DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132 - 5190

5090
Ser 06CM.MB\1097
July 28, 2003

Ms. Adriana Constantinescu
Project Manager
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Dear Ms. Constantinescu:

SUBJECT: NAVAL FUEL DEPOT POINT MOLATE RICHMOND, CALIFORNIA
SELF MONITORING REPORT FOR THE PACKAGED GROUNDWATER TREATMENT PLANT AND FRENCH DRAIN TREATMENT PLANT
APRIL AND MAY 2003

The State of California Order Number 97-045, National Pollutant Discharge Elimination System (NPDES) Permit Number CA0030074, requires submittal of a Self Monitoring Report for the subject systems. The systems include a Packaged Groundwater Treatment Plant (PGWTP) and an Underground Storage Tank French Drain Treatment Plant. The Tank French Drain Treatment Plant did not operate during the reporting period as is typical during the dry season. The monitoring summary report, analytical data tables, and laboratory reports for April and May 2003 are provided as enclosures. Please call John Kowalczyk at (619) 532-0972 or me at (619) 532-0967 if you have any questions.

Sincerely,

MICHAEL S. BLOOM
BRAC Environmental Coordinator
By direction of the Commander

Enclosure: 1. Monitoring Summary
2. Analytical Data Tables
3. Laboratory Reports

Copy to: (w/o encl)
Mr. Kent Weingardt
Project Manager
Foster Wheeler Environmental Corp.
1230 Columbia Street, Suite 640
San Diego, CA 92101

5090
Ser 06CM.MB\1097
July 28, 2003

Blind copy to:
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05G.DS (SWDIV Compliance File)
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Monitoring Summary

1.0 PACKAGED GROUNDWATER TREATMENT PLANT

1.1 Compliance Overview

The Packaged Groundwater Treatment Plant (PGWTP) continued to operate normally during the months of April and May 2003. The UST French Drain Treatment Plant did not operate during the reporting period as is typical during the dry season.

The monthly NPDES samples were collected on April 22, 2003 and May 21, 2003 and analyzed for total petroleum hydrocarbons (TPH-extractable), volatile organic compounds (VOCs) and bioassays by 96-hour static fish toxicity. The samples were also analyzed for total suspended solids (TSS), total settleable solids (TSETT), and biological oxygen demand (BOD). In addition, the April samples were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs). Physical parameters such as pH, temperature, and dissolved oxygen (DO) were measured in the field. TPH-purgeable (gasoline) is no longer analyzed per approval from the Regional Water Quality Control Board. The analytical results indicate that the plant's effluent met the permit limits during the reporting period.

Several upgrades to the PGWTP were completed in May 2002 and post-upgrade sampling was conducted on May 19, 2003. The upgrades include pumping well adjustments, piping modifications to the sand filters, cleaning and optimizing the bioreactor, and adding one additional granulated activated carbon vessel. The post-upgrade compliance results for the PGWTP effluent were all below method reporting limits. A report of the system upgrades was signed by the contractor project engineer and submitted to the Regional Water Quality Control Board on June 11, 2003. A summary of the post-upgrade sampling results is included in Section 1.2.2 of this report.

1.2 Analytical Program

The PGWTP samples were uniquely numbered according to the following format:

0067-PGWTP-YYY

Where, 0067 is the four-digit Contract Task Order number, PGWTP is the treatment system, and YYY is a sequential number for this project. The sample numbers were recorded in the field logbook and on the Chain-of-Custody form at the time of sample collection. A complete description of the sample and sampling circumstances was recorded in the field logbook and referenced using the unique sample identification numbers. Analytical data summary tables and original laboratory reports for the reporting period are included as attachments.

The method number for each analytical procedure used is shown in Table 1-1.

Table 1-1
PGWTP Analytical Methods

Analysis	Method ID
Total Petroleum Hydrocarbons (TPH)	Method 8015B
Volatile Organic Compounds (VOCs)	Method 5030B/8260B
Polycyclic Aromatic Hydrocarbons (PAHs)	Method 8310
Bioassays	96-hour static fish toxicity
Total Settleable Solids (TSETT)	Method 160.5
Total Suspended Solids (TSS)	Method 160.2
Biological Oxygen Demand (BOD)	Method 405.1

1.2.1 Additional Samples

In order to monitor and optimize the plant operation, sampling of intermediate treatment locations is conducted as determined necessary as part of the Self-Monitoring Program. Per the request of the RWQCB, compliance samples were collected on May 19, 2003 following the 48-hr initial operation after upgrades to the system were completed. These post-upgrade samples were analyzed for TPH only. Due to a holding time exceedance for rainbow trout, an additional sample was collected on May 28, 2003 for the bioassay.

1.2.2 Laboratory Results

April 2003

The influent sample had a reported TPH-diesel concentration of 1200 micrograms per liter (µg/L), and a reported TPH-bunker C concentration of 4100 µg/L. The effluent sample had a reported TPH-diesel concentration of less than 50 µg/L, a reported TPH-bunker C concentration of 150 µg/L (B-, J-value less than the method reporting limit of 500 µg/L), VOC concentrations of less than 5 µg/L, and BOD concentration of less than 2 mg/L. The effluent sample had fish bioassay results of 100% survival for both Rainbow Trout and Three-Spine Stickleback. The April effluent results were all below their respective permit limits.

May 2003

The influent sample had a reported TPH-diesel concentration of 1200 µg/L, and a reported TPH-bunker C concentration of 3700 µg/L. The effluent sample had a reported TPH-diesel concentration of less than 50 µg/L, a reported TPH-bunker C concentration of less than the method reporting limit of 500 µg/L, VOC concentrations of less than 5 µg/L, and BOD concentration of less than 2 mg/L. The effluent sample had fish bioassay results of 100% survival for both Rainbow Trout and Three-Spine Stickleback. The May effluent results were all below their respective permit limits.

The TPH analytical results for the post-upgrade samples are presented in Table 1-2. The effluent results were all below their respective reporting limits.

Table 1-2
PGWTP Post-Upgrade Sample Results
May 19, 2003

Sample	Bioassay	TPH-Diesel	TPH-Bunker C
48-hr Start-up Influent	NA	4,400 µg/L	12,000 µg/L
48-hr Start-up Effluent	NA	< 50 U µg/L	< 300 µg/L

1.3 Operation Summary and Mass Removal

April 2003

The average daily flow from the PGWTP for the month of April 2003 was 18,209 gallons per day (gpd). The monthly total volume of water treated by the system was 546,260 gallons. The system operated 100% of the time during the month. Table 1-3 provides the weekly discharge flow volumes for the PGWTP in April 2003. Also included is the estimated TPH mass removed by the PGWTP. The values for mass removed were estimated using the TPH concentrations in the influent and the effluent.

Table 1-3
PGWTP Volume And Mass Process Data
April 2003

Date	Cumulative Flow (gallons)	Weekly Flow (gallons)	TPH Mass Removed (pounds)
4/4/03	36,086,340	77800	3.3
4/11/03	36,211,600	125260	5.3
4/18/03	36,339,705	128105	5.4
4/25/03	36,465,700	125995	5.4
4/30/03	36,554,800	89100	3.8
Total Monthly	**546,260**		**23.2**
Daily Average (gpd)	**18,209**		

Notes: Week of 4/4/03 covers from 4/1 to 4/4 (4 days) and week of 4/30/03 covers from 4/26 to 4/30 (5 days).

May 2003

The average daily flow from the PGWTP for the month of May 2003 was 16,510 gpd. The monthly total volume of water treated by the system was 511,812 gallons. The system operated 100% of the time during the month. Table 1-4 provides the weekly discharge flow volumes for the PGWTP in May 2003. Also included is the estimated TPH mass removed by the PGWTP.

Table 1-4
PGWTP Volume And Mass Process Data
May 2003

Date	Cumulative Flow (gallons)	Weekly Flow (gallons)	TPH Mass Removed (pounds)
5/9/03	36,701,336	146,536	19.6
5/16/03	36,818,700	117,364	15.7
5/23/03	36,938,000	119,300	11.3
5/31/03	37,066,612	128,612	4.7
Total Monthly	**511,812**		**51.3**
Daily Average (gpd)	**16,510**		

Notes: Week of 5/9/03 covers from 5/1 to 5/9 (9 days) and week of 5/31/03 covers from 5/24 to 5/31 (8 days).

