White - Laboratory Pink - Laboratory Canary - Project File; Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

lient : FOSTER WHEELER	Date Collected: 02/21/01
roject : CAMP PENDLETON, CTO26	Date Received: 02/21/01
atch No. : 01B205	Date Extracted: 03/04/01 07:27
ample ID: 0026-091	Date Analyzed: 03/04/01 07:27
ab Samp ID: B205-01	Dilution Factor: 1
ab File ID: RCH109	Matrix : WATER
xt Btch ID: VOC1241	% Moisture : NA
alib. Ref.: RCH104	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.52J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	89	62-139
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	111	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/21/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B205	Date Extracted:	03/04/01 11:54
Sample ID:	0026-092	Date Analyzed:	03/04/01 11:54
Lab Samp ID:	B205-02	Dilution Factor:	1
Lab File ID:	RCH116	Matrix :	WATER
Ext Btch ID:	VOC1241	% Moisture :	NA
Calib. Ref.:	RCH104	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	20J	50	2.7
BENZENE	14	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	.5J	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	4.4	.5	.12
XYLENES	18	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.74J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	17	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	7.2	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	1.2J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	100	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/21/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B205	Date Extracted: 03/04/01 00:39
Sample ID: 0026-093	Date Analyzed: 03/04/01 00:39
Lab Samp ID: B205-03	Dilution Factor: 1
Lab File ID: RCH098	Matrix : WATER
Ext Btch ID: VOC0941	% Moisture : NA
Calib. Ref.: RCH082	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	1.1	.5	.21
1,2-DICHLOROPROPANE	.93J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.99J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	102	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2006

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/21/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B205	Date Extracted:	03/04/01 08:05
Sample ID:	0026-094	Date Analyzed:	03/04/01 08:05
Lab Samp ID:	B205-04	Dilution Factor:	1
Lab File ID:	RCH110	Matrix :	WATER
Ext Btch ID:	VOC1241	% Moisture :	NA
Calib. Ref.:	RCH104	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	2.7J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.73J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	3.3J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2007

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/21/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B205	Date Extracted:	03/04/01 08:43
Sample ID:	0026-095	Date Analyzed:	03/04/01 08:43
Lab Samp ID:	B205-05	Dilution Factor:	1
Lab File ID:	RCH111	Matrix :	WATER
Ext Btch ID:	VOC1241	% Moisture :	NA
Calib. Ref.:	RCH104	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CiS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	102	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2008

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B205

Matrix : WATER
Instrument ID : I18

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB002WB	ND	1	NA	10	.558	02/26/0113:10	02/24/0118:45	TRB009-03	TRB009CC	TRB002W	NA	02/24/01
LCS1W	TRB002WL	6.25	1	NA	10	.558	02/26/0113:15	02/24/0118:45	TRB009-04	TRB009CC	TRB002W	NA	02/24/01
LCD1W	TRB002WC	6.46	1	NA	10	.558	02/26/0113:20	02/24/0118:45	TRB009-05	TRB009CC	TRB002W	NA	02/24/01
0026-092	B205-02	3.2J	.95	NA	9.5	.53	02/26/0113:25	02/24/0118:45	TRB009-06	TRB009CC	TRB002W	02/21/01	02/21/01
0026-093	B205-03	ND	.97	NA	9.7	.541	02/26/0113:30	02/24/0118:45	TRB009-07	TRB009CC	TRB002W	02/21/01	02/21/01
0026-094	B205-04	ND	.97	NA	9.7	.541	02/26/0113:35	02/24/0118:45	TRB009-08	TRB009CC	TRB002W	02/21/01	02/21/01

RL: Reporting Limit

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B205

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB043WB	ND	95	1	NA	.1	.067	03/02/0100:09	02/28/0112:30	TC01014A	TC01013A	DSB043W	NA	02/28/01
LCS1W	DSB043WL	4.64	96	1	NA	.1	.067	03/01/0121:44	02/28/0112:30	TC01011A	TC01002A	DSB043W	NA	02/28/01
LCD1W	DSB043WC	4.66	99	1	NA	.1	.067	03/01/0122:32	02/28/0112:30	TC01012A	TC01002A	DSB043W	NA	02/28/01
0026-092	B205-02	3.1	99	.94	NA	.094	.063	03/02/0101:47	02/28/0112:30	TC01016A	TC01013A	DSB043W	02/21/01	02/21/01
0026-093*	B205-03	.72	98	.95	NA	.095	.0637	03/02/0102:35	02/28/0112:30	TC01017A	TC01013A	DSB043W	02/21/01	02/21/01
0026-093MS	B205-03M	5.6	98	.95	NA	.095	.0637	03/02/0103:24	02/28/0112:30	TC01018A	TC01013A	DSB043W	02/21/01	02/21/01
0026-093MSD	B205-03S	5.6	100	.95	NA	.095	.0637	03/02/0104:12	02/28/0112:30	TC01019A	TC01013A	DSB043W	02/21/01	02/21/01
0026-094	B205-04	.55	94	.94	NA	.094	.063	03/02/0105:01	02/28/0112:30	TC01020A	TC01013A	DSB043W	02/21/01	02/21/01
0026-095	B205-05	ND	94	.95	NA	.095	.0637	03/02/0105:49	02/28/0112:30	TC01021A	TC01013A	DSB043W	02/21/01	02/21/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

* : Presence of a discrete peak, a non fuel pattern, quantitated against Diesel pattern.

21 of 45

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B205

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB030WB	ND	1	NA	.1	.0206	02/22/0118:08	NA	AB22011A	AB22007A	ICB030W	NA	NA
LCS1W	ICB030WL	3.95	1	NA	.1	.0206	02/22/0118:25	NA	AB22012A	AB22007A	ICB030W	NA	NA
LCD1W	ICB030WC	3.91	1	NA	.1	.0206	02/22/0118:42	NA	AB22013A	AB22007A	ICB030W	NA	NA
0026-092	B205-02	4.68	25	NA	2.5	.515	02/22/0119:28	NA	AB22015A	AB22007A	ICB030W	02/21/01	02/21/01

RL: Reporting Limit

8008

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B205

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICC010WB	ND	1	NA	.2	.047	03/08/0108:51	NA	AC07064A	AC07062A	ICC010W	NA	NA
LCS1W	ICC010WL	4.91	1	NA	.2	.047	03/08/0109:09	NA	AC07065A	AC07062A	ICC010W	NA	NA
LCD1W	ICC010WC	4.91	1	NA	.2	.047	03/08/0109:26	NA	AC07066A	AC07062A	ICC010W	NA	NA
0026-092	B205-02	4300	1000	NA	200	47	03/08/0113:41	NA	AC07081A	AC07074A	ICC010W	02/21/01	02/21/01

RL : Reporting Limit

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B205

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICC010WB	ND	1	NA	.5	.101	03/08/0108:51	NA	AC07064A	AC07062A	ICC010W	NA	NA
LCS1W	ICC010WL	21	1	NA	.5	.101	03/08/0109:09	NA	AC07065A	AC07062A	ICC010W	NA	NA
LCD1W	ICC010WC	20.9	1	NA	.5	.101	03/08/0109:26	NA	AC07066A	AC07062A	ICC010W	NA	NA
0026-092	B205-02	2690	1000	NA	500	101	03/08/0113:41	NA	AC07081A	AC07074A	ICC010W	02/21/01	02/21/01

RL : Reporting Limit

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B205

Matrix : WATER
Instrument ID : NA

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALC004WB	ND	1	NA	5	.469	03/05/0113:45	NA	ALC004W-01	NA	ALC004W	NA	NA
LCS1W	ALC004WL	74.7	1	NA	5	.469	03/05/0113:55	NA	ALC004W-02	NA	ALC004W	NA	NA
LCD1W	ALC004WC	74.7	1	NA	5	.469	03/05/0114:05	NA	ALC004W-03	NA	ALC004W	NA	NA
0026-092	B205-02	22.9	1	NA	5	.469	03/05/0114:15	NA	ALC004W-04	NA	ALC004W	02/21/01	02/21/01

RL: Reporting Limit

FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01386

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Site 5/8/9/17	PURCHASE ORDER NO.: 020845 TASK 2
PROJECT LOCATION: Camp Pendleton	PROJECT NO.: 1950.02 GD
SAMPLER NAME: Tania Turpin-Kerlo	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: Lisa Bienkowski	AIRBILL NUMBER: Courier

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 01B217

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	TPH-EXTRACTABLE	EPA 3760B INCLUDING MBE + OXYGENATES	EPA 418.1 TRPH	EPA 300.1 NITRATE SULFATE CHLORIDE	RSK 175M ETHANE ETHANE METHANE	EPA 300.1 ALKALINITY	EPA 1664 TDC				COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-096	2/21/01	1600 ~~1715~~	11	X		W	10 day	X	X	X	X	X	X	X					S5/8/9/17 MW44	—	-	REG

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/22/01	[signature]
COMPANY: FWENC	TIME: 1630	COMPANY: EMAX
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: ____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: QUARTER 1 G.W SAMPLING

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

FOSTER WHE[illegible] ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite [illegible] San Diego, CA 92101 (619) 234-8696

NUMBER 01388

CHAIN-OF-CUSTODY RECORD

PROJECT NAME	Site 5/8/9/17
PURCHASE ORDER NO.	D20848 TASK 2
PROJECT LOCATION	Camp Pendleton
PROJECT NO.	1990.026D
SAMPLER NAME	Tania Turpin Keasler
SAMPLER SIGNATURE	[signature]
PROJECT CONTACT	Lisa Bienkowski
AIRBILL NUMBER	Courier
LABORATORY NAME	EMAX
LABORATORY ID (FOR LABORATORY)	018217

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	8260B 1,2 Cl Ethane, MTBE & Oxygenates	TPH-Extractable	EPA 415.1 TRPH	EPA 300.0 Nitrate Sulfate Chloride	RSK 175M Ethane Methane	EPA 310.1 Alkalinity	EPA 9060B TOC				COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-109	2/22/01	1040	11	TH	X	W	10 day	X	X	X	X	X	X	X					S5/8/9/17 MW4	-	-	REG
0026-110	2/22/01	1100	3	X		W	10 day	X											TRIP BLANK	-	-	TB
0026-111	2/22/01	1250	5	X		W	10 day	X	X	X									S5/8/9/17 MW7	-	-	REG
0026-112	2/22/01	1330	5	X		W	10 day	X	X	X									S5/8/9/17 MW39	-	-	REG
0026-113	2/22/01	1415	2	X		W	10 day				X		X						13 AREA HYDRANT	-	-	REG
0026-114	2/22/01	1500	12	X		W	10 day	X	X	X	X	X	X	X					S5/8/9/17 MW1	-	-	REG
0026-115	2/22/01	1510	11	X		W	10 day	X	X	X	X	X	X						S5/8/9/17 MW46	-	-	REG

[signature]

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/22/01	[signature]
COMPANY: FWENC	TIME: 1630	COMPANY: EMAX
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
QUARTER 1
GW SAMPLING

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/21/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/22/01
Batch No.	: 01B217	Date Extracted:	03/04/01 12:32
Sample ID:	0026-096	Date Analyzed:	03/04/01 12:32
Lab Samp ID:	B217-01	Dilution Factor:	1
Lab File ID:	RCH117	Matrix :	WATER
Ext Btch ID:	VOC1241	% Moisture :	NA
Calib. Ref.:	RCH104	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	7.2J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	2.2J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	62-139
TOLUENE-D8	96	75-125
BROMOFLUOROBENZENE	100	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 01B217	Date Extracted:	03/04/01 13:10
Sample ID	: 0026-109	Date Analyzed:	03/04/01 13:10
Lab Samp ID	: B217-02	Dilution Factor:	1
Lab File ID	: RCH118	Matrix	: WATER
Ext Btch ID	: VOC1241	% Moisture	: NA
Calib. Ref.	: RCH104	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	.52J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	10J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	.74J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.43J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	62-139
TOLUENE-D8	95	75-125
BROMOFLUOROBENZENE	101	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/22/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/22/01
Batch No. : 018217	Date Extracted: 03/04/01 13:49
Sample ID: 0026-110	Date Analyzed: 03/04/01 13:49
Lab Samp ID: B217-03	Dilution Factor: 1
Lab File ID: RCH119	Matrix : WATER
Ext Btch ID: VOC1241	% Moisture : NA
Calib. Ref.: RCH104	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.52J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	97	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	105	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/22/01
Batch No.	: 01B217	Date Extracted:	03/04/01 14:26
Sample ID:	0026-111	Date Analyzed:	03/04/01 14:26
Lab Samp ID:	B217-04	Dilution Factor:	1
Lab File ID:	RCH120	Matrix :	WATER
Ext Btch ID:	VOC1241	% Moisture :	NA
Calib. Ref.:	RCH104	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	.71	.5	.21
1,2-DICHLOROPROPANE	.61J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	7.8J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.63J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.69J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	98	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 018217	Date Extracted:	03/04/01 20:40
Sample ID:	0026-112	Date Analyzed:	03/04/01 20:40
Lab Samp ID:	B217-05	Dilution Factor:	1
Lab File ID:	RCH130	Matrix	: WATER
Ext Btch ID:	VOC1441	% Moisture	: NA
Calib. Ref.:	RCH123	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	2.4	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	19J	50	2.7
BENZENE	1.1	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	.62J	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	74E	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	3.6J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	18J	20	2.3
DIISOPROPYL ETHER	2.7J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	102	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2013

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

lient	: FOSTER WHEELER	Date Collected:	02/22/01
roject	: CAMP PENDLETON, CT026	Date Received:	02/22/01
atch No.	: 01B217	Date Extracted:	03/04/01 21:18
ample ID	: 0026-112DL	Date Analyzed:	03/04/01 21:18
ab Samp ID	: B217-05T	Dilution Factor:	10
ab File ID	: RCH131	Matrix	: WATER
xt Btch ID	: VOC1441	% Moisture	: NA
alib. Ref.	: RCH123	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	4.2
1,1,2,2-TETRACHLOROETHANE	ND	10	1.9
1,1,2-TRICHLOROETHANE	ND	50	1.7
1,1-DICHLOROETHANE	ND	50	1.6
1,1-DICHLOROETHENE	ND	50	1
1,2-DICHLOROETHANE	3.5J	5	2.1
1,2-DICHLOROPROPANE	ND	50	1.4
METHYL ETHYL KETONE	ND	500	21
2-HEXANONE	ND	500	10
4-METHYL-2-PENTANONE (MIBK)	ND	500	12
ACETONE	47J	500	27
BENZENE	ND	5	1.5
BROMODICHLOROMETHANE	ND	50	1.7
BROMOFORM	ND	50	1.2
BROMOMETHANE	ND	50	1.8
CARBON TETRACHLORIDE	ND	5	.91
CHLOROBENZENE	ND	50	1.4
CHLOROETHANE	ND	50	4.3
CHLOROFORM	ND	50	4.1
CHLOROMETHANE	ND	50	2.4
CIS-1,2-DICHLOROETHENE	90D	50	1.6
CIS-1,3-DICHLOROPROPENE	ND	5	2.1
DIBROMOCHLOROMETHANE	ND	50	1.4
ETHYLBENZENE	ND	5	1.2
XYLENES	ND	15	2.7
MTBE	ND	10	2.2
METHYLENE CHLORIDE	ND	50	2.2
STYRENE	ND	50	1.5
TETRACHLOROETHYLENE	ND	50	1.4
TOLUENE	ND	5	1.4
TRANS-1,2-DICHLOROETHENE	ND	50	1.8
TRANS-1,3-DICHLOROPROPENE	ND	5	2.3
TRICHLOROETHENE	4.4J	50	1.5
VINYL ACETATE	ND	500	3.2
VINYL CHLORIDE	ND	5	2
TERT-BUTYL ALCOHOL	ND	200	23
DIISOPROPYL ETHER	ND	50	3.9
ETHYL TERT-BUTYL ETHER	ND	50	8.8
TERT-AMYL METHYL ETHER	ND	50	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2014

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/22/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/22/01
Batch No. : 018217	Date Extracted: 03/04/01 21:57
Sample ID: 0026-114	Date Analyzed: 03/04/01 21:57
Lab Samp ID: B217-07	Dilution Factor: 1
Lab File ID: RCH132	Matrix : WATER
Ext Btch ID: VOC1441	% Moisture : NA
Calib. Ref.: RCH123	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	.44J	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	4.3J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.37J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	5.1	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2015

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 018217	Date Extracted:	03/04/01 22:35
Sample ID:	0026-115	Date Analyzed:	03/04/01 22:35
Lab Samp ID:	B217-08	Dilution Factor:	1
Lab File ID:	RCH133	Matrix	: WATER
Ext Btch ID:	VOC1441	% Moisture	: NA
Calib. Ref.:	RCH123	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	10J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.49J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1.8J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	111	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	104	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2016

