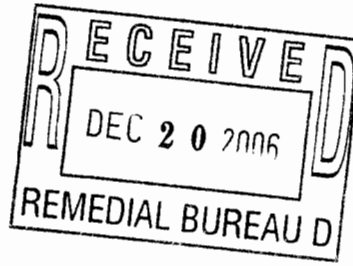




TETRA TECH EC, INC.



12 December 2006
RAC II-2006-301

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
SEPTEMBER 2006 PERFORMANCE MONITORING REPORT**

Dear Ms. Trocher:

I am pleased to provide the September 2006 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 for the entire month of September. A summary of the operation and maintenance activities performed during September is as follows:

- Routine inspections of the facility were performed;
- Pumps were checked and lubricated;
- Air filters were cleaned or replaced;
- Raked and mowed the grass at the facility; and
- The monthly influent and effluent samples were collected.

B. Operational Data

The following table presents operational data for the year 2006, arranged by month:

Month	Operating Days	Average flow Meter %	Average flow rate (gpm)	Amount of groundwater treated (mg)
January	31	45	517.5	23.1
February	28	45	517.5	20.9
March	31	45	517.5	23.1
April	30	45	517.5	22.4
May	31	38	437	19.5
June	26	32	368	13.8
July	24	38	437	15.1
August	27	32	368	14.3
September	30	31	356.5	15.4
Volume of groundwater treated for 2006				167.6
Volume of groundwater treated for the OU-1				2,942.5

gpm - gallons per minute
mg - millions of gallons



1000 The American Road, Morris Plains, NJ 07950
Tel 973.630.8000 Fax 973.630.8025
www.tteci.com

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 September 2006 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) September
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vinyl Chloride	2	0.5U	3.8	3.8	4.2	4.0	3.3	4.8	5.4	4.4				0.5 U
Chloroethane		0.5U	0.61	0.56	0.58	0.57	0.53	0.54	0.97	0.63				0.5 U
1,1-Dichloroethene*	5	3.2	11	10.0	11	10	9.1	11	16	11				0.5U
1,1,2 Trichloro-1,2,2-Trifluoroethane		1.2	4.3	3.9	3.9	3.8	3.4	3.7	6.8	2.4				0.5 U
Acetone		1.0U	1.0U	5.0U	1.0U	1.0U	1.0U	1.0U	6.0U	0.5UL				0.66
Methylene Chloride		0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U				0.5 U
Trans 1,2-Dichloroethene*	5	0.5 U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U				0.5 U
Methyl Tert-Butyl Ether		1.0	3.7	3.7	3.9	4.2	4.0	5.1	4.3	7.1K				1.0 U
1,1-Dichloroethane	5	6.1	30	18	18	19	18	19	26	23				0.5 U
Cis-1,2-Dichloroethene*	5	14	45	45	46	48	43	30	69	45L				0.5 UL
Chloroform	7	0.5 U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U				0.5 U
1,1,1-Trichloroethane*	5	42	150	130	140	150	120	120	210	160				0.5 U
Trichloroethene*	5	15L	42	40	42	43	38	41	60	49				0.5 U
Total Volatile Organics*	100	82.5	280.41	254.96	269.58	282.57	239.33	235.14	398.47	302.53				0.66

Note:

ug/L = micrograms per liter
 * = Site Contaminant of Concern

U = Below Reporting Limit
 L = Reported Value May be Biased Low

K = Reported Value May Be Biased High

D. Next Month's Activities

The following activities are planned for October 2006:

- Perform monthly performance monitoring sampling;
- Terminate operation and maintenance activities. The facility is scheduled to be transferred to New York State on 16 October 2006.

E. Summary and Recommendations

Based on the treatment plant influent and effluent data summarized above, it can be concluded 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: P. Long (NYSDEC)

ATTACHMENT 1

Case Narrative:
Vestal 1-1. #06090021

The National Environmental Laboratory Accreditation Conference (NELAC) is a voluntary environmental laboratory accreditation association of State and Federal agencies. NELAC established and promoted a national accreditation program that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAC accredited. The Laboratory tests that are accredited have met all the requirements established under the NELAC Standards.

