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TETRA TECH FW, INC.

12 April 2005
RAC II-2005-049

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
JUNE 2004 PERFORMANCE MONITORING REPORT**

Dear Ms. Trocher:

I am pleased to provide the June 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 until 29 June 2004, at which time the system was shut down to prevent damage from well pump flow fluctuations. When the system was shut down, the well pump flow was pulsating and ranged from 0 to 30%. A summary of the operation and maintenance activities performed during June is as follows:

- Routine cleaning and inspections of the facility were performed;
- Oiled well pump;
- Air filters were replaced;
- Removed debris from both pump filters; and
- The monthly influent and effluent samples were collected.



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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
May	31	40	460	20.5
June	29	40	460	19.2
Volume of groundwater treated for 2004				134.9
Volume of groundwater treated for the OU-1				2554.5

gpm - gallons per minute

mg - millions of gallons

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 June 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) June
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vinyl Chloride	2	4.8	3.4	3.0	3.1	3.9	3.0							0.5 U
Chloroethane		1.0	0.6	0.5	0.6	5.0 U	0.7							0.5 U
1,1-Dichloroethene*	5	11	8.7	6.3	8.0	7.1	8.1							0.5 U
1,1,2 Trichloro-1,2,2-Trifluoroethane		3.6	2.7	1.8	2.4	1.9	2.2							0.5 U
Trans 1,2-Dichloroethene*	5	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	0.5 U							0.5 U
Methyl Tert-Butyl Ether		3.9	4.1	3.6	3.2	3.2	3.0							1.1
1,1-Dichloroethane	5	23	20	15	17	15	16							0.5 U
Cis-1,2-Dichloroethene*	5	56	49	37	42	41	44							1.6
Chloroform	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							0.5 U
1,1,1-Trichloroethane*	5	120	110	81	93	83	100							0.80
Trichloroethene*	5	46	43	33	39	34	36							0.60
Total Volatile Organics*	100	269.3	241.5	181.2	208.3	189.1	213							4.1

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 July 2004:

- Finish repairs on pump control valve; and
- Determine and repair cause of fluctuating flow and return system to operation.

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,



Heidemarie Roldan
Project Manager

Attachment

cc: M. Dunham (NYSDEC)

Attachment 1



U.S. Environmental Protection Agency
Region 2 Laboratory

Data Report: Vestal Well 1-1 [06/04]

Project Number: 04060028

Program: Y206E

Project Leader: L. Arabia

9

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



AF02087

Field/Station ID: INFLUENT

Date Received: 6/10/2004

Matrix: Aqueous

Sample Description:

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	3.0		ug/L
000074839	BROMOMETHANE	---	0.50U	ug/L
000075003	CHLOROETHANE	0.70		ug/L
000075694	TRICHLOROFLUOROMETHANE	---	0.50U	ug/L
000075354	1,1-DICHLOROETHENE	8.1		ug/L
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.2		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	3.0		ug/L
000075343	1,1-DICHLOROETHANE	16		ug/L
000156592	CIS-1,2-DICHLOROETHENE	44		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	100		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	36		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
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

AF02088

Field/Station ID: EFFLUENT

Date Received: 6/10/2004

Matrix: Aqueous

Sample Description:

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

<u>CAS Number</u>	<u>Analyte Name</u>	<u>Result</u>	<u>Remark Codes</u>	<u>Units</u>
75-43-4	DICHLORODIFLUOROMETHANE	---	0.50U	ug/L
000074873	CHLOROMETHANE	---	0.50U	ug/L
000075014	VINYL CHLORIDE	---	0.50U	ug/L
000074839	BROMOMETHANE	---	0.50U	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	1.1		ug/L
000075343	1,1-DICHLOROETHANE	---	0.50U	ug/L
000156592	CIS-1,2-DICHLOROETHENE	1.6		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	0.80		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	0.60		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
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

Project Approval: _____ **Date:** _____

Refer to Page 1 for an explanation of Remark Codes