2.0 FRENCH DRAIN SYSTEM

The French Drain System (FDS) system was not in operation during April and May 2003. No water was discharged or sampled from the FDS during the reporting period.

Analytical Data Tables

Point Molate Naval Fuel Depot
Packaged Groundwater Treatment Plant Analytical Data
April 2003

U.S. Navy
Contract No. N68711-98-D-5713

Contract Task Order #67
Foster Wheeler Environmental Corporation

Sample ID	Location	Sampling Date	TSETT mL/L-hr	DO mg/L	pH units	FLOW gallons	TEMP deg C	TSS mg/L	CN µg/L	PHENOL mg/L	BOD mg/L	PAH µg/L	VOC µg/L	PCBs µg/L	Fathead Minnow percent	Rainbow Trout Minnow percent	Three-Spine Stickleback percent	TPH-Gasoline µg/L	TPH-DIESEL µg/L	TPH-BUNKER C µg/L
PERMIT REQUIREMENTS	Monthly AVE		0.1		>6 X <9		See	30		NE	30			NE	90% survival			NE	NE	NE
	Weekly AVE		-		>6 X <9		Note 2	45		NE	45			NE	Permit allows 2 of the 3 fish species			NE	NE	NE
	Daily MAX		-		>6 X <9			60		NE	60			NE	listed above to be analyzed.			NE	NE	NE
	Instantaneous		0.2		>6 X <9					NE				NE				NE	NE	NE
	Daily AVE			> 5.0					25	NE		2.4	5	NE				NE	NE	NE
0067-PGWTP-004	Trip Blank	4/22/2003	NA					NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA
0067-PGWTP-005	Effluent	4/22/2003	0.1 U	4.3	7.4		17.30	4 U	NA	NA	2 U	NA	5 U	NA	NA	100%	100%	NA	50 U	150 BJ
0067-PGWTP-006	Influent	4/22/2003	NA	10.0	6.6		16.60	4 U	NA	NA	3	NA	NA	NA	NA	NA	NA	NA	1200	4100 B
	EFFLUENT	4/1/2003				22,760														
	EFFLUENT	4/2/2003				18,650														
0067-PGWTP-003	EFFLUENT	4/3/2003				18,650														
	EFFLUENT	4/4/2003				17,740														
	EFFLUENT	4/5/2003				17,740														
	EFFLUENT	4/6/2003				17,740														
	EFFLUENT	4/7/2003				17,740														
	EFFLUENT	4/8/2003				17,740														
	EFFLUENT	4/9/2003				17,740														
	EFFLUENT	4/10/2003				18,280														
	EFFLUENT	4/11/2003				18,280														
	EFFLUENT	4/12/2003				18,301														
	EFFLUENT	4/13/2003				18,301														
	EFFLUENT	4/14/2003				18,301														
	EFFLUENT	4/15/2003				18,301														
	EFFLUENT	4/16/2003				18,301														
	EFFLUENT	4/17/2003				18,301														
	EFFLUENT	4/18/2003				18,301														
	EFFLUENT	4/19/2003				17,824														
	EFFLUENT	4/20/2003				17,824														
	EFFLUENT	4/21/2003				17,824														
	EFFLUENT	4/22/2003				17,824														
	EFFLUENT	4/23/2003				18,233														
	EFFLUENT	4/24/2003				18,233														
	EFFLUENT	4/25/2003				18,233														
	EFFLUENT	4/26/2003				18,433														
	EFFLUENT	4/27/2003				18,433														
	EFFLUENT	4/28/2003				18,433														
	EFFLUENT	4/29/2003				15,100														
	EFFLUENT	4/30/2003				18,700														
	Minimum					**15,100**	**gpd**													
	Maximum					**22,760**	**gpd**													
	Number of days discharging					**30**	**days**													
	Total discharged					**546,260**	**gal**													
	Avg Daily Flow					**18,209**	**gpd**													
	Total TPH Removed					**23.2**	**lb**													

NE denotes not established
NA denotes not analyzed
DO denotes dissolved oxygen.
deg C denotes degrees Celsius
TSETT denotes Total Settleable Solids.
TSS denotes Total Suspended Solids
PHENOL denotes phenolic compounds
PCB denotes polychlorinated biphenyls

BOD denotes chemical oxygen demand
PAH denotes polycyclic aromatic hydrocarbons
VOC denotes volatile organic compound
TPH denotes total petroleum hydrocarbons
mg/L denotes milligrams per liter.
µg/L denotes micrograms per liter.
J denotes estimated value less than the reporting limit
B denotes analyte present in associated blank sample
U denotes less than the stated reporting limit

Long-Term Analytical Monitoring

Cyanide	Twice per Year
Phenolics	Twice per Year
PAH	Every 2 Months
VOCs	Monthly
PCB	Anually
Bioassay	Monthly with Trout and Minnow or Stickleback
TPH	Monthly Influent and Effluent

Note 1: There is no limit for dissolved oxygen at the PGWTP discharge pipe. The permit requires the dissolved oxygen concentration to be > 5.0 mg/l within 1 foot of the receiving water surface. The permit requires daily receiving water sampling only when bypassing occurs from any of the treatment units in the treatment facilities for more than 24 hours, and when the bypass results in violation of any effluent limitation.

Note 2: There is no permit level for temperature at the PGWTP discharge pipe. The permit requires that the discharge shall not alter the temperature of the receiving water beyond natural background levels. The permit requires daily receiving water sampling only when bypassing occurs from any of the treatment units in the treatment facilities for more than 24 hours, and when the bypass results in violation of any effluent limitation.

Point Molate Naval Fuel Depot
Packaged Groundwater Treatment Plant Analytical Data
May 2003

U.S. Navy
Contract No. N68711-98-D-5713

Contract Task Order #67
Foster Wheeler Environmental Corporation

Sample ID	Location	Sampling Date	TSETT mL/L-hr	DO mg/L	pH units	FLOW gallons	TEMP deg C	TSS mg/L	CN µg/L	PHENOL mg/L	BOD mg/L	PAH µg/L	VOC µg/L	PCBs µg/L	Fathead Minnow percent	Rainbow Trout Minnow percent	Three-Spine Stickleback percent	TPH-Gasoline µg/L	TPH-DIESEL µg/L	TPH-BUNKER C µg/L
PERMIT REQUIREMENTS	Monthly AVE		0.1	See Note 1	>6 X <9		See Note 2	30		NE	30			NE	90% survival			NE	NE	NE
	Weekly AVE		-		>6 X <9			45		NE	45			NE	Permit allows 2 of the 3 fish species			NE	NE	NE
	Daily MAX		-		>6 X <9			60		NE	60			NE	listed above to be analyzed.			NE	NE	NE
	Instantaneous		0.2		>6 X <9					NE				NE				NE	NE	NE
	Daily AVE			> 5.0					25	NE		2.4	5	NE				NE	NE	NE
0067-PGWTP-007A	Effluent	5/7/2003	0.1 U					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
0067-PGWTP-007	Influent (See Note 3)	5/19/2003	NA					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4400	12000
0067-PGWTP-008	Effluent (See Note 3)	5/19/2003	NA					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50 U	300 U
0067-PGWTP-009	Trip Blank	5/21/2003	NA					NA	NA	NA	NA	NA	0.76 J	NA	NA	NA	NA	NA	NA	NA
0067-PGWTP-010	Effluent	5/21/2003	0.1 U	5.5	6.5		16.00	4 U	NA	NA	2 U	2.1 U	0.56 J	NA	NA	holding time exc.	100%	NA	50 U	500 U
0067-PGWTP-011	Influent	5/21/2003	NA	2.0	8.5		16.00	4 U	NA	NA	3 B	NA	NA	NA	NA	NA	NA	NA	1200	3700
0067-PGWTP-012	Effluent	5/28/2003	NA													100%				
	EFFLUENT	5/1/2003				15,900														
	EFFLUENT	5/2/2003				14,730														
	EFFLUENT	5/3/2003				16,393														
	EFFLUENT	5/4/2003				16,393														
	EFFLUENT	5/5/2003				16,393														
	EFFLUENT	5/6/2003				16,393														
0067-PGWTP-007A	EFFLUENT	5/7/2003	0.1 U			16,250														
	EFFLUENT	5/8/2003				16,995														
	EFFLUENT	5/9/2003				17,091														
	EFFLUENT	5/10/2003				17,091														
	EFFLUENT	5/11/2003				17,091														
	EFFLUENT	5/12/2003				17,091														
	EFFLUENT	5/13/2003				17,091														
	EFFLUENT	5/14/2003				15,570														
	EFFLUENT	5/15/2003				16,826														
	EFFLUENT	5/16/2003				16,604														
	EFFLUENT	5/17/2003				15,328														
	EFFLUENT	5/18/2003				18,547														
0067-PGWTP-007	EFFLUENT	5/19/2003	0.1 U			19,950														
	EFFLUENT	5/20/2003				17,475														
	EFFLUENT	5/21/2003				17,400														
	EFFLUENT	5/22/2003				15,300														
	EFFLUENT	5/23/2003				15,300														
	EFFLUENT	5/24/2003				16,543														
	EFFLUENT	5/25/2003				16,543														
	EFFLUENT	5/26/2003				16,543														
	EFFLUENT	5/27/2003				16,543														
	EFFLUENT	5/28/2003				16,543														
	EFFLUENT	5/29/2003				16,543														
	EFFLUENT	5/30/2003				13,342														
	EFFLUENT	5/31/2003				16,012														
	Minimum					**13,342**	**gpd**													
	Maximum					**19,950**	**gpd**													
	Number of days discharging					**31**	**days**													
	Total discharged					**511,812**	**gal**													
	Avg Daily Flow					**16,510**	**gpd**													
	Total TPH Removed					**51.3**	**lb**													

