

15 July 2004 RAC П-2004-117

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

JUL 19

SUBJECT:

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

Dear Ms. Trocher:

I am pleased to provide the March 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 March. A summary of the operation and maintenance activities performed during March 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	23.1
Volume of groundw	72.8			
Volume of groundw	2492.4			

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 March 2004 are included in Attachment 1. A summary of the data for the compounds detected in the plant influent and effluent is as follows:

	Discharge				Influe	nt Co	ncent	ratio	n (ug/	L)				Effluent Concentration
Compound	Criteria (ug/L)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	(ug/L) March
Vinyl Chloride	2	4.8	3.4	3.0										0.5 U
Chloroethane		1.0	0.6	0.5										0.5 U
1,1-Dichloroethene*	5	11	8.7	6.3										0.5 U
1,1,2 Trichloro- 1,2,2-Trifluoroethane		3.6	2.7	1.8										0.5 U
Trans 1,2-Dichloroethene*	5	0.5 U	0.5 U	0.5U										0.5 U
Methyl Tert-Butyl Ether		3.9	4.1	3.6										1.0
1,1-Dichloroethane	5	23	20	15										0.5 U
Cis-1,2-Dichloroethene*	5	56	49	37										0.5 U
Chloroform	7	0.5 U	0.5 U	0.5U										0.5 U
1,1,1-Trichloroethane*	5	120	110	81										0.5 U
Trichloroethene*	5	46	43	33										0.5 U
Total Volatile Organics*	100	269.3	241.5	181.2										1.0

Note:

ug/L = micrograms per liter* = Site Contaminant of ConcernU = Below Reporting Limit

D. Next Month's Activities

The following activities are planned for April 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,

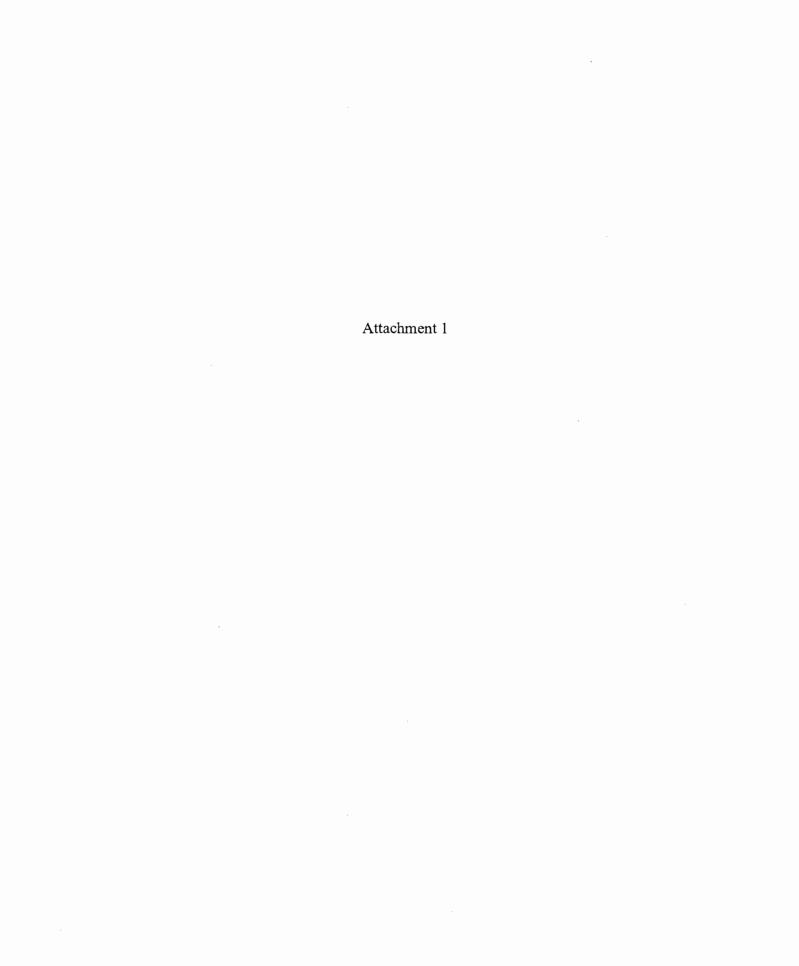
Project Manager

Attachments

cc:

K. Moncino M. Dunham (EPA)

(NYSDEC)



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<u>Case Narrative:</u> Vestal 1-1 #04030003

The Laboratory has met all data quality objectives, e.g., Target Reporting Limits, Accuracy and Precision, established for this project except where noted below.

