

13 September 2005 RAC II-2005-154

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 JULY 2005 PERFORMANCE MONITORING REPORT

Dear Ms. Trocher:

I am pleased to provide the July 2005 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 in auto mode for the entire month. Thunderstorms during the weekend of 30 and 31 July took the system off-line, but it was restarted without a problem on 1 August. A summary of the operation and maintenance activities performed during July is as follows:

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



B. Operational Data

The following table presents operational data for the year 2005, arranged by month:

Month	Operating Days	Average flow Meter%	Average flow rate (gpm)	Amount of groundwater treated (mg)
January	31	47	541	24.2
February	28	46	529	21.3
March	31	45	517.5	22.4
April	17	48	552	13.5
May	31	*	*	*
June	30	*	*	*
July	29	*	*	:*
Volume of groundwa	ater treated for 2005	<u> </u>		81.4*
Volume of groundwa	ater treated for the O	U-1		2684.8*

^{*}The float control valve is not closing completely, preventing the flow meter from operating correctly. A replacement is being sought.

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 July 2005 are included in Attachment 1. A summary of the data for the compounds detected in the plant influent and effluent is as follows:

	Discharge	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) January
Vinyl Chloride	2	3.5	3.9	3.4	4.4	4.1	3.7	3.5						0.5 U
Chloroethane		0.5	0.6	0.5	0.73	0.59	0.54	0.55						0.5 U
1,1-Dichloroethene*	5	13	9.3	8.4	11	12	9.5	9.4						0.5 U
1,1,2 Trichloro- 1,2,2-Trifluoroethane		3.1	2.9	2.6	3.2	2.6	2.9	2.9						0.5 U
Acetone		1.0 U	2.3	1.0 U	1.0U	1.0U	1.0 U	1.0U						1.2
Trans 1,2-Dichloroethene*	5	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5U						0.5 U
Methyl Tert-Butyl Ether		4.7	4.3	4.3	3.9	4.2	3.9	4.2						2.2
1.1-Dichloroethane	5	18	17	17	24	17	17	17						1.8
Cis-1.2-Dichloroethene*	5	50	46	46	54	47	45	44						5.5
Chloroform	7	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5U						0.5 U
1,1,1-Trichloroethane*	5	110	120	110	140	110	120	110						4.4
Trichloroethene*	5	43	40	40	47	39	38	36						2.4
Total Volatile Organics*	100	245.8	246.3	232.2	288.23	236.49	240.54	227.55						17.5

Note:

ug/L = micrograms per liter
* = Site Contaminant of Concern
U = Below Reporting Limit
NS = Not Sampled

D. Next Month's Activities

The following activities are planned for August 2005:

- Repair flow meter valve;
- Restore phone service; and
- Perform monthly performance monitoring sampling.

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) 630-8412 if you should have any questions.

Sincerely,

Wendy DeMaio
Project Manager

Attachment

cc: M. Dunham (NYSDEC)



<u>Case Narrative:</u> Vestal 1-1. #05070016

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

Comment(s):

None

Reporting Limit(s):

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

Volatile Organic Compounds: The CRQL for Methylene Chloride in water is 0.5 ug/L (OLC03.2). 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, ESAT-SOP-132 (GC/MS Method).

Approval:	J. R. La	Date: _	9-2-05	
11				



U.S. Environmental Protection Agency Region 2 Laboratory

Data Report: Vestal Well 1-1 [07/05]

Project Number: 05070016

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

Report Date: 8/29/2005 11:33AM Page 1 of 5

Project Number: 05070016

*Sorted By Sample 1D

AG02658

Field/Station ID: INFLUENT

Matrix: Aqueous

Date Received: 7/8/2005

Sample Description:

Analys	sis Type: VC	OA GCMS LOW LEVEL DRINKING WATER		Remark	
<u>CA</u>	S Number	Analyte Name	Result	Codes	<u>Units</u>
75-	43-4	DICHLORODIFLUOROMETHANE		40:50℃	ug/L
000	0074873	CHLOROMETHANE		0.50U	ug/L
000	0075014	VINYL CHLORIDE	3.5		ug/L
000	0074839	BROMOMETHANE		0.50U	ug/L
000	0075003	CHLOROETHANE	0.55		ug/L
000	0075694	TRICHLOROFLUOROMETHANE		0.50U	ug/L
000	0075354	1,1-DICHLOROETHENB	9.4	Y Granner	ug/L
76-	13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.9	an a	ug/L
000	0075150	CARBON DISULFIDE	。二次 珠龙	0.50U+	ug/L
000	0067641	ACETONE		1.0U	ug/L
79-	20-9	METHYL ACETATE	Li tur	0:500	·ug/L
000	075092	METHYLENE CHLORIDE		1.0U	ug/L
000	156605	TRANS-1,2-DICHLOROETHENE		0.50U*	*ug/L
001	634044	METHYL TERT-BUTYL ETHER	4.2	THE RESERVE THE STATE OF THE ST	ug/L
000	075343	1,1-DICHLOROETHANE	. 17		ug/L
000	156592	CIS-1,2-DICHLOROETHENE	44	error o sua e minimentante e create e interna accesario.	ug/L
594	-20-7	2,2-DICHLOROPROPANE	. 	0.50U	ug/L
000	078933	2-BUTANONE		1.0U	ug/L
000	074975	BROMOCHLOROMETHANE		O.SOU	ug/L
000	067663	CHLOROFORM		0.50U	ug/L
71-	55-6	1,1,1-TRICHLOROETHANE	flig****		ug/L :
110	- 82- 7	CYCLOHEXANE		0.50U	ug/L
000	056235	CARBON TETRACHLORIDE	e through the	0.50U	ug/L
000	5 6358 6	1,1-DICHLOROPROPENE		0.50U	ug/L
000	071432	BENZENE		10.50U	ug/L
000	107062	1,2-DICHLOROETHANE		0.50U	ug/L
	323891	TRICHLOROETHENE*	±36	# 197 ₄ } ***	·úg/L
	-87-2	METHYLCYCLOHEXANE		0.50U	ug/L
	078875	1,2-DICHLOROPROPANE	٠٠-١٠٠١	0.50C	ug/L
	074953	DIBROMOMETHANE	e de la companya de l	0.50U	ug/L
	075274	BROMODICHLOROMETHANE		0.500	ug/L
	061015	CIS-1,3-DICHLOROPROPENE		0.50U	ug/L
	108101	4-METHYL-2-PENTANONE		1.0U.a- a.,	ug/Ľ
	108883	TOLUENE		0.50U	ug/L
	061026	TRANS-1,3-DICHLOROPROPENE		0.50U	ug/L
	079005	1,1,2-TRICHLOROETHANE	—— Araban de la latini, a lati	0.50U	ug/L
	127184	TETRACHLOROETHENE	- (*)	0.50U	ug/L
	142289	1,3-DICHLOROPROPANE	rest (2004) o consistent disens	0.50U	ug/L
	124481	DIBROMOCHLOROMETHANE	* ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	A MANAGE AND A SERVICE AND A SERVICE OF THE PARTY OF THE	ug/L
	106934	1,2-DIBROMOETHANE		0.50U	ug/L
	591786	2-HEXANONE		(4-440-4) 4 (688), 1 4 5.20)	ug/L
000	108907	CHLOROBENZENE		0.50U	ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 8/29/2005 11:33AM Page 2 of 5

Project Number: 05070016

*Sorted By Sample ID

AG02658

Field/Station ID: INFLUENT

Date Received: 7/8/2005

Matrix: Aqueous

Sample Description:

Analysis Type: VOA GCMS LOW LEVEL DRINKING WATER		Remark_	
<u>CAS Number</u> Analyte Name	Result	Codes	<u>Units</u>
000630206 1.1.1.2-TETRACHLOROETHANE	e en 🚅 e grade	. D.50U	i. Fug/L
100-41-4 ETHYLBENZENE	n magni sinnigar ili sast si	0.50U	ug/L
001330207 M/P-XYLENE	W 44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0.50U%	"ug/L
000095476 O-XYLENE		0.50U	ug/L
000100425 STYRENE		0.500	* aug/L
000075252 BROMOFORM	Secretary Sec. National Sec. (Sec.)	0.50U	ug/L
000098828 ISOPROPYLBENZENE	<u></u>	0.500	er joyt
000108861 BROMOBENZENE		0.50U	ug/L
000096184 1,2,3-TRICHLØROPROPANE	# · **	. * .0.50 6 (%)	i Angiti
000079345 1,1,2,2-TETRACHLOROETHANE		0.50U	ug/L
000103651 N-PROPYLBENZENE	KALITERNI MA		Jug/L
000095498 2-CHLOROTOLUENE	en e	0.50ป	ug/L
106-43-4 4-CHLOROTOLUENE	· · · .	0.50 U 3.40	ey :pg/£
000108678 1,3,5-TRIMETHYLBENZENE	en de la compania del la compania de la compania del la compania de la compania del la compania de la compania del la compania de la compania del la compania dela	0.50U	ug/L
000098066 TERT-BUTYTBENZENE	4 f	0.50(\$.1.4)	i.Pug/E
000095636 1,2,4-TRIMETHYLBENZENE	 MassaladaCalini (1987)	0.50U	ug/L
135-98-8 SEC-BUTYLBENZENE	, -4	*0.500	enp/La
000541731 1,3-DICHLOROBENZENE 000106467 1,4-DICHLOROBENZENE	 A STATE OF MARKET	0.50U	ug/L
000095501 1,2-DICHLOROBENZENE		0.50U	. bg/l .:
000099876 4-ISOPROPYLTOLUENE		0.50U	ug/L ug/L
000104518 N-BUTYLBENZENE		0.50U	ug/L
000096128 1,2-DIBROMO-3-CHLOROPROPANE		0.500	ug/E
000120821 1,2,4-TRICHLOROBENZENE		0.50U	ug/L
87-68-3 HEXACHLOROBUTADIENB		0.50U /	Ww/L
000091203 NAPHTHALENE		0.50U	ug/L
000087616 1,2,3-TRICHLOROBENZENE	* = 1 4.	.0.50U	° µg/L
1330-20-7 TOTAL XYLENES	The second section is a second of the second	0.50U	ug/L
ETHANE,1,2-DICHLORO-1,1,2-TRIFLU,RT=4,55	0.65	"NF. " in	· · · · · · · · · · · · · · · · · · ·

AG02659

Field/Station ID: EFFLUENT

Matrix: Aqueous

Sample Description:

Date Received: 7/8/2005

Refer to Page 1 for an explanation of Remark Codes

Report Date: 8/29/2005 11:33AM Page 3 of 5

Project Number: 05070016

*Sorted By Sample ID

Remark_

AG02659

Field/Station ID: EFFLUENT

Date Received: 7/8/2005

Matrix: Aqueous

Sample Description:

Analysis Type: VOA GCMS LOW LEVEL DRINKING WATE	R
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	CAS Number	Analyte Name	Result	Codes	<u>Units</u>
	75-43-4	DICHLORODIFLUOROMETHANE		0.50U	ug/L
100	000074873	CHLOROMETHANE	A 🚝 🔑 XXI.	0,500	ug/L
	000075014	VINYL CHLORIDE		0.50U	ug/L
eline pe	000074839	BROMOMETHANE	War Control	0.50Ur * *	:ug/E
•	000075003	CHLOROETHANE		0.50U	ug/L
	000075694	TRICHLOROFLUOROMETHANE	The state of the state of	0.50Ü	ug/L
44	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	12	K.	n8\J
	79-20-9	METHYL ACETATE		0.50U	ug/L
	000075092	METHYLENE CHLORIDS		1.QU ****	ug/L
1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	000156605	TRANS-1,2-DICHLOROETHENE		0.50U	ug/L
	001634044	METHYL TERT-BUTYL ETHER	2.2		ug/L
	000075343	1,1-DICHLOROETHANE	1.8		ug/L
被有两种	000156592	CIS-1,2-DICHLOROETHENE	* 5.5** Nation	医神经性炎	ug/L.
	594-20-7	2,2-DICHLOROPROPANE		0.50U	ug/L
a is the	000078933	2-BUTANONE		1.00%	lig/L
	000074975	BROMOCHLOROMETHANE		0.50U	ug/L
	000067663	CHLOROFORM		0.50 0 0	og/L
	71-55-6	1,1,1-TRICHLOROETHANE	4.4		ug/L
	110-82-7	CYCLOHEXANE		0.50U	ug/L
	000056235	CARBON TETRACHLORIDE		0.50U	ug/L
21	000563586	1,1-DICHLOROPROPENE	一大大學問題		ug/L
	000071432	BENZENE		0.50U	ug/L
	000107062	1,2-DICHLOROETHANE	uri di ili	0: 50U ,	ug/L
	025323891	TRICHLOROETHENE	2.4	No. 2. 1. 1. 2. A self-red Philippe Committee of	ug/L
	108-87-2	METHYLCYCLOHEXANE	and the control of th	0.50U 🛵 💢 📜	ug/L
	000078875	1,2-DICHLOROPROPANE		0.50U	ug/L
	000074953	DIBROMOMETHANE	all the commence of the property of the contract of the contra	0,500	ug/L
	000075274	BROMODICHLOROMETHANE		0.50U	ug/L
	010061015	CIS-1,3-DICHLOROPROPENE	eardier ei	0.50U\;	ug/L
	000108101	4-METHYL-2-PENTANONE	and and a second a	1.0U	ug/L
	000108883	TOLUENE	and the second of the second o	0.50U	ug/L
	010061026	TRANS-1,3-DICHLOROPROPENE		0.50U	ug/L
m , a	000079005	1,1,2-TRICHLOROETHANE	28. 一、"如果"的"一、"。 在19. 18. 18. 18. 18. 1	0.50U	ug/L
	000127184	TETRACHLOROETHENE		0.50U	ug/L
	000142289	1,3-DICHLOROPROPANE	7 针 列 / 编	0.50U. 🦠 🔻	ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 8/29/2005 11:33AM