NE denotes not established
NA denotes not analyzed
DO denotes dissolved oxygen.
deg C denotes degrees Celsius
TSETT denotes Total Settleable Solids.
TSS denotes Total Suspended Solids
PHENOL denotes phenolic compounds
PCB denotes polychlorinated biphenyls

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PAH	Every 2 Months
VOCs	Monthly
PCB	Anually
Bioassay	Monthly with Trout and Minnow or Stickleback
TPH	Monthly Influent and Effluent

Note 1: There is no limit for dissolved oxygen at the PGWTP discharge pipe. The permit requires the dissolved oxygen concentration to be > 5.0 mg/l within 1 foot of the receiving water surface. The permit requires daily receiving water sampling only when bypassing occurs from any of the treatment units in the treatment facilities for more than 24 hours, and when the bypass results in violation of any effluent limitation.

Note 2: There is no permit level for temperature at the PGWTP discharge pipe. The permit requires that the discharge shall not alter the temperature of the receiving water beyond natural background levels. The permit requires daily receiving water sampling only when bypassing occurs from any of the treatment units in the treatment facilities for more than 24 hours, and when the bypass results in violation of any effluent limitation.

Note 3: Samples were collected as part of the start-up certification procedure after the 48-hour operation of the modified PGWTP.

Laboratory Reports

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

CAS Lab Reference No./SDG: D9962

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW-846 5030B
Cleanup: N/A
Analysis: SW-846 8260B

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration: In the Initial Calibration (ICAL) from 04/25/03 (MSJ), one or more compounds had an RSD >15%. However the mean RSD for all analytes was <15% with no individual analyte RSD >30%, thus meeting all acceptance criteria.

B. Blanks: The Method Blank analyzed on 04/30/03 on MSJ yielded Methylene Chloride above the MDL. This compound was not detected in the associated samples.

C. Internal Standards: All acceptance criteria were met.

D. Surrogates: All acceptance criteria were met.

E. Spikes: All acceptance criteria were met.

F. Samples: Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED/DATE: Gina Rivera 05-05-03 Reviewed by: [signature]
Gina Rivera
Volatiles Organics

Columbia
Analytical Services
5090 Caterpillar Road
Redding, CA 96003-1412
Phone: (530) 244-5227
Fax: (530) 244-4109

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP004

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9962 SDG No.: D9962 Lab Sample ID: D9962001

Matrix: WATER Level: LOW Lab File ID: J031442

Sample Volume: 10.0 ML Date Received: 04/23/03

Date Analyzed: 04/30/03

Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
74-87-3	Chloromethane		0.32	5.0	5.0	U
75-01-4	Vinyl chloride		0.36	5.0	5.0	U
74-83-9	Bromomethane		0.40	5.0	5.0	U
75-00-3	Chloroethane		0.35	5.0	5.0	U
75-35-4	1,1-Dichloroethene		0.32	5.0	5.0	U
67-64-1	Acetone		0.78	5.0	5.0	U
75-15-0	Carbon disulfide		0.42	5.0	5.0	U
75-09-2	Methylene chloride		0.090	5.0	5.0	U
156-60-5	trans-1,2-Dichloroethene		0.27	5.0	5.0	U
1634-04-4	Methyl tert-butylether		0.30	5.0	5.0	U
75-34-3	1,1-Dichloroethane		0.18	5.0	5.0	U
156-59-2	cis-1,2-Dichloroethene		0.21	5.0	5.0	U
78-93-3	2-Butanone		1.0	5.0	5.0	U
67-66-3	Chloroform		0.12	5.0	5.0	U
71-55-6	1,1,1-Trichloroethane		0.19	5.0	5.0	U
56-23-5	Carbon tetrachloride		0.13	5.0	5.0	U
71-43-2	Benzene		0.070	5.0	5.0	U
107-06-2	1,2-Dichloroethane		0.25	5.0	5.0	U
79-01-6	Trichloroethene		0.18	5.0	5.0	U
78-87-5	1,2-Dichloropropane		0.19	5.0	5.0	U
75-27-4	Bromodichloromethane		0.12	5.0	5.0	U
10061-01-5	cis-1,3-Dichloropropene		0.14	5.0	5.0	U
108-10-1	4-Methyl-2-pentanone		0.46	5.0	5.0	U
108-88-3	Toluene		0.11	5.0	5.0	U
10061-02-6	trans-1,3-Dichloropropene		0.24	5.0	5.0	U
79-00-5	1,1,2-Trichloroethane		0.28	5.0	5.0	U
127-18-4	Tetrachloroethene		0.15	5.0	5.0	U
591-78-6	2-Hexanone		0.67	5.0	5.0	U
124-48-1	Dibromochloromethane		0.25	5.0	5.0	U
108-90-7	Chlorobenzene		0.12	5.0	5.0	U
100-41-4	Ethylbenzene		0.12	5.0	5.0	U
1330-20-7	Xylene (total)		0.13	5.0	5.0	U
100-42-5	Styrene		0.13	5.0	5.0	U
75-25-2	Bromoform		0.27	5.0	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		0.16	5.0	5.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP005

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9962 SDG No.: D9962 Lab Sample ID: D9962002

