

8 March 2006 RAC II-2006-044

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 DECEMBER 2005 PERFORMANCE MONITORING REPORT

Dear Ms. Trocher:

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

- Routine inspections of the facility were performed;
- · Pumps were checked and lubricated;
- · Air filters were cleaned or replaced;
- · Removed snow and de-iced sidewalk; 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	*	*	*
August	29	*	*	*
September	30	*	*	*
October	31	*	*	*
November	30	*	*	*
December	31	*	*	*
Volume of groundwat	81.4*			
Volume of groundwat	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 December 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		Influent Concentration (ug/L)						Effluent Concentrati					
Compound	Criteria (ug/L)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	on (ug/L) December
Vinyl Chloride	2	3.5	3.9	3.4	4.4	4.1	3.7	3.5	3.3	4.5	4.2	3.8	3.0	0.5 U
Chloroethane		0.5	0.6	0.5	0.73	0.59	0.54	0.55	0.5U	0.5U	0.5U	0.51	0.5U	0.5 U
1,1-Dichloroethene*	5	13	9.3	8.4	11	12	9.5	9.4	8.3	8.7	8.6	8.3	7.4	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	2.4	2.8	2.7	2.7	2.7	0.5 U
Acetone		1.0 U	2.3	1.0 U	1.0U	1.0U	1.0 U	1.0U	5.0U	1.0U	1.0U	10U	1.0U	1.8
Methylene Chloride		U	U	U	U	U	U	U	U	U	U	U	0.5U	13
Trans 1,2-Dichloroethene*	5	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5 U
Methyl Tert-Butyl Ether		4.7	4.3	4.3	3.9	4.2	3.9	4.2	3.7	3.6	4.0	3.0	3.4	1.7
1,1-Dichloroethane	5	18	17	17	24	17	17	17	18	18	18	16	14	1.7
Cis-1,2-Dichloroethene*	5	50	46	46	54	47	45	44	41	44	42	40	37	5.1
Chloroform	7	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5 U
1,1,1-Trichloroethane*	5	110	120	110	140	110	120	110	100	110	100	110	110	4.6
Trichloroethene*	5	43	40	40	47	39	38	36	35	36	35	35	34	2.4
Total Volatile Organics*	100	245.8	246.3	232.2	288.23	236.49	240.54	227.55	211.7	227.6	214.5	219.31	211.5	17.3

Note:

ug/L = micrograms per liter

U = Below Reporting Limit

* = Site Contaminant of Concern NS = Not Sampled

D. Next Month's Activities

The following activities are planned for January 2006:

- · Repair flow meter valve; and
- · Perform monthly performance monitoring sampling.

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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.

