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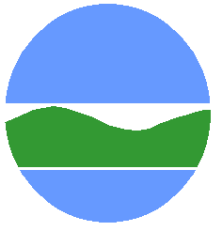

New York State Department of Environmental Conservation

Site Number 7-04-009A

Vestal Water Supply Site Quarterly Report and Annual Groundwater Monitoring Summary

Second Quarter 2011

December 2011

ARCADIS

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Staff Geologist

Vestal Water Supply Site Quarterly Report and Annual Groundwater Monitoring Summary

Site Number 7-04-009A

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New York State Department of Environmental Conservation

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Date:
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ARCADIS

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1. Introduction

The New York State Department of Environmental Conservation (NYSDEC) has issued a Work Assignment (# D004443-4) to ARCADIS U.S., inc. (ARCADIS), formerly Malcolm Pirnie, Inc. (Malcolm Pirnie) for Operation, Maintenance, and Monitoring at the Vestal Water Supply Site in New York State (Site # 7-04-009A). ARCADIS has prepared this Quarterly Report and Annual Groundwater Monitoring Summary 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

ARCADIS 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, ARCADIS 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 provides energy savings by allowing the well pump motor to be operated at a reduced speed. Compared to the full load rating of the pump motor and at estimated energy cost of $0.083 per kilo-watt (KW), the VFD, at the current setting of 51 hertz, has the potential to provide an estimated annual energy cost savings up to $9,000.

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 (Appendix A) are direct readings from the digital flow meter.

3.1 System Operation

As indicated in the ECI Monthly Reports and O&M Logs, the groundwater treatment system was shut down for approximately four days in April and two days in March at the request of the NYSDEC Division of Water due to flooding on the Susquehanna River.

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 352 gallons per minute (GPM) in April, 2011 to an average of 289 GPM in June, 2011. As shown on Table 3-1, approximately 39,820,000 gallons of water were treated during the second quarter 2011 operating period.

3.2 Influent – Effluent Sampling

Second quarter 2011 influent and effluent groundwater samples were collected from the Well 1-1A treatment system in accordance with the Work Plan; however, as discussed in Section 3.1, the system shutdown caused by the Susquehanna River flooding in April, 2011 occurred during the period of the typical monthly sampling event. As a result, no samples were collected from the treatment system in April 2011.

Influent and effluent groundwater samples were sent to TestAmerica 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 samples collected in the second quarter, 2011. Figure 3-2 shows that the total VOCs concentrations detected in the Well 1-1A influent samples are generally within the range of previous sampling events.

Table 3-3 shows that VOCs were not detected in any of the second quarter 2011 effluent samples.

Based on influent sample concentrations and total flow volumes from the Well 1-1A treatment system, approximately 118 pounds of VOCs were removed by the treatment system during the second quarter 2011 operating period. This quantity is greater than the first quarter 2011 removal mass of 109 pounds and within the range of VOC removal for the system.

4. Groundwater Monitoring

The Vestal Well 1-1A groundwater monitoring program evaluates groundwater quality, monitors contaminant migration in the groundwater at the site, and assesses hydrogeologic site conditions, including groundwater flow. Figure 4-1 shows the location of the groundwater monitoring wells. Second quarter groundwater monitoring program activities were conducted in accordance with the Work Plan between June 11 and 16, 2011.

4.1 Well Inspection

In 2007, several groundwater monitoring wells shown in the Final O&M Manual (Figure 1, Location of Wells) either could not be located or did not spatially correlate to wells found during the well inspection process. Therefore, each well located during the well inspection survey was subsequently located using a hand-held global positioning system (GPS) and given a new identification. Appendix C contains a list of the old and new well identifications and GPS coordinates for each well. This and future reports will refer to the new well identifications.

Existing on-site groundwater monitoring wells and piezometers were evaluated for integrity and suitability for groundwater monitoring and water levels. The condition of each well and piezometer was recorded on a well inspection form, provided in Appendix D. As shown on the well inspection forms, the integrity of each well and/or piezometer is generally acceptable except for Well 4009-2. The protective casing for this well is damaged.

4.2 Groundwater Flow

Prior to collecting groundwater samples, water levels were measured to the nearest hundredth of a foot and recorded on a groundwater level data form (Appendix E). Table 4-1 summarizes the groundwater levels and elevations from the site. As shown in Table 4-1, groundwater elevations in groundwater monitoring wells and piezometers screened in the shallow groundwater monitoring zone ranged from 804.27-feet above mean sea level (amsl) to 825.10-feet amsl; groundwater elevations in monitoring wells and piezometers screened in the deep groundwater monitoring zone ranged from 804.31-feet amsl to 805.92-feet amsl.

As shown in the groundwater elevation data presented in Table 4-1, the groundwater elevations in monitoring well clusters 4009-11/11A, 4009-13/13A, and 4009-16/16A

were higher in the shallow monitoring zone than in the deep monitoring zone (indicating a downward hydraulic gradient). The difference in the hydraulic gradients is likely due to the influence of the groundwater pumping wells (Well 1-1A, Well 1-2A, and Well 1-3). The elevations in groundwater monitoring well cluster 4009-12/12A were slightly higher (0.03 feet) in the deep groundwater monitoring than in the shallow groundwater monitoring zone (indicating an upward hydraulic gradient). Since the shallow groundwater monitoring zone at 4009-12A is deeper (approximately 60 feet bgs) compared to the above-mentioned well clusters (an average of approximately 36 feet bgs) and the deep groundwater monitoring zone at 4009-12 (approximately 112 feet bgs) is shallower compared to wells 4009-11, 13, and 16 (150 feet, 113 feet, and 147 feet, respectively), the influence of pumping across the monitoring zones at this location may be reduced.

Shallow and deep potentiometric surface maps are provided on Figure 4-2 and Figure 4-3, respectfully. As shown on Figure 4-2, the direction of groundwater flow in the vicinity of the source area in the shallow groundwater monitoring zone is generally northwest toward the Well 1-1A groundwater treatment plant. As shown on Figure 4-3, the direction of groundwater flow in the central area of the site is generally north to northwest toward the Well 1-1A treatment plant. The direction of groundwater flow in the western area of the site is generally west, toward the Town of Vestal water supply wells (1-3 and 1-2A). These data indicate that pumping of Well 1-1A is creating a localized groundwater divide south of the Well 1-1A treatment system.

4.3 Groundwater Sampling

Groundwater samples were collected from 18 groundwater monitoring wells (4009-1 through 4009-11, 4009-11A, 4009-12, 4009-12A, 4009-13, 4009-13A, 4009-14, and 4009-15) using low-flow groundwater purging and sampling procedures in accordance with the Work Plan. Prior to collecting groundwater samples, pH, conductivity, turbidity, dissolved oxygen (DO), temperature, salinity, total dissolved solids (TDS), and oxidation-reduction potential (REDOX) were measured using a Horiba U-22 water quality meter and recorded on groundwater sampling purge logs. Groundwater sampling purge logs are presented in Appendix F.

Groundwater samples collected during the groundwater monitoring program were sent to TestAmerica – Connecticut by chain-of-custody procedures and analyzed for target compound list (TCL) VOCs by USEPA Method 8260. Samples collected from groundwater monitoring wells 4009-12, 4009-12A, and 4009-13 were also analyzed for

target analyte list (TAL) metals by USEPA Method ILM05.3. Analytical data packages are provided in Appendix B.

Groundwater sampling results for the second quarter 2011 sampling event are summarized in Table 4-2 (VOCs) and Table 4-3 (Metals).

4.3.1 VOCs - Shallow Groundwater Monitoring Wells

As shown in Table 4-2, VOCs were detected at concentrations greater than the corresponding NYSDEC Class GA Standards in seven of the 13 groundwater samples collected from the shallow groundwater monitoring network. Figure 4-4 shows the horizontal distribution of total VOC concentrations from shallow monitoring well network. As shown on Figure 4-4, the greatest concentrations of total VOCs were detected in the samples from shallow groundwater monitoring wells 4009-3 (141 µg/L), 4009-7 (674 µg/L), and 4009-8 (1,692 µg/L). Figure 4-5 shows the total VOCs concentrations in samples collected from these wells over time. As shown in Figure 4-5, the concentrations of total VOCs have generally decreased over time, with the most significant reductions observed in groundwater samples from 4009-8. Table 4-2 shows that the concentrations of 1,1,1-trichloroethane (1,1,1-TCA) in the sample from 4009-3 (14 µg/L) has decreased slightly from the concentration in the sample from this well (15 µg/L) in 2008, maintaining the substantial decrease from 2008 levels (810 µg/L). The concentration of 1,1,1-TCA in the sample collected from 4009-8 has increased from 630 µg/L in 2010 to 1,000 µg/L in 2011, which is the maximum 1,1,1-TCA concentration reported in this well since 2007. The concentrations of 1,1,1-TCA (46 µg/L) 1-1, dichloroethane (43 µg/L) 1-1, dichloroethene (10 µg/L), cis-1,2-dichloroethene (210 µg/L) and vinyl chloride (310 µg/L) increased from 2010 levels and represent maximum values for samples collected from this well. The concentrations of trichloroethene (46 µg/L) in the sample from 4009-7 increased compared to the concentrations reported in 2010 but are consistent with previous results for samples collected from this well. As shown in Table 4-2, the concentrations of VOCs in samples collected from the remainder of wells in the shallow groundwater monitoring network (4009-2, 4009-4, 4009-5, and 4009-12A) were generally consistent with the 2007 through 2010 monitoring results. The concentrations of total VOCs in these wells ranged from 33 µg/L (4009-2) to 98 µg/L (4009-5).

As shown in Table 4-2, low levels of acetone were detected in several of the June 15, 2011 groundwater samples and the associated Trip Blank. Table 4-2 shows that acetone and trichloroethene compounds were also detected in the associated Method

Blank (indicated by the "B" qualifier); therefore, low-level detections of acetone and trichloroethene are likely related to laboratory contamination.

One duplicate sample (4009-X) was collected from monitoring well 4009-6 and submitted as a laboratory quality assurance/quality control check. As shown in Table 4-2, the concentrations of VOCs in these samples correlate well.

4.3.2 VOCs – Deep Groundwater Monitoring Wells

Table 4-2 shows that the concentrations of total VOCs in the groundwater sample collected from monitoring well 4009-12 in 2011 (501 µg/L) increased compared to results reported in 2010 (214 µg/L). As shown in Table 4-2, the concentrations of 1,1,1-TCA (330 µg/L), trichloroethene (60 µg/L), cis-1,2-dichloroethene (65 µg/L), 1,1-dichloroethane (15 µg/L), and 1,1-dichloroethene (14 µg/L) are all greater than their corresponding NYSDEC Class GA Standard of 5 µg/L. Table 4-2 also shows that the methylene chloride result in the sample from 4009-12 in 2011 (16 µg/L) is likely to be anomalous and may be related to laboratory contamination since it was detected in the method blank and has been detected in only one other sampling period since 2007. As shown in Table 4-2, groundwater samples collected from the remaining wells screened in the deep groundwater monitoring zone (4009-11, 4009-14, and 4009-15) did not contain any VOCs at concentrations greater than the applicable NYSDEC Class GA Standards.

4.3.3 Metals

Groundwater samples were collected from groundwater monitoring wells 4009-12 and 4009-12A, and 4009-13 and analyzed for total and dissolved TAL metals. Table 4-3 shows that the groundwater samples analyzed for metals in 2010 contained at least one metal at a concentration greater than the applicable NYSDEC Class GA Standards. As shown in Table 4-3, iron concentrations in groundwater sampled from well 4009-12 (3800 µg/L), well 4009-12A (886 µg/L) and well 4009-13 (955 µg/L) exceeded the corresponding NYSDEC Class GA standard of 300 µg/L. The concentrations of total sodium greater than the applicable NYSDEC Class GA Standard (20,000 µg/L) ranged from 86,700 µg/L in the sample from 4009-13 to 119,000 µg/L in the sample from 4009-12. Based on the proximity of these sample locations to Pumphouse Road, the sodium exceedances in these samples are likely the result of the local application of road de-icing agents. Groundwater samples from 4009-12A (419 µg/L) and 4009-13 (539 µg/L) contained concentrations of total manganese greater than the corresponding NYSDEC Class GA Standard of 300 µg/L.

5. Recommendations

Recommendations for revised instrumentation and controls have been presented to the NYSDEC in the PRR (Malcolm Pirnie, 2010). The following recommendations are for items observed during the second quarter 2011 O&M period.

The protective casing on well 4009-2 is damaged and should be replaced.

6. Summary

The Vestal Well 1-1A groundwater treatment system was shut down for four days in late April and early May due to flooding. The system operated with minimal interruption during the remainder of the second quarter, 2011 operation and maintenance period. The average flow rate through the treatment system during this period was 327 GPM, consistent with the average flow from the first quarter 2011. Total flow through the treatment system from April to June 2011 was approximately 39.8-million gallons. Based on monthly influent and effluent sampling, the treatment system successfully removes VOCs from groundwater extracted from the capture zone. Approximately 118 pounds of VOCs were removed by the treatment system during the second quarter, 2011 operational period.

Second quarter groundwater monitoring activities were conducted between June 11 and 15, 2011. Based on the well inspection survey, the condition of monitoring wells and piezometers were generally acceptable with the exception of a damaged protective well casing for well 4009-2. Evaluations of groundwater flow indicate that the direction of shallow groundwater flow from the contaminant source area is generally toward the Well 1-1A treatment plant. Deep groundwater flow is influenced locally by Well 1-1A and the Town of Vestal water supply wells.

The concentrations of VOCs in samples collected from the shallow groundwater monitoring network were greater than the corresponding NYSDEC Class GA Standards in seven of the 13 wells evaluated during the second quarter 2011 sampling event, but were generally within the range of results from the 2007 through 2011 sampling events. The maximum concentration of total VOCs was 1,692 µg/L in the sample from shallow monitoring well 4009-8. Only one deep groundwater monitoring well (4009-12) contained concentrations of VOCs greater than the applicable NYSDEC Class GA Standard. The elevated concentrations of VOCs in this well are likely due to the influence of the pumping well on local vertical groundwater flow. The results from this well were consistent with 2007 through 2010 sample results.

In general, groundwater samples collected from monitoring wells located downgradient of the contaminant source area contained the greatest concentrations of VOCs. No VOCs were detected above the applicable NYSDEC Class GA Standards in any of the groundwater samples collected from monitoring wells located between the Well 1-1A groundwater treatment system and the Town of Vestal 1-2A and 1-3 water supply wells.

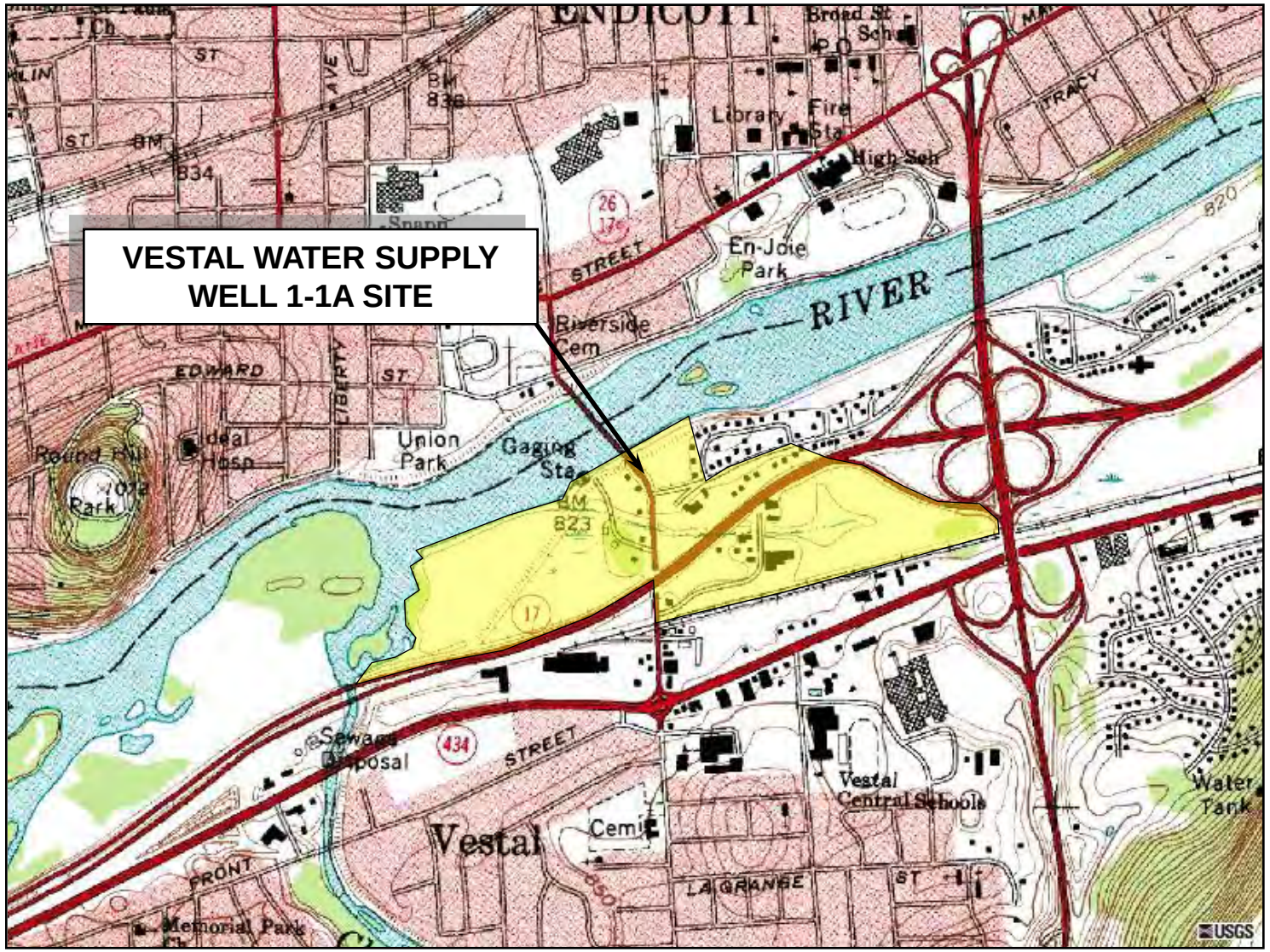
The concentrations of iron, sodium, and/or manganese were detected at concentrations greater than the corresponding NYSDEC Class GA Standards in each of groundwater samples analyzed for metals during the second quarter 2011 sampling event.

The next groundwater sampling event is scheduled to be completed in the third quarter 2012.

7. References

Malcolm Pirnie, 2010, 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

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

VESTAL WATER SUPPLY SITE 1-1A 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

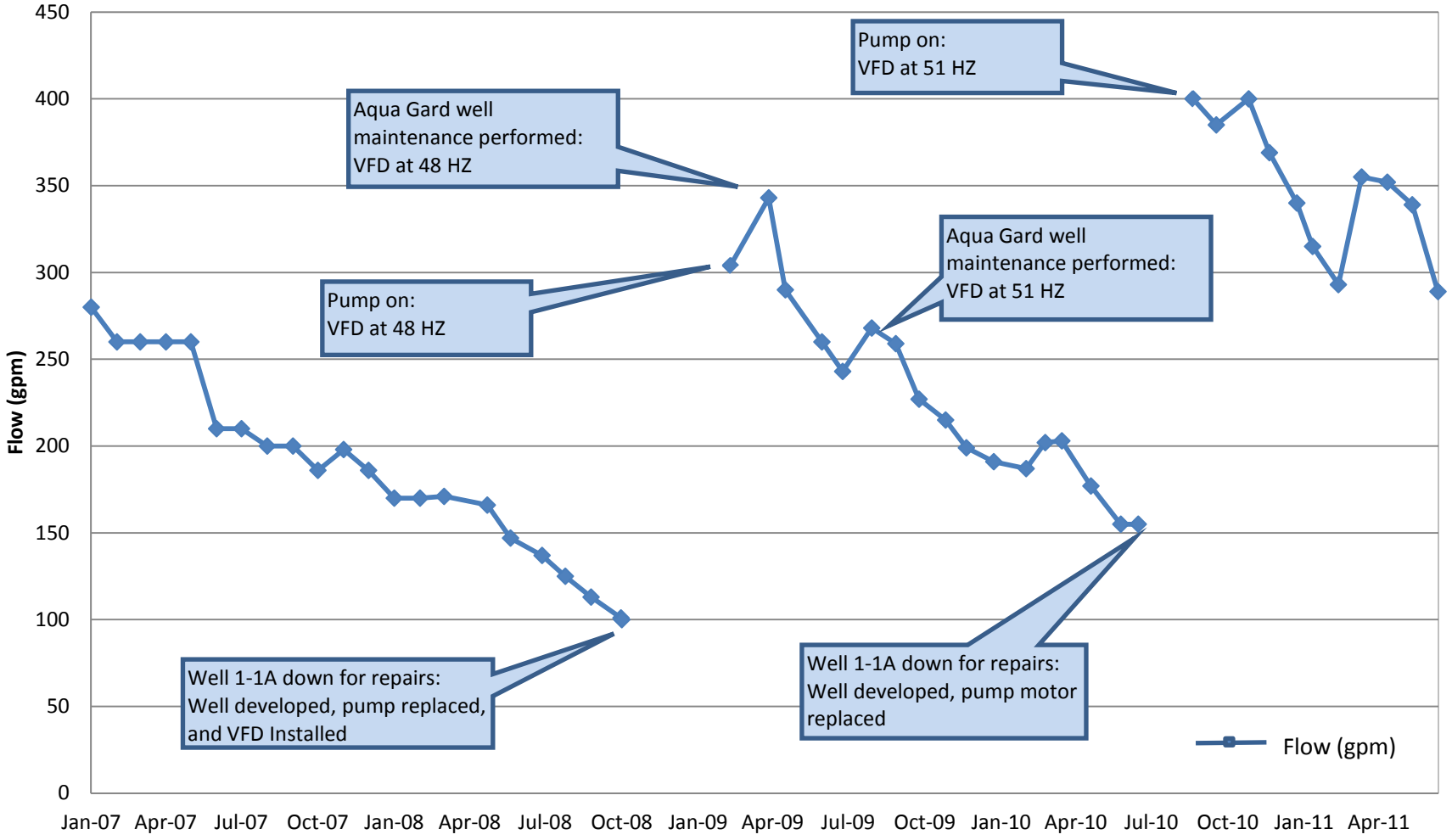
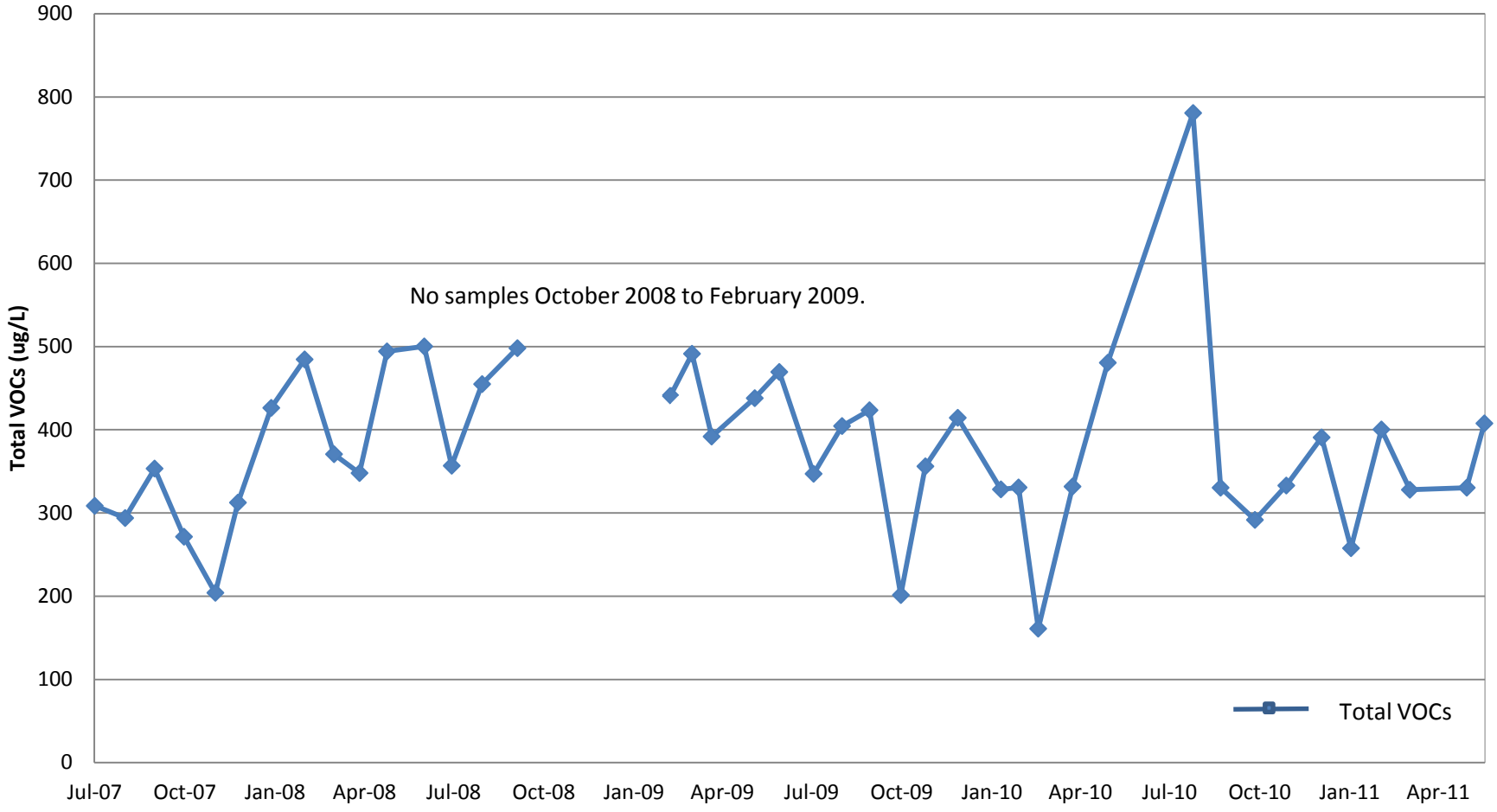
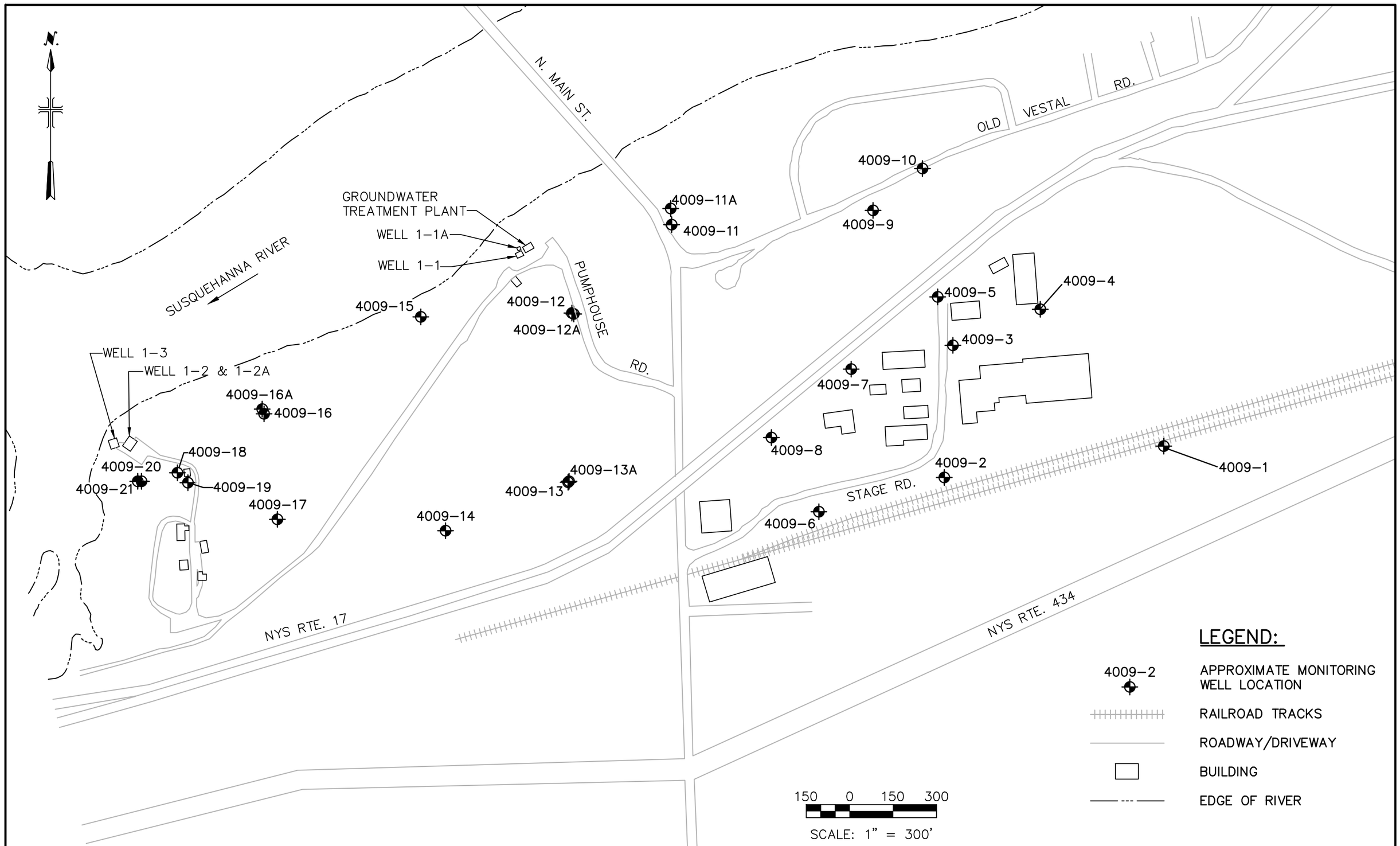


