New York State Department of Environmental Conservation
Division of Environmental Remediation • 625 Broadway • Albany, New York 12233-7013

Site Number 7-04-009A

Vestal Water Supply Site Quarterly Report

First Quarter 2011

Pumphouse Road
Vestal, New York

New York State Department of Environmental Conservation Work Assignment D004443-4

August 2011

Report Prepared By:

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MALCOLM PIRNIE

Contents

Figures

Tables

Appendices

1. Introduction

The New York State Department of Environmental Conservation (NYSDEC) has issued a Work Assignment (# D004443-4) to Malcolm Pirnie, Inc. (Malcolm Pirnie) for Operation, Maintenance, and Monitoring at the Vestal Water Supply Site in New York State (Site # 7-04-009A). Malcolm Pirnie has prepared this Quarterly Report in accordance with the NYSDEC-approved Work Plan to summarize site activities.

2. Site Description

The Vestal Water Supply (Site 1-1) Site is located on Pumphouse Road, Vestal, Broome County, New York (Figure 2-1), along the southern bank of the Susquehanna River. Well 1-1 is located just south of the Susquehanna River and northwest of an industrial park located along Stage Road. Until 1980, Well 1-1 was the main source of water for Water District 1, which provides drinking water for several areas of the Town of Vestal. Currently, there are two other production wells, Wells 1-2A and 1-3 that function as the main source of water for Water District 1. Well 1-1A was installed in 1993 to replace Well 1-1 and is currently being used to pump and treat groundwater, which is then discharged to the Susquehanna River.

3. Operation and Maintenance

Malcolm Pirnie has maintained continuous operation of the groundwater treatment plant at the Vestal Water Supply Site. This includes the operation, maintenance, and influent/effluent sampling in accordance with the operations and maintenance (O&M) manual (Final Operation and Maintenance Manual, Long-Term Response, Operable Unit 1, Vestal Well 1-1 Site, Vestal, New York) (Tetra Tech EC, Inc., 2006) (Final O&M Manual). However, as indicated in the Work Assignment, no work was performed on the Vestal Water Supply (Site 1-1) soil vapor extraction system.

As part of managing the Vestal Water Supply Site, Malcolm Pirnie has a subcontract with Environmental Compliance, Inc. (ECI), who has unique knowledge of operating the groundwater treatment plant. ECI provides materials, labor, equipment, and supervision to maintain continuous operation of the groundwater treatment plant.

A variable frequency drive (VFD) was installed in February 2009 to provide soft-start operation for the Well 1-1A replacement well pump motor and reduced torque on the Certa-Lock® PVC drop pipe. The VFD also has the potential to provide future energy savings by allowing the well pump motor to be operated at a reduced speed. The VFD setting was maintained at 51 HZ throughout the first quarter 2011 operating period.

As discussed in the Third and Fourth Quarter 2010 Quarterly Report (Malcolm Pirnie, 2010a) the digital flow meter readings may be understated and the ECI Monthly Reports and System O&M Logs presented estimated adjusted values. The estimated adjusted flow values for July through December 2010 were calculated by adding an additional 150 gallons per minute (GPM) to the flow displayed on the digital flow meter. The adjustment value was based on the difference between the flow calculated using the manufacturer's pump performance curve, system operating pressure, and pumping level compared to the reading on the digital flow meter. Following discussions with ECI in April 2011, and to be consistent with historical reporting formats, the Monthly Reports and System O&M logs will no longer present the adjusted flow values. Therefore, the flow measurements presented in the Monthly Report and System O&M Logs are based on direct readings from the digital flow meter.

As indicated in the ECI Monthly Reports and O&M Logs, the groundwater treatment system was shut down for approximately two days in March at the request of the NYSDEC due to flooding on the Susquehanna River. There was also one interruption in February due to a power outage.

3.1. System Operation

Table 3-1 and Figure 3-1 summarize groundwater treatment system flow rates from the Monthly Reports and System O&M Logs. As shown in Table 3-1, the groundwater treatment system flow rate for Well 1-1A decreased from an average of 315 GPM in January 2011 to an average of 293 GPM in February 2011. The average flow increased to 355 GPM in March 2011. As shown in Table 3-1, approximately 40,278,000 gallons of water were treated during the first quarter 2011 operating period.

3.2. Influent – Effluent Sampling

First quarter 2011 influent and effluent groundwater samples were collected from the Well 1-1A treatment system in accordance with the Work Plan. Influent and effluent groundwater samples were sent to Test America Laboratories following chain-of-custody protocols for analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency USEPA Method 8260B. The laboratory analytical reporting forms are provided in Appendix B. The laboratory analytical data for the treatment plan samples are summarized in Tables 3-2 (influent VOCs) and Table 3-3 (effluent VOCs). Figure 3-2 presents the Well 1-1A treatment plant total influent VOC concentrations over time.

As shown in Table 3-2, influent sample concentrations of 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride are consistent with previous sampling results and exceed the corresponding NYSDEC Class GA Standards in each of the first quarter 2011 influent samples. Acetone and methylene chloride were detected January and February 2011 influent samples and/or the laboratory method blank. As indicated in Table 3.1, the estimated (based on the "J" qualifier) concentrations of acetone in the January and February 2011 samples from Well 1-1A were 3.1 ug/L and 14 ug/L, respectively. The estimated concentrations of methylene chloride in these samples were 2.5 ug/L and 3.4 ug/L, respectively. Figure 3-2 shows that the maximum total VOCs concentrations (400 ug/L) reported during the first quarter 2011 operating period was detected in the February 2011 samples. As shown in Figure 3-1, these concentrations are consistent with historical sampling results.

Table 3-3 shows that that no VOCs were detected in any of the first quarter 2011 effluent samples.

Based on influent sample concentrations and total flow volumes from the Well 1-1A treatment system, a total of approximately 109 pounds of VOCs were removed by the treatment system during the fourth quarter 2011 operating period. As mentioned in Section 3, the flow reported by the digital flow meter may be under-estimating the treatment plant capacity. Since the VOC removal mass is a function of flow, the mass removal value presented above may be conservative.

4. Groundwater Monitoring

Groundwater monitoring wells were sampled in accordance with the Work Plan during the first quarter, 2010. The results of the sampling event were submitted with the first quarter 2010 Vestal Water Supply Site Quarterly Report and Annual Groundwater Monitoring Summary. The next annual groundwater monitoring event is scheduled for the second quarter, 2011.

5. Recommendations

Recommendations for a revised flow meter, updated instrumentation and controls, replacement of the discharge pipeline, and air stripper maintenance have been presented to the NYSDEC in the PRR (Malcolm Pirnie, 2010b) and the Quarterly Report, Fourth Quarter, 2010 (Malcolm Pirnie, 2011). No additional recommendations are suggested at this time.

6. Summary

The Vestal Well 1-1A groundwater treatment operated with minor interruption during the first quarter, 2011. The treatment system was shut down for one day in February for a power outage and two days in March for flooding on the Susquehanna River. The average first quarter 2011 flow rate was approximately 320 GPM; a decrease of approximately 50 GPM from the previous quarter. Total flow through the treatment system during the first quarter 2011was approximately 40.3-million gallons. Based on monthly influent and effluent sampling, the treatment system successfully removes VOCs from groundwater extracted from the capture zone. Approximately 109 pounds of VOCs were removed by the treatment system during the first quarter, 2011 operating period.

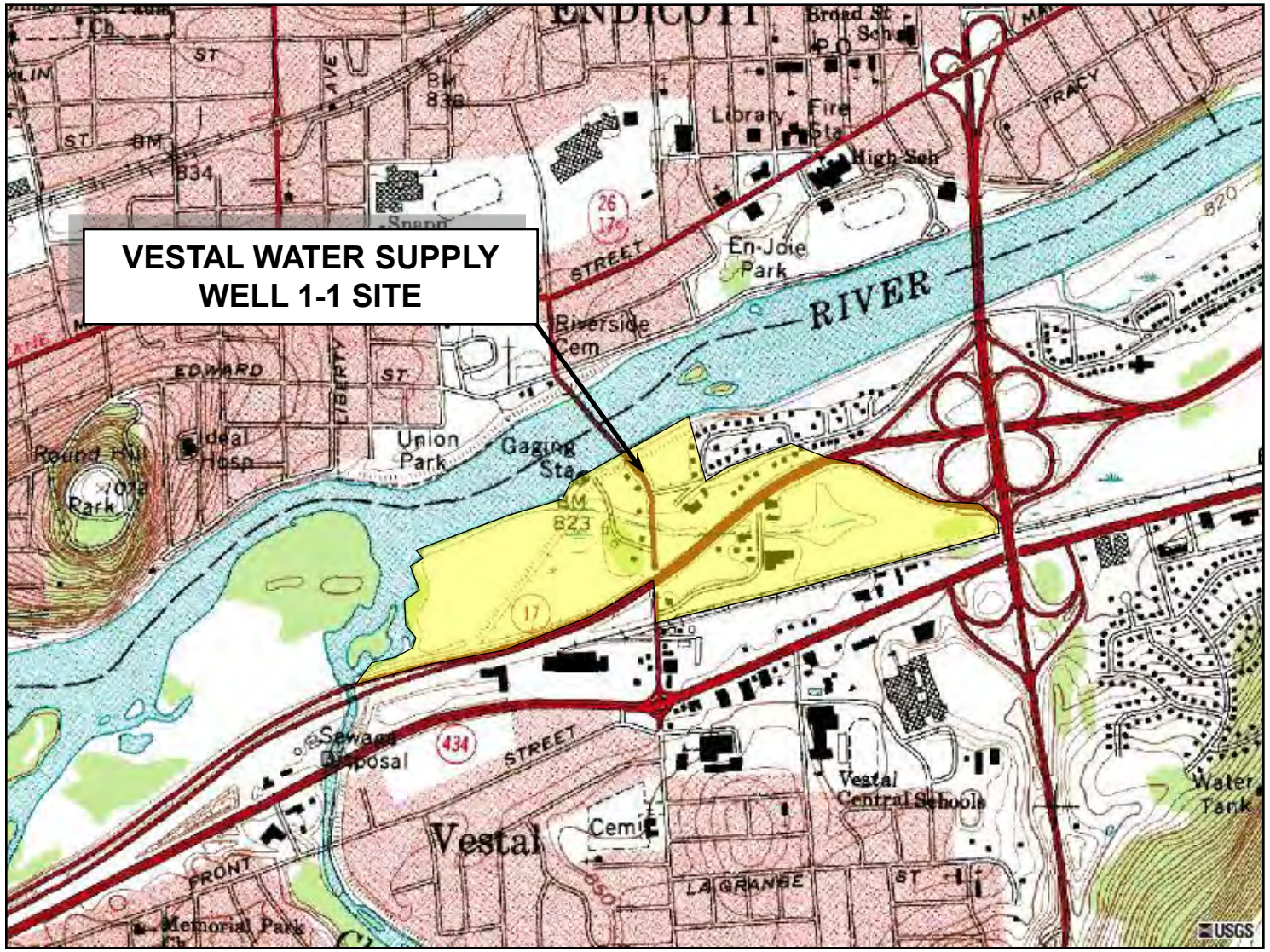
The next groundwater sampling event is scheduled to be completed during the second quarter of 2011.

7. References

Malcolm Pirnie, 2010a, Quarterly Report, Second and Third Quarters, 2010, Vestal Water Supply Site, Site Number 7-04-009A.

Malcolm Pirnie, 2010b, Periodic Review Report, Vestal Water Supply Site, Site Number 7-04-009A.

Tetra Tech EC, Inc., 2006, Final Operation and Maintenance Manual, Long-Term Response, Operable Unit 1, Vestal Well 1-1 Site, Vestal, New York.



SCALE IN FEET

0 500 1000 2000

SOURCE: U.S.G.S 7.5 MIN. ONEONTA QUAD, 1988

MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D004443-4
VESTAL WATER SUPPLY – NYSDEC SITE NO. 7-04-009A
VESTAL, NEW YORK

VESTAL WATER SUPPLY SITE 1-1 LOCATION

FIGURE 2-1

F:\PROJECT\0266352\FILE\Reports\Figure 1-1 Vestal Site Location.ppt

Figure 3-1
Well 1-1A Treatment Plant Flow
Vestal Water Supply Site
NYSDEC Site Number 7-04-009A

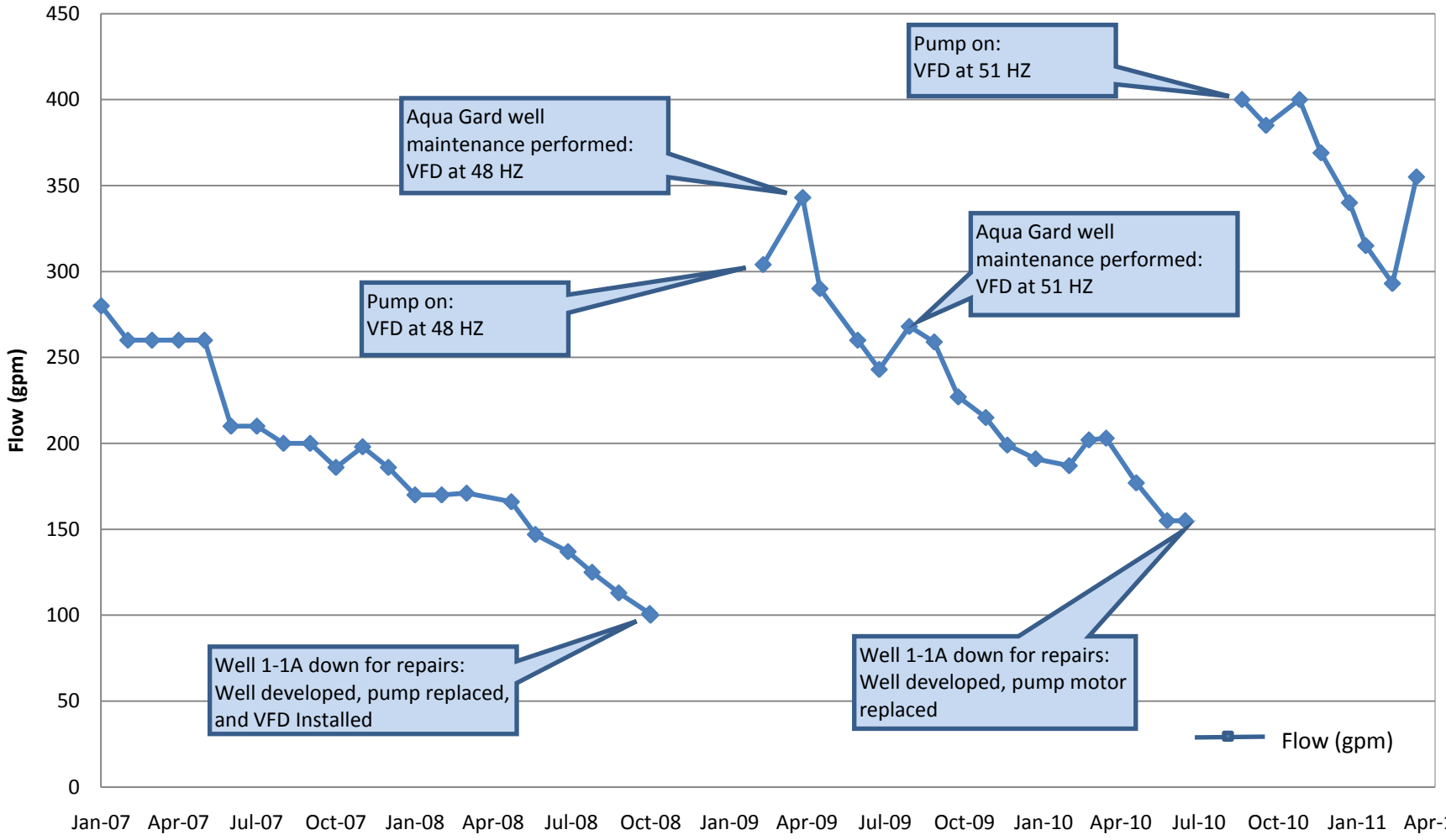


Figure 3-2
Well 1-1A Treatment Plant Total VOCs Concentrations
Vestal Water Supply Site
NYSDEC Site Number 7-04-009A