Matrix: WATER Level: LOW Lab File ID: J031443

Sample Volume: 10.0 ML Date Received: 04/23/03

Date Analyzed: 04/30/03

Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
74-87-3	Chloromethane		0.32	5.0	5.0	U
75-01-4	Vinyl chloride		0.36	5.0	5.0	U
74-83-9	Bromomethane		0.40	5.0	5.0	U
75-00-3	Chloroethane		0.35	5.0	5.0	U
75-35-4	1,1-Dichloroethene		0.32	5.0	5.0	U
67-64-1	Acetone		0.78	5.0	5.0	U
75-15-0	Carbon disulfide		0.42	5.0	5.0	U
75-09-2	Methylene chloride		0.090	5.0	5.0	U
156-60-5	trans-1,2-Dichloroethene		0.27	5.0	5.0	U
1634-04-4	Methyl tert-butylether		0.30	5.0	5.0	U
75-34-3	1,1-Dichloroethane		0.18	5.0	5.0	U
156-59-2	cis-1,2-Dichloroethene		0.21	5.0	5.0	U
78-93-3	2-Butanone		1.0	5.0	5.0	U
67-66-3	Chloroform		0.12	5.0	5.0	U
71-55-6	1,1,1-Trichloroethane		0.19	5.0	5.0	U
56-23-5	Carbon tetrachloride		0.13	5.0	5.0	U
71-43-2	Benzene		0.070	5.0	5.0	U
107-06-2	1,2-Dichloroethane		0.25	5.0	5.0	U
79-01-6	Trichloroethene		0.18	5.0	5.0	U
78-87-5	1,2-Dichloropropane		0.19	5.0	5.0	U
75-27-4	Bromodichloromethane		0.12	5.0	5.0	U
10061-01-5	cis-1,3-Dichloropropene		0.14	5.0	5.0	U
108-10-1	4-Methyl-2-pentanone		0.46	5.0	5.0	U
108-88-3	Toluene		0.11	5.0	5.0	U
10061-02-6	trans-1,3-Dichloropropene		0.24	5.0	5.0	U
79-00-5	1,1,2-Trichloroethane		0.28	5.0	5.0	U
127-18-4	Tetrachloroethene		0.15	5.0	5.0	U
591-78-6	2-Hexanone		0.67	5.0	5.0	U
124-48-1	Dibromochloromethane		0.25	5.0	5.0	U
108-90-7	Chlorobenzene		0.12	5.0	5.0	U
100-41-4	Ethylbenzene		0.12	5.0	5.0	U
1330-20-7	Xylene (total)		0.13	5.0	5.0	U
100-42-5	Styrene		0.13	5.0	5.0	U
75-25-2	Bromoform		0.27	5.0	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		0.16	5.0	5.0	U

CASE NARRATIVE
GC TPH Diesel

CAS Lab Reference No./SDG.: D9962

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW-846 3510C
Cleanup: N/A
Analysis: SW-846 8015B(MOD)

IV. PREPARATION

Sample volume may vary based on the amount of sample received per container. Reporting limits have not been adjusted.

V. ANALYSIS

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: In the Laboratory Control Sample DWB10423LCS, analyzed on 04/28/03, spike exceeded the recovery limits, reanalysis of the sample yielded similar result. However, the LCSD had acceptable recoveries and no further action was taken.

E. Samples: All acceptance criteria were met.

F. Other: Diesel range is from C10-C24

Compounds were detected in sample D9962003 at the same elution time as diesel. However, the pattern of the peaks did not match those expected from diesel fuel. The pattern most resembles that found for weathered diesel.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED/DATE: Scott Poh 4/30/03 REVIEWED BY: EBurnett

Scott Poh
Scientist, GC Organics

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP005

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9962 SDG No.: D9962 Lab Sample ID: D9962002

Matrix: WATER Level: LOW Lab File ID: G0428011

Sample Wt/Vol: 1.050 L Date Received: 04/23/03

Extract Vol: 1 ML Date Extracted: 04/23/03

Date Analyzed: 04/29/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
PHCD--------	TPH-DIESEL		0.019	0.050	0.050	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP006

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9962 SDG No.: D9962 Lab Sample ID: D9962003

Matrix: WATER Level: LOW Lab File ID: G0428012

Sample Wt/Vol: 1.050 L Date Received: 04/23/03

Extract Vol: 1 ML Date Extracted: 04/23/03

Date Analyzed: 04/29/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
PHCD--------	TPH-DIESEL		0.019	0.050	1.2	

CASE NARRATIVE
GC TPH BUNKER C

CAS Lab Reference No./SDG.: D9962

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW-846 3510C
Cleanup: N/A
Analysis: SW-846 8015B(MOD)

IV. PREPARATION

Sample volume may vary based on the amount of sample received per container. Reporting limits have not been adjusted.

V. ANALYSIS

A. Calibration: All acceptance criteria were met.

B. Blanks: The method blank DWB10423 contained compounds within the same elution time as Bunker C which was above the Method Detection Limit(MDL). However the result was less than the Reporting Limit; therefore, proper flagging was applied and corrective action is not recommended.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Samples: All acceptance criteria were met.

F. Other: Bunker C range is from C10-C36.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED/DATE: Scott Poh 4/29/03 REVIEWED BY: E Burrows

Scott Poh
Scientist, GC Organics

Columbia Analytical Services
5090 Caterpillar Road
Redding, CA 96003-1412
Phone: (530) 244-5227
Fax: (530) 244-4109

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP005

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9962 SDG No.: D9962 Lab Sample ID: D9962002

Matrix: WATER Level: LOW Lab File ID: G0428011

Sample Wt/Vol: 1.050 L Date Received: 04/23/03

Extract Vol: 1 ML Date Extracted: 04/23/03

Date Analyzed: 04/29/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
FOIL--------	Bunker C		0.035	0.50	0.15	BJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP006

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9962 SDG No.: D9962 Lab Sample ID: D9962003

Matrix: WATER Level: LOW Lab File ID: G0428012

Sample Wt/Vol: 1.050 L Date Received: 04/23/03

Extract Vol: 1 ML Date Extracted: 04/23/03

Date Analyzed: 04/29/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
FOIL--------	Bunker C		0.035	0.50	4.1	B

CASE NARRATIVE
Wet Chemistry

CAS Lab Reference No./SDG.: D9962

I. **RECEIPT**
No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. **HOLDING TIMES**
All holding times were met.

III. **METHOD**
The method used is cited in the corresponding Form I.

IV. **PREPARATION**
Sample preparation proceeded normally, if applicable.

V. **ANALYSIS**

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Spikes: All acceptance criteria were met.

D. Duplicates: All acceptance criteria were met.

E. Laboratory Control Samples: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other: No QA/QC except client requested QA/QC has been reported.

Settleable Solids were reported to a set MDL (RL) of 0.1 mL/L/hr.

B-The reported value obtained was less than the RL.

U-The reported value was less than the MDL.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED: _____ DATE: 5/5/03

Mark Fegler
Quality Assurance Officer

Columbia Analytical Services, Inc.
5090 Caterpillar Rd
Redding, CA 96003-1412
Phone: (530) 244-5227
Fax: (530) 244-4109

Report of Analytical Results

Client Sample ID: 0067PGWTP005
Sample Description: 0067-PGWTP-005
Sample Matrix: Water
Site: N/A

Date Collected: 04/22/03 09:03 (Tue)
Date Received: 04/23/03 09:40 (Wed)

Reference No: D9962
Lab Sample ID: D9962002

CATEGORY NAME / Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Sample Volume	1050	mL		04/23/03 14:00	EPA160.5
Settleable Solids	0.1 U	mL/L/h	0.1	04/23/03 14:00	EPA160.5
Total Suspended Solids	4 U	mg/L	10	04/28/03 17:00	EPA160.2
DEMAND AND GENERAL ORGANIC					
BOD 5, Date In	4/23/03			04/23/03 00:00	EPA405.1/SM5210B
BOD 5, Date Out	4/28/03			04/23/03 00:00	EPA405.1/SM5210B
BOD, 5 Day	2 U	mg/L	10	04/23/03 00:00	EPA405.1/SM5210B

(19820)

Report of Analytical Results

Client Sample ID: 0067PGWTP006
Sample Description: 0067-PGWTP-006
Sample Matrix: Water
Site: N/A

Date Collected: 04/22/03 09:21 (Tue)
Date Received: 04/23/03 09:40 (Wed)

Reference No: D9962
Lab Sample ID: D9962003

CATEGORY NAME / Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Total Suspended Solids	4 U	mg/L	10	04/28/03 17:00	EPA160.2
DEMAND AND GENERAL ORGANIC					
BOD 5, Date In	4/23/03			04/23/03 00:00	EPA405.1/SM5210B
BOD 5, Date Out	4/28/03			04/23/03 00:00	EPA405.1/SM5210B
BOD, 5 Day	3	mg/L	10	04/23/03 00:00	EPA405.1/SM5210B

(19820)

LABORATORY REPORT

Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756

CA DOHS ELAP Cert. No.: 1775

Date: April 28, 2003

Client: Columbia Analytical Services
5090 Caterpillar Road
Redding, CA 96003-1412
Attn: Rob DeMarr

Laboratory No.: A-03042301-001
Client Lab No: D0309962
Sample ID: 0067-PGWTP-005

Sample Control: The samples were received by ATL in a chilled state, with the chain of custody record attached.