Figure 3-2
Well 1-1A Treatment Plant Total VOCs Concentrations
Vestal Water Supply Site
NYSDEC Site Number 7-04-009A



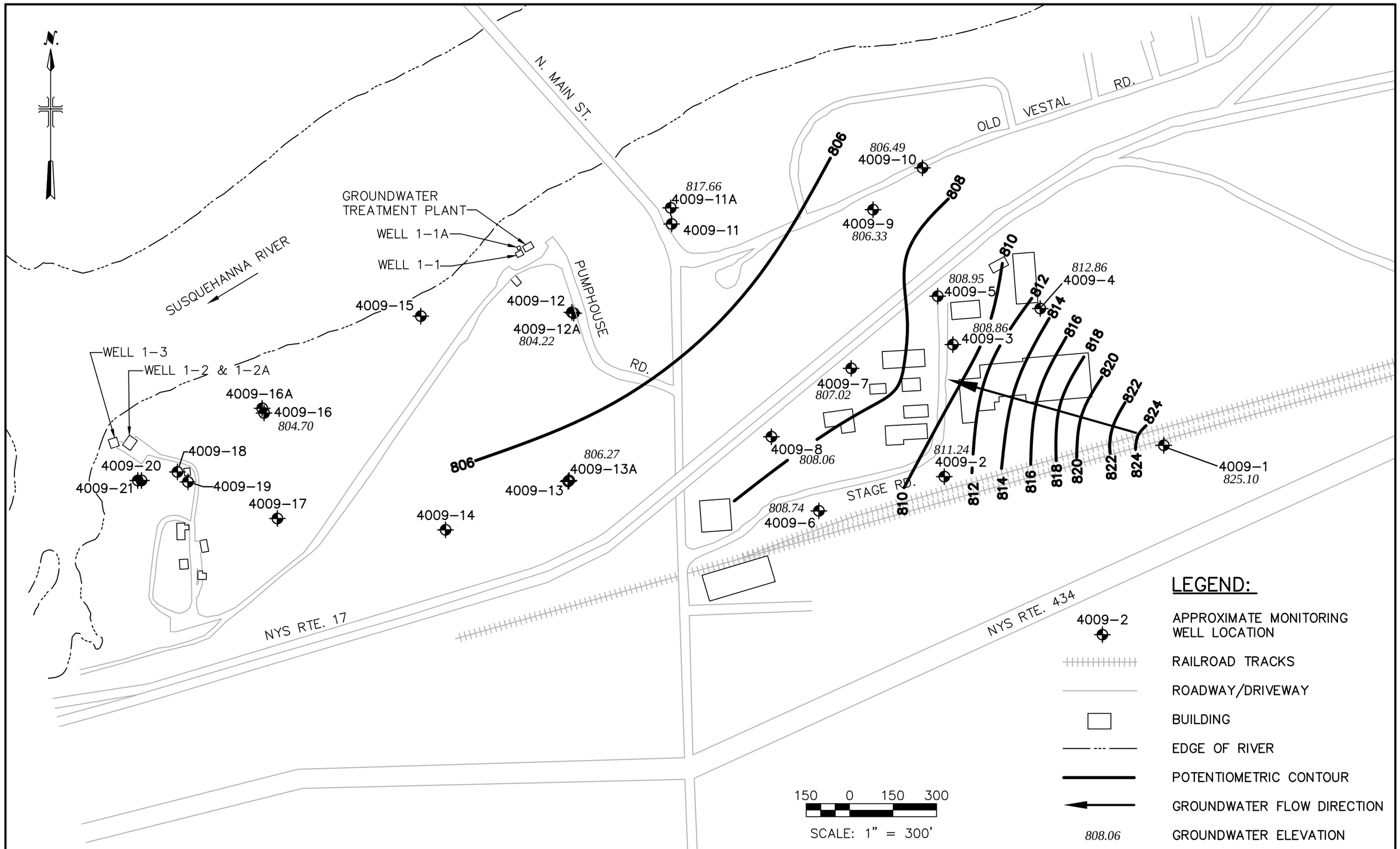


NYSDEC STANDBY CONTRACT NO. D004443-4
NYSDEC SITE NO. 7-04-009
VESTAL WATER SUPPLY
VESTAL, NEW YORK

MONITORING WELL LOCATION MAP

SCALE: 1" = 300'

ARCADIS-US, INC.
SEPTEMBER 2011
FIGURE 4-1



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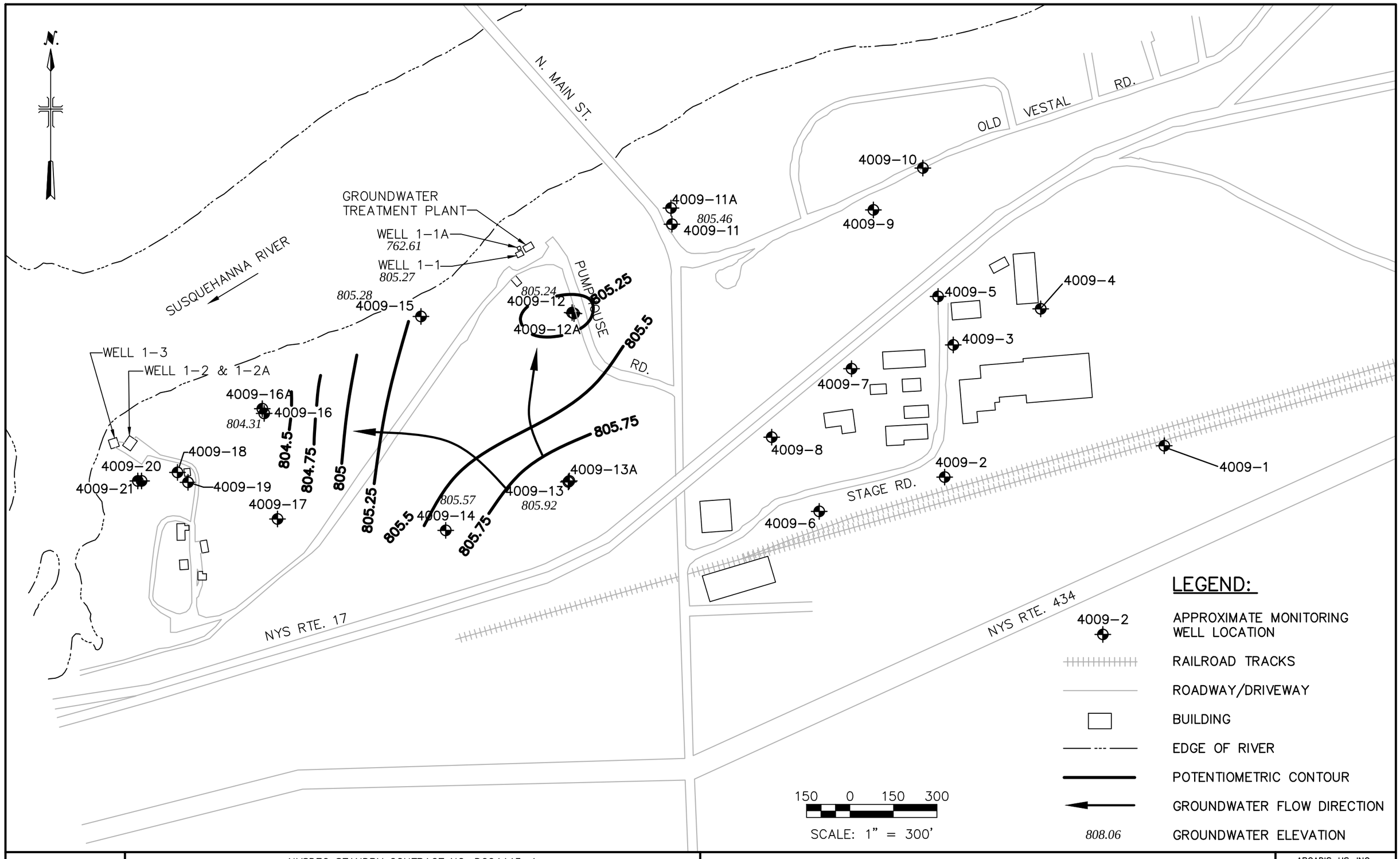
NYSDEC STANDBY CONTRACT NO. D004443-4
NYSDEC SITE NO. 7-04-009
VESTAL WATER SUPPLY
VESTAL, NEW YORK

SHALLOW POTENTIOMETRIC SURFACE
MONITORING WELL LOCATION MAP (6/14/2011)
SCALE: 1" = 300'

ARCADIS-US, INC.
SEPTEMBER 2011
FIGURE 4-2



LEGEND:

- 4009-2 — APPROXIMATE MONITORING WELL LOCATION
- RAILROAD TRACKS
- ROADWAY/DRIVEWAY
- BUILDING
- EDGE OF RIVER
- POTENTIOMETRIC CONTOUR
- GROUNDWATER FLOW DIRECTION
- 808.06 — GROUNDWATER ELEVATION

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NYSDEC STANDBY CONTRACT NO. D004443-4
NYSDEC SITE NO. 7-04-009

VESTAL WATER SUPPLY
VESTAL, NEW YORK

DEEP POTENTIOMETRIC SURFACE MONITORING WELL LOCATION MAP (6/14/2011)
SCALE: 1" = 300'

ARCADIS-US, INC.
SEPTEMBER 2011
FIGURE 4-3

N.

N. MAIN ST.

OLD VESTAL RD.

GROUNDWATER TREATMENT PLANT

WELL 1-1A

WELL 1-1

SUSQUEHANNA RIVER

PUMPHOUSE RD.

WELL 1-3

WELL 1-2 & 1-2A

4009-10 **2**

4009-11A **1**

4009-11

4009-9 **5**

4009-15

4009-12

4009-12A **42**

4009-5 **98**

4009-4 **47**

4009-3 **141**

4009-16A

4009-16

4009-7 **674**

4009-8 **1692**

4009-18

4009-20

4009-21

4009-19

4009-17

4009-13A

4009-13

4009-14

4009-2 **33**

4009-1 **8**

STAGE RD.

4009-6

NYS RTE. 17

NYS RTE. 434

100

500

1000

1500

NOTE:
ALL CONCENTRATIONS MEASURED IN ug/l.

150 0 150 300

SCALE: 1" = 300'

LEGEND:

- TOTAL VOCS ISOCONCENTRATION LINE
- ESTIMATED ISOCONCENTRATION LINE (LIMITED DATA)
- 4009-2 — APPROXIMATE MONITORING WELL LOCATION
- **1037** — TOTAL VOCS CONCENTRATION
- RAILROAD TRACKS
- ROADWAY/DRIVEWAY
- BUILDING
- EDGE OF RIVER

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

TOTAL VOC CONCENTRATIONS (JUNE 2011)
SCALE: 1" = 300'

ARCADIS-US, INC.
SEPTEMBER 2011
FIGURE 4-4

Figure 4--5
Historical Total VOCs Concentrations in Shallow Groundwater Monitoring Wells
Vestal Water Supply Site
NYSDEC Site Number 7-04-009

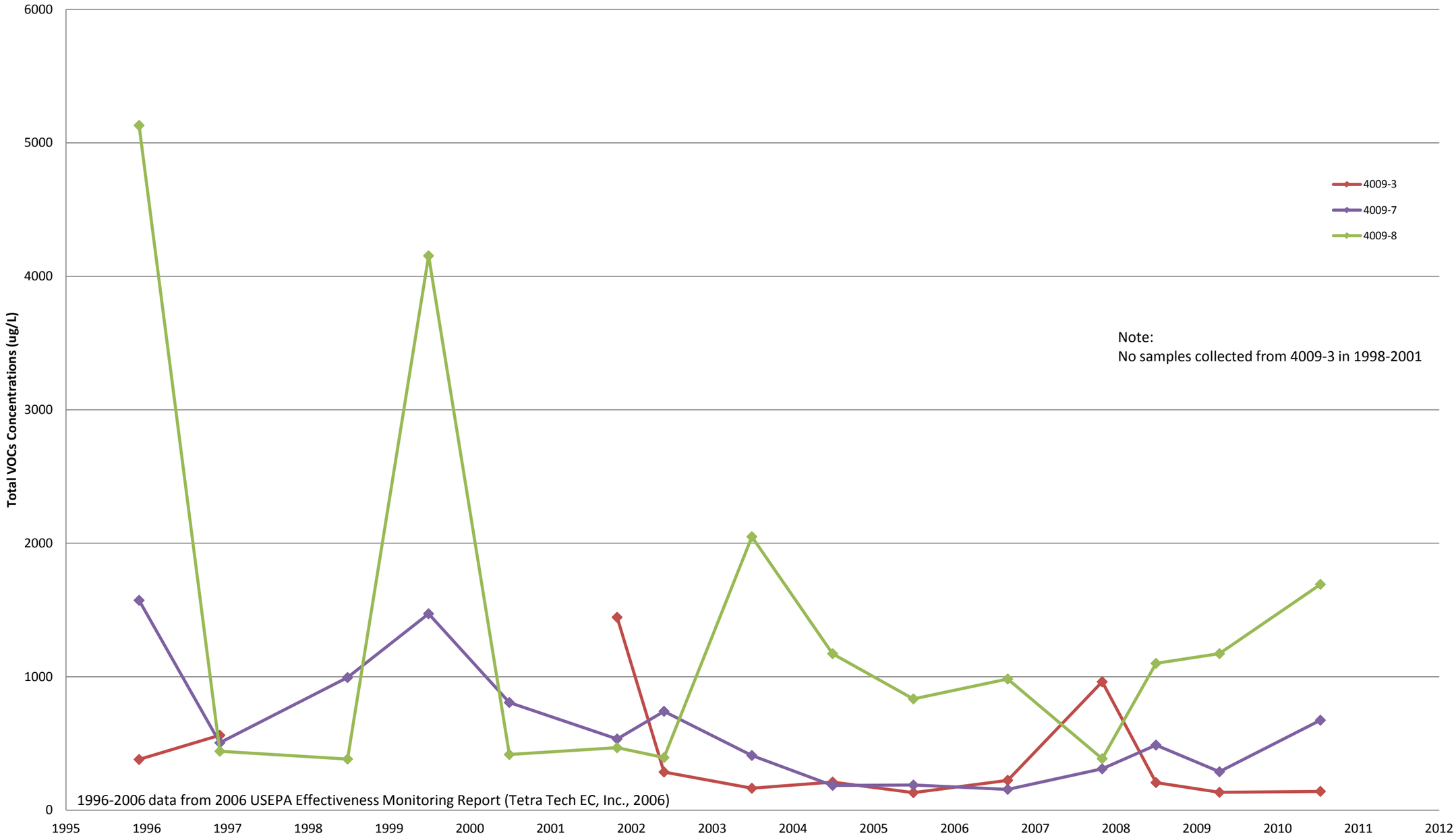

TABLE 3-1
WELL 1-1A FLOW SUMMARY
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE NO. 7-04-009A

Date	System Operation[1] (days/month)			Pumping Rate[1] (gpm)	Total Flow[2] (gallons)	Quarterly Flow (gallons)
January-07	31	44640		280	12,499,200	
February-07	28	40320		260	10,483,200	33,840,000
March-07	29	41760	(3)	260	10,857,600	
April-07	30	43200		260	11,232,000	
May-07	31	44640		260	11,606,400	31,910,400
June-07	30	43200		210	9,072,000	
July-07	31	44640		210	9,374,400	
August-07	31	44640		200	8,928,000	26,942,400
September-07	30	43200		200	8,640,000	
October-07	31	44640		186	8,303,040	
November-07	29	41760		198	8,268,480	24,874,560
December-07	31	44640		186	8,303,040	
January-08	31	44640		170	7,588,800	
February-08	29	41760		170	7,099,200	22,321,440
March-08	31	44640		171	7,633,440	
April-08	30	43200		166	7,171,200	
May-08	31	44640		147	6,562,080	19,651,680
June-08	30	43200		137	5,918,400	
July-08	31	44640		125	5,580,000	
August-08	31	44640		113	5,044,320	14,987,520
September-08	30	43200		101	4,363,200	
October-08	6	8640	(4)	100	864,000	
November-08	0	0	(4)	0	0	864,000
December-08	0	0	(4)	0	0	
January-09	0	0	(4)	0	0	
February-09	19	27360	(4)	304	8,317,440	22,641,120
March-09	29	41760	(3)	343	14,323,680	
April-09	30	43200		290	12,528,000	
May-09	30	43200	(5)	260	11,232,000	34,257,600
June-09	30	43200		243	10,497,600	
July-09	29	41760	(4)	268	11,191,680	
August-09	29	41760	(5)	259	10,815,840	31,160,160
September-09	28	40320	(5)	227	9,152,640	
October-09	31	44640		215	9,597,600	
November-09	30	43200	(5)	199	8,596,800	26,720,640
December-09	31	44640		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	36000	(3)	187	6,732,000	
February-10	28	40320		202	8,144,640	23,938,560
March-10	31	44640		203	9,061,920	
April-10	30	43200		177	7,646,400	
May-10	31	44640		155	6,919,200	16,128,000
June-10	7	10080	(4)	155	1,562,400	
July-10	0	0	(4)	0	0	
August-10	12	17280	(4)	400	6,912,000	23,544,000
September-10	30	43200		385	16,632,000	
October-10	31	44640		400	17,856,000	
November-10	28	40320	(5)	369	14,878,080	47,911,680
December-10	31	44640		340	15,177,600	
January-11	31	44640		315	14,061,600	
February-11	27	38880	(5)	293	11,391,840	40,278,240
March-11	29	41760	(3)	355	14,824,800	
April-11	26	37440	(3)	352	13,178,880	
May-11	29	41760	(3)	339	14,156,640	39,820,320
June-11	30	43200		289	12,484,800	
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	WELL 1A-INF 10/26/2007 WATER ug/L	WELL 1A-INF 11/27/2007 WATER ug/L
VOCs						
1,1,1-Trichloroethane	5	**170**	**160**	**200**	**140**	**110**
1,1,2,2-Tetrachloroethane	5	10 U	5 U	20 U	5 U	10 U
1,1,2-Trichloroethane	1	10 U	5 U	20 U	5 U	10 U
1,1-Dichloroethane	5	**20**	**19**	**23**	**22**	**15**
1,1-Dichloroethene	5	**12**	**10**	**14 J**	**11**	**8.2 J**
1,2-Dichloroethane	0.6	10 U	5 U	20 U	5 U	10 U
1,2-Dichloropropane	5	10 U	5 U	20 U	5 U	10 U
2-Hexanone		20 U	10 U	40 U	10 U	20 U
Acetone		20 U	10 U	40 U	10 U	20 U
Benzene	1	10 U	0.39 J	20 U	5 U	10 U
Bromodichloromethane	50	10 U	5 U	20 U	5 U	10 U
Bromoform		10 U	5 U	20 U	5 U	10 U
Bromomethane	5	10 U	5 U	20 U	5 U	10 U
Carbon disulfide		10 U	5 U	20 U	5 U	10 U
Carbon tetrachloride	5	10 U	5 U	20 U	5 U	10 U
Chlorobenzene	5	10 U	5 U	20 U	5 U	10 U
Chloroethane	5	10 U	5 U	20 U	5 U	10 U
Chloroform	7	10 U	5 U	20 U	5 U	10 U
Chloromethane		10 U	5 U	20 U	5 U *	10 U
cis-1,2-Dichloroethene	5	**55**	**54**	**58**	**50**	**39**
cis-1,3-Dichloropropene	0.4	10 U	5 U	20 U	5 U	10 U
Dibromochloromethane	50	10 U	5 U	20 U	5 U	10 U
Ethylbenzene	5	10 U	5 U	20 U	5 U	10 U
Methyl Ethyl Ketone	50	20 U	10 U	40 U	10 U	20 U
Methyl Isobutyl Ketone		20 U	10 U	40 U	10 U	20 U
Methylene Chloride	5	10 U	5 U	20 U *	5 U	10 U M
Styrene	5	10 U	5 U	20 U	5 U	10 U
Tetrachloroethene	5	1.3 J	5 U	20 U	0.97 J	10 U
Toluene	5	10 U	0.15 J	20 U	5 U	10 U
trans-1,2-Dichloroethene	5	10 U	5 U	20 U	5 U	10 U
trans-1,3-Dichloropropene	0.4	10 U	5 U	20 U	5 U	10 U
Trichloroethene	5	**46**	**47**	**53**	**41 B**	**29**
Vinyl chloride	2	**4.3 J**	**3.4 J**	**5.4 J**	**6.5 ***	**2.9 J**
Xylenes, Total	5	10 U	5 U	20 U	5 U	10 U
Total VOCs		309	294	353	271	204

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 12/20/2007 WATER 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	WELL 1A-INF 4/22/2008 WATER ug/L
VOCs						
1,1,1-Trichloroethane	5	**170**	**230**	**250**	**180**	**180**
1,1,2,2-Tetrachloroethane	5	20 U	10 U	10 U	5 U	10 U
1,1,2-Trichloroethane	1	20 U	10 U	10 U	5 U	10 U
1,1-Dichloroethane	5	**24**	**30**	**31**	**27**	**26**
1,1-Dichloroethene	5	**13 J**	**18 M**	**18**	**17**	**9.7 J**
1,2-Dichloroethane	0.6	20 U	10 U	10 U	5 U	10 U
1,2-Dichloropropane	5	20 U *	10 U	10 U	5 U	10 U
2-Hexanone		40 U	20 U *	20 U	10 U	20 U
Acetone		40 UM	20 U *	20 U	10 U	20 U
Benzene	1	20 U	0.6 J	10 U	0.38 J	10 U
Bromodichloromethane	50	20 U	10 U	10 U	5 U	10 U
Bromoform		20 U	10 U	10 U	5 U	10 U
Bromomethane	5	20 U	10 U *	10 U	5 U	10 U
Carbon disulfide		20 U	10 U	10 U	5 U	10 U
Carbon tetrachloride	5	20 U	10 U	**35**	5 U	10 U
Chlorobenzene	5	20 U	10 U	10 U	5 U	10 U
Chloroethane	5	20 U *	10 U	10 U	0.79 J	10 U
Chloroform	7	20 U	10 U	10 U	5 U	10 U
Chloromethane		20 U *	10 U	10 U	5 U	10 U
cis-1,2-Dichloroethene	5	**57**	**71**	**73**	**76**	**72**
cis-1,3-Dichloropropene	0.4	20 U	10 U	10 U	5 U	10 U
Dibromochloromethane	50	20 U	10 U	10 U	5 U	10 U
Ethylbenzene	5	20 U	10 U	10 U	5 U	10 U
Methyl Ethyl Ketone	50	40 U	20 U *	20 U	10 U	20 U
Methyl Isobutyl Ketone		40 U	20 U	20 U	10 U	20 U
Methylene Chloride	5	2.2 JMB	0.94 J	10 U	5 U	2.2 J B
Styrene	5	20 U	10 U	10 U	5 U	10 U
Tetrachloroethene	5	20 U	10 U	10 U	5 U	10 U
Toluene	5	20 U	10 U	10 U	5 U	10 U
trans-1,2-Dichloroethene	5	20 U	10 U	10 U	5 U	10 U
trans-1,3-Dichloropropene	0.4	20 U	10 U	10 U	5 U	10 U
Trichloroethene	5	**37**	**62**	**69**	**62**	**54 * B**
Vinyl chloride	2	**9.3 JM**	**11**	**8.6 J**	**7.5**	**4.1 J**
Xylenes, Total	5	20 U	2.8 J	10 U	5 U	10 U
Total VOCs		313	426	485	371	348

