



18 August 2004 RAC II-2004-148

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 from 1 June to 29 June. The treatment system was shut down on 29 June 2004 due to the infiltration of air into the treatment system (flow was pulsating and ranged from 0 to 30%).

A summary of the operation and maintenance activities performed during this period is as follows:

- Routine cleaning and inspections of the facility were performed;
- Removed debris from both pump filters;
- 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
May	31	40	460	20.5
June	28	35	402.5	16.2
Volume of groundy	131.9			
Volume of groundy	2,551.5			

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:

	Discharge		Influent Concentration (ug/L)						Effluent Concentration					
Compound	Criteria (ug/L)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	(ug/L) June
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	0.5U	0.5U	5.0 UJ	0.5U							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	0.5U	0.5U	0.5U	0.5U							0.5 U
1,1,1-Trichloroethane*	5	120	110	81	93	83	100							0.8
Trichloroethene*	5	46	43.	33	39	34	36				_			0.6
Total Volatile Organics*	100	269.3	241.5	181.2	208.3	189.1	213.0							4.1

Note:

ug/L = micrograms per liter

* = Site Contaminant of Concern

U = Below Reporting Limit

J = Estimated Value

D. Next Month's Activities

The following activities are planned for July 2004:

- Determine the cause and repair the influent side of the treatment system such that air infiltration does not occur;
- Repair or replace the clear well level indicator;
- · Rebuild pump control valve; and
- 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,

Heidemarie Roldan Project Manager

Attachments

cc: M. Dunham (NYSDEC)

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Attachment 1

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<u>Case Narrative:</u> <u>Vestal Well 1-1 #04060028</u>

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

Methods:

Volatile Organic Compounds, ESAT-SOP-163 (GC/MS Method): No anomalies were observed.

Approval: Q B. Be Date: 8/2/04



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

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.
К	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: 04060028

*Sorted By Sample ID

AF02087

Field/Station ID: INFLUENT

Matrix: Aqueous

Date Received: 6/10/2004

Sample Description:

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR		Remark_			
CAS Number Analyte Name	Result	Codes	<u>Units</u>		
75-43-4 DICHLORODIFLUOROMETHANE	17 20 12 1	0,50U	ug/L		
000074873 CHLOROMETHANE		0.50U	ug/L		
000075014 VINYL CHLORIDE	3.0	100 B 100 B	ug/L		
000074839 BROMOMETHANE		0.50U	ug/L		
000075003 CHLOROETHANE	0.70		ug/L		
000075694 TRICHLOROFLUOROMETHANE		0.50U	ug/L		
000075354 1 ₄ 1-DICHLOROETHENE	8.1		ug/L		
76-13-1 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.2		ug/L		
000075150 CARBON DISULFIDE	*** : == : 16:	0.50U	-ug/L		
000067641 ACETONE		1.0U	ug/L		
79-20-9 METHYLACETATE	144 A 1744 A	0.50U	ug/L		
000075092 METHYLENE CHLORIDE	540	0.50U	ug/L		
000T56605 TRANS-1,2-DICHLOROETHENE		0.500	ug/L		
001634044 METHYL TERT-BUTYL ETHER	3.0	10.00	ug/L		
000075343 1.1-DICHLOROETHANE	16		ug/L		
000156592 CIS-1,2-DICHLOROETHENE	44		ug/L		
594-20-7 2.2-DICHLOROPROPANE	1920 A	0,500	ug/L		
000078933 2-BUTANONE		1.0U	ug/L		
000074975 BROMOCHLOROMETHANE		0.50U	ug/L		
000067663 CHLOROFORM		0.50U	ug/L		
71-55-6 INITERICHLOROETHANE	100		ug/L		
110-82-7 CYCLOHEXANE	- 	0.50U	ug/L		
000056235 CARBON TETRACHLORIDE	1907 - <u>200</u> 48 - 200	0.500	ug/L		
000563586 1,1-DICHLOROPROPENE	Tariffica tio n	0.50U	ug/L		
8 000071432 BENZENE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		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		
3, 000078875 1,2-DICHLOROPROPANE	1 A 	0.500	ug/L		
000074953 DIBROMOMETHANE		0.50U	ug/L		
000075274 BROMODICHLOROMETHANE	447	0.50U	ug/L		
010061015 CIS-1,3-DICHLOROPROPENE		0.50U	ug/L		
000108101 4-METHYL-2-PENTANONE		1:00	ug/I		
000108883 TOLUENE		0.50U	ug/L		
010061026 TRANS-1,3-DICHLOROPROPENE	del services	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	4.5	0.50U	iqg/L		
000106934 1,2-DIBROMOETHANE		0.50U	ug/L		
000591786 2-HEXANONE	<u></u> -	a ilou	ug/L		
000108907 CHLOROBENZENE		0.50U	ug/L		