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B217

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB043WB	ND	95	1	NA	.1	.067	03/02/0100:09	02/28/0112:30	TC01014A	TC01013A	DSB043W	NA	02/28/01
LCS1W	DSB043WL	4.64	96	1	NA	.1	.067	03/01/0121:44	02/28/0112:30	TC01011A	TC01002A	DSB043W	NA	02/28/01
LCD1W	DSB043WC	4.66	99	1	NA	.1	.067	03/01/0122:32	02/28/0112:30	TC01012A	TC01002A	DSB043W	NA	02/28/01
0026-096*	B217-01	2.1	93	1	NA	.1	.067	03/02/0107:26	02/28/0112:30	TC01023A	TC01013A	DSB043W	02/21/01	02/22/01
0026-109***	B217-02	.23	94	.94	NA	.094	.063	03/02/0109:03	02/28/0112:30	TC01025A	TC01024A	DSB043W	02/22/01	02/22/01
0026-111***	B217-04	.28	94	1.01	NA	.101	.0677	03/02/0109:51	02/28/0112:30	TC01026A	TC01024A	DSB043W	02/22/01	02/22/01
0026-112**	B217-05	3.6	98	.95	NA	.095	.0637	03/02/0111:28	02/28/0112:30	TC01028A	TC01024A	DSB043W	02/22/01	02/22/01
0026-114***	B217-07	.15	90	1.03	NA	.103	.069	03/02/0113:54	02/28/0112:30	TC01031A	TC01030A	DSB043W	02/22/01	02/22/01
0026-115**	B217-08	1.3	98	.95	NA	.095	.0637	03/02/0114:42	02/28/0112:30	TC01032A	TC01030A	DSB043W	02/22/01	02/22/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

* : Single peak observed, quantified as Diesel
** : Non-typical fuel pattern, quantified as Diesel
*** : Motor oil-like pattern, quantified as Diesel

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B217

Matrix : WATER
Instrument ID : I18

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB002WB	ND	1	NA	10	.558	02/26/0113:10	02/24/0118:45	TRB009-03	TRB009CC	TRB002W	NA	02/24/01
LCS1W	TRB002WL	6.25	1	NA	10	.558	02/26/0113:15	02/24/0118:45	TRB009-04	TRB009CC	TRB002W	NA	02/24/01
LCD1W	TRB002WC	6.46	1	NA	10	.558	02/26/0113:20	02/24/0118:45	TRB009-05	TRB009CC	TRB002W	NA	02/24/01
0026-096	B217-01	ND	.95	NA	9.5	.53	02/26/0113:40	02/24/0118:45	TRB009-09	TRB009CC	TRB002W	02/21/01	02/22/01
0026-109	B217-02	ND	.94	NA	9.4	.525	02/26/0113:45	02/24/0118:45	TRB009-10	TRB009CC	TRB002W	02/22/01	02/22/01
0026-111	B217-04	ND	.94	NA	9.4	.525	02/26/0113:50	02/24/0118:45	TRB009-11	TRB009CC	TRB002W	02/22/01	02/22/01
0026-112	B217-05	ND	.94	NA	9.4	.525	02/26/0113:55	02/24/0118:45	TRB009-12	TRB009CC	TRB002W	02/22/01	02/22/01
0026-114	B217-07	ND	.97	NA	9.7	.541	02/26/0114:10	02/24/0118:45	TRB009-15	TRB010CC	TRB002W	02/22/01	02/22/01
0026-115	B217-08	ND	.97	NA	9.7	.541	02/26/0114:15	02/24/0118:45	TRB009-16	TRB010CC	TRB002W	02/22/01	02/22/01

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/21/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 01B217	Date Extracted:	02/27/01 11:30
Sample ID:	0026-096	Date Analyzed:	02/27/01 20:55
Lab Samp ID:	B217-01	Dilution Factor:	1
Lab File ID:	FB0725A	Matrix :	WATER
Ext Btch ID:	GAB008W	% Moisture :	NA
Calib. Ref.:	FB0724A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	.33J	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/22/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/22/01
Batch No. : 01B217	Date Extracted: 02/27/01 11:30
Sample ID: 0026-109	Date Analyzed: 02/27/01 21:00
Lab Samp ID: B217-02	Dilution Factor: 1
Lab File ID: FB0726A	Matrix : WATER
Ext Btch ID: GAB008W	% Moisture : NA
Calib. Ref.: FB0724A	Instrument ID : GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	.45J	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 018217	Date Extracted:	02/27/01 11:30
Sample ID	: 0026-114	Date Analyzed:	02/27/01 21:05
Lab Samp ID	: 8217-07	Dilution Factor:	1
Lab File ID	: FB0727A	Matrix :	WATER
Ext Btch ID	: GAB008W	% Moisture :	NA
Calib. Ref.	: FB0724A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	.4J	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 018217	Date Extracted:	02/27/01 11:30
Sample ID:	0026-115	Date Analyzed:	02/27/01 21:10
Lab Samp ID:	B217-08	Dilution Factor:	1
Lab File ID:	FB0728A	Matrix :	WATER
Ext Btch ID:	GAB008W	% Moisture :	NA
Calib. Ref.:	FB0724A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	140E	1	.26

RL: Reporting Limit
E : Exceeding calibration range.

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 01B217	Date Extracted:	02/27/01 11:30
Sample ID	: 0026-115DL	Date Analyzed:	02/27/01 21:16
Lab Samp ID	: B217-08T	Dilution Factor:	10
Lab File ID	: FB0729A	Matrix :	WATER
Ext Btch ID	: GAB008W	% Moisture :	NA
Calib. Ref.	: FB0724A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	10	2.6
ETHYLENE	ND	10	1.8
METHANE	260	10	2.6

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY ICP

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/22/01
SDG NO.	: 018217	Date Extracted:	03/02/01 13:55
Sample ID:	0026-114	Date Analyzed:	03/07/01 19:17
Lab Samp ID:	B217-07	Dilution Factor:	1
Lab File ID:	I07C016012	Matrix :	WATER
Ext Btch ID:	IPC005W	% Moisture :	NA
Calib. Ref.:	I07C016007	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium^	1240	10	.917
Magnesium	460	1	.0812
Potassium	22.1	5	1.97
Sodium^	1410	10	4.17

RL: Reporting Limit
^ Analyzed @DF10 on 03/09/01 File I07C018

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018217

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
0026-096	B217-01	210	1	NA	5	.469	03/03/0111:40	NA	ALC002W-17	NA	ALC002W	02/21/01	02/22/01
0026-109	B217-02	115	1	NA	5	.469	03/03/0111:50	NA	ALC002W-18	NA	ALC002W	02/22/01	02/22/01
0026-113	B217-06	160	1	NA	5	.469	03/03/0112:00	NA	ALC002W-19	NA	ALC002W	02/22/01	02/22/01
0026-114	B217-07	60.1	1	NA	5	.469	03/03/0112:10	NA	ALC002W-20	NA	ALC002W	02/22/01	02/22/01
0026-115	B217-08	140	1	NA	5	.469	03/03/0112:20	NA	ALC002W-21	NA	ALC002W	02/22/01	02/22/01
MBLK1W	ALC002WB	ND	1	NA	5	.469	03/03/01 9:00	NA	ALC002W-1	NA	ALC002W	NA	NA
LCS1W	ALC002WL	72.5	1	NA	5	.469	03/03/01 9:10	NA	ALC002W-2	NA	ALC002W	NA	NA
LCD1W	ALC002WC	75.0	1	NA	5	.469	03/03/01 9:20	NA	ALC002W-3	NA	ALC002W	NA	NA

RL: Reporting Limit

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018217

Matrix : WATER
Instrument ID : 1026

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TCC001WB	ND	1	NA	5	.551	03/05/0110:30	NA	TCC001W-07	TCC001W-05	TCC001W	NA	NA
LCS1W	TCC001WL	19.9	1	NA	5	.551	03/05/0110:45	NA	TCC001W-08	TCC001W-05	TCC001W	NA	NA
LCD1W	TCC001WC	20.2	1	NA	5	.551	03/05/0111:00	NA	TCC001W-09	TCC001W-05	TCC001W	NA	NA
0026-096	B217-01	ND	1	NA	5	.551	03/05/0111:15	NA	TCC001W-10	TCC001W-05	TCC001W	02/21/01	02/22/01
0026-109	B217-02	ND	1	NA	5	.551	03/05/0111:40	NA	TCC001W-11	TCC001W-05	TCC001W	02/22/01	02/22/01
0026-114	B217-07	ND	1	NA	5	.551	03/05/0112:05	NA	TCC001W-12	TCC001W-05	TCC001W	02/22/01	02/22/01
0026-115	B217-08	9.0	1	NA	5	.551	03/05/0112:30	NA	TCC001W-13	TCC001W-05	TCC001W	02/22/01	02/22/01
0026-115MS	B217-08M	59.7	1	NA	5	.551	03/05/0112:55	NA	TCC001W-14	TCC001W-05	TCC001W	02/22/01	02/22/01
0026-115MSD	B217-08S	59.7	1	NA	5	.551	03/05/0113:20	NA	TCC001W-15	TCC001W-05	TCC001W	02/22/01	02/22/01

RL : Reporting Limit

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B217

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB031WB	ND	1	NA	.5	.101	02/23/0100:35	NA	AB22033A	AB22031A	ICB031W	NA	NA
LCS1W	ICB031WL	19.5	1	NA	.5	.101	02/23/0100:52	NA	AB22034A	AB22031A	ICB031W	NA	NA
LCD1W	ICB031WC	19.4	1	NA	.5	.101	02/23/0101:09	NA	AB22035A	AB22031A	ICB031W	NA	NA
0026-096	B217-01	460	25	NA	12.5	2.53	02/23/0106:16	NA	AB22053A	AB22043A	ICB031W	02/21/01	02/22/01
MBLK2W	ICB032WB	ND	1	NA	.5	.101	02/23/0107:24	NA	AB22057A	AB22055A	ICB032W	NA	NA
LCS2W	ICB032WL	19.6	1	NA	.5	.101	02/23/0107:41	NA	AB22058A	AB22055A	ICB032W	NA	NA
LCD2W	ICB032WC	19.7	1	NA	.5	.101	02/23/0107:58	NA	AB22059A	AB22055A	ICB032W	NA	NA
0026-113	B217-06	190	50	NA	25	5.05	02/23/0114:46	NA	AB22083A	AB22079A	ICB032W	02/22/01	02/22/01
0026-114	B217-07	1810	50	NA	25	5.05	02/23/0115:03	NA	AB22084A	AB22079A	ICB032W	02/22/01	02/22/01
0026-115	B217-08	471	50	NA	25	5.05	02/23/0115:21	NA	AB22085A	AB22079A	ICB032W	02/22/01	02/22/01
MBLK3W	ICC010WB	ND	1	NA	.5	.101	03/08/0108:51	NA	AC07064A	AC07062A	ICC010W	NA	NA
LCS3W	ICC010WL	21	1	NA	.5	.101	03/08/0109:09	NA	AC07065A	AC07062A	ICC010W	NA	NA
LCD3W	ICC010WC	20.9	1	NA	.5	.101	03/08/0109:26	NA	AC07066A	AC07062A	ICC010W	NA	NA
0026-109	B217-02	2360	1000	NA	500	50.5	03/08/0114:19	NA	AC07083A	AC07074A	ICC010W	02/22/01	02/22/01

RL : Reporting Limit

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B217

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB031WB	ND	1	NA	.1	.0206	02/23/0100:35	NA	AB22033A	AB22031A	ICB031W	NA	NA
LCS1W	ICB031WL	3.85	1	NA	.1	.0206	02/23/0100:52	NA	AB22034A	AB22031A	ICB031W	NA	NA
LCD1W	ICB031WC	3.83	1	NA	.1	.0206	02/23/0101:09	NA	AB22035A	AB22031A	ICB031W	NA	NA
0026-096	B217-01	3.32	25	NA	2.5	.515	02/23/0106:16	NA	AB22053A	AB22043A	ICB031W	02/21/01	02/22/01
MBLK2W	ICB032WB	ND	1	NA	.1	.0206	02/23/0107:24	NA	AB22057A	AB22055A	ICB032W	NA	NA
LCS2W	ICB032WL	3.83	1	NA	.1	.0206	02/23/0107:41	NA	AB22058A	AB22055A	ICB032W	NA	NA
LCD2W	ICB032WC	3.83	1	NA	.1	.0206	02/23/0107:58	NA	AB22059A	AB22055A	ICB032W	NA	NA
0026-109	B217-02	7.6	2	NA	.2	.0412	02/23/0110:48	NA	AB22069A	AB22067A	ICB032W	02/22/01	02/22/01
0026-113	B217-06	.903	2	NA	.2	.0412	02/23/0111:05	NA	AB22070A	AB22067A	ICB032W	02/22/01	02/22/01
0026-114	B217-07	7.05	2	NA	.2	.0412	02/23/0111:22	NA	AB22071A	AB22067A	ICB032W	02/22/01	02/22/01
0026-115	B217-08	1.29	2	NA	.2	.0412	02/23/0111:39	NA	AB22072A	AB22067A	ICB032W	02/22/01	02/22/01

RL: Reporting Limit

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 018217

Matrix : WATER
Instrument ID : T1006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB032WB	ND	1	NA	.2	.047	02/23/0107:24	NA	AB22057A	AB22055A	ICB032W	NA	NA
LCS1W	ICB032WL	5.04	1	NA	.2	.047	02/23/0107:41	NA	AB22058A	AB22055A	ICB032W	NA	NA
LCD1W	ICB032WC	5	1	NA	.2	.047	02/23/0107:58	NA	AB22059A	AB22055A	ICB032W	NA	NA
0026-113	B217-06	150	50	NA	10	2.35	02/23/0114:46	NA	AB22083A	AB22079A	ICB032W	02/22/01	02/22/01
MBLK2W	ICC010WB	ND	1	NA	.2	.047	03/08/0108:51	NA	AC07064A	AC07062A ✓	ICC010W	NA	NA
LCS2W	ICC010WL	4.91	1	NA	.2	.047	03/08/0109:09	NA	AC07065A	AC07062A	ICC010W	NA	NA
LCD2W	ICC010WC	4.91	1	NA	.2	.047	03/08/0109:26	NA	AC07066A	AC07062A	ICC010W	NA	NA
0026-109	B217-02 ✓	3430	1000	NA	200	47	03/08/0114:19	NA	AC07083A	AC07074A ✓	ICC010W	02/22/01	02/22/01
0026-114	B217-07	4150	1000	NA	200	47	03/08/0114:37	NA	AC07084A	AC07074A	ICC010W	02/22/01	02/22/01
0026-115	B217-08	6930	1000	NA	200	47	03/08/0114:54	NA	AC07085A	AC07074A	ICC010W	02/22/01	02/22/01
0026-096	B217-01	7770	2000	NA	400	94	03/08/0118:20	NA	AC07097A	AC07086A	ICC010W	02/21/01	02/22/01

RL : Reporting Limit

FOSTER WHE[illegible]R ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01396

CHAIN-OF-CUSTODY RECORD

PROJECT NAME	UST SITE 5/8/9/17
PURCHASE ORDER NO.	020848 TASK 2
PROJECT LOCATION	CAMP PENDLETON
PROJECT NO.	1990.026D
SAMPLER NAME	TANIA TURPIN-KOHSLER
SAMPLER SIGNATURE	[signature]
PROJECT CONTACT	LISA BIENKOWSKI
AIRBILL NUMBER	COURIER
LABORATORY NAME	EMAY
LABORATORY ID (FOR LABORATORY)	01B233

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	8260B INCLUDING RTBE & OXYGENATES	TPH-EXTRACTABLE	EPA 418.1 TRPH	EPA 300.0 NITRATE SULFATE CHLORIDE	RSK175M ETHANE ETHENE METHANE	EPA 310.1 ALKALINITY	EPA 9060 TOC				COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-117	2/23/01	0900	3	X		W	10 day	X											TRIP BLANK	-	-	TB
0026-118	2/23/01	1000	4	X		W	10 day	X	X										EQUIP BLANK	-	-	EB
0026-122	2/23/01	1135	5	X		W	10 day	X	X	X									S5/8/9/17 MW23	-	—	REG
0026-123	2/23/01	1330	11	X		W	10 day	X	X	X	X	X	X	X					S5/8/9/17 MW37	-	-	~~AR~~ REG

[signature] 2/23/01

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/23/01	[signature]
COMPANY: FWENC	TIME: 1600	COMPANY: Roadrunner
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
QUARTER 1
G.W. SAMPLING

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/23/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/23/01
Batch No.	: 01B233	Date Extracted:	03/06/01 17:58
Sample ID	: 0026-117	Date Analyzed:	03/06/01 17:58
Lab Samp ID	: B233-01	Dilution Factor:	1
Lab File ID	: RCH171	Matrix :	WATER
Ext Btch ID	: VOC1741	% Moisture :	NA
Calib. Ref.	: RCH165	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.53J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	62-139
TOLUENE-D8	96	75-125
BROMOFLUOROBENZENE	103	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/23/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/23/01
Batch No.	: 01B233	Date Extracted:	03/06/01 21:04
Sample ID	: 0026-118	Date Analyzed:	03/06/01 21:04
Lab Samp ID	: B233-02	Dilution Factor:	1
Lab File ID	: RCH176	Matrix :	WATER
Ext Btch ID	: VOC1741	% Moisture :	NA
Calib. Ref.	: RCH165	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	9.3J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	109	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2005

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/23/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/23/01
Batch No. : 018233	Date Extracted: 03/06/01 21:42
Sample ID: 0026-122	Date Analyzed: 03/06/01 21:42
Lab Samp ID: B233-03	Dilution Factor: 1
Lab File ID: RCH177	Matrix : WATER
Ext Btch ID: VOC1741	% Moisture : NA
Calib. Ref.: RCH165	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	10J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	.31J	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	.68J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1.5J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	116	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	108	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2006