Reporting Limits:

OLC03.2 contains a list of Contract Required Quantitation Limits (CRQLs) for each analyte. The Laboratory was able to achieve the listed CRQLs except for the following analyte(s):

The CRQL for Bromomethane in water 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.

Comments:

After review of the Vestal historical analytical data, it appears that the samples collected for this project were mislabeled. Elevated levels for several target analytes are usually observed in the influent sample and not in the effluent sample. In this project, the reverse occurred; elevated levels of several target analytes were observed in the effluent sample and not in the influent sample.

Approval: ______ Date: <u>5-5-04</u>

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U.S. Environmental Protection Agency Region 2 Laboratory

Data Report: Vestal Well 1-1 [03/04]

Project Number: 04030003

Program: Y206E

Project Leader: L. Niles

Remark Codes	Explanation .
U	THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTING LIMIT.
1	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

Project Number: 04030003

*Sorted By Sample ID

AF00923

Field/Station ID: Influent

Matrix: Aqueous

Sample Description: 1-1 Well Influent

Date Received: 3/5/2004

CAS Number	Analyte Name	Result	Remark_ <u>Codes</u>	Units
75-43-4	DICHLORODIFLUOROMETHANE	<u>Kesuit</u>	0.50U	ug/L
000074873	CHLOROMETHANE		0.50U	ug/L
000074075	VINYL CHLORIDE		0.50U	ug/L
000073014	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	1988 - 19 44 11985	0.50U	ug/L
000075150	CARBON DISULFIDE		0.50U	ug/L
000067641	ACETONE	. 19. july 10. 1 (19. july 14. 14. july 19. jul	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	1.0		ug/L
000075343	1,1-DICHLOROETHANE		0.50U	ug/L
000156592	CIS-1,2-DICHLOROETHENE		0.50U	ug/L
594-20-7	2,2-DICHLOROPROPANE	<u></u>	0.50U	ug/L
000078933	2-BUTANONE		1.0U	ug/L
000074975	BROMOCHLOROMETHANE	<u></u>	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	1. v. j. v. j	0.50U	ug/L
000127184	TETRACHLOROETHENE		0,50U	ug/L
000142289	1,3-DICHLOROPROPANE		0. 50U	ug/L
000124481	DIBROMOCHLOROMETHANE	. Turana Zzani	0.50U	ug/L
000106934	1,2-DIBROMOETHANE	• • • • • • • • • • • • • • • • • • •	0.50U	ug/L
000591786	2-HEXANONE		1.0U	ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 5/3/2004 9:25AM Page 2 of 5

Project Number: 04030003

*Sorted By Sample ID

AF00923

Field/Station ID: Influent

Matrix: Aqueous

Date Received: 3/5/2004

Sample Description: 1-1 Well Influent

Analysis Type: VOA L	OW LEVEL GCMS	DRINK WTR
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Analysis Type: V	OA LOW LEVEL GCMS DRINK WTR		Remark	
CAS Number	Analyte Name	Result	Codes	<u>Units</u>
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	120	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	- 12 40	0.50U	ug/L
000541731	1,3-DICHLOROBENZENE		0.50U	ug/L
000106467	1,4-DICHLOROBENZENE	227	0.50U	ug/L
000095501	1,2-DICHLOROBENZENE		0.50U	ug/L
000099876	4-ISOPROPYLTOLUENE	- 77	0.50U	ug/L
000104518	N-BUTYLBENZENE		0.50 U	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