Notes

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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 5/20/2008 WATER ug/L	WELL 1A-INF 6/27/2008 WATER 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	**300 E**	**290**	**220**	**270**	**300**
1,1,2,2-Tetrachloroethane	5	10 U	20 U	20 U	20 U	25 U
1,1,2-Trichloroethane	1	10 U	20 U	20 U	20 U	25 U *
1,1-Dichloroethane	5	**27**	**28**	**23**	**27**	**28**
1,1-Dichloroethene	5	**17**	**20 J**	**13 J**	**19 J**	**19 J**
1,2-Dichloroethane	0.6	10 U	20 U	20 U	20 U	25 U
1,2-Dichloropropane	5	10 U	20 U	20 U	20 U	25 U
2-Hexanone		10 U	40 U	40 U	40 U	50 U
Acetone		0.5 J B	11 J B	40 U	4.7 J	5.2 J
Benzene	1	10 U	20 U	20 U	20 U	25 U
Bromodichloromethane	50	10 U	20 U	20 U	20 U	25 U
Bromoform		10 U	20 U	20 U	20 U	25 U
Bromomethane	5	10 U	20 U	20 U	20 U	25 U
Carbon disulfide		10 U	20 U	20 U	20 U	25 U
Carbon tetrachloride	5	10 U	20 U	20 U	20 U	25 U
Chlorobenzene	5	10 U	20 U	20 U	20 U	25 U
Chloroethane	5	10 U	20 U	20 U	20 U	25 U
Chloroform	7	10 U	20 U	20 U	20 U	25 U *
Chloromethane		10 U	20 U	20 U	20 U	25 U
cis-1,2-Dichloroethene	5	**78**	**77**	**50**	**68**	**75**
cis-1,3-Dichloropropene	0.4	10 U	20 U	20 U	20 U	25 U
Dibromochloromethane	50	10 U	20 U	20 U	20 U	25 U
Ethylbenzene	5	10 U	20 U	20 U	20 U	25 U
Methyl Ethyl Ketone	50	10 U	40 U	40 U	40 U	50 U
Methyl Isobutyl Ketone		10 U	40 U	40 U	40 U	50 U
Methylene Chloride	5	0.32 JB	3.5 J B	20 U	20 U	25 U
Styrene	5	10 U	20 U	20 U *	20 U	25 U
Tetrachloroethene	5	10 U	20 U	20 U	20 U	25 U
Toluene	5	10 U	20 U	20 U	20 U	25 U
trans-1,2-Dichloroethene	5	10 U	20 U	20 U	20 U	25 U
trans-1,3-Dichloropropene	0.4	10 U	20 U	20 U	20 U	25 U
Trichloroethene	5	**65**	**64**	**45**	**59**	**64**
Vinyl chloride	2	**6.4 J**	**6.7 J**	**5.8 J**	**7.2 J**	**6.9 J**
Xylenes, Total	5	10 U	20 U	20 U	20 U	25 U
Total VOCs		494	500	357	455	498

Notes

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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	WELL 1A-INF 5/30/2009 WATER ug/L	WELL 1A-INF 6/24/2009 WATER ug/L
VOCs						
1,1,1-Trichloroethane	5	**260**	**280**	**220**	**250**	**270**
1,1,2,2-Tetrachloroethane	5	25 U	2 U	10 U	20 U	2 U
1,1,2-Trichloroethane	1	25 U	2 U	10 U	20 U	2 U
1,1-Dichloroethane	5	**28**	**31**	**25**	**27**	**27**
1,1-Dichloroethene	5	**19 J**	**22 ***	**20**	**24 ***	**22**
1,2-Dichloroethane	0.6	25 U	2 U	10 U	20 U	2 U
1,2-Dichloropropane	5	25 U	2 U	10 U	20 U	2 U
2-Hexanone		50 U	8 U	20 U	40 U	8 U
Acetone		50 U	2.3 J *	20 U *	12 J	10
Benzene	1	25 U	2 U	10 U	20 U	2 U
Bromodichloromethane	50	25 U	2 U	10 U	20 U	2 U
Bromoform		25 U	2 U	10 U	20 U	2 U
Bromomethane	5	25 U	4 U	10 U	20 U	4 U
Carbon disulfide		25 U	2 U	10 U	20 U	2 U
Carbon tetrachloride	5	25 U	2 U	10 U	20 U	2 U
Chlorobenzene	5	25 U	2 U	10 U	20 U	2 U
Chloroethane	5	25 U	4 U	10 U	20 U	4 U *
Chloroform	7	25 U	0.67 J B	10 U	20 U	2 U
Chloromethane		25 U	2 U	10 U	20 U	2 U *
cis-1,2-Dichloroethene	5	**65**	**63**	**60**	**53**	**55**
cis-1,3-Dichloropropene	0.4	25 U	2 U	10 U	20 U	2 U
Dibromochloromethane	50	25 U	2 U	10 U	20 U	2 U
Ethylbenzene	5	25 U	2 U	10 U	20 U	2 U
Methyl Ethyl Ketone	50	50 U	8 U	20 U	40 U	8 U
Methyl Isobutyl Ketone		50 U	8 U	20 U	40 U	8 U
Methylene Chloride	5	25 U	**7.9 J B**	**2.3 J B**	**11 J B**	**14**
Styrene	5	25 U	2 U	10 U	20 U	2 U
Tetrachloroethene	5	25 U	2 U	10 U	20 U	2 U
Toluene	5	25 U	2 U	10 U	20 U	2 U
trans-1,2-Dichloroethene	5	25 U	0.51 J	10 U	20 U	1.5 J
trans-1,3-Dichloropropene	0.4	25 U	2 U	10 U	20 U	2 U
Trichloroethene	5	**59**	**58**	**55**	**50**	**59**
Vinyl chloride	2	**10 J**	**14**	**9.6 J**	**11 J**	**11**
Xylenes, Total	5	25 U	**12**	10 U	20 U	4 U
Total VOCs		441	491	392	438	470

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

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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 7/29/2009 WATER 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	WELL 1A-INF 11/20/2009 WATER ug/L
VOCs						
1,1,1-Trichloroethane	5	**190**	**220**	**230**	**110**	**200**
1,1,2,2-Tetrachloroethane	5	2 U	2 U	10 U	10 U	20 U
1,1,2-Trichloroethane	1	2 U	2 U	10 U	10 U	20 U
1,1-Dichloroethane	5	**21**	**23**	**26**	**14**	**24**
1,1-Dichloroethene	5	**18 ***	**19**	**19**	**8.7 J**	**16 J**
1,2-Dichloroethane	0.6	2 U	2 U	10 U	10 U	20 U
1,2-Dichloropropane	5	2 U	2 U	10 U	10 U	20 U
2-Hexanone		8 U	8 U	20 U	20 U	40 U
Acetone		13 B	23	20 U	4.2 J	40 U
Benzene	1	2 U	2 U	10 U	10 U	20 U
Bromodichloromethane	50	2 U	2 U	10 U	10 U	20 U
Bromoform		2 U	2 U	10 U	10 U	20 U
Bromomethane	5	4 U	4 U	10 U	10 U	20 U
Carbon disulfide		2 U	2 U	10 U	10 U	20 U
Carbon tetrachloride	5	2 U	2 U	10 U	10 U	20 U
Chlorobenzene	5	2 U	2 U	10 U	10 U	20 U
Chloroethane	5	4 U *	4 U	10 U	10 U	20 U
Chloroform	7	2 U	2 U	10 U	10 U	20 U
Chloromethane		2 U	2 U	10 U	10 U	20 U
cis-1,2-Dichloroethene	5	**49**	**51**	**70**	**31**	**54**
cis-1,3-Dichloropropene	0.4	2 U	2 U	10 U	10 U	20 U
Dibromochloromethane	50	2 U	2 U	10 U	10 U	20 U
Ethylbenzene	5	2 U	2 U	10 U	10 U	20 U
Methyl Ethyl Ketone	50	8 U	8 U	20 U	20 U	40 U
Methyl Isobutyl Ketone		8 U	8 U	20 U	20 U	40 U
Methylene Chloride	5	**9.1**	4.9 J B	3.9 J B	10 U	20 U
Styrene	5	2 U	2 U	10 U	10 U	20 U
Tetrachloroethene	5	2 U	2 U	10 U	10 U	20 U
Toluene	5	2 U	2 U	10 U	10 U	20 U
trans-1,2-Dichloroethene	5	2 U *	2 U	10 U	10 U	20 U
trans-1,3-Dichloropropene	0.4	2 U	2 U	10 U	10 U	20 U
Trichloroethene	5	**47**	**56**	**66**	**29**	**53**
Vinyl chloride	2	2 U	**7.6**	**8.6 J**	**4.5 J**	**9.1 J**
Xylenes, Total	5	4 U	4 U	10 U	10 U	20 U
Total VOCs		347	405	424	201	356

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

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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 12/23/2009 WATER ug/L	WELL 1A-INF 2/5/2010 WATER 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	**240**	**170**	**170**	**91**	**180**
1,1,2,2-Tetrachloroethane	5	20 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1	20 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5	**27**	**23**	**22**	**14**	**22**
1,1-Dichloroethene	5	**20**	**16**	**17**	**7.5**	**16**
1,2-Dichloroethane	0.6	20 U	5 U	5 U	5 U *	5 U
1,2-Dichloropropane	5	20 U	5 U	5 U	5 U	5 U
2-Hexanone		40 U *	10 U	10 U	10 U	10 U
Acetone		5.8 J	10 U	10 U	10 U	10 U
Benzene	1	20 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50	20 U	5 U	5 U	5 U	5 U
Bromoform		20 U	5 U	5 U	5 U	5 U
Bromomethane	5	20 U	5 U	5 U	5 U	5 U
Carbon disulfide		20 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5	20 U	5 U	5 U	5 U	5 U
Chlorobenzene	5	20 U	5 U	5 U	5 U	5 U
Chloroethane	5	20 U	5 U	5 U	5 U *	5 U
Chloroform	7	20 U	5 U	5 U	5 U	5 U
Chloromethane		20 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	**55**	**56**	**57**	**22**	**53**
cis-1,3-Dichloropropene	0.4	20 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50	20 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	20 U	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone	50	40 U	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone		40 U	10 U	10 U	10 U	10 U
Methylene Chloride	5	20 U	5 U	5 U	5 U	5 U
Styrene	5	20 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	20 U	5 U	5 U	5 U	5 U
Toluene	5	20 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	20 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	20 U	5 U	5 U	5 U	5 U
Trichloroethene	5	**58**	**56**	**58**	**23**	**52**
Vinyl chloride	2	**8.6 J**	**7.4**	**6.7**	**3.5 J**	**8.8**
Xylenes, Total	5	20 U	5 U	5 U	5 U	5 U
Total VOCs		414	328	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	WELL 1A-INF 10/22/2010 WATER ug/L	WELL 1A-INF 11/23/2010 WATER ug/L
VOCs						
1,1,1-Trichloroethane	5	**270**	**420**	**180**	**150**	**180**
1,1,2,2-Tetrachloroethane	5	10 U	20 U	5 U	5 U	10 U
1,1,2-Trichloroethane	1	10 U	20 U	5 U	5 U	10 U
1,1-Dichloroethane	5	**30**	**48**	**23**	**18**	**23**
1,1-Dichloroethene	5	**21**	**34**	**15**	**15**	**14**
1,2-Dichloroethane	0.6	10 U	20 U	5 U	5 U	10 U
1,2-Dichloropropane	5	10 U	20 U	5 U	5 U	10 U
2-Hexanone		20 U	40 U	10 U	10 U	20 U
Acetone		20 U	40 U	10 U	10 U	2.6 J
Benzene	1	10 U	20 U	5 U	5 U	10 U
Bromodichloromethane	50	10 U	20 U	5 U	5 U	10 U
Bromoform		10 U	20 U	5 U	5 U	10 U
Bromomethane	5	10 U	20 U	5 U	5 U	10 U
Carbon disulfide		10 U	20 U	5 U	5 U	10 U
Carbon tetrachloride	5	10 U	20 U	5 U	5 U	10 U
Chlorobenzene	5	10 U	20 U	5 U	5 U	10 U
Chloroethane	5	10 U	20 U	5 U	5 U	10 U
Chloroform	7	10 U	20 U	5 U	5 U	10 U
Chloromethane		10 U	20 U	5 U *	5 U *	10 U
cis-1,2-Dichloroethene	5	**75**	**140**	**52**	**47**	**48**
cis-1,3-Dichloropropene	0.4	10 U	20 U	5 U	5 U	10 U
Dibromochloromethane	50	10 U	20 U	5 U	5 U	10 U
Ethylbenzene	5	10 U	20 U	5 U	5 U	10 U
Methyl Ethyl Ketone	50	20 U	40 U	10 U	10 U	20 U
Methyl Isobutyl Ketone		20 U	40 U *	10 U	10 U	20 U
Methylene Chloride	5	1.6 J B	4.7 J B	5 U	5 U	10 U
Styrene	5	10 U	20 U	5 U	5 U	10 U
Tetrachloroethene	5	10 U	20 U	5 U	5 U	10 U
Toluene	5	10 U	20 U	5 U	5 U	10 U
trans-1,2-Dichloroethene	5	10 U	20 U	5 U	5 U	10 U
trans-1,3-Dichloropropene	0.4	10 U	20 U	5 U	5 U	10 U
Trichloroethene	5	**71**	**120**	**51**	**47**	**49**
Vinyl chloride	2	**12**	**14 J**	**9.4**	**9.7**	**9 J**
Xylenes, Total	5	10 U	20 U	5 U	5 U	10 U
Total VOCs		481	781	330	292	333

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 12/29/2010 WATER 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	WELL 1A-INF 5/26/2011 WATER ug/L	WELL 1A-INF 6/13/2011 WATER ug/L
VOCs							
1,1,1-Trichloroethane	5	**220**	**140**	**220**	**170**	**180**	**240**
1,1,2,2-Tetrachloroethane	5	20 U	10	20 U	5 U	5 U	2 U
1,1,2-Trichloroethane	1	20 U	10	20 U	5 U	5 U	2 U
1,1-Dichloroethane	5	**28**	**19**	**27**	**25**	**23**	**26**
1,1-Dichloroethene	5	**19 J**	**13**	**22**	**18**	**15**	**20**
1,2-Dichloroethane	0.6	20 U	10 U	20 U	5 U	5 U	2 U
1,2-Dichloropropane	5	20 U	10 U	20 U	5 U	5 U	2 U
2-Hexanone		40 U	20 U	40 U	10 U	10 U	8 U
Acetone		40 U	3.1 J	14 J B	10 U	10 U	4.8 J B
Benzene	1	20 U	10 U	20 U	5 U	5 U	2 U
Bromodichloromethane	50	20 U	10 U	20 U	5 U	5 U	2 U
Bromoform		20 U	10 U	20 U	5 U	5 U	2 U
Bromomethane	5	20 U	10 U	20 U	5 U*	5 U	4 U
Carbon disulfide		20 U	10 U	20 U	5 U	5 U	2 U
Carbon tetrachloride	5	20 U	10 U	20 U	5 U	5 U	2 U *
Chlorobenzene	5	20 U	10 U	20 U	5 U	5 U	2 U
Chloroethane	5	20 U	10 U	20 U	5 U	5 U	4 U
Chloroform	7	20 U	10 U	20 U	5 U	5 U	0.71 J B
Chloromethane		20 U	10 U	20 U	5 U	5 U	2 U
cis-1,2-Dichloroethene	5	**57**	**39**	**63**	**53**	**52**	**52**
cis-1,3-Dichloropropene	0.4	20 U	10 U	20 U	5 U	5 U	2 U
Dibromochloromethane	50	20 U	10 U	20 U	5 U	5 U	2 U
Ethylbenzene	5	20 U	10 U	20 U	5 U	5 U	2 U
Methyl Ethyl Ketone	50	40 U	20 U	40 U	10 U	10 U	8 U
Methyl Isobutyl Ketone		40 U	20 U	40 U	10 U	10 U	8 U
Methylene Chloride	5	20 U	2.5 J B	3.4 J B	5 U	5 U	8 U
Styrene	5	20 U	10 U	20 U	5 U	5 U	2 U
Tetrachloroethene	5	20 U	10 U	20 U	5 U	5 U	2 U *
Toluene	5	20 U	10 U	20 U	5 U	5 U	2 U *
trans-1,2-Dichloroethene	5	20 U	10 U	20 U	5 U	5 U	2 U
trans-1,3-Dichloropropene	0.4	20 U	10 U	20 U	5 U	5 U	2 U
Trichloroethene	5	**58**	**40**	**62**	**53**	**54**	**61**
Vinyl chloride	2	**8.8 J**	**6.7 J**	**6.4 J**	**8.9**	**6.4**	**8.7**
Xylenes, Total	5	20 U	10 U	20 U	5 U	5 U	4 U
Total VOCs		391	258	400	328	330	408

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.

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 5/26/2011 WATER ug/L	WELL 1A-EFF 6/16/2011 WATER ug/L
1,1,1-Trichloroethane	5	5 U	0.99
1,1,2,2-Tetrachloroethane	5	5 U	0.5 U
1,1,2-Trichloroethane	1	5 U	0.5 U
1,1-Dichloroethane	5	5 U	0.5 U
1,1-Dichloroethene	5	5 U	0.5 U
1,2-Dichloroethane	0.6	5 U	0.5 U
1,2-Dichloropropane	5	5 U	0.5 U
2-Hexanone		10 U	2 U
Acetone		10 U	2 U
Benzene	1	5 U	0.5 U
Bromodichloromethane	50	5 U	0.5 U
Bromoform		5 U	0.5 U
Bromomethane	5	5 U	1 U
Carbon disulfide		5 U	0.5 U
Carbon tetrachloride	5	5 U	0.5 U
Chlorobenzene	5	5 U	0.5 U
Chloroethane	5	5 U	1 U
Chloroform	7	5 U	0.5 U
Chloromethane		5 U	0.5 U
cis-1,2-Dichloroethene	5	5 U	0.32 J
cis-1,3-Dichloropropene	0.4	5 U	0.5 U
Dibromochloromethane	50	5 U	0.5 U
Ethylbenzene	5	5 U	0.5 U
Methyl Ethyl Ketone	50	10 U	2 U
Methyl Isobutyl Ketone		10 U	2 U
Methylene Chloride	5	5 U	2 U
Styrene	5	5 U	0.5 U
Tetrachloroethene	5	5 U	0.5 U
Toluene	5	5 U	0.5 U
trans-1,2-Dichloroethene	5	5 U	0.5 U
trans-1,3-Dichloropropene	0.4	5 U	0.5 U
Trichloroethene	5	5 U	0.19 J
Vinyl chloride	2	5 U	0.5 U
Xylenes, Total	5	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 4-1
SUMMARY OF GROUNDWATER ELEVATIONS
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE NO. 7-04-009A

New Well ID	Old Well ID	Monitored Interval	Measuring Point Elevation [1] (feet)	8/13/2007		10/8/2008		6/22/2009		3/16/2010		6/14/2011	
				DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)
4009-1	S-8	Shallow	832.20	7.49	824.71	7.79	824.41	7.16	825.04	7.21	824.99	7.10	825.10
4009-2	EB-33	Shallow	828.59	19.33	809.26	19.79	808.80	18.11	810.48	17.35	811.24	17.35	811.24
4009-3	S-7	Shallow	823.72	17.89	805.83	18.59	805.13	14.64	809.08	12.75	810.97	14.86	808.86
4009-4	S-6	Shallow	822.46	12.91	809.55	13.82	808.64	10.29	812.17	8.86	813.60	9.60	812.86
4009-5	EB-31	Shallow	825.77	20.49	805.28	20.79	804.98	16.19	809.58	13.84	811.93	16.82	808.95
4009-6	S-1	Shallow	827.16	20.75	806.41	21.19	805.97	18.99	808.17	17.52	809.64	18.42	808.74
4009-7	S-2	Shallow	823.72	20.10	803.62	21.11	802.61	17.02	806.70	15.09	808.63	16.70	807.02
4009-8	S-11	Shallow	**	18.72	-	21.95	-	17.77	-	15.29	-	17.64	-
4009-9	EB-41	Shallow	825.28 [2]	22.60	802.68	23.18	802.10	19.15	806.13	16.08	809.20	18.95	806.33
4009-10	EB-42	Shallow	831.54	28.57	802.97	29.15	802.39	25.47	806.07	22.41	809.13	25.05	806.49
4009-11	1-32	Deep	831.08	17.55	813.53	29.38	801.70	22.47	808.61	19.81	811.27	25.62	805.46
4009-11A	1-32A	Shallow	830.86	28.31	802.55	20.70	810.16	16.02	814.84	13.89	816.97	13.20	817.66
4009-12	1-29	Deep	823.55	20.89	802.66	21.93	801.62	15.57	807.98	12.82	810.73	18.31	805.24
4009-12A	1-29A	Shallow	824.08	21.30	802.78	22.40	801.68	16.02	808.06	13.30	810.78	19.81	804.27
4009-13	1-30	Deep	816.54	13.46	803.08	14.71	801.83	8.48	808.06	6.24	810.30	10.62	805.92
4009-13A	1-30A	Shallow	816.42	23.05	793.37	14.23	802.19	9.24	807.18	6.31	810.11	10.15	806.27
4009-14	1-23	Deep	820.91	17.75	803.16	19.10	801.81	12.69	808.22	10.49	810.42	15.34	805.57
4009-15	1-24	Deep	826.76	23.81	802.95	25.21	801.55	18.35	808.41	16.17	810.59	21.48	805.28
4009-16	1-20	Deep	825.93	23.86	802.07	25.41	800.52	18.55	807.38	16.82	809.11	21.62	804.31
4009-16A	1-20A	Shallow	826.32	24.01	802.31	25.34	800.98	18.42	807.90	16.41	809.91	21.62	804.70
4009-17	Piezo-levee*	Shallow	-	17.15	-	18.81	-	NM	-	10.03	-	14.62	-
4009-18	well-west well house*	Deep	-	31.83	-	33.32	-	26.44	-	24.39	-	29.61	-
4009-19	well-south well house*	Deep	-	22.00	-	23.52	-	16.81	-	14.63	-	19.45	-
4009-20	Piezo-north*	Shallow	-	21.30	-	21.44	-	15.42	-	11.80	-	18.01	-
4009-21	Piezo-west*	Deep	-	20.30	-	21.59	-	14.75	-	12.96	-	17.95	-
Well 1-1	Former Pumping Well	Deep	832.53 [3]	-	-	30.03	802.50	24.62	807.91	21.89	810.64	27.26	805.27
Well 1-1A	Pumping Well	Deep	831.33 [3]	-	-			61.85	769.48	76.02	755.31	68.72	762.61

Notes:

* - Could not identify well location from site map (Figure 1, Final Operation and Maintenance Manual, Long-Term Response, Operable Unit 1, Vestal Well 1-1 Site, Vestal, New York, October 2006, Tetra Tech EC, Inc.). Old Well ID based on 2007 field description of well location.

** - Well casing damaged. Measuring point elevation not known.

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

(2) - TOC elevation from well level survey conducted 6/13/11.

(3) - TOC Elevation from well level survey conducted 3/13/08.