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/23/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/23/01
Batch No.	: 01B233	Date Extracted:	03/07/01 07:03
Sample ID:	0026-123	Date Analyzed:	03/07/01 07:03
Lab Samp ID:	B233-04	Dilution Factor:	1
Lab File ID:	RCH192	Matrix :	WATER
Ext Btch ID:	VOC1941	% Moisture :	NA
Calib. Ref.:	RCH187	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	.62	.5	.21
1,2-DICHLOROPROPANE	.49J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	11J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.32J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	112	62-139
TOLUENE-D8	95	75-125
BROMOFLUOROBENZENE	101	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/23/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/23/01
Batch No.	: 01B233	Date Extracted:	02/28/01 10:15
Sample ID:	0026-123	Date Analyzed:	02/28/01 13:05
Lab Samp ID:	B233-04	Dilution Factor:	1
Lab File ID:	FB0815A	Matrix :	WATER
Ext Btch ID:	GAB009W	% Moisture :	NA
Calib. Ref.:	FB0813A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	2	1	.26

RL: Reporting Limit

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B233

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TCC001WB	ND	1	NA	5	.551	03/05/0110:30	NA	TCC001W-7	TCC001W-17	TCC001W	NA	NA
LCS1W	TCC001WL	19.9	1	NA	5	.551	03/05/0110:45	NA	TCC001W-8	TCC001W-17	TCC001W	NA	NA
LCD1W	TCC001WC	20.2	1	NA	5	.551	03/05/0111:00	NA	TCC001W-9	TCC001W-17	TCC001W	NA	NA
0026-123	B233-04	ND	1	NA	5	.551	03/05/0114:40	NA	TCC001W-19	TCC001W-17	TCC001W	02/23/01	02/23/01

RL : Reporting Limit

8020

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018233

Matrix : WATER
Instrument ID : 1018

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB002WB	ND	1	NA	10	.558	02/26/0113:10	02/24/0118:45	TRB009-03	TRB009CC	TRB002W	NA	02/24/01
LCS1W	TRB002WL	6.25	1	NA	10	.558	02/26/0113:15	02/24/0118:45	TRB009-04	TRB009CC	TRB002W	NA	02/24/01
LCD1W	TRB002WC	6.46	1	NA	10	.558	02/26/0113:20	02/24/0118:45	TRB009-05	TRB009CC	TRB002W	NA	02/24/01
0026-122	B233-03	ND	.95	NA	9.5	.53	02/26/0114:35	02/24/0118:45	TRB009-20	TRB010CC	TRB002W	02/23/01	02/23/01
0026-123	B233-04	ND	.95	NA	9.5	.53	02/26/0114:40	02/24/0118:45	TRB009-21	TRB010CC	TRB002W	02/23/01	02/23/01

RL: Reporting Limit

2009

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018233

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALC004W8	ND	1	NA	5	.469	03/05/0113:45	NA	ALC004W-1	NA	ALC004W	NA	NA
LCS1W	ALC004WL	74.7	1	NA	5	.469	03/05/0113:55	NA	ALC004W-2	NA	ALC004W	NA	NA
LCD1W	ALC004WC	74.7	1	NA	5	.469	03/05/0114:05	NA	ALC004W-3	NA	ALC004W	NA	NA
0026-123	B233-04	164	1	NA	5	.469	03/05/0114:25	NA	ALC004W-5	NA	ALC004W	02/23/01	02/23/01

RL: Reporting Limit

8024

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B233

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB033WB	ND	1	NA	.1	.0206	02/24/0111:46	NA	AB24003A	AB24001A	ICB033W	NA	NA
LCS1W	ICB033WL	3.91	1	NA	.1	.0206	02/24/0112:03	NA	AB24004A	AB24001A	ICB033W	NA	NA
LCD1W	ICB033WC	3.91	1	NA	.1	.0206	02/24/0112:20	NA	AB24005A	AB24001A	ICB033W	NA	NA
0026-123	B233-04	2.41	2	NA	.2	.0412	02/24/0112:37	NA	AB24006A	AB24001A	ICB033W	02/23/01	02/23/01

RL: Reporting Limit

8002A

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B233

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB033WB	ND	1	NA	.5	.101	02/24/0111:46	NA	AB24003A	AB24001A	ICB033W	NA	NA
LCS1W	ICB033WL	20.1	1	NA	.5	.101	02/24/0112:03	NA	AB24004A	AB24001A	ICB033W	NA	NA
LCD1W	ICB033WC	20	1	NA	.5	.101	02/24/0112:20	NA	AB24005A	AB24001A	ICB033W	NA	NA
0026-123	B233-04	1280	50	NA	25	5.05	02/24/0114:02	NA	AB24011A	AB24001A	ICB033W	02/23/01	02/23/01

RL : Reporting Limit

82008

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018233

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB033WB	ND	1	NA	.2	.047	02/24/0111:46	NA	AB24003A	AB24013A	ICB033W	NA	NA
LCS1W	ICB038WL	4.99	1	NA	.2	.047	02/24/0112:03	NA	AB24004A	AB24013A	ICB033W	NA	NA
LCD1W	ICB038WC	4.94	1	NA	.2	.047	02/24/0112:20	NA	AB24005A	AB24013A	ICB033W	NA	NA
0026-123	B233-04	1340	1000	NA	200	47	02/24/0116:18	NA	AB24019A	AB24013A	ICB033W	02/23/01	02/23/01

RL : Reporting Limit

8002

FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite San Diego, CA 92101 (619) 234-8696

NUMBER 01395

CHAIN-OF-CUSTODY RECORD

01B246 M4/VC2

PROJECT NAME: VST 5/8/9/17	PURCHASE ORDER NO.: 020848 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.026D
SAMPLER NAME: TANIA TURPIN-KRASLEN	SAMPLER SIGNATURE:
PROJECT CONTACT: LISA BIENKOWSKI	AIRBILL NUMBER: COURIER

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 01B246

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	8260B INCLUDING MTBE 1,4-DIOXANE	TPH EXTRACTABLE	EPA 418.1 TRPH	EPA 300.0 NITRATE SULFATE CHLORIDE	RSK175M ETHENE ETHANE METHANE	EPA 310.1 ALKALINITY	EPA 9060 (TOC)	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-124	2/26/01	0900	3	X		W	10 day	Y								TRIP BLANK	-	-	TB
0026-125	2/26/01	1000	4	X		W	10 day	X	X							EQUIP BLANK	-	-	EB
0026-126	2/26/01	1100	5	X		W	10 day	X	X	X						5/8/9/17 MW34	-	-	REG
0026-127	2/26/01	1150	5		X	W	10 day	X	X	X						5/8/9/17 MW25	-	-	REG
0026-128	2/26/01	1315	11	X		W	10 day	X	X	X	X	X	X	X		5/8/9/17 MW15	-	-	REG
0026-129	2/26/01	1335	11	X		W	10 day	X	X	X	X	X	X	X		5/8/9/17 MW15	-	-	FD
0026-131	2/26/01	1650	11	X		W	10 day	X	X	X	X	X	X	X		5/8/9/17 MW47	-	-	REG

2/26/01

RELINQUISHED BY (Signature)	DATE 2/26/01	RECEIVED BY (Signature)	
COMPANY FWENG	TIME 1700	COMPANY ROAD RUNNER	
RELINQUISHED BY (Signature)	DATE 2/26/01	RECEIVED BY (Signature)	
COMPANY ROAD RUNNER	TIME 645	COMPANY EMAX Lab.	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: 4.5, 3.2 SAMPLE CONDITION: ☑ INTACT ☐ BROKEN
COOLER SEAL: ☑ INTACT ☐ BROKEN

SAMPLING COMMENT:
QUARTER 1 GROUNDWATER SAMPLING

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 01B246	Date Extracted:	03/06/01 17:20
Sample ID:	0026-124	Date Analyzed:	03/06/01 17:20
Lab Samp ID:	B246-01	Dilution Factor:	1
Lab File ID:	RCH170	Matrix :	WATER
Ext Btch ID:	VOC1741	% Moisture :	NA
Calib. Ref.:	RCH165	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	.45J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.53J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 01B246	Date Extracted:	03/07/01 00:14
Sample ID:	0026-125	Date Analyzed:	03/07/01 00:14
Lab Samp ID:	B246-02	Dilution Factor:	1
Lab File ID:	RCH181	Matrix :	WATER
Ext Btch ID:	VOC1741	% Moisture :	NA
Calib. Ref.:	RCH165	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	11J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.94J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	96	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 01B246	Date Extracted:	03/07/01 00:51
Sample ID:	0026-126	Date Analyzed:	03/07/01 00:51
Lab Samp ID:	B246-03	Dilution Factor:	1
Lab File ID:	RCH182	Matrix :	WATER
Ext Btch ID:	VOC1741	% Moisture :	NA
Calib. Ref.:	RCH165	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	8.6J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	.31J	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.31J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.98J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	104	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/26/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/26/01
Batch No. : 01B246	Date Extracted: 03/07/01 07:41
Sample ID: 0026-127	Date Analyzed: 03/07/01 07:41
Lab Samp ID: B246-04	Dilution Factor: 1
Lab File ID: RCH193	Matrix : WATER
Ext Btch ID: VOC1941	% Moisture : NA
Calib. Ref.: RCH187	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	6.6J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	2.8J	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	3.8J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	114	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	108	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2007

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/26/01
Batch No.	: 01B246	Date Extracted:	03/07/01 08:19
Sample ID:	0026-128	Date Analyzed:	03/07/01 08:19
Lab Samp ID:	B246-05	Dilution Factor:	1
Lab File ID:	RCH194	Matrix :	WATER
Ext Btch ID:	VOC1941	% Moisture :	NA
Calib. Ref.:	RCH187	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	.48J	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	ND	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	.3J	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	6.8	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.72J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	7.6	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	96	75-125
BROMOFLUOROBENZENE	108	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2012

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 01B246	Date Extracted:	03/07/01 08:57
Sample ID	: 0026-129	Date Analyzed:	03/07/01 08:57
Lab Samp ID	: B246-06	Dilution Factor:	1
Lab File ID	: RCH195	Matrix	: WATER
Ext Btch ID	: VOC1941	% Moisture	: NA
Calib. Ref.	: RCH187	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	.55J	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	8.4J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	.33J	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	6.8	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.42J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	7.3	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	108	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 01B246	Date Extracted:	03/07/01 09:36
Sample ID:	0026-131	Date Analyzed:	03/07/01 09:36
Lab Samp ID:	B246-07	Dilution Factor:	1
Lab File ID:	RCH196	Matrix	: WATER
Ext Btch ID:	VOC1941	% Moisture	: NA
Calib. Ref.:	RCH187	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	8.6J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	.63J	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	.44J	5	.14
ETHYLBENZENE	.7	.5	.12
XYLENES	3.3	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	.56	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1.8J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	109	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018246

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRC001WB	ND	1	NA	10	.558	03/05/0111:40	03/02/0118:30	TRC001W-3	TRC003CC	TRC001W	NA	03/02/01
LCS1W	TRC001WL	5.85	1	NA	10	.558	03/05/0111:45	03/02/0118:30	TRC001W-4	TRC003CC	TRC001W	NA	03/02/01
LCD1W	TRC001WC	5.85	1	NA	10	.558	03/05/0111:50	03/02/0118:30	TRC001W-5	TRC003CC	TRC001W	NA	03/02/01
0026-126	B246-03	ND	.96	NA	9.6	.536	03/05/0112:00	03/02/0118:30	TRC001W-7	TRC003CC	TRC001W	02/26/01	02/26/01
0026-127	B246-04	ND	.95	NA	9.5	.53	03/05/0112:05	03/02/0118:30	TRC001W-8	TRC003CC	TRC001W	02/26/01	02/26/01
0026-128	B246-05	ND	.98	NA	9.8	.547	03/05/0112:10	03/02/0118:30	TRC001W-9	TRC003CC	TRC001W	02/26/01	02/26/01
0026-129	B246-06	ND	.95	NA	9.5	.53	03/05/0112:15	03/02/0118:30	TRC001W-10	TRC003CC	TRC001W	02/26/01	02/26/01
0026-131	B246-07	ND	.95	NA	9.5	.53	03/05/0112:20	03/02/0118:30	TRC001W-11	TRC003CC	TRC001W	02/26/01	02/26/01

RL: Reporting Limit

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018246

Matrix : WATER
Instrument ID : GCTO50

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB044WB	ND	97	1	NA	.1	.067	03/02/0121:59	03/01/0112:00	TC01041A	TC01040A	DSB044W	NA	03/01/01
LCS1W	DSB044WL	5.1	98	1	NA	.1	.067	03/02/0122:48	03/01/0112:00	TC01042A	TC01040A	DSB044W	NA	03/01/01
LCD1W	DSB044WC	5.06	95	1	NA	.1	.067	03/02/0123:36	03/01/0112:00	TC01043A	TC01040A	DSB044W	NA	03/01/01
0026-125	B246-02	ND	91	.96	NA	.096	.064	03/03/0100:25	03/01/0112:00	TC01044A	TC01040A	DSB044W	02/26/01	02/26/01
0026-126	B246-03	.44	94	1	NA	.1	.067	03/03/0101:13	03/01/0112:00	TC01045A	TC01040A	DSB044W	02/26/01	02/26/01
0026-127	B246-04	ND	93	.94	NA	.094	.063	03/03/0102:02	03/01/0112:00	TC01046A	TC01040A	DSB044W	02/26/01	02/26/01
0026-128	B246-05	.14	95	.98	NA	.098	.0657	03/03/0102:51	03/01/0112:00	TC01047A	TC01040A	DSB044W	02/26/01	02/26/01
0026-129	B246-06	.079J	94	.95	NA	.095	.0637	03/03/0103:39	03/01/0112:00	TC01048A	TC01040A	DSB044W	02/26/01	02/26/01
0026-131	B246-07	ND	90	.95	NA	.095	.0637	03/03/0104:28	03/01/0112:00	TC01049A	TC01040A	DSB044W	02/26/01	02/26/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B246

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TCC001WB	ND	1	NA	5	.551	03/05/0110:30	NA	TCC001W-7	TCC001W-17	TCC001W	NA	NA
LCS1W	TCC001WL	19.9	1	NA	5	.551	03/05/0110:45	NA	TCC001W-8	TCC001W-17	TCC001W	NA	NA
LCD1W	TCC001WC	20.2	1	NA	5	.551	03/05/0111:00	NA	TCC001W-9	TCC001W-17	TCC001W	NA	NA
0026-128	B246-05	7.00	1	NA	5	.551	03/05/0117:05	NA	TCC001W-24	TCC001W-17	TCC001W	02/26/01	02/26/01
0026-129	B246-06	9.00	1	NA	5	.551	03/05/0117:30	NA	TCC001W-25	TCC001W-17	TCC001W	02/26/01	02/26/01
0026-131	B246-07	15.6	1	NA	5	.551	03/05/0118:00	NA	TCC001W-26	TCC001W-17	TCC001W	02/26/01	02/26/01

RL : Reporting Limit

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : D1B246

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALC004WB	ND	1	NA	5	.469	03/05/0113:45	NA	ALC004W-1	NA	ALC004W	NA	NA
LCS1W	ALC004WL	74.7	1	NA	5	.469	03/05/0113:55	NA	ALC004W-2	NA	ALC004W	NA	NA
LCD1W	ALC004WC	74.7	1	NA	5	.469	03/05/0114:05	NA	ALC004W-3	NA	ALC004W	NA	NA
0026-128	B246-05	89.7	1	NA	5	.469	03/05/0115:15	NA	ALC004W-10	NA	ALC004W	02/26/01	02/26/01
0026-129	B246-06	89.7	1	NA	5	.469	03/05/0115:25	NA	ALC004W-11	NA	ALC004W	02/26/01	02/26/01
0026-131	B246-07	149	1	NA	5	.469	03/05/0115:35	NA	ALC004W-12	NA	ALC004W	02/26/01	02/26/01
0026-131DUP	B246-07D	147	1	NA	5	.469	03/05/0115:45	NA	ALC004W-13	NA	ALC004W	02/26/01	02/26/01
0026-131MS	B246-07M	261	1	NA	5	.469	03/05/0115:55	NA	ALC004W-14	NA	ALC004W	02/26/01	02/26/01

RL: Reporting Limit

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B246

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB034WB	ND	1	NA	.1	.0206	02/27/0111:38	NA	AB27003A	AB27001A	ICB034W	NA	NA
LCS1W	ICB034WL	3.95	1	NA	.1	.0206	02/27/0111:55	NA	AB27004A	AB27001A	ICB034W	NA	NA
LCD1W	ICB034WC	3.95	1	NA	.1	.0206	02/27/0112:12	NA	AB27005A	AB27001A	ICB034W	NA	NA
0026-128	B246-05	7.3	2	NA	.2	.0412	02/27/0112:46	NA	AB27007A	AB27001A	ICB034W	02/26/01	02/26/01
0026-129	B246-06	7.21	2	NA	.2	.0412	02/27/0113:03	NA	AB27008A	AB27001A	ICB034W	02/26/01	02/26/01
0026-131	B246-07	1.77	2	NA	.2	.0412	02/27/0113:20	NA	AB27009A	AB27001A	ICB034W	02/26/01	02/26/01
0026-131DUP	B246-07D	1.78	2	NA	.2	.0412	02/27/0114:03	NA	AB27011A	AB27001A	ICB034W	02/26/01	02/26/01
0026-131MS	B246-07M	5.26	2	NA	.2	.0412	02/27/0114:20	NA	AB27012A	AB27001A	ICB034W	02/26/01	02/26/01