Date Sampled:	04/22/03
Date Received:	04/23/03
Dates Tested:	04/23/03 to 04/27/03

Sample Analysis: The following analyses were performed on your sample:

Rainbow Trout Percent Survival Acute Bioassay (EPA 600/4-90/027F), Stickleback Percent Survival Acute Bioassay (EPA 600/4-85/013).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.	Test	Results
0067-PGWTP-005	Rainbow Trout	100% Survival; TUa = 0.0
	Stickleback	100% Survival; TUa = 0.0

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

0095

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

NUMBER 05117

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Treatment Plant	PURCHASE ORDER NO.: 020847 Task 04
PROJECT LOCATION: Pt. Molate	PROJECT NO.: 1990.067E
SAMPLER NAME: Chad Simpson	SAMPLER SIGNATURE:
PROJECT CONTACT: Gerald 949 756-7577	AIRBILL NUMBER: 834101097867 6

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	8260B	8015B TPH GX	160.5 SS	160.2 TSS	405.1 BOD	COMMENTS
0067-PGWTP-004	4/22/03	0900	3	X		W	5 Day	X					Trip Blank
0067-PGWTP-005	4/22/03	0903	8	X		W	5 Day	X	X	X	X	X	Composite / Grab
0067-PGWTP-006	4/22/03	0921	4	X		W	5 Day		X		X	X	Composite

LABORATORY NAME: CAS

LABORATORY ID (FOR LABORATORY): 09962

Project Information Section Do not submit to Laboratory

LOCATION	DEPTH START	DEPTH END	QC
-	-	-	Rg
eff	-	-	Rg
Inf	-	-	Rg

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY: T+E	TIME: 1700	COMPANY
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:
Monthly permit Samplings

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

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

NUMBER 05115

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Treatment Plant	PURCHASE ORDER NO.: 20847 Task 2
PROJECT LOCATION: Pt. Molate	PROJECT NO.: 1990.047E
SAMPLER NAME: Chad Simpson	SAMPLER SIGNATURE:
PROJECT CONTACT: Gerald (949) 756-7577	AIRBILL NUMBER: 834010978768

ANALYSES REQUIRED: EPA 160.5 (SS)

LABORATORY NAME: CAS

LABORATORY ID (FOR LABORATORY): 09819

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0067-PGWTP-003	4/03/03	1305	1	X		W	5 day	Grab	Effluent	--		Rec

RELINQUISHED BY (Signature)	DATE 4/3/03	RECEIVED BY (Signature)	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY TTFW	TIME 1800	COMPANY	
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:

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

May 9, 2003

Mr. Gerald Tamashiro
Foster Wheeler Environmental Corp.
1940 E. Deere Ave., Suite #200
Santa Ana, CA 92705

Reference#: **DA030112**
DA112

Subject: **Naval Fuel Depot, Point Molate CTO-047**

Dear Mr. Tamashiro,

Columbia Analytical Services received samples on May 8, 2003 for analysis in conjunction with this project. An executed copy of your chain-of-custody and a sample identification cross-reference table are enclosed. All samples were received in good condition unless otherwise noted on an enclosed Sample Receipt Exceptions report.

We will mail your report on or before **May 22, 2003.**

We appreciate the opportunity to work with you on this project. Should you have any questions regarding your samples, or if you need additional information, please call me at **(530) 244-5227.**

Sincerely,

Wayne Scott
Client Services

May 22, 2003

Mr. Gerald Tamashiro
Foster Wheeler Environmental Corp.
1940 E. Deere Ave., Suite #200
Santa Ana, CA 92705

Reference#: **DA030259**
DA259

Subject: **Naval Fuel Depot, Point Molate CTO-047**

Dear Mr. Tamashiro,

Columbia Analytical Services received samples on May 22, 2003 for analysis in conjunction with this project. An executed copy of your chain-of-custody and a sample identification cross-reference table are enclosed. All samples were received in good condition unless otherwise noted on an enclosed Sample Receipt Exceptions report.

We will mail your report on or before **Jun 6, 2003.**

We appreciate the opportunity to work with you on this project. Should you have any questions regarding your samples, or if you need additional information, please call me at **(530) 244-5227.**

Sincerely,

Wayne E Scott

Wayne Scott
Client Services

June 10, 2003

Mr. Gerald Tamashiro
Foster Wheeler Environmental Corp.
1940 E. Deere Ave., Suite #200
Santa Ana, CA 92705

Reference#: **DA030424**
DA424

Subject: **Naval Fuel Depot, Point Molate CTO-047**

Dear Mr. Tamashiro,

Columbia Analytical Services received samples on Jun 10, 2003 for analysis in conjunction with this project. An executed copy of your chain-of-custody and a sample identification cross-reference table are enclosed. All samples were received in good condition unless otherwise noted on an enclosed Sample Receipt Exceptions report.

We will mail your report on or before **Jun 12, 2003.**

We appreciate the opportunity to work with you on this project. Should you have any questions regarding your samples, or if you need additional information, please call me at **(530) 244-5227.**

Sincerely,

Wayne E Scott

Wayne Scott
Client Services

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Total Extractable Hydrocarbons

Lab #:	165338	Location:	Pt. Molate TreatmentPlant
Client:	Tetra Tech FW Inc.	Prep:	EPA 3520C
Project#:	1990.067E	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/19/03
Units:	ug/L	Received:	05/19/03
Diln Fac:	1.000	Prepared:	05/19/03
Batch#:	81585	Analyzed:	05/20/03

Field ID: 0067-PGWTP-007 Lab ID: 165338-001
Type: SAMPLE

Analyte	Result	RL
JP-5 C10-C16	990 H Y	50
Diesel C10-C24	4,400 H Y	50
Bunker C C12-50	12,000	300

Surrogate	%REC	Limits
Hexacosane	102	65-135

Field ID: 0067-PGWTP-008 Lab ID: 165338-002
Type: SAMPLE

Analyte	Result	RL
JP-5 C10-C16	ND	50
Diesel C10-C24	ND	50
Bunker C C12-50	ND	300

Surrogate	%REC	Limits
Hexacosane	111	65-135

Type: BLANK Lab ID: QC214105

Analyte	Result	RL
JP-5 C10-C16	ND	50
Diesel C10-C24	ND	50
Bunker C C12-50	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

1.0

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

CAS Lab Reference No./SDG: DA259

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW-846 5030B
Cleanup: N/A
Analysis: SW-846 8260B

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration: In the Initial Calibration (ICAL) from 05/23/03, one or more compound's RSD is >15%. The mean RSD for all calibrated analytes is <15%, however Bromomethane (42.0%) exceeds the in-house 40% criteria. Bromomethane was not detected in any associated samples above the reporting limit and no further action was taken.

The Initial Calibration Verification from 05/23/03 yielded Bromomethane (42.1%) exceeding the in-house 30%D criteria. Bromomethane was not detected in any associated samples above the reporting limit and no further action was taken.

B. Blanks: The Method Blank analyzed on 05/28/03 detected Bromomethane at a level less than ½ the reporting limit, which meets project-specific QC criteria. This compound was detected in sample DA259002 at a level less than ½ the reporting limit and was "B" flagged.