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-1 8/14/2007 Shallow ug/L	4009-1 10/9/2008 Shallow ug/L	4009-1 6/22/2009 Shallow ug/L	4009-1 3/16/2010 Shallow ug/L	4009-1 6/14/2011 Shallow ug/L	4009-2 8/14/2007 Shallow ug/L	4009-2 10/9/2008 Shallow ug/L	4009-2 6/22/2009 Shallow ug/L	4009-2 3/16/2010 Shallow ug/L	4009-2 6/14/2011 Shallow ug/L	4009-DUP1[1] 6/14/2011 Shallow ug/L
1,1,1-Trichloroethane	5	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	5	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5	3.2 J	**6.7**	2.5 J	2	1.1	2.4 J	3.3 J	3.2 J	3.1	2.7	2.7
1,1-Dichloroethene	5	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.6	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
2-Butanone (MEK)	50	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2 U
2-Hexanone		10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2 U
4-Methyl-2-pentanone (MIBK)		10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2 U
Acetone		10 U	1.1 J	1.5 J	1.7 J B	2 U	10 U	1 J B	10 U	2 U	2 U	1 J B
Benzene	1	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	50	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Bromoform		10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Bromomethane	5	10 U	5 U	5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U	1 U
Carbon disulfide		10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	5	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Chloroethane	5	10 U	5 U	5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U	1 U
Chloroform	7	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Chloromethane		10 U	5 U *	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	5	1.4 J	3 J	1.5 J	1.8	2.4	**34**	**34**	**37**	**34**	**28**	**27**
cis-1,3-Dichloropropene	0.4	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane		10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	5	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	1.2 J	0.2 J	0.5 U	0.5 U
Methylene Chloride	5	10 U	5 U	5 U *	2 U	0.17 J B	10 U	5 U	5 U *	2 U	0.16 J B	0.17 J B
Styrene	5	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	5	0.65 J	1.6 J	0.86 J	0.97	0.77	10 U	5 U	5 U	0.38 J	0.36 J	0.42 J
Toluene	5	10 U	5 U	5 U	0.5 U *	0.5 U	10 U	5 U	0.95 J B	0.5 U *	0.5 U	0.5 U
trans-1,2-Dichloroethene	5	10 U	5 U	5 U	0.5 U	0.5 U	0.83 J	1 J	1.1 J	1.3	0.84	0.94
trans-1,3-Dichloropropene	0.4	10 U	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	5	0.95 J	2.1 J	1.4 J	1.5	1.4	2.5 J	2.5 J	3.8 J	3.7	2.7	2.6
Vinyl chloride	2	10 U	5 U	5 U	0.5 U	0.5 U	**12**	**15**	**3.9 J**	**18**	0.99	1.2
Xylenes, Total		10 U		5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U	1 U
Total VOCs		6.20	14.5	7.76	7.97	5.84	51.73	56.8	50.20	60.68	33.05	36.03

Notes

- Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or
Concentration is estimated for TICS.
B - Analyte detected in the method blank and sample
M - Manual integrated compound
* - Laboratory control sample/duplicate exceeds control limits.
1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-3 8/14/2007 Shallow ug/L	4009-3 10/9/2008 Shallow ug/L	4009-3 6/23/2009 Shallow ug/L	4009-3 3/16/2010 Shallow ug/L	4009-3 6/14/2011 Shallow ug/L	4009-4 8/14/2007 Shallow ug/L	4009-4 10/9/2008 Shallow ug/L	4009-4 6/23/2009 Shallow ug/L	4009-4 3/17/2010 Shallow ug/L	4009-4 6/14/2011 Shallow ug/L	4009-5 8/14/2007 Shallow ug/L
1,1,1-Trichloroethane	5	**130**	**810**	**57**	**16**	**14**	10 U	5 U	5 U	0.5 U	0.5 U	10 U
1,1,2,2-Tetrachloroethane	5	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
1,1,2-Trichloroethane	1	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
1,1-Dichloroethane	5	**19**	**39 J**	**27**	**21**	**16**	10 U	5 U	5 U	0.28 J	0.5 U	2.3 J
1,1-Dichloroethene	5	1.4 J	50 U	2.4 J	1.1	0.27 J	10 U	5 U	5 U	0.5 U	0.5 U	1.1 J
1,2-Dichloroethane	0.6	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
1,2-Dichloropropane	1	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
2-Butanone (MEK)	50	10 U	100 U	10 U	2 U	2 U	10 U	10 U	10 U	0.55 J B	2 U	10 U
2-Hexanone		10 U	100 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U
4-Methyl-2-pentanone (MIBK)		10 U	100 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U
Acetone		10 U	100 U	10 U	2 U	2 U	10 U	3.7 J B	10 U	1.4 J B	0.86 J B	10 U
Benzene	1	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Bromodichloromethane	50	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Bromoform		10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Bromomethane	5	10 U	50 U	5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U	10 U
Carbon disulfide		10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Carbon tetrachloride	5	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Chlorobenzene	5	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Chloroethane	5	10 U	50 U	5 U *	1 U	1 U	10 U	5 U	5 U	1 U	1 U	10 U
Chloroform	7	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Chloromethane		10 U	50 U *	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
cis-1,2-Dichloroethene	5	**26**	**37 J**	**28**	**33**	**37**	**15**	**13**	**41**	**42**	**37**	**12**
cis-1,3-Dichloropropene	0.4	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Dibromochloromethane		10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Ethylbenzene	5	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Methylene Chloride	5	0.24 J	50 U	5 U	2 U	0.18 J B	10 U	5 U	5 U *	0.13 J B	0.12 J B	10 U
Styrene	5	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Tetrachloroethene	5	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Toluene	5	10 U	50 U	0.95 J	0.5 U *	0.5 U	10 U	5 U	0.91 J B	0.5 U	0.2 J	10 U
trans-1,2-Dichloroethene	5	0.46 J M	50 U	1 J	0.96	0.9	10 U	5 U	5 U	0.31 J	0.24 J	10 U
trans-1,3-Dichloropropene	0.4	10 U	50 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U	10 U
Trichloroethene	5	**8 J**	**13 J**	**13**	**13**	**12**	**26**	**8.5**	**6.3**	2.6	**7.9**	**40**
Vinyl chloride	2	**40**	**63**	**79**	**49**	**61**	0.52 J	5 U	5 U	0.41 J	0.24 J	0.89 J
Xylenes, Total		10 U	50 U	5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U	10 U
Total VOCs		223.70	962	207.35	134.06	141.35	41.52	25.2	48.21	47.68	46.56	56.29

Notes

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J - Compound detected below the reporting limit or
Concentration is estimated for TICS.
B - Analyte detected in the method blank and sample
M - Manual integrated compound
* - Laboratory control sample/duplicate exceeds control limits.
1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-5 10/9/2008 Shallow ug/L	4009-5 6/23/2009 Shallow ug/L	4009-5 3/17/2010 Shallow ug/L	4009-5 6/15/2011 Shallow ug/L	4009-6 8/14/2007 Shallow ug/L	4009-6 10/9/2008 Shallow ug/L	4009-6 6/23/2009 Shallow ug/L	4009-6 3/16/2010 Shallow ug/L	4009-6 6/16/2011 Shallow ug/L
1,1,1-Trichloroethane	5	5 U	5 U	0.32 J	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
1,1-Dichloroethane	5	3.7 J	3.4 J	4.6	2.5	10 U	5 U	5 U	0.5 U	0.5 U
1,1-Dichloroethene	5	2.4 J	1.9 J	3.1	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.6	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
2-Butanone (MEK)	50	10 U	10 U	0.54 J B	2 U	10 U	10 U	10 U	2 U	2 U
2-Hexanone		10 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U
4-Methyl-2-pentanone (MIBK)		10 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U
Acetone		10 U	10 U	1.3 J B	1.6 J	10 U	3.1 J B	10 U	2 U	2 U
Benzene	1	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Bromodichloromethane	50	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Bromoform		5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Bromomethane	5	5 U	5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U
Carbon disulfide		5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Carbon tetrachloride	5	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Chlorobenzene	5	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Chloroethane	5	5 U	5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U
Chloroform	7	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Chloromethane		5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	5	**20**	**12**	**21**	**57**	10 U	5 U	5 U	0.5 U	0.33 J
cis-1,3-Dichloropropene	0.4	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Dibromochloromethane		5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Ethylbenzene	5	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Methylene Chloride	5	5 U	5 U *	2 U	0.13 J B	10 U	5 U	5 U *	2 U	2 U
Styrene	5	5 U *	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Tetrachloroethene	5	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Toluene	5	5 U	5 U	0.19 J	0.39 J	10 U	5 U	0.89 J B	0.5 U *	0.5 U
trans-1,2-Dichloroethene	5	5 U	5 U	0.46 J	3.4	10 U	5 U	5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U	0.5 U
Trichloroethene	5	**63**	**55**	**56 B**	**33**	0.75 J	5 U	5 U	0.59	0.75
Vinyl chloride	2	**12**	**3.3 J**	**25**	0.32 J	10 U	5 U	5 U	0.5 U	0.5 U
Xylenes, Total		5 U	5 U	1 U	1 U	10 U	5 U	5 U	1 U	1 U
Total VOCs		101.1	75.6	112.51	98.34	0.75	3.1	0.89	0.59	1.08

Notes
- Concentration exceeds NYSDEC Class GA Standard
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J - Compound detected below the reporting limit or
Concentration is estimated for TICS.
B - Analyte detected in the method blank and sample
M - Manual integrated compound
* - Laboratory control sample/duplicate exceeds control limits.
1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-7 8/15/2007 Shallow ug/L	4009-7 10/9/2008 Shallow ug/L	4009-7 6/23/2009 Shallow ug/L	4009-7 3/17/2010 Shallow ug/L	4009-7 6/16/2011 Shallow ug/L	4009-8 8/14/2007 Shallow ug/L	4009-8 10/9/2008 Shallow ug/L	4009-8 6/23/2009 Shallow ug/L	4009-8 3/16/2010 Shallow ug/L	4009-8 6/15/2011 Shallow ug/L	4009-9 8/14/2007 Shallow ug/L	4009-9 10/9/2008 Shallow ug/L
1,1,1-Trichloroethane	5	1.9 J M	**7.2 J**	**13 J**	**9**	**46**	**540**	**130**	**490**	**630**	**1000**	10 U	5 U
1,1,2,2-Tetrachloroethane	5	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
1,1,2-Trichloroethane	1	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
1,1-Dichloroethane	5	**6.1 J**	**20**	**35**	**24**	**43**	**73**	**16**	**49 J**	**52**	**66**	10 U	5 U
1,1-Dichloroethene	5	1.5 J	4.4 J	**9.3 J**	4	**10**	**17 J**	4.3 J	**23 J**	**22**	**19**	10 U	5 U
1,2-Dichloroethane	0.6	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
1,2-Dichloropropane	1	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
2-Butanone (MEK)	50	10 U	20 U	40 U	4 U	10 U	40 U	20 U	100 U	20 U	40 U	10 U	10 U
2-Hexanone		10 U	20 U	40 U	4 U	10 U	40 U	20 U	100 U	20 U	40 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)		10 U	20 U	40 U	4 U	10 U	40 U	20 U	100 U	20 U	40 U	10 U	10 U
Acetone		10 U	2.8 J	5.2 J	4 U	5.2 J	40 U	3.5 J	16 J	52 B	36 J	10 U	10 U
Benzene	1	0.47 J	10 U	20 U	0.52 J	0.78 J	40 U	10 U	50 U	**1.5 J**	10 U	10 U	5 U
Bromodichloromethane	50	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Bromoform		10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Bromomethane	5	10 U	10 U	20 U	2 U	5 U*	40 U	10 U	50 U	10 U	20 U	10 U	5 U
Carbon disulfide		10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Carbon tetrachloride	5	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Chlorobenzene	5	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Chloroethane	5	10 U	10 U	20 U *	2 U	5 U*	**5.8 J**	10 U	50 U *	10 U	20 U	10 U	5 U
Chloroform	7	10 U	10 U	20 U	1 U	0.68 J B	40 U	10 U	50 U	5 U	4 J B	10 U	5 U
Chloromethane		10 U	10 U *	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
cis-1,2-Dichloroethene	5	**74**	**130**	**160**	**110**	**210**	**180**	**130**	**320**	**240**	**290**	**9.3 J**	**12**
cis-1,3-Dichloropropene	0.4	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Dibromochloromethane		10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Ethylbenzene	5	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Methylene Chloride	5	10 U	10 U	20 U	4 U	10 U	1.9 J B	10 U	**7.9 J**	3.5 J	**33 J B**	10 U	5 U
Styrene	5	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U *
Tetrachloroethene	5	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Toluene	5	10 U	10 U	3.7 J	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
trans-1,2-Dichloroethene	5	0.4 J M	10 U	20 U	0.76 J	1.9 J	40 U	10 U	50 U	5 U	10 U	10 U	5 U
trans-1,3-Dichloropropene	0.4	10 U	10 U	20 U	1 U	2.5 U	40 U	10 U	50 U	5 U	10 U	10 U	5 U
Trichloroethene	5	**45**	**46**	**52**	**20**	**46**	**79**	**85**	**160**	**130**	**210**	10 U	5 U
Vinyl chloride	2	**27**	**100**	**210**	**120**	**310**	**86**	**17**	**34 J**	**94**	**34**	10 U	5 U
Xylenes, Total		10 U	10 U	20 U	2 U	5 U	40 U	10 U	50 U	10 U	20 U	10 U	5 U
Total VOCs		156.37	310.4	488.2	288.28	673.56	982.7	385.8	1099.9	1173.0	1692	9.3	12

Notes
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or
Concentration is estimated for TICS.
B - Analyte detected in the method blank and sample
M - Manual integrated compound
* - Laboratory control sample/duplicate exceeds control limits.
1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-9 6/23/2009 Shallow ug/L	4009-9 3/15/2010 Shallow ug/L	4009-9 6/15/2011 Shallow ug/L	4009-10 8/14/2007 Shallow ug/L	4009-10 10/10/2008 Shallow ug/L	4009-10 6/22/2009 Shallow ug/L	4009-10 3/15/2010 Shallow ug/L	4009-10 6/16/2011 Shallow ug/L	4009-11 8/14/2007 Deep ug/L	4009-11 10/10/2008 Deep ug/L	4009-11 6/24/2009 Deep ug/L
1,1,1-Trichloroethane	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	1.2	10 U	5 U	0.5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
1,1,2-Trichloroethane	1	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
1,1-Dichloroethane	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
1,1-Dichloroethene	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U *
1,2-Dichloroethane	0.6	5 U	5 U *	0.5 U	10 U	5 U	5 U	5 U *	0.5 U	10 U	5 U	0.5 U
1,2-Dichloropropane	1	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
2-Butanone (MEK)	50	10 U	10 U	2 U	10 U	10 U	10 U	10 U	2 U	10 U	10 U	2 U
2-Hexanone		10 U	10 U	2 U	10 U	10 U	10 U	10 U	2 U	10 U	10 U	2 U *
4-Methyl-2-pentanone (MIBK)		10 U	10 U	2 U	10 U	10 U	10 U	10 U	2 U	10 U	10 U	2 U
Acetone		1.2 J	10 U	2 U	10 U	10 U	10 U	10 U	0.77 J	10 U	7.8 J B	2.7
Benzene	1	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Bromodichloromethane	50	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Bromoform		5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Bromomethane	5	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U	5 U	1 U
Carbon disulfide		5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.67
Carbon tetrachloride	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Chlorobenzene	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Chloroethane	5	5 U *	5 U *	1 U	10 U	5 U	5 U *	5 U *	1 U	10 U	5 U	1 U
Chloroform	7	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.12 J B	10 U	5 U	0.5 U
Chloromethane		5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U *
cis-1,2-Dichloroethene	5	**6.4**	**5.2**	2.5 B	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Dibromochloromethane		5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Ethylbenzene	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Methylene Chloride	5	5 U	5 U	0.22 J B	10 U	5 U	5 U	5 U	2 U	10 U	5 U	2 U
Styrene	5	5 U	5 U	0.5 U	10 U	5 U *	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Tetrachloroethene	5	5 U	5 U	0.28 J	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Toluene	5	0.91 J	5 U	0.2 J	10 U	5 U	0.94 J	5 U	0.27 J	10 U	5 U	0.99
trans-1,2-Dichloroethene	5	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U *
trans-1,3-Dichloropropene	0.4	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Trichloroethene	5	5 U	0.86 J	1.5 B	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Vinyl chloride	2	5 U	5 U	0.5 U	10 U	5 U	5 U	5 U	0.5 U	10 U	5 U	0.5 U
Xylenes, Total		5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U	5 U	2.5
Total VOCs		8.51	6.06	4.70	0	0	0.94	0	2.36	0	7.8	6.86

Notes

- Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or
Concentration is estimated for TICS.

B - Analyte detected in the method blank and sample

M - Manual integrated compound

* - Laboratory control sample/duplicate exceeds control limits.

1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-11 3/15/2010 Deep ug/L	4009-11 6/16/2011 Deep ug/L	4009-11A 8/14/2007 Shallow ug/L	4009-11A 10/10/2008 Shallow ug/L	4009-11A 6/24/2009 Shallow ug/L	4009-11A 3/15/2010 Shallow ug/L	4009-11A 6/16/2011 Shallow ug/L	4009-12 8/15/2007 Deep ug/L	4009-12 12/12/2008 Deep ug/L	4009-12 6/24/2009 Deep ug/L	4009-12 3/15/2010 Deep ug/L
1,1,1-Trichloroethane	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.39 J M	**200**	**230**	**120**
1,1,2,2-Tetrachloroethane	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
1,1,2-Trichloroethane	1	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
1,1-Dichloroethane	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	2.4 J	**10 J**	**12**	**6.9 J**
1,1-Dichloroethene	5	5 U	0.5 U	10 U	5 U	0.5 U *	5 U	0.5 U	0.17 J M	**11 J**	**19**	**8.9 J**
1,2-Dichloroethane	0.6	5 U *	0.5 U	10 U	5 U	0.5 U	5 U *	0.5 U	10 U	20 U	2 U	10 U
1,2-Dichloropropane	1	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
2-Butanone (MEK)	50	10 U	1.4 J	10 U	10 U	2 U	10 U	2 U	10 U	40 U	8 U	20 U
2-Hexanone		10 U	2 U	10 U	10 U	2 U *	10 U	2 U	10 U	40 U	8 U	20 U
4-Methyl-2-pentanone (MIBK)		10 U	2 U	10 U	10 U	2 U	10 U	2 U	10 U	40 U	8 U	20 U
Acetone		10 U	8.9	10 U	2.4 J B	2 U	10 U	0.84 J	10 U	40 U	9.1	5 J B
Benzene	1	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Bromodichloromethane	50	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Bromoform		5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Bromomethane	5	5 U	1 U	10 U	5 U	1 U	5 U	1 U	10 U	20 U	4 U	10 U
Carbon disulfide		5 U	0.42 J	10 U	5 U	0.5 U	5 U	0.5 U	20 J N	20 U	2 U	10 U
Carbon tetrachloride	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Chlorobenzene	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Chloroethane	5	5 U *	1 U	10 U	5 U	1 U	5 U *	1 U	10 U	20 U	4 U *	10 U
Chloroform	7	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Chloromethane		5 U	0.23 J	10 U	5 U	0.5 U *	5 U	0.5 U	10 U	20 U *	2 U *	10 U
cis-1,2-Dichloroethene	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	**48**	**56**	**36**
cis-1,3-Dichloropropene	0.4	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	**2.7 J**	20 U	2 U	10 U
Dibromochloromethane		5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Ethylbenzene	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Methylene Chloride	5	5 U	2 U	10 U	5 U	2 U	5 U	2 U	10 U	20 U	**14**	10 U
Styrene	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Tetrachloroethene	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Toluene	5	5 U	0.3 J	10 U	5 U	0.95	5 U	0.27 J	10 U	20 U	2 U	10 U
trans-1,2-Dichloroethene	5	5 U	0.5 U	10 U	5 U	0.5 U *	5 U	0.5 U	10 U	20 U	1.5 J	10 U
trans-1,3-Dichloropropene	0.4	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Trichloroethene	5	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	1.3 J	**43**	**59**	**37**
Vinyl chloride	2	5 U	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	20 U	2 U	10 U
Xylenes, Total		5 U	1 U	10 U	5 U	1 U	5 U	1 U	10 U	20 U	4 U	10 U
Total VOCs		0	11.25	0	2.4	0.95	0	1.11	26.96	312	400.6	213.8

Notes

- Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or
Concentration is estimated for TICS.

B - Analyte detected in the method blank and sample

M - Manual integrated compound

* - Laboratory control sample/duplicate exceeds control limits.

1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-12 6/15/2011 Deep ug/L	4009-12A 8/15/2007 Shallow ug/L	4009-12A 10/10/2008 Shallow ug/L	4009-12A 6/24/2009 Shallow ug/L	4009-12A 3/15/2010 Shallow ug/L	4009-12A 6/15/2011 Shallow ug/L	4009-13 8/15/2007 Deep ug/L	4009-13 10/10/2008 Deep ug/L	4009-13 2/3/2009 Deep ug/L	4009-13 6/24/2009 Deep ug/L	4009-13 3/17/2010 Deep ug/L
1,1,1-Trichloroethane	5	**330**	**8 J**	4.1 J	**12**	**11**	**7.9**	10 U	5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	5	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5	**15**	**7.4 J**	**10**	**11**	**12**	**9**	10 U	5 U	0.5 U	0.5 U	0.13 J
1,1-Dichloroethene	5	**14**	1.6 J	2.1 J	3.4 *	2.8 J	1.5	10 U	5 U	0.5 U	0.5 U *	0.5 U
1,2-Dichloroethane	0.6	2.5 U	10 U	5 U	0.5 U	5 U *	0.5 U	10 U	5 U	0.5 U *	0.5 U	0.5 U
1,2-Dichloropropane	1	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
2-Butanone (MEK)	50	10 U	10 U	10 U	2 U	10 U	2 U	10 U	10 U	2 U	2 U	0.59 J B
2-Hexanone		10 U	10 U	10 U	2 U *	10 U	2 U	10 U	10 U	2 U	2 U *	2 U
4-Methyl-2-pentanone (MIBK)		10 U	10 U	10 U	2 U	10 U	2 U	10 U	10 U	2 U	2 U	2 U
Acetone		11	10 U	1.6 J	2 U	10 U	2 U	10 U	3.6 J B	2 U	2 U	1.5 J B
Benzene	1	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	50	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Bromoform		2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Bromomethane	5	5 U	10 U	5 U	1 U	5 U	1 U	10 U	5 U	1 U	1 U	1 U
Carbon disulfide		2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	5	2.5 U	0.96 J	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Chloroethane	5	5 U	10 U	5 U	1 U	5 U *	1 U	10 U	5 U	1 U	1 U	1 U
Chloroform	7	0.73 J B	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Chloromethane		2.5 U	10 U	5 U *	0.5 U *	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U *	0.5 U
cis-1,2-Dichloroethene	5	**65**	**17**	**18**	**21**	**19**	**18**	10 U	5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.4	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane		2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	5	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	5	**5.2 J B**	10 U	5 U	2 U	5 U	0.12 J B	10 U	5 U	2 U	2 U	2 U
Styrene	5	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U *	0.5 U	0.5 U
Tetrachloroethene	5	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.23 J	0.5 U	0.5 U
Toluene	5	2.5 U	10 U	5 U	0.94	5 U	0.39 J	10 U	5 U	0.5 U	1	0.5 U
trans-1,2-Dichloroethene	5	2.5 U	10 U	5 U	0.25 J *	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U *	0.5 U
trans-1,3-Dichloropropene	0.4	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	5	**60**	3.8 J	3.8 J	**5.7**	**5**	**5.1**	10 U	5 U	0.5 U	0.5 U	0.13 J B
Vinyl chloride	2	2.5 U	10 U	5 U	0.5 U	5 U	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U
Xylenes, Total		5 U	10 U	5 U	1 U	5 U	1 U	10 U	5 U	1.5 U	2.5	1 U
Total VOCs		500.93	38.76	39.6	54.29	49.8	42.01	0	3.6	0.23	3.5	2.35

Notes

- Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or
Concentration is estimated for TICS.

B - Analyte detected in the method blank and sample

M - Manual integrated compound

* - Laboratory control sample/duplicate exceeds control limits.

1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-13 3/17/2010 Deep ug/L	4009-13A 8/15/2007 Shallow ug/L	4009-13A 10/10/2008 Shallow ug/L	4009-13A 2/3/2009 Shallow ug/L	4009-13A 6/24/2009 Shallow ug/L	4009-13A 3/17/2010 Shallow ug/L	4009-13A 6/15/2011 Shallow ug/L	4009-14 8/15/2007 Deep ug/L	4009-14 10/9/2008 Deep ug/L	4009-14 6/22/2009 Deep ug/L	4009-14 3/17/2010 Deep ug/L
1,1,1-Trichloroethane	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.35 J	0.5 U	10 U	5 U	5 U	0.5 U
1,1,2,2-Tetrachloroethane	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
1,1,2-Trichloroethane	1	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
1,1-Dichloroethane	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
1,1-Dichloroethene	5	0.5 U	10 U	5 U	0.5 U	0.5 U *	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
1,2-Dichloroethane	0.6	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
1,2-Dichloropropane	1	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
2-Butanone (MEK)	50	2 U	10 U	10 U	2 U	2 U	0.62 J B	2 U	10 U	10 U	10 U	0.4 J
2-Hexanone		2 U	10 U	10 U	2 U	2 U *	2 U	2 U	10 U	10 U	10 U	2 U
4-Methyl-2-pentanone (MIBK)		2 U	10 U	10 U	2 U	2 U	2 U	2 U	10 U	10 U	10 U	2 U
Acetone		2 U	10 U	1.4 J	1.7 J B	2 U	1.1 J B	2 U	10 U	2.1 J B	10 U	1.1 J B
Benzene	1	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Bromodichloromethane	50	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Bromoform		0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Bromomethane	5	1 U	10 U	5 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	1 U
Carbon disulfide		0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.12 J
Carbon tetrachloride	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Chlorobenzene	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Chloroethane	5	1 U	10 U	5 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	1 U
Chloroform	7	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Chloromethane		0.5 U	10 U	5 U	0.5 U	0.5 U *	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
cis-1,2-Dichloroethene	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
cis-1,3-Dichloropropene	0.4	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Dibromochloromethane		0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Ethylbenzene	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Methylene Chloride	5	0.14 J B	10 U	5 U	0.81 J B	2 U	2 U	0.15 J B	10 U	5 U	5 U *	2 U *
Styrene	5	0.5 U	10 U	5 U *	0.5 U *	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Tetrachloroethene	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Toluene	5	0.3 J	10 U	5 U	0.5 U	0.9	0.5 U	0.5 U	10 U	5 U	1.1 J B	0.36 J
trans-1,2-Dichloroethene	5	0.5 U	10 U	5 U	0.5 U	0.5 U *	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
trans-1,3-Dichloropropene	0.4	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Trichloroethene	5	0.5 U	10 U	5 U	0.5 U	0.5 U	0.18 J B	0.5 U	10 U	5 U	5 U	0.28 J B
Vinyl chloride	2	0.5 U	10 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	5 U	5 U	0.5 U
Xylenes, Total		1 U	10 U	5 U	1.5 U	1 U	1 U	1 U	10 U	5 U	2.5 J	1 U
Total VOCs		0.44	0	1.4	2.51	0.9	2.25	0.15	0	2.1	3.6	2.26

Notes

- Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or
Concentration is estimated for TICS.
B - Analyte detected in the method blank and sample
M - Manual integrated compound
* - Laboratory control sample/duplicate exceeds control limits.
1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-14 6/15/2011 Deep ug/L	4009-15 8/15/2007 Deep ug/L	4009-15 10/10/2008 Deep ug/L	4009-15 2/3/2009 Deep ug/L	4009-15 6/22/2009 Deep ug/L	4009-15 3/17/2010 Deep ug/L	4009-15 6/15/2011 Deep ug/L	Trip Blank 3/16/2010 - ug/L	Trip Blank 3/17/2010 - ug/L	Trip Blank 6/15/2011 - ug/L	Trip Blank 6/16/2011 - ug/L
1,1,1-Trichloroethane	5	0.5 U	10 U	5 U	0.5 U	5 U	2.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	5	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5	0.5 U	10 U	5 U	0.5 U	1.3 J	0.71	1.1	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	5	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.6	0.5 U	10 U	5 U	0.5 U *	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone (MEK)	50	2 U	10 U	10 U	2 U	10 U	0.45 J	2 U	2 U	0.47 J	2 U	2 U
2-Hexanone		2 U	10 U	10 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Methyl-2-pentanone (MIBK)		2 U	10 U	10 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U
Acetone		2 U	10 U	2 J	1.4 J B	10 U	1.3 J B	2 U	2 U	1.6 J B	0.73 J B	2 U
Benzene	1	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	50	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform		0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	5	1 U	10 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide		0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	5	0.5 U*	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	5	1 U	10 U	5 U	1 U	5 U *	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 J	0.5 U
Chloromethane		0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	5	0.5 U	10 U	5 U	0.5 U	5 U	0.65	0.45 J	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.4	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane		0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	5	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	5	2 U	10 U	5 U	2 U	5 U	2 U *	0.15 J B	2 U	2 U *	2.8 B	1.8 J B
Styrene	5	0.5 U	10 U	5 U	0.5 U *	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	5	0.5 U*	10 U	5 U	0.71	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	0.3 J*	10 U	5 U	0.5 U	0.95 J	0.5 U	0.49 J	0.5 U *	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	5	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.4	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	5	0.5 U	10 U	5 U	0.22 J	5 U	0.22 J B	0.5 U	0.5 U	0.28 J B	0.5 U	0.5 U
Vinyl chloride	2	0.5 U	10 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylenes, Total		1 U	10 U	5 U	1.5 U	2.5 J	1 U	1 U	1 U	1 U	1 U	1 U
Total VOCs		0.3	0	2	2.33	4.75	6.23	2.19				

Notes

- Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or
Concentration is estimated for TICS.

