



TETRA TECH FW, INC.

15 July 2004
RAC II-2004-118

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Ms. Sharon Trocher
Work Assignment Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

**SUBJECT: USEPA RAC II CONTRACT NUMBER 68-W-98-214
WORK ASSIGNMENT NUMBER 109-RALR-0238
VESTAL WATER SUPPLY WELL, OPERABLE UNIT 1
APRIL 2004 PERFORMANCE MONITORING REPORT**

Dear Ms. Trocher:

I am pleased to provide the April 2004 Monthly Performance Monitoring Report for the Vestal Water Supply Well treatment facility.

A. Monthly Operations

The treatment system at the Vestal Water Supply Well operated continuously during the month of April. A summary of the operation and maintenance activities performed during April is as follows:

- Routine cleaning and inspections of the facility were performed;
- Air filters were replaced; and
- The monthly influent and effluent samples were collected.

B. Operational Data

The following table presents operational data for the year 2004, arranged by month:

Month	Operating Days	Average flow Meter %	Average flow rate (gpm)	Amount of groundwater treated (mg)
January	31	50	575	25.7
February	29	50	575	24
March	31	45	517.5	22.4
April	30	45	517.5	22.4
Volume of groundwater treated for 2004				95.2
Volume of groundwater treated for the OU-1				2514.8

gpm - gallons per minute
mg - millions of gallons



1000 The American Road, Morris Plains, NJ 07950
Tel 973.630.8000 Fax 973.630.8025
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C. Comparison of Influent and Effluent Concentrations with Discharge Criteria

The treatment plant influent and effluent analytical data received from the EPA-DESA laboratory for the month of April 2004 are included in Attachment 1. A summary of the data for the compounds detected in the plant influent and effluent is as follows:

Compound	Discharge Criteria (ug/L)	Influent Concentration (ug/L)												Effluent Concentration (ug/L) April
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vinyl Chloride	2	4.8	3.4	3.0	3.1									0.5 U
Chloroethane		1.0	0.6	0.5	0.6									0.5 U
1,1-Dichloroethene*	5	11	8.7	6.3	8.0									0.5 U
1,1,2 Trichloro-1,2,2-Trifluoroethane		3.6	2.7	1.8	2.4									0.5 U
Trans 1,2-Dichloroethene*	5	0.5 U	0.5 U	0.5U	0.5U									0.5 U
Methyl Tert-Butyl Ether		3.9	4.1	3.6	3.2									0.9
1,1-Dichloroethane	5	23	20	15	17									0.5 U
Cis-1,2-Dichloroethene*	5	56	49	37	42									0.7 U
Chloroform	7	0.5 U	0.5 U	0.5U	0.5U									0.5 U
1,1,1-Trichloroethane*	5	120	110	81	93									0.5 U
Trichloroethene*	5	46	43	33	39									0.5 U
Total Volatile Organics*	100	269.3	241.5	181.2	208.3									1.6

Note:

ug/L = micrograms per liter

* = Site Contaminant of Concern

U = Below Reporting Limit

D. Next Month's Activities

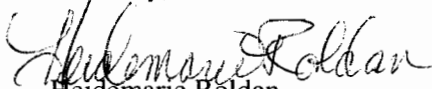
The following activities are planned for May 2004:

- Finish repairs on pump control valve
- Routine system maintenance.

E. Summary and Recommendations

Based on the treatment plant influent and effluent data summarized above, it can be concluded that the treated water continues to meet the discharge limits. Please feel free to contact me at (973) 630-8197 if you should have any questions.

Sincerely,



Heidi Marie Roldan

Project Manager

Attachments

cc: K. Moncino (EPA)
/ M. Dunham (NYSDEC)

Attachment 1



U.S. Environmental Protection Agency
Region 2 Laboratory

Data Report: Vestal Well 1-1 [04/04]