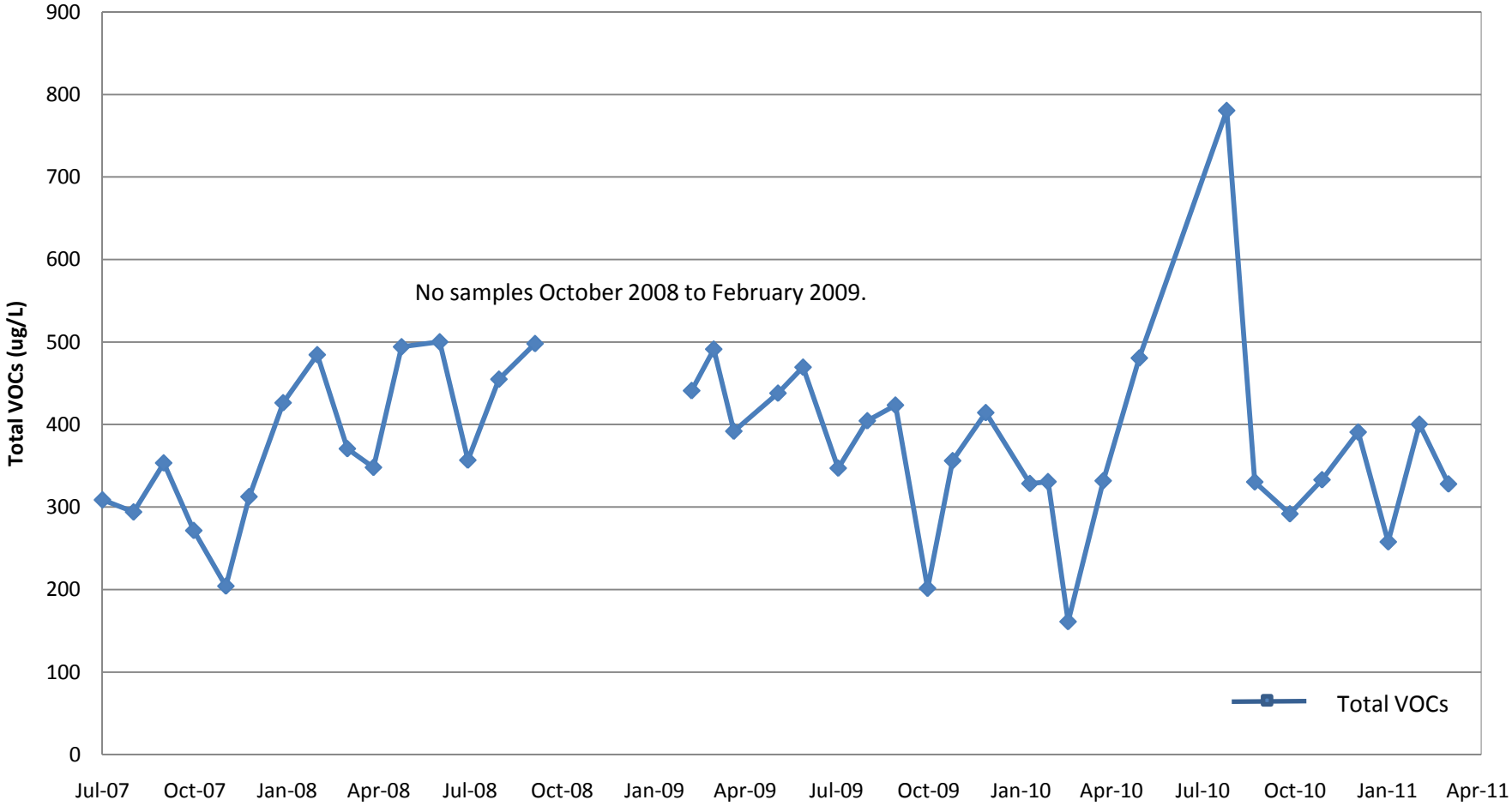


TABLE 3-1
WELL 1-1A FLOW SUMMARY
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE NO. 7-04-009A

Date	System Operation[1] (days/month)	Pumping Rate[1] (gpm)	Total Flow[2] (gallons)	Quarterly Flow (gallons)
January-07	31	280	12,499,200	
February-07	28	260	10,483,200	33,840,000
March-07	29 (3)	260	10,857,600	
April-07	30	260	11,232,000	
May-07	31	260	11,606,400	31,910,400
June-07	30	210	9,072,000	
July-07	31	210	9,374,400	
August-07	31	200	8,928,000	26,942,400
September-07	30	200	8,640,000	
October-07	31	186	8,303,040	
November-07	29	198	8,268,480	24,874,560
December-07	31	186	8,303,040	
January-08	31	170	7,588,800	
February-08	29	170	7,099,200	22,321,440
March-08	31	171	7,633,440	
April-08	30	166	7,171,200	
May-08	31	147	6,562,080	19,651,680
June-08	30	137	5,918,400	
July-08	31	125	5,580,000	
August-08	31	113	5,044,320	14,987,520
September-08	30	101	4,363,200	
October-08	6 (4)	100	864,000	
November-08	0 (4)	0	0	864,000
December-08	0 (4)	0	0	
January-09	0 (4)	0	0	
February-09	19 (4)	304	8,317,440	22,641,120
March-09	29 (3)	343	14,323,680	
April-09	30	290	12,528,000	
May-09	30 (5)	260	11,232,000	34,257,600
June-09	30	243	10,497,600	
July-09	29 (4)	268	11,191,680	
August-09	29 (5)	259	10,815,840	31,160,160
September-09	28 (5)	227	9,152,640	
October-09	31	215	9,597,600	
November-09	30 (5)	199	8,596,800	26,720,640
December-09	31	191	8,526,240	

TABLE 3-1
WELL 1-1A FLOW SUMMARY
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE NO. 7-04-009A

Date	System Operation[1] (days/month)	Pumping Rate[1] (gpm)	Total Flow[2] (gallons)	Quarterly Flow (gallons)
January-10	25 (3)	187	6,732,000	23,938,560
February-10	28	202	8,144,640	
March-10	31	203	9,061,920	
April-10	30	177	7,646,400	16,128,000
May-10	31	155	6,919,200	
June-10	7 (4)	155	1,562,400	
July-10	0 (4)	0	0	23,544,000
August-10	12 (4)	400	6,912,000	
September-10	30	385	16,632,000	
October-10	31	400	17,856,000	47,911,680
November-10	28 (5)	369	14,878,080	
December-10	31	340	15,177,600	
January-11	31	315	14,061,600	40,278,240
February-11	27 (5)	293	11,391,840	
March-11	29 (3)	355	14,824,800	
Total Flow (2007)			**117,567,360**	
Total Flow (2008)			**65,750,400**	
Total Flow (2009)			**93,790,080**	
Total Flow (2010)			**111,522,240**	
Total Flow (2011)			**40,278,240**	

Notes:
1 - From Environmental Compliance, Inc. O&M Reports and Malcolm Pirnie, Inc. field notes.
2 - Calculated assuming system operating 24-hours per day
3 - System shut down for flooding
4 - System shut down for repairs
5 - System down due to power failure
gpm - Gallons per minute

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 7/27/2007 WATER ug/L	WELL 1A-INF 8/27/2007 WATER ug/L	WELL 1A-INF 9/26/2007 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**170**	**160**	**200**
1,1,2,2-Tetrachloroethane	5	10 U	5 U	20 U
1,1,2-Trichloroethane	1	10 U	5 U	20 U
1,1-Dichloroethane	5	**20**	**19**	**23**
1,1-Dichloroethene	5	**12**	**10**	**14 J**
1,2-Dichloroethane	0.6	10 U	5 U	20 U
1,2-Dichloropropane	5	10 U	5 U	20 U
2-Hexanone		20 U	10 U	40 U
Acetone		20 U	10 U	40 U
Benzene	1	10 U	0.39 J	20 U
Bromodichloromethane	50	10 U	5 U	20 U
Bromoform		10 U	5 U	20 U
Bromomethane	5	10 U	5 U	20 U
Carbon disulfide		10 U	5 U	20 U
Carbon tetrachloride	5	10 U	5 U	20 U
Chlorobenzene	5	10 U	5 U	20 U
Chloroethane	5	10 U	5 U	20 U
Chloroform	7	10 U	5 U	20 U
Chloromethane		10 U	5 U	20 U
cis-1,2-Dichloroethene	5	**55**	**54**	**58**
cis-1,3-Dichloropropene	0.4	10 U	5 U	20 U
Dibromochloromethane	50	10 U	5 U	20 U
Ethylbenzene	5	10 U	5 U	20 U
Methyl Ethyl Ketone	50	20 U	10 U	40 U
Methyl Isobutyl Ketone		20 U	10 U	40 U
Methylene Chloride	5	10 U	5 U	20 U *
Styrene	5	10 U	5 U	20 U
Tetrachloroethene	5	1.3 J	5 U	20 U
Toluene	5	10 U	0.15 J	20 U
trans-1,2-Dichloroethene	5	10 U	5 U	20 U
trans-1,3-Dichloropropene	0.4	10 U	5 U	20 U
Trichloroethene	5	**46**	**47**	**53**
Vinyl chloride	2	**4.3 J**	**3.4 J**	**5.4 J**
Xylenes, Total	5	10 U	5 U	20 U
Total VOCs		309	294	353

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 10/26/2007 WATER ug/L	WELL 1A-INF 11/27/2007 WATER ug/L	WELL 1A-INF 12/20/2007 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**140**	**110**	**170**
1,1,2,2-Tetrachloroethane	5	5 U	10 U	20 U
1,1,2-Trichloroethane	1	5 U	10 U	20 U
1,1-Dichloroethane	5	**22**	**15**	**24**
1,1-Dichloroethene	5	**11**	**8.2 J**	**13 J**
1,2-Dichloroethane	0.6	5 U	10 U	20 U
1,2-Dichloropropane	5	5 U	10 U	20 U *
2-Hexanone		10 U	20 U	40 U
Acetone		10 U	20 U	40 UM
Benzene	1	5 U	10 U	20 U
Bromodichloromethane	50	5 U	10 U	20 U
Bromoform		5 U	10 U	20 U
Bromomethane	5	5 U	10 U	20 U
Carbon disulfide		5 U	10 U	20 U
Carbon tetrachloride	5	5 U	10 U	20 U
Chlorobenzene	5	5 U	10 U	20 U
Chloroethane	5	5 U	10 U	20 U *
Chloroform	7	5 U	10 U	20 U
Chloromethane		5 U *	10 U	20 U *
cis-1,2-Dichloroethene	5	**50**	**39**	**57**
cis-1,3-Dichloropropene	0.4	5 U	10 U	20 U
Dibromochloromethane	50	5 U	10 U	20 U
Ethylbenzene	5	5 U	10 U	20 U
Methyl Ethyl Ketone	50	10 U	20 U	40 U
Methyl Isobutyl Ketone		10 U	20 U	40 U
Methylene Chloride	5	5 U	10 U M	2.2 JMB
Styrene	5	5 U	10 U	20 U
Tetrachloroethene	5	0.97 J	10 U	20 U
Toluene	5	5 U	10 U	20 U
trans-1,2-Dichloroethene	5	5 U	10 U	20 U
trans-1,3-Dichloropropene	0.4	5 U	10 U	20 U
Trichloroethene	5	**41 B**	**29**	**37**
Vinyl chloride	2	**6.5 ***	**2.9 J**	**9.3 JM**
Xylenes, Total	5	5 U	10 U	20 U
Total VOCs		271	204	313

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 1/23/2008 WATER ug/L	WELL 1A-INF 2/26/2008 WATER ug/L	WELL 1A-INF 3/27/2008 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**230**	**250**	**180**
1,1,2,2-Tetrachloroethane	5	10 U	10 U	5 U
1,1,2-Trichloroethane	1	10 U	10 U	5 U
1,1-Dichloroethane	5	**30**	**31**	**27**
1,1-Dichloroethene	5	**18 M**	**18**	**17**
1,2-Dichloroethane	0.6	10 U	10 U	5 U
1,2-Dichloropropane	5	10 U	10 U	5 U
2-Hexanone		20 U *	20 U	10 U
Acetone		20 U *	20 U	10 U
Benzene	1	0.6 J	10 U	0.38 J
Bromodichloromethane	50	10 U	10 U	5 U
Bromoform		10 U	10 U	5 U
Bromomethane	5	10 U *	10 U	5 U
Carbon disulfide		10 U	10 U	5 U
Carbon tetrachloride	5	10 U	**35**	5 U
Chlorobenzene	5	10 U	10 U	5 U
Chloroethane	5	10 U	10 U	0.79 J
Chloroform	7	10 U	10 U	5 U
Chloromethane		10 U	10 U	5 U
cis-1,2-Dichloroethene	5	**71**	**73**	**76**
cis-1,3-Dichloropropene	0.4	10 U	10 U	5 U
Dibromochloromethane	50	10 U	10 U	5 U
Ethylbenzene	5	10 U	10 U	5 U
Methyl Ethyl Ketone	50	20 U *	20 U	10 U
Methyl Isobutyl Ketone		20 U	20 U	10 U
Methylene Chloride	5	0.94 J	10 U	5 U
Styrene	5	10 U	10 U	5 U
Tetrachloroethene	5	10 U	10 U	5 U
Toluene	5	10 U	10 U	5 U
trans-1,2-Dichloroethene	5	10 U	10 U	5 U
trans-1,3-Dichloropropene	0.4	10 U	10 U	5 U
Trichloroethene	5	**62**	**69**	**62**
Vinyl chloride	2	**11**	**8.6 J**	**7.5**
Xylenes, Total	5	2.8 J	10 U	5 U
Total VOCs		426	485	371