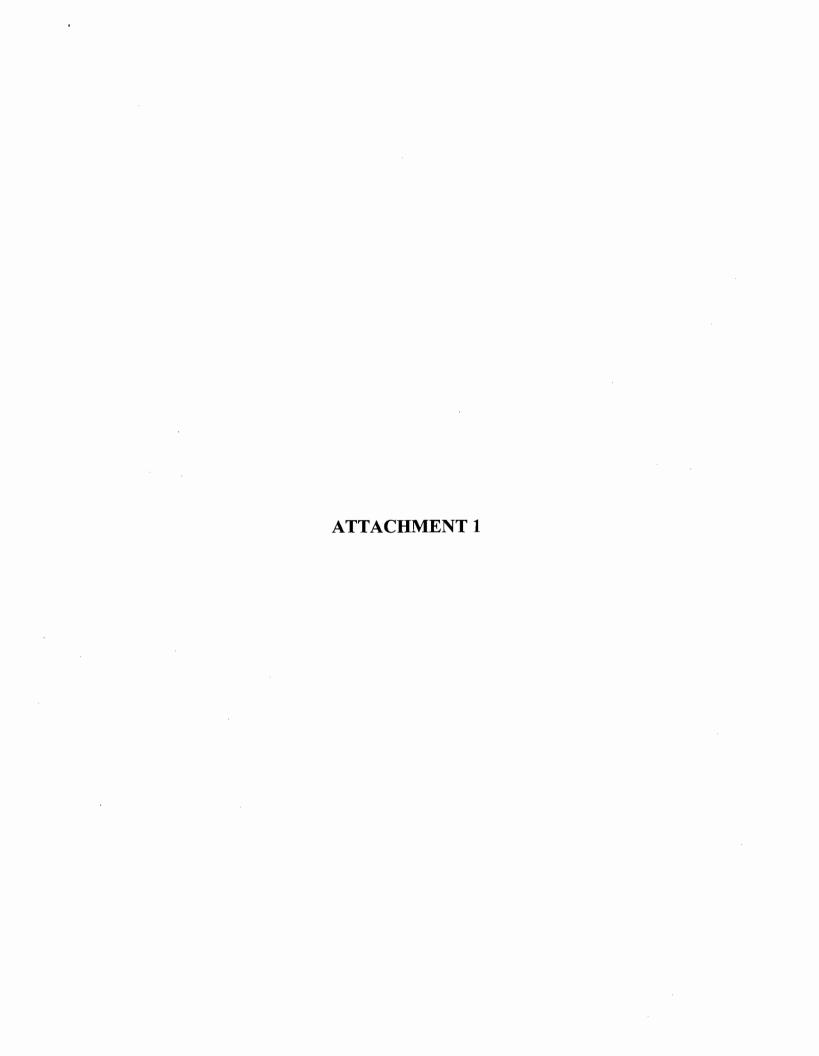
Sincerely,

Heidemarie Roldan Project Manager

Attachment

cc: P. Long (NYSDEC)

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<u>Case Narrative:</u> <u>Vestal 1-1. #05120015</u>

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.

Cor	nm	ent	(\mathbf{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 1,2-Dibromo-3-chloropropane in water is 0.5 ug/L (OLC03.2). The Laboratory's Reporting Limit was raised to 5 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. Date: 1-31-06



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

Data Report: Vestal Well 1-1 [12/05]

Project Number: 05120015

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

Project Number: 05120015

*Sorted By Sample ID

AG08940

Field/Station ID: INFLUENT

Matrix: Aqueous

Date Received: 12/6/2005

Sample Description:

Analysis Type: VOA GCM5 LOW LEVEL DRINKING WAT	i Type: VOA GCMS LOW LEVEL DRINKING '	WATER
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A	nalysis Type: V	OA GCMS LOW LEVEL DRINKING WATER		Remark_	
	CAS Number	Analyte Name	Result	Codes	<u>Units</u>
	75-43-4	DICHLORODIFLUOROMETHANE	to the second	0.50U	<u>ive/L</u>
	000074873	CHLOROMETHANE		0.50U	ug/L
一节的内容	000075014	VINYL CHLORIDE	3.0	· · · · · · · · · · · · · · · · · · ·	· ug/L
	000074839	BROMOMETHANE		0.50U	ug/L
	000075003	CHLOROETHANE		- 0.50U	. ug/L
	000075694	TRICHLOROFLUOROMETHANE		0.50U	ug/L
	000075354	1,1-DICHLOROETHENE	7.4		pg/L
	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.7		ug/L
	000075150	CARBON DISULFIDE		0.500	10/02
	000067641	ACETONE	en Literatur	1.0U	ug/L
	79-20-9	METHYL ACETATE		0.50L	top/E
	000075092	METHYLENE CHLORIDE		0.50U	ug/L
	000156605	TRANS-1,2-DICALOROETHENE	de re in e l de re de la compa	0.50U	· Ligo
	001634044	METHYL TERT-BUTYL ETHER	3.4		ug/L
	000075343	1,1-DICHLOROETHANE	A. 1.14	And Buckley Co.	· vg/L
	000156592	CIS-1,2-DICHLOROETHENE	37		ug/L
12 1 12 1 12 1 1 1 1 1 1 1 1 1 1 1 1 1	594-20-7	2.2-DICHLOROPROPANE		0.50U	varug/L
	000078933	2-BUTANONE		1.00	tg/L
	000074975	BROMOCHLOROMETHANE		0.50U	ng/L
111111111111111111111111111111111111111	000067663	CHLOROFORM		0.50U	ug/L
in the court of th	71-55-6	1,1,1-TRICHLOROETHANE	-110		ug/L
nu es 1895, l'Ordonous parter	110-82-7	CYCLOHEXANE		0.50U	ug/L
	000056235	CARBON TETRACHEORIDE		0.50U	190
to the second section and	000563586	1,1-DICHLOROPROPENE		0.50U	ug/L
	000071432	BENZENE-ANDROPER AND	Habitatia	0.5 011 and	or White
- 1991 to A.S.	000107062	1,2-DICHLOROETHANE		0.50U	ug/L
	025323891	TRICHLOROETHENE	34		uy/L
 	108-87-2	METHYLCYCLOHEXANE		0.50U	ug/L
	000078875 000074953	1,2-DICHLOROPROPANE DIBROMOMETHANE		0.500	ug/L
	000074933	BROMODICHLOROMETHANE		0.50U 0.50U	ug/L
	010061015	CIS-1,3-DICHLOROPROPENE		0.50U	ug/L
	000108101	4-METHYL-2-PENTANONE		1.00	ts.pe/L/s
W. 132.	000108101	TOLUENE		0 <i>.50</i> U	CONTRACTOR OF THE PROPERTY OF
	010061026	TRANS-1,3-DICHLOROPROPENE	e e estapor en esta en el	0.50U	ug/L
1 1 1 1 1 1 1 1 1 1	000079005	1,1,2-TRICHLOROETHANE	er de la la la companie	0.50U	ug/L ug/L
marine di	000077003	TETRACHLOROBTHENE		0.500	og/E
19年4年 新國人	000127184	1,3-DICHLOROPROPANE		0.50U	ug/L
grand region	000124481	DIBROMOCHLOROMETHANB		9.50U	my/L
	000124481	1,2-DIBROMOETHANE		0.50U	ug/L
	000100934	2-HEXANONE		7.00	
. /	000391780	CHLOROBENZENE		0.50U	Recognition to the supplementation of the contract of the cont
	000100307	CILCRODENZENE		0.500	ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 1/20/2006 4:57PM Page 2 of 5

Project Number: 05120015

*Sorted By Sample ID

AG08940

Field/Station ID: INFLUENT

Date Received: 12/6/2005

Matrix: Aqueous

Sample Description:

Analysis Type: V	OA GCMS LOW LEVEL DRINKING WATER		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 TO THE STATE OF THE STA		# 0.500 · ·	一個性
000075252	BROMOFORM		0.50U	ug/L
000098828	ISOPROPYLBENZENE		0.500	ng/L
000108861	BROMOBENZENE		0.50U	ug/L
000096184	1,2,3-TRICHLOROPROPANE	electricas D ivisio s	- 9.50U	er upila :
000079345	1,1,2,2-TETRACHLOROETHANE	er signeralagy w 📆	0.50U	ug/L
000103651	N-PROPYLBENZENE.		0.500	ug/L
000095498	2-CHLOROTOLUENE	ppodkruguerak (ig. s. <u>2</u>	0.50U	ug/L
106-43-4	4-CHLOROTOLUENE	h Market Land	0:50U	ug/L
000108678	1,3,5-TRIMETHYLBENZENE	entropie	. 0.50U	ug/L
000098066	TERT-BUTYLBENZENE		. 0.30U	ug/L
000095636	1,2,4-TRIMETHYLBENZENE	-	0.50U	ug/L
135-98-8	SEC-BUTYLBENZENE		0.50U	- ug/L
000541731	1,3-DICHLOROBENZENE		0.50U	ug/L
000106467	I,4-DICHLOROBENZENE	计算数据一种	45 0.50U -4 *	'ug/L
000095501	1,2-DICHLOROBENZENE	\$136.3000 Photo 146.5000	. 0.50U	ug/L
000099876	4-ISOPROPYLTOLUENE	enderlika i i i ke ku	0.50U	<u> </u>
000104518	N-BUTYLBENZENE		0.50U	ug/L
000096128	1,2-DIBROMO-3-CHLOROPROPANE		'S.OU '	r og/L
000120821	1,2,4-TRICHLOROBENZENE		0.50U	ug/L
87-68-3	HEXACHLOROBUTADIENE	and the contract of	** 0.50U ***	var ug/L
000091203	NAPHTHALENE		0.50U	ug/L
000087616	1,2,3-TRICHLOROBENZERE		0.50U / ·	ve/L
1330-20-7	TOTAL XYLENES		0.50U	ug/L