Project Number: 04040012

Program: Y206E

Project Leader: L. Niles

Remark Codes	Explanation
U	THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTING LIMIT.
J	THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE IS AN ESTIMATE.
UJ	THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTING LIMIT. THE REPORTING LIMIT IS AN ESTIMATE.
N	THERE IS PRESUMPTIVE EVIDENCE THAT THE ANALYTE IS PRESENT; THE ANALYTE IS REPORTED AS A TENTATIVE IDENTIFICATION.
NJ	THERE IS PRESUMPTIVE EVIDENCE THAT THE ANALYTE IS PRESENT; THE ANALYTE IS REPORTED AS A TENTATIVE IDENTIFICATION. THE REPORTED VALUE IS AN ESTIMATE.
R	THE PRESENCE OR ABSENCE OF THE ANALYTE CANNOT BE DETERMINED FROM THE DATA DUE TO SEVERE QUALITY CONTROL PROBLEMS. THE DATA ARE REJECTED AND CONSIDERED UNUSABLE.
K	THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE MAY BE BIASED HIGH. THE ACTUAL VALUE IS EXPECTED TO BE LESS THAN THE REPORTED VALUE.
L	THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE MAY BE BIASED LOW. THE ACTUAL VALUE IS EXPECTED TO BE GREATER THAN THE REPORTED VALUE.
NV	NOT VALIDATED
INC	RESULT NOT ENTERED



U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Vestal Well 1-1 [04/04]

Project Number: 04040012

*Sorted By Sample ID

AF01213

Field/Station ID: Influent
Matrix: Aqueous

Date Received: 4/9/2004

Sample Description: 1-1 Well Influent

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

CAS Number	Analyte Name	Result	Remark Codes	Units
75-43-4	DICHLORODIFLUOROMETHANE	---	0.50U	ug/L
000074873	CHLOROMETHANE	---	0.50U	ug/L
000075014	VINYL CHLORIDE	3.1		ug/L
000074839	BROMOMETHANE	---	1.0U	ug/L
000075003	CHLOROETHANE	0.60		ug/L
000075694	TRICHLOROFLUOROMETHANE	---	0.50U	ug/L
000075354	1,1-DICHLOROETHENE	8.0		ug/L
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.4		ug/L
000075150	CARBON DISULFIDE	---	0.50U	ug/L
000067641	ACETONE	---	1.0U	ug/L
79-20-9	METHYL ACETATE	---	0.50U	ug/L
000075092	METHYLENE CHLORIDE	---	0.50U	ug/L
000156605	TRANS-1,2-DICHLOROETHENE	---	0.50U	ug/L
001634044	METHYL TERT-BUTYL ETHER	3.2		ug/L
000075343	1,1-DICHLOROETHANE	17		ug/L
000156592	CIS-1,2-DICHLOROETHENE	42		ug/L
594-20-7	2,2-DICHLOROPROPANE	---	0.50U	ug/L
000078933	2-BUTANONE	---	1.0U	ug/L
000074975	BROMOCHLOROMETHANE	---	0.50U	ug/L
000067663	CHLOROFORM	---	0.50U	ug/L
71-55-6	1,1,1-TRICHLOROETHANE	93		ug/L
110-82-7	CYCLOHEXANE	---	0.50U	ug/L
000056235	CARBON TETRACHLORIDE	---	0.50U	ug/L
000563586	1,1-DICHLOROPROPENE	---	0.50U	ug/L
000071432	BENZENE	---	0.50U	ug/L
000107062	1,2-DICHLOROETHANE	---	0.50U	ug/L
025323891	TRICHLOROETHENE	39		ug/L
108-87-2	METHYLCYCLOHEXANE	---	0.50U	ug/L
000078875	1,2-DICHLOROPROPANE	---	0.50U	ug/L
000074953	DIBROMOMETHANE	---	0.50U	ug/L
000075274	BROMODICHLOROMETHANE	---	0.50U	ug/L
010061015	CIS-1,3-DICHLOROPROPENE	---	0.50U	ug/L
000108101	4-METHYL-2-PENTANONE	---	1.0U	ug/L
000108883	TOLUENE	---	0.50U	ug/L
010061026	TRANS-1,3-DICHLOROPROPENE	---	0.50U	ug/L
000079005	1,1,2-TRICHLOROETHANE	---	0.50U	ug/L
000127184	TETRACHLOROETHENE	---	0.50U	ug/L
000142289	1,3-DICHLOROPROPANE	---	0.50U	ug/L
000124481	DIBROMOCHLOROMETHANE	---	0.50U	ug/L
000106934	1,2-DIBROMOETHANE	---	0.50U	ug/L
000591786	2-HEXANONE	---	1.0U	ug/L
000108907	CHLOROBENZENE	---	0.50U	ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 5/28/2004 11:40AM



U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Vestal Well 1-1 [04/04]