RL: Reporting Limit

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B246

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB034WB	ND	1	NA	.5	.101	02/27/0111:38	NA	AB27003A	AB27001A	ICB034W	NA	NA
LCS1W	ICB034WL	20	1	NA	.5	.101	02/27/0111:55	NA	AB27004A	AB27001A	ICB034W	NA	NA
LCD1W	ICB034WC	20	1	NA	.5	.101	02/27/0112:12	NA	AB27005A	AB27001A	ICB034W	NA	NA
0026-128	B246-05	1660	200	NA	100	20.2	02/27/0115:40	NA	AB27015A	AB27013A	ICB034W	02/26/01	02/26/01
0026-129	B246-06	1620	200	NA	100	20.2	02/27/0115:57	NA	AB27016A	AB27013A	ICB034W	02/26/01	02/26/01
0026-131	B246-07	773	200	NA	100	20.2	02/27/0116:14	NA	AB27017A	AB27013A	ICB034W	02/26/01	02/26/01
0026-131DUP	B246-07D	789	200	NA	100	20.2	02/27/0116:31	NA	AB27018A	AB27013A	ICB034W	02/26/01	02/26/01
0026-131MS	B246-07M	1630	200	NA	100	20.2	02/27/0116:48	NA	AB27019A	AB27013A	ICB034W	02/26/01	02/26/01

RL : Reporting Limit

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B246

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB035WB	ND	1	NA	.2	.047	02/27/0119:04	NA	AB27027A	AB27025A	ICB035W	NA	NA
LCS1W	ICB035WL	4.8	1	NA	.2	.047	02/27/0119:21	NA	AB27028A	AB27025A	ICB035W	NA	NA
LCD1W	ICB035WC	4.73	1	NA	.2	.047	02/27/0119:38	NA	AB27029A	AB27025A	ICB035W	NA	NA
0026-128	B246-05	4020	1000	NA	200	47	02/27/0120:47	NA	AB27033A	AB27025A	ICB035W	02/26/01	02/26/01
0026-129	B246-06	4130	1000	NA	200	47	02/27/0121:04	NA	AB27034A	AB27025A	ICB035W	02/26/01	02/26/01
0026-131	B246-07	6490	1000	NA	200	47	02/27/0121:21	NA	AB27035A	AB27025A	ICB035W	02/26/01	02/26/01

RL : Reporting Limit

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/26/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/26/01
Batch No. : 018246	Date Extracted: 03/02/01 11:50
Sample ID: 0026-128	Date Analyzed: 03/02/01 17:23
Lab Samp ID: B246-05	Dilution Factor: 1
Lab File ID: FC0117A	Matrix : WATER
Ext Btch ID: GAC001W	% Moisture : NA
Calib. Ref.: FC0113A	Instrument ID : GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	7.7	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 01B246	Date Extracted:	03/02/01 11:50
Sample ID:	0026-129	Date Analyzed:	03/02/01 17:28
Lab Samp ID:	B246-06	Dilution Factor:	1
Lab File ID:	FC0118A	Matrix :	WATER
Ext Btch ID:	GAC001W	% Moisture :	NA
Calib. Ref.:	FC0113A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	6.7	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 018246	Date Extracted:	03/02/01 11:50
Sample ID	: 0026-131	Date Analyzed:	03/02/01 17:34
Lab Samp ID	: B246-07	Dilution Factor:	1
Lab File ID	: FC0119A	Matrix :	WATER
Ext Btch ID	: GAC001W	% Moisture :	NA
Calib. Ref.	: FC0113A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	.84J	1	.26

RL: Reporting Limit

FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01369

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: UST Site 6/7	PURCHASE ORDER NO.: 020844 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.026D
SAMPLER NAME: Tamia Turpin-Keasler	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: Lisa Bienkowski	AIRBILL NUMBER: COURIER

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 01B199

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	EPA 8260B INCLUDING MTBE & OXYGENATES	TPH-EXTRACTABLE	EPA 418.1 (TRPH)	EPA 300.0 NITRATE SULFATE CHLORIDE	RSK175M (ETHENE ETHANE METHANE)	EPA 310.1 (ALKALINITY)	EPA 9060B (TOC)	EPA 6010B (Na, K, Ca, Mg)	EPA 8310 (PAHs)		COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-082	2/20/01	0900	3	X		W	10 day	X											TRIP BLANK	-	-	TB
0026-~~084~~ 084 TK	2/20/01	1230	12	X		W	10 day	X	X	X	X	X	X	X	X				S6/7-MW7	-	-	REG
0026-~~084~~ 085 TK	2/20/01	1245	12	X		W	10 day	X	X	X	X	X	X	X	X				S6/7-MW7	-	-	FD
0026-087	2/20/01	1445	12	~~X~~	X	W	10 day	X	X	X	X	X	X	X		X			S6/7-MW16	-	-	REG

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/21/01	[signature]
COMPANY: FWENC	TIME: 0840	COMPANY: FWENC
RELINQUISHED BY (Signature): [signature]	DATE: 2/21/01	RECEIVED BY (Signature): [signature]
COMPANY: FWENC	TIME: 1130	COMPANY: EMAX
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: ____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: QUARTER 1 GW SAMPLING

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CT026	Date Received: 02/21/01
Batch No. : 01B199	Date Extracted: 03/03/01 20:51
Sample ID: 0026-082	Date Analyzed: 03/03/01 20:51
Lab Samp ID: B199-01	Dilution Factor: 1
Lab File ID: RCH092	Matrix : WATER
Ext Btch ID: VOC0941Q	% Moisture : NA
Calib. Ref.: RCH082	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	8.2J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.43J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.74J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B199	Date Extracted: 03/05/01 13:19
Sample ID: 0026-084	Date Analyzed: 03/05/01 13:19
Lab Samp ID: B199-02	Dilution Factor: 1
Lab File ID: RCH149	Matrix : WATER
Ext Btch ID: VOC1541	% Moisture : NA
Calib. Ref.: RCH144	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	1.1	.5	.21
1,2-DICHLOROPROPANE	.51J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	10J	50	2.7
BENZENE	.99	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	.61	.5	.12
XYLENES	3	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	1.4J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1.4J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	120	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2005

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B199	Date Extracted: 03/03/01 21:29
Sample ID: 0026-085	Date Analyzed: 03/03/01 21:29
Lab Samp ID: B199-03	Dilution Factor: 1
Lab File ID: RCH093	Matrix : WATER
Ext Btch ID: VOC0941	% Moisture : NA
Calib. Ref.: RCH082	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	1	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	10J	50	2.7
BENZENE	.93	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	.59	.5	.12
XYLENES	2.9	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	1.7J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	1.7J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	113	62-139
TOLUENE-D8	96	75-125
BROMOFLUOROBENZENE	102	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2006

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : FOSTER WHEELER	Date Collected: 02/20/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/21/01
Batch No. : 01B199	Date Extracted: 03/03/01 22:07
Sample ID: 0026-087	Date Analyzed: 03/03/01 22:07
Lab Samp ID: B199-04	Dilution Factor: 1
Lab File ID: RCH094	Matrix : WATER
Ext Btch ID: VOC0941	% Moisture : NA
Calib. Ref.: RCH082	Instrument ID : T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	12J	50	2.7
BENZENE	25	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	.41J	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	7.8	.5	.12
XYLENES	53	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.79J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	.49J	5	.14
TOLUENE	2.9	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	14	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	1.2J	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	99	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2007

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B199

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB042WB	ND	91	1	NA	.1	.067	02/28/0106:21	02/27/0112:30	TB06021A	TB06014A	DSB042W	NA	02/27/01
LCS1W	DSB042WL	4.66	101	1	NA	.1	.067	02/28/0107:10	02/27/0112:30	TB06022A	TB06014A	DSB042W	NA	02/27/01
LCD1W	DSB042WC	4.8	103	1	NA	.1	.067	02/28/0107:59	02/27/0112:30	TB06023A	TB06014A	DSB042W	NA	02/27/01
0026-084*	B199-02	.31	97	.97	NA	.097	.065	02/28/0112:49	02/27/0112:30	TB06029A	TB06026A	DSB042W	02/20/01	02/21/01
0026-085*	B199-03	.29	95	.95	NA	.095	.0637	02/28/0113:37	02/27/0112:30	TB06030A	TB06026A	DSB042W	02/20/01	02/21/01
0026-087*	B199-04	1.5	95	.97	NA	.097	.065	02/28/0114:26	02/27/0112:30	TB06031A	TB06026A	DSB042W	02/20/01	02/21/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

* : A Diesel like fuel pattern.

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B199

Matrix : WATER
Instrument ID : I18

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB001WB	ND	1	NA	10	.558	02/26/0110:40	02/24/0114:50	TRB006-03	TRB006CC	TRB001W	NA	02/24/01
LCS1W	TRB001WL	6.66	1	NA	10	.558	02/26/0110:45	02/24/0114:50	TRB006-04	TRB006CC	TRB001W	NA	02/24/01
LCD1W	TRB001WC	6.66	1	NA	10	.558	02/26/0110:50	02/24/0114:50	TRB006-05	TRB006CC	TRB001W	NA	02/24/01
0026-084	B199-02	ND	1.05	NA	10.5	.586	02/26/0111:45	02/24/0114:50	TRB006-16	TRB006CC	TRB001W	02/20/01	02/21/01
0026-085	B199-03	ND	1	NA	10	.558	02/26/0111:50	02/24/0114:50	TRB006-17	TRB006CC	TRB001W	02/20/01	02/21/01
0026-087	B199-04	ND	.97	NA	9.7	.541	02/26/0111:55	02/24/0114:50	TRB006-18	TRB006CC	TRB001W	02/20/01	02/21/01

RL: Reporting Limit

SW 3520C/8310
POLYNUCLEAR AROMATIC HYDROCARBONS

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B199	Date Extracted:	02/23/01 17:45
Sample ID:	0026-087	Date Analyzed:	02/23/01 22:31
Lab Samp ID:	B199-04	Dilution Factor:	.95
Lab File ID:	RB23019A	Matrix :	WATER
Ext Btch ID:	PAB011W	% Moisture :	NA
Calib. Ref.:	RB23014	Instrument ID :	LCT002

PARAMETERS	RESULTS (ug/L)		RL (ug/L)	MDL (ug/L)	
NAPHTHALENE	(30)	27	9.5	.36	.34
ACENAPHTHYLENE	(ND)	NA	9.5	1.5	NA
ACENAPHTHENE	.37J	(ND)	9.5	.34	.44
FLUORENE	(1.2J)	.92J	9.5	.11	.11
PHENANTHRENE	(1.7J)	13E	9.5	.049	.097
ANTHRACENE	(ND)	.17J	9.5	.049	.047
FLUORANTHENE	(ND)	ND	9.5	.11	.26
PYRENE	(ND)	ND	9.5	.059	.052
BENZO(A)ANTHRACENE	(ND)	ND	.095	.052	.059
CHRYSENE	(ND)	ND	9.5	.051	.066
BENZO(B)FLUORANTHENE	(ND)	ND	.19	.088	.083
BENZO(K)FLUORANTHENE	(ND)	ND	9.5	.047	.049
BENZO(A)PYRENE	(ND)	ND	.19	.052	.078
DIBENZO(A,H)ANTHRACENE	(ND)	ND	9.5	.13	.096
BENZO(G,H,I)PERYLENE	(ND)	ND	9.5	.084	.19
INDENO(1,2,3-CD)PYRENE	(ND)	ND	9.5	.037	.076

SURROGATE PARAMETERS	% RECOVERY		QC LIMIT
P-TERPHENYL-D14	(91)	119	25-157

RL: Reporting Limit
Left of | is related to UV detector; Right of | related to FL detector
( ) included the reported data

SW 3520C/8310
POLYNUCLEAR AROMATIC HYDROCARBONS

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 018199	Date Extracted:	02/23/01 17:45
Sample ID	: 0026-087DL	Date Analyzed:	02/24/01 11:04
Lab Samp ID	: B199-04T	Dilution Factor:	4.75
Lab File ID	: RB23038A	Matrix :	WATER
Ext Btch ID	: PAB011W	% Moisture :	NA
Calib. Ref.	: RB23037	Instrument ID :	LCT002

PARAMETERS	RESULTS (ug/L)		RL (ug/L)	MDL (ug/L)	
NAPHTHALENE	(29J)	28J	47	1.8	1.7
ACENAPHTHYLENE	(ND)	NA	47	7.6	NA
ACENAPHTHENE	(ND)	ND	47	1.7	2.2
FLUORENE	(1.2J)	1J	47	.55	.54
PHENANTHRENE	(ND)	14J	47	.25	.48
ANTHRACENE	(ND)	.33J	47	.25	.23
FLUORANTHENE	.77J	(ND)	47	.56	1.3
PYRENE	(ND)	ND	47	.29	.26
BENZO(A)ANTHRACENE	(ND)	ND	.48	.26	.29
CHRYSENE	(ND)	ND	47	.26	.33
BENZO(B)FLUORANTHENE	(ND)	ND	.95	.44	.41
BENZO(K)FLUORANTHENE	(ND)	ND	47	.23	.25
BENZO(A)PYRENE	(ND)	ND	.95	.26	.39
DIBENZO(A,H)ANTHRACENE	(ND)	ND	47	.65	.48
BENZO(G,H,I)PERYLENE	(ND)	ND	47	.42	.95
INDENO(1,2,3-CD)PYRENE	(ND)	ND	47	.19	.38

SURROGATE PARAMETERS	% RECOVERY		QC LIMIT
P-TERPHENYL-D14	(87)	111	25-157

RL: Reporting Limit
Left of | is related to UV detector; Right of | related to FL detector
( ) included the reported data

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CT026	Date Received:	02/21/01
Batch No.	: 01B199	Date Extracted:	02/27/01 11:30
Sample ID:	0026-084	Date Analyzed:	02/27/01 12:19
Lab Samp ID:	B199-02	Dilution Factor:	1
Lab File ID:	FB0704A	Matrix :	WATER
Ext Btch ID:	GAB008W	% Moisture :	NA
Calib. Ref.:	FB0702A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	31	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B199	Date Extracted:	02/27/01 11:30
Sample ID:	0026-085	Date Analyzed:	02/27/01 12:24
Lab Samp ID:	B199-03	Dilution Factor:	1
Lab File ID:	FB0705A	Matrix :	WATER
Ext Btch ID:	GAB008W	% Moisture :	NA
Calib. Ref.:	FB0702A	Instrument ID :	GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	32	1	.26

RL: Reporting Limit

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/20/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/21/01
Batch No.	: 01B199	Date Extracted:	02/27/01 11:30
Sample ID:	0026-087	Date Analyzed:	02/27/01 13:56
Lab Samp ID:	B199-04	Dilution Factor:	1
Lab File ID:	FB0708A	Matrix :	WATER
Ext Btch ID:	GAB008W	% Moisture :	NA
Calib. Ref.:	FB0702A	Instrument ID :	GCTO10

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	.78J	1	.18
METHANE	9.6	1	.26

RL: Reporting Limit

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B199

Matrix : WATER
Instrument ID : I026

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TCB007WB	ND	1	NA	5	.551	02/26/0110:30	NA	TCB007W-07	TCB007W-05	TCB007W	NA	NA
LCS1W	TCB007WL	21.4	1	NA	5	.551	02/26/0110:45	NA	TCB007W-08	TCB007W-05	TCB007W	NA	NA
LCD1W	TCB007WC	20.8	1	NA	5	.551	02/26/0111:00	NA	TCB007W-09	TCB007W-05	TCB007W	NA	NA
0026-084	B199-02	12.8	1	NA	5	.551	02/26/0118:30	NA	TCB007W-26	TCB007W-17	TCB007W	02/20/01	02/21/01
0026-085	B199-03	13.2	1	NA	5	.551	02/26/0119:00	NA	TCB007W-27	TCB007W-17	TCB007W	02/20/01	02/21/01
0026-087	B199-04	14.2	1	NA	5	.551	02/26/0119:20	NA	TCB007W-28	TCB007W-17	TCB007W	02/20/01	02/21/01

RL : Reporting Limit

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B199

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
0026-084	B199-02	11.0	1	NA	5	.469	03/03/0111:00	NA	ALC002W-13	NA	ALC002W	02/20/01	02/21/01
0026-085	B199-03	8.0	1	NA	5	.469	03/03/0111:10	NA	ALC002W-14	NA	ALC002W	02/20/01	02/21/01
0026-087	B199-04	ND	1	NA	5	.469	03/03/0111:20	NA	ALC002W-15	NA	ALC002W	02/20/01	02/21/01
MBLK1W	ALC002WB	ND	1	NA	5	.469	03/03/01 9:00	NA	ALC002W-1	NA	ALC002W	NA	NA
LCS1W	ALC002WL	72.5	1	NA	5	.469	03/03/01 9:10	NA	ALC002W-2	NA	ALC002W	NA	NA
LCD1W	ALC002WC	75.0	1	NA	5	.469	03/03/01 9:20	NA	ALC002W-3	NA	ALC002W	NA	NA