B - Analyte detected in the method blank and sample

M - Manual integrated compound

* - Laboratory control sample/duplicate exceeds control limits.

1 - Sample 4009-DUP1 is a duplicate sample from 4009-2

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-11A 10/10/2008 Deep ug/L	4009-11A[(1)] 10/10/2008 Deep ug/L	4009-12 8/15/2007 Deep ug/L	4009-12 10/10/2008 Deep ug/L	4009-12[(1)] 10/10/2008 Deep ug/L	4009-12 6/24/2009 Deep ug/L
Aluminum		115 B	200 U	200 U	8360	456	85.5 U
Antimony		60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60 U
Arsenic	25	10.0 U	10.0 U	10.0 U	8.6 B	10.0 U	10 U
Barium	1000	81.2 B	79.6 B	24.9 B	117 B	72.8 B	66.6 B
Beryllium		5.0 U	5.0 U	5.0 U	0.40 B	5.0 U	0.2 U
Cadmium	5	0.6 B	0.4 B	5.0 U	0.5 B	5.0 U	5 U
Calcium		111000	106000	63900	150000	135000	148000
Chromium	50	1.6 B	10.0 U	10.0 U	16.5	10.0 U	10 U
Cobalt		4.6 B	3.5 B	50.0 U	29.6 B	2.3 B	50 J B
Copper	200	3.3 B	2.0 B	3.1 B	28.9	1.6 B	25 J
Iron	300	**323**	67.6 B	**8940**	**59500**	**3890**	**1300**
Lead	25	10.0 U	10.0 U	10.0 U	**93.3**	4.2 B	2.4 J
Magnesium		44100	42300	11400	25300	21500	22100
Manganese	300	**369**	**365**	247	**546**	54.6	18.9
Mercury	0.7	0.200 U	0.200 U	0.20 U	0.200 U	0.200 U	0.2 U
Nickel	100	14.0 B	13.9 B	1.7 B	21.0 B	2.1 B	40 U
Potassium		984 B	1060 B	4380 B	3890 B	2540 B	2360
Selenium	10	35.0 U	35.0 U	35.0 U	35.0 U	35.0 U	35 U
Silver	50	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10 U
Sodium	20000	**52700**	**50400**	**32400**	**104000**	**102000**	**109000**
Thallium		25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25 U
Vanadium		50.0 U	50.0 U	0.84 B	10.8 B	50.0 U	50 U
Zinc		11.6 B	6.5 B	60.0 U	156	10.0 B	12.5

Notes
U - The compound was not detected at the indicated concentration.
B - Analyte detected in the associated method blank.
J - Concentration greater than MDL but less than RL, result estimated
(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-12 3/15/2010 Deep ug/L	4009-12(1) 3/15/2010 Deep ug/L	4009-12 6/15/2011 Deep ug/L	4009-12A 8/15/2007 Shallow ug/L	4009-12A(1) 8/15/2007 Shallow ug/L	4009-12A 10/10/2008 Shallow ug/L
Aluminum		53.6 B, J	200 U	200 U	200 U	67.2 B	200 U
Antimony		60.0 U	60.0 U	60 U	60.0 U	60.0 U	60.0 U
Arsenic	25	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Barium	1000	69.9 J	67.9 J	72.7 J	51.2 B	49.4 B	2.0 B
Beryllium		5.0 U	5.0 U	5 U	0.29 B	5.0 U	5.0 U
Cadmium	5	5.0 U	5.0 U	0.46 J	5.0 U	5.0 U	5.0 U
Calcium		153000	147000	153000	125000	126000	3960 B
Chromium	50	10.0 U	10.0 U	1.4 J	10.0 U	10.0 U	2.1 B
Cobalt		0.6 J	1.0 J	1.8 J	50.0 U	50.0 U	50.0 U
Copper	200	25.0 U	25.0 J	25 U	3.2 B	2.0 B	25.0 U
Iron	300	**1200**	**809**	**3800**	**590**	**566**	**5480**
Lead	25	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Magnesium		23200 B	22200	24200	23200	23500	7770
Manganese	300	29.2	20.2	26.8	**335**	**337**	33.3
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.200 U
Nickel	100	40.0 U	40.0 U	1.5 J	1.7 B	1.4 B	2.2 B
Potassium		2970 J	2570 J	2610 J	2160 B	2220 B	2080 B
Selenium	10	35.0 U	35.0 U	35 U	35.0 U	35.0 U	35.0 U
Silver	50	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Sodium	20000	**118000**	**114000**	**119000**	**93500**	**93300**	**94700**
Thallium		25.0 U	25.0 U	25 U	25.0 U	25.0 U	25.0 U
Vanadium		50.0 U	50.0 U	50 U	0.85 B	50.0 U	50.0 U
Zinc		44.1 J	41.0 J	4.8 J	60.0 U	60.0 U	5.2 B

Notes

U - The compound was not detected at the indicated concentration.

B - Analyte detected in the associated method blank.

J - Concentration greater than MDL but less than RL, result estimated

(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-12A[(1)] 10/10/2008 Shallow ug/L	4009-12A 6/24/2009 Shallow ug/L	4009-12A 3/15/2010 Shallow ug/L	4009-12A[(1)] 3/15/2010 Shallow ug/L	4009-12A 6/15/2011 Shallow ug/L	4009-13 6/24/2009 Shallow ug/L
Aluminum		200 U	200 U	200 U	110 J	200 U	200 U
Antimony		60.0 U	20 U	60.0 U	60.0 U	60 U	20 U
Arsenic	25	10.0 U	10 U	10.0 U	10.0 U	10 U	6.9 J
Barium	1000	0.90 B	51.0	54.4 J	53.7 J	60.3 J	128 B
Beryllium		5.0 U	2 U	5.0 U	5.0 U	5 U	2 U
Cadmium	5	5.0 U	1 U	5.0 U	5.0 U	0.34 J	1 U
Calcium		2170 B	134000	136000	135000	145000	114000
Chromium	50	10.0 U	4 U	10.0 U	10.0 U	10 U	4 U
Cobalt		50.0 U	4 U	50.0 U	50.0 U	50 U	4 U
Copper	200	25.0 U	10 U	25.0 U	25.0 U	25 U	10 U
Iron	300	100 U	**1770 B**	**13000**	**2050**	**886**	**1260**
Lead	25	10.0 U	5 U	10.0 U	10.0 U	10 U	5 U
Magnesium		9270	25600 B	25500 B	24800	27100	42000
Manganese	300	1.3 B	**414 B**	**502**	**424**	**419**	**652**
Mercury	0.7	0.200 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	40.0 U	10 U	3.1 J	40.0 U	40 U	1.9 J
Potassium		2160 B	2280	2280 J	2060 J	2220 J	2160
Selenium	10	35.0 U	15 U	35.0 U	35.0 U	35 U	15 U
Silver	50	10.0 U	3 U	10.0 U	10.0 U	10 U	3 U
Sodium	20000	**102000**	**107000**	**105000**	**105000**	**109000**	**97500**
Thallium		25.0 U	20 U	25.0 U	25.0 U	25 U	20 U
Vanadium		50.0 U	5 U	50.0 U	50.0 U	50 U	5 U
Zinc		60.0 U	10.1	6.2 J	60.0 U	60 U	24.0

Notes
U - The compound was not detected at the indicated concentration.
B - Analyte detected in the associated method blank.
J - Concentration greater than MDL but less than RL, result estimated
(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-13 3/17/2010 Shallow ug/L	4009-13(1) 3/17/2010 Shallow ug/L	4009-13 6/15/2011 Shallow ug/L	4009-13A 8/15/2007 Shallow ug/L	4009-13A 10/10/2008 Shallow ug/L	4009-13A(1) 10/10/2008 Shallow ug/L
Aluminum		200 U	200 U	200 U	200 U	200 U	200 U
Antimony		60.0 U	60.0 U	60 U	60.0 U	60.0 U	60.0 U
Arsenic	25	12.0	10.9	11.7	10.0 U	10.0 U	10.0 U
Barium	1000	107 J	110 J	89 J	74.1 B	80.7 B	78.5 B
Beryllium		5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U
Cadmium	5	5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U
Calcium		93400	95100	95000	155000	166000	154000
Chromium	50	10.0 U	10.0 U	1 J	10.0 U	10.0 U	10.0 U
Cobalt		1.1 J	50.0 U	50 U	50.0 U	1.3 B	1.4 B
Copper	200	25.0 U	25.0 U	25 U	3.8 B	25.0 U	25.0 U
Iron	300	**1740**	**983**	**955**	31.2 B	**435**	176
Lead	25	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Magnesium		43200 B	41800	40500	21200	22900	21600
Manganese	300	**553**	**565**	**539**	2.6 B	6.1 B	4.7 B
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.20 U	0.200 U	0.200 U
Nickel	100	1.4 J	40.0 U	40 U	1.6 B	1.7 B	1.5 B
Potassium		2190 J	2050 J	2050 J	3080 B	3130 B	3170 B
Selenium	10	35.0 U	35.0 U	35 U	35.0 U	35.0 U	35.0 U
Silver	50	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Sodium	20000	**95300**	**93500**	**86700**	**116000**	**137000**	**129000**
Thallium		25.0 U	25.0 U	25 U	25.0 U	25.0 U	25.0 U
Vanadium		50.0 U	50.0 U	50 U	50.0 U	50.0 U	50.0 U
Zinc		5.0 J	60.0 U	3.2 J	60.0 U	4.6 B	60.0 U

Notes

U - The compound was not detected at the indicated concentration.

B - Analyte detected in the associated method blank.

J - Concentration greater than MDL but less than RL, result estimated

(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-15 8/15/2007 Deep ug/L	4009-15 6/22/2009 Deep ug/L	4009-15 3/17/2010 Deep ug/L	4009-15[(1)] 3/17/2010 Deep ug/L	4009-15 3/17/2010 Deep ug/L	WELL 1-A EFF 8/27/2007 Pumping Well ug/L
Aluminum		200 U	80.5 J	200 U	200 U	200 U	200 U
Antimony		60.0 U	20.0 U	60.0 U	60.0 U	60 U	60.0 U
Arsenic	25	10.0 U	10.0 U	10.0 U	10.0 U	10 U	10.0 U
Barium	1000	4.6 B	9.5 B	15.7 J	16.3 J	2.5 J	48.3 B
Beryllium		5.0 U	2.0 U	5.0 U	5.0 U	5 U	5.0 U
Cadmium	5	5.0 U	1.0 U	5.0 U	5.0 U	5 U	5.0 U
Calcium		5650	32000 B	87800	89400	8550	101000
Chromium	50	10.0 U	4 U	10.0 U	10.0 U	10 U	10.0 U
Cobalt		50.0 U	1.4 J B	0.6 J	50.0 U	50 U	50.0 U
Copper	200	3.1 B	5.2 J	25.0 U	25.0 U	25 U	25.0 U
Iron	300	**638**	**3790**	**398**	**302**	228	100 U
Lead	25	10.0 U	5 U	10.0 U	10.0 U	10 U	10.0 U
Magnesium		1520 B	23900	19900 B	19800	18600	15300
Manganese	300	8.6 B	49.4	12.2 J	11.4 J	6.7 J	99.1
Mercury	0.7	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
Nickel	100	1.6 B	1.4 J	40.0 U	40.0 U	40 U	1.6 B
Potassium		6160	2460	1760 J	1680 J	2070 J	1810 B
Selenium	10	35.0 U	15 U	35.0 U	35.0 U	35 U	35.0 U
Silver	50	10.0 U	3 U	10.0 U	10.0 U	10 U	10.0 U
Sodium	20000	8750	**69300**	**66400**	**67400**	**66900**	**65400**
Thallium		25.0 U	20 U	25.0 U	25.0 U	25 U	25.0 U
Vanadium		0.78 B	5 U	50.0 U	50.0 U	50 U	50.0 U
Zinc		4.6 B	104	7.2 J	3.0 J	7.2 J	60.0 U

Notes

U - The compound was not detected at the indicated concentration.

B - Analyte detected in the associated method blank.

J - Concentration greater than MDL but less than RL, result estimated

(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-11A 10/10/2008 Deep ug/L	4009-11A[(1)] 10/10/2008 Deep ug/L	4009-12 8/15/2007 Deep ug/L	4009-12 10/10/2008 Deep ug/L	4009-12[(1)] 10/10/2008 Deep ug/L	4009-12 6/24/2009 Deep ug/L
Aluminum		115 B	200 U	200 U	8360	456	85.5 U
Antimony		60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60 U
Arsenic	25	10.0 U	10.0 U	10.0 U	8.6 B	10.0 U	10 U
Barium	1000	81.2 B	79.6 B	24.9 B	117 B	72.8 B	66.6 B
Beryllium		5.0 U	5.0 U	5.0 U	0.40 B	5.0 U	0.2 U
Cadmium	5	0.6 B	0.4 B	5.0 U	0.5 B	5.0 U	5 U
Calcium		111000	106000	63900	150000	135000	148000
Chromium	50	1.6 B	10.0 U	10.0 U	16.5	10.0 U	10 U
Cobalt		4.6 B	3.5 B	50.0 U	29.6 B	2.3 B	50 J B
Copper	200	3.3 B	2.0 B	3.1 B	28.9	1.6 B	25 J
Iron	300	**323**	67.6 B	**8940**	**59500**	**3890**	**1300**
Lead	25	10.0 U	10.0 U	10.0 U	**93.3**	4.2 B	2.4 J
Magnesium		44100	42300	11400	25300	21500	22100
Manganese	300	**369**	**365**	247	**546**	54.6	18.9
Mercury	0.7	0.200 U	0.200 U	0.20 U	0.200 U	0.200 U	0.2 U
Nickel	100	14.0 B	13.9 B	1.7 B	21.0 B	2.1 B	40 U
Potassium		984 B	1060 B	4380 B	3890 B	2540 B	2360
Selenium	10	35.0 U	35.0 U	35.0 U	35.0 U	35.0 U	35 U
Silver	50	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10 U
Sodium	20000	**52700**	**50400**	**32400**	**104000**	**102000**	**109000**
Thallium		25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25 U
Vanadium		50.0 U	50.0 U	0.84 B	10.8 B	50.0 U	50 U
Zinc		11.6 B	6.5 B	60.0 U	156	10.0 B	12.5

Notes
U - The compound was not detected at the indicated concentration.
B - Analyte detected in the associated method blank.
J - Concentration greater than MDL but less than RL, result estimated
(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-12 3/15/2010 Deep ug/L	4009-12(1) 3/15/2010 Deep ug/L	4009-12 6/15/2011 Deep ug/L	4009-12A 8/15/2007 Shallow ug/L	4009-12A(1) 8/15/2007 Shallow ug/L	4009-12A 10/10/2008 Shallow ug/L
Aluminum		53.6 B, J	200 U	200 U	200 U	67.2 B	200 U
Antimony		60.0 U	60.0 U	60 U	60.0 U	60.0 U	60.0 U
Arsenic	25	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Barium	1000	69.9 J	67.9 J	72.7 J	51.2 B	49.4 B	2.0 B
Beryllium		5.0 U	5.0 U	5 U	0.29 B	5.0 U	5.0 U
Cadmium	5	5.0 U	5.0 U	0.46 J	5.0 U	5.0 U	5.0 U
Calcium		153000	147000	153000	125000	126000	3960 B
Chromium	50	10.0 U	10.0 U	1.4 J	10.0 U	10.0 U	2.1 B
Cobalt		0.6 J	1.0 J	1.8 J	50.0 U	50.0 U	50.0 U
Copper	200	25.0 U	25.0 J	25 U	3.2 B	2.0 B	25.0 U
Iron	300	**1200**	**809**	**3800**	**590**	**566**	**5480**
Lead	25	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Magnesium		23200 B	22200	24200	23200	23500	7770
Manganese	300	29.2	20.2	26.8	**335**	**337**	33.3
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.200 U
Nickel	100	40.0 U	40.0 U	1.5 J	1.7 B	1.4 B	2.2 B
Potassium		2970 J	2570 J	2610 J	2160 B	2220 B	2080 B
Selenium	10	35.0 U	35.0 U	35 U	35.0 U	35.0 U	35.0 U
Silver	50	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Sodium	20000	**118000**	**114000**	**119000**	**93500**	**93300**	**94700**
Thallium		25.0 U	25.0 U	25 U	25.0 U	25.0 U	25.0 U
Vanadium		50.0 U	50.0 U	50 U	0.85 B	50.0 U	50.0 U
Zinc		44.1 J	41.0 J	4.8 J	60.0 U	60.0 U	5.2 B

Notes

U - The compound was not detected at the indicated concentration.

B - Analyte detected in the associated method blank.

J - Concentration greater than MDL but less than RL, result estimated

(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-12A[(1)] 10/10/2008 Shallow ug/L	4009-12A 6/24/2009 Shallow ug/L	4009-12A 3/15/2010 Shallow ug/L	4009-12A[(1)] 3/15/2010 Shallow ug/L	4009-12A 6/15/2011 Shallow ug/L	4009-13 6/24/2009 Shallow ug/L
Aluminum		200 U	200 U	200 U	110 J	200 U	200 U
Antimony		60.0 U	20 U	60.0 U	60.0 U	60 U	20 U
Arsenic	25	10.0 U	10 U	10.0 U	10.0 U	10 U	6.9 J
Barium	1000	0.90 B	51.0	54.4 J	53.7 J	60.3 J	128 B
Beryllium		5.0 U	2 U	5.0 U	5.0 U	5 U	2 U
Cadmium	5	5.0 U	1 U	5.0 U	5.0 U	0.34 J	1 U
Calcium		2170 B	134000	136000	135000	145000	114000
Chromium	50	10.0 U	4 U	10.0 U	10.0 U	10 U	4 U
Cobalt		50.0 U	4 U	50.0 U	50.0 U	50 U	4 U
Copper	200	25.0 U	10 U	25.0 U	25.0 U	25 U	10 U
Iron	300	100 U	**1770 B**	**13000**	**2050**	**886**	**1260**
Lead	25	10.0 U	5 U	10.0 U	10.0 U	10 U	5 U
Magnesium		9270	25600 B	25500 B	24800	27100	42000
Manganese	300	1.3 B	**414 B**	**502**	**424**	**419**	**652**
Mercury	0.7	0.200 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	40.0 U	10 U	3.1 J	40.0 U	40 U	1.9 J
Potassium		2160 B	2280	2280 J	2060 J	2220 J	2160
Selenium	10	35.0 U	15 U	35.0 U	35.0 U	35 U	15 U
Silver	50	10.0 U	3 U	10.0 U	10.0 U	10 U	3 U
Sodium	20000	**102000**	**107000**	**105000**	**105000**	**109000**	**97500**
Thallium		25.0 U	20 U	25.0 U	25.0 U	25 U	20 U
Vanadium		50.0 U	5 U	50.0 U	50.0 U	50 U	5 U
Zinc		60.0 U	10.1	6.2 J	60.0 U	60 U	24.0

Notes
U - The compound was not detected at the indicated concentration.
B - Analyte detected in the associated method blank.
J - Concentration greater than MDL but less than RL, result estimated
(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-13 3/17/2010 Shallow ug/L	4009-13(1) 3/17/2010 Shallow ug/L	4009-13 6/15/2011 Shallow ug/L	4009-13A 8/15/2007 Shallow ug/L	4009-13A 10/10/2008 Shallow ug/L	4009-13A(1) 10/10/2008 Shallow ug/L
Aluminum		200 U	200 U	200 U	200 U	200 U	200 U
Antimony		60.0 U	60.0 U	60 U	60.0 U	60.0 U	60.0 U
Arsenic	25	12.0	10.9	11.7	10.0 U	10.0 U	10.0 U
Barium	1000	107 J	110 J	89 J	74.1 B	80.7 B	78.5 B
Beryllium		5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U
Cadmium	5	5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U
Calcium		93400	95100	95000	155000	166000	154000
Chromium	50	10.0 U	10.0 U	1 J	10.0 U	10.0 U	10.0 U
Cobalt		1.1 J	50.0 U	50 U	50.0 U	1.3 B	1.4 B
Copper	200	25.0 U	25.0 U	25 U	3.8 B	25.0 U	25.0 U
Iron	300	**1740**	**983**	**955**	31.2 B	**435**	176
Lead	25	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Magnesium		43200 B	41800	40500	21200	22900	21600
Manganese	300	**553**	**565**	**539**	2.6 B	6.1 B	4.7 B
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.20 U	0.200 U	0.200 U
Nickel	100	1.4 J	40.0 U	40 U	1.6 B	1.7 B	1.5 B
Potassium		2190 J	2050 J	2050 J	3080 B	3130 B	3170 B
Selenium	10	35.0 U	35.0 U	35 U	35.0 U	35.0 U	35.0 U
Silver	50	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U
Sodium	20000	**95300**	**93500**	**86700**	**116000**	**137000**	**129000**
Thallium		25.0 U	25.0 U	25 U	25.0 U	25.0 U	25.0 U
Vanadium		50.0 U	50.0 U	50 U	50.0 U	50.0 U	50.0 U
Zinc		5.0 J	60.0 U	3.2 J	60.0 U	4.6 B	60.0 U

Notes

U - The compound was not detected at the indicated concentration.

B - Analyte detected in the associated method blank.

J - Concentration greater than MDL but less than RL, result estimated

(1) - Sample results for dissolved metals.

TABLE 4-3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (METALS)
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE #7-04-009A

Sample ID Sampling Date Monitoring Interval Units	NYSDEC GA Standard ug/L	4009-15 8/15/2007 Deep ug/L	4009-15 6/22/2009 Deep ug/L	4009-15 3/17/2010 Deep ug/L	4009-15[(1)] 3/17/2010 Deep ug/L	4009-15 3/17/2010 Deep ug/L	WELL 1-A EFF 8/27/2007 Pumping Well ug/L
Aluminum		200 U	80.5 J	200 U	200 U	200 U	200 U
Antimony		60.0 U	20.0 U	60.0 U	60.0 U	60 U	60.0 U
Arsenic	25	10.0 U	10.0 U	10.0 U	10.0 U	10 U	10.0 U
Barium	1000	4.6 B	9.5 B	15.7 J	16.3 J	2.5 J	48.3 B
Beryllium		5.0 U	2.0 U	5.0 U	5.0 U	5 U	5.0 U
Cadmium	5	5.0 U	1.0 U	5.0 U	5.0 U	5 U	5.0 U
Calcium		5650	32000 B	87800	89400	8550	101000
Chromium	50	10.0 U	4 U	10.0 U	10.0 U	10 U	10.0 U
Cobalt		50.0 U	1.4 J B	0.6 J	50.0 U	50 U	50.0 U
Copper	200	3.1 B	5.2 J	25.0 U	25.0 U	25 U	25.0 U
Iron	300	**638**	**3790**	**398**	**302**	228	100 U
Lead	25	10.0 U	5 U	10.0 U	10.0 U	10 U	10.0 U
Magnesium		1520 B	23900	19900 B	19800	18600	15300
Manganese	300	8.6 B	49.4	12.2 J	11.4 J	6.7 J	99.1
Mercury	0.7	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
Nickel	100	1.6 B	1.4 J	40.0 U	40.0 U	40 U	1.6 B
Potassium		6160	2460	1760 J	1680 J	2070 J	1810 B
Selenium	10	35.0 U	15 U	35.0 U	35.0 U	35 U	35.0 U
Silver	50	10.0 U	3 U	10.0 U	10.0 U	10 U	10.0 U
Sodium	20000	8750	**69300**	**66400**	**67400**	**66900**	**65400**
Thallium		25.0 U	20 U	25.0 U	25.0 U	25 U	25.0 U
Vanadium		0.78 B	5 U	50.0 U	50.0 U	50 U	50.0 U
Zinc		4.6 B	104	7.2 J	3.0 J	7.2 J	60.0 U

Notes

U - The compound was not detected at the indicated concentration.