Project Number: 04040012

*Sorted By Sample ID

AF01213 Field/Station ID: Influent
Matrix: Aqueous

Date Received: 4/9/2004

Sample Description: 1-1 Well Influent

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

CAS Number	Analyte Name	Result	Remark Codes	Units
000630206	1,1,1,2-TETRACHLOROETHANE	---	0.50U	ug/L
100-41-4	ETHYLBENZENE	---	0.50U	ug/L
001330207	M/P-XYLENE	---	0.50U	ug/L
000095476	O-XYLENE	---	0.50U	ug/L
000100425	STYRENE	---	0.50U	ug/L
000075252	BROMOFORM	---	0.50U	ug/L
000098828	ISOPROPYLBENZENE	---	0.50U	ug/L
000108861	BROMOBENZENE	---	0.50U	ug/L
000096184	1,2,3-TRICHLOROPROPANE	---	0.50U	ug/L
000079345	1,1,2,2-TETRACHLOROETHANE	---	0.50U	ug/L
000103651	N-PROPYLBENZENE	---	0.50U	ug/L
000095498	2-CHLOROTOLUENE	---	0.50U	ug/L
106-43-4	4-CHLOROTOLUENE	---	0.50U	ug/L
000108678	1,3,5-TRIMETHYLBENZENE	---	0.50U	ug/L
000098066	TERT-BUTYLBENZENE	---	0.50U	ug/L
000095636	1,2,4-TRIMETHYLBENZENE	---	0.50U	ug/L
135-98-8	SEC-BUTYLBENZENE	---	0.50U	ug/L
000541731	1,3-DICHLOROBENZENE	---	0.50U	ug/L
000106467	1,4-DICHLOROBENZENE	---	0.50U	ug/L
000095501	1,2-DICHLOROBENZENE	---	0.50U	ug/L
000099876	4-ISOPROPYLTOLUENE	---	0.50U	ug/L
000104518	N-BUTYLBENZENE	---	0.50U	ug/L
000096128	1,2-DIBROMO-3-CHLOROPROPANE	---	0.50U	ug/L
000120821	1,2,4-TRICHLOROBENZENE	---	0.50U	ug/L
87-68-3	HEXACHLOROBUTADIENE	---	0.50U	ug/L
000091203	NAPHTHALENE	---	0.50U	ug/L
000087616	1,2,3-TRICHLOROBENZENE	---	0.50U	ug/L

AF01214 Field/Station ID: Effluent
Matrix: Aqueous

Date Received: 4/9/2004

Sample Description: 1-1 Well Effluent

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

CAS Number	Analyte Name	Result	Remark Codes	Units
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Refer to Page 1 for an explanation of Remark Codes

Report Date: 5/28/2004 11:40AM



U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Vestal Well 1-1 [04/04]