C. Internal Standards: All acceptance criteria were met.

D. Surrogates: All acceptance criteria were met.

E. Spikes: All acceptance criteria were met.

F. Samples: Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED/DATE: BMo 06/05/03 Reviewed by: RaDahill 06/06/03
Brian Moore
Volatiles Organics

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP009

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: SDG No.: DA259 Lab Sample ID: DA259001

Matrix: WATER Level: LOW Lab File ID: U031668

Sample Volume: 10.0 ML Date Received: 05/22/03

Date Analyzed: 05/28/03

Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
74-87-3	Chloromethane		0.17	5.0	5.0	U
75-01-4	Vinyl chloride		0.13	5.0	5.0	U
74-83-9	Bromomethane		0.080	5.0	5.0	U
75-00-3	Chloroethane		0.14	5.0	5.0	U
75-35-4	1,1-Dichloroethene		0.16	5.0	5.0	U
67-64-1	Acetone		0.64	5.0	0.76	J
75-15-0	Carbon disulfide		0.12	5.0	5.0	U
75-09-2	Methylene chloride		0.14	5.0	5.0	U
156-60-5	trans-1,2-Dichloroethene		0.14	5.0	5.0	U
75-34-3	1,1-Dichloroethane		0.12	5.0	5.0	U
156-59-2	cis-1,2-Dichloroethene		0.17	5.0	5.0	U
78-93-3	2-Butanone		0.25	5.0	5.0	U
67-66-3	Chloroform		0.090	5.0	5.0	U
71-55-6	1,1,1-Trichloroethane		0.10	5.0	5.0	U
56-23-5	Carbon tetrachloride		0.12	5.0	5.0	U
71-43-2	Benzene		0.11	5.0	5.0	U
107-06-2	1,2-Dichloroethane		0.17	5.0	5.0	U
79-01-6	Trichloroethene		0.11	5.0	5.0	U
78-87-5	1,2-Dichloropropane		0.090	5.0	5.0	U
75-27-4	Bromodichloromethane		0.10	5.0	5.0	U
10061-01-5	cis-1,3-Dichloropropene		0.13	5.0	5.0	U
108-10-1	4-Methyl-2-pentanone		0.29	5.0	5.0	U
108-88-3	Toluene		0.11	5.0	5.0	U
10061-02-6	trans-1,3-Dichloropropene		0.080	5.0	5.0	U
79-00-5	1,1,2-Trichloroethane		0.21	5.0	5.0	U
127-18-4	Tetrachloroethene		0.16	5.0	5.0	U
591-78-6	2-Hexanone		0.13	5.0	5.0	U
124-48-1	Dibromochloromethane		0.080	5.0	5.0	U
108-90-7	Chlorobenzene		0.090	5.0	5.0	U
100-41-4	Ethylbenzene		0.080	5.0	5.0	U
1330-20-7	Xylene (total)		0.11	5.0	5.0	U
100-42-5	Styrene		0.080	5.0	5.0	U
75-25-2	Bromoform		0.15	5.0	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		0.11	5.0	5.0	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP010

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: SDG No.: DA259 Lab Sample ID: DA259002

Matrix: WATER Level: LOW Lab File ID: U031669

Sample Volume: 10.0 ML Date Received: 05/22/03

Date Analyzed: 05/28/03

Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
74-87-3	Chloromethane		0.17	5.0	5.0	U
75-01-4	Vinyl chloride		0.13	5.0	5.0	U
74-83-9	Bromomethane		0.080	5.0	0.52	BJ
75-00-3	Chloroethane		0.14	5.0	5.0	U
75-35-4	1,1-Dichloroethene		0.16	5.0	5.0	U
67-64-1	Acetone		0.64	5.0	5.0	U
75-15-0	Carbon disulfide		0.12	5.0	5.0	U
75-09-2	Methylene chloride		0.14	5.0	5.0	U
156-60-5	trans-1,2-Dichloroethene		0.14	5.0	5.0	U
75-34-3	1,1-Dichloroethane		0.12	5.0	5.0	U
156-59-2	cis-1,2-Dichloroethene		0.17	5.0	5.0	U
78-93-3	2-Butanone		0.25	5.0	0.56	J
67-66-3	Chloroform		0.090	5.0	5.0	U
71-55-6	1,1,1-Trichloroethane		0.10	5.0	5.0	U
56-23-5	Carbon tetrachloride		0.12	5.0	5.0	U
71-43-2	Benzene		0.11	5.0	5.0	U
107-06-2	1,2-Dichloroethane		0.17	5.0	5.0	U
79-01-6	Trichloroethene		0.11	5.0	5.0	U
78-87-5	1,2-Dichloropropane		0.090	5.0	5.0	U
75-27-4	Bromodichloromethane		0.10	5.0	5.0	U
10061-01-5	cis-1,3-Dichloropropene		0.13	5.0	5.0	U
108-10-1	4-Methyl-2-pentanone		0.29	5.0	5.0	U
108-88-3	Toluene		0.11	5.0	5.0	U
10061-02-6	trans-1,3-Dichloropropene		0.080	5.0	5.0	U
79-00-5	1,1,2-Trichloroethane		0.21	5.0	5.0	U
127-18-4	Tetrachloroethene		0.16	5.0	5.0	U
591-78-6	2-Hexanone		0.13	5.0	5.0	U
124-48-1	Dibromochloromethane		0.080	5.0	5.0	U
108-90-7	Chlorobenzene		0.090	5.0	5.0	U
100-41-4	Ethylbenzene		0.080	5.0	5.0	U
1330-20-7	Xylene (total)		0.11	5.0	5.0	U
100-42-5	Styrene		0.080	5.0	5.0	U
75-25-2	Bromoform		0.15	5.0	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		0.11	5.0	5.0	U

CASE NARRATIVE
GC TPH Diesel

CAS Lab Reference No./SDG.: DA259

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW-846 3510C
Cleanup: N/A
Analysis: SW-846 8015B(MOD)

IV. PREPARATION

Sample volume may vary based on the amount of sample received per container. Reporting limits have not been adjusted.

V. ANALYSIS

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Samples: All acceptance criteria were met.

F. Other: Diesel range is from C10-C24

Compounds were detected in sample DA259003 at the same elution time as diesel. However, the pattern of the peaks did not match those expected from diesel fuel. The pattern most resembles that found for weathered diesel.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED/DATE: EBurrough 6/5/03 REVIEWED BY: _____

Erica Burrough
Scientist, GC Organics

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP010

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: DA259 SDG No.: DA259 Lab Sample ID: DA259002

Matrix: WATER Level: LOW Lab File ID: G0604025

Sample Wt/Vol: 1.000 L Date Received: 05/22/03

Extract Vol: 1 ML Date Extracted: 05/28/03

Date Analyzed: 06/05/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
PHCD	TPH-DIESEL		0.019	0.050	0.050	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP011

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: DA259 SDG No.: DA259 Lab Sample ID: DA259003

Matrix: WATER Level: LOW Lab File ID: G0604026

Sample Wt/Vol: 1.000 L Date Received: 05/22/03

Extract Vol: 1 ML Date Extracted: 05/28/03

Date Analyzed: 06/05/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
PHCD	TPH-DIESEL		0.019	0.050	1.2	

CASE NARRATIVE
GC TPH BUNKER C

CAS Lab Reference No./SDG.: DA259

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW-846 3510C
Cleanup: N/A
Analysis: SW-846 8015B(MOD)

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: In the Laboratory Control Spike Duplicate(LCSD), Octacosane exceeded recovery limits. Reanalysis yielded similar results. The Laboratory Control Spike(LCS) had acceptable recoveries, corrective action is not recommended.

D. Spikes: In the LCSD (DWB10528LCSD), analyzed on 06/04/03, spike exceeded the recovery limits. Reanalysis of the spike yielded similar result. The LCS had acceptable recoveries, corrective action is not recommended.

E. Samples: All acceptance criteria were met.

F. Other: Bunker C range is from C10-C36.

The one-year expiration date for the Bunker C method detection limit expired on 05/08/03. A new method detection limit is currently in process.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED/DATE: EBurrough 6/6/03 REVIEWED BY: Brian Hall

Erica Burrough
Scientist, GC Organics

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP010

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: DA259 SDG No.: DA259 Lab Sample ID: DA259002

Matrix: WATER Level: LOW Lab File ID: G0604025

Sample Wt/Vol: 1.000 L Date Received: 05/22/03

Extract Vol: 1 ML Date Extracted: 05/28/03

Date Analyzed: 06/05/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
FOIL--------Bunker C			0.035	0.50	0.50	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP011

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: DA259 SDG No.: DA259 Lab Sample ID: DA259003

Matrix: WATER Level: LOW Lab File ID: G0604026

Sample Wt/Vol: 1.000 L Date Received: 05/22/03

Extract Vol: 1 ML Date Extracted: 05/28/03

Date Analyzed: 06/05/03

Extraction Type: SEP FUNNEL Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: mg/L	MDL	RL	RESULT	Q
FOIL--------	Bunker C		0.035	0.50	3.7	

CASE NARRATIVE
HPLC POLYNUCLEAR AROMATIC HYDROCARBONS

CAS Lab Reference No./SDG.: DA259

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW-846 3520C
Cleanup: N/A
Analysis: SW-846 8310

IV. PREPARATION

Sample preparation proceeded normally. Water sample volumes may vary based on the amount of sample received per container. Reporting limits have been adjusted accordingly for volumes less than 1 liter.