B - Analyte detected in the associated method blank.

J - Concentration greater than MDL but less than RL, result estimated

(1) - Sample results for dissolved metals.

ARCADIS

Appendix **A**

Monthly Reports and System Operation and Maintenance Logs

ENVIRONMENTAL COMPLIANCE, INC. **VESTAL WELL 1-1 MONTHLY O & M LOG** **April 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)*				355								353									350					348					
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	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	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	
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 Meter Reading**

ENVIRONMENTAL COMPLIANCE, INC.									VESTAL WELL 1-1 MONTHLY O & M LOG										May 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)*				355								350							330							322					
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	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	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
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 Meter Reading**

ENVIRONMENTAL COMPLIANCE, INC.									VESTAL WELL 1-1 MONTHLY O & M LOG									June 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)*				290							290							293							290					284	
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	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	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	
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 Meter Reading**

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

Vestal Well 1-1 Monthly Report
April 2011

SECTION I – SUMMARY OF ACTIVITIES

System operated continuously until April 26 when the system was turned off at request of NYSDEC due to river flooding. Elevation on water level gauge was 818.

Actual flow meter recordings ranged between 348 and 355 over the course of the month.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Checked and adjusted belts
- Lubricated equipment, as needed
- Routine inspection of site
- Cleaned up grounds
- Tuned mower for season

SECTION III – REPAIR WORK COMPLETED

- None

SECTION IV – REPAIR WORK NEEDED

- None

SECTION V – RECOMMENDATIONS

- None

ENVIRONMENTAL COMPLIANCE, INC.
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Vestal Well 1-1 Monthly Report
May 2011

SECTION I – SUMMARY OF ACTIVITIES

System operated continuously except for first 2 days of May when the system was turned off at request of NYSDEC due to river flooding. Actual flow meter recordings ranged between 355 at beginning of month and 322 towards end of the month.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Checked and adjusted belts
- Lubricated equipment, as needed
- Routine inspection of site
- Cleaned up grounds
- Mowed and trimmed lawn

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
June 2011

SECTION I – SUMMARY OF ACTIVITIES

System operated continuously entire month without any issues. Actual flow meter recordings ranged between 290 at beginning of month and 284 at end of the month.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Checked and adjusted belts
- Lubricated equipment, as needed
- Routine inspection of site
- Cleaned up grounds
- Mowed and trimmed lawn

SECTION III – REPAIR WORK COMPLETED

- None

SECTION IV – REPAIR WORK NEEDED

- None

SECTION V – RECOMMENDATIONS

- None

ARCADIS

Appendix **B**

Analytical Reporting Forms

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-15593-1

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.
Cheryl Cascella
Project Manager I
6/7/2011 10:38 AM

Designee for
Jackie Trudell
Project Manager I
jackie.trudell@testamericainc.com
06/07/2011

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

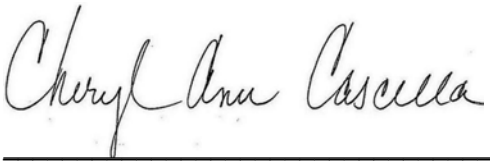
TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Number: 220-15593-1

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.
Cheryl Cascella
Project Manager I
6/7/2011 10:38 AM

Designee for
Jackie Trudell

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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

(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: 220-15593-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-15593-1	Well 1-1A Inf	Water	05/26/2011 0830	05/27/2011 0945
220-15593-2	Well 1-1A EFF	Water	05/26/2011 0840	05/27/2011 0945
220-15593-3TB	Trip Blank	Water	05/26/2011 0830	05/27/2011 0945

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15593-1	**WELL 1-1A INF**					
1,1-Dichloroethane		23		5.0	ug/L	8260B
1,1-Dichloroethene		15		5.0	ug/L	8260B
1,1,1-Trichloroethane		180		5.0	ug/L	8260B
Trichloroethene		54		5.0	ug/L	8260B
Vinyl chloride		6.4		5.0	ug/L	8260B
cis-1,2-Dichloroethene		52		5.0	ug/L	8260B
220-15593-3TB	**TRIP BLANK**					
Methylene Chloride		2.9	J B	5.0	ug/L	8260B

METHOD SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

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: 220-15593-1

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Client Sample ID: Well 1-1A Inf

Lab Sample ID: 220-15593-1 Date Sampled: 05/26/2011 0830
Client Matrix: Water Date Received: 05/27/2011 0945

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-51472	Instrument ID:	MSL
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	L9869.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 2316			Final Weight/Volume:	5 mL
Prep Date:	06/01/2011 2316				

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	23		1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	15		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	180		0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	54		0.62	5.0
Vinyl chloride	6.4		0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	52		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)	71		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	75		68 - 132
Toluene-d8 (Surr)	82		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

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

Lab Sample ID: 220-15593-2 Date Sampled: 05/26/2011 0840
Client Matrix: Water Date Received: 05/27/2011 0945

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-51472	Instrument ID:	MSL
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	L9870.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 2340			Final Weight/Volume:	5 mL
Prep Date:	06/01/2011 2340				

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)	70		65 - 136
4-Bromofluorobenzene	78		51 - 142
Dibromofluoromethane	74		68 - 132
Toluene-d8 (Surr)	80		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Client Sample ID: Trip Blank

Lab Sample ID: 220-15593-3TB Date Sampled: 05/26/2011 0830
Client Matrix: Water Date Received: 05/27/2011 0945

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-51472	Instrument ID:	MSL
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	L9863.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 2039			Final Weight/Volume:	5 mL
Prep Date:	06/01/2011 2039				

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	2.9	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)	73		65 - 136
4-Bromofluorobenzene	82		51 - 142
Dibromofluoromethane	75		68 - 132
Toluene-d8 (Surr)	81		63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

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
220-15593-1	Well 1-1A Inf	75	71	82	84
220-15593-2	Well 1-1A EFF	74	70	80	78
220-15593-3	Trip Blank	75	73	81	82
MB 220-51472/3		73	73	81	83
LCS 220-51472/2		73	70	80	83
220-15612-A-1 MS		77	74	82	84
220-15612-A-1 MSD		75	69	77	85

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: 220-15593-1

Method Blank - Batch: 220-51472

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-51472/3	Analysis Batch:	220-51472	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L9862.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 2002	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/01/2011 2002				
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	2.36	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)	73	65 - 136
4-Bromofluorobenzene	83	51 - 142
Dibromofluoromethane	73	68 - 132
Toluene-d8 (Surr)	81	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Lab Control Sample - Batch: 220-51472

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-51472/2	Analysis Batch:	220-51472	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L9860.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1913	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/01/2011 1913				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	26.0	130	41 - 150	
Benzene	20.0	17.5	87	66 - 131	
Bromodichloromethane	20.0	18.1	90	78 - 120	
Bromoform	20.0	18.9	94	66 - 120	
Bromomethane	20.0	20.0	100	47 - 150	
Methyl Ethyl Ketone	20.0	23.6	118	42 - 150	
Carbon disulfide	20.0	16.6	83	55 - 150	
Carbon tetrachloride	20.0	16.2	81	69 - 135	
Chlorobenzene	20.0	18.6	93	68 - 120	
Chloroethane	20.0	16.0	80	49 - 150	
Chloroform	20.0	18.1	90	77 - 126	
Chloromethane	20.0	16.2	81	33 - 150	
Dibromochloromethane	20.0	18.9	95	75 - 120	
1,1-Dichloroethane	20.0	17.9	90	75 - 130	
1,2-Dichloroethane	20.0	18.8	94	73 - 127	
1,1-Dichloroethene	20.0	16.5	83	65 - 142	
1,2-Dichloropropane	20.0	18.1	90	69 - 129	
cis-1,3-Dichloropropene	20.0	18.5	92	63 - 120	
trans-1,3-Dichloropropene	20.0	18.2	91	73 - 120	
Ethylbenzene	20.0	18.0	90	62 - 120	
2-Hexanone	20.0	23.1	115	46 - 150	
Methylene Chloride	20.0	19.9	99	56 - 138	
methyl isobutyl ketone	20.0	21.3	107	70 - 122	
Styrene	20.0	18.6	93	47 - 120	
1,1,2,2-Tetrachloroethane	20.0	20.4	102	75 - 124	
Tetrachloroethene	20.0	17.2	86	50 - 120	
Toluene	20.0	18.3	91	66 - 120	
1,1,1-Trichloroethane	20.0	16.7	84	73 - 135	
1,1,2-Trichloroethane	20.0	18.9	95	76 - 125	
Trichloroethene	20.0	17.2	86	60 - 122	
Vinyl chloride	20.0	15.9	79	61 - 150	
Xylenes, Total	60.0	55.0	92	58 - 120	
cis-1,2-Dichloroethene	20.0	18.0	90	65 - 120	
trans-1,2-Dichloroethene	20.0	17.7	89	58 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	70	65 - 136
4-Bromofluorobenzene	83	51 - 142
Dibromofluoromethane	73	68 - 132
Toluene-d8 (Surr)	80	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-51472

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15612-A-1 MS	Analysis Batch:	220-51472	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L9882.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/02/2011 0432			Final Weight/Volume:	5 mL
Prep Date:	06/02/2011 0432				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15612-A-1 MSD	Analysis Batch:	220-51472	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L9883.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/02/2011 0457			Final Weight/Volume:	5 mL
Prep Date:	06/02/2011 0457				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	88	77	41 - 150	12	20		
Benzene	114	109	66 - 131	5	20		
Bromodichloromethane	111	110	78 - 120	1	20		
Bromoform	106	107	66 - 120	1	20		
Bromomethane	143	145	47 - 150	1	20		
Methyl Ethyl Ketone	92	93	42 - 150	1	20		
Carbon disulfide	115	112	55 - 150	3	20		
Carbon tetrachloride	114	114	69 - 135	1	20		
Chlorobenzene	111	110	68 - 120	1	20		
Chloroethane	149	131	49 - 150	13	20		
Chloroform	110	113	77 - 126	3	20		
Chloromethane	104	102	33 - 150	2	20		
Dibromochloromethane	104	106	75 - 120	1	20		
1,1-Dichloroethane	112	112	75 - 130	0	20		
1,2-Dichloroethane	110	108	73 - 127	2	20		
1,1-Dichloroethene	119	112	65 - 142	6	20		
1,2-Dichloropropane	108	108	69 - 129	0	20		
cis-1,3-Dichloropropene	108	107	63 - 120	0	20		
trans-1,3-Dichloropropene	107	103	73 - 120	3	20		
Ethylbenzene	114	110	62 - 120	4	20		
2-Hexanone	101	103	46 - 150	2	20		
Methylene Chloride	106	100	56 - 138	6	20		
methyl isobutyl ketone	101	109	70 - 122	7	20		
Styrene	113	110	47 - 120	2	20		
1,1,2,2-Tetrachloroethane	104	111	75 - 124	7	20		
Tetrachloroethene	112	112	50 - 120	0	20		
Toluene	111	111	66 - 120	1	20		
1,1,1-Trichloroethane	114	113	73 - 135	1	20		
1,1,2-Trichloroethane	108	106	76 - 125	2	20		
Trichloroethene	115	114	60 - 122	1	20		
Vinyl chloride	112	109	61 - 150	2	20		
Xylenes, Total	113	113	58 - 120	0	20		
cis-1,2-Dichloroethene	115	111	65 - 120	3	20		

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-51472

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15612-A-1 MS	Analysis Batch:	220-51472	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L9882.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/02/2011 0432			Final Weight/Volume:	5 mL
Prep Date:	06/02/2011 0432				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15612-A-1 MSD	Analysis Batch:	220-51472	Instrument ID:	MSL
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	L9883.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/02/2011 0457			Final Weight/Volume:	5 mL
Prep Date:	06/02/2011 0457				
Leach Date:	N/A				

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

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	74	69	65 - 136
4-Bromofluorobenzene	84	85	51 - 142
Dibromofluoromethane	77	75	68 - 132
Toluene-d8 (Surr)	82	77	63 - 127

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-51472

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15612-A-1 MS	Units: ug/L	MSD Lab Sample ID:	220-15612-A-1 MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	06/02/2011 0432		Analysis Date:	06/02/2011 0457	
Prep Date:	06/02/2011 0432		Prep Date:	06/02/2011 0457	
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	43.8	38.7
Benzene	5.0	U	50.0	50.0	57.2	54.6
Bromodichloromethane	5.0	U	50.0	50.0	55.6	55.0
Bromoform	5.0	U	50.0	50.0	52.9	53.6
Bromomethane	5.0	U	50.0	50.0	71.4	72.4
Methyl Ethyl Ketone	10	U	50.0	50.0	46.1	46.5
Carbon disulfide	5.0	U	50.0	50.0	57.6	55.9
Carbon tetrachloride	5.0	U	50.0	50.0	56.8	57.2
Chlorobenzene	5.0	U	50.0	50.0	55.3	54.9
Chloroethane	5.0	U	50.0	50.0	74.4	65.3
Chloroform	5.0	U	50.0	50.0	55.0	56.5
Chloromethane	5.0	U	50.0	50.0	52.2	51.1
Dibromochloromethane	5.0	U	50.0	50.0	52.2	52.9
1,1-Dichloroethane	5.0	U	50.0	50.0	55.9	55.9
1,2-Dichloroethane	5.0	U	50.0	50.0	55.1	54.0
1,1-Dichloroethene	5.0	U	50.0	50.0	59.6	56.0
1,2-Dichloropropane	5.0	U	50.0	50.0	53.8	53.8
cis-1,3-Dichloropropene	5.0	U	50.0	50.0	53.8	53.7
trans-1,3-Dichloropropene	5.0	U	50.0	50.0	53.3	51.6
Ethylbenzene	5.0	U	50.0	50.0	56.9	54.9
2-Hexanone	10	U	50.0	50.0	50.4	51.5
Methylene Chloride	5.0	U	50.0	50.0	52.8	49.8
methyl isobutyl ketone	10	U	50.0	50.0	50.5	54.4
Styrene	5.0	U	50.0	50.0	56.4	55.1
1,1,2,2-Tetrachloroethane	5.0	U	50.0	50.0	51.9	55.4
Tetrachloroethene	7.9		50.0	50.0	63.9	63.7
Toluene	5.0	U	50.0	50.0	55.3	55.6
1,1,1-Trichloroethane	5.0	U	50.0	50.0	57.0	56.3
1,1,2-Trichloroethane	5.0	U	50.0	50.0	53.8	52.8
Trichloroethene	5.0	U	50.0	50.0	57.4	57.0
Vinyl chloride	5.0	U	50.0	50.0	56.0	54.7
Xylenes, Total	5.0	U	150	150	170	170
cis-1,2-Dichloroethene	5.0	U	50.0	50.0	57.5	55.7
trans-1,2-Dichloroethene	5.0	U	50.0	50.0	58.8	57.7

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

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: 220-15593-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-51472					
LCS 220-51472/2	Lab Control Sample	T	Water	8260B	
MB 220-51472/3	Method Blank	T	Water	8260B	
220-15593-1	Well 1-1A Inf	T	Water	8260B	
220-15593-2	Well 1-1A EFF	T	Water	8260B	
220-15593-3TB	Trip Blank	T	Water	8260B	
220-15612-A-1 MS	Matrix Spike	T	Water	8260B	
220-15612-A-1 MSD	Matrix Spike Duplicate	T	Water	8260B	

Report Basis
T = Total

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Laboratory Chronicle

Lab ID: 220-15593-1 **Client ID: Well 1-1A Inf**

Sample Date/Time: 05/26/2011 08:30 Received Date/Time: 05/27/2011 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15593-A-1		220-51472		06/01/2011 23:16	1	TAL CT	BK
A:8260B	220-15593-A-1		220-51472		06/01/2011 23:16	1	TAL CT	BK

Lab ID: 220-15593-2 **Client ID: Well 1-1A EFF**

Sample Date/Time: 05/26/2011 08:40 Received Date/Time: 05/27/2011 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15593-A-2		220-51472		06/01/2011 23:40	1	TAL CT	BK
A:8260B	220-15593-A-2		220-51472		06/01/2011 23:40	1	TAL CT	BK

Lab ID: 220-15593-3 **Client ID: Trip Blank**

Sample Date/Time: 05/26/2011 08:30 Received Date/Time: 05/27/2011 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15593-A-3		220-51472		06/01/2011 20:39	1	TAL CT	BK
A:8260B	220-15593-A-3		220-51472		06/01/2011 20:39	1	TAL CT	BK

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 220-51472/3		220-51472		06/01/2011 20:02	1	TAL CT	BK
A:8260B	MB 220-51472/3		220-51472		06/01/2011 20:02	1	TAL CT	BK

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 220-51472/2		220-51472		06/01/2011 19:13	1	TAL CT	BK
A:8260B	LCS 220-51472/2		220-51472		06/01/2011 19:13	1	TAL CT	BK

Lab ID: MS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15612-A-1 MS		220-51472		06/02/2011 04:32	1	TAL CT	BK
A:8260B	220-15612-A-1 MS		220-51472		06/02/2011 04:32	1	TAL CT	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15593-1

Laboratory Chronicle

Lab ID: MSD **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15612-A-1 MSD		220-51472		06/02/2011 04:57	1	TAL CT	BK
A:8260B	220-15612-A-1 MSD		220-51472		06/02/2011 04:57	1	TAL CT	BK

Lab References:
TAL CT = TestAmerica Connecticut

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-15716-1

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.
Cheryl Cascella
Project Manager I
6/27/2011 11:02 AM

Designee for
Jackie Trudell
Project Manager I
jackie.trudell@testamericainc.com
06/27/2011

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

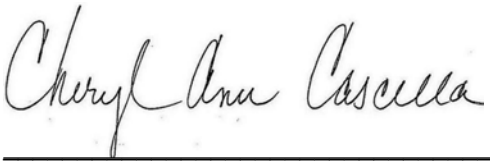
TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Number: 220-15716-1

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.
Cheryl Cascella
Project Manager I
6/27/2011 11:02 AM

Designee for
Jackie Trudell

Table of Contents

Table of Contents

Job Narrative
220-15716-1

Comments
No additional comments.

Receipt
The following samples were received at the laboratory without a sample collection time documented on the chain of custody: TRIP BLANK (220-15716-3), Well 1-1 A EFF (220-15716-2), Well 1-1 A INF (220-15716-1). The times were taken form the sample container labels.

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: 220-15716-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-15716-1	Well 1-1 A INF	Water	06/13/2011 0825	06/14/2011 1015
220-15716-2	Well 1-1 A EFF	Water	06/13/2011 0930	06/14/2011 1015
220-15716-3TB	TRIP BLANK	Water	06/13/2011 0825	06/14/2011 1015

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15716-1	**WELL 1-1 A INF**					
Acetone		4.8	J B	8.0	ug/L	8260B
Chloroform		0.71	J B	2.0	ug/L	8260B
1,1-Dichloroethane		26		2.0	ug/L	8260B
1,1-Dichloroethene		20		2.0	ug/L	8260B
cis-1,2-Dichloroethene		52		2.0	ug/L	8260B
1,1,1-Trichloroethane		240		2.0	ug/L	8260B
Trichloroethene		61		2.0	ug/L	8260B
Vinyl chloride		8.7		2.0	ug/L	8260B
220-15716-2	**WELL 1-1 A EFF**					
cis-1,2-Dichloroethene		0.32	J	0.50	ug/L	8260B
1,1,1-Trichloroethane		0.99		0.50	ug/L	8260B
Trichloroethene		0.19	J	0.50	ug/L	8260B
220-15716-3TB	**TRIP BLANK**					
Acetone		1.1	J	2.0	ug/L	8260B
Methylene Chloride		0.69	J B	2.0	ug/L	8260B

METHOD SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

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: 220-15716-1

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Client Sample ID: Well 1-1 A INF

Lab Sample ID: 220-15716-1 Date Sampled: 06/13/2011 0825
Client Matrix: Water Date Received: 06/14/2011 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52116	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1649.D
Dilution:	4.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1622			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1622				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	4.8	J B	2.3	8.0
Benzene	2.0	U	0.56	2.0
Bromodichloromethane	2.0	U	0.31	2.0
Bromoform	2.0	U	0.52	2.0
Bromomethane	4.0	U	0.84	4.0
Methyl Ethyl Ketone	8.0	U	1.3	8.0
Carbon disulfide	2.0	U	0.31	2.0
Carbon tetrachloride	2.0	U *	0.40	2.0
Chlorobenzene	2.0	U	0.23	2.0
Chloroethane	4.0	U	0.60	4.0
Chloroform	0.71	J B	0.48	2.0
Chloromethane	2.0	U	0.80	2.0
Dibromochloromethane	2.0	U	0.35	2.0
1,1-Dichloroethane	26		0.52	2.0
1,2-Dichloroethane	2.0	U	0.48	2.0
1,1-Dichloroethene	20		0.76	2.0
cis-1,2-Dichloroethene	52		0.84	2.0
trans-1,2-Dichloroethene	2.0	U	0.96	2.0
1,2-Dichloropropane	2.0	U	0.44	2.0
cis-1,3-Dichloropropene	2.0	U	0.52	2.0
trans-1,3-Dichloropropene	2.0	U	0.76	2.0
Ethylbenzene	2.0	U	0.56	2.0
2-Hexanone	8.0	U	2.0	8.0
Methylene Chloride	8.0	U	0.36	8.0
methyl isobutyl ketone	8.0	U	1.2	8.0
Styrene	2.0	U	0.68	2.0
1,1,2,2-Tetrachloroethane	2.0	U	0.60	2.0
Tetrachloroethene	2.0	U *	0.44	2.0
Toluene	2.0	U *	0.72	2.0
1,1,1-Trichloroethane	240		0.64	2.0
1,1,2-Trichloroethane	2.0	U	0.44	2.0
Trichloroethene	61		0.44	2.0
Vinyl chloride	8.7		0.56	2.0
Xylenes, Total	4.0	U	1.2	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		57 - 121
4-Bromofluorobenzene	87		57 - 121
Dibromofluoromethane	119		67 - 133
Toluene-d8 (Surr)	87		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Client Sample ID: Well 1-1 A EFF

Lab Sample ID: 220-15716-2 Date Sampled: 06/13/2011 0930
Client Matrix: Water Date Received: 06/14/2011 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52129	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1687.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1319			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1319				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.32	J	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	2.0	U	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.99		0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.19	J	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		57 - 121
4-Bromofluorobenzene	95		57 - 121
Dibromofluoromethane	100		67 - 133
Toluene-d8 (Surr)	74		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-15716-3TB Date Sampled: 06/13/2011 0825
Client Matrix: Water Date Received: 06/14/2011 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52129	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1686.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1252			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1252				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.1	J	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.69	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		57 - 121
4-Bromofluorobenzene	95		57 - 121
Dibromofluoromethane	98		67 - 133
Toluene-d8 (Surr)	74		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

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
220-15716-1	Well 1-1 A INF	119	116	87	87
220-15716-2	Well 1-1 A EFF	100	98	74	95
220-15716-3	TRIP BLANK	98	94	74	95
MB 220-52116/3		109	106	84	90
MB 220-52129/3		98	94	75	95
LCS 220-52116/2		89	86	88	83
LCS 220-52129/2		80	77	82	88

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	67-133
DCA = 1,2-Dichloroethane-d4 (Surr)	57-121
TOL = Toluene-d8 (Surr)	62-121
BFB = 4-Bromofluorobenzene	57-121

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Method Blank - Batch: 220-52116

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52116/3	Analysis Batch:	220-52116	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1641.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1244	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1244				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	0.789	J	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.250	J	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	1.35	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106	57 - 121
4-Bromofluorobenzene	90	57 - 121
Dibromofluoromethane	109	67 - 133
Toluene-d8 (Surr)	84	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Lab Control Sample - Batch: 220-52116

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52116/2	Analysis Batch:	220-52116	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1638.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1122	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1122				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	7.91	79	33 - 150	
Benzene	10.0	12.0	120	72 - 123	
Bromodichloromethane	10.0	11.5	115	71 - 128	
Bromoform	10.0	10.5	105	66 - 120	
Bromomethane	10.0	10.7	107	35 - 150	
Methyl Ethyl Ketone	10.0	8.28	83	30 - 150	
Carbon disulfide	10.0	13.8	138	51 - 140	
Carbon tetrachloride	10.0	14.0	140	67 - 134	*
Chlorobenzene	10.0	10.9	109	68 - 120	
Chloroethane	10.0	12.9	129	35 - 150	
Chloroform	10.0	11.6	116	72 - 131	
Chloromethane	10.0	8.86	89	30 - 150	
Dibromochloromethane	10.0	10.6	106	66 - 120	
1,1-Dichloroethane	10.0	12.0	120	74 - 127	
1,2-Dichloroethane	10.0	12.0	120	64 - 136	
1,1-Dichloroethene	10.0	12.7	127	70 - 134	
cis-1,2-Dichloroethene	10.0	11.1	111	70 - 120	
trans-1,2-Dichloroethene	10.0	11.9	119	63 - 120	
1,2-Dichloropropane	10.0	10.8	108	71 - 120	
cis-1,3-Dichloropropene	10.0	9.81	98	66 - 120	
trans-1,3-Dichloropropene	10.0	10.4	104	70 - 120	
Ethylbenzene	10.0	11.0	110	63 - 120	
2-Hexanone	10.0	8.07	81	29 - 150	
Methylene Chloride	10.0	12.7	127	47 - 150	
methyl isobutyl ketone	10.0	8.92	89	52 - 137	
Styrene	10.0	9.38	94	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	9.17	92	62 - 129	
Tetrachloroethene	10.0	12.1	121	55 - 120	*
Toluene	10.0	12.3	123	64 - 120	*
1,1,1-Trichloroethane	10.0	13.4	134	70 - 134	
1,1,2-Trichloroethane	10.0	10.9	109	73 - 126	
Trichloroethene	10.0	11.9	119	66 - 120	
Vinyl chloride	10.0	9.49	95	48 - 150	
Xylenes, Total	30.0	34.0	113	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	57 - 121
4-Bromofluorobenzene	83	57 - 121
Dibromofluoromethane	89	67 - 133
Toluene-d8 (Surr)	88	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Method Blank - Batch: 220-52129