Project Number: 04040012

*Sorted By Sample ID

AF01214

Field/Station ID: Effluent
Matrix: Aqueous

Date Received: 4/9/2004

Sample Description: 1-1 Well Effluent

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

CAS Number	Analyte Name	Result	Remark Codes	Units
75-43-4	DICHLORODIFLUOROMETHANE	---	0.50U	ug/L
000074873	CHLOROMETHANE	---	0.50U	ug/L
000075014	VINYL CHLORIDE	---	0.50U	ug/L
000074839	BROMOMETHANE	---	1.0U	ug/L
000075003	CHLOROETHANE	---	0.50U	ug/L
000075694	TRICHLOROFLUOROMETHANE	---	0.50U	ug/L
000075354	1,1-DICHLOROETHENE	---	0.50U	ug/L
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	---	0.50U	ug/L
000075150	CARBON DISULFIDE	---	0.50U	ug/L
000067641	ACETONE	---	1.0U	ug/L
79-20-9	METHYL ACETATE	---	0.50U	ug/L
000075092	METHYLENE CHLORIDE	---	0.50U	ug/L
000156605	TRANS-1,2-DICHLOROETHENE	---	0.50U	ug/L
001634044	METHYL TERT-BUTYL ETHER	0.90		ug/L
000075343	1,1-DICHLOROETHANE	---	0.50U	ug/L
000156592	CIS-1,2-DICHLOROETHENE	0.70		ug/L
594-20-7	2,2-DICHLOROPROPANE	---	0.50U	ug/L
000078933	2-BUTANONE	---	1.0U	ug/L
000074975	BROMOCHLOROMETHANE	---	0.50U	ug/L
000067663	CHLOROFORM	---	0.50U	ug/L
71-55-6	1,1,1-TRICHLOROETHANE	---	0.50U	ug/L
110-82-7	CYCLOHEXANE	---	0.50U	ug/L
000056235	CARBON TETRACHLORIDE	---	0.50U	ug/L
000563586	1,1-DICHLOROPROPENE	---	0.50U	ug/L
000071432	BENZENE	---	0.50U	ug/L
000107062	1,2-DICHLOROETHANE	---	0.50U	ug/L
025323891	TRICHLOROETHENE	---	0.50U	ug/L
108-87-2	METHYLCYCLOHEXANE	---	0.50U	ug/L
000078875	1,2-DICHLOROPROPANE	---	0.50U	ug/L
000074953	DIBROMOMETHANE	---	0.50U	ug/L
000075274	BROMODICHLOROMETHANE	---	0.50U	ug/L
010061015	CIS-1,3-DICHLOROPROPENE	---	0.50U	ug/L
000108101	4-METHYL-2-PENTANONE	---	1.0U	ug/L
000108883	TOLUENE	---	0.50U	ug/L
010061026	TRANS-1,3-DICHLOROPROPENE	---	0.50U	ug/L
000079005	1,1,2-TRICHLOROETHANE	---	0.50U	ug/L
000127184	TETRACHLOROETHENE	---	0.50U	ug/L
000142289	1,3-DICHLOROPROPANE	---	0.50U	ug/L



U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Vestal Well 1-1 [04/04]

Project Number: 04040012

*Sorted By Sample ID

AF01214 Field/Station ID: Effluent
Matrix: Aqueous

Date Received: 4/9/2004

Sample Description: 1-1 Well Effluent

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

CAS Number	Analyte Name	Result	Remark Codes	Units
000124481	DIBROMOCHLOROMETHANE	---	0.50U	ug/L
000106934	1,2-DIBROMOETHANE	---	0.50U	ug/L
000591786	2-HEXANONE	---	1.0U	ug/L
000108907	CHLOROBENZENE	---	0.50U	ug/L
000630206	1,1,1,2-TETRACHLOROETHANE	---	0.50U	ug/L
100-41-4	ETHYLBENZENE	---	0.50U	ug/L
001330207	M/P-XYLENE	---	0.50U	ug/L
000095476	O-XYLENE	---	0.50U	ug/L
000100425	STYRENE	---	0.50U	ug/L
000075252	BROMOFORM	---	0.50U	ug/L
000098828	ISOPROPYLBENZENE	---	0.50U	ug/L
000108861	BROMOBENZENE	---	0.50U	ug/L
000096184	1,2,3-TRICHLOROPROPANE	---	0.50U	ug/L
000079345	1,1,1,2-TETRACHLOROETHANE	---	0.50U	ug/L
000103651	N-PROPYLBENZENE	---	0.50U	ug/L
000095498	2-CHLOROTOLUENE	---	0.50U	ug/L
106-43-4	4-CHLOROTOLUENE	---	0.50U	ug/L
000108678	1,3,5-TRIMETHYLBENZENE	---	0.50U	ug/L
000098066	TERT-BUTYLBENZENE	---	0.50U	ug/L
000095636	1,2,4-TRIMETHYLBENZENE	---	0.50U	ug/L
135-98-8	SEC-BUTYLBENZENE	---	0.50U	ug/L
000541731	1,3-DICHLOROBENZENE	---	0.50U	ug/L
000106467	1,4-DICHLOROBENZENE	---	0.50U	ug/L
000095501	1,2-DICHLOROBENZENE	---	0.50U	ug/L
000099876	4-ISOPROPYLTOLUENE	---	0.50U	ug/L
000104518	N-BUTYLBENZENE	---	0.50U	ug/L
000096128	1,2-DIBROMO-3-CHLOROPROPANE	---	0.50U	ug/L
000120821	1,2,4-TRICHLOROBENZENE	---	0.50U	ug/L
87-68-3	HEXACHLOROBUTADIENE	---	0.50U	ug/L
000091203	NAPHTHALENE	---	0.50U	ug/L
000087616	1,2,3-TRICHLOROBENZENE	---	0.50U	ug/L

Project Approval:

J. R. Ben

Date:

6-3-04

Refer to Page 1 for an explanation of Remark Codes

Report Date: 5/28/2004 11:40AM