V. ANALYSIS

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Samples: Sample analysis proceeded normally.

F. Other: Insufficient sample was received to perform matrix QC on the water batch of samples. A duplicate laboratory control sample (LCSD) was used to determine the precision of the method.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED/DATE: BM. 06/04/03 REVIEWED BY: Brian Moore

Brian Moore
Organics Manager

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0067PGWTP010

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: SDG No.: DA259 Lab Sample ID: DA259002

Matrix: WATER Level: LOW Lab File ID: I0603005

Sample Wt/Vol: 0.970 L Date Received: 05/22/03

Extract Vol: 1 ML Date Extracted: 05/28/03

Date Analyzed: 06/03/03

Extraction Type: CONT Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: ug/L	MDL	RL	RESULT	Q
91-20-3	Naphthalene		0.058	1.0	1.0	U
86-73-7	Fluorene		0.012	0.21	0.21	U
85-01-8	Phenanthrene		0.0086	0.10	0.10	U
120-12-7	Anthracene		0.0071	0.10	0.10	U
206-44-0	Fluoranthene		0.0084	0.10	0.10	U
129-00-0	Pyrene		0.0069	0.10	0.10	U
56-55-3	Benzo(a)Anthracene		0.0072	0.10	0.10	U
218-01-9	Chrysene		0.0091	0.10	0.10	U
205-99-2	Benzo(b)Fluoranthene		0.0084	0.10	0.10	U
207-08-9	Benzo(k)Fluoranthene		0.0075	0.10	0.10	U
50-32-8	Benzo(a)Pyrene		0.0067	0.10	0.10	U
53-70-3	Dibenzo(a,h)Anthracene		0.014	0.21	0.21	U
191-24-2	Benzo(g,h,i)Perylene		0.014	0.21	0.21	U
193-39-5	Indeno(1,2,3-c,d)Pyrene		0.0064	0.10	0.10	U
83-32-9	Acenaphthene		0.064	1.0	1.0	U
208-96-8	Acenaphthylene		0.070	2.1	2.1	U

CASE NARRATIVE
Wet Chemistry

CAS Lab Reference No./SDG.: DA259

I. **RECEIPT**
No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. **HOLDING TIMES**
All holding times were met.

III. **METHOD**
The method used is cited in the corresponding Form I.

IV. **PREPARATION**
Sample preparation proceeded normally, if applicable.

V. **ANALYSIS**

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Spikes: All acceptance criteria were met.

D. Duplicates: All acceptance criteria were met.

E. Laboratory Control Samples: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other: No QA/QC except client requested QA/QC has been reported.

Settleable Solids were reported to a set MDL (RL) of 0.1 mL/L/hr.

B-The reported value obtained was less than the RL.

U-The reported value was less than the MDL.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED: _____ DATE: 6/9/05

Mark Fesler
Quality Assurance Officer

Report of Analytical Results

Client Sample ID: 0067PGWTP010
Sample Description: 0067-PGWTP-010
Sample Matrix: Water
Site: N/A

Date Collected: 05/21/03 10:32 (Wed)
Date Received: 05/22/03 10:15 (Thu)

Reference No: DA259
Lab Sample ID: DA259002

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Sample Volume	1025	mL		05/31/03 10:00	EPA160.5
Settleable Solids	< 0.1	mL/L/h	0.1	05/31/03 10:00	EPA160.5
Total Suspended Solids	< 4	mg/L	10	05/28/03 12:00	EPA160.2
DEMAND AND GENERAL ORGANIC					
BOD 5, Date In	05/22/03			05/22/03 11:20	EPA405.1/SM5210B
BOD 5, Date Out	05/27/03			05/22/03 11:20	EPA405.1/SM5210B
BOD, 5 Day	2 U	mg/L	10	05/22/03 11:20	EPA405.1/SM5210B

(19965)

Report of Analytical Results

Client Sample ID: 0067PGWTP011
Sample Description: 0067-PGWTP-011
Sample Matrix: Water
Site: N/A

Date Collected: 05/21/03 10:42 (Wed)
Date Received: 05/22/03 10:15 (Thu)

Reference No: DA259
Lab Sample ID: DA259003

CATEGORY NAME / Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Total Suspended Solids	< 4	mg/L	10	05/28/03 12:00	EPA160.2
DEMAND AND GENERAL ORGANIC					
BOD 5, Date In	05/22/03			05/22/03 11:20	EPA405.1/SM5210B
BOD 5, Date Out	05/27/03			05/22/03 11:20	EPA405.1/SM5210B
BOD, 5 Day	3 B	mg/L	10	05/22/03 11:20	EPA405.1/SM5210B

(19965)

LABORATORY REPORT

Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756

CA DOHS ELAP Cert. No.: 1775

Date: June 2, 2003

Client: Columbia Analytical Services
5090 Caterpillar Road
Redding, CA 96003-1412
Attn: Wayne Scott

Laboratory No.: A-03062901-001
Client Lab No: DA259004
Sample ID: 0067-PGWTP-012

Sample Control: The samples were received by ATL in a chilled state, with the chain of custody record attached.

Date Sampled:	05/28/03
Date Received:	05/29/03
Dates Tested:	05/29/03 to 06/02/03

Sample Analysis: The following analyses were performed on your sample:

Rainbow Trout Percent Survival Acute Bioassay (EPA 600/4-90/027F).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.	Test	Results
0067-PGWTP-012	Rainbow Trout	100% Survival; TUa = 0.0

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

LABORATORY REPORT

Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756

CA DOHS ELAP Cert. No.: 1775

Date: May 26, 2003

Client: Columbia Analytical Services
5090 Caterpillar Road
Redding, CA 96003-1412
Attn: Wayne Scott

Laboratory No.: A-03052207-001
Client Lab No: DA259002
Sample ID: 0067-PGWTP-010

Sample Control: The samples were received by ATL in a chilled state, with the chain of custody record attached.

Date Sampled:	05/21/03
Date Received:	05/22/03
Dates Tested:	05/22/03 to 05/26/03

Sample Analysis: The following analyses were performed on your sample:

Stickleback Percent Survival Acute Bioassay (EPA 600/4-85/013).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.	Test	Results
0067-PGWTP-010	Stickleback	100% Survival; TUa = 0.0

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

CASE NARRATIVE
Wet Chemistry

CAS Lab Reference No./SDG.: DA424

I. **RECEIPT**
No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. **HOLDING TIMES**
All holding times were met.

III. **METHOD**
The method used is cited in the corresponding Form I.

IV. **PREPARATION**
Sample preparation proceeded normally, if applicable.

V. **ANALYSIS**

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Spikes: All acceptance criteria were met.

D. Duplicates: All acceptance criteria were met.

E. Laboratory Control Samples: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other: No QA/QC except client requested QA/QC has been reported.

Settleable Solids were reported to a set MDL (RL) of 0.1 mL/L/hr.

B-The reported value obtained was less than the RL.

