

NAVAL AIR WARFARE CENTER, TRENTON NJ

Ground Water Treatment Facility Operations and Maintenance

MONTHLY REPORT

MARCH, 1999

Total volume of ground water pumped for the month (gal): 231,400

Average Flow Rate (gpm)		<u>55.8</u>
Average Flow From Well		<u>2.5</u>
15BR	<u>16.2</u>	<u>0</u>
20BR	<u>8.5</u>	<u>N/A</u>
41BR	<u>9.9</u>	
45BR	<u>5.4</u>	
48BR	<u>13.3</u>	

Time Operational (hours)	<u>91.5</u>
Time Operational (percent)	<u>12</u>
Days in month	<u>4</u>

Shut Downs

<u>Date/time started</u>	<u>Total Hours</u>	<u>Cause</u>
3/4/99 14:30	652.5	Catalyst failure. Air emissions exceeded permit levels. The system will remain shutdown until delivery and installation the new catalyst.

Sample Dates for lab analyses (results att) 26-Mar-99 No influent sample was collected because the wells were not being pumped.

Figure/Table of Field GC data attached Only one data point generated this month from an effluent sample collected on 26-MAR-99. All results were non-detect.

Estimated pounds of contaminants treated

	<u>For month:</u>	<u>Total (lb.):</u>
Vinyl Chloride	NA	752.7
Dichloroethene	NA	4655.221
Trichloroethene	NA	1582.77
Total VOCs removed	NA	6991

Maintenance Notes (such as carbon change outs, etc.)

Catalyst failure was determined to be due to a build up of silicates and sulfates.

On March 22 and 23, 1999, 20,400 gallons of wastewater from three on-site frac-tanks were pumped through the carbon units.

1A

SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

10MAR269901

Lab Name: CHEMTECHContract: FOSTER WHEELER ENVIRO CORP.Project No.: 11203NJ

Site: _____

Location: _____

Group: 10MAR269Matrix: (soil/water) WATERLab Sample ID: O69432Sample wt/vol: 5.0 (g/mL) MLLab File ID: M10564.D

Level: (low/med) _____

Date Received: 3/26/99% Moisture: not dec. 100Date Analyzed: 3/30/99GC Column: RTX624 ID: 0.53 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg)	ug/L	Q
75-71-8	Dichlorodifluoromethane		1.8	U
75-01-4	Vinyl Chloride		1.3	U
74-83-9	Bromomethane		1.7	U
74-87-3	Chloromethane		1.8	U
75-00-3	Chloroethane		2	U
107-02-8	Acrolein		5	U
75-69-4	Trichlorofluoromethane		1.3	U
75-35-4	1,1-Dichloroethene		0.6	U
75-09-2	Methylene Chloride		0.7	U
156-60-5	trans-1,2-Dichloroethene		0.7	U
107-13-1	Acrylonitrile		5	U
75-34-4	1,1-Dichloroethane		0.4	U
67-66-3	Chloroform		0.8	U
71-55-6	1,1,1-Trichloroethane		0.9	U
56-23-5	Carbon Tetrachloride		1.5	U
71-43-2	Benzene		0.9	U
107-06-2	1,2-Dichloroethane		0.9	U
79-01-6	Trichloroethene		1	U
78-87-5	1,2-Dichloropropane		1	U
75-27-4	Bromodichloromethane		0.6	U
110-07-3	2-Chloroethyl Vinyl Ether		5	U
10061-01-5	cis-1,3-Dichloropropene		0.1	U
108-88-3	Toluene		1	U
10061-02-6	trans-1,3-Dichloropropene		0.2	U
79-00-5	1,1,2-Trichloroethane		0.9	U
127-18-4	Tetrachloroethene		0.9	U
124-48-1	Dibromochloromethane		1	U
108-90-7	Chlorobenzene		0.9	U
100-41-4	Ethylbenzene		0.9	U
75-25-2	Bromoform		0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		1.1	U
	TOTAL TTO		0	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
10MAR269901