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 4/22/2008 WATER ug/L	WELL 1A-INF 5/20/2008 WATER ug/L	WELL 1A-INF 6/27/2008 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**180**	**300 E**	**290**
1,1,2,2-Tetrachloroethane	5	10 U	10 U	20 U
1,1,2-Trichloroethane	1	10 U	10 U	20 U
1,1-Dichloroethane	5	**26**	**27**	**28**
1,1-Dichloroethene	5	**9.7 J**	**17**	**20 J**
1,2-Dichloroethane	0.6	10 U	10 U	20 U
1,2-Dichloropropane	5	10 U	10 U	20 U
2-Hexanone		20 U	10 U	40 U
Acetone		20 U	0.5 J B	11 J B
Benzene	1	10 U	10 U	20 U
Bromodichloromethane	50	10 U	10 U	20 U
Bromoform		10 U	10 U	20 U
Bromomethane	5	10 U	10 U	20 U
Carbon disulfide		10 U	10 U	20 U
Carbon tetrachloride	5	10 U	10 U	20 U
Chlorobenzene	5	10 U	10 U	20 U
Chloroethane	5	10 U	10 U	20 U
Chloroform	7	10 U	10 U	20 U
Chloromethane		10 U	10 U	20 U
cis-1,2-Dichloroethene	5	**72**	**78**	**77**
cis-1,3-Dichloropropene	0.4	10 U	10 U	20 U
Dibromochloromethane	50	10 U	10 U	20 U
Ethylbenzene	5	10 U	10 U	20 U
Methyl Ethyl Ketone	50	20 U	10 U	40 U
Methyl Isobutyl Ketone		20 U	10 U	40 U
Methylene Chloride	5	2.2 J B	0.32 JB	3.5 J B
Styrene	5	10 U	10 U	20 U
Tetrachloroethene	5	10 U	10 U	20 U
Toluene	5	10 U	10 U	20 U
trans-1,2-Dichloroethene	5	10 U	10 U	20 U
trans-1,3-Dichloropropene	0.4	10 U	10 U	20 U
Trichloroethene	5	**54 * B**	**65**	**64**
Vinyl chloride	2	**4.1 J**	**6.4 J**	**6.7 J**
Xylenes, Total	5	10 U	10 U	20 U
Total VOCs		348	494	500

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 7/25/2008 WATER ug/L	WELL 1A-INF 8/25/2008 WATER ug/L	WELL 1A-INF 9/30/2008 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**220**	**270**	**300**
1,1,2,2-Tetrachloroethane	5	20 U	20 U	25 U
1,1,2-Trichloroethane	1	20 U	20 U	25 U *
1,1-Dichloroethane	5	**23**	**27**	**28**
1,1-Dichloroethene	5	**13 J**	**19 J**	**19 J**
1,2-Dichloroethane	0.6	20 U	20 U	25 U
1,2-Dichloropropane	5	20 U	20 U	25 U
2-Hexanone		40 U	40 U	50 U
Acetone		40 U	4.7 J	5.2 J
Benzene	1	20 U	20 U	25 U
Bromodichloromethane	50	20 U	20 U	25 U
Bromoform		20 U	20 U	25 U
Bromomethane	5	20 U	20 U	25 U
Carbon disulfide		20 U	20 U	25 U
Carbon tetrachloride	5	20 U	20 U	25 U
Chlorobenzene	5	20 U	20 U	25 U
Chloroethane	5	20 U	20 U	25 U
Chloroform	7	20 U	20 U	25 U *
Chloromethane		20 U	20 U	25 U
cis-1,2-Dichloroethene	5	**50**	**68**	**75**
cis-1,3-Dichloropropene	0.4	20 U	20 U	25 U
Dibromochloromethane	50	20 U	20 U	25 U
Ethylbenzene	5	20 U	20 U	25 U
Methyl Ethyl Ketone	50	40 U	40 U	50 U
Methyl Isobutyl Ketone		40 U	40 U	50 U
Methylene Chloride	5	20 U	20 U	25 U
Styrene	5	20 U *	20 U	25 U
Tetrachloroethene	5	20 U	20 U	25 U
Toluene	5	20 U	20 U	25 U
trans-1,2-Dichloroethene	5	20 U	20 U	25 U
trans-1,3-Dichloropropene	0.4	20 U	20 U	25 U
Trichloroethene	5	**45**	**59**	**64**
Vinyl chloride	2	**5.8 J**	**7.2 J**	**6.9 J**
Xylenes, Total	5	20 U	20 U	25 U
Total VOCs		357	455	498

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 3/5/2009 WATER ug/L	WELL 1A-INF 3/27/2009 WATER ug/L	WELL 1A-INF 4/16/2009 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**260**	**280**	**220**
1,1,2,2-Tetrachloroethane	5	25 U	2 U	10 U
1,1,2-Trichloroethane	1	25 U	2 U	10 U
1,1-Dichloroethane	5	**28**	**31**	**25**
1,1-Dichloroethene	5	**19 J**	**22 ***	**20**
1,2-Dichloroethane	0.6	25 U	2 U	10 U
1,2-Dichloropropane	5	25 U	2 U	10 U
2-Hexanone		50 U	8 U	20 U
Acetone		50 U	2.3 J *	20 U *
Benzene	1	25 U	2 U	10 U
Bromodichloromethane	50	25 U	2 U	10 U
Bromoform		25 U	2 U	10 U
Bromomethane	5	25 U	4 U	10 U
Carbon disulfide		25 U	2 U	10 U
Carbon tetrachloride	5	25 U	2 U	10 U
Chlorobenzene	5	25 U	2 U	10 U
Chloroethane	5	25 U	4 U	10 U
Chloroform	7	25 U	0.67 J B	10 U
Chloromethane		25 U	2 U	10 U
cis-1,2-Dichloroethene	5	**65**	**63**	**60**
cis-1,3-Dichloropropene	0.4	25 U	2 U	10 U
Dibromochloromethane	50	25 U	2 U	10 U
Ethylbenzene	5	25 U	2 U	10 U
Methyl Ethyl Ketone	50	50 U	8 U	20 U
Methyl Isobutyl Ketone		50 U	8 U	20 U
Methylene Chloride	5	25 U	**7.9 J B**	**2.3 J B**
Styrene	5	25 U	2 U	10 U
Tetrachloroethene	5	25 U	2 U	10 U
Toluene	5	25 U	2 U	10 U
trans-1,2-Dichloroethene	5	25 U	0.51 J	10 U
trans-1,3-Dichloropropene	0.4	25 U	2 U	10 U
Trichloroethene	5	**59**	**58**	**55**
Vinyl chloride	2	**10 J**	**14**	**9.6 J**
Xylenes, Total	5	25 U	**12**	10 U
Total VOCs		441	491	392

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 5/30/2009 WATER ug/L	WELL 1A-INF 6/24/2009 WATER ug/L	WELL 1A-INF 7/29/2009 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**250**	**270**	**190**
1,1,2,2-Tetrachloroethane	5	20 U	2 U	2 U
1,1,2-Trichloroethane	1	20 U	2 U	2 U
1,1-Dichloroethane	5	**27**	**27**	**21**
1,1-Dichloroethene	5	**24 ***	**22**	**18 ***
1,2-Dichloroethane	0.6	20 U	2 U	2 U
1,2-Dichloropropane	5	20 U	2 U	2 U
2-Hexanone		40 U	8 U	8 U
Acetone		12 J	10	13 B
Benzene	1	20 U	2 U	2 U
Bromodichloromethane	50	20 U	2 U	2 U
Bromoform		20 U	2 U	2 U
Bromomethane	5	20 U	4 U	4 U
Carbon disulfide		20 U	2 U	2 U
Carbon tetrachloride	5	20 U	2 U	2 U
Chlorobenzene	5	20 U	2 U	2 U
Chloroethane	5	20 U	4 U *	4 U *
Chloroform	7	20 U	2 U	2 U
Chloromethane		20 U	2 U *	2 U
cis-1,2-Dichloroethene	5	**53**	**55**	**49**
cis-1,3-Dichloropropene	0.4	20 U	2 U	2 U
Dibromochloromethane	50	20 U	2 U	2 U
Ethylbenzene	5	20 U	2 U	2 U
Methyl Ethyl Ketone	50	40 U	8 U	8 U
Methyl Isobutyl Ketone		40 U	8 U	8 U
Methylene Chloride	5	**11 J B**	**14**	**9.1**
Styrene	5	20 U	2 U	2 U
Tetrachloroethene	5	20 U	2 U	2 U
Toluene	5	20 U	2 U	2 U
trans-1,2-Dichloroethene	5	20 U	1.5 J	2 U *
trans-1,3-Dichloropropene	0.4	20 U	2 U	2 U
Trichloroethene	5	**50**	**59**	**47**
Vinyl chloride	2	**11 J**	**11**	2 U
Xylenes, Total	5	20 U	4 U	4 U
Total VOCs		438	470	347

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 8/27/2009 WATER ug/L	WELL 1A-INF 9/24/2009 WATER ug/L	WELL 1A-INF 10/26/2009 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**220**	**230**	**110**
1,1,2,2-Tetrachloroethane	5	2 U	10 U	10 U
1,1,2-Trichloroethane	1	2 U	10 U	10 U
1,1-Dichloroethane	5	**23**	**26**	**14**
1,1-Dichloroethene	5	**19**	**19**	**8.7 J**
1,2-Dichloroethane	0.6	2 U	10 U	10 U
1,2-Dichloropropane	5	2 U	10 U	10 U
2-Hexanone		8 U	20 U	20 U
Acetone		23	20 U	4.2 J
Benzene	1	2 U	10 U	10 U
Bromodichloromethane	50	2 U	10 U	10 U
Bromoform		2 U	10 U	10 U
Bromomethane	5	4 U	10 U	10 U
Carbon disulfide		2 U	10 U	10 U
Carbon tetrachloride	5	2 U	10 U	10 U
Chlorobenzene	5	2 U	10 U	10 U
Chloroethane	5	4 U	10 U	10 U
Chloroform	7	2 U	10 U	10 U
Chloromethane		2 U	10 U	10 U
cis-1,2-Dichloroethene	5	**51**	**70**	**31**
cis-1,3-Dichloropropene	0.4	2 U	10 U	10 U
Dibromochloromethane	50	2 U	10 U	10 U
Ethylbenzene	5	2 U	10 U	10 U
Methyl Ethyl Ketone	50	8 U	20 U	20 U
Methyl Isobutyl Ketone		8 U	20 U	20 U
Methylene Chloride	5	4.9 J B	3.9 J B	10 U
Styrene	5	2 U	10 U	10 U
Tetrachloroethene	5	2 U	10 U	10 U
Toluene	5	2 U	10 U	10 U
trans-1,2-Dichloroethene	5	2 U	10 U	10 U
trans-1,3-Dichloropropene	0.4	2 U	10 U	10 U
Trichloroethene	5	**56**	**66**	**29**
Vinyl chloride	2	**7.6**	**8.6 J**	**4.5 J**
Xylenes, Total	5	4 U	10 U	10 U
Total VOCs		405	424	201

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 11/20/2009 WATER ug/L	WELL 1A-INF 12/23/2009 WATER ug/L	WELL 1A-INF 2/5/2010 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**200**	**240**	**170**
1,1,2,2-Tetrachloroethane	5	20 U	20 U	5 U
1,1,2-Trichloroethane	1	20 U	20 U	5 U
1,1-Dichloroethane	5	**24**	**27**	**23**
1,1-Dichloroethene	5	**16 J**	**20**	**16**
1,2-Dichloroethane	0.6	20 U	20 U	5 U
1,2-Dichloropropane	5	20 U	20 U	5 U
2-Hexanone		40 U	40 U *	10 U
Acetone		40 U	5.8 J	10 U
Benzene	1	20 U	20 U	5 U
Bromodichloromethane	50	20 U	20 U	5 U
Bromoform		20 U	20 U	5 U
Bromomethane	5	20 U	20 U	5 U
Carbon disulfide		20 U	20 U	5 U
Carbon tetrachloride	5	20 U	20 U	5 U
Chlorobenzene	5	20 U	20 U	5 U
Chloroethane	5	20 U	20 U	5 U
Chloroform	7	20 U	20 U	5 U
Chloromethane		20 U	20 U	5 U
cis-1,2-Dichloroethene	5	**54**	**55**	**56**
cis-1,3-Dichloropropene	0.4	20 U	20 U	5 U
Dibromochloromethane	50	20 U	20 U	5 U
Ethylbenzene	5	20 U	20 U	5 U
Methyl Ethyl Ketone	50	40 U	40 U	10 U
Methyl Isobutyl Ketone		40 U	40 U	10 U
Methylene Chloride	5	20 U	20 U	5 U
Styrene	5	20 U	20 U	5 U
Tetrachloroethene	5	20 U	20 U	5 U
Toluene	5	20 U	20 U	5 U
trans-1,2-Dichloroethene	5	20 U	20 U	5 U
trans-1,3-Dichloropropene	0.4	20 U	20 U	5 U
Trichloroethene	5	**53**	**58**	**56**
Vinyl chloride	2	**9.1 J**	**8.6 J**	**7.4**
Xylenes, Total	5	20 U	20 U	5 U
Total VOCs		356	414	328

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 2/23/2010 WATER ug/L	WELL 1A-INF 3/15/2010 WATER ug/L	WELL 1A-INF 4/19/2010 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**170**	**91**	**180**
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	**22**	**14**	**22**
1,1-Dichloroethene	5	**17**	**7.5**	**16**
1,2-Dichloroethane	0.6	5 U	5 U *	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U *	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	**57**	**22**	**53**
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	**58**	**23**	**52**
Vinyl chloride	2	**6.7**	**3.5 J**	**8.8**
Xylenes, Total	5	5 U	5 U	5 U
Total VOCs		331	161	332

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 5/25/2010 WATER ug/L	WELL 1A-INF 8/20/2010 WATER ug/L	WELL 1A-INF 9/17/2010 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**270**	**420**	**180**
1,1,2,2-Tetrachloroethane	5	10 U	20 U	5 U
1,1,2-Trichloroethane	1	10 U	20 U	5 U
1,1-Dichloroethane	5	**30**	**48**	**23**
1,1-Dichloroethene	5	**21**	**34**	**15**
1,2-Dichloroethane	0.6	10 U	20 U	5 U
1,2-Dichloropropane	5	10 U	20 U	5 U
2-Hexanone		20 U	40 U	10 U
Acetone		20 U	40 U	10 U
Benzene	1	10 U	20 U	5 U
Bromodichloromethane	50	10 U	20 U	5 U
Bromoform		10 U	20 U	5 U
Bromomethane	5	10 U	20 U	5 U
Carbon disulfide		10 U	20 U	5 U
Carbon tetrachloride	5	10 U	20 U	5 U
Chlorobenzene	5	10 U	20 U	5 U
Chloroethane	5	10 U	20 U	5 U
Chloroform	7	10 U	20 U	5 U
Chloromethane		10 U	20 U	5 U *
cis-1,2-Dichloroethene	5	**75**	**140**	**52**
cis-1,3-Dichloropropene	0.4	10 U	20 U	5 U
Dibromochloromethane	50	10 U	20 U	5 U
Ethylbenzene	5	10 U	20 U	5 U
Methyl Ethyl Ketone	50	20 U	40 U	10 U
Methyl Isobutyl Ketone		20 U	40 U *	10 U
Methylene Chloride	5	1.6 J B	4.7 J B	5 U
Styrene	5	10 U	20 U	5 U
Tetrachloroethene	5	10 U	20 U	5 U
Toluene	5	10 U	20 U	5 U
trans-1,2-Dichloroethene	5	10 U	20 U	5 U
trans-1,3-Dichloropropene	0.4	10 U	20 U	5 U
Trichloroethene	5	**71**	**120**	**51**
Vinyl chloride	2	**12**	**14 J**	**9.4**
Xylenes, Total	5	10 U	20 U	5 U
Total VOCs		481	781	330