U-The reported value was less than the MDL.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and CAS, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED: _____ DATE: 6/11/03

Mark Fesler
Quality Assurance Officer

Report of Analytical Results

Client Sample ID: 0067PGWTP012
Sample Description: 0067-PGWTP-012
Sample Matrix: Water
Site: N/A

Date Collected: 06/09/03 07:15 (Mon)
Date Received: 06/10/03 09:40 (Tue)

Reference No: DA424
Lab Sample ID: DA424001

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Sample Volume	1050	mL		06/10/03 11:00	EPA160.5
Settleable Solids	< 0.1	mL/L/h	0.1	06/10/03 11:00	EPA160.5

(19972)

FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 234 8595

NUMBER 05122

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Treatment Plant	PURCHASE ORDER NO.: 020847 task 11
PROJECT LOCATION: Point Molate	PROJECT NO.: 1990.067E
SAMPLER NAME: Chad Simpson	SAMPLER SIGNATURE:
PROJECT CONTACT: Gerald (949)756-7577	AIRBILL NUMBER: 839392790373

ANALYSES REQUIRED: 96 hr Acute

LABORATORY NAME: Aquatic

LABORATORY ID (FOR LABORATORY):

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0067-PtWTP-010	5/21/03	1055	2	X		W	Std	Composite	Effluent	-	-	Pe

RELINQUISHED BY (Signature)	DATE: 5/21/03	RECEIVED BY (Signature)	LABORATORY INSTRUCTIONS/COMMENTS: Rainbow Trout / 3 spine stickle Back
COMPANY: TTEC	TIME: 1700	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION: 2nd Cooler Air Bill 839392790362
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY): TEMPERATURE: SAMPLE CONDITION: ☐ INTACT ☐ BROKEN; COOLER SEAL: ☐ INTACT ☐ BROKEN
COMPANY	TIME	COMPANY	

SAMPLING COMMENT: monthly permit sampling

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

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FOSTER WHEELER ENVIRONMENTAL CORPORATION

NUMBER 05121

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Treatment Plant	PURCHASE ORDER NO: 020847 Task 4
PROJECT LOCATION: Ft. Molate	PROJECT NO: 1990.067E
SAMPLER NAME: Chad Simpson	SAMPLER SIGNATURE:
PROJECT CONTACT: Gerald (949) 756-7577	AIRBILL NUMBER: 859392790351

ANALYSES REQUIRED: 160.5 (SS); 160.2 (TSS); 405.1 (BOD); 8015B TPH Ext.; 8260B (VOA's); 8310 (PAH's)

LABORATORY NAME: CAS

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	SAMPLE CONTAINER NO.	LEVEL 3	LEVEL 4	TYPE	TAT	160.5 (SS)	160.2 (TSS)	405.1 (BOD)	8015B TPH Ext.	8260B (VOA's)	8310 (PAH's)			COMMENTS
0067-PGWTP-009	5/21/03	1012	3	X		W	5 Day				X	X			1	Trip Blank / Grab
0067-PGWTP-010	5/21/03	1032	10	X		W	5 Day	X	X	X	X	X	X		2	Composite / Grab
0067-PGWTP-011	5/21/03	1042	4	X		W	5 Day		X	X	X				3	Composite / Grab

RELINQUISHED BY (Signature):	DATE: 5/21/03	RECEIVED BY (Signature):	LABORATORY INSTRUCTIONS/COMMENTS:
COMPANY: FWEC	TIME: 1107	COMPANY:	
RELINQUISHED BY (Signature):	DATE: 5/22/03	RECEIVED BY (Signature):	COMPOSITE DESCRIPTION:
COMPANY:	TIME: 1015	COMPANY: CAS/Reading	
RELINQUISHED BY (Signature):	DATE:	RECEIVED BY (Signature):	SAMPLE CONDITIONS UPON RECEIPT (FOR LABORATORY):
COMPANY:	TIME:	COMPANY:	TEMPERATURE: °C; CHAIN OF CUSTODY SEALS: INTACT / BROKEN; PRESERVATION: YES / NO

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

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

NUMBER 05120

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pt. Molate Treatment Plant	PURCHASE ORDER NO.: 047557
PROJECT LOCATION: Richmond, Ca	PROJECT NO.: 1990.067E
SAMPLER NAME: Chad Simpson	SAMPLER SIGNATURE: Ch
PROJECT CONTACT: Gerald (949) 756-7577	AIRBILL NUMBER:

ANALYSES REQUIRED: 8015B TPH Ext

LABORATORY NAME: Curtis and Tompkins, Ltd.

LABORATORY ID (FOR LABORATORY):

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	8015B TPH Ext	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0067-PGWTP-007	5/19/03	1030	2	X		W	48 hr.	X	Composite	Influent	–	–	Ng
0067-PGWTP-008	5/19/03	1040	2	X		W	48 hr.	X	Grab	Effluent	–	–	Ng

RELINQUISHED BY (Signature): Ch	DATE: 5/19/03	RECEIVED BY (Signature): Tony Fox	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY: TTFW	TIME: 1500	COMPANY: C&T	
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:
48 hr. TAT for new GAC vessel C addition to PGWTP

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

FOSTER WHEELER ENVIRONMENTAL CORPORATION

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

NUMBER 05119

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Treatment Plant	PURCHASE ORDER NO.: 020847 Task 04	ANALYSES REQUIRED: 1601 5.0	LABORATORY NAME: CAS
PROJECT LOCATION: Pt. Molate	PROJECT NO.: 1990.067E		LABORATORY ID (FOR LABORATORY): DA112
SAMPLER NAME: Chad Simpson	SAMPLER SIGNATURE:		
PROJECT CONTACT: Gerald 949 756-7577	AIRBILL NUMBER: 834010970621		

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	1601	5.0	COMMENT
0067-PSWTP-007	5/7/03	1200	1	X		W	5 day	X		grab

RELINQUISHED BY (Signature)	DATE: 5/7/03	RECEIVED BY (Signature)	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY: T+PW	TIME: 1700	COMPANY	
RELINQUISHED BY (Signature)	DATE: 5/8/03	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME: 0945	COMPANY: CAS/REDDING	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
COMPANY	TIME	COMPANY	TEMPERATURE: 3°C SAMPLE CONDITION: [X] INTACT [ ] BRC
			COOLER SEAL: [X] INTACT [ ] BROKEN

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FOSTER WHEELER ENVIRONMENTAL CORPORATION
1230 Columbia Street, Suite 640 San Diego, CA 92101 (619) 231-5696

NUMBER 05123

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Treatment Plant	PURCHASE ORDER NO.: 020847 Task 4
PROJECT LOCATION: Pt. Molate	PROJECT NO.: 1990.067E
SAMPLER NAME: Chad Simpson	SAMPLER SIGNATURE: [signature]
PROJECT CONTACT: Gerald (949) 756-7577	AIRBILL NUMBER: 839392790330

ANALYSES REQUIRED: 96 Hr. Bioassay

LABORATORY NAME: Aquatic

LABORATORY ID (FOR LABORATORY):

Project Information Section
Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	96 Hr. Bioassay	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
0067-AWTP-012	5/26/03	0900	1	X		W	5 day	X	Effluent composite		–	–	Reg

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	5/26/03	
COMPANY: TT FW	TIME: 1700	COMPANY:
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS: Rain Bow Trout

COMPOSITE DESCRIPTION:

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

SAMPLING COMMENT: Re-Sample (1) 5 gallon Bioassay

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

NUMBER 05129

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Treatment Plant	PURCHASE ORDER NO.: 020847 Task 04
PROJECT LOCATION: Pt. Molate	PROJECT NO.: 1990.067 FE
SAMPLER NAME: C. Simpson	SAMPLER SIGNATURE:
PROJECT CONTACT: Gerald 949-756-7577	AIRBILL NUMBER: 839392790260

ANALYSES REQUIRED: 160.5 (SV)

LABORATORY NAME:

LABORATORY ID (FOR LABORATORY): DA424

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	COMMENTS
0067-PGWTP-012	6.09.03	0715	1	X		W	48 hr	grab 1

RELINQUISHED BY (Signature)	DATE 6.09.03	RECEIVED BY (Signature)	LABORATORY INSTRUCTIONS/COMMENTS: 48 hr. TAT @ Wayne Scott's Request
COMPANY TTEC	TIME 16.00	COMPANY	
RELINQUISHED BY (Signature)	DATE 6/10/03	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME 0940	COMPANY CAS/Reading	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
COMPANY	TIME	COMPANY	TEMPERATURE: 2°C SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
			COOLER SEAL: ☑ INTACT ☐ BROKEN

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