AG08941

Field/Station ID: EFFLUENT

Matrix: Aqueous

Sample Description:

Date Received: 12/6/2005

Page 3 of 5

Refer to Page 1 for an explanation of Remark Codes

Report Date: 1/20/2006 4:57PM

Date Received: 12/6/2005

Project Number: 05120015

*Sorted By Sample ID

AG08941

Field/Station ID: EFFLUENT

Matrix: Aqueous

Sample Description:

A	nalysis Type: VC	OA GCMS LOW LEVEL DRINKING WATER		Remark	
	CAS Number	Analyte Name	Result	Codes	<u>Units</u>
والمراجع والموافق المراجع	75-43-4	DICHLORODIFLUOROMETHANE		0.50U	ug/L
े कियो अले किया संबंध है	000074873	CHLOROMETHANE	en e	0.50U	ug/L
	000075014	VINYL CHLORIDE 4		0.500	ug/E
。 "小桥"也是 3.50 SS-15\$\$\$	000074839	BROMOMETHANE		0.50U	ug/L
上 客 产 等 家	000075003	CHLOROETHANE		0.50 U	ug/e
4 . 7	000075694	TRICHLOROFLUOROMETHANE		0.50U	ug/L
A SALT HAVE	000075354	1,1-DICHLOROETHENE		0.500	by L
Sec. 40.40 after \$1.48.	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		0.50U	ug/L
2-拉姆拉克	000075150	CARBON DISULFIDE		0.501	ug/L
	000067641	ACETONE	1.8		ug/L
	79-20-9	METHYL ACETATE	70211	0.50U	ug/L
· 25 "Advantation Crossman	000075092	METHYLENE CHLORIDE	13		ug/L
	000156605	TRANS-1,2-DICHEOROETHENEX	HIELES NA	6.50U	Fig/E
1 1 1 1 1 1 1 1 1 1	001634044	METHYL TERT-BUTYL ETHER	1.7	Tarahili Sala Jawa Nama	ug/L
	000075343	1,1-DICHLOROETHANE	717		10/L
	000156592	CIS-1,2-DICHLOROETHENE	5.1	**********	ug/L
	594-20-7	2,2-DICHLOROPROPANE	<u> </u>	0.500	ug/L
	000078933	2-BUTANONE		1.0U	ug/L
1. 方体研究的	000074975	BROMOCHLOROMETHANE TO THE SECOND STATE OF THE	a Maria Paga Paga	0.500	'tig/L
-	000067663	CHLOROFORM	San Sancia	0.50U	ug/L
	71-55-6	1. LETRICEL OROETHANS	4.6	100	ug/L
	110-82-7	CYCLOHEXANE	74 -	0.50U	ug/L
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	000056235	CARBONATEURACHEORIDE A	NE PARTE	0.50B	10/ 12
	000563586	1,1-DICHLOROPROPENE		0.50U	ug/L
	000071432	BENZIENE		0,50U W/-	tog/by to see
CONTRACTOR OF THE RESIDENCE OF THE RESID	000107062	1,2-DICHLOROETHANE		0.50U	ug/L
at the second	025323891	TRICHLOROETHENE	24		W/D
	108-87-2	METHYLCYCLOHEXANE	tonia de la composición dela composición de la composición de la composición de la composición de la composición dela composición de la composición dela composición dela composición dela composición de la composición dela composición de	0.50U	ug/L
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	000078875	1.2-DICHLOROPROPANE	dati datak	0.500	ug/L
	000074953	DIBROMOMETHANE		0.50U	ug/L
	000075274	BROMODICHLOROMETHANE		0.50U	ug/L
	010061015	CIS-1,3-DICHLOROPROPENE		0.50U	ug/L
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	000108101	4-METHYE-2-PENTANONE		*1.00 · · · ·	WETTER STREET
	000108883	TOLUENE		0.50U	ug/L
	010061026	TRANS-1,3-DICHLOROPROPENS	Carry 19 16 35	0.50U	عارون
	000079005	1,1,2-TRICHLOROETHANE		0.50U	ug/L
- 1	1.	TETRACHEDROEPHIOLES CONC. AND AND AND ASSESSMENT OF A STATE OF THE STA		· 公司的 10 · 中央	-eσu :::
	000142289	1,3-DICHLOROPROPANE		0.50U	ug/L