Comment(s):

None.

Reporting Limit(s):

The Laboratory was able to achieve the Contract Required Quantitation Limits (CRQLs), where applicable, for each analyte requested except for the following analyte(s):

Volatile Organic Compounds: The CRQL for Methyl Tert-Butyl Ether and Cis-1,2-Dichloroethene in water (SOM01.1-Trace) is 0.5 ug/L. The Laboratory's Reporting Limit was raised to 1.0 ug/L due to problems associated with the initial calibration curve.

Method(s):

Low Level Volatile Organic Analysis, EPA-SOP-DW-1 (Purge & Trap GC/MS Method)

Approval: _____

J.R. Shea

Date: _____

11-5-06



U.S. Environmental Protection Agency
Region 2 Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

Data Report: Vestal Well 1-1 [09/06]

Project Number: 06090021

Program: Y206E

Project Leader: L. Arabia

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 [09/06]

Project Number: 06090021

*Sorted By Sample ID

AH05567 : Field/Station ID: INFLUENT
Matrix: Aqueous

Date Received: 9/7/2006

Sample Description:

Analysis Type: VOA SOM1.1-TRACE GCMS AQUEOUS

CAS Number	Analyte Name	Result	Remark Codes	Units
75-43-4	DICHLORODIFLUOROMETHANE	---	0.50U L	ug/L
000074873	CHLOROMETHANE	---	0.50U	ug/L
000075014	VINYL CHLORIDE	4.4		ug/L
000074839	BROMOMETHANE	---	0.50U	ug/L
000075003	CHLOROETHANE	0.63		ug/L
000075694	TRICHLOROFLUOROMETHANE	---	0.50U	ug/L
000075354	1,1-DICHLOROETHENE	11		ug/L
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.4		ug/L
000075150	CARBON DISULFIDE	---	0.50U	ug/L
67-64-1	ACETONE	---	0.50U L	ug/L
79-20-9	METHYL ACETATE	---	0.50U	ug/L
75-09-2	METHYLENE CHLORIDE	---	0.50U	ug/L
000156605	TRANS-1,2-DICHLOROETHENE	---	0.50U	ug/L
001634044	METHYL TERT-BUTYL ETHER	7.1	K	ug/L
000075343	1,1-DICHLOROETHANE	23		ug/L
000156592	CIS-1,2-DICHLOROETHENE	45	L	ug/L
000078933	2-BUTANONE	---	0.50U	ug/L
000074975	BROMOCHLOROMETHANE	---	0.50U	ug/L
000067663	CHLOROFORM	---	0.50U	ug/L
71-55-6	1,1,1-TRICHLOROETHANE	160		ug/L
110-82-7	CYCLOHEXANE	---	0.50U	ug/L
000056235	CARBON TETRACHLORIDE	---	0.50U	ug/L
000071432	BENZENE	---	0.50U	ug/L
000107062	1,2-DICHLOROETHANE	---	0.50U	ug/L
025323891	TRICHLOROETHENE	49		ug/L
000078875	1,2-DICHLOROPROPANE	---	0.50U	ug/L
75-27-4	BROMODICHLOROMETHANE	---	0.50U	ug/L
010061015	CIS-1,3-DICHLOROPROPENE	---	0.50U	ug/L
000108101	4-METHYL-2-PENTANONE	---	0.50U	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
108-87-2	METHYLCYCLOHEXANE	---	0.50U	ug/L
000124481	DIBROMOCHLOROMETHANE	---	0.50U	ug/L
000106934	1,2-DIBROMOETHANE	---	0.50U	ug/L
000591786	2-HEXANONE	---	0.50U	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