AF00924

Field/Station ID: Effluent

Date Received: 3/5/2004

Matrix: Aqueous

Sample Description: 1-1 Well Effluent

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

Result Codes Units CAS Number Analyte Name

Remark_

Refer to Page 1 for an explanation of Remark Codes

Page 3 of 5 Report Date: 5/3/2004 9:25AM

Project Number: 04030003

*Sorted By Sample ID

Remark_

AF00924

Field/Station ID: Effluent

Date Received: 3/5/2004

Matrix: Aqueous

Sample Description: 1-1 Well Effluent

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

				Kemark_	
	CAS Number	Analyte Name	<u>Result</u>	Codes	Units
	75-43-4	DICHLORODIFLUOROMETHANE		0.50U	ug/L
	000074873	CHLOROMETHANE		0.50U	ug/L
2 0000000000000000000000000000000000000	000075014	VINYL CHLORIDE	3.0		ug/L
7.00	000074839	BROMOMETHANE		1.0U	ug/L
A SECTION OF	000075003	CHLOROETHANE	0.50		ug/L
	000075694	TRICHLOROFLUOROMETHANE	1 -11	0.50U	ug/L
LABINET COMP.	000075354	1,1-DICHLOROETHENE	6.3		ug/L
	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.8		ug/L
VV. 3 v 30000094 (8 MAN) 19-288800000	000075150	CARBON DISULFIDE		0. 50U	ug/L
	000067641	ACETONE		1.0U	ug/L
G.11.11.1 (REV. 1996)	79-20-9	METHYL ACETATE		0.50U	ug/L
	000075092	METHYLENE CHLORIDE		0.50U	ug/L
ye s electricitis succession	000156605	TRANS-1,2-DICHLOROETHENE		0.50U	ug/L
	001634044	METHYL TERT-BUTYL ETHER	3.6		ug/L
r se, our enumeropespace	000075343	1,1-DICHLOROETHANE	15		ug/L
	000156592	CIS-1,2-DICHLOROETHENE	37		ug/L
L e As Samuello de	594-20-7	2,2-DICHLOROPROPANE		0.50U	ug/L
1.50% / 1.00%	000078933	2-BUTANONE	The state of the s	1.0U	ug/L
and the second of the second second	000074975	BROMOCHLOROMETHANE		0.50U	ug/L
	000067663	CHLOROFORM		0.50U	ug/L
	71-55-6	1,1,1-TRICHLOROETHANE	81		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	33∵ ∨∞∗		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	-	0.50Ü	ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 5/3/2004 9:25AM Page 4 of 5

Project Number: 04030003

*Sorted By Sample ID

AF00924

Field/Station ID: Effluent

Date Received: 3/5/2004

Matrix: Aqueous

Sample Description: 1-1 Well Effluent

Analysis T	vne: VΩ	A LOW LEVEL GCMS DRINK WTR				
·					Remark_	
<u>CAS Nu</u>		Analyte Name		Result	Codes	<u>Units</u>
000124		DIBROMOCHLOROMETHANE			0.50U	ug/L
000106		1,2-DIBROMOETHANE	3446	730	0.50U	ug/L
000591		2-HEXANONE			1.0U	ug/L
000108		CHLOROBENZENE			0.50U	ug/L
000630	206	1,1,1,2-TETRACHLOROETHANE			0.50U	ug/L
100-41-	-4	ETHYLBENZENE			0.50U	ug/L
001330	207	M/P-XYLENE			0.50U	ug/L
000095	476	O-XYLENE			0.50U	ug/L
000100		STYRENE			0.50U	ug/L
000075	252	BROMOFORM			0.50U	ug/L
000098	828	ISOPROPYLBENZENE		Y-14	0.50U	ug/L
000108	861	BROMOBENZENE			0.50U	ug/L
000096	184	1,2,3-TRICHLOROPROPANE			0.50U	ug/L
000079	345	1,1,2,2-TETRACHLOROETHANE		1256	0.50U	ug/L
000103	651	N-PROPYLBENZENE			0.50U	ug/L
000095	498	2-CHLOROTOLUENE			0.50U	ug/L
106-43-	-4	4-CHLOROTOLUENE			0.50U	ug/L
000108	678	1,3,5-TRIMETHYLBENZENE	THE RESERVE OF THE PARTY OF THE	111 010	0.50U	ug/L
000098	066	TERT-BUTYLBENZENE			0.50U	ug/L
000095	636	1,2,4-TRIMETHYLBENZENE		 -	0.50U	ug/L
135-98-	8	SEC-BUTYLBENZENE			0.50U	ug/L
000541	Peter Strawn Strain Co.	1,3-DICHLOROBENZENE			0.50U	ug/L
000106	467	1,4-DICHLOROBENZENE		. 	0.50U	ug/L
000095		1,2-DICHLOROBENZENE		77	0.50U	ug/L
000099	876	4-ISOPROPYLTOLUENE			0.50U	ug/L
000104	COMPANY CONTRACTOR CO.	N-BUTYLBENZENE		- 100 mg	0.50U	ug/L
000096		1,2-DIBROMO-3-CHLOROPROPANE			0.50U	ug/L
000120	Carried March 1985	1,2,4-TRICHLOROBENZENE		7-7	0.50Ü	ug/L
87-68-3		HEXACHLOROBUTADIENE			0.50U	ug/L
000091	203	NAPHTHALENE		5 4 16	0.50U	ug/L
000007	(1/	1 A A PRIORIT OR OPENIZENTE	- CA		0.5077	~

Project Approval:

Date: <u>5-5-04</u>

0.50U

ug/L

Refer to Page 1 for an explanation of Remark Codes

1,2,3-TRICHLOROBENZENE

Report Date: 5/3/2004 9:25AM

000087616

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