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 10/22/2010 WATER ug/L	WELL 1A-INF 11/23/2010 WATER ug/L	WELL 1A-INF 12/29/2010 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**150**	**180**	**220**
1,1,2,2-Tetrachloroethane	5	5 U	10 U	20 U
1,1,2-Trichloroethane	1	5 U	10 U	20 U
1,1-Dichloroethane	5	**18**	**23**	**28**
1,1-Dichloroethene	5	**15**	**14**	**19 J**
1,2-Dichloroethane	0.6	5 U	10 U	20 U
1,2-Dichloropropane	5	5 U	10 U	20 U
2-Hexanone		10 U	20 U	40 U
Acetone		10 U	2.6 J	40 U
Benzene	1	5 U	10 U	20 U
Bromodichloromethane	50	5 U	10 U	20 U
Bromoform		5 U	10 U	20 U
Bromomethane	5	5 U	10 U	20 U
Carbon disulfide		5 U	10 U	20 U
Carbon tetrachloride	5	5 U	10 U	20 U
Chlorobenzene	5	5 U	10 U	20 U
Chloroethane	5	5 U	10 U	20 U
Chloroform	7	5 U	10 U	20 U
Chloromethane		5 U *	10 U	20 U
cis-1,2-Dichloroethene	5	**47**	**48**	**57**
cis-1,3-Dichloropropene	0.4	5 U	10 U	20 U
Dibromochloromethane	50	5 U	10 U	20 U
Ethylbenzene	5	5 U	10 U	20 U
Methyl Ethyl Ketone	50	10 U	20 U	40 U
Methyl Isobutyl Ketone		10 U	20 U	40 U
Methylene Chloride	5	5 U	10 U	20 U
Styrene	5	5 U	10 U	20 U
Tetrachloroethene	5	5 U	10 U	20 U
Toluene	5	5 U	10 U	20 U
trans-1,2-Dichloroethene	5	5 U	10 U	20 U
trans-1,3-Dichloropropene	0.4	5 U	10 U	20 U
Trichloroethene	5	**47**	**49**	**58**
Vinyl chloride	2	**9.7**	**9 J**	**8.8 J**
Xylenes, Total	5	5 U	10 U	20 U
Total VOCs		292	333	391

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-2
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-INF 1/28/2011 WATER ug/L	WELL 1A-INF 2/28/2011 WATER ug/L	WELL 1A-INF 3/29/2011 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**140**	**220**	**170**
1,1,2,2-Tetrachloroethane	5	10	20 U	5 U
1,1,2-Trichloroethane	1	10	20 U	5 U
1,1-Dichloroethane	5	**19**	**27**	**25**
1,1-Dichloroethene	5	**13**	**22**	**18**
1,2-Dichloroethane	0.6	10 U	20 U	5 U
1,2-Dichloropropane	5	10 U	20 U	5 U
2-Hexanone		20 U	40 U	10 U
Acetone		3.1 J	14 J B	10 U
Benzene	1	10 U	20 U	5 U
Bromodichloromethane	50	10 U	20 U	5 U
Bromoform		10 U	20 U	5 U
Bromomethane	5	10 U	20 U	5 U*
Carbon disulfide		10 U	20 U	5 U
Carbon tetrachloride	5	10 U	20 U	5 U
Chlorobenzene	5	10 U	20 U	5 U
Chloroethane	5	10 U	20 U	5 U
Chloroform	7	10 U	20 U	5 U
Chloromethane		10 U	20 U	5 U
cis-1,2-Dichloroethene	5	**39**	**63**	**53**
cis-1,3-Dichloropropene	0.4	10 U	20 U	5 U
Dibromochloromethane	50	10 U	20 U	5 U
Ethylbenzene	5	10 U	20 U	5 U
Methyl Ethyl Ketone	50	20 U	40 U	10 U
Methyl Isobutyl Ketone		20 U	40 U	10 U
Methylene Chloride	5	2.5 J B	3.4 J B	5 U
Styrene	5	10 U	20 U	5 U
Tetrachloroethene	5	10 U	20 U	5 U
Toluene	5	10 U	20 U	5 U
trans-1,2-Dichloroethene	5	10 U	20 U	5 U
trans-1,3-Dichloropropene	0.4	10 U	20 U	5 U
Trichloroethene	5	**40**	**62**	**53**
Vinyl chloride	2	**6.7 J**	**6.4 J**	**8.9**
Xylenes, Total	5	10 U	20 U	5 U
Total VOCs		258	400	328

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

E - Concentration exceeds instrument calibration range.

* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 7/27/2007 WATER ug/L	WELL 1A-EFF 8/27/2007 WATER ug/L	WELL 1A-EFF 9/26/2007 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	5 U *
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 10/26/2007 WATER ug/L	WELL 1A-EFF 11/27/2007 WATER ug/L	WELL 1A-EFF 12/20/2007 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 UM
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U *	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	0.38 JB
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U
Vinyl chloride	2	5 U *	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 1/23/2008 WATER ug/L	WELL 1A-EFF 2/26/2008 WATER ug/L	WELL 1A-EFF 3/27/2008 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U *	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U *	5 U	5 U
Carbon disulfide		5 U *	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	1.2 JB
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 4/22/2008 WATER ug/L	WELL 1A-EFF 5/20/2008 WATER ug/L	WELL 1A-EFF 6/27/2008 WATER ug/L
1,1,1-Trichloroethane	5	5 U	10 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	10 U	5 U
1,1,2-Trichloroethane	1	5 U	10 U	5 U
1,1-Dichloroethane	5	5 U	10 U	5 U
1,1-Dichloroethene	5	5 U	10 U	5 U *
1,2-Dichloroethane	0.6	5 U	10 U	5 U
1,2-Dichloropropane	5	5 U	10 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		1.8 J	1.2 J B	10 U
Benzene	1	5 U	10 U	5 U
Bromodichloromethane	50	5 U	10 U	5 U
Bromoform		5 U	10 U	5 U
Bromomethane	5	5 U	10 U	5 U
Carbon disulfide		5 U	10 U	5 U *
Carbon tetrachloride	5	5 U	10 U	5 U
Chlorobenzene	5	5 U	10 U	5 U
Chloroethane	5	5 U	10 U	5 U *
Chloroform	7	5 U	10 U	5 U
Chloromethane		5 U	10 U	5 U
cis-1,2-Dichloroethene	5	5 U	0.3 J	5 U
cis-1,3-Dichloropropene	0.4	5 U	10 U	5 U
Dibromochloromethane	50	5 U	10 U	5 U
Ethylbenzene	5	5 U	10 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	0.34 J B	5 U
Styrene	5	5 U	10 U	5 U
Tetrachloroethene	5	5 U	10 U	5 U
Toluene	5	5 U	10 U	5 U
trans-1,2-Dichloroethene	5	5 U	10 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	10 U	5 U
Trichloroethene	5	1.1 J*B	10 U	5 U
Vinyl chloride	2	5 U	10 U	5 U
Xylenes, Total	5	5 U	10 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 7/25/2008 WATER ug/L	WELL 1A-EFF 8/25/2008 WATER ug/L	WELL 1A-EFF 9/30/2008 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U *
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		1 J B	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U *
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 3/5/2009 WATER ug/L	WELL 1A-EFF 3/27/2009 WATER ug/L	WELL 1A-EFF 4/16/2009 WATER ug/L
1,1,1-Trichloroethane	5	1.5 J	0.5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	0.5 U	5 U
1,1,2-Trichloroethane	1	5 U	0.5 U	5 U
1,1-Dichloroethane	5	5 U	0.27 J	5 U
1,1-Dichloroethene	5	5 U	0.16 J *	5 U
1,2-Dichloroethane	0.6	5 U	0.5 U	5 U
1,2-Dichloropropane	5	5 U	0.5 U	5 U
2-Hexanone		10 U	2 U	10 U
Acetone		1.1 J	2 U *	10 U *
Benzene	1	5 U	0.5 U	5 U
Bromodichloromethane	50	5 U	0.5 U	5 U
Bromoform		5 U	0.5 U	5 U
Bromomethane	5	5 U	1 U	5 U
Carbon disulfide		5 U	0.5 U	5 U
Carbon tetrachloride	5	5 U	0.5 U	5 U
Chlorobenzene	5	5 U	0.5 U	5 U
Chloroethane	5	5 U	1 U	5 U
Chloroform	7	5 U	0.5 U	5 U
Chloromethane		5 U	0.5 U	5 U
cis-1,2-Dichloroethene	5	5 U	0.82	5 U
cis-1,3-Dichloropropene	0.4	5 U	0.5 U	5 U
Dibromochloromethane	50	5 U	0.5 U	5 U
Ethylbenzene	5	5 U	0.5 U	5 U
Methyl Ethyl Ketone	50	10 U	2 U	10 U
Methyl Isobutyl Ketone		10 U	2 U	10 U
Methylene Chloride	5	5 U	2 U	5 U
Styrene	5	5 U	0.5 U	5 U
Tetrachloroethene	5	5 U	0.5 U	5 U
Toluene	5	5 U	0.33 J	5 U
trans-1,2-Dichloroethene	5	5 U	0.5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	0.5 U	5 U
Trichloroethene	5	5 U	0.5 J	5 U
Vinyl chloride	2	5 U	0.5 U	5 U
Xylenes, Total	5	5 U	3.4	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 5/30/2009 WATER ug/L	WELL 1A-EFF 6/24/2009 WATER ug/L	WELL 1A-EFF 7/29/2009 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	0.96
1,1,2,2-Tetrachloroethane	5	5 U	5 U	0.5 U
1,1,2-Trichloroethane	1	5 U	5 U	0.5 U
1,1-Dichloroethane	5	5 U	5 U	0.5 U
1,1-Dichloroethene	5	5 U *	5 U *	0.5 U *
1,2-Dichloroethane	0.6	5 U	5 U	0.5 U
1,2-Dichloropropane	5	5 U	5 U	0.5 U
2-Hexanone		10 U	10 U *	2 U
Acetone		10 U	10 U	1.8 J B
Benzene	1	5 U	5 U	0.5 U
Bromodichloromethane	50	5 U	5 U	0.5 U
Bromoform		5 U	5 U	0.5 U
Bromomethane	5	5 U	5 U	1 U
Carbon disulfide		5 U	5 U	0.5 U
Carbon tetrachloride	5	5 U	5 U	0.5 U
Chlorobenzene	5	5 U	5 U	0.5 U
Chloroethane	5	5 U	5 U	1 U *
Chloroform	7	5 U	5 U	0.5 U
Chloromethane		5 U	5 U *	0.5 U
cis-1,2-Dichloroethene	5	5 U	5 U	0.45 J
cis-1,3-Dichloropropene	0.4	5 U	5 U	0.5 U
Dibromochloromethane	50	5 U	5 U	0.5 U
Ethylbenzene	5	5 U	5 U	0.5 U
Methyl Ethyl Ketone	50	10 U	10 U	2 U
Methyl Isobutyl Ketone		10 U	10 U	2 U
Methylene Chloride	5	5 U	5 U	2 U
Styrene	5	5 U	5 U	0.5 U
Tetrachloroethene	5	5 U	5 U	0.5 U
Toluene	5	5 U	5 U	0.5 U
trans-1,2-Dichloroethene	5	5 U	5 U *	0.5 U *
trans-1,3-Dichloropropene	0.4	5 U	5 U	0.5 U
Trichloroethene	5	5 U	5 U	0.37 J
Vinyl chloride	2	5 U	5 U	0.5 U
Xylenes, Total	5	5 U	5 U	1 U

Notes

U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

B - Analyte found in associated blank as well as the sample.

* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 8/27/2009 WATER ug/L	WELL 1A-EFF 9/24/2009 WATER ug/L	WELL 1A-EFF 10/26/2009 WATER ug/L
1,1,1-Trichloroethane	5	0.5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	0.5 U	5 U	5 U
1,1,2-Trichloroethane	1	0.5 U	5 U	5 U
1,1-Dichloroethane	5	0.5 U	5 U	5 U
1,1-Dichloroethene	5	0.5 U	5 U	5 U
1,2-Dichloroethane	0.6	0.5 U	5 U	5 U
1,2-Dichloropropane	5	0.5 U	5 U	5 U
2-Hexanone		2 U	10 U	10 U
Acetone		2 U	10 U	10 U
Benzene	1	0.5 U	5 U	5 U
Bromodichloromethane	50	0.5 U	5 U	5 U
Bromoform		0.5 U	5 U	5 U
Bromomethane	5	1 U	5 U	5 U
Carbon disulfide		0.5 U	5 U	5 U
Carbon tetrachloride	5	0.5 U	5 U	5 U
Chlorobenzene	5	0.5 U	5 U	5 U
Chloroethane	5	1 U	5 U	5 U
Chloroform	7	0.5 U	5 U	5 U
Chloromethane		0.5 U	5 U	5 U
cis-1,2-Dichloroethene	5	0.46 J	5 U	5 U
cis-1,3-Dichloropropene	0.4	0.5 U	5 U	5 U
Dibromochloromethane	50	0.5 U	5 U	5 U
Ethylbenzene	5	0.5 U	5 U	5 U
Methyl Ethyl Ketone	50	2 U	10 U	10 U
Methyl Isobutyl Ketone		2 U	10 U	10 U
Methylene Chloride	5	2 U	5 U	5 U
Styrene	5	0.5 U	5 U	5 U
Tetrachloroethene	5	0.5 U	5 U	5 U
Toluene	5	0.5 U	5 U	5 U
trans-1,2-Dichloroethene	5	0.5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	0.5 U	5 U	5 U
Trichloroethene	5	0.29 J	5 U	5 U
Vinyl chloride	2	0.5 U	5 U	5 U
Xylenes, Total	5	1 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 11/20/2009 WATER ug/L	WELL 1A-EFF 12/23/2009 WATER ug/L	WELL 1A-EFF 2/5/2010 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U *	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U *	10 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 2/23/2010 WATER ug/L	WELL 1A-EFF 3/15/2010 WATER ug/L	WELL 1A-EFF 4/19/2010 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U *	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U *	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 5/25/2010 WATER ug/L	WELL 1A-EFF 8/20/2010 WATER ug/L	WELL 1A-EFF 9/17/2010 WATER ug/L
1,1,1-Trichloroethane	5	5 U	2.1 J	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U *
cis-1,2-Dichloroethene	5	5 U	2 J	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U *	10 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	0.67 J	5 U
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 10/22/2010 WATER ug/L	WELL 1A-EFF 11/23/2010 WATER ug/L	WELL 1A-EFF 12/29/2010 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	3 J
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U *	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	2.3 J
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	1.4 J
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

TABLE 3-3
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

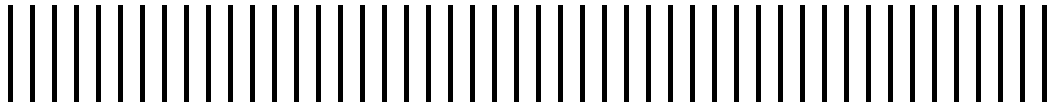
Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	WELL 1A-EFF 1/28/2011 WATER ug/L	WELL 1A-EFF 2/28/2011 WATER ug/L	WELL 1A-EFF 3/29/2011 WATER ug/L
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U
2-Hexanone		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U
Methyl Isobutyl Ketone		10 U	10 U	10 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manual integrated compound.
B - Analyte found in associated blank as well as the sample.
* - MS or MSD exceeded control limits.