RL: Reporting Limit

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 018199

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB029WB	ND	1	NA	.2	.047	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
LCS1W	ICB029WL	5.22	1	NA	.2	.047	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
LCD1W	ICB029WC	5.14	1	NA	.2	.047	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
0026-084	B199-02	2780	1000	NA	200	47	02/22/0109:55	NA	AB21060A	AB21051A	ICB029W	02/20/01	02/21/01
0026-085	B199-03	2610	1000	NA	200	47	02/22/0110:13	NA	AB21061A	AB21051A	ICB029W	02/20/01	02/21/01
0026-087	B199-04	4080	1000	NA	200	47	02/22/0110:30	NA	AB21062A	AB21051A	ICB029W	02/20/01	02/21/01

RL : Reporting Limit

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B199

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB029WB	ND	1	NA	.1	.0206	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
LCS1W	ICB029WL	3.98	1	NA	.1	.0206	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
LCD1W	ICB029WC	3.93	1	NA	.1	.0206	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
0026-085	B199-03	9.53	2	NA	.2	.0412	02/22/0105:06	NA	AB21043A	AB21039A	ICB029W	02/20/01	02/21/01
0026-087	B199-04	1	2	NA	.2	.0412	02/22/0105:23	NA	AB21044A	AB21039A	ICB029W	02/20/01	02/21/01
0026-084	B199-02	7.68	50	NA	5	1.03	02/22/0106:31	NA	AB21048A	AB21039A	ICB029W	02/20/01	02/21/01
0026-084DUP	B199-02D	7.15	50	NA	5	1.03	02/22/0108:13	NA	AB21054A	AB21051A	ICB029W	02/20/01	02/21/01
0026-084MS	B199-02M	199	50	NA	5	1.03	02/22/0108:30	NA	AB21055A	AB21051A	ICB029W	02/20/01	02/21/01

RL: Reporting Limit

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 018199

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB029WB	ND	1	NA	.5	.101	02/22/0102:33	NA	AB21034A	AB21027A	ICB029W	NA	NA
LCS1W	ICB029WL	20.9	1	NA	.5	.101	02/22/0102:50	NA	AB21035A	AB21027A	ICB029W	NA	NA
LCD1W	ICB029WC	20.7	1	NA	.5	.101	02/22/0103:07	NA	AB21036A	AB21027A	ICB029W	NA	NA
0026-084	B199-02	3910	1000	NA	500	101	02/22/0109:55	NA	AB21060A	AB21051A	ICB029W	02/20/01	02/21/01
0026-085	B199-03	3790	1000	NA	500	101	02/22/0110:13	NA	AB21061A	AB21051A	ICB029W	02/20/01	02/21/01
0026-087	B199-04	4270	1000	NA	500	101	02/22/0110:30	NA	AB21062A	AB21051A	ICB029W	02/20/01	02/21/01

RL : Reporting Limit

FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01387

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: UST Site 6/7	PURCHASE ORDER NO.: 020545 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.026D
SAMPLER NAME: Tania Torres-Kessler	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: Lisa Bienkowski	AIRBILL NUMBER: Courier

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 018218

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	TPH-EXTRACTABLE	5260B INCLUDING MTBE + OXYGENATES	EPA 418.1 TRPH	EPA 300.1 NITRATE SULFATE CHLORIDE	RSK175M ETHANE ETHANE METHANE	EPA 310.1 ALKALINITY	EPA 7060 TOC				COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-097	2/27/01	TIL 1715 ~~1600~~	11	X		W	10 day	X	X	X	X	X	X	X					S6/7 MW17	-	-	REG

RELINQUISHED BY (Signature): [signature]	DATE: 2/22/01	RECEIVED BY (Signature): [signature]	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY: HWENC	TIME: 1630	COMPANY: EMAX	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
COMPANY	TIME	COMPANY	TEMPERATURE: ____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: QUARTER 1 GW SAMPLING

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 01B218	Date Extracted:	03/04/01 23:13
Sample ID:	0026-097	Date Analyzed:	03/04/01 23:13
Lab Samp ID:	B218-01	Dilution Factor:	1
Lab File ID:	RCH134	Matrix	: WATER
Ext Btch ID:	VOC1441	% Moisture	: NA
Calib. Ref.:	RCH123	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	ND	.5	.21
1,2-DICHLOROPROPANE	ND	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	7.7J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	.76	.5	.12
XYLENES	3.6	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	.96	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	ND	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	113	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	104	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

RSK-175
DISSOLVED GASES

Client	: FOSTER WHEELER	Date Collected:	02/22/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/22/01
Batch No.	: 01B218	Date Extracted:	02/27/01 11:30
Sample ID:	0026-097	Date Analyzed:	02/27/01 20:11
Lab Samp ID:	B218-01	Dilution Factor:	1
Lab File ID:	FB0721A	Matrix :	WATER
Ext Btch ID:	GAB008W	% Moisture :	NA
Calib. Ref.:	FB0713A	Instrument ID :	GCTO10

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	2	1	.26

RL: Reporting Limit

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : O1B218

Matrix : WATER
Instrument ID : GCTO5O

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB043WB	ND	95	1	NA	.1	.067	03/02/0100:09	02/28/0112:30	TC01014A	TC01013A	DSB043W	NA	02/28/01
LCS1W	DSB043WL	4.64	96	1	NA	.1	.067	03/01/0121:44	02/28/0112:30	TC01011A	TC01002A	DSB043W	NA	02/28/01
LCD1W	DSB043WC	4.66	99	1	NA	.1	.067	03/01/0122:32	02/28/0112:30	TC01012A	TC01002A	DSB043W	NA	02/28/01
0026-097*	B218-01	.54	97	.94	NA	.094	.063	03/02/0106:38	02/28/0112:30	TC01022A	TC01013A	DSB043W	02/22/01	02/22/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

* : Non-typical feul pattern, quantified as Diesel

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B218

Matrix : WATER
Instrument ID : 118

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB002WB	ND	1	NA	10	.558	02/27/0113:10	02/24/0118:45	TRB009-03	TRB009CC	TRB002W	NA	02/24/01
LCS1W	TRB002WL	6.25	1	NA	10	.558	02/27/0113:15	02/24/0118:45	TRB009-04	TRB009CC	TRB002W	NA	02/24/01
LCD1W	TRB002WC	6.46	1	NA	10	.558	02/27/0113:20	02/24/0118:45	TRB009-05	TRB009CC	TRB002W	NA	02/24/01
0026-097	B218-01	ND	.94	NA	9.4	.525	02/27/0114:20	02/24/0118:45	TRB009-17	TRB010CC	TRB002W	02/22/01	02/22/01

RL: Reporting Limit

5022

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B218

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICC011WB	ND	1	NA	.2	.047	03/08/0115:45	NA	AC07088A	AC07086A	ICC011W	NA	NA
LCS1W	ICC011WL	4.96	1	NA	.2	.047	03/08/0116:02	NA	AC07089A	AC07086A	ICC011W	NA	NA
0026-097	B218-01	6730	1000	NA	200	47	03/08/0116:19	NA	AC07090A	AC07086A	ICC011W	02/22/01	02/22/01

RL : Reporting Limit

8005

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018218

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB031WB	ND	1	NA	.1	.0206	02/23/0100:35	NA	AB22033A	AB22031A	ICB031W	NA	NA
LCS1W	ICB031WL	3.85	1	NA	.1	.0206	02/23/0100:52	NA	AB22034A	AB22031A	ICB031W	NA	NA
LCD1W	ICB031WC	3.83	1	NA	.1	.0206	02/23/0101:09	NA	AB22035A	AB22031A	ICB031W	NA	NA
0026-097	B218-01	ND	25	NA	2.5	.515	02/23/0106:33	NA	AB22054A	AB22043A	ICB031W	02/22/01	02/22/01

RL: Reporting Limit

8004

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B218

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICC011WB	ND	1	NA	.5	.101	03/08/0115:45	NA	AC07088A	AC07086A	ICC011W	NA	NA
LCS1W	ICC011WL	21.4	1	NA	.5	.101	03/08/0116:02	NA	AC07089A	AC07086A	ICC011W	NA	NA
0026-097	B218-01	4920	1000	NA	500	101	03/08/0116:19	NA	AC07090A	AC07086A	ICC011W	02/22/01	02/22/01

RL : Reporting Limit

8003

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018218

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TCC001WB	ND	1	NA	5	.551	03/05/0110:30	NA	TCC001W-7	TCC001W-5	TCC001W	NA	NA
LCS1W	TCC001WL	19.9	1	NA	5	.551	03/05/0110:45	NA	TCC001W-8	TCC001W-5	TCC001W	NA	NA
LCD1W	TCC001WC	20.2	1	NA	5	.551	03/05/0111:00	NA	TCC001W-9	TCC001W-5	TCC001W	NA	NA
0026-097	B218-01	5.10	1	NA	5	.551	03/05/0113:45	NA	TCC001W-16	TCC001W-5	TCC001W	02/22/01	02/22/01

RL : Reporting Limit

8029

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018218

Matrix : WATER
Instrument ID : NA

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALC002WB	ND	1	NA	5	.469	03/03/0109:00	NA	ALC002W-01	NA	ALC002W	NA	NA
LCS1W	ALC002WL	72.5	1	NA	5	.469	03/03/0109:10	NA	ALC002W-02	NA	ALC002W	NA	NA
LCD1W	ALC002WC	75.0	1	NA	5	.469	03/03/0109:20	NA	ALC002W-03	NA	ALC002W	NA	NA
0026-097	8218-01	ND	1	NA	5	.469	03/03/0112:30	NA	ALC002W-22	NA	ALC002W	02/22/01	02/22/01

RL: Reporting Limit

FOSTER WH[illegible]R ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite [illegible] San Diego, CA 92101 (619) 234-8696

NUMBER 01389

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Site 5/6	PURCHASE ORDER NO.: 020848 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1790.026D
SAMPLER NAME: Tania Turpin-Keasler	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: Lisa Bienkowski	AIRBILL NUMBER: Courier

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 018232

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	TPH-EXTRACTABLE	8260B INCLUDING MTBE & OXYGENATES	EPA 418.1 TRPH	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026-119	2/23/01	1115	5	X		W	10 day	X	X	X		S6/7-MW12	-	-	REG
0026-120	2/23/01	1130	5	X		W	10 day	X	X	X		S6/7-MW12	-	-	FD

[signature] 2/23/01

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/23/01	[signature]
COMPANY: FWENC	TIME: 1600	COMPANY: Roadrunner
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: QUARTER 1 GW SAMPLING

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/23/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/23/01
Batch No.	: 01B232	Date Extracted:	03/06/01 19:10
Sample ID:	0026-119	Date Analyzed:	03/06/01 19:10
Lab Samp ID:	B232-01	Dilution Factor:	1
Lab File ID:	RCH173	Matrix :	WATER
Ext Btch ID:	VOC1741	% Moisture :	NA
Calib. Ref.:	RCH165	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	.96	.5	.21
1,2-DICHLOROPROPANE	.57J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	10J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	.34J	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.94J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	114	62-139
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/23/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/23/01
Batch No.	: 01B232	Date Extracted:	03/06/01 19:48
Sample ID	: 0026-120	Date Analyzed:	03/06/01 19:48
Lab Samp ID	: B232-02	Dilution Factor:	1
Lab File ID	: RCH174	Matrix	: WATER
Ext Btch ID	: VOC1741	% Moisture	: NA
Calib. Ref.	: RCH165	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.42
1,1,2,2-TETRACHLOROETHANE	ND	1	.19
1,1,2-TRICHLOROETHANE	ND	5	.17
1,1-DICHLOROETHANE	ND	5	.16
1,1-DICHLOROETHENE	ND	5	.1
1,2-DICHLOROETHANE	.97	.5	.21
1,2-DICHLOROPROPANE	.57J	5	.14
METHYL ETHYL KETONE	ND	50	2.1
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE (MIBK)	ND	50	1.2
ACETONE	11J	50	2.7
BENZENE	ND	.5	.15
BROMODICHLOROMETHANE	ND	5	.17
BROMOFORM	ND	5	.12
BROMOMETHANE	ND	5	.18
CARBON TETRACHLORIDE	ND	.5	.091
CHLOROBENZENE	ND	5	.14
CHLOROETHANE	ND	5	.43
CHLOROFORM	ND	5	.41
CHLOROMETHANE	ND	5	.24
CIS-1,2-DICHLOROETHENE	ND	5	.16
CIS-1,3-DICHLOROPROPENE	ND	.5	.21
DIBROMOCHLOROMETHANE	ND	5	.14
ETHYLBENZENE	ND	.5	.12
XYLENES	ND	1.5	.27
MTBE	ND	1	.22
METHYLENE CHLORIDE	ND	5	.22
STYRENE	ND	5	.15
TETRACHLOROETHYLENE	ND	5	.14
TOLUENE	ND	.5	.14
TRANS-1,2-DICHLOROETHENE	ND	5	.18
TRANS-1,3-DICHLOROPROPENE	ND	.5	.23
TRICHLOROETHENE	.95J	5	.15
VINYL ACETATE	ND	50	.32
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	2.3
DIISOPROPYL ETHER	ND	5	.39
ETHYL TERT-BUTYL ETHER	ND	5	.88
TERT-AMYL METHYL ETHER	ND	5	1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	118	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	108	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2005

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 01B232

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB045WB	ND	98	1	NA	.1	.067	03/02/0115:31	03/01/0112:00	TC01033A	TC01030A	DSB045W	NA	03/01/01
LCS1W	DSB045WL	5.07	101	1	NA	.1	.067	03/02/0116:19	03/01/0112:00	TC01034A	TC01030A	DSB045W	NA	03/01/01
LCD1W	DSB045WC	5.02	100	1	NA	.1	.067	03/02/0117:08	03/01/0112:00	TC01035A	TC01030A	DSB045W	NA	03/01/01
0026-119	B232-01	.14	98	.96	NA	.096	.0643	03/02/0118:45	03/01/0112:00	TC01037A	TC01030A	DSB045W	02/23/01	02/23/01
0026-120	B232-02	.11	95	.96	NA	.096	.0643	03/02/0119:34	03/01/0112:00	TC01038A	TC01030A	DSB045W	02/23/01	02/23/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

6004

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 018232

Matrix : WATER
Instrument ID : 1018

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB002WB	ND	1	NA	10	.558	02/26/0113:10	02/24/0118:45	TRB009-03	TRB009CC	TRB002W	NA	02/24/01
LCS1W	TRB002WL	6.25	1	NA	10	.558	02/26/0113:15	02/24/0118:45	TRB009-04	TRB009CC	TRB002W	NA	02/24/01
LCD1W	TRB002WC	6.46	1	NA	10	.558	02/26/0113:20	02/24/0118:45	TRB009-05	TRB009CC	TRB002W	NA	02/24/01
0026-119	B232-01	ND	.94	NA	9.4	.525	02/26/0114:25	02/24/0118:45	TRB009-18	TRB010CC	TRB002W	02/23/01	02/23/01
0026-120	B232-02	ND	.95	NA	9.5	.53	02/26/0114:30	02/24/0118:45	TRB009-19	TRB010CC	TRB002W	02/23/01	02/23/01

RL: Reporting Limit

FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234-8696

NUMBER 01390

CHAIN-OF-CUSTODY RECORD

01B245 M4/VC2

PROJECT NAME: UST Site 6/7	PURCHASE ORDER NO.: 020848 TASK 2
PROJECT LOCATION: CAMP PENDLETON	PROJECT NO.: 1990.026D
SAMPLER NAME: Tania Turpin-Keasler	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: Lisa Bienkowski	AIRBILL NUMBER: Courier

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 01B245

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL C	LEVEL D	TYPE	TAT	TPH-EXTRACTABLE	EPA 8260B INCLUDING MTBE & OXYGENATES	EPA 418.1 TRPH	EPA 300.0 NITRATE SULFATE CHLORIDE	RSK 175M ETHENE ETHANE METHANE	EPA 310.1 ALKALINITY	EPA 1060 TOC				COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0026 130	2/26/01	1620	11	Y		W	10 day	Y	X	X	X	X	X	Y					S6/7 MW13	-	-	REG

2/26/01

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	2/26/01	[signature] #005
COMPANY: FWENC	TIME: 1700	COMPANY: ROAD RUNNER
RELINQUISHED BY (Signature): DRC #005	DATE: 2/26/01	RECEIVED BY (Signature): [signature]
COMPANY: ROAD RUNNER	TIME: 645	COMPANY: EMAX Lab.
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: 3.5 SAMPLE CONDITION: ☑ INTACT ☐ BROKEN
COOLER SEAL: ☑ INTACT ☐ BROKEN