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52129/3	Analysis Batch:	220-52129	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1685.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1224	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1224				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.283	J	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.588	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	57 - 121
4-Bromofluorobenzene	95	57 - 121
Dibromofluoromethane	98	67 - 133
Toluene-d8 (Surr)	75	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Lab Control Sample - Batch: 220-52129

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52129/2	Analysis Batch:	220-52129	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1682.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1102	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1102				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	7.86	79	33 - 150	
Benzene	10.0	10.1	101	72 - 123	
Bromodichloromethane	10.0	10.2	102	71 - 128	
Bromoform	10.0	9.41	94	66 - 120	
Bromomethane	10.0	12.9	129	35 - 150	
Methyl Ethyl Ketone	10.0	8.24	82	30 - 150	
Carbon disulfide	10.0	10.0	100	51 - 140	
Carbon tetrachloride	10.0	10.1	101	67 - 134	
Chlorobenzene	10.0	9.21	92	68 - 120	
Chloroethane	10.0	14.4	144	35 - 150	
Chloroform	10.0	10.2	102	72 - 131	
Chloromethane	10.0	12.6	126	30 - 150	
Dibromochloromethane	10.0	9.62	96	66 - 120	
1,1-Dichloroethane	10.0	10.4	104	74 - 127	
1,2-Dichloroethane	10.0	10.7	107	64 - 136	
1,1-Dichloroethene	10.0	9.13	91	70 - 134	
cis-1,2-Dichloroethene	10.0	9.55	95	70 - 120	
trans-1,2-Dichloroethene	10.0	9.15	91	63 - 120	
1,2-Dichloropropane	10.0	9.43	94	71 - 120	
cis-1,3-Dichloropropene	10.0	8.94	89	66 - 120	
trans-1,3-Dichloropropene	10.0	9.21	92	70 - 120	
Ethylbenzene	10.0	8.60	86	63 - 120	
2-Hexanone	10.0	8.00	80	29 - 150	
Methylene Chloride	10.0	10.7	107	47 - 150	
methyl isobutyl ketone	10.0	8.88	89	52 - 137	
Styrene	10.0	7.82	78	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	8.57	86	62 - 129	
Tetrachloroethene	10.0	9.49	95	55 - 120	
Toluene	10.0	10.3	103	64 - 120	
1,1,1-Trichloroethane	10.0	10.4	104	70 - 134	
1,1,2-Trichloroethane	10.0	10.1	101	73 - 126	
Trichloroethene	10.0	9.44	94	66 - 120	
Vinyl chloride	10.0	10.8	108	48 - 150	
Xylenes, Total	30.0	27.1	90	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	77	57 - 121
4-Bromofluorobenzene	88	57 - 121
Dibromofluoromethane	80	67 - 133
Toluene-d8 (Surr)	82	62 - 121

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

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: 220-15716-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-52116					
LCS 220-52116/2	Lab Control Sample	T	Water	8260B	
MB 220-52116/3	Method Blank	T	Water	8260B	
220-15716-1	Well 1-1 A INF	T	Water	8260B	
Analysis Batch:220-52129					
LCS 220-52129/2	Lab Control Sample	T	Water	8260B	
MB 220-52129/3	Method Blank	T	Water	8260B	
220-15716-2	Well 1-1 A EFF	T	Water	8260B	
220-15716-3TB	TRIP BLANK	T	Water	8260B	

Report Basis
T = Total

Client: Malcolm Pirnie, Inc. Job Number: 220-15716-1

Laboratory Chronicle

Lab ID: 220-15716-1 **Client ID: Well 1-1 A INF**

Sample Date/Time: 06/13/2011 08:25 Received Date/Time: 06/14/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15716-C-1		220-52116		06/21/2011 16:22	4	TAL CT	BK
A:8260B	220-15716-C-1		220-52116		06/21/2011 16:22	4	TAL CT	BK

Lab ID: 220-15716-2 **Client ID: Well 1-1 A EFF**

Sample Date/Time: 06/13/2011 09:30 Received Date/Time: 06/14/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15716-B-2		220-52129		06/22/2011 13:19	1	TAL CT	BK
A:8260B	220-15716-B-2		220-52129		06/22/2011 13:19	1	TAL CT	BK

Lab ID: 220-15716-3 **Client ID: TRIP BLANK**

Sample Date/Time: 06/13/2011 08:25 Received Date/Time: 06/14/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15716-A-3		220-52129		06/22/2011 12:52	1	TAL CT	BK
A:8260B	220-15716-A-3		220-52129		06/22/2011 12:52	1	TAL CT	BK

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 220-52116/3		220-52116		06/21/2011 12:44	1	TAL CT	BK
A:8260B	MB 220-52116/3		220-52116		06/21/2011 12:44	1	TAL CT	BK
P:5030B	MB 220-52129/3		220-52129		06/22/2011 12:24	1	TAL CT	BK
A:8260B	MB 220-52129/3		220-52129		06/22/2011 12:24	1	TAL CT	BK

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 220-52116/2		220-52116		06/21/2011 11:22	1	TAL CT	BK
A:8260B	LCS 220-52116/2		220-52116		06/21/2011 11:22	1	TAL CT	BK
P:5030B	LCS 220-52129/2		220-52129		06/22/2011 11:02	1	TAL CT	BK
A:8260B	LCS 220-52129/2		220-52129		06/22/2011 11:02	1	TAL CT	BK

Lab References:
TAL CT = TestAmerica Connecticut

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-15768-1

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.
Cheryl Cascella
Project Manager I
6/30/2011 2:34 PM

Designee for
Jackie Trudell
Project Manager I
jackie.trudell@testamericainc.com
06/30/2011

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

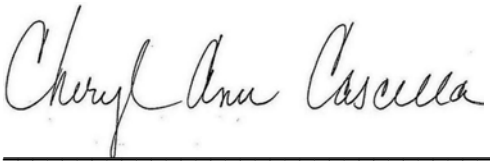
TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Number: 220-15768-1

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.
Cheryl Cascella
Project Manager I
6/30/2011 2:34 PM

Designee for
Jackie Trudell

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.

Metals
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: 220-15768-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-15768-1	4009-3	Water	06/14/2011 1445	06/16/2011 1025
220-15768-2	4009-2	Water	06/14/2011 1600	06/16/2011 1025
220-15768-3	4009-1	Water	06/14/2011 1720	06/16/2011 1025
220-15768-3MS	4009-1	Water	06/14/2011 1720	06/16/2011 1025
220-15768-3MSD	4009-1	Water	06/14/2011 1720	06/16/2011 1025
220-15768-4	4009-4	Water	06/14/2011 1735	06/16/2011 1025
220-15768-5	4009-DUP1	Water	06/14/2011 1200	06/16/2011 1025
220-15768-6	4009-14	Water	06/15/2011 0945	06/16/2011 1025
220-15768-7	4009-13	Water	06/15/2011 1205	06/16/2011 1025
220-15768-8	4009-13A	Water	06/15/2011 1335	06/16/2011 1025
220-15768-9	4009-12	Water	06/15/2011 1220	06/16/2011 1025
220-15768-10	4009-12A	Water	06/15/2011 1040	06/16/2011 1025
220-15768-11	4009-15	Water	06/15/2011 0910	06/16/2011 1025
220-15768-12	4009-8	Water	06/15/2011 1615	06/16/2011 1025
220-15768-13	4009-5	Water	06/15/2011 1515	06/16/2011 1025
220-15768-14	4009-9	Water	06/15/2011 1710	06/16/2011 1025
220-15768-15TB	TB-61511-01	Water	06/15/2011 0945	06/16/2011 1025

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15768-1	**4009-3**					
1,1-Dichloroethane		16		0.50	ug/L	8260B
1,1-Dichloroethene		0.27	J	0.50	ug/L	8260B
cis-1,2-Dichloroethene		37		0.50	ug/L	8260B
trans-1,2-Dichloroethene		0.90		0.50	ug/L	8260B
Methylene Chloride		0.18	J B	2.0	ug/L	8260B
1,1,1-Trichloroethane		14		0.50	ug/L	8260B
Trichloroethene		12		0.50	ug/L	8260B
Vinyl chloride		61		0.50	ug/L	8260B
220-15768-2	**4009-2**					
1,1-Dichloroethane		2.7		0.50	ug/L	8260B
cis-1,2-Dichloroethene		28		0.50	ug/L	8260B
trans-1,2-Dichloroethene		0.84		0.50	ug/L	8260B
Methylene Chloride		0.16	J B	2.0	ug/L	8260B
Tetrachloroethene		0.36	J	0.50	ug/L	8260B
Trichloroethene		2.7		0.50	ug/L	8260B
Vinyl chloride		0.99		0.50	ug/L	8260B
220-15768-3	**4009-1**					
1,1-Dichloroethane		1.1		0.50	ug/L	8260B
cis-1,2-Dichloroethene		2.4		0.50	ug/L	8260B
Methylene Chloride		0.17	J B	2.0	ug/L	8260B
Tetrachloroethene		0.77		0.50	ug/L	8260B
Trichloroethene		1.4		0.50	ug/L	8260B
220-15768-4	**4009-4**					
Acetone		0.86	J B	2.0	ug/L	8260B
cis-1,2-Dichloroethene		37		0.50	ug/L	8260B
trans-1,2-Dichloroethene		0.24	J	0.50	ug/L	8260B
Methylene Chloride		0.12	J B	2.0	ug/L	8260B
Toluene		0.20	J	0.50	ug/L	8260B
Trichloroethene		7.9		0.50	ug/L	8260B
Vinyl chloride		0.24	J	0.50	ug/L	8260B

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15768-5	**4009-DUP1**					
Acetone		1.0	J B	2.0	ug/L	8260B
1,1-Dichloroethane		2.7		0.50	ug/L	8260B
cis-1,2-Dichloroethene		27		0.50	ug/L	8260B
trans-1,2-Dichloroethene		0.94		0.50	ug/L	8260B
Methylene Chloride		0.17	J B	2.0	ug/L	8260B
Tetrachloroethene		0.42	J	0.50	ug/L	8260B
Trichloroethene		2.6		0.50	ug/L	8260B
Vinyl chloride		1.2		0.50	ug/L	8260B
220-15768-6	**4009-14**					
Toluene		0.30	J *	0.50	ug/L	8260B
220-15768-7	**4009-13**					
Methylene Chloride		0.14	J B	2.0	ug/L	8260B
Toluene		0.30	J	0.50	ug/L	8260B
As		11.7		10.0	ug/L	ILM05.3/ICP
Ba		89.0	J	200	ug/L	ILM05.3/ICP
Ca		95000		5000	ug/L	ILM05.3/ICP
Cr		1.0	J	10.0	ug/L	ILM05.3/ICP
Fe		955		100	ug/L	ILM05.3/ICP
K		2050	J	5000	ug/L	ILM05.3/ICP
Mg		40500		5000	ug/L	ILM05.3/ICP
Mn		539		15.0	ug/L	ILM05.3/ICP
Na		86700		5000	ug/L	ILM05.3/ICP
Zn		3.2	J	60.0	ug/L	ILM05.3/ICP
220-15768-8	**4009-13A**					
Methylene Chloride		0.15	J B	2.0	ug/L	8260B

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15768-9	**4009-12**					
Acetone		11		10	ug/L	8260B
Chloroform		0.73	J B	2.5	ug/L	8260B
1,1-Dichloroethane		15		2.5	ug/L	8260B
1,1-Dichloroethene		14		2.5	ug/L	8260B
cis-1,2-Dichloroethene		65		2.5	ug/L	8260B
Methylene Chloride		5.2	J B	10	ug/L	8260B
1,1,1-Trichloroethane		330		2.5	ug/L	8260B
Trichloroethene		60		2.5	ug/L	8260B
Ba		72.7	J	200	ug/L	ILM05.3/ICP
Ca		153000		5000	ug/L	ILM05.3/ICP
Cd		0.46	J	5.0	ug/L	ILM05.3/ICP
Co		1.8	J	50.0	ug/L	ILM05.3/ICP
Cr		1.4	J	10.0	ug/L	ILM05.3/ICP
Fe		3800		100	ug/L	ILM05.3/ICP
K		2610	J	5000	ug/L	ILM05.3/ICP
Mg		24200		5000	ug/L	ILM05.3/ICP
Mn		26.8		15.0	ug/L	ILM05.3/ICP
Na		119000		5000	ug/L	ILM05.3/ICP
Ni		1.5	J	40.0	ug/L	ILM05.3/ICP
Zn		4.8	J	60.0	ug/L	ILM05.3/ICP
220-15768-10	**4009-12A**					
1,1-Dichloroethane		9.0		0.50	ug/L	8260B
1,1-Dichloroethene		1.5		0.50	ug/L	8260B
cis-1,2-Dichloroethene		18		0.50	ug/L	8260B
Methylene Chloride		0.12	J B	2.0	ug/L	8260B
Toluene		0.39	J	0.50	ug/L	8260B
1,1,1-Trichloroethane		7.9		0.50	ug/L	8260B
Trichloroethene		5.1		0.50	ug/L	8260B
Ba		60.3	J	200	ug/L	ILM05.3/ICP
Ca		145000		5000	ug/L	ILM05.3/ICP
Cd		0.34	J	5.0	ug/L	ILM05.3/ICP
Fe		886		100	ug/L	ILM05.3/ICP
K		2220	J	5000	ug/L	ILM05.3/ICP
Mg		27100		5000	ug/L	ILM05.3/ICP
Mn		419		15.0	ug/L	ILM05.3/ICP
Na		109000		5000	ug/L	ILM05.3/ICP

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15768-11	**4009-15**					
1,1-Dichloroethane		1.1		0.50	ug/L	8260B
cis-1,2-Dichloroethene		0.45	J	0.50	ug/L	8260B
Methylene Chloride		0.15	J B	2.0	ug/L	8260B
Toluene		0.49	J	0.50	ug/L	8260B
Ba		2.5	J	200	ug/L	ILM05.3/ICP
Ca		8550		5000	ug/L	ILM05.3/ICP
Fe		228		100	ug/L	ILM05.3/ICP
K		2070	J	5000	ug/L	ILM05.3/ICP
Mg		18600		5000	ug/L	ILM05.3/ICP
Mn		6.7	J	15.0	ug/L	ILM05.3/ICP
Na		66900		5000	ug/L	ILM05.3/ICP
Zn		7.2	J	60.0	ug/L	ILM05.3/ICP
220-15768-12	**4009-8**					
Acetone		36	J	40	ug/L	8260B
Chloroform		4.0	J B	10	ug/L	8260B
1,1-Dichloroethane		66		10	ug/L	8260B
1,1-Dichloroethene		19		10	ug/L	8260B
cis-1,2-Dichloroethene		290		10	ug/L	8260B
Methylene Chloride		33	J B	40	ug/L	8260B
1,1,1-Trichloroethane		1000		10	ug/L	8260B
Trichloroethene		210		10	ug/L	8260B
Vinyl chloride		34		10	ug/L	8260B
220-15768-13	**4009-5**					
Acetone		1.6	J	2.0	ug/L	8260B
1,1-Dichloroethane		2.5		0.50	ug/L	8260B
cis-1,2-Dichloroethene		57		0.50	ug/L	8260B
trans-1,2-Dichloroethene		3.4		0.50	ug/L	8260B
Methylene Chloride		0.13	J B	2.0	ug/L	8260B
Toluene		0.39	J	0.50	ug/L	8260B
Trichloroethene		33		0.50	ug/L	8260B
Vinyl chloride		0.32	J	0.50	ug/L	8260B
220-15768-14	**4009-9**					
cis-1,2-Dichloroethene		2.5	B	0.50	ug/L	8260B
Methylene Chloride		0.22	J B	2.0	ug/L	8260B
Tetrachloroethene		0.28	J	0.50	ug/L	8260B
Toluene		0.20	J	0.50	ug/L	8260B
Trichloroethene		1.5	B	0.50	ug/L	8260B

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15768-15TB	**TB-61511-01**					
Acetone		0.73	J B	2.0	ug/L	8260B
Chloroform		0.12	J	0.50	ug/L	8260B
Methylene Chloride		2.8	B	2.0	ug/L	8260B

METHOD SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
Purge and Trap	TAL CT		SW846 5030B
Cold Vapor Mercury Analysis	TAL BUF	ILM05.3 ILM05.3/HG	
Preparation, ILM053 Mercury	TAL BUF		ILM05.3 ILM05.3/HG
Metals, ILM05.3 (ICP)	TAL BUF	ILM05.3 ILM05.3/ICP	
Preparation, ILM05.3 Metals (ICP)	TAL BUF		ILM05.3 ILM05.3

Lab References:

TAL BUF = TestAmerica Buffalo

TAL CT = TestAmerica Connecticut

Method References:

ILM05.3 = U.S. Environmental Protection Agency

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: 220-15768-1

Method		Analyst	Analyst ID
SW846	8260B	Kostrzewska, Barbara	BK
ILM05.3	ILM05.3/HG	Mosscrop, Michael	MM
ILM05.3	ILM05.3/ICP	Hanks, Lisa	LH

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-3

Lab Sample ID: 220-15768-1 Date Sampled: 06/14/2011 1445
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2682.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1941			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1941				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	16		0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.27	J	0.19	0.50
cis-1,2-Dichloroethene	37		0.21	0.50
trans-1,2-Dichloroethene	0.90		0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.18	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	14		0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	12		0.11	0.50
Vinyl chloride	61		0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87		57 - 121
4-Bromofluorobenzene	88		57 - 121
Dibromofluoromethane	93		67 - 133
Toluene-d8 (Surr)	93		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-2

Lab Sample ID: 220-15768-2 Date Sampled: 06/14/2011 1600
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2683.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2006			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2006				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	2.7		0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	28		0.21	0.50
trans-1,2-Dichloroethene	0.84		0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.16	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.36	J	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	2.7		0.11	0.50
Vinyl chloride	0.99		0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		57 - 121
4-Bromofluorobenzene	90		57 - 121
Dibromofluoromethane	91		67 - 133
Toluene-d8 (Surr)	92		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-1

Lab Sample ID: 220-15768-3 Date Sampled: 06/14/2011 1720
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2684.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2030			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2030				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	1.1		0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	2.4		0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.17	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.77		0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	1.4		0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		57 - 121
4-Bromofluorobenzene	88		57 - 121
Dibromofluoromethane	90		67 - 133
Toluene-d8 (Surr)	91		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-4

Lab Sample ID: 220-15768-4 Date Sampled: 06/14/2011 1735
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2685.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2055			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2055				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	0.86	J B	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	37		0.21	0.50
trans-1,2-Dichloroethene	0.24	J	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.12	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.20	J	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	7.9		0.11	0.50
Vinyl chloride	0.24	J	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		57 - 121
4-Bromofluorobenzene	88		57 - 121
Dibromofluoromethane	91		67 - 133
Toluene-d8 (Surr)	94		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-DUP1

Lab Sample ID: 220-15768-5 Date Sampled: 06/14/2011 1200
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2686.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2119			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2119				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.0	J B	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	2.7		0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	27		0.21	0.50
trans-1,2-Dichloroethene	0.94		0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.17	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.42	J	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	2.6		0.11	0.50
Vinyl chloride	1.2		0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		57 - 121
4-Bromofluorobenzene	88		57 - 121
Dibromofluoromethane	88		67 - 133
Toluene-d8 (Surr)	94		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-14

Lab Sample ID: 220-15768-6 Date Sampled: 06/15/2011 0945
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52116	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1662.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2218			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2218				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U *	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	2.0	U	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U *	0.11	0.50
Toluene	0.30	J *	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115		57 - 121
4-Bromofluorobenzene	87		57 - 121
Dibromofluoromethane	115		67 - 133
Toluene-d8 (Surr)	81		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-13

Lab Sample ID: 220-15768-7 Date Sampled: 06/15/2011 1205
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2687.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2143			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2143				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.14	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.30	J	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		57 - 121
4-Bromofluorobenzene	89		57 - 121
Dibromofluoromethane	89		67 - 133
Toluene-d8 (Surr)	93		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-13A

Lab Sample ID: 220-15768-8 Date Sampled: 06/15/2011 1335
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2688.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2208			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2208				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.15	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		57 - 121
4-Bromofluorobenzene	86		57 - 121
Dibromofluoromethane	89		67 - 133
Toluene-d8 (Surr)	95		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-12

Lab Sample ID: 220-15768-9 Date Sampled: 06/15/2011 1220
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52159	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2714.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1315			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1315				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		2.9	10
Benzene	2.5	U	0.70	2.5
Bromodichloromethane	2.5	U	0.39	2.5
Bromoform	2.5	U	0.65	2.5
Bromomethane	5.0	U	1.1	5.0
Methyl Ethyl Ketone	10	U	1.6	10
Carbon disulfide	2.5	U	0.39	2.5
Carbon tetrachloride	2.5	U	0.50	2.5
Chlorobenzene	2.5	U	0.29	2.5
Chloroethane	5.0	U	0.75	5.0
Chloroform	0.73	J B	0.60	2.5
Chloromethane	2.5	U	1.0	2.5
Dibromochloromethane	2.5	U	0.44	2.5
1,1-Dichloroethane	15		0.65	2.5
1,2-Dichloroethane	2.5	U	0.60	2.5
1,1-Dichloroethene	14		0.95	2.5
cis-1,2-Dichloroethene	65		1.1	2.5
trans-1,2-Dichloroethene	2.5	U	1.2	2.5
1,2-Dichloropropane	2.5	U	0.55	2.5
cis-1,3-Dichloropropene	2.5	U	0.65	2.5
trans-1,3-Dichloropropene	2.5	U	0.95	2.5
Ethylbenzene	2.5	U	0.70	2.5
2-Hexanone	10	U	2.6	10
Methylene Chloride	5.2	J B	0.46	10
methyl isobutyl ketone	10	U	1.5	10
Styrene	2.5	U	0.85	2.5
1,1,2,2-Tetrachloroethane	2.5	U	0.75	2.5
Tetrachloroethene	2.5	U	0.55	2.5
Toluene	2.5	U	0.90	2.5
1,1,1-Trichloroethane	330		0.80	2.5
1,1,2-Trichloroethane	2.5	U	0.55	2.5
Trichloroethene	60		0.55	2.5
Vinyl chloride	2.5	U	0.70	2.5
Xylenes, Total	5.0	U	1.5	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		57 - 121
4-Bromofluorobenzene	91		57 - 121
Dibromofluoromethane	93		67 - 133
Toluene-d8 (Surr)	95		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-12A

Lab Sample ID: 220-15768-10 Date Sampled: 06/15/2011 1040
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2693.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 0009			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 0009				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	9.0		0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	1.5		0.19	0.50
cis-1,2-Dichloroethene	18		0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.12	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.39	J	0.18	0.50
1,1,1-Trichloroethane	7.9		0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	5.1		0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		57 - 121
4-Bromofluorobenzene	88		57 - 121
Dibromofluoromethane	89		67 - 133
Toluene-d8 (Surr)	95		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-15

Lab Sample ID: 220-15768-11 Date Sampled: 06/15/2011 0910
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2690.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 2256			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 2256				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	1.1		0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.45	J	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.15	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.49	J	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		57 - 121
4-Bromofluorobenzene	87		57 - 121
Dibromofluoromethane	90		67 - 133
Toluene-d8 (Surr)	95		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-8

Lab Sample ID: 220-15768-12 Date Sampled: 06/15/2011 1615
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52159	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2715.D
Dilution:	20			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1339			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1339				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	36	J	12	40
Benzene	10	U	2.8	10
Bromodichloromethane	10	U	1.6	10
Bromoform	10	U	2.6	10
Bromomethane	20	U	4.2	20
Methyl Ethyl Ketone	40	U	6.4	40
Carbon disulfide	10	U	1.5	10
Carbon tetrachloride	10	U	2.0	10
Chlorobenzene	10	U	1.1	10
Chloroethane	20	U	3.0	20
Chloroform	4.0	J B	2.4	10
Chloromethane	10	U	4.0	10
Dibromochloromethane	10	U	1.8	10
1,1-Dichloroethane	66		2.6	10
1,2-Dichloroethane	10	U	2.4	10
1,1-Dichloroethene	19		3.8	10
cis-1,2-Dichloroethene	290		4.2	10
trans-1,2-Dichloroethene	10	U	4.8	10
1,2-Dichloropropane	10	U	2.2	10
cis-1,3-Dichloropropene	10	U	2.6	10
trans-1,3-Dichloropropene	10	U	3.8	10
Ethylbenzene	10	U	2.8	10
2-Hexanone	40	U	10	40
Methylene Chloride	33	J B	1.8	40
methyl isobutyl ketone	40	U	6.0	40
Styrene	10	U	3.4	10
1,1,2,2-Tetrachloroethane	10	U	3.0	10
Tetrachloroethene	10	U	2.2	10
Toluene	10	U	3.6	10
1,1,1-Trichloroethane	1000		3.2	10
1,1,2-Trichloroethane	10	U	2.2	10
Trichloroethene	210		2.2	10
Vinyl chloride	34		2.8	10
Xylenes, Total	20	U	6.0	20

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		57 - 121
4-Bromofluorobenzene	91		57 - 121
Dibromofluoromethane	90		67 - 133
Toluene-d8 (Surr)	96		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-5

Lab Sample ID: 220-15768-13 Date Sampled: 06/15/2011 1515
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52159	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2716.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1404			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1404				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.6	J	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	2.5		0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	57		0.21	0.50
trans-1,2-Dichloroethene	3.4		0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.13	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.39	J	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	33		0.11	0.50
Vinyl chloride	0.32	J	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		57 - 121
4-Bromofluorobenzene	93		57 - 121
Dibromofluoromethane	91		67 - 133
Toluene-d8 (Surr)	95		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-9

Lab Sample ID: 220-15768-14 Date Sampled: 06/15/2011 1710
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52201	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2753.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/23/2011 1156			Final Weight/Volume:	5 mL
Prep Date:	06/23/2011 1156				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	2.5	B	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.22	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.28	J	0.11	0.50
Toluene	0.20	J	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	1.5	B	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		57 - 121
4-Bromofluorobenzene	91		57 - 121
Dibromofluoromethane	95		67 - 133
Toluene-d8 (Surr)	92		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: **TB-61511-01**