New York State Department of Environmental Conservation
Vestal Water Supply Site Quarterly Report

Appendix A

Monthly Reports and System Operation and Maintenance Logs



0266352 / ALB

MALCOLM PIRNIE

ENVIRONMENTAL COMPLIANCE, INC.
101 Mount Bethel Rd.
Warren, New Jersey 07059
908-754-1700
908-754-1866 (fax)
http://www.eci-nj.com
j.jimenez@eci-nj.com (email)

Vestal Well 1-1 Monthly Report
January 2011

SECTION I – SUMMARY OF ACTIVITIES

System operated entire month without interruption. Pumping rate ranged between 321 GPM to 310 GPM at end of month. Site checked more frequently than usual because of very cold weather and frequent snow storms. Heat tape and heaters working well.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Checked and adjusted belts
- Lubricated equipment, as needed
- Routine inspection of site
- Cleaned up grounds
- Removed Snow

SECTION III – REPAIR WORK COMPLETED

- None

SECTION IV – REPAIR WORK NEEDED

- None

SECTION V – RECOMMENDATIONS

- None

ENVIRONMENTAL COMPLIANCE, INC.
101 Mount Bethel Rd.
Warren, New Jersey 07059
908-754-1700
908-754-1866 (fax)
http://www.eci-nj.com
j.jimenez@eci-nj.com (email)

Vestal Well 1-1 Monthly Report
February 2011

SECTION I – SUMMARY OF ACTIVITIES

System operated continuously except for one interruption on February 22 due to a power outage. Actual flow meter recordings ranged between 290 and 297 at end of month. Site checked more frequently than usual because of very cold weather and frequent snow storms. Heat tape and heaters working well.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Checked and replaced belts
- Lubricated equipment, as needed
- Routine inspection of site
- Cleaned up grounds
- Removed Snow

SECTION III – REPAIR WORK COMPLETED

- None

SECTION IV – REPAIR WORK NEEDED

- None

SECTION V – RECOMMENDATIONS

- None

ENVIRONMENTAL COMPLIANCE, INC.
101 Mount Bethel Rd.
Warren, New Jersey 07059
908-754-1700
908-754-1866 (fax)
http://www.eci-nj.com
j.jimenez@eci-nj.com (email)

Vestal Well 1-1 Monthly Report
March 2011

SECTION I – SUMMARY OF ACTIVITIES

System operated continuously except for 2 days when the system was turned off at request of NYSDEC due to river flooding. Actual flow meter recordings ranged between 350 and 363 over the course of the month. Site checked more frequently than usual because of very cold weather and frequent snow storms.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Checked and adjusted belts
- Lubricated equipment, as needed
- Routine inspection of site
- Cleaned up grounds
- Removed Snow

SECTION III – REPAIR WORK COMPLETED

- None

SECTION IV – REPAIR WORK NEEDED

- None

SECTION V – RECOMMENDATIONS

- None

ENVIRONMENTAL COMPLIANCE, INC.							VESTAL WELL 1-1 MONTHLY O & M LOG													January 2011										
DAY	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**
TIME																															
WELL HOUSE	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
PRE LUBE LINE																															
PUMP MOTOR OIL																															
CHEMICAL BUILDING																															
SUMP PUMP	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
DISCHARGE VALVES	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
FLOW METER (GPM)*							321					316						313								310					
CHLORINE ROOM																															
GENERAL CONDITION	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
TOWER PACKING INSP.	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
MAIN PUMPHOUSE																															
BLOWER AND MOTOR	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
BLOWER AIR FILTERS	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
ALARM / CONTROL PANEL																															
CLEARWELL LEVEL																															
OTHER*																															
GROUNDS	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X
INGROUND TANK LEVEL	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X

***Unadjusted Flow Meter Reading**

ENVIRONMENTAL COMPLIANCE, INC.					VESTAL WELL 1-1 MONTHLY O & M LOG																February 2011											
DAY	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**			
TIME																															
WELL HOUSE	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
PRE LUBE LINE																															
PUMP MOTOR OIL																															
CHEMICAL BUILDING																															
SUMP PUMP	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
DISCHARGE VALVES	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
FLOW METER (GPM)*					290							290							295							297					
CHLORINE ROOM																															
GENERAL CONDITION	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
TOWER PACKING INSP.	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
MAIN PUMPHOUSE																															
BLOWER AND MOTOR	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
BLOWER AIR FILTERS	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
ALARM / CONTROL PANEL	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
CLEARWELL LEVEL																															
OTHER*																															
GROUNDS	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			
INGROUND TANK LEVEL	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X			

***Unadjusted Flow Meter Reading**

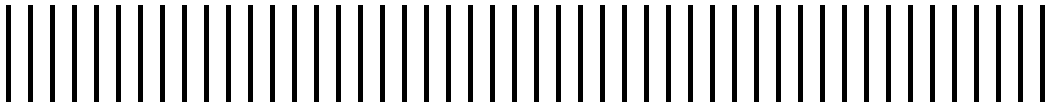
ENVIRONMENTAL COMPLIANCE, INC.					VESTAL WELL 1-1 MONTHLY O & M LOG														March 2011											
DAY	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**
TIME																															
WELL HOUSE	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
PRE LUBE LINE																															
PUMP MOTOR OIL																															
CHEMICAL BUILDING																															
SUMP PUMP	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
DISCHARGE VALVES	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
FLOW METER (GPM)*					350							356							350							363					
CHLORINE ROOM																															
GENERAL CONDITION	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
TOWER PACKING INSP.	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
MAIN PUMPHOUSE																															
BLOWER AND MOTOR	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
BLOWER AIR FILTERS	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
ALARM / CONTROL PANEL	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
CLEARWELL LEVEL																															
OTHER*																															
GROUNDS	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X
INGROUND TANK LEVEL	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X

***Unadjusted Meter Reading**

New York State Department of Environmental Conservation
Vestal Water Supply Site Quarterly Report

Appendix B

Analytical Reporting Forms



0266352 / ALB

MALCOLM PIRNIE

ANALYTICAL REPORT

Job Number: 220-14659-1

Job Description: NYSDEC Standby - Vestal Water Supply

For:
Malcolm Pirnie, Inc.
855 Route 146
Suite 210
Clifton Park, NY 12065

Attention: Mr. Jeremy Wyckoff

Approved for release.
Joan Widomski
Project Mgmt. Assistant
2/7/2011 2:26 PM

Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
02/07/2011

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

Job Number: 220-14659-1

Job Description: NYSDEC Standby - Vestal Water Supply

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Joan Widomski
Project Mgmt. Assistant
2/7/2011 2:26 PM

Designee for
Johanna Dubauskas

Table of Contents

Table of Contents

Comments
No additional comments.

Receipt
The following field QC sample was received at the laboratory without a sample collection time documented on the chain of custody: TRIP BLANK (220-14659-3). As a result, a sample collection time of 12:00am, on the date of collection, has been used.

All other samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

(Ax)(IS)(DF)
(AIS)(RRF)(V)(% solids) = C

(AX)(IS)(VT)(1000)(DF)
(AIS)(RRF)(VA)(V)(% solids) = C (for medium level soils)

SemiVolatiles

(AX)(IS)(VE)(DF)(GPC factor is 2 if needed)
(AIS)(RRF)(volume injected)(V)(% solids) = C

Pesticides

(AX)(VE)(DF)
(RRF)(V)(% solids)(volume injected) = C

PCBs for compound/retention time

(AX)(VE)(DF)
(RRF of compound at the stated retention time)(V)(% solids)(volume injected) = C

DRO/CTETPH

(AX)(VE)(DF)
(RRF)(V)(% solids)(volume injected) = C

AX = area of the target Ion
AIS = Area of Internal standard
C = concentration as ug/L or ug/Kg
DF = dilution
IS = Internal standard concentration (ng)
RRF = average RF (from initial cal except CLP methods from continuing cal)
V = sample volume for liquids in mls or sample weight for solids in grams
VA = volume of aliquot for medium level soils
VE = volume of concentrated extract
VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-14659-1	WELL 1-1A INF	Water	01/28/2011 1400	01/29/2011 1005
220-14659-2	WELL 1-1A EFF	Water	01/28/2011 1405	01/29/2011 1005
220-14659-3TB	TRIP BLANK	Water	01/28/2011 0000	01/29/2011 1005

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-14659-1	**WELL 1-1A INF**					
Acetone		3.1	J	20	ug/L	8260B
1,1-Dichloroethane		19		10	ug/L	8260B
1,1-Dichloroethene		13		10	ug/L	8260B
Methylene Chloride		2.5	J B	10	ug/L	8260B
1,1,1-Trichloroethane		140		10	ug/L	8260B
Trichloroethene		40		10	ug/L	8260B
Vinyl chloride		6.7	J	10	ug/L	8260B
cis-1,2-Dichloroethene		39		10	ug/L	8260B
220-14659-3TB	**TRIP BLANK**					
Methylene Chloride		1.2	J B	5.0	ug/L	8260B

METHOD SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
Purge and Trap	TAL CT		SW846 5030B

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-14659-1 Date Sampled: 01/28/2011 1400
Client Matrix: Water Date Received: 01/29/2011 1005

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 220-47660 Instrument ID: MSW
Preparation: 5030B Lab File ID: W9045.D
Dilution: 2.0 Initial Weight/Volume: 5 mL
Date Analyzed: 02/03/2011 1557 Final Weight/Volume: 5 mL
Date Prepared: 02/03/2011 1557

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	3.1	J	2.1	20
Benzene	10	U	1.5	10
Bromodichloromethane	10	U	0.96	10
Bromoform	10	U	0.92	10
Bromomethane	10	U	4.2	10
Methyl Ethyl Ketone	20	U	2.2	20
Carbon disulfide	10	U	1.8	10
Carbon tetrachloride	10	U	2.1	10
Chlorobenzene	10	U	1.4	10
Chloroethane	10	U	2.1	10
Chloroform	10	U	1.3	10
Chloromethane	10	U	2.2	10
Dibromochloromethane	10	U	1.1	10
1,1-Dichloroethane	19		2.1	10
1,2-Dichloroethane	10	U	1.4	10
1,1-Dichloroethene	13		1.7	10
1,2-Dichloropropane	10	U	1.4	10
cis-1,3-Dichloropropene	10	U	0.56	10
trans-1,3-Dichloropropene	10	U	1.1	10
Ethylbenzene	10	U	1.7	10
2-Hexanone	20	U	2.2	20
Methylene Chloride	2.5	J B	1.6	10
methyl isobutyl ketone	20	U	0.76	20
Styrene	10	U	1.3	10
1,1,2,2-Tetrachloroethane	10	U	1.6	10
Tetrachloroethene	10	U	1.6	10
Toluene	10	U	1.4	10
1,1,1-Trichloroethane	140		1.4	10
1,1,2-Trichloroethane	10	U	1.3	10
Trichloroethene	40		1.2	10
Vinyl chloride	6.7	J	2.0	10
Xylenes, Total	10	U	4.5	10
cis-1,2-Dichloroethene	39		2.0	10
trans-1,2-Dichloroethene	10	U	1.5	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		65 - 136
4-Bromofluorobenzene	91		51 - 142
Dibromofluoromethane	92		68 - 132
Toluene-d8 (Surr)	93		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Client Sample ID: WELL 1-1A EFF

Lab Sample ID: 220-14659-2 Date Sampled: 01/28/2011 1405
Client Matrix: Water Date Received: 01/29/2011 1005

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 220-47647 Instrument ID: MSW
Preparation: 5030B Lab File ID: W9016.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Date Analyzed: 02/01/2011 1922 Final Weight/Volume: 5 mL
Date Prepared: 02/01/2011 1922

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0	U	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		65 - 136
4-Bromofluorobenzene	90		51 - 142
Dibromofluoromethane	91		68 - 132
Toluene-d8 (Surr)	95		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-14659-3TB Date Sampled: 01/28/2011 0000
Client Matrix: Water Date Received: 01/29/2011 1005

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 220-47647 Instrument ID: MSW
Preparation: 5030B Lab File ID: W9002.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Date Analyzed: 02/01/2011 1338 Final Weight/Volume: 5 mL
Date Prepared: 02/01/2011 1338

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	1.2	J B	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		65 - 136
4-Bromofluorobenzene	91		51 - 142
Dibromofluoromethane	91		68 - 132
Toluene-d8 (Surr)	94		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
220-14659-1	WELL 1-1A INF	92	93	93	91
220-14659-2	WELL 1-1A EFF	91	93	95	90
220-14659-3	TRIP BLANK	91	91	94	91
MB 220-47647/3		92	90	96	91
MB 220-47660/3		90	91	96	96
LCS 220-47647/2		94	93	95	90
LCS 220-47660/2		95	96	98	93

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	68-132
DCA = 1,2-Dichloroethane-d4 (Surr)	65-136
TOL = Toluene-d8 (Surr)	63-127
BFB = 4-Bromofluorobenzene	51-142

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Method Blank - Batch: 220-47647

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 220-47647/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/01/2011 1045
Date Prepared: 02/01/2011 1045

Analysis Batch: 220-47647
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W8995.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	1.79	J	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90	65 - 136
4-Bromofluorobenzene	91	51 - 142
Dibromofluoromethane	92	68 - 132
Toluene-d8 (Surr)	96	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Lab Control Sample - Batch: 220-47647

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 220-47647/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/01/2011 0907
Date Prepared: 02/01/2011 0907

Analysis Batch: 220-47647
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W8991.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	5.70	57	41 - 150	J
Benzene	10.0	9.69	97	66 - 131	
Bromodichloromethane	10.0	9.31	93	78 - 120	
Bromoform	10.0	8.04	80	66 - 120	
Bromomethane	10.0	12.6	126	47 - 150	
Methyl Ethyl Ketone	10.0	8.11	81	42 - 150	J
Carbon disulfide	10.0	9.72	97	55 - 150	
Carbon tetrachloride	10.0	9.60	96	69 - 135	
Chlorobenzene	10.0	9.18	92	68 - 120	
Chloroethane	10.0	13.8	138	49 - 150	
Chloroform	10.0	9.26	93	77 - 126	
Chloromethane	10.0	11.9	119	33 - 150	
Dibromochloromethane	10.0	8.32	83	75 - 120	
1,1-Dichloroethane	10.0	10.0	100	75 - 130	
1,2-Dichloroethane	10.0	9.53	95	73 - 127	
1,1-Dichloroethene	10.0	9.81	98	65 - 142	
1,2-Dichloropropane	10.0	9.86	99	69 - 129	
cis-1,3-Dichloropropene	10.0	8.96	90	63 - 120	
trans-1,3-Dichloropropene	10.0	8.78	88	73 - 120	
Ethylbenzene	10.0	9.32	93	62 - 120	
2-Hexanone	10.0	7.98	80	46 - 150	J
Methylene Chloride	10.0	9.81	98	56 - 138	
methyl isobutyl ketone	10.0	8.72	87	70 - 122	J
Styrene	10.0	8.90	89	47 - 120	
1,1,2,2-Tetrachloroethane	10.0	8.63	86	75 - 124	
Tetrachloroethene	10.0	9.02	90	50 - 120	
Toluene	10.0	9.42	94	66 - 120	
1,1,1-Trichloroethane	10.0	9.77	98	73 - 135	
1,1,2-Trichloroethane	10.0	9.02	90	76 - 125	
Trichloroethene	10.0	9.46	95	60 - 122	
Vinyl chloride	10.0	12.7	127	61 - 150	
Xylenes, Total	30.0	27.1	90	58 - 120	
cis-1,2-Dichloroethene	10.0	9.09	91	65 - 120	
trans-1,2-Dichloroethene	10.0	9.90	99	58 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93	65 - 136
4-Bromofluorobenzene	90	51 - 142
Dibromofluoromethane	94	68 - 132
Toluene-d8 (Surr)	95	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Method Blank - Batch: 220-47660

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 220-47660/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/03/2011 1209
Date Prepared: 02/03/2011 1209

