

17 October 2006 RAC II-2006-249

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 AUGUST 2006 PERFORMANCE MONITORING REPORT

Dear Ms. Trocher:

I am pleased to provide the August 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 was restarted on 4 August after the air stripper media was replaced. A summary of the operation and maintenance activities performed during August is as follows:

- Replacement of the air stripper media was completed;
- 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
Volume of groundwa	ater treated for 2006	· · _ ·		152.2
Volume of groundwa	ater treated for the O			2,927.1

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 August 2006 are included in Attachment 1. A summary of the data for the compounds detected in the plant influent and effluent is as follows:

	Influent Concentration (ug/L)						Effluent Concentration							
Compound	Criteria (ug/L)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	(ug/L) August
Vinyl Chloride	2	0.5U	3.8	3.8	4.2	4.0	3.3	4.8	5.4					0.5 U
Chloroethane		0.5U	0.61	0.56	0.58	0.57	0.53	0.54	0.97					0.5 U
1,1-Dichloroethene*	5	3.2	11	10.0	11	10	9.1	11	16					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					0.5 U
Acetone		1.0U	1.0U	5.0U	1.0U	1.0U	1.0U	1.0U	6.0U					6.0 U
Methylene Chloride		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					0.5 U
Methyl Tert-Butyl Ether		1.0	3.7	3.7	3.9	4.2	4.0	5.1	4.3					0.58
1,1-Dichloroethane	5	6.1	30	18	18	19	18	19	26					0.5 U
Cis-1,2-Dichloroethene*	5	14	45	45	. 46	48	43	30	69					0.5 U
Chloroform	7	0.5 U	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					0.5 U
Trichloroethene*	5	15L	42	40	42	43	38	41	60					0.5 U
Total Volatile Organics*	, 100	82.5	280.41	254.96	69.58	282.57	239.33	235.14	398.47					0.58

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 September 2006:

• 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. Flease feel free to contact me at (973) 630-8197 if you should have any questions.

Sincerely,

Jemarie Roldan

Heidemarie Roldan Project Manager

Attachment cc: P. Long (NYSDEC)

ATTACHMENT 1

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<u>Case Narrative:</u> Vestal 1-1. #06080038

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):

VOAs: Air bubbles were observed in one of the two 40 mL vials collected for Laboratory sample AH04508 (Influent).

<u>Reporting Limit(s):</u>

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 Acetone in water (OLC03.2) is 5 ug/L. The Laboratory's Reporting Limit was raised to 6.0 ug/L due to contamination found in the method blank.

Method(s):

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

Approval: f. The Date: 9-22-06



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U.S. Environmental Protection Agency Region 2 Laboratory 2890 Woodbridge Avenue Edison, NJ 08837 Data Report: Vestal Well 1-1 [08/06] Project Number: 06080038 Program: Y206E

Project Leader: L. Arabia

emark odes	Explanation
U	THE ANALYTE WAS NOT DETECTED AIR 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 A Υ OR ABOVE THE REPORTING LIMIT. THE REPORTING LIMIT IS AN ESTIMATE.
N	THERE IS PRESUMPTIVE EV DENCE 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 .

Page 1 of 5



U.S. EPA Region 2 Laboratory Data Report

Survey Name: Vestal Well 1-1 [08/06]

Project Number: 06080038

*Sorted By Sample ID

Field/Station ID: INFLUENT AH04508

Matrix: Aqueous

Date Received: 8/11/2006

Sample Description:

Analysis Type: VOA GCMS LOW LEVEL DRINKING WATER

Analysis Type: V	OA GCMS LOW LEVEL DRINKING WATER		Remark	
CAS Number	<u>Analyte Name</u>	<u>Result</u>	Codes	<u>Units</u>
75-43-4	DICHLORODIFLUOROMETHANE		0.50U	ug/L
000074873	CHLOROMETHANE	ena anti-anti-anti-anti-anti-anti-anti-anti-	0.50U	ug/L
000075014	VINYL CHLORIDE	5.4		ug/L
000074839	BROMOMETHANE		0.50U	ug/L
000075003	CHLOROETHANE	0.97		ug/L
000075694	TRICHLOROFLUOROMETHANE		0.50U	ug/L
,	1,1-DICRLOROETHENE	16		ug/L
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	6.8	K	ug/L
000075150			0:50U	ig/L
000067641	ACETONE		6.0U	ug/L
79-20-9	METHYL ACETATE	Ξłaς,	0.50U	ug/L
000075092	METHYLENE CHLORIDE	ana ' Dhibiatair dhatha a taon	0.50U	ug/L
000156605	TRANS-I 2-DICHLOROETHENE		0.500	ug/L
001634044	METHYL TERT-BUTYL ETHER	4.3		ug/L
000075343	1,1-DICHLOROETHANE	20	and the second second	uğ/L
000156592	CIS-1,2-DICHLOROETHENE	69	A COM	ug/L
594-20-7	2,2-DICHLOROPROPANE 2-BUTANONE	and the second	0.50U 0.50U	ug/L
000078933 000074975	2-BUTANONE BROMOCHEOROMETHANE	 92197767755	0.500	ug/L
000067663	CHLOROFORM		0.50U	· βε/
71-55-6	1.1.1.TRICHLOROETHANE	 2105-2012	0.500	ug/L ug/L
110-82-7	CYCLOHEXANE	∴ £ ₩₩₩₩₩₩ 	0.50U	ug/L
000056235	CARBON TETRACHLORIDE		0.50U	
000563586	1,1-DICHLOROPROPENE		0.50U	ug/L
000071432	BENZENE		. 0.50U	ug/E
000107062	1,2-DICHLOROETHANE		0.50U	ug/L
025323891*	TRICHLOROETHENE	1 6Q		ug/L
108-87-2	METHYLCYCLOHEXANE		0.50U	ug/L
000078875	12: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	a ⊤ .285	0.500	⊷ug/L
000108883	TOLUENE		0.50U	ug/L
010061026	TRANS-1,3-DICHLOROPROPENE			ug/L
000079005	1,1,2-TRICHLOROETHANE	 **********************************	0.50U	ug/L
000127184	TETRACHLOROETHENE		0.50U	° ug∕L
000142289	1,3-DICHLOROPROPANE	 7 175568-3 5-22-2	0.50U	ug/L
000124481	DIBROMOCHLOROMETHANE		0.50U	ug/L
000106934	1,2-DIBROMOETHANE	 EBS:500.0200.	0.50U	ug/L
000591786	2-HEXANONE CHLOROBENZENE	international Contraction of the	1.0U 0.50U	ug/L ug/L
000108907			0.500	ug/L



J.S. EPA Region 2 Laboratory Data Report

Survey Mame: Vestal Well 1-1 [08/06]

Date Received: 8/11/2006

Project Number: 06080038

*Sorted By Sample ID

AH04508

Field/Station ID: INFLUENT Matrix: Aqueous

Sample Description:

Analysis Type: VOA GCMS LOW LEVEL DRINKING WATER

Analysis Type: V	OA GCMS LOW LEVEL DRINKING WATER		Remark	
CAS Number	Analyte Name	<u>Result</u>	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		2:50U	₁ ug/L
000095476	O-XYLENE	an a	0.50U	ug/L
000100425	STYRENE		0.50U	ug/L
000075252	BROMOFORM		0.50U	ug/L
000098828	ISOPROPYLBENZENE		0.500	≥ ug/L
000108861	BROMOBENZENE	and a substantial and the second	0.50U	ug/L
000096184	1,2,3-TRICHLOROPROFANE	volten in the second	0.50U	ug/L.
000079345	1,1,2,2-TETRACHLOROETHANE	ana an	0.50U	ug/L
000103651	· N-PROPYLBENZENE		0.50U	uğ/L.
000095498	2-CHLOROTOLUENE		0.50U	ug/L
106-43-4	4-CHLOROTOLUENE		10.50U	ug/L
000108678	1,3,5-TRIMETHYLBENZENE		0.50U	ug/L
000098066	TERT-BUTYLBENZEN		0.500	ug/L
000095636	1,2,4-TRIMETHYLBENZENE		0.50U	ug/L
135-98-8	SEC-BUTYLBENZENE		0.500	ug/L
000541731	1,3-DICHLOROBENZENE	 Riferin	0.50U	ug/L
000106467 000095501	1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE	station of the state of the sta	0.50U	ू . ûg/L
000093301	4-ISOPROPYLTOLUENS		0.30U	ug/L
000104518	N-BUTYLBENZENE		0.50U	ng∕L ug∕I
000096128	1.2-DIBROMO-3-CHEOKOPROPANE	 	9.50U	ug/L ug/L
000120821	1,2,4-TRICHLOROBENZENE	la sel a destina ball a base de la del	0.50U	ug/L
87-68-3	HEXACHLOROBUTADIENE		0.500	ug/L
000091203	NAPHTHALENE		0.50U	ug/L
000087616	1,2,3-TRICHLOROBENZENE		0.500	ug/L
1330-20-7	TOTAL XYLENES	169-127 (1996) Marshall (1996) (1996) 	0.50U	ug/L
	ETHANE,1,2-DICHLORO-1,2-TRIFUOR-;RT=4.81	20 20	NN N	ig/L
	a a serie de la company de	2019년 11월 2021년 11월 11일 - 11일 - 11일 - 11 - 11일 - 11 - 11일 - 11	SPACE TO THE	