SAMPLING COMMENT: QUARTER 1 GW SAMPLING

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: FOSTER WHEELER	Date Collected:	02/26/01
Project	: CAMP PENDLETON, CTO26	Date Received:	02/26/01
Batch No.	: 018245	Date Extracted:	03/07/01 12:08
Sample ID:	0026-130	Date Analyzed:	03/07/01 12:08
Lab Samp ID:	B245-01	Dilution Factor:	2.5
Lab File ID:	RCH200	Matrix :	WATER
Ext Btch ID:	VOC1941	% Moisture :	NA
Calib. Ref.:	RCH187	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	12	1.1
1,1,2,2-TETRACHLOROETHANE	ND	2.5	.48
1,1,2-TRICHLOROETHANE	ND	12	.43
1,1-DICHLOROETHANE	1.3J	12	.4
1,1-DICHLOROETHENE	ND	12	.25
1,2-DICHLOROETHANE	ND	1.2	.52
1,2-DICHLOROPROPANE	ND	12	.35
METHYL ETHYL KETONE	ND	120	5.3
2-HEXANONE	ND	120	2.5
4-METHYL-2-PENTANONE (MIBK)	ND	120	3.1
ACETONE	ND	120	6.8
BENZENE	9.4	1.2	.37
BROMODICHLOROMETHANE	ND	12	.44
BROMOFORM	ND	12	.31
BROMOMETHANE	ND	12	.46
CARBON TETRACHLORIDE	ND	1.2	.23
CHLOROBENZENE	ND	12	.35
CHLOROETHANE	ND	12	1.1
CHLOROFORM	ND	12	1
CHLOROMETHANE	ND	12	.6
CIS-1,2-DICHLOROETHENE	ND	12	.4
CIS-1,3-DICHLOROPROPENE	ND	1.2	.53
DIBROMOCHLOROMETHANE	ND	12	.35
ETHYLBENZENE	21	1.2	.3
XYLENES	110	3.7	.68
MTBE	ND	2.5	.54
METHYLENE CHLORIDE	1.3J	12	.54
STYRENE	ND	12	.38
TETRACHLOROETHYLENE	ND	12	.34
TOLUENE	20	1.2	.35
TRANS-1,2-DICHLOROETHENE	ND	12	.46
TRANS-1,3-DICHLOROPROPENE	ND	1.2	.57
TRICHLOROETHENE	8.6J	12	.39
VINYL ACETATE	ND	120	.8
VINYL CHLORIDE	ND	1.2	.51
TERT-BUTYL ALCOHOL	ND	50	5.8
DIISOPROPYL ETHER	ND	12	.97
ETHYL TERT-BUTYL ETHER	ND	12	2.2
TERT-AMYL METHYL ETHER	ND	12	3.1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	62-139
TOLUENE-D8	90	75-125
BROMOFLUOROBENZENE	98	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

2004

METHOD 3550/M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018245

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSB045WB	ND	98	1	NA	.1	.067	03/02/0115:31	03/01/0112:00	TC01033A	TC01030A	DSB045W	NA	03/01/01
LCS1W	DSB045WL	5.07	101	1	NA	.1	.067	03/02/0116:19	03/01/0112:00	TC01034A	TC01030A	DSB045W	NA	03/01/01
LCD1W	DSB045WC	5.02	100	1	NA	.1	.067	03/02/0117:08	03/01/0112:00	TC01035A	TC01030A	DSB045W	NA	03/01/01
0026-130*	B245-01	1.5	98	1	NA	.1	.067	03/02/0117:57	03/01/0112:00	TC01036A	TC01030A	DSB045W	02/26/01	02/26/01

RL : Reporting Limit
SUR1 : Hexacosane

Parameter	H-C Range
JP5	C7 -C18
Diesel	C10-C24
Motor Oil	C18-C34
Gas	C6 -C12

* : A non-typical fuel pattern, quantitated against Diesel calibration factor

5004

RSK-175
DISSOLVED GASES

Client : FOSTER WHEELER	Date Collected: 02/26/01
Project : CAMP PENDLETON, CTO26	Date Received: 02/26/01
Batch No. : 01B245	Date Extracted: 02/28/01 10:15
Sample ID: 0026-130	Date Analyzed: 02/28/01 13:10
Lab Samp ID: B245-01	Dilution Factor: 1
Lab File ID: FB0816A	Matrix : WATER
Ext Btch ID: GAB009W	% Moisture : NA
Calib. Ref.: FB0802A	Instrument ID : GCT010

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	1	.26
ETHYLENE	ND	1	.18
METHANE	16	1	.26

RL: Reporting Limit

METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B245

Matrix : WATER
Instrument ID : 1018

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRC001WB	ND	1	NA	10	.558	03/05/0111:40	03/02/0118:30	TRC003-03	TRC003CC	TRC001W	NA	03/02/01
LCS1W	TRC001WL	5.85	1	NA	10	.558	03/05/0111:45	03/02/0118:30	TRC003-04	TRC003CC	TRC001W	NA	03/02/01
LCD1W	TRC001WC	5.85	1	NA	10	.558	03/05/0111:50	03/02/0118:30	TRC003-05	TRC003CC	TRC001W	NA	03/02/01
0026-130	B245-01	ND	1	NA	10	.558	03/05/0111:55	03/02/0118:30	TRC003-06	TRC003CC	TRC001W	02/26/01	02/26/01

RL: Reporting Limit

6002

METHOD 310.1
TOTAL ALKALINITY

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B245

Matrix : WATER
Instrument ID :

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALC004WB	ND	1	NA	5	.469	03/05/0113:45	NA	ALC004W-1	NA	ALC004W	NA	NA
LCS1W	ALC004WL	74.7	1	NA	5	.469	03/05/0113:55	NA	ALC004W-2	NA	ALC004W	NA	NA
LCD1W	ALC004WC	74.7	1	NA	5	.469	03/05/0114:05	NA	ALC004W-3	NA	ALC004W	NA	NA
0026-130	B245-01	ND	1	NA	5	.469	03/05/0115:05	NA	ALC004W-9	NA	ALC004W	02/26/01	02/26/01

RL: Reporting Limit

8028

METHOD 9060
TOC

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B245

Matrix : WATER
Instrument ID : 1026

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TCC001WB	ND	1	NA	5	.551	03/05/0110:30	NA	TCC001W-07	TCC001W-05	TCC001W	NA	NA
LCS1W	TCC001WL	19.9	1	NA	5	.551	03/05/0110:45	NA	TCC001W-08	TCC001W-05	TCC001W	NA	NA
LCD1W	TCC001WC	20.2	1	NA	5	.551	03/05/0111:00	NA	TCC001W-09	TCC001W-05	TCC001W	NA	NA
0026-130	B245-01	15.9	1	NA	5	.551	03/05/0116:35	NA	TCC001W-23	TCC001W-17	TCC001W	02/26/01	02/26/01

RL : Reporting Limit

METHOD 300.0
NITRATE/NITRITE-N

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 018245

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB034WB	ND	1	NA	.1	.0206	02/27/0111:38	NA	AB27003A	AB27001A	ICB034W	NA	NA
LCS1W	ICB034WL	3.95	1	NA	.1	.0206	02/27/0111:55	NA	AB27004A	AB27001A	ICB034W	NA	NA
LCD1W	ICB034WC	3.95	1	NA	.1	.0206	02/27/0112:12	NA	AB27005A	AB27001A	ICB034W	NA	NA
0026-130	B245-01	2.28	2	NA	.2	.0412	02/27/0112:29	NA	AB27006A	AB27001A	ICB034W	02/26/01	02/26/01

RL: Reporting Limit

8003

METHOD 300.0
SULFATE

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CT026
Batch No. : 018245

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB034WB	ND	1	NA	.5	.101	02/27/0111:38	NA	AB27003A	AB27001A	ICB034W	NA	NA
LCS1W	ICB034WL	20	1	NA	.5	.101	02/27/0111:55	NA	AB27004A	AB27001A	ICB034W	NA	NA
LCD1W	ICB034WC	20	1	NA	.5	.101	02/27/0112:12	NA	AB27005A	AB27001A	ICB034W	NA	NA
0026-130	B245-01	4050	200	NA	100	20.2	02/27/0117:05	NA	AB27020A	AB27013A	ICB034W	02/26/01	02/26/01

RL : Reporting Limit

METHOD 300.0
CHLORIDE-Cl

Client : FOSTER WHEELER
Project : CAMP PENDLETON, CTO26
Batch No. : 01B245

Matrix : WATER
Instrument ID : TI006

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICB034WB	ND	1	NA	.2	.047	02/27/0111:38	NA	AB27003A	AB27001A	ICB034W	NA	NA
LCS1W	ICB034WL	4.73	1	NA	.2	.047	02/27/0111:55	NA	AB27004A	AB27001A	ICB034W	NA	NA
LCD1W	ICB034WC	4.75	1	NA	.2	.047	02/27/0112:12	NA	AB27005A	AB27001A	ICB034W	NA	NA
0026-130	B245-01	4930	1000	NA	200	47	02/27/0121:38	NA	AB27036A	AB27025A	ICB034W	02/26/01	02/26/01

RL : Reporting Limit

APPENDIX C

NON-HAZARDOUS WASTE MANIFESTS

NON-HAZARDOUS WASTE MANIFEST

09265

PROFILE NO. 453350

MP
1-800-458-3036
☐ BAKERSFIELD ☐ YOLO ☐ PHOENIX

NOTE: This form to be in lieu of the Toxic Substance Controls hazardous waste manifest. To be used for NON-HAZARDOUS WASTES only. EC-9979

TO BE COMPLETED BY GENERATOR

Name : AC-S Environmental Security

Mailing Address : P.O. Box 555008, Camp Pendleton,

City / State / Zip : Camp Pendleton, CA. 92055-5008

Phone No : 760 725-3360 Contact :

Signature: X [signature] Date: 02 / 25 / 2001

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS

Waste Description : TPh Impacted WATER

Generating Location : Sites 1, 5/8/9/17, 10, 16, 13

Handling Instructions :

Quantity : 1500 [ ]BBL [X]GLS [ ]YDS [ ]TONS

CONTAINER TYPE: [X]TANK TRUCK [ ]DUMP TRUCK [ ]DRUMS [ ]BINS [ ]OTHER

DESIGNATED FACILITY :

NAME : ADDRESS :

CITY/STATE/ZIP: PHONE # :

TRANSPORTER

MP VACUUM TRUCK SERVICE
MP ENVIRONMENTAL SERVICES, INC.
3400 Manor Street
Bakersfield, CA 93308
805 / 393-1151

TICKET# C-185380 TRACT/TRLR# 476 / 3268
Bin No's
Signature: John T. Alsip
Date 2-23-01
P/U DATE: 2-23-01 Job # EC-9979

TSD FACILITY

Name : Onyx Environmental Services CAD 008302903

Address : 1704 W. 1st St **Disposal Method :**

City/State/Zip : Azusa, CA. 91702 ☐Landfill Other

Phone No : 626-334-5117 Time : am pm

Discrepancy :

Signature : Date : / /

GENERATOR RETAIN

ATTACHMENT 1

WELL INSTALLATION AND DESTRUCTION REPORT

TABLE OF CONTENTS

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1.1 FIELD ACTIVITIES 1-1
1.2 WASTE DISPOSAL 1-1

APPENDICES

Appendix A Well Permit, and Boring, Well Construction, and Well Development Logs

Appendix B Hazardous and Non-Hazardous Waste Manifests and Waste Profiles

LIST OF FIGURES

Figure 1-1 Site Map

1.0 WELL INSTALLATION

On February 1 and 2, 2001, Foster Wheeler Environmental Corporation destroyed three groundwater monitoring wells and replaced them with two new groundwater monitoring wells at Site 1, 13 Area (Figure 1-1), Marine Corps Base Camp Pendleton, California. These three wells were replaced because groundwater had risen above screened intervals. Soil samples were collected for waste characterization purposes only.

1.1 FIELD ACTIVITIES

On January 30, 2001, a boring permit was obtained from the San Diego Department of Environmental Health, identified as Permit No. W99561, for the new well installations and well destruction. Utility clearances by Underground Service Alert, the Base utility locator service, and a subcontracted utility locator service were performed at this site recently for other drilling activities. Prior to drilling, the first 5 feet of each boring was hand augured to ensure utility clearance.

On February 1, 2001, monitoring wells S1-MW13171-1, S1-MW13171-2, and S1-MW13171-3 were destroyed by over-drilling with a 10-inch diameter hollow stem auger. All casing and annular materials were removed. Each boring was backfilled with hydrated bentonite chips and sealed per well permit requirements.

On February 2, 2001, the new well borings, identified as wells S1-MW22 and S1-MW23, were drilled using a hollow-stem auger to 37 and 30 feet below ground surface, respectively. Well S1-MW22 is located in the vicinity of former well S1-MW13171-1, southwest of the former gasoline underground storage tank cavity at Site 1. Well S1-MW22 is located approximately 10 feet east of former well S1-MW13171-2. Once the target depth was achieved, the groundwater monitoring well was constructed in the well boring. The groundwater monitoring well was constructed in accordance with well permit requirements. Well survey data is included as Attachment 2.

On February 12, 2001 surging and bailing techniques were used to develop monitoring wells S1-MW22 and S1-MW23. Copies of the well permit, the well boring and construction log, and the well development form are included in Appendix A.

1.2 WASTE DISPOSAL

Wastes from the drilling and well development activities (soil cuttings and decontamination water and purge water) were transported as hazardous and non-hazardous waste to Onyx Environmental Services in Azusa, California, for disposal. The hazardous and non-hazardous waste manifest forms and waste profile forms are included as Appendix B.

FIGURES

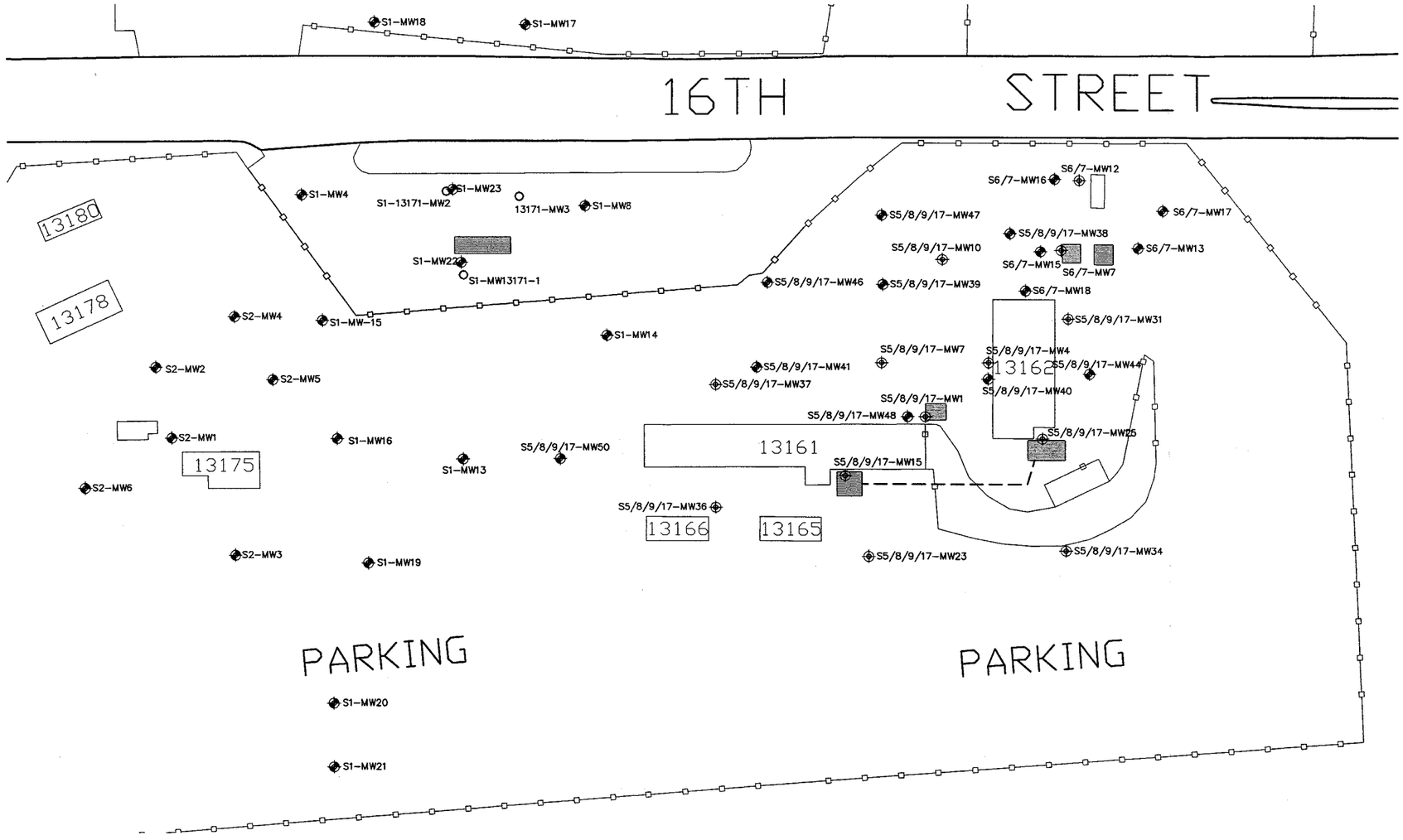
DRAWING NO: 0104131A11.DWG

DCN: FWSD-RAC-01-0413 | CTO #0026

APPROVED BY: MC

CHECKED BY: JO | REV: REVISION 0

DRAWN BY: MD | DATE: 03/20/01



LEGEND:

- S5/8/9/17-MW23 — DEEP AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- S1-MW21 — SHALLOW AQUIFER GROUNDWATER MONITORING WELL AND IDENTIFICATION
- WELL DESTROYED, FEBRUARY 2001
- FORMER UST
- LOCATION OF FORMER BLDG.
- LOCATION OF FORMER PIPELINE
- FENCE LINE

100 50 0 100
SCALE IN FEET

N

Figure A.1-1
WELL LOCATION MAP
13 AREA

MCB CAMP PENDLETON

FOSTER WHEELER ENVIRONMENTAL CORPORATION

I:\1990-RAC\CTO-0026\13 AREA\010413 13 AREA GWMR, APRIL 01\DWGS\010413A11.DWG
PLOT/UPDATE: MAR 30 2001 09:50:45

APPENDIX A

WELL PERMIT, WELL BORING AND CONSTRUCTION LOGS, AND WELL DEVELOPMENT LOGS

PERMIT # W99561
A.P.N. 101-000-00
EST # H05939-025

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION

MONITORING WELL AND BORING CONSTRUCTION AND DESTRUCTION PERMIT

SITE NAME: AREA 13, BUILDING 13171

SITE ADDRESS: MCB CAMP PENDLETON, CAMP PENDLETON, CA 92055

PERMIT FOR: **INSTALL 2 AND DESTROY 3 GROUNDWATER MONITORING WELLS**

PERMIT APPROVAL DATE: JANUARY 30, 2001

PERMIT EXPIRES ON: MAY 30, 2001

PERMIT CONDITIONS:

1. **Contact the RWQCB for their comments and concerns regarding the proposed activities.**
2. **For well to be destroyed, all material within the original borehole, which includes the casing, filterpack and annular seal must be removed. The borehole must be completely filled with an approved sealing material as specified in Department of Water Resources Bulletin 74-90.**
3. All wash water must be contained and disposed of properly.
4. Submit complete laboratory data for both soil and groundwater with the well logs.
5. Submit all the information specified in the 2000 SAM Manual in: Section 5, Page 3 (1)
6. All water and soil placed in drums must be labeled and stored as specified in the 2000 SAM Manual in:

   Section 5, Page 7, (5)

7. This office must be given 48 hour notice of any drilling activity on this site. Please contact Marisue Crystal at (619) 338-2339.
8. This office must be given advanced notification of drilling cancellation. Please contact Marisue Crystal at (619) 338-2339.