Analysis Batch: 220-47660
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W9036.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	2.30	J	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91	65 - 136
4-Bromofluorobenzene	96	51 - 142
Dibromofluoromethane	90	68 - 132
Toluene-d8 (Surr)	96	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Lab Control Sample - Batch: 220-47660

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 220-47660/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/03/2011 1031
Date Prepared: 02/03/2011 1031

Analysis Batch: 220-47660
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W9032.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	7.16	72	41 - 150	J
Benzene	10.0	10.3	103	66 - 131	
Bromodichloromethane	10.0	9.98	100	78 - 120	
Bromoform	10.0	8.09	81	66 - 120	
Bromomethane	10.0	11.7	117	47 - 150	
Methyl Ethyl Ketone	10.0	8.99	90	42 - 150	J
Carbon disulfide	10.0	9.75	97	55 - 150	
Carbon tetrachloride	10.0	10.0	100	69 - 135	
Chlorobenzene	10.0	9.35	93	68 - 120	
Chloroethane	10.0	13.5	135	49 - 150	
Chloroform	10.0	9.83	98	77 - 126	
Chloromethane	10.0	10.9	109	33 - 150	
Dibromochloromethane	10.0	8.85	88	75 - 120	
1,1-Dichloroethane	10.0	10.4	104	75 - 130	
1,2-Dichloroethane	10.0	10.3	103	73 - 127	
1,1-Dichloroethene	10.0	9.92	99	65 - 142	
1,2-Dichloropropane	10.0	10.5	105	69 - 129	
cis-1,3-Dichloropropene	10.0	9.74	97	63 - 120	
trans-1,3-Dichloropropene	10.0	9.43	94	73 - 120	
Ethylbenzene	10.0	9.25	92	62 - 120	
2-Hexanone	10.0	8.59	86	46 - 150	J
Methylene Chloride	10.0	9.87	99	56 - 138	
methyl isobutyl ketone	10.0	9.77	98	70 - 122	J
Styrene	10.0	9.29	93	47 - 120	
1,1,2,2-Tetrachloroethane	10.0	9.17	92	75 - 124	
Tetrachloroethene	10.0	9.06	91	50 - 120	
Toluene	10.0	9.71	97	66 - 120	
1,1,1-Trichloroethane	10.0	10.3	103	73 - 135	
1,1,2-Trichloroethane	10.0	9.51	95	76 - 125	
Trichloroethene	10.0	9.72	97	60 - 122	
Vinyl chloride	10.0	11.8	118	61 - 150	
Xylenes, Total	30.0	27.8	93	58 - 120	
cis-1,2-Dichloroethene	10.0	9.65	97	65 - 120	
trans-1,2-Dichloroethene	10.0	10.2	102	58 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	65 - 136
4-Bromofluorobenzene	93	51 - 142
Dibromofluoromethane	95	68 - 132
Toluene-d8 (Surr)	98	63 - 127

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	B	The analyte was found in an associated blank, as well as in the sample.

Client: Malcolm Pirnie, Inc. Job Number: 220-14659-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-47647					
LCS 220-47647/2	Lab Control Sample	T	Water	8260B	
MB 220-47647/3	Method Blank	T	Water	8260B	
220-14659-2	WELL 1-1A EFF	T	Water	8260B	
220-14659-3TB	TRIP BLANK	T	Water	8260B	
Analysis Batch:220-47660					
LCS 220-47660/2	Lab Control Sample	T	Water	8260B	
MB 220-47660/3	Method Blank	T	Water	8260B	
220-14659-1	WELL 1-1A INF	T	Water	8260B	

Report Basis
T = Total

ANALYTICAL REPORT

Job Number: 220-14826-1

Job Description: NYSDEC Standby - Vestal Water Supply

For:
Malcolm Pirnie, Inc.
855 Route 146
Suite 210
Clifton Park, NY 12065

Attention: Mr. Jeremy Wyckoff

Approved for release.
Joan Widomski
Project Manager I
3/8/2011 11:57 AM

Designee for
Johanna Dubauskas
Project Manager II
johanna.dubauskas@testamericainc.com
03/08/2011

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

Job Number: 220-14826-1

Job Description: NYSDEC Standby - Vestal Water Supply

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Joan Widomski
Project Manager I
3/8/2011 11:57 AM

Designee for
Johanna Dubauskas

Table of Contents

Table of Contents

Comments
No additional comments.

Receipt
The following field QC sample was received at the laboratory without a sample collection time documented on the chain of custody: Trip Blank (220-14826-3). As a result, a sample collection time of 12:00am, on the date of collection, has been used.

The following Trip Blank sample was received with headspace in 2 of 3 vials with the container IDs 220-14826-B and C-3: Trip Blank (220-14826-3). The expiration date for this Trip Blank is 2/21/11 and may be a contributing factor. These were not used for analysis.

All other samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

$$\frac{(Ax)(IS)(DF)}{(AIS)(RRF)(V)(\%\ solids)} = C$$

$$\frac{(AX)(IS)(VT)(1000)(DF)}{(AIS)(RRF)(VA)(V)(\%\ solids)} = C \quad \text{(for medium level soils)}$$

SemiVolatiles

$$\frac{(AX)(IS)(VE)(DF)(GPC\ factor\ is\ 2\ if\ needed)}{(AIS)(RRF)(volume\ injected)(V)(\%\ solids)} = C$$

Pesticides

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\%\ solids)(volume\ injected)} = C$$

PCBs for compound/retention time

$$\frac{(AX)(VE)(DF)}{(RRF\ of\ compound\ at\ the\ stated\ retention\ time)(V)(\%\ solids)(volume\ injected)} = C$$

DRO/CTETPH

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\%\ solids)(volume\ injected)} = C$$

AX = area of the target Ion
AIS = Area of Internal standard
C = concentration as ug/L or ug/Kg
DF = dilution
IS = Internal standard concentration (ng)
RRF = average RF (from initial cal except CLP methods from continuing cal)
V = sample volume for liquids in mls or sample weight for solids in grams
VA = volume of aliquot for medium level soils
VE = volume of concentrated extract
VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-14826-1	Well 1-1A Inf	Water	02/28/2011 1740	03/01/2011 1000
220-14826-2	Well 1-1A Eff	Water	02/28/2011 1745	03/01/2011 1000
220-14826-3TB	Trip Blank	Water	02/28/2011 0000	03/01/2011 1000

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-14826-1	**WELL 1-1A INF**					
Acetone		14	J B	40	ug/L	8260B
1,1-Dichloroethane		27		20	ug/L	8260B
1,1-Dichloroethene		22		20	ug/L	8260B
Methylene Chloride		3.4	J B	20	ug/L	8260B
1,1,1-Trichloroethane		220		20	ug/L	8260B
Trichloroethene		62		20	ug/L	8260B
Vinyl chloride		6.4	J	20	ug/L	8260B
cis-1,2-Dichloroethene		63		20	ug/L	8260B
220-14826-3TB	**TRIP BLANK**					
Methylene Chloride		1.4	J B	5.0	ug/L	8260B

METHOD SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
Purge and Trap	TAL CT		SW846 5030B

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Client Sample ID: **Well 1-1A Inf**

Lab Sample ID: 220-14826-1 Date Sampled: 02/28/2011 1740
Client Matrix: Water Date Received: 03/01/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 220-48427 Instrument ID: MSW
Preparation: 5030B Lab File ID: W9705.D
Dilution: 4.0 Initial Weight/Volume: 5 mL
Date Analyzed: 03/02/2011 1423 Final Weight/Volume: 5 mL
Date Prepared: 03/02/2011 1423

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	14	J B	4.1	40
Benzene	20	U	3.0	20
Bromodichloromethane	20	U	1.9	20
Bromoform	20	U	1.8	20
Bromomethane	20	U	8.5	20
Methyl Ethyl Ketone	40	U	4.4	40
Carbon disulfide	20	U	3.6	20
Carbon tetrachloride	20	U	4.3	20
Chlorobenzene	20	U	2.9	20
Chloroethane	20	U	4.2	20
Chloroform	20	U	2.7	20
Chloromethane	20	U	4.4	20
Dibromochloromethane	20	U	2.2	20
1,1-Dichloroethane	27		4.1	20
1,2-Dichloroethane	20	U	2.9	20
1,1-Dichloroethene	22		3.3	20
1,2-Dichloropropane	20	U	2.8	20
cis-1,3-Dichloropropene	20	U	1.1	20
trans-1,3-Dichloropropene	20	U	2.3	20
Ethylbenzene	20	U	3.5	20
2-Hexanone	40	U	4.4	40
Methylene Chloride	3.4	J B	3.1	20
methyl isobutyl ketone	40	U	1.5	40
Styrene	20	U	2.6	20
1,1,2,2-Tetrachloroethane	20	U	3.2	20
Tetrachloroethene	20	U	3.2	20
Toluene	20	U	2.9	20
1,1,1-Trichloroethane	220		2.8	20
1,1,2-Trichloroethane	20	U	2.6	20
Trichloroethene	62		2.5	20
Vinyl chloride	6.4	J	4.0	20
Xylenes, Total	20	U	9.1	20
cis-1,2-Dichloroethene	63		4.0	20
trans-1,2-Dichloroethene	20	U	3.0	20

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	97		68 - 132
Toluene-d8 (Surr)	93		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Client Sample ID: Well 1-1A Eff

Lab Sample ID: 220-14826-2 Date Sampled: 02/28/2011 1745
Client Matrix: Water Date Received: 03/01/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 220-48387 Instrument ID: MSW
Preparation: 5030B Lab File ID: W9680.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Date Analyzed: 03/01/2011 2101 Final Weight/Volume: 5 mL
Date Prepared: 03/01/2011 2101

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0	U	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		65 - 136
4-Bromofluorobenzene	82		51 - 142
Dibromofluoromethane	100		68 - 132
Toluene-d8 (Surr)	92		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Client Sample ID: Trip Blank

Lab Sample ID: 220-14826-3TB Date Sampled: 02/28/2011 0000
Client Matrix: Water Date Received: 03/01/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 220-48387 Instrument ID: MSW
Preparation: 5030B Lab File ID: W9678.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Date Analyzed: 03/01/2011 2012 Final Weight/Volume: 5 mL
Date Prepared: 03/01/2011 2012

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	1.4	J B	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	99		68 - 132
Toluene-d8 (Surr)	92		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
220-14826-1	Well 1-1A Inf	97	94	93	84
220-14826-2	Well 1-1A Eff	100	93	92	82
220-14826-3	Trip Blank	99	92	92	84
MB 220-48387/3		101	95	93	83
MB 220-48427/3		96	94	93	83
LCS 220-48387/2		100	94	94	86
LCS 220-48427/2		101	93	93	84
220-14824-B-1 MS		99	93	92	82
220-14824-A-1 MSD		98	92	92	84

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	68-132
DCA = 1,2-Dichloroethane-d4 (Surr)	65-136
TOL = Toluene-d8 (Surr)	63-127
BFB = 4-Bromofluorobenzene	51-142

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Method Blank - Batch: 220-48387

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 220-48387/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/01/2011 1245
Date Prepared: 03/01/2011 1245

Analysis Batch: 220-48387
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W9660.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	2.90	J	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	1.76	J	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	65 - 136
4-Bromofluorobenzene	83	51 - 142
Dibromofluoromethane	101	68 - 132
Toluene-d8 (Surr)	93	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Lab Control Sample - Batch: 220-48387

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 220-48387/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/01/2011 1127
Date Prepared: 03/01/2011 1127

Analysis Batch: 220-48387
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W9657.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	12.2	122	41 - 150	
Benzene	10.0	10.3	103	66 - 131	
Bromodichloromethane	10.0	10.2	102	78 - 120	
Bromoform	10.0	9.40	94	66 - 120	
Bromomethane	10.0	10.7	107	47 - 150	
Methyl Ethyl Ketone	10.0	10.1	101	42 - 150	
Carbon disulfide	10.0	9.43	94	55 - 150	
Carbon tetrachloride	10.0	10.7	107	69 - 135	
Chlorobenzene	10.0	9.58	96	68 - 120	
Chloroethane	10.0	12.5	125	49 - 150	
Chloroform	10.0	10.2	102	77 - 126	
Chloromethane	10.0	10.8	108	33 - 150	
Dibromochloromethane	10.0	9.69	97	75 - 120	
1,1-Dichloroethane	10.0	9.97	100	75 - 130	
1,2-Dichloroethane	10.0	9.69	97	73 - 127	
1,1-Dichloroethene	10.0	10.3	103	65 - 142	
1,2-Dichloropropane	10.0	10.1	101	69 - 129	
cis-1,3-Dichloropropene	10.0	10.6	106	63 - 120	
trans-1,3-Dichloropropene	10.0	10.7	107	73 - 120	
Ethylbenzene	10.0	9.72	97	62 - 120	
2-Hexanone	10.0	9.70	97	46 - 150	J
Methylene Chloride	10.0	9.14	91	56 - 138	
methyl isobutyl ketone	10.0	9.12	91	70 - 122	J
Styrene	10.0	9.32	93	47 - 120	
1,1,2,2-Tetrachloroethane	10.0	9.78	98	75 - 124	
Tetrachloroethene	10.0	9.88	99	50 - 120	
Toluene	10.0	9.67	97	66 - 120	
1,1,1-Trichloroethane	10.0	11.6	116	73 - 135	
1,1,2-Trichloroethane	10.0	10.8	108	76 - 125	
Trichloroethene	10.0	10.6	106	60 - 122	
Vinyl chloride	10.0	12.8	128	61 - 150	
Xylenes, Total	30.0	29.3	98	58 - 120	
cis-1,2-Dichloroethene	10.0	10.4	104	65 - 120	
trans-1,2-Dichloroethene	10.0	10.4	104	58 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	65 - 136
4-Bromofluorobenzene	86	51 - 142
Dibromofluoromethane	100	68 - 132
Toluene-d8 (Surr)	94	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-48387

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 220-14824-B-1 MS
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/01/2011 1742
Date Prepared: 03/01/2011 1742

Analysis Batch: 220-48387
Prep Batch: N/A

Instrument ID: MSW
Lab File ID: W9672.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 220-14824-A-1 MSD
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/01/2011 1807
Date Prepared: 03/01/2011 1807

Analysis Batch: 220-48387
Prep Batch: N/A

Instrument ID: MSW
Lab File ID: W9673.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	83	77	41 - 150	7	20		
Benzene	105	99	66 - 131	6	20		
Bromodichloromethane	107	100	78 - 120	7	20		
Bromoform	104	95	66 - 120	10	20		
Bromomethane	64	73	47 - 150	14	20		
Methyl Ethyl Ketone	87	82	42 - 150	6	20		
Carbon disulfide	89	85	55 - 150	5	20		
Carbon tetrachloride	111	105	69 - 135	5	20		
Chlorobenzene	99	94	68 - 120	5	20		
Chloroethane	118	127	49 - 150	7	20		
Chloroform	105	97	77 - 126	7	20		
Chloromethane	97	107	33 - 150	10	20		
Dibromochloromethane	101	94	75 - 120	8	20		
1,1-Dichloroethane	105	99	75 - 130	6	20		
1,2-Dichloroethane	101	95	73 - 127	7	20		
1,1-Dichloroethene	101	97	65 - 142	4	20		
1,2-Dichloropropane	105	99	69 - 129	5	20		
cis-1,3-Dichloropropene	108	101	63 - 120	6	20		
trans-1,3-Dichloropropene	109	104	73 - 120	5	20		
Ethylbenzene	104	97	62 - 120	6	20		
2-Hexanone	91	84	46 - 150	8	20		
Methylene Chloride	80	76	56 - 138	5	20		
methyl isobutyl ketone	91	85	70 - 122	6	20		
Styrene	98	92	47 - 120	6	20		
1,1,2,2-Tetrachloroethane	100	94	75 - 124	6	20		
Tetrachloroethene	102	95	50 - 120	7	20		
Toluene	99	93	66 - 120	6	20		
1,1,1-Trichloroethane	118	111	73 - 135	6	20		
1,1,2-Trichloroethane	113	108	76 - 125	5	20		
Trichloroethene	110	104	60 - 122	6	20		
Vinyl chloride	121	130	61 - 150	7	20		
Xylenes, Total	101	96	58 - 120	5	20		