Lab Name: CHEMTECH Contract: FOSTER WHEELER ENVIRO CORP.
 Project No. 1120 Site: _____ Location: _____ Group: 10MAR26
 Matrix: (soil/water) WATER Lab Sample ID: O69432
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: M10564.D
 Level: (low/med) _____ Date Received: 3/26/99
 % Moisture: not dec. 100 Date Analyzed: 3/30/99
 GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:
 (ug/L or ug/Kg) ug/L
 Number TICs found: 2

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 17301-23-4	Undecane, 2,6-dimethyl-	27.92	11	J
2. 26730-14-3	Tridecane, 7-methyl-	29.31	6	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

10MAR269901

Lab Name: CHEMTECH Contract: FOSTER WHEELER ENVIRONMENTAL C
 Project No.: 11203NJ Site: _____ Location: _____ Group: 10MAR269
 Matrix: (soil/water) WATER Lab Sample ID: O69432
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: S19005.D
 Level: (low/med) _____ Date Received: 3/26/99
 % Moisture: 100 decanted: (Y/N): N Date Extracted: 3/29/99
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/31/99
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/L
108-95-2	Phenol ✓	10	U
111-44-4	bis(2-Chloroethyl)ether ✓	10	U
108-60-1	2,2'-oxybis(1-Chloropropane) ✓	10	U
95-57-8	2-Chlorophenol ✓	10	U
95-50-1	1,2-Dichlorobenzene ✓	10	U
541-73-1	1,3-Dichlorobenzene ✓	10	U
106-46-7	1,4-Dichlorobenzene ✓	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	3+4-Methylphenols	10	U
621-64-7	n-Nitroso-di-n-propylamine ✓	10	U
67-72-1	Hexachloroethane ✓	10	U
98-95-3	Nitrobenzene ✓	10	U
78-59-1	Isophorone ✓	10	U
88-75-5	2-Nitrophenol ✓	10	U
105-67-9	2,4-Dimethylphenol ✓	10	U
111-91-1	bis(2-Chloroethoxy)methane ✓	10	U
120-83-2	2,4-Dichlorophenol ✓	10	U
100-51-6	Benzyl Alcohol	20	U
65-85-0	Benzoic Acid	50	U
120-82-1	1,2,4-Trichlorobenzene ✓	10	U
91-20-3	Naphthalene ✓	10	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene ✓	10	U
59-50-7	4-Chloro-3-methylphenol ✓	20	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene ✓	10	U
88-06-2	2,4,6-Trichlorophenol ✓	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene ✓	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate ✓	10	U
208-96-8	Acenaphthylene ✓	1.8	J
606-20-2	2,6-Dinitrotoluene ✓	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