NOTE: **This permit does not constitute approval of a workplan as defined in Section 2722 of Article 11 of C.C.R., Title 23. Workplans are required for all unauthorized release investigations in San Diego County.**

APPROVED BY: **Robert Rapista** DATE: 01/30/01

Notified: V.M. MST JAN 30 2001 MSC

Statement of Certification

I, Mark Cutler, certify that, to the best of my knowledge, the data and information presented in the boring and well completion logs listed below are accurate and complete. The field geologist performed field activities and prepared the logs according to accepted practices and procedures, under my supervision.

Mark Cutler, CA RG #4487

13 Area, Site 1
S1-MW22
S1-MW23

FOSTER WHEELER ENVIRONMENTAL CORPORATION

LOG OF BORING S1-MW22

(Sheet 1 of 1)

Client: SWDIV	Drilling Company: West Hazmat
Project: Site 1, 13 Area	Drilling Method: Hollow Stem Auger
Project Number: 1990.026D.0715	Sampling Method: None
Location: MCB Camp Pendleton	Borehole Diameter: 9 in. 0-37Ft.
Geologist: Jeff Oslick	Northing: 2,058,833.70 Feet (NAD 83; NAVD 88)
Date Started: February 2, 2001	Easting: 6,236,864.57 Feet (NAD 83; NAVD 88)
Date Completed: February 2, 2001	Ground Surface Elevation:
Total Depth: 37.0 Feet bgs	Top of Casing Elevation: 331.13 Feet AMSL : above mean sea level

Depth (ft.)	Sample PID (ppm)	WELL CONSTRUCTION SUMMARY	Water Level	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	Depth (ft.)
5	23	TRAFFIC RATED FLUSH MOUNT VAULT LOCKING WELL CAP CONCRETE 4-INCH DIAMETER BLANK, SCH.40 PVC		SC		0 to 5 ft. Clayey fine to medium grained sands, light tan and grey, 10-15% plastic fines; percent fines is 25-30% at 5'.	5
10	220	MEDIUM BENTONITE CHIPS, HYDRATED		ML		5 to 12 ft. Clayey silt with fine sands, grey, 25% plastic fines. Slight gasoline odor at 7'.	10
15	394	#2/16 SAND		CL		12 to 16 ft. Silty clays and clayey silts, 12-14' is grey, 14'-16' change to light tan. Strong gasoline odor at 13'.	15
				CL CL		16 to 16.5 ft. Clay, brown, moderate to high plasticity, 50% plastic fines. 16.5 to 19 ft. Silty clays and clayey silts, light tan.	
20	10			ML		19 to 23 ft. Silts, 5% plastic fines, light grey.	20
25		4-INCH DIAMETER, 0.010-INCH SLOT, SCH.40 PVC		SC		23 to 31 ft. Clayey fine to medium grained sand, 30% plastic fines and silts, light grey. 6" brown layer at 25'.	25
30	79		▽	CL		31 to 37 ft. Clay, moderate to high plasticity, brown with grey, moist.	30
35							35

Notes: bgs = below ground surface
NAD 83; NAVD 88
AMSL : above mean sea level

Boring Log Reviewed By: Mark Cutler, CA R.G. 4487 2/8/01

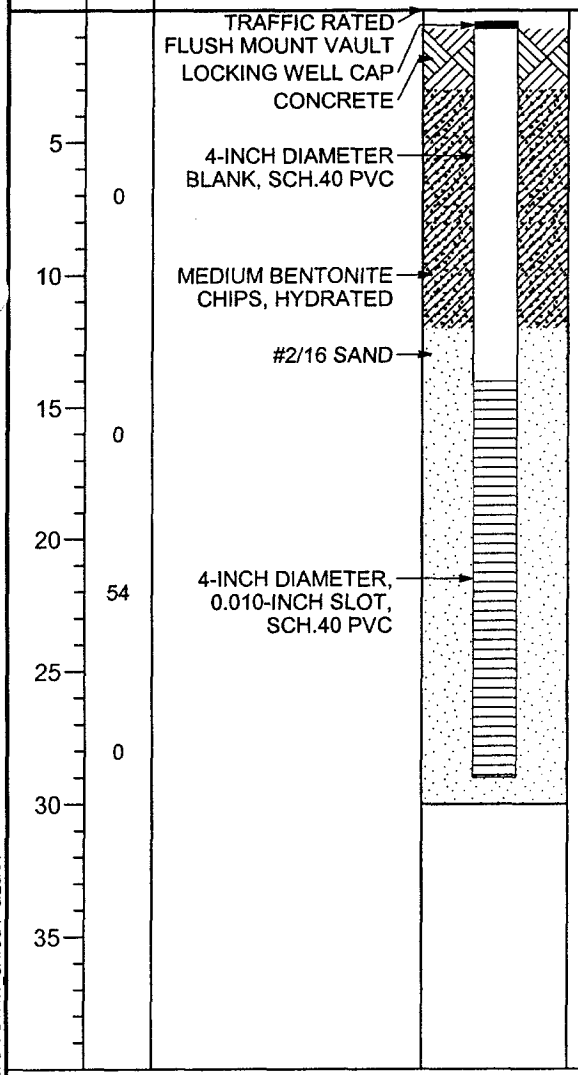
WELL LOG S1MW223.GPJ FSTRW_SA.GDT 3/29/01

FOSTER WHEELER ENVIRONMENTAL CORPORATION

LOG OF BORING S1-MW23

(Sheet 1 of 1)

Client: SWDIV	Drilling Company: West Hazmat
Project: Site 1, 13 Area	Drilling Method: Hollow Stem Auger
Project Number: 1990.026D.0715	Sampling Method: None
Location: MCB Camp Pendleton	Borehole Diameter: 9 in. 0-30Ft.
Geologist: Jeff Oslick	Northing: 2,058,891.95 Feet (NAD 83; NAVD 88)
Date Started: February 2, 2001	Easting: 6,236,858.09 Feet (NAD 83; NAVD 88)
Date Completed: February 2, 2001	Ground Surface Elevation:
Total Depth: 30.0 Feet bgs	Top of Casing Elevation: 329.19 Feet AMSL : above mean sea level



Water Level	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	Depth (ft.)
	SC		0 to 6 ft. Clayey fine to medium grained sand, medium brown color, 30-40% plastic fines, slightly moist.	5
	SC		6 to 6.5 ft. Clayey sand, redish brown.	
	SM		6.5 to 9 ft. Silty to clayey fine sand, light tan to brown, 25% plastic fines, no odor.	
	SP-SC		9 to 12 ft. Clayey, poorly sorted fine to medium sands, light tan. Medium sands appear in thin lenses.	10
	CL		12 to 14 ft. Clayey silt to silty clay, medium tan to brown with grey mottling.	
	CL		14 to 15 ft. Clay, bright red, moderate to high plasticity, stiff, <10% silt, trace fine sands.	
	CL		15 to 22 ft. Clay and silty clay, 15-18' tan to grey color, 18-22' transitions to medium brown color, no odor.	15
	ML		22 to 27 ft. Clayey silt with fine sands, medium brown, 15-30% plastic fines.	20
▽	ML		27 to 28 ft. Clayey silts with 15% medium to fine sands, very moist, no odor.	25
	ML		28 to 30 ft. Sandy silts, wet running fine sands and silt, no odor.	30
				35

Notes: bgs = below ground surface
NAD 83; NAVD 88
AMSL : above mean sea level

Boring Log Reviewed By: Mark Cutler, CA R.G. 4487 2/8/01

WELL LOG S1MW..GPJ FSTRW_SA.GDT 3/29/01

FOSTER WHEELER ENVIRONMENTAL CORPORATION

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: MCB Camp Pendleton
Project Number: CTO 26
Date: 2/12/01
Site Engineer: J Donnay, Field Tech.

Well Number: USTS1, Area 13, Well 22 SI-MW22
Equipment: Horiba U-10, 2" Grundfos pump
Contractor: FWENC personnel Brock from West Hazmat Drilling

	Before	Reference Point	After
Depth to Water (ft)	19.58	BTOC	31.93
Depth to Sediment (ft)	32.58	BTOC	32.58
Thickness of Sediment (ft)			

Depth of Well (ft) 33'
Diameter of Casing ~~(ft)~~ 4-inch PVC
Water Column Height (ft)

Casing Volume (gals) = π(Diam. of Casing (ft)/2)^2 (Water Column Height (ft))(7.48 gals/ft^3) = _____

Casing Volumes Purged _____

Total Volume Purged (gals) _____

Pumping @ approx. 0.5 gpm

Time	pH	Turbidity (NTU)	Temp (°C)	Conductivity (µmhos)	Surge Bail Pump		Comments
1052					S		Begin surgingwell,
1106					End S		End surging, very odorous
1111	6.55		23.2	14.6	B		5 gall. bailed
1113	-	-	-	-			13 gall. bailed; went dry
1116	6.47		23.1	15.4			Recharching, 31.69' DTW
1130	6.85		20.9	12.8	B		Bailed, went dry twice
1132	6.66		22.7	13.3	P		Pumped 19 gall.
1135	-	-	-	-			Pumped dry, wait for rechar
~~1135~~							
1154	6.85		14.3	13.5	P		approx. 21 gall.
1157	6.55		23.9	16.3	P		approx. 22.5 gall.
1159	6.59		24.4	16.4	P		approx. 23.5 gall.
1200	-	-	-	-	End P		Well runs dry. End pumping.

Notes Sampling Procedures:

1052	Begin surgingwell
1106	End surging. Well is very odourous & coffee colore
1110	Begin Bailing
1130	End bailing
1132	Begin pumping
1200	End pump. Well is dry & much cleaner.

WELL DEVELOPMENT LOG / WELL SAMPLING LOG

Project Name: MCB Camp Pendleton
Project Number: CTO 26
Date: 2/12/01
Site Engineer: J Donnay, Field Tech.

Well Number: Site 1, Area 13, Well 23 SI-MW23
Equipment: 2" Grundfos
Contractor: FWENC Personnel
Brock, West Hazmat Drilling

	Before	Reference Point	After
Depth to Water (ft)	17.17 ft.	BTOC	20.87 ft.
Depth to Sediment (ft)	28.45 ft.	BTOC	28.50 ft.
Thickness of Sediment (ft)			

Pump set @ 28 ft.

Depth of Well (ft) 28.5'
Diameter of Casing ~~(ft)~~ 4" PVC
Water Column Height (ft)

Casing Volume (gals) = π(Diam. of Casing (ft)/2)^2 (Water Column Height (ft))(7.48 gals/ft^3) = _____

Casing Volumes Purged _____

Total Volume Purged (gals) Approx. 42 gallons Pumping @ approx.0.5gpm

Time	pH	Turbidity (NTU)	Temp (°C)	Conductivity (µmhos)	Surge Bail Pump		Comments
0922					S		Begin surging well
0930					End S		End surging
0933	6.52		22.4	20.2	B		Begin bailing 5 gallons
0937	6.36		23.0	23.4	B		approx 18 gallons
0941	-	-	-	-	-		approx 20 gallons
0950	6.07		22.5	24.9	P		approx 22 gallons @ 0.6 gpm
0952	6.01		23.6	23.0	P		approx 23 gallons
0957	5.99		23.7	22.7	P		approx. 25.5 gallons
1001	5.92		24.7	22.6	P		approx. 27 gallons
1003	5.92		24.9	22.7	P		approx. 28 gallons
1006	5.93		25.1	22.6	P		approx. 29.5 gallons
1010	5.89		25.2	22.5	P		approx. 31.5 gallons
1015	6.17		24.9	22.4	P		approx. 34 gallons
1019	6.20		25.1	22.7	P		approx. 36 gallons
1024	6.19		24.9	22.4	End P		approx. 38.5 gall. End pumping.

Notes Sampling Procedures:
0922 Begin surging well
0930 End surging well - water has slight diesel odor.
0943 Begin pumping
1026 End pumping
1024 End development. Water cleared significantly.

APPENDIX B

HAZARDOUS AND NON-HAZARDOUS WASTE MANIFESTS AND WASTE PROFILES

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CA2170023533 | Manifest Document No. 31962 | 2. Page 1 of 1

3. Generator's Name and Mailing Address: ASSISTANT CHIEF OF STAFF ENVIRONMENTAL SECURITY P.O. BOX 555008

4. Generator's Phone (760) 725-3360

5. Transporter 1 Company Name: MP ENVIRONMENTAL SERVICES | 6. US EPA ID Number: CAT000624247 | A. Transporter's Phone: (800) 458-3036

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address: CHEVRON ENVIRONMENTAL SVCS L.L.C. 1704 W. FIRST ST. AZUSA, CA 91702 | 10. US EPA ID Number: CAD008303029 | C. Facility's Phone: (626) 334-5117

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS "T.P.H. SOIL" (Total Petroleum Hydrocarbons Soil)	012	DM	09600	lbs
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above: SITE I WASTE MW23/22 DRILLING

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information: WEAR PROPER PROTECTIVE EQUIPMENT

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Josh Brady | Signature | Month 03 | Day 14 | Year 01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: LANCE TORIX | Signature | Month 03 | Day 14 | Year 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR — TRANSPORTER — FACILITY

Printed by J. J. KELLER & ASSOCIATES, INC
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 1/97

Waste Management

AETS/CWM

3 Goldmine Road, Flanders, New Jersey 07836 • Phone 973-347-7111

WASTESTREAM INFORMATION PROFILE

Disposal Code

☐ Recertification
AETS/CWM LOCATION _____ OFFICE _____ CITY _____ ST _____ 2 70
I, ☐ Invoice Address

AETS TSDF requested _____ Technology requested _____ Generator No. _____ Generator EPA ID No. CAT000624247

1. Generator Name ASSISTANT CHIEF OF STAFF/ENVIRONMENTAL SECURITY Generator State No. NA
Address P.O. BOX 555008 State Waste stream No. NA
City CAMP PENDLETON State CA Country USA ZIP 92055 5008
NAICS (SIC) Code _____ Source _____ Origin _____ Form _____ System Type _____

2. Waste Name NON HAZARDOUS TPH SOIL Lab or Waste Area _____
3. Process Generating Waste UST CLEAN UP / MONITORING WELLS
4. Shipping Name NON HAZARDOUS TPH SOIL
Hazard Class _____ UN/NA No. _____ PG _____ RQ amt _____ lb

RQ Desc:	1. NA	2.
DOT Desc:	1. NA	2

5. Waste Codes NA
Wastewater _____ Non Wastewater X Sub Category _____

6. Physical and chemical properties (check all that apply)

pH
a ___ < 2
b ___ 2 - 5
c X 5 - 9
d ___ 9 - 12.5
e ___ > 12.5
_____ exact

Specific Gravity
a ___ < .8
b ___ .8 - 1.0
c ___ 1.0
d ___ 1.0 - 1.2
e ___ > 1.2
NA exact