Field/Station ID: EFFLUENT AH04509 Matrix: Aqueous

Date Received: 8/11/2006

Sample Description:



U.S. EPA Region 2 Laboratory Data Report

Survey Name: Vestal Well 1-1 [08/06]

Project Number: 06080038

*Sorted By Sample ID

AH04509

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Field/Station ID: EFFLUENT Matrix: Aqueous Date Received: 8/11/2006

Sample Description:

Analysis Type: VOA GCMS LOW LEVEL DRINKING WATER

Α	nalysis Type: V(OA GCMS LOW LEVEL DRINKING WATER		Remark_	
	CAS Number	Analyte Name	Result	<u>Codes</u>	<u>Units</u>
	75-43-4	DICHLORODIFLUOROMETHANE		0.50U	ug/L
A THE DE	000074873	CHLOROMETHANE	6 40 - 270 - <u>77</u> - 14 - 14 - 14 - 14 - 14 - 14 - 14 - 1	0.50U	ŭg/L
. I talk Bourge	000075014	VINYL CHLORIDE		0.50U	ug/L
	000074839	BROMOMETHANE		< 0.50U ↔	ug/Lesi
 March 460 (1996) 2008001 	000075003	CHLOROETHANE	••••••••••••••••••••••••••••••••••••••	0.50U	ug/L
	000075694	TRICHLOROFLUOROMETHANE		0.500	. dg/L
 Logical Social State Social Social Social Social 	000075354	1,1-DICHLOROETHENE		0.50U	ug/L
	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIELUOROETHANE	络哈姆异哈尔	0.500	⊤ug/L
	000075150	CARBON DISULFIDE		0.50U	ug/L
ala series de la composition. Ala series de la composition de la comp	000067641	ACETONE	nan de la company de la co Nota de la company de la com	6.0U	jug/L
	79-20-9	METHYL ACETATE		0.50U	ug/L
	000075092	METHYLENE CHLORIDE	ie die en andere	0.50U	. ug/L
an in the strategy	000156605	TRANS-1,2-DICHLOROETHENE	and and a second a second and a second and a second a s	0.50U	ug/L
2 6 C 2 C 2	001634044	METHYL TERT-BUTYL ETHER			, ųg/L
	000075343	1,1-DICHLOROETHANE		0.50U	ug/L
	000156592	CIS-1/2-DICHLOROETHENE	* * * • • • • • • •	Q.50U	ng/L
二代社会社 化压水压器	594-20-7	2,2-DICHLOROPROPANE		0.50U	ug/L
	000078933	2-BUTANONE		0.500	ůg/L
1	000074975	BROMOCHLOROMETHANE		0.50U	ug/L
	000067663	CHLOROFORM		0.50U	ug/L
	71-55-6	1,1,1-TRICHLOROETHANE		0.50U	ug/L
Stand Bar	000056235	CICLOHEAAND CARBON TETRACHLORIDE	14. N. 77 A. A. A. A.	0.50U	ug/L
12446204	000563586	HT-DICHLOROPROPENE	en e	0.500	ug/L ug/L
	000000000000000000000000000000000000000	BENZENE		0.50U	Repairing a subscription of the second second
		12 DICHEOROETHANE	A CONTRACTOR OF A CONTRACT	0.500	ug/L /ug/L
ったでなる情報	025323891	TRICHLOROETHENE		0.50U	ug/L
to the second	108-87-2	METHYLCYCEOHEXANE		0.50U	ug/L
ur frank Heelurigen	000078875	1,2-DICHLOROPROPANE		0.50U	ug/L
the players	000074953	DIBROMOMETHANE		0.500	ug/L
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	010061015	CIS-1,3-DICHLOROPROPENE		0.500	ug/L
in searchar a	000108101	4-METHYL-2-PENTANONE		0.50U	ug/L
	000108883	TOLUENE		:0.500 at a	ug/L
	010061026	TRANS-1,3-DICHLOROPROPENE	9999979-9978587798877799777979797777 - 	0.50U	ug/L
	000079005	1,1,2-TRICHLOROBTHANE	\$ 	0.50 Ú . 🐴	ug/L
ىلىپەر كەرتە كەرتە	000127184	TETRACHLOROETHENE	and a state and a second s	0.50U	ug/L
· · · · · · · · · ·	000142289	1,3-DICHLOROPROPANE		0.50U***	ug/L
	2 40 CONTRACTOR (1997)	1、19月11日1月11日1月11日1月11日(19月11日)1月11日(19月1日)1月11日)1月11日(19月1日)1日(19月1日)1日(19月1日)1日(19月1日)1日(19月1日)1日(19月1日)1日)1日 1月11日(19月1日)1日(19月1日)1日)1日(19月1日)1日(19月1日)1日)1日(19月1日)1日(19月1日)1日(19月1日)1日(19月1日)1日(19月1日)1日(19月1日)1日)1日)1日(19月	an a	ag ungag a len lengen en sonn hun lengen gallen. Ag	, şa≕ ralşırı '