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-48387

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-14824-B-1 MS	Analysis Batch: 220-48387	Instrument ID: MSW
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: W9672.D
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	03/01/2011 1742		Final Weight/Volume: 5 mL
Date Prepared:	03/01/2011 1742		

MSD Lab Sample ID:	220-14824-A-1 MSD	Analysis Batch: 220-48387	Instrument ID: MSW
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: W9673.D
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	03/01/2011 1807		Final Weight/Volume: 5 mL
Date Prepared:	03/01/2011 1807		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
cis-1,2-Dichloroethene	106	97	65 - 120	8	20		
trans-1,2-Dichloroethene	103	99	58 - 120	4	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93	92	65 - 136
4-Bromofluorobenzene	82	84	51 - 142
Dibromofluoromethane	99	98	68 - 132
Toluene-d8 (Surr)	92	92	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-48387

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 220-14824-B-1 MS
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/01/2011 1742
Date Prepared: 03/01/2011 1742

Units: ug/L

MSD Lab Sample ID: 220-14824-A-1 MSD
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/01/2011 1807
Date Prepared: 03/01/2011 1807

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acetone	10	U	20.0	20.0	16.6	15.4
Benzene	5.0	U	20.0	20.0	21.1	19.9
Bromodichloromethane	5.0	U	20.0	20.0	21.4	20.1
Bromoform	5.0	U	20.0	20.0	20.8	18.9
Bromomethane	5.0	U	20.0	20.0	12.7	14.7
Methyl Ethyl Ketone	10	U	20.0	20.0	17.4	16.3
Carbon disulfide	5.0	U	20.0	20.0	17.9	17.0
Carbon tetrachloride	5.0	U	20.0	20.0	22.2	21.0
Chlorobenzene	5.0	U	20.0	20.0	19.9	18.8
Chloroethane	5.0	U	20.0	20.0	23.5	25.3
Chloroform	5.0	U	20.0	20.0	21.0	19.5
Chloromethane	5.0	U	20.0	20.0	19.3	21.3
Dibromochloromethane	5.0	U	20.0	20.0	20.2	18.7
1,1-Dichloroethane	5.0	U	20.0	20.0	21.1	19.8
1,2-Dichloroethane	5.0	U	20.0	20.0	20.2	18.9
1,1-Dichloroethene	5.0	U	20.0	20.0	20.1	19.3
1,2-Dichloropropane	5.0	U	20.0	20.0	20.9	19.8
cis-1,3-Dichloropropene	5.0	U	20.0	20.0	21.5	20.2
trans-1,3-Dichloropropene	5.0	U	20.0	20.0	21.8	20.8
Ethylbenzene	5.0	U	20.0	20.0	20.7	19.5
2-Hexanone	10	U	20.0	20.0	18.1	16.7
Methylene Chloride	5.0	U	20.0	20.0	16.0	15.2
methyl isobutyl ketone	10	U	20.0	20.0	18.2	17.1
Styrene	5.0	U	20.0	20.0	19.6	18.4
1,1,2,2-Tetrachloroethane	5.0	U	20.0	20.0	19.9	18.8
Tetrachloroethene	5.0	U	20.0	20.0	20.4	19.1
Toluene	5.0	U	20.0	20.0	19.8	18.6
1,1,1-Trichloroethane	5.0	U	20.0	20.0	23.6	22.3
1,1,2-Trichloroethane	5.0	U	20.0	20.0	22.7	21.6
Trichloroethene	5.0	U	20.0	20.0	22.0	20.8
Vinyl chloride	5.0	U	20.0	20.0	24.2	26.0
Xylenes, Total	5.0	U	60.0	60.0	60.8	57.6
cis-1,2-Dichloroethene	5.0	U	20.0	20.0	21.1	19.5
trans-1,2-Dichloroethene	5.0	U	20.0	20.0	20.6	19.7

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Method Blank - Batch: 220-48427

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 220-48427/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/02/2011 1303
Date Prepared: 03/02/2011 1303

Analysis Batch: 220-48427
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W9702.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	2.15	J	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	1.09	J	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	65 - 136
4-Bromofluorobenzene	83	51 - 142
Dibromofluoromethane	96	68 - 132
Toluene-d8 (Surr)	93	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Lab Control Sample - Batch: 220-48427

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 220-48427/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/02/2011 1144
Date Prepared: 03/02/2011 1144

Analysis Batch: 220-48427
Prep Batch: N/A
Units: ug/L

Instrument ID: MSW
Lab File ID: W9699.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	11.4	114	41 - 150	
Benzene	10.0	10.2	102	66 - 131	
Bromodichloromethane	10.0	10.3	103	78 - 120	
Bromoform	10.0	9.74	97	66 - 120	
Bromomethane	10.0	7.70	77	47 - 150	
Methyl Ethyl Ketone	10.0	9.64	96	42 - 150	J
Carbon disulfide	10.0	9.42	94	55 - 150	
Carbon tetrachloride	10.0	10.6	106	69 - 135	
Chlorobenzene	10.0	9.75	98	68 - 120	
Chloroethane	10.0	11.9	119	49 - 150	
Chloroform	10.0	10.5	105	77 - 126	
Chloromethane	10.0	9.76	98	33 - 150	
Dibromochloromethane	10.0	9.49	95	75 - 120	
1,1-Dichloroethane	10.0	10.2	102	75 - 130	
1,2-Dichloroethane	10.0	9.75	97	73 - 127	
1,1-Dichloroethene	10.0	10.3	103	65 - 142	
1,2-Dichloropropane	10.0	10.1	101	69 - 129	
cis-1,3-Dichloropropene	10.0	10.7	107	63 - 120	
trans-1,3-Dichloropropene	10.0	10.4	104	73 - 120	
Ethylbenzene	10.0	10.1	101	62 - 120	
2-Hexanone	10.0	9.11	91	46 - 150	J
Methylene Chloride	10.0	9.00	90	56 - 138	
methyl isobutyl ketone	10.0	8.97	90	70 - 122	J
Styrene	10.0	9.19	92	47 - 120	
1,1,2,2-Tetrachloroethane	10.0	9.53	95	75 - 124	
Tetrachloroethene	10.0	9.73	97	50 - 120	
Toluene	10.0	9.88	99	66 - 120	
1,1,1-Trichloroethane	10.0	11.5	115	73 - 135	
1,1,2-Trichloroethane	10.0	11.0	110	76 - 125	
Trichloroethene	10.0	10.5	105	60 - 122	
Vinyl chloride	10.0	12.1	121	61 - 150	
Xylenes, Total	30.0	29.2	97	58 - 120	
cis-1,2-Dichloroethene	10.0	10.5	105	65 - 120	
trans-1,2-Dichloroethene	10.0	10.1	101	58 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93	65 - 136
4-Bromofluorobenzene	84	51 - 142
Dibromofluoromethane	101	68 - 132
Toluene-d8 (Surr)	93	63 - 127

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc. Job Number: 220-14826-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	B	The analyte was found in an associated blank, as well as in the sample.

ANALYTICAL REPORT

Job Number: 220-15075-1

Job Description: NYSDEC Standby - Vestal Water Supply

For:
Malcolm Pirnie, Inc.
855 Route 146
Suite 210
Clifton Park, NY 12065

Attention: Mr. Jeremy Wyckoff

Approved for release.
Joan Widomski
Project Manager I
4/12/2011 12:09 PM

Designee for
Johanna Dubauskas
Project Manager II
johanna.dubauskas@testamericainc.com
04/12/2011

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

Job Number: 220-15075-1

Job Description: NYSDEC Standby - Vestal Water Supply

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Joan Widomski
Project Manager I
4/12/2011 12:09 PM

Designee for
Johanna Dubauskas

Table of Contents

Table of Contents

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

$$\frac{(Ax)(IS)(DF)}{(AIS)(RRF)(V)(\%\ solids)} = C$$

$$\frac{(AX)(IS)(VT)(1000)(DF)}{(AIS)(RRF)(VA)(V)(\%\ solids)} = C \quad \text{(for medium level soils)}$$

SemiVolatiles

$$\frac{(AX)(IS)(VE)(DF)(\text{GPC factor is 2 if needed})}{(AIS)(RRF)(\text{volume injected})(V)(\%\ solids)} = C$$

Pesticides

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\%\ solids)(\text{volume injected})} = C$$

PCBs for compound/retention time

$$\frac{(AX)(VE)(DF)}{(\text{RRF of compound at the stated retention time})(V)(\%\ solids)(\text{volume injected})} = C$$

DRO/CTETPH

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\%\ solids)(\text{volume injected})} = C$$

AX = area of the target Ion
AIS = Area of Internal standard
C = concentration as ug/L or ug/Kg
DF = dilution
IS = Internal standard concentration (ng)
RRF = average RF (from initial cal except CLP methods from continuing cal)
V = sample volume for liquids in mls or sample weight for solids in grams
VA = volume of aliquot for medium level soils
VE = volume of concentrated extract
VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-15075-1	Well 1-1A Inf	Water	03/29/2011 1030	03/30/2011 1030
220-15075-2	Well 1-1A Eff	Water	03/29/2011 1040	03/30/2011 1030
220-15075-3TB	Trip Blank	Water	03/29/2011 1025	03/30/2011 1030

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15075-1	**WELL 1-1A INF**					
1,1-Dichloroethane		25		5.0	ug/L	8260B
1,1-Dichloroethene		18		5.0	ug/L	8260B
1,1,1-Trichloroethane		170		5.0	ug/L	8260B
Trichloroethene		53		5.0	ug/L	8260B
Vinyl chloride		8.9		5.0	ug/L	8260B
cis-1,2-Dichloroethene		53		5.0	ug/L	8260B
220-15075-3TB	**TRIP BLANK**					
Methylene Chloride		1.9	J B	5.0	ug/L	8260B

METHOD SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
Purge and Trap	TAL CT		SW846 5030B

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Method	Analyst	Analyst ID
SW846 8260B	Humbert, Dave	DH
SW846 8260B	Kostrzewska, Barbara	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Client Sample ID: Well 1-1A Inf

Lab Sample ID: 220-15075-1 Date Sampled: 03/29/2011 1030
Client Matrix: Water Date Received: 03/30/2011 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-49466	Instrument ID:	MSL
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	L8891.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/06/2011 1226			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 1226				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U *	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	25		1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	18		0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0	U	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	170		0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	53		0.62	5.0
Vinyl chloride	8.9		0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	53		0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		65 - 136
4-Bromofluorobenzene	93		51 - 142
Dibromofluoromethane	87		68 - 132
Toluene-d8 (Surr)	93		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Client Sample ID: Well 1-1A Eff

Lab Sample ID: 220-15075-2 Date Sampled: 03/29/2011 1040
Client Matrix: Water Date Received: 03/30/2011 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-49434	Instrument ID:	MSL
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	L8858.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1454			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1454				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0	U	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83		65 - 136
4-Bromofluorobenzene	87		51 - 142
Dibromofluoromethane	83		68 - 132
Toluene-d8 (Surr)	89		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Client Sample ID: Trip Blank

Lab Sample ID: 220-15075-3TB Date Sampled: 03/29/2011 1025
Client Matrix: Water Date Received: 03/30/2011 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-49434	Instrument ID:	MSL
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	L8856.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1405			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	1.9	J B	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	78		65 - 136
4-Bromofluorobenzene	89		51 - 142
Dibromofluoromethane	83		68 - 132
Toluene-d8 (Surr)	86		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
220-15075-1	Well 1-1A Inf	87	84	93	93
220-15075-2	Well 1-1A Eff	83	83	89	87
220-15075-3	Trip Blank	83	78	86	89
MB 220-49434/3		80	79	86	85
MB 220-49466/3		80	79	86	87
LCS 220-49434/2		80	79	86	83
LCS 220-49466/2		86	85	89	88
220-15081-H-7 MS		84	83	86	86
220-15071-C-2 MS		85	81	87	86
220-15081-I-7 MSD		91	87	91	90
220-15071-A-2 MSD		85	84	89	87

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	68-132
DCA = 1,2-Dichloroethane-d4 (Surr)	65-136
TOL = Toluene-d8 (Surr)	63-127
BFB = 4-Bromofluorobenzene	51-142

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Method Blank - Batch: 220-49434

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-49434/3	Analysis Batch:	220-49434	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8849.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1116	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1116				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	2.01	J	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	79	65 - 136
4-Bromofluorobenzene	85	51 - 142
Dibromofluoromethane	80	68 - 132
Toluene-d8 (Surr)	86	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Lab Control Sample - Batch: 220-49434

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-49434/2	Analysis Batch:	220-49434	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8846.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1002	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1002				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	18.3	91	41 - 150	
Benzene	20.0	18.4	92	66 - 131	
Bromodichloromethane	20.0	17.5	88	78 - 120	
Bromoform	20.0	16.7	84	66 - 120	
Bromomethane	20.0	25.4	127	47 - 150	
Methyl Ethyl Ketone	20.0	17.3	87	42 - 150	
Carbon disulfide	20.0	18.8	94	55 - 150	
Carbon tetrachloride	20.0	19.3	96	69 - 135	
Chlorobenzene	20.0	18.3	91	68 - 120	
Chloroethane	20.0	25.3	127	49 - 150	
Chloroform	20.0	18.4	92	77 - 126	
Chloromethane	20.0	21.9	110	33 - 150	
Dibromochloromethane	20.0	17.4	87	75 - 120	
1,1-Dichloroethane	20.0	18.7	93	75 - 130	
1,2-Dichloroethane	20.0	17.6	88	73 - 127	
1,1-Dichloroethene	20.0	19.8	99	65 - 142	
1,2-Dichloropropane	20.0	18.1	90	69 - 129	
cis-1,3-Dichloropropene	20.0	17.6	88	63 - 120	
trans-1,3-Dichloropropene	20.0	17.7	88	73 - 120	
Ethylbenzene	20.0	18.8	94	62 - 120	
2-Hexanone	20.0	17.2	86	46 - 150	
Methylene Chloride	20.0	19.0	95	56 - 138	
methyl isobutyl ketone	20.0	17.1	86	70 - 122	
Styrene	20.0	18.3	92	47 - 120	
1,1,2,2-Tetrachloroethane	20.0	16.9	85	75 - 124	
Tetrachloroethene	20.0	18.8	94	50 - 120	
Toluene	20.0	18.8	94	66 - 120	
1,1,1-Trichloroethane	20.0	19.5	97	73 - 135	
1,1,2-Trichloroethane	20.0	17.5	88	76 - 125	
Trichloroethene	20.0	18.3	91	60 - 122	
Vinyl chloride	20.0	22.0	110	61 - 150	
Xylenes, Total	60.0	55.7	93	58 - 120	
cis-1,2-Dichloroethene	20.0	17.9	90	65 - 120	
trans-1,2-Dichloroethene	20.0	19.4	97	58 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	79	65 - 136
4-Bromofluorobenzene	83	51 - 142
Dibromofluoromethane	80	68 - 132
Toluene-d8 (Surr)	86	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-49434