Refer to Page 1 for an explanation of Remark Codes

Report Date: 1/20/2006 4:57PM

Project Number: 05120015

*Sorted By Sample ID

AG08941

Field/Station ID: EFFLUENT

Matrix: Aqueous

Sample Description:

Date Received: 12/6/2005

	Analysis Type: V	OA GCMS LOW LEVEL DRINKING WATER		Remark_	
	CAS Number	Analyte Name	Result	Codes	<u>Units</u>
24 x 1724 x210022	000124481	DIBROMOCHLOROMETHANE		0.50U	ug/L
v.↑ t. 78284 (1444)	000106934	1,2-DIBROMOETHANE		0.50U	ug/L
A PARTY	000591786	2-HEXANONE		100	de/E
	000108907	CHLOROBENZENE		0.50U	ug/L
	000630206	I,I,I,2-TETRACHLOROETHANE	明·神智学的组织 的意见	'***0:30U 😘	""typ
	100-41-4	ETHYLBENZENE		0.50U	ug/L
11 3 CON 13 1 S	001330207	M/P-XYLENE	4.3	0.50U	Loo_L
* * * * * * * * * * * * * * * * * * * *	000095476	O-XYLENE		0.50U	ug/L
	000100425	STYRENE NEW HOLD STREET, STREE	ta di see al-orie	0.50U	L. 10/5
	000075252	BROMOFORM		0.50U	ug/L
	000098828	ISOPROPYLBENZENE	e de la companya de	0.500	ug/L
widowood 2011 - 12.80 me 1.80 metabolika matana eta o	000108861	BROMOBENZENE		0.50U	ug/L
	000096184	1,2,3-TRICHLOROPROPANE	The state of the same	0.50U	pg/L
	000079345	1,1,2,2-TETRACHLOROETHANE	No. 2	0.50U	ug/L
	000103651	N-PROPYLBENZENE		9.50U	ug/L
1	000095498	2-CHLOROTOLUENE		0.50U	ug/L
	106-43-4	4-CHLOROTOLUENE		0.500	19fC
	000108678	1,3,5-TRIMETHYLBENZENE		0.50U	ug/L
	000098066	TERT-BUTYEBENZENB		**** 0.5DU- :- *	AND TO
	000095636	1,2,4-TRIMETHYLBENZENE	a (a second	0.50U	ug/L
Allegials (Allegials	135-98-8	SEC-BUTYLBENZENE	La Carrier Tolking	0.500	ug/L
I LANG A TANKET , POLITICATION AND	000541731	1,3-DICHLOROBENZENE	4	0.50U	ug/L
	000106467	1/4bighlorobenzene		0.500	
· NA DESMANDA	000095501	1,2-DICHLOROBENZENE		0,50U	ug/L
	000099876	4-ISOPROPYL POLUENE		0.500	- WL
cht skiehr das disellerakte is die	000104518	N-BUTYLBENZENE		0.50U	ug/L
ar considerable de	000096128	1,2-DIBROMO-S-CHLOROPROPANE	100 m	345. 0U	i Deli
	000120821	1,2,4-TRICHLOROBENZENE		.0.50U	ug/L
3. 1	87-68-3	HEXACHLOROBUTADIENE		\$ 0.50U is:	nv/L
Constructive feet and other con-	000091203	NAPHTHALENE		0.50U	ug/L
	000087616	the first of the second control of the secon		0.500	ug/L.
	1330-20-7	TOTAL XYLENES		0.50U	ug/L

Project Approval:

Refer to Page 1 for an explanation of Remark Codes

Report Date: 1/20/2006 4:57PM

Date: 1-31-06

Page 5 of 5