U.S. EPA Region 2 Laboratory Data Report



Survey Mame: Vestal Well 1-1 [08/06]

Date Received: 8/11/2006

Project Number: 06080038

*Sorted By Sample ID



Field/Station ID: EFFLUENT Matrix: Aqueous

Sample Description:

Analysis Type: VOA GCMS LOW LEVEL DRINKING WATER

Analysis Type: VOA GCMS LOW L	EVEL DRINKING WATER		Remark_	
CAS Number Analyte Name		Result	Codes	<u>Units</u>
	LOROMETHANE		0.50U	ug/L
000106934 1,2-DIBROMO	· · · · · · · · · · · · · · · · · · ·		0.50U	ug/L
000591786 2-HEXANONE	19. 2017 - T.S. 2017 - 19. 19. 19. 19. 19. 19. 19. 19. 19. 20. 20. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19		1.0U	ug/L
000108907 CHLOROBEN	in the second		0.50U	ug/L
· · · · · · · · · · · · · · · · · · ·	CHLORCETHANE		0.50U	ug/L
	NE AL SECTOR		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	ender de la construction de la const		0.50U	ug/L
000098828 ISOPROPYLBI			0.50U	ug/L
	ENE STATES AND A STATES		0.50U	ug/L
000096184 1,2,3-TRICHLO	ようしゃ かん かん 御知 しょうかん かか 小海山 かっかん ひょうてい くう なく		0.50U	ug/L
	CHLOROETHANE		0.50L	ug/L
000103651 N-PROPYLBE	NZENE		0.50U	ug/L
000095498 2-CHLOROTO	LUENE		0.500	ug/L
106-43-4 4-CHLOROTO	LUENE		0.50U	ug/L
000108678 - 1,3,5-TRIMETI	IXLBENZENE		0.500	ug/L
000098066 TERT-BUTYLI	BENZENE	an a	0.50U	ug/L.
000095636 1,2,4-TRIMETI	IYLBENZENE	$\overline{\mathbf{T}}$	0.500	ug/L
135-98-8 SEC-BUTYLBI			0.50U	ug/L
000541731 1,3-DICHLORO	医乳腺素的医乳糖酶的医乳糖酶酶等的的现在分词 医中心神经炎 医脾管下的 医丁甲二氏试验检尿道 网络马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马		0.50U	ug/L
000106467 1,4-DICHLORO		·	0.50U	ug/L
000095501 1,2-DICHLORC	The Manufacture of the California Andrew California and the California and the California and the California and	a i sa	0.50U	ug/L
000099876 4-ISOPROPYL			0.50U	ug/L
	ZENE		0.50U	ug/L
•	3-CHLOROPROPANE		0.50U	ug/L
	ROBENZENE	NA MARY STATISTICS	0.500	ug/1.
87-68-3 HEXACHLORO		and a second state of the	0.50U	ug/L
	R N WAR DE LA CAL		0.500	ug/L
000087616 1, 2 ,3-TRICHLC		•••••	0.50U	ug/L
1330-20-7 TOTAL XYLE	VES	and a set of	0 :50U	ug/L

Project Approval:

Date: 9-22-06

Refer to Page 1 for an explanation of Remark Codes Report Date: 9/17/2006 10:10AM