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15081-H-7 MS	Analysis Batch:	220-49434	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8852.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1228			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1228				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15081-I-7 MSD	Analysis Batch:	220-49434	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8853.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1252			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1252				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	83	90	41 - 150	8	20		
Benzene	111	114	66 - 131	2	20		
Bromodichloromethane	103	107	78 - 120	4	20		
Bromoform	98	101	66 - 120	4	20		
Bromomethane	130	118	47 - 150	10	20		
Methyl Ethyl Ketone	94	102	42 - 150	8	20		
Carbon disulfide	123	128	55 - 150	4	20		
Carbon tetrachloride	111	114	69 - 135	3	20		
Chlorobenzene	103	107	68 - 120	3	20		
Chloroethane	131	133	49 - 150	2	20		
Chloroform	110	112	77 - 126	2	20		
Chloromethane	121	126	33 - 150	4	20		
Dibromochloromethane	97	103	75 - 120	6	20		
1,1-Dichloroethane	112	114	75 - 130	2	20		
1,2-Dichloroethane	104	107	73 - 127	2	20		
1,1-Dichloroethene	122	124	65 - 142	2	20		
1,2-Dichloropropane	105	110	69 - 129	5	20		
cis-1,3-Dichloropropene	102	108	63 - 120	5	20		
trans-1,3-Dichloropropene	104	105	73 - 120	2	20		
Ethylbenzene	105	110	62 - 120	4	20		
2-Hexanone	99	107	46 - 150	8	20		
Methylene Chloride	103	107	56 - 138	4	20		
methyl isobutyl ketone	103	109	70 - 122	6	20		
Styrene	101	105	47 - 120	4	20		
1,1,2,2-Tetrachloroethane	99	105	75 - 124	5	20		
Tetrachloroethene	104	112	50 - 120	7	20		
Toluene	105	108	66 - 120	3	20		
1,1,1-Trichloroethane	114	117	73 - 135	3	20		
1,1,2-Trichloroethane	104	107	76 - 125	3	20		
Trichloroethene	109	114	60 - 122	5	20		
Vinyl chloride	120	122	61 - 150	1	20		
Xylenes, Total	107	109	58 - 120	2	20		
cis-1,2-Dichloroethene	112	116	65 - 120	4	20		

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-49434

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15081-H-7 MS	Analysis Batch:	220-49434	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8852.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1228			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1228				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15081-I-7 MSD	Analysis Batch:	220-49434	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8853.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/05/2011 1252			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1252				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
trans-1,2-Dichloroethene	115	118	58 - 120	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83	87	65 - 136
4-Bromofluorobenzene	86	90	51 - 142
Dibromofluoromethane	84	91	68 - 132
Toluene-d8 (Surr)	86	91	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-49434

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15081-H-7 MS	Units: ug/L	MSD Lab Sample ID:	220-15081-I-7 MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	04/05/2011 1228		Analysis Date:	04/05/2011 1252	
Prep Date:	04/05/2011 1228		Prep Date:	04/05/2011 1252	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acetone	10	U	50.0	50.0	41.3	44.9
Benzene	5.0	U	50.0	50.0	55.7	56.8
Bromodichloromethane	5.0	U	50.0	50.0	51.6	53.6
Bromoform	5.0	U	50.0	50.0	48.8	50.7
Bromomethane	5.0	U	50.0	50.0	65.2	59.0
Methyl Ethyl Ketone	10	U	50.0	50.0	47.1	51.0
Carbon disulfide	5.0	U	50.0	50.0	61.6	64.2
Carbon tetrachloride	5.0	U	50.0	50.0	55.7	57.2
Chlorobenzene	5.0	U	50.0	50.0	51.5	53.3
Chloroethane	5.0	U	50.0	50.0	65.6	66.6
Chloroform	5.0	U	50.0	50.0	55.0	56.0
Chloromethane	5.0	U	50.0	50.0	60.7	62.9
Dibromochloromethane	5.0	U	50.0	50.0	48.6	51.7
1,1-Dichloroethane	5.0	U	50.0	50.0	56.0	57.2
1,2-Dichloroethane	5.0	U	50.0	50.0	52.1	53.3
1,1-Dichloroethene	5.0	U	50.0	50.0	60.9	61.9
1,2-Dichloropropane	5.0	U	50.0	50.0	52.6	55.1
cis-1,3-Dichloropropene	5.0	U	50.0	50.0	51.1	53.9
trans-1,3-Dichloropropene	5.0	U	50.0	50.0	51.8	52.7
Ethylbenzene	5.0	U	50.0	50.0	52.6	55.0
2-Hexanone	10	U	50.0	50.0	49.4	53.4
Methylene Chloride	5.0	U	50.0	50.0	51.5	53.6
methyl isobutyl ketone	10	U	50.0	50.0	51.4	54.7
Styrene	5.0	U	50.0	50.0	50.7	52.6
1,1,2,2-Tetrachloroethane	5.0	U	50.0	50.0	49.7	52.3
Tetrachloroethene	2.1	J	50.0	50.0	54.1	58.3
Toluene	5.0	U	50.0	50.0	52.7	54.1
1,1,1-Trichloroethane	5.0	U	50.0	50.0	57.0	58.5
1,1,2-Trichloroethane	5.0	U	50.0	50.0	52.2	53.6
Trichloroethene	5.0	U	50.0	50.0	54.4	57.1
Vinyl chloride	5.0	U	50.0	50.0	60.2	61.1
Xylenes, Total	5.0	U	150	150	160	164
cis-1,2-Dichloroethene	5.0	U	50.0	50.0	55.8	58.2
trans-1,2-Dichloroethene	5.0	U	50.0	50.0	57.5	59.1

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Method Blank - Batch: 220-49466

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-49466/3	Analysis Batch:	220-49466	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8890.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/06/2011 1201	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 1201				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	2.28	J	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	79	65 - 136
4-Bromofluorobenzene	87	51 - 142
Dibromofluoromethane	80	68 - 132
Toluene-d8 (Surr)	86	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Lab Control Sample - Batch: 220-49466

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-49466/2	Analysis Batch:	220-49466	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8887.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/06/2011 1048	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 1048				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	17.4	87	41 - 150	
Benzene	20.0	22.6	113	66 - 131	
Bromodichloromethane	20.0	21.3	107	78 - 120	
Bromoform	20.0	19.4	97	66 - 120	
Bromomethane	20.0	38.1	191	47 - 150	*
Methyl Ethyl Ketone	20.0	19.3	96	42 - 150	
Carbon disulfide	20.0	24.7	124	55 - 150	
Carbon tetrachloride	20.0	23.1	115	69 - 135	
Chlorobenzene	20.0	21.0	105	68 - 120	
Chloroethane	20.0	29.6	148	49 - 150	
Chloroform	20.0	22.6	113	77 - 126	
Chloromethane	20.0	26.5	133	33 - 150	
Dibromochloromethane	20.0	20.0	100	75 - 120	
1,1-Dichloroethane	20.0	23.0	115	75 - 130	
1,2-Dichloroethane	20.0	21.8	109	73 - 127	
1,1-Dichloroethene	20.0	25.4	127	65 - 142	
1,2-Dichloropropane	20.0	22.2	111	69 - 129	
cis-1,3-Dichloropropene	20.0	21.1	105	63 - 120	
trans-1,3-Dichloropropene	20.0	21.1	105	73 - 120	
Ethylbenzene	20.0	21.6	108	62 - 120	
2-Hexanone	20.0	19.8	99	46 - 150	
Methylene Chloride	20.0	23.1	116	56 - 138	
methyl isobutyl ketone	20.0	21.2	106	70 - 122	
Styrene	20.0	20.8	104	47 - 120	
1,1,2,2-Tetrachloroethane	20.0	20.2	101	75 - 124	
Tetrachloroethene	20.0	21.9	109	50 - 120	
Toluene	20.0	21.3	107	66 - 120	
1,1,1-Trichloroethane	20.0	23.5	118	73 - 135	
1,1,2-Trichloroethane	20.0	21.3	107	76 - 125	
Trichloroethene	20.0	21.8	109	60 - 122	
Vinyl chloride	20.0	26.3	131	61 - 150	
Xylenes, Total	60.0	64.7	108	58 - 120	
cis-1,2-Dichloroethene	20.0	22.5	112	65 - 120	
trans-1,2-Dichloroethene	20.0	23.7	118	58 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85	65 - 136
4-Bromofluorobenzene	88	51 - 142
Dibromofluoromethane	86	68 - 132
Toluene-d8 (Surr)	89	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-49466

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15071-C-2 MS	Analysis Batch:	220-49466	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8892.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/06/2011 1250			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 1250				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15071-A-2 MSD	Analysis Batch:	220-49466	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8893.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/06/2011 1314			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 1314				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	64	64	41 - 150	0	20		
Benzene	92	93	66 - 131	1	20		
Bromodichloromethane	85	85	78 - 120	0	20		
Bromoform	77	78	66 - 120	1	20		
Bromomethane	114	125	47 - 150	10	20		
Methyl Ethyl Ketone	74	74	42 - 150	0	20		
Carbon disulfide	98	101	55 - 150	3	20		
Carbon tetrachloride	89	91	69 - 135	3	20		
Chlorobenzene	89	110	68 - 120	6	20		
Chloroethane	96	107	49 - 150	11	20		
Chloroform	89	92	77 - 126	3	20		
Chloromethane	88	104	33 - 150	17	20		
Dibromochloromethane	79	78	75 - 120	0	20		
1,1-Dichloroethane	90	94	75 - 130	4	20		
1,2-Dichloroethane	83	84	73 - 127	1	20		
1,1-Dichloroethene	98	101	65 - 142	3	20		
1,2-Dichloropropane	84	89	69 - 129	6	20		
cis-1,3-Dichloropropene	84	84	63 - 120	1	20		
trans-1,3-Dichloropropene	81	85	73 - 120	5	20		
Ethylbenzene	87	87	62 - 120	1	20		
2-Hexanone	78	76	46 - 150	3	20		
Methylene Chloride	84	87	56 - 138	4	20		
methyl isobutyl ketone	80	79	70 - 122	1	20		
Styrene	82	86	47 - 120	4	20		
1,1,2,2-Tetrachloroethane	80	77	75 - 124	3	20		
Tetrachloroethene	86	88	50 - 120	2	20		
Toluene	87	88	66 - 120	1	20		
1,1,1-Trichloroethane	91	93	73 - 135	1	20		
1,1,2-Trichloroethane	84	85	76 - 125	1	20		
Trichloroethene	90	93	60 - 122	3	20		
Vinyl chloride	88	103	61 - 150	16	20		
Xylenes, Total	88	89	58 - 120	1	20		
cis-1,2-Dichloroethene	89	93	65 - 120	4	20		

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-49466

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15071-C-2 MS	Analysis Batch:	220-49466	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8892.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/06/2011 1250			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 1250				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15071-A-2 MSD	Analysis Batch:	220-49466	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L8893.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/06/2011 1314			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 1314				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
trans-1,2-Dichloroethene	95	96	58 - 120	1	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	81	84	65 - 136
4-Bromofluorobenzene	86	87	51 - 142
Dibromofluoromethane	85	85	68 - 132
Toluene-d8 (Surr)	87	89	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-49466

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15071-C-2 MS	Units: ug/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	04/06/2011 1250		
Prep Date:	04/06/2011 1250		
Leach Date:	N/A		

MSD Lab Sample ID:	220-15071-A-2 MSD
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	04/06/2011 1314
Prep Date:	04/06/2011 1314
Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acetone	10	U	50.0	50.0	32.2	32.2
Benzene	22		50.0	50.0	68.5	68.9
Bromodichloromethane	5.0	U	50.0	50.0	42.6	42.6
Bromoform	5.0	U	50.0	50.0	38.7	39.0
Bromomethane	5.0	U	50.0	50.0	56.8	62.5
Methyl Ethyl Ketone	10	U	50.0	50.0	37.0	36.9
Carbon disulfide	5.0	U	50.0	50.0	49.1	50.4
Carbon tetrachloride	5.0	U	50.0	50.0	44.5	45.6
Chlorobenzene	130		50.0	50.0	174	184
Chloroethane	5.0	U	50.0	50.0	48.2	53.6
Chloroform	5.0	U	50.0	50.0	44.5	45.9
Chloromethane	5.0	U	50.0	50.0	43.8	52.0
Dibromochloromethane	5.0	U	50.0	50.0	39.3	39.2
1,1-Dichloroethane	5.0	U	50.0	50.0	45.0	46.9
1,2-Dichloroethane	2.3	J	50.0	50.0	43.8	44.4
1,1-Dichloroethene	5.0	U	50.0	50.0	48.9	50.6
1,2-Dichloropropane	5.0	U	50.0	50.0	41.9	44.4
cis-1,3-Dichloropropene	5.0	U	50.0	50.0	41.8	42.1
trans-1,3-Dichloropropene	5.0	U	50.0	50.0	40.4	42.7
Ethylbenzene	1.0	J	50.0	50.0	44.6	44.3
2-Hexanone	10	U	50.0	50.0	39.2	37.9
Methylene Chloride	5.0	U	50.0	50.0	42.1	43.6
methyl isobutyl ketone	10	U	50.0	50.0	39.8	39.4
Styrene	5.0	U	50.0	50.0	41.2	42.8
1,1,2,2-Tetrachloroethane	5.0	U	50.0	50.0	39.8	38.7
Tetrachloroethene	5.0	U	50.0	50.0	43.1	44.1
Toluene	5.0	U	50.0	50.0	43.5	43.8
1,1,1-Trichloroethane	5.0	U	50.0	50.0	45.7	46.3
1,1,2-Trichloroethane	5.0	U	50.0	50.0	41.9	42.5
Trichloroethene	5.0	U	50.0	50.0	45.2	46.6
Vinyl chloride	5.0	U	50.0	50.0	43.8	51.4
Xylenes, Total	5.0	U	150	150	132	133
cis-1,2-Dichloroethene	5.0	U	50.0	50.0	44.5	46.3
trans-1,2-Dichloroethene	5.0	U	50.0	50.0	47.4	48.0

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	LCS or LCSD exceeds the control limits
	B	The analyte was found in an associated blank, as well as in the sample.

Client: Malcolm Pirnie, Inc. Job Number: 220-15075-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-49434					
LCS 220-49434/2	Lab Control Sample	T	Water	8260B	
MB 220-49434/3	Method Blank	T	Water	8260B	
220-15075-2	Well 1-1A Eff	T	Water	8260B	
220-15075-3TB	Trip Blank	T	Water	8260B	
220-15081-H-7 MS	Matrix Spike	T	Water	8260B	
220-15081-I-7 MSD	Matrix Spike Duplicate	T	Water	8260B	
Analysis Batch:220-49466					
LCS 220-49466/2	Lab Control Sample	T	Water	8260B	
MB 220-49466/3	Method Blank	T	Water	8260B	
220-15071-C-2 MS	Matrix Spike	T	Water	8260B	
220-15071-A-2 MSD	Matrix Spike Duplicate	T	Water	8260B	
220-15075-1	Well 1-1A Inf	T	Water	8260B	

Report Basis
T = Total