Flash Point (F)
a ___ < 80
b ___ 80 - 100
c ___ 101 - 140
d ___ 141 - 200
e X > 200
f ___ no flash _____ exact

Solids
_____ % suspended
_____ % settleable
_____ % dissolved
_____ % ash
_____ water solubility
_____ BTU/lb
Free Liquid Range 0 % to _____ %

Physical State
s X solid
m ___ semi-solid
l ___ liquid
p ___ pumpable semi-solid
f ___ flowable powder
g ___ gas
x ___ aerosol
r ___ pressurized liquid
d ___ debris per 40 CFR 268.45
h ___ sharps

Hazardous Characteristics
a ___ air reactive
w ___ water reactive
c ___ cyanide reactive
f ___ sulfide reactive
e ___ explosive
o ___ oxidizing acid
p ___ peroxide former
r ___ radioactive or NRC regulated
s ___ shock sensitive
t ___ temperature sensitive
m ___ polymerization/monomer
n ___ OSHA carcinogen
i ___ infectious
h ___ inhalation hazard
Zone: A, B, C, D

Odor:
a none ___
b mild X
c strong ___
describe PETROLEUM

Halogens
Br ___ % Bromine
Cl ___ % Chlorine
F ___ % Fluorine
I ___ % Iodine

Layers: a ___ multilayered; b ___ bi-layered; c X single phase

Viscosity by Layer	Top Layer	Second Layer	Bottom Layer
	___ high (syrup)	___ high (syrup)	___ high (syrup)
	___ medium (oil)	___ medium (oil)	___ medium (oil)
	___ low (water)	___ low (water)	___ low (water)
	___ solid	___ solid	X solid

Color
_____
_____
_____

Used oil y/n ___ BOC<1000 ppm ___ or > 1000 ppm ___

7. Chemical Composition [M = Marine Pollutant, S = Severe Marine Pollutant, O = Ozone Depleting Substance, U = Underlying Hazardous Constituent, B = Benzene NESHAP, T = TRI Chemical, C = OSHA Carcinogen]

	Constituents	Range	Units		Constituents	Range	Units
1.	Oil	100%					
2.	Rocks/Debris	0-1%					
3.	TPH	0-1%					

Total Composition Must Equal or Exceed 100%
Other:

8. Is the wastestream being imported into the USA? Yes ____ No X
9. Does the wastestream contain PCBs regulated by 40 CFR? Yes ____ No X
PCB concentration ____ ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes ____ No X
11. Is the wastestream subject to Benzene NESHAP? Yes ____ No X
If yes, is the wastestream subject to Notification and Control Requirements? Yes ____ No X
Benzene concentration ____ ppm
12. Is the wastestream subject to RCRA subpart CC controls? Yes ____ No X
Volatile organic concentration, if known ____ ppmw
CC approved analytical method ____ Generator Knowledge ____
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes X No ____

14. Container Information (Identify UN container marking if known)

Packaging: Bulk Solid ____ Type/Size: ____ Bulk Liquid ____ Type/Size: ____ Drum X Type/Size: 55 gallon

Other ____

Shipping Frequency: Units 25 Drums Per Month ____ Quarter X Year ____ Unit Time ____ Other ____

15. Additional Information:

GENERATOR CERTIFICATION
I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

Eugene T. Ward — NAME (PRINT OR TYPE) — (760) 725-9768 — PHONE — 01-22-01 — DATE

Eugene T. Ward — SIGNATURE — Env. Prot. Spl. — TITLE

FACILITY NOTIFICATION
If approved for management, ABTS/CWM has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

TSDF PROCESSING USE ONLY: PPE REQUIRED No ____ Yes ____ Describe ____

WIP NO. 453351

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. CA2.1.7.0.0.7.3.5.3.3	Manifest Document No.	2. Page 1 1 of 1

3. Generator's Name and Mailing Address
AC/S Environmental Security
Box 555008, MCB Camp Pendleton

4. Generator's Phone (760) 725-4375

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
MP Environmental	CAT.0.0.0.6.2.4.2.4.7	1-800-458-3036
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
	TTL ~~CAD.0.0.8.3.0.2.9.0.3~~	
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
ONYX - AZUZA 1704 W. 1st ST AZUSA, CA 91702	CAD0.0.8.3.0.2.9.0.3	626-334-5117

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS TPH/VOC WATER UST SITES 1/5/5/9/17 10/16	00.6	DR	0.3.0.0.0	lb
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
Drilling Dry Hazardous Waste

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Proper PPE

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
GERALD O. TUCKER	[signature]	01	26	01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[signature]	[signature]	01	26	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

Waste Management℠

AETS/CWM

3 Goldmine Road, Flanders, New Jersey 07836 • Phone 973-347-7111

WASTESTREAM INFORMATION PROFILE

Disposal Code

☐ Recertification
AETS/CWM LOCATION _____ OFFICE _____ CITY _____ ST _____ Z 70
☐ Invoice Address

AETS TSDF requested _____ Technology requested _____ Generator No. _____ Generator EPA ID No. CAT000624247

1. Generator Name ASSISTANT CHIEF OF STAFF / ENVIRONMENTAL SECURITY Generator State No. NA

Address P.O. BOX 555008 State Wastestream No. NA

City CAMP PENDLETON State CA Country USA ZIP 92055 5008

NAICS (SIC) Code _____ Source _____ Origin _____ Form _____ System Type _____

2. Waste Name NON HAZARDOUS TPH/VOC WATER Lab or Waste Area _____

3. Process Generating Waste UST CLEAN UP / MONITORING WELLS

4. Shipping Name NON HAZARDOUS TPH/VOC WATER

Hazard Class _____ UN/NA No. _____ PG _____ RQ amt _____ lb

RQ Desc:	1. NA	2.
DOT Desc:	1. NA	2

5. Waste Codes NA

Wastewater X Non Wastewater _____ Sub Category _____

6. Physical and chemical properties (check all that apply)

pH	Specific Gravity	Flash Point (F)	Solids	
a ___ < 2	a ___ < .8	a ___ < 80	___ % suspended	___ % ash
b ___ 2 - 5	b ___ .8 - 1.0	b ___ 80 - 100	___ % settleable	___ water solubility
c X 5 - 9	c X 1.0	c ___ 101 - 140	___ % dissolved	___ BTU/lb
d ___ 9 - 12.5	d ___ 1.0 - 1.2	d ___ 141 - 200		
e ___ > 12.5	e ___ > 1.2	e X > 200	Free Liquid Range 100 %	to ___ %
___ exact	___ exact	f ___ no flash ___ exact		

Physical State
s ___ solid
m ___ semi-solid
l X liquid
p ___ pumpable semi-solid
f ___ flowable powder
g ___ gas
a ___ aerosol
r ___ pressurized liquid
d ___ debris per 40 CFR 268.45
h ___ sharps

Hazardous Characteristics
a ___ air reactive
w ___ water reactive
c ___ cyanide reactive
f ___ sulfide reactive
e ___ explosive
o ___ oxidizing acid
p ___ peroxide former
r ___ radioactive or NRC regulated
s ___ shock sensitive
t ___ temperature sensitive
m ___ polymerization/monomer
n ___ OSHA carcinogen
i ___ infectious
h ___ inhalation hazard
Zone: A, B, C, D

Odor:
a none _____
b mild X
c strong _____
describe PETROLEUM

Halogens
Br ___ % Bromine
Cl ___ % Chlorine
F ___ % Fluorine
I ___ % Iodine

Layers: a ___ multilayered: b ___ bi-layered: c X single phase:

Viscosity by Layer	Top Layer	Second Layer	Bottom Layer
	___ high (syrup)	___ high (syrup)	___ high (syrup)
	___ medium (oil)	___ medium (oil)	___ medium (oil)
	___ low (water)	___ low (water)	X low (water)
	___ solid	___ solid	___ solid

Color _____

Used oil y/n N HOC<1000 ppm ___ or > 1000 ppm ___

WIP 96 Page 1 of 2 WIP NO. 453350

JAN-19-2001 15:59 7607533482 94% P.03

7. Chemical Composition (M = Marine Pollutant, S = Severe Marine Pollutant, O = Ozone Depleting Substance, U = Underlying Hazardous Constituent, B = Benzene NESHAP, T = TRI Chemical, C = OSHA Carcinogen)

	Constituents	Range	Units		Constituents	Range	Units
1.	Water	100%					
2.	TPH/Oil	0-1%					

Total Composition Must Equal or Exceed 100%

Other:

8. Is the wastestream being imported into the USA? Yes ____ No X
9. Does the wastestream contain PCBs regulated by 40 CFR? Yes ____ No X
   PCB concentration ____ ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes ____ No X
11. Is the wastestream subject to Benzene NESHAP? Yes ____ No X
    If yes, is the wastestream subject to Notification and Control Requirements? Yes ____ No X
    Benzene concentration ____ ppm
12. Is the wastestream subject to RCRA subpart CC controls? Yes ____ No X
    Volatile organic concentration, if known ____ ppmw
    CC approved analytical method ____ Generator Knowledge ____
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes X No ____

14. Container Information (Identify UN container marking if known)

Packaging: Bulk Solid ____ Type/Size: ____ Bulk Liquid ____ Type/Size: ____ Drum X Type/Size: 55 gallon

Other ____

Shipping Frequency: Units 25 Drums Per Month ____ Quarter X Year ____ One Time ____ Other ____

15. Additional Information:

GENERATOR CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

Eugene T. Ward (760)725-9768 01-22-01

NAME (PRINT OR TYPE) PHONE DATE

Eugene T. Ward Env. Prot. Sp.

SIGNATURE TITLE

FACILITY NOTIFICATION

If approved for management, ALTS/CWM has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

TSDF PROCESSING USE ONLY: PPE REQUIRED No ____ Yes ____ Describe ____

WIP NO. 453350

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CA2170023533 | Manifest Document No.: 00001 | 2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: ACIS Environmental Security, Box 555008, MCB Camp Pendleton CA 92055

4. Generator's Phone (760) 725-~~4375~~ 3360

A. State Manifest Document Number: 2044479

B. State Generator's ID: HYHQ36020982

5. Transporter 1 Company Name: MP Environmental

6. US EPA ID Number: NAT000624247

C. State Transporter's ID [Reserved.]

D. Transporter's Phone: 800-458-3036

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID [Reserved.]

F. Transporter's Phone:

9. Designated Facility Name and Site Address: ONYX - AZUZA, 1704 W. 1st St Azusa, CA 91702

10. US EPA ID Number: CA0008302903

G. State Facility's ID:

H. Facility's Phone: 626-334-5117

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. Environmentally Hazardous Substance, Solid, N.O.S./9/UN3077/PG III (Benzene)	002	DR	01000	P	State: CA611 D018; EPA/Other:
b.					State: ; EPA/Other:
c.					State: ; EPA/Other:
d.					State: ; EPA/Other:

J. Additional Descriptions for Materials Listed Above: Profile # 453366

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information: Wear Proper PPE

Emergency response # 800-458-3036 13 Area Site 1

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: GERALD O. TUCKER | Signature: Gerald O. Tucker | Month 01 Day 26 Year 01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Greg Huff | Signature: [signature] | Month 01 Day 26 Year 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: | Signature: | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: | Signature: | Month Day Year

GENERATOR / TRANSPORTER / FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

20444796

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (1/99)
EPA 8700—22

Blue: GENERATOR SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 400, Sacramento, CA 95812-0400

Waste Management

AETS/CWM

3 Goldmine Road, Flanders, New Jersey 07836 • Phone 973-347-7111

WASTESTREAM INFORMATION PROFILE

Disposal Code

☐ Recertification
AETS/CWM LOCATION _____ Office _____ City _____ ST _____ 2 70
☐ Invoice Advice

AETS TSDF requested _____ Technology requested _____ Generator No. _____ Generator EPA ID No. CAT000624247

1. Generator Name DEPARTMENT OF ARMY / ENVIRONMENTAL SECURITY Generator State No. N/A
Address P.O. BOX 555008 State Wastestream No. N/A
City CAMP PENDLETON State CA Country USA ZIP 92055 5008
NAICS (SIC) Code _____ Source _____ Origin _____ Form _____ System Type _____

2. Waste Name RCRA CONTAMINATED SOIL Lab or Waste Area _____
3. Process Generating Waste UST CLEAN UP / MONITORING WELLS
4. Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.
Hazard Class 9 UN/NA No. UN3077 PG III RQ unit N/A lb

	1.	2.
RQ Desc:		
DOT Desc:		

5. Waste Codes D018
Wastewater _____ Non Wastewater X Sub Category _____

6. Physical and chemical properties (check all that apply)

pH
a ___ < 2
b ___ 2 - 5
c X 5 - 9
d ___ 9 - 12.5
e ___ > 12.5
___ exact

Specific Gravity
a ___ < .8
b ___ .8 - 1.0
c ___ 1.0
d ___ 1.0 - 1.2
e ___ > 1.2
N/A exact

Flash Point (F)
a ___ < 80
b ___ 80 - 100
c ___ 101 - 140
d ___ 141 - 200
e X > 200
f ___ no flash ___ exact

Solids
___ % suspended
___ % settleable
___ % dissolved
___ % ash
___ water solubility
___ BTU/lb
Free Liquid Range 0 % to ___ %

Physical State
s X solid
m ___ semi-solid
l ___ liquid
p ___ pumpable semi-solid
f ___ flowable powder
g ___ gas
a ___ aerosol
r ___ pressurized liquid
d ___ debris per 40 CFR 268.45
h ___ sharps

Hazardous Characteristics
a ___ air reactive
w ___ water reactive
c ___ cyanide reactive
f ___ sulfide reactive
e ___ explosive
o ___ oxidizing acid
p ___ peroxide former
r ___ radioactive or NRC regulated
s ___ shock sensitive
t ___ temperature sensitive
m ___ polymerization/monomer
n ___ OSHA carcinogen
i ___ infectious
h ___ inhalation hazard
Zone: A, B, C, D

Odor:
a none ___
b mild X
c strong ___
describe PETROLEUM

Halogens
Br ___ % Bromine
Cl ___ % Chlorine
F ___ % Fluorine
I ___ % Iodine

Layers: a ___ multilayered: b ___ bi-layered: c X single phase:

Viscosity by Layer	Top Layer	Second Layer	Bottom Layer
	___ high (syrup)	___ high (syrup)	___ high (syrup)
	___ medium (oil)	___ medium (oil)	___ medium (oil)
	___ low (water)	___ low (water)	___ low (water)
	___ solid	___ solid	X solid

Color
_____
_____
_____

Used oil y/n ___ BOC<1000 ppm ___ or > 1000 ppm ___

7. Chemical Composition [M = Marine Pollutant, S = Severe Marine Pollutant, O = Ozone Depleting Substance, U = Underlying Hazardous Constituent, B = Benzene NESHAP, T = TRI Chemical, C = OSHA Carcinogen]

	Constituents	Range	Units		Constituents	Range	Units
1.	[illegible]	100%					
2.	[illegible]	0-1%					
3.	[illegible]	15 ppm					

Total Composition Must Equal or Exceed 100%

Other:

8. Is the wastestream being imported into the USA? Yes ___ No X
9. Does the wastestream contain PCBs regulated by 40 CFR? Yes ___ No X
   PCB concentration _____ ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes ___ No X
11. Is the wastestream subject to Benzene NESHAP? Yes ___ No X
    If yes, is the wastestream subject to Notification and Control Requirements? Yes ___ No X
    Benzene concentration _____ ppm
12. Is the wastestream subject to RCRA subpart CC controls? Yes ___ No X
    Volatile organic concentration, if known _____ ppmw
    CC approved analytical method _____ Generator Knowledge _____
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes X No ___

14. Container Information (Identify UN container marking if known)

Packaging: Bulk Solid ___ Type/Size: _____ Bulk Liquid ___ Type/Size: _____ Drum X Type/Size: 55 gallon

Other _____

Shipping Frequency: Units 2 DRUMS Per Month _____ Quarter X Year _____ One Time _____ Other _____

15. Additional Information:

GENERATOR CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

Eugene T. Ward	(760) 725-9768	01-24-01
NAME (PRINT OR TYPE)	PHONE	DATE
Eugene T. Ward	Env. Prot. Spl.	
SIGNATURE	TITLE	

FACILITY NOTIFICATION

If approved for management, AETS/CWM has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

TSDF PROCESSING USE ONLY: PPE REQUIRED No ___ Yes ___ Describe _____

ATTACHMENT 2

SITE 1 WELL SURVEY DATA
(FRASER ENGINEERING, INCORPORATED)

SITE 1, 13 AREA,

GROUNDWATER MONITORING WELL SURVEY DATA

(FRASER ENGINEERING, INC., MARCH 2001)

Well Identification	Northing	Easting	Elevation
S1-MW8 (1)	2,058,880.09	6,236,962.52	330.27
S1-MW21 (2)	2,058,414.35	6,236,770.93	360.88
S1-MW22 (3)	2,058,833.70	6,236,864.57	331.13
S1-MW23 (3)	2,058,891.95	6,236,858.09	329.19

Well locations surveyed at top of well casing.
Data are in State Plane coordinates referenced to North American Datum (NAD) 83 and North American Vertical Datum (NAVD) 88.
(1) Recent well repair resulted in change in top of casing elevation.
(2) Well was resurveyed due to missing survey data in previous report.
(3) New well, installed February 2001.