Refer to Page 1 for an explanation of Remark Codes

Report Date: 7/28/2004 10:53AM Page 2 of 5

Project Number: 04060028

*Sorted By Sample ID

AF02087

Field/Station ID: INFLUENT

Matrix: Aqueous

Date Received: 6/10/2004

Sample Description:

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

	Analysis Type. v	OA LOW LEVEL GCM3 DRINK WIR		Remark_			
	CAS Number	Analyte Name	Result	Codes	<u>Units</u>		
	000630206	1,1,12-TETRACHLOROETHANE		0.50U	Hig/L		
	100-41-4	ETHYLBENZENE		0.50U	ug/L		
	001330207	M.P.XYLEND	数 数数据数据	0.500	ug/L		
	000095476	O-XYLENE	有国际外发展的	0.50U	ug/L		
	000100425	STYRENE	2017年 日本教育 日本教育	0.500	d ng/L		
	000075252	BROMOFORM		0.50U	ug/L		
	000098828	ISOPROPYLBENZENE A REPORT OF THE PARTY OF TH		0.500	ugL		
4	000108861	BROMOBENZENE		0.50U	ug/L		
	000096184	1.2.3-TRICHLOROPROPANE	人工工作工作	0.500	ieC:		
	000079345	1,1,2,2-TETRACHLOROETHANE		0.50U	ug/L		
	annungan).	NEPROPYLBENZENE		0.500	ug/L		
	000095498	2-CHLOROTOLUENE		0.50U	ug/L		
	10624354	-CHLOROTOLUENE	The East of the Ea	0.50U	ug/L		
water water	000108678	1,3,5-TRIMETHYLBENZENE	制度。訓練器 三式網路	0.50U	ug/L		
	000098066	TERT-BUTYLBENZENE		0.50U	# ug/L		
	000095636	1,2,4-TRIMETHYLBENZENE	五仙山是东北 山。"这个	0.50U	ug/L		
	135,98-8	SEC-BUTYEBENZENE * * * * * * * * * * * * * * * * * *	1. 强烈,从各种基础。	0.50U	TENED.		
	000541731	1,3-DICHLOROBENZENE		0.50U	ug/L		
	000106467	ALADICHLOROBENZENE PA	SPACE OF THE PARTY	0.50U	ug/L		
	000095501	1,2-DICHLOROBENZENE		0.50U	ug/L		
6.000	000099876	4 SOPROPYLIOLUENE WEST AND A STREET	发现。一种种的一种的	0.500	uc/L		
	000104518	N-BUTYLBENZENE		0.50U	ug/L		
	000096128	1.2-DIBROMO-3-CHEOROPROPANE	这样是一个时间	0.500	Tug/L		
SHEET COURS	000120821	1,2,4-TRICHLOROBENZENE		0:50U	ug/L		
	87-683	HEXACHLOROBUTADIENE	"是我们就是是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一	0.50U	Tig/L		
	000091203	NAPHTHALENE	型 的表现 。	0.50U	ug/L		
	7 000087616	1.23-TRICHLOROBENZENE		0.500	110/1		

AF02088

Field/Station ID: EFFLUENT

Date Received: 6/10/2004

Remark

Matrix: Aqueous

Sample Description:

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

<u>CAS Number</u> <u>Analyte Name</u> <u>Result</u> <u>Codes</u> <u>Units</u>

Refer to Page 1 for an explanation of Remark Codes

Report Date: 7/28/2004 10:53AM Pa

Project Number: 04060028

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AF02088

Field/Station ID: EFFLUENT

Date Received: 6/10/2004

Matrix: Aqueous

Sample Description:

Analysis Type: V	OA LOW LEVEL GCMS DRINK WTR		Remark	
CAS Number	Analyte Name	Result	Codes	Units
75-43-4	DICHLORODIFLUOROMETHANE	<u> </u>	0.50U	ug/L
000074873	CHLOROMETHANE	Bulling Barketin.	0.50U	ug/L
000075014	VINYL CHLORIDE		0.50U	ug/L
000074839	BROMOMETHANE	- 	0,50U	ug/L
000075003	CHLOROETHANE	Brother deal Chief	0.50U	ug/L
000075694	TRICHLOROELUOROMETHANE		0:50U	ug/L
000075354	1,1-DICHLOROETHENE		0.50U	ug/L
体 76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		0.50U	ug/L
000075150	CARBON DISULFIDE	•••	0.50U	ug/L
000067641	ACETONE	CONTRACTOR	1.0U	ug/L
79-20-9	METHYL ACETATE		0.50U	ug/L
000075092	METHYLENE CHLORIDE	<u> </u>	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	74.0	0.50U	ug/L
000156592	CIS-1,24DICHLOROETHENE	1.6		ug/L
594-20-7	2,2-DICHLOROPROPANE		0.50U	ug/L
= 000078933 =	2-BUTANONE		-1.0U	ng/L
000074975	BROMOCHLOROMETHANE		0.50U	ug/L
000067663	CHLOROFORM		0.50U	ug/L
71-55-6	1,1,1-TRICHLOROETHANĘ	0.80		ug/L
110-82-7	CYCLOHEXANE	Alleman St.	0.50U	ug/L
000056235	CARBON TETRACHLORIDE		0.50U	ug/L
000563586	1,1-DICHLOROPROPENE		0.500	↔ ug/L
000071432	BENZENE		0.50U	ug/L
000107062	L2-DICHLOROETHANE	AV9-4 05-	0.50U	ug/L
025323891	TRICHLOROETHENE	0.60		ug/L
108-87-2	METHYLOYCLOHEXANE	建 种的一一	0.50U	og/L#
000078875	1,2-DICHLOROPROPANE		0.50U	ug/L
000074953	DIBROMOMETHANE	i la u	0.500	ug/L
000075274	BROMODICHLOROMETHANE		0.50U	ug/L
010061015	CIS-1,3-DICHEOROPROPENE	是数据的 · 20 1	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-TRICHEOROETHANE	ti. Otto Hi	0.50U	ug/L
000127184	TETRACHLOROETHENE		0.50U	ug/L
000142289	13-DICHLOROPROPANE		0.500	.ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 7/28/2004 10:53AM

Project Number: 04060028

*Sorted By Sample ID

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AF02088

Field/Station ID: EFFLUENT

Matrix: Aqueous

Date Received: 6/10/2004

Sample Description:

Analysis Type: VOA LOW LEVEL GCMS DRINK WTR

	Analysis Type: v	OA LOW LEVEL GCMS DRINK WIR		Remark	
	CAS Number	Analyte Name	<u>Result</u>	Codes	<u>Units</u>
9/2 X	000124481	DIBROMOCHLOROMETHANE		0.50U	ug/L
	000106934	1,2-DIBROMOETHANE	· · · · · · · · · · · · · · · · · · ·	0.500	tig/IT
	000591786	2-HEXANONE		1.0U	ug/L
*	X000108907	CHLOROBENZENE CHLOROBENZENE	W. C. Markette P.	0.50U	ug/L
	000630206	1,1,1,2-TETRACHLOROETHANE		0.50U	ug/L
	100-41-4	ETHYUBENZENE	以为 (本 集) (2)	0.50U	ng/L
	001330207	M/P-XYLENE		0.50U	ug/L
	2000095476	O-XYLENE 4	Brand Andrew	0.50U	ug/L
94737	000100425	STYRENE		0.50U	ug/L
	000075252	BROMOFORM	A TOTAL TERMS	0.500	ug/L
	000098828	ISOPROPYLBENZENE		0.50U	ug/L
	000.08861	BROXOBENZENE		0.50U	300
121	000096184	1,2,3-TRICHLOROPROPANE		0.50U	ug/L
	000079345	1,1,2,2 HEAR ACHIOROGODHAVANIES.		0.50U	ug/L
	000103651	N-PROPYLBENZENE		0.50U	ug/L
	000093498	≥eHUOROFOUUEN:	新一集图 — " 第 图	0.500	ug/L
Sec. 3	106-43-4	4-CHLOROTOLUENE		0.50U	ug/L
	000108678	3,5-TRIMETHYLBENZENE		0.50U	ug/L
	000098066	TERT-BUTYLBENZENE		0.50U	ug/L
	2000095636	E2.4FTRIMETHYCBENZENE	(A) (1) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A	0.500	ug/L
	135-98-8	SEC-BUTYLBENZENE		0.50U	ug/L
	\$20 E00(\$41731]	EPBIGHUOROBERZENE	TO THE STATE OF	0.50U	Lug/L
	000106467	1,4-DICHLOROBENZENE		0.50U	ug/L
	000005501	1,24DICHLOROBENZENE		0.500	ug/L
	000099876	4-ISOPROPYLTOLUENE		0.50U	ug/L
		NUBERTY LEBENZENES	The State of the S	0.50U	ug/L
	000096128	1,2-DIBROMO-3-CHLOROPROPANE		0.50U	ug/L
	000120821	2.4-TRICHEORÓBENZENE		0.500	ug/L
	87-68-3	HEXACHLOROBUTADIENE		0.50U	ug/L
	1 000091203	NAPHTHALENE THE PARTY OF THE PA		0.50U	ug/L
X56	000087616	1.2.3-TRICHLOROBENZENE	His SAREME - AND HERE	0.50U	ug/L

Project Approval: Date: 8/2/04

Refer to Page 1 for an explanation of Remark Codes

Report Date: 7/28/2004 10:53AM Page 5 of 5