Project Number: 05070016

*Sorted By Sample ID

AG02659 Field/Station ID: EFFLUENT

Date Received: 7/8/2005

Matrix: Aqueous

Sample Description:

Analysis Type: V	OA GCMS LOW LEVEL DRINKING WATER		Remark_	
CAS Number	Analyte Name	Result	Codes	<u>Units</u>
000124481	DIBROMOCHLOROMETHANE		0.50U	ug/L
000106934	1,2-DIBROMOETHANE		3.0250U	ue/L
000591786	2-HEXANONE		1.0U	ug/L
000108907	CHLOROBENZENE * *	يان يور ايون ايون ايون ايون ايون ايون ايون ايون	- Q.50U :GR	1/00/L
000630206	1,1,1,2-TETRACHLOROETHANE		0.50U	ug/L
100-41-4	ETHYLBENZENE		0.500	a ngt
001330207	M/P-XYLENE	A CONTRACTOR SALE OF THE CONTRACTOR SALES AND ASSESSMENT	0.50U	ug/L
000095476	O-XYLENE :		**:060E***	#.ibyL
000100425	STYRENE	Consideration of the state of the constant of	0.50U	ug/L
000075252	BROMOFORM		*0.50ta	/Agug/L
000098828	ISOPROPYLBENZENE		0.50U	ug/L
000108861	BROMOBENZENE	ing the state of the	· OHOU.	₩÷r ffg/E
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		*10.50U**	**************************************
106-43-4	4-CHLOROTOLUENE		0.5 0U	ug/L
000108678	1,3,5-TRIMETHYLBENZENE	Andrian Late West	, ,0.50U , ,	ug/L
000098066	TERT-BUTYLBENZENE	en toekka, dien tier nie erwanische Großer und wer	0.50U	ug/L
000095636	1,2,4-TRIMETHYLBENZENE		0,500	ig/L
135-98-8	SEC-BUTYLBENZENE		0.50U	ug/L
000541731	1.3-DICHLOROBENZENE	,	\$ 10\$ 000***	pg/L
000106467	1,4-DICHLOROBENZENE		0.50U	ug/L
000095501	1,2-DICHLOROBENZENE	Secretary Secretary	a OSOU as	N§118/L
000099876 000104518	4-ISOPROPYLTOLUENE N-BUTYLBENZENE		0.50U -0.50U	ug/L
000104318	1,2-DIBROMO-3-CHLOROPROPANE		0.50U	ug/L
000120821	1,2,4-TRICHLOROBENZENE		*+0.50U : **	ug/L * 3 ug/L :
87-68-3	HEXACHLOROBUTADIENE	W Acceptance of the state of th	0.50U	ug/L
000091203	NAPHTHALENE		0.500	ugi. '}ug/L
000091203	1,2,3-TRICHLOROBENZENE		0.50U	ug/L
1330-20-7	TOTAL XYLENES		0.50U	ug/L
1330-20-1		ALL NO MEN THE POST	AHAA	est a re, tr . in .

Project Approval: Date: 9-2-05

Refer to Page I for an explanation of Remark Codes

Report Date: 8/29/2005 11:33AM