Refer to Page 1 for an explanation of Remark Codes

Report Date: 10/30/2006 8:08AM

Page 2 of 4



U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Vestal Well 1-1 [09/06]

Project Number: 06090021

*Sorted By Sample ID

AH05567

Field/Station ID: INFLUENT

Date Received: 9/7/2006

Matrix: Aqueous

Sample Description:

Analysis Type: VOA SOM1.1-TRACE GCMS AQUEOUS

CAS Number	Analyte Name	Result	Remark Codes	Units
000100425	STYRENE	---	0.50U	ug/L
000075252	BROMOFORM	---	0.50U	ug/L
000098828	ISOPROPYLBENZENE	---	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
000096128	1,2-DIBROMO-3-CHLOROPROPANE	---	0.50U	ug/L
000120821	1,2,4-TRICHLOROBENZENE	---	0.50U	ug/L
000087616	1,2,3-TRICHLOROBENZENE	---	0.50U	ug/L
	ETHANE, 1,2-DICHLORO-1,1,2-TRIFL;RT=4.78	0.67	NJ	ug/L

AH05568

Field/Station ID: EFFLUENT

Date Received: 9/7/2006

Matrix: Aqueous

Sample Description:

Analysis Type: VOA SOM1.1-TRACE GCMS AQUEOUS

CAS Number	Analyte Name	Result	Remark Codes	Units
75-43-4	DICHLORODIFLUOROMETHANE	---	0.50U L	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
67-64-1	ACETONE	0.66		ug/L
79-20-9	METHYL ACETATE	---	0.50U	ug/L
75-09-2	METHYLENE CHLORIDE	---	0.50U	ug/L
000156605	TRANS-1,2-DICHLOROETHENE	---	0.50U	ug/L
001634044	METHYL TERT-BUTYL ETHER	---	1.0U	ug/L
000075343	1,1-DICHLOROETHANE	---	0.50U	ug/L
000156592	CIS-1,2-DICHLOROETHENE	---	1.0U L	ug/L
000078933	2-BUTANONE	---	0.50U	ug/L



U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Vestal Well 1-1 [09/06]

Project Number: 06090021

*Sorted By Sample ID

AH05568

Field/Station ID: EFFLUENT

Date Received: 9/7/2006

Matrix: Aqueous

Sample Description:

Analysis Type: VOA SOM1.1-TRACE GCMS AQUEOUS

CAS Number	Analyte Name	Result	Remark Codes	Units
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
000071432	BENZENE	---	0.50U	ug/L
000107062	1,2-DICHLOROETHANE	---	0.50U	ug/L
025323891	TRICHLOROETHENE	---	0.50U	ug/L
000078875	1,2-DICHLOROPROPANE	---	0.50U	ug/L
75-27-4	BROMODICHLOROMETHANE	---	0.50U	ug/L
010061015	CIS-1,3-DICHLOROPROPENE	---	0.50U	ug/L
000108101	4-METHYL-2-PENTANONE	---	0.50U	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
108-87-2	METHYLCYCLOHEXANE	---	0.50U	ug/L
000124481	DIBROMOCHLOROMETHANE	---	0.50U	ug/L
000106934	1,2-DIBROMOETHANE	---	0.50U	ug/L
000591786	2-HEXANONE	---	0.50U	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
000541731	1,3-DICHLOROBENZENE	---	0.50U	ug/L
000106467	1,4-DICHLOROBENZENE	---	0.50U	ug/L
000095501	1,2-DICHLOROBENZENE	---	0.50U	ug/L
000096128	1,2-DIBROMO-3-CHLOROPROPANE	---	0.50U	ug/L
000120821	1,2,4-TRICHLOROBENZENE	---	0.50U	ug/L
000087616	1,2,3-TRICHLOROBENZENE	---	0.50U	ug/L

Project Approval: _____

[Signature]

Date: _____

11-5-06

Refer to Page 1 for an explanation of Remark Codes

Report Date: 10/30/2006 8:08AM