10MAR269901

Lab Name: CHEMTECH Contract: FOSTER WHEELER ENVIRONMENTAL C
 Project No.: 11203NJ Site: _____ Location: _____ Group: 10MAR269
 Matrix: (soil/water) WATER Lab Sample ID: O69432
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: S19005.D
 Level: (low/med) _____ Date Received: 3/26/99
 % Moisture: 100 decanted: (Y/N): N Date Extracted: 3/29/99
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/31/99
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/L	
99-09-2	3-Nitroaniline		50	U
83-32-9	Acenaphthene ✓		10	U
51-28-5	2,4-Dinitrophenol ✓		50	U
100-02-7	4-Nitrophenol ✓		50	U
132-64-9	Dibenzofuran		10	U
121-14-2	2,4-Dinitrotoluene ✓		10	U
84-66-2	Diethylphthalate ✓		10	U
7005-72-3	4-Chlorophenyl-phenylether ✓		10	U
86-73-7	Fluorene ✓		10	U
100-01-6	4-Nitroaniline		50	U
534-52-1	4,6-Dinitro-2-methylphenol ✓		50	U
86-30-6	N-Nitrosodiphenylamine ✓		10	U
122-66-7	1,2-Diphenylhydrazine ✓		10	U
101-55-3	4-Bromophenyl-phenylether ✓		10	U
118-74-1	Hexachlorobenzene ✓		10	U
87-86-5	Pentachlorophenol ✓		50	U
85-01-8	Phenanthrene ✓		6.2	J
120-12-7	Anthracene ✓		2.2	J
84-74-2	Di-n-butylphthalate ✓		10	U
206-44-0	Fluoranthene ✓		9.4	J
92-87-5	Benzidine ✓		10	U
129-00-0	Pyrene ✓		14	
85-68-7	Butylbenzylphthalate ✓		10	U
91-94-1	3,3'-Dichlorobenzidine ✓		20	U
56-55-3	Benzo[a]anthracene ✓		9.4	J
218-01-9	Chrysene ✓		9.4	J
117-81-7	bis(2-Ethylhexyl)phthalate ✓		17	
117-84-0	Di-n-octylphthalate ✓		10	U
205-99-2	Benzo[b]fluoranthene ✓		32	
207-08-9	Benzo[k]fluoranthene ✓		10	U
50-32-8	Benzo[a]pyrene ✓		16	
193-39-5	Indeno[1,2,3-cd]pyrene ✓		10	U
53-70-3	Dibenz[a,h]anthracene ✓		10	U

ANALYSIS REPORT

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CLIENT SAMPLE #

INORGANIC ANALYSIS DATA SHEET

10MAR26990

Lab Name: CHEMTECH CONSULTING GROUP

Contract:

Lab Code: CHEM

Case No.:

SAS No.:

SDG No.: 11203

Matrix (soil/water): WATER

Lab Sample ID: 69432S

Level (low/med): LOW

Date Received: 03/26/99

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	436			P
7440-36-0	Antimony	3.0	U		P
7440-38-2	Arsenic	5.7	B		P
7440-39-3	Barium	172	B		P
7440-41-7	Beryllium	1.3	B		P
7440-43-9	Cadmium	1.8	B		P
7440-70-2	Calcium	46300			P
7440-47-3	Chromium	8.7	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	56.9			P
7439-89-6	Iron	1560			P
7439-92-1	Lead	59.9			P
7439-95-4	Magnesium	13400			P
7439-96-5	Manganese	31.6			P
7439-97-6	Mercury	2.9			CV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium	8720			P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	55400			P
7440-28-0	Thallium	4.0	B		P
7440-62-2	Vanadium	1.6	B		P
7440-66-6	Zinc	119			P
	Cyanide	4.0	U		CA

Color Before: GREY

Clarity Before: CLOUDY

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

CHEMTECH**LABORATORY REPORT**

REPORT OF ANALYSES

FOSTER WHEELER ENVIRO CORP.
2300 LINCOLN HIGHWAY EAST
LANGHORNE, PA 19047-
Attn: MEG WATSON

DATE: 04/01/99

PROJECT # 11203 NJ

SAMPLE NUMBER- 69432
DATE SAMPLED- 03/26/99
DATE RECEIVED- 03/26/99
DELIVERED BY- CHEMTECH

SAMPLE ID- 10MAR269901
TIME SAMPLED- 1100 SAMPLER- CLIENT
TIME RECEIVED- 1300
RECEIVED BY- SP SAMPLE MATRIX- WW

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ANALYSIS	ANALYSIS			RESULT UNITS
	METHOD	DATE	TIME BY	
TOTAL SUSPENDED SOLIDS	EPA 160.2	03/29/99	HSP	32.0 mg/L

LABORATORY DIRECTOR *M. Watson*

110 Route 4
Englewood, New Jersey 07631
Phone: (201) 567-6868 Fax: (201) 567-1333

515 Route 9
Barnegat, New Jersey 08005
Phone: (609) 698-0199 Fax: (609) 698-0910

NYSDOH Certification No. 10624
NJDEP Certification No. 02548

NJDEP Certification No. 15004