Lab Sample ID: 220-15768-15TB Date Sampled: 06/15/2011 0945
Client Matrix: Water Date Received: 06/16/2011 1025

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52130	Instrument ID:	MSW
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	W2681.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1917			Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1917				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	0.73	J B	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.12	J	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	2.8	B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		57 - 121
4-Bromofluorobenzene	89		57 - 121
Dibromofluoromethane	91		67 - 133
Toluene-d8 (Surr)	92		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-13

Lab Sample ID: 220-15768-7 Date Sampled: 06/15/2011 1205
Client Matrix: Water Date Received: 06/16/2011 1025

ILM05.3/HG Cold Vapor Mercury Analysis

Analysis Method:	ILM05.3/HG	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Prep Method:	ILM05.3/HG	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1533			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hg	0.20	U	0.12	0.20

ILM05.3/ICP Metals, ILM05.3 (ICP)

Analysis Method:	ILM05.3/ICP	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Prep Method:	ILM05.3	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1551			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ag	10.0	U	1.7	10.0
Al	200	U	60.0	200
As	11.7		5.6	10.0
Ba	89.0	J	0.50	200
Be	5.0	U	0.30	5.0
Ca	95000		100	5000
Cd	5.0	U	0.33	5.0
Co	50.0	U	0.63	50.0
Cr	1.0	J	0.87	10.0
Cu	25.0	U	1.5	25.0
Fe	955		19.3	100
K	2050	J	200	5000
Mg	40500		43.4	5000
Mn	539		0.30	15.0
Na	86700		324	5000
Ni	40.0	U	1.3	40.0
Pb	10.0	U	3.0	10.0
Sb	60.0	U	6.8	60.0
Se	35.0	U	8.7	35.0
Tl	25.0	U	10.2	25.0
V	50.0	U	1.1	50.0
Zn	3.2	J	1.7	60.0

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-12

Lab Sample ID: 220-15768-9 Date Sampled: 06/15/2011 1220
Client Matrix: Water Date Received: 06/16/2011 1025

ILM05.3/HG Cold Vapor Mercury Analysis

Analysis Method:	ILM05.3/HG	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Prep Method:	ILM05.3/HG	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1535			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hg	0.20	U	0.12	0.20

ILM05.3/ICP Metals, ILM05.3 (ICP)

Analysis Method:	ILM05.3/ICP	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Prep Method:	ILM05.3	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1553			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ag	10.0	U	1.7	10.0
Al	200	U	60.0	200
As	10.0	U	5.6	10.0
Ba	72.7	J	0.50	200
Be	5.0	U	0.30	5.0
Ca	153000		100	5000
Cd	0.46	J	0.33	5.0
Co	1.8	J	0.63	50.0
Cr	1.4	J	0.87	10.0
Cu	25.0	U	1.5	25.0
Fe	3800		19.3	100
K	2610	J	200	5000
Mg	24200		43.4	5000
Mn	26.8		0.30	15.0
Na	119000		324	5000
Ni	1.5	J	1.3	40.0
Pb	10.0	U	3.0	10.0
Sb	60.0	U	6.8	60.0
Se	35.0	U	8.7	35.0
Tl	25.0	U	10.2	25.0
V	50.0	U	1.1	50.0
Zn	4.8	J	1.7	60.0

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-12A

Lab Sample ID: 220-15768-10 Date Sampled: 06/15/2011 1040
Client Matrix: Water Date Received: 06/16/2011 1025

ILM05.3/HG Cold Vapor Mercury Analysis

Analysis Method:	ILM05.3/HG	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Prep Method:	ILM05.3/HG	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1536			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hg	0.20	U	0.12	0.20

ILM05.3/ICP Metals, ILM05.3 (ICP)

Analysis Method:	ILM05.3/ICP	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Prep Method:	ILM05.3	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1555			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ag	10.0	U	1.7	10.0
Al	200	U	60.0	200
As	10.0	U	5.6	10.0
Ba	60.3	J	0.50	200
Be	5.0	U	0.30	5.0
Ca	145000		100	5000
Cd	0.34	J	0.33	5.0
Co	50.0	U	0.63	50.0
Cr	10.0	U	0.87	10.0
Cu	25.0	U	1.5	25.0
Fe	886		19.3	100
K	2220	J	200	5000
Mg	27100		43.4	5000
Mn	419		0.30	15.0
Na	109000		324	5000
Ni	40.0	U	1.3	40.0
Pb	10.0	U	3.0	10.0
Sb	60.0	U	6.8	60.0
Se	35.0	U	8.7	35.0
Tl	25.0	U	10.2	25.0
V	50.0	U	1.1	50.0
Zn	60.0	U	1.7	60.0

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Client Sample ID: 4009-15

Lab Sample ID: 220-15768-11 Date Sampled: 06/15/2011 0910
Client Matrix: Water Date Received: 06/16/2011 1025

ILM05.3/HG Cold Vapor Mercury Analysis

Analysis Method:	ILM05.3/HG	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Prep Method:	ILM05.3/HG	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1538			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hg	0.20	U	0.12	0.20

ILM05.3/ICP Metals, ILM05.3 (ICP)

Analysis Method:	ILM05.3/ICP	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Prep Method:	ILM05.3	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1557			Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ag	10.0	U	1.7	10.0
Al	200	U	60.0	200
As	10.0	U	5.6	10.0
Ba	2.5	J	0.50	200
Be	5.0	U	0.30	5.0
Ca	8550		100	5000
Cd	5.0	U	0.33	5.0
Co	50.0	U	0.63	50.0
Cr	10.0	U	0.87	10.0
Cu	25.0	U	1.5	25.0
Fe	228		19.3	100
K	2070	J	200	5000
Mg	18600		43.4	5000
Mn	6.7	J	0.30	15.0
Na	66900		324	5000
Ni	40.0	U	1.3	40.0
Pb	10.0	U	3.0	10.0
Sb	60.0	U	6.8	60.0
Se	35.0	U	8.7	35.0
Tl	25.0	U	10.2	25.0
V	50.0	U	1.1	50.0
Zn	7.2	J	1.7	60.0

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

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
220-15768-1	4009-3	93	87	93	88
220-15768-2	4009-2	91	85	92	90
220-15768-3	4009-1	90	86	91	88
220-15768-4	4009-4	91	86	94	88
220-15768-5	4009-DUP1	88	84	94	88
220-15768-6	4009-14	115	115	81	87
220-15768-7	4009-13	89	85	93	89
220-15768-8	4009-13A	89	85	95	86
220-15768-9	4009-12	93	91	95	91
220-15768-10	4009-12A	89	84	95	88
220-15768-11	4009-15	90	86	95	87
220-15768-12	4009-8	90	90	96	91
220-15768-13	4009-5	91	88	95	93
220-15768-14	4009-9	95	91	92	91
220-15768-15	TB-61511-01	91	88	92	89
MB 220-52116/3		109	106	84	90
MB 220-52130/10		90	85	93	90
MB 220-52159/3		93	92	96	90
MB 220-52201/3		92	90	93	90
LCS 220-52116/2		89	86	88	83
LCS 220-52130/9		91	87	93	90
LCS 220-52159/2		91	89	95	93
LCS 220-52201/2		92	89	94	94
220-15768-3 MS	4009-1 MS	94	89	95	90
220-15768-3 MSD	4009-1 MSD	91	89	96	90

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	67-133
DCA = 1,2-Dichloroethane-d4 (Surr)	57-121
TOL = Toluene-d8 (Surr)	62-121
BFB = 4-Bromofluorobenzene	57-121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Method Blank - Batch: 220-52116

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52116/3	Analysis Batch:	220-52116	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1641.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1244	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1244				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	0.789	J	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.250	J	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	1.35	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106	57 - 121
4-Bromofluorobenzene	90	57 - 121
Dibromofluoromethane	109	67 - 133
Toluene-d8 (Surr)	84	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Control Sample - Batch: 220-52116

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52116/2	Analysis Batch:	220-52116	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1638.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1122	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1122				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	7.91	79	33 - 150	
Benzene	10.0	12.0	120	72 - 123	
Bromodichloromethane	10.0	11.5	115	71 - 128	
Bromoform	10.0	10.5	105	66 - 120	
Bromomethane	10.0	10.7	107	35 - 150	
Methyl Ethyl Ketone	10.0	8.28	83	30 - 150	
Carbon disulfide	10.0	13.8	138	51 - 140	
Carbon tetrachloride	10.0	14.0	140	67 - 134	*
Chlorobenzene	10.0	10.9	109	68 - 120	
Chloroethane	10.0	12.9	129	35 - 150	
Chloroform	10.0	11.6	116	72 - 131	
Chloromethane	10.0	8.86	89	30 - 150	
Dibromochloromethane	10.0	10.6	106	66 - 120	
1,1-Dichloroethane	10.0	12.0	120	74 - 127	
1,2-Dichloroethane	10.0	12.0	120	64 - 136	
1,1-Dichloroethene	10.0	12.7	127	70 - 134	
cis-1,2-Dichloroethene	10.0	11.1	111	70 - 120	
trans-1,2-Dichloroethene	10.0	11.9	119	63 - 120	
1,2-Dichloropropane	10.0	10.8	108	71 - 120	
cis-1,3-Dichloropropene	10.0	9.81	98	66 - 120	
trans-1,3-Dichloropropene	10.0	10.4	104	70 - 120	
Ethylbenzene	10.0	11.0	110	63 - 120	
2-Hexanone	10.0	8.07	81	29 - 150	
Methylene Chloride	10.0	12.7	127	47 - 150	
methyl isobutyl ketone	10.0	8.92	89	52 - 137	
Styrene	10.0	9.38	94	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	9.17	92	62 - 129	
Tetrachloroethene	10.0	12.1	121	55 - 120	*
Toluene	10.0	12.3	123	64 - 120	*
1,1,1-Trichloroethane	10.0	13.4	134	70 - 134	
1,1,2-Trichloroethane	10.0	10.9	109	73 - 126	
Trichloroethene	10.0	11.9	119	66 - 120	
Vinyl chloride	10.0	9.49	95	48 - 150	
Xylenes, Total	30.0	34.0	113	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	57 - 121
4-Bromofluorobenzene	83	57 - 121
Dibromofluoromethane	89	67 - 133
Toluene-d8 (Surr)	88	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Method Blank - Batch: 220-52130

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52130/10	Analysis Batch:	220-52130	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2677.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1740	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1740				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	0.911	J	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	1.34	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85	57 - 121
4-Bromofluorobenzene	90	57 - 121
Dibromofluoromethane	90	67 - 133
Toluene-d8 (Surr)	93	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Control Sample - Batch: 220-52130

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52130/9	Analysis Batch:	220-52130	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2674.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/21/2011 1626	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/21/2011 1626				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	7.64	76	33 - 150	
Benzene	10.0	9.04	90	72 - 123	
Bromodichloromethane	10.0	8.76	88	71 - 128	
Bromoform	10.0	8.56	86	66 - 120	
Bromomethane	10.0	9.58	96	35 - 150	
Methyl Ethyl Ketone	10.0	9.00	90	30 - 150	
Carbon disulfide	10.0	9.55	95	51 - 140	
Carbon tetrachloride	10.0	8.74	87	67 - 134	
Chlorobenzene	10.0	8.65	86	68 - 120	
Chloroethane	10.0	8.99	90	35 - 150	
Chloroform	10.0	8.62	86	72 - 131	
Chloromethane	10.0	9.39	94	30 - 150	
Dibromochloromethane	10.0	9.16	92	66 - 120	
1,1-Dichloroethane	10.0	9.05	90	74 - 127	
1,2-Dichloroethane	10.0	8.32	83	64 - 136	
1,1-Dichloroethene	10.0	9.11	91	70 - 134	
cis-1,2-Dichloroethene	10.0	8.71	87	70 - 120	
trans-1,2-Dichloroethene	10.0	9.35	94	63 - 120	
1,2-Dichloropropane	10.0	8.77	88	71 - 120	
cis-1,3-Dichloropropene	10.0	8.40	84	66 - 120	
trans-1,3-Dichloropropene	10.0	8.62	86	70 - 120	
Ethylbenzene	10.0	9.24	92	63 - 120	
2-Hexanone	10.0	8.90	89	29 - 150	
Methylene Chloride	10.0	8.01	80	47 - 150	
methyl isobutyl ketone	10.0	8.78	88	52 - 137	
Styrene	10.0	8.65	86	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	8.66	87	62 - 129	
Tetrachloroethene	10.0	9.50	95	55 - 120	
Toluene	10.0	8.95	89	64 - 120	
1,1,1-Trichloroethane	10.0	9.43	94	70 - 134	
1,1,2-Trichloroethane	10.0	8.45	85	73 - 126	
Trichloroethene	10.0	9.29	93	66 - 120	
Vinyl chloride	10.0	9.96	100	48 - 150	
Xylenes, Total	30.0	26.9	90	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87	57 - 121
4-Bromofluorobenzene	90	57 - 121
Dibromofluoromethane	91	67 - 133
Toluene-d8 (Surr)	93	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Method Blank - Batch: 220-52159

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52159/3	Analysis Batch:	220-52159	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2710.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1138	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1138				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.196	J	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	1.86	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	57 - 121
4-Bromofluorobenzene	90	57 - 121
Dibromofluoromethane	93	67 - 133
Toluene-d8 (Surr)	96	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Control Sample - Batch: 220-52159

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52159/2	Analysis Batch:	220-52159	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2707.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1024	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1024				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	8.04	80	33 - 150	
Benzene	10.0	10.3	103	72 - 123	
Bromodichloromethane	10.0	9.86	99	71 - 128	
Bromoform	10.0	9.66	97	66 - 120	
Bromomethane	10.0	8.91	89	35 - 150	
Methyl Ethyl Ketone	10.0	9.16	92	30 - 150	
Carbon disulfide	10.0	10.7	107	51 - 140	
Carbon tetrachloride	10.0	10.5	105	67 - 134	
Chlorobenzene	10.0	9.96	100	68 - 120	
Chloroethane	10.0	8.76	88	35 - 150	
Chloroform	10.0	9.79	98	72 - 131	
Chloromethane	10.0	8.72	87	30 - 150	
Dibromochloromethane	10.0	9.96	100	66 - 120	
1,1-Dichloroethane	10.0	10.5	105	74 - 127	
1,2-Dichloroethane	10.0	9.64	96	64 - 136	
1,1-Dichloroethene	10.0	10.3	103	70 - 134	
cis-1,2-Dichloroethene	10.0	10.0	100	70 - 120	
trans-1,2-Dichloroethene	10.0	10.1	101	63 - 120	
1,2-Dichloropropane	10.0	9.78	98	71 - 120	
cis-1,3-Dichloropropene	10.0	9.60	96	66 - 120	
trans-1,3-Dichloropropene	10.0	9.66	97	70 - 120	
Ethylbenzene	10.0	10.6	106	63 - 120	
2-Hexanone	10.0	9.63	96	29 - 150	
Methylene Chloride	10.0	9.24	92	47 - 150	
methyl isobutyl ketone	10.0	10.1	101	52 - 137	
Styrene	10.0	9.77	98	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	9.62	96	62 - 129	
Tetrachloroethene	10.0	10.5	105	55 - 120	
Toluene	10.0	10.1	101	64 - 120	
1,1,1-Trichloroethane	10.0	11.1	111	70 - 134	
1,1,2-Trichloroethane	10.0	9.31	93	73 - 126	
Trichloroethene	10.0	10.9	109	66 - 120	
Vinyl chloride	10.0	9.02	90	48 - 150	
Xylenes, Total	30.0	30.3	101	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89	57 - 121
4-Bromofluorobenzene	93	57 - 121
Dibromofluoromethane	91	67 - 133
Toluene-d8 (Surr)	95	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-52159

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15768-3	Analysis Batch:	220-52159	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2711.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1202			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1202				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15768-3	Analysis Batch:	220-52159	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2712.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1226			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1226				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	79	73	33 - 150	8	20		
Benzene	108	109	72 - 123	1	20		
Bromodichloromethane	105	105	71 - 128	0	20		
Bromoform	103	102	66 - 120	1	20		
Bromomethane	94	105	35 - 150	10	20		
Methyl Ethyl Ketone	103	99	30 - 150	4	20		
Carbon disulfide	112	112	51 - 140	1	20		
Carbon tetrachloride	109	114	67 - 134	5	20		
Chlorobenzene	104	104	68 - 120	0	20		
Chloroethane	113	122	35 - 150	8	20		
Chloroform	101	102	72 - 131	2	20		
Chloromethane	95	101	30 - 150	5	20		
Dibromochloromethane	109	108	66 - 120	1	20		
1,1-Dichloroethane	111	113	74 - 127	2	20		
1,2-Dichloroethane	102	106	64 - 136	4	20		
1,1-Dichloroethene	109	107	70 - 134	1	20		
cis-1,2-Dichloroethene	104	107	70 - 120	2	20		
trans-1,2-Dichloroethene	108	112	63 - 120	4	20		
1,2-Dichloropropane	108	110	71 - 120	2	20		
cis-1,3-Dichloropropene	102	103	66 - 120	1	20		
trans-1,3-Dichloropropene	105	105	70 - 120	1	20		
Ethylbenzene	108	108	63 - 120	1	20		
2-Hexanone	112	107	29 - 150	4	20		
Methylene Chloride	78	76	47 - 150	3	20		
methyl isobutyl ketone	114	113	52 - 137	1	20		
Styrene	100	103	52 - 120	3	20		
1,1,2,2-Tetrachloroethane	96	96	62 - 129	0	20		
Tetrachloroethene	115	115	55 - 120	0	20		
Toluene	106	109	64 - 120	3	20		
1,1,1-Trichloroethane	118	118	70 - 134	0	20		
1,1,2-Trichloroethane	96	99	73 - 126	3	20		
Trichloroethene	111	112	66 - 120	1	20		
Vinyl chloride	107	116	48 - 150	9	20		

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-52159

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15768-3	Analysis Batch:	220-52159	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2711.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1202			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1202				
Leach Date:	N/A				

MSD Lab Sample ID:	220-15768-3	Analysis Batch:	220-52159	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2712.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1226			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1226				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Xylenes, Total	105	106	61 - 120	1	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89	89	57 - 121
4-Bromofluorobenzene	90	90	57 - 121
Dibromofluoromethane	94	91	67 - 133
Toluene-d8 (Surr)	95	96	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 220-52159

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	220-15768-3	Units: ug/L	MSD Lab Sample ID:	220-15768-3	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	06/22/2011 1202		Analysis Date:	06/22/2011 1226	
Prep Date:	06/22/2011 1202		Prep Date:	06/22/2011 1226	
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	2.0	U	20.0	20.0	15.8	14.6
Benzene	0.50	U	20.0	20.0	21.7	21.8
Bromodichloromethane	0.50	U	20.0	20.0	21.1	21.1
Bromoform	0.50	U	20.0	20.0	20.6	20.4
Bromomethane	1.0	U	20.0	20.0	18.9	21.0
Methyl Ethyl Ketone	2.0	U	20.0	20.0	20.5	19.8
Carbon disulfide	0.50	U	20.0	20.0	22.3	22.5
Carbon tetrachloride	0.50	U	20.0	20.0	21.7	22.7
Chlorobenzene	0.50	U	20.0	20.0	20.7	20.8
Chloroethane	1.0	U	20.0	20.0	22.6	24.4
Chloroform	0.50	U	20.0	20.0	20.1	20.5
Chloromethane	0.50	U	20.0	20.0	19.1	20.1
Dibromochloromethane	0.50	U	20.0	20.0	21.8	21.5
1,1-Dichloroethane	1.1		20.0	20.0	23.3	23.7
1,2-Dichloroethane	0.50	U	20.0	20.0	20.3	21.2
1,1-Dichloroethene	0.50	U	20.0	20.0	21.8	21.5
cis-1,2-Dichloroethene	2.4		20.0	20.0	23.2	23.7
trans-1,2-Dichloroethene	0.50	U	20.0	20.0	21.6	22.4
1,2-Dichloropropane	0.50	U	20.0	20.0	21.5	21.9
cis-1,3-Dichloropropene	0.50	U	20.0	20.0	20.4	20.6
trans-1,3-Dichloropropene	0.50	U	20.0	20.0	21.0	21.1
Ethylbenzene	0.50	U	20.0	20.0	21.5	21.7
2-Hexanone	2.0	U	20.0	20.0	22.3	21.5
Methylene Chloride	0.17	J	20.0	20.0	15.8	15.3
methyl isobutyl ketone	2.0	U	20.0	20.0	22.9	22.6
Styrene	0.50	U	20.0	20.0	20.0	20.5
1,1,2,2-Tetrachloroethane	0.50	U	20.0	20.0	19.2	19.3
Tetrachloroethene	0.77		20.0	20.0	23.8	23.7
Toluene	0.50	U	20.0	20.0	21.2	21.8
1,1,1-Trichloroethane	0.50	U	20.0	20.0	23.5	23.6
1,1,2-Trichloroethane	0.50	U	20.0	20.0	19.2	19.8
Trichloroethene	1.4		20.0	20.0	23.6	23.8
Vinyl chloride	0.50	U	20.0	20.0	21.4	23.3
Xylenes, Total	1.0	U	60.0	60.0	63.0	63.4

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Method Blank - Batch: 220-52201

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52201/3	Analysis Batch:	220-52201	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2752.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/23/2011 1131	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/23/2011 1131				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.227	J	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	1.56	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.165	J	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90	57 - 121
4-Bromofluorobenzene	90	57 - 121
Dibromofluoromethane	92	67 - 133
Toluene-d8 (Surr)	93	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Control Sample - Batch: 220-52201

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52201/2	Analysis Batch:	220-52201	Instrument ID:	MSW
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W2749.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/23/2011 1017	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/23/2011 1017				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	10.2	102	33 - 150	
Benzene	10.0	10.5	105	72 - 123	
Bromodichloromethane	10.0	10.0	100	71 - 128	
Bromoform	10.0	9.76	98	66 - 120	
Bromomethane	10.0	4.75	48	35 - 150	
Methyl Ethyl Ketone	10.0	9.86	99	30 - 150	
Carbon disulfide	10.0	11.1	111	51 - 140	
Carbon tetrachloride	10.0	10.9	109	67 - 134	
Chlorobenzene	10.0	10.1	101	68 - 120	
Chloroethane	10.0	8.15	82	35 - 150	
Chloroform	10.0	10.2	102	72 - 131	
Chloromethane	10.0	8.40	84	30 - 150	
Dibromochloromethane	10.0	10.2	102	66 - 120	
1,1-Dichloroethane	10.0	10.6	106	74 - 127	
1,2-Dichloroethane	10.0	10.1	101	64 - 136	
1,1-Dichloroethene	10.0	10.2	102	70 - 134	
cis-1,2-Dichloroethene	10.0	10.7	107	70 - 120	
trans-1,2-Dichloroethene	10.0	10.5	105	63 - 120	
1,2-Dichloropropane	10.0	10.3	103	71 - 120	
cis-1,3-Dichloropropene	10.0	9.86	99	66 - 120	
trans-1,3-Dichloropropene	10.0	10.0	100	70 - 120	
Ethylbenzene	10.0	10.5	105	63 - 120	
2-Hexanone	10.0	10.3	103	29 - 150	
Methylene Chloride	10.0	9.56	96	47 - 150	
methyl isobutyl ketone	10.0	10.1	101	52 - 137	
Styrene	10.0	10.0	100	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	9.59	96	62 - 129	
Tetrachloroethene	10.0	11.2	112	55 - 120	
Toluene	10.0	10.1	101	64 - 120	
1,1,1-Trichloroethane	10.0	11.3	113	70 - 134	
1,1,2-Trichloroethane	10.0	9.82	98	73 - 126	
Trichloroethene	10.0	11.4	114	66 - 120	
Vinyl chloride	10.0	8.88	89	48 - 150	
Xylenes, Total	30.0	30.6	102	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89	57 - 121
4-Bromofluorobenzene	94	57 - 121
Dibromofluoromethane	92	67 - 133
Toluene-d8 (Surr)	94	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Method Blank - Batch: 480-20970

Method: ILM05.3/HG
Preparation: ILM05.3/HG

Lab Sample ID:	MB 480-20970/8-A	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Client Matrix:	Water	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1547	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Hg	0.20	U	0.12	0.20

Lab Control Sample - Batch: 480-20970

Method: ILM05.3/HG
Preparation: ILM05.3/HG

Lab Sample ID:	LCS 480-20970/7-A	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Client Matrix:	Water	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1545	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Hg	6.67	7.12	107	80 - 120	

Matrix Spike - Batch: 480-20970

Method: ILM05.3/HG
Preparation: ILM05.3/HG

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Client Matrix:	Water	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1543	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Hg	0.20	U	1.67	1.80	108	75 - 125	

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Serial Dilution - Batch: 480-20970

Method: ILM05.3/HG
Preparation: ILM05.3/HG

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Client Matrix:	Water	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1540	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Hg	0.20	U	1.0			U

Duplicate - Batch: 480-20970

Method: ILM05.3/HG
Preparation: ILM05.3/HG

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21237	Instrument ID:	LEEMAN3
Client Matrix:	Water	Prep Batch:	480-20970	Lab File ID:	J06221CW.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/22/2011 1542	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1150				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Hg	0.20	U	0.20	NC	20	U

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Method Blank - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	MB 480-21081/1-A	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1546	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Ag	10.0	U	1.7	10.0
Al	76.25	J	60.0	200
As	10.0	U	5.6	10.0
Ba	200	U	0.50	200
Be	5.0	U	0.30	5.0
Ca	153.9	J	100	5000
Cd	5.0	U	0.33	5.0
Co	50.0	U	0.63	50.0
Cr	10.0	U	0.87	10.0
Cu	25.0	U	1.5	25.0
Fe	100	U	19.3	100
K	5000	U	200	5000
Mg	5000	U	43.4	5000
Mn	15.0	U	0.30	15.0
Na	5000	U	324	5000
Ni	40.0	U	1.3	40.0
Pb	10.0	U	3.0	10.0
Sb	60.0	U	6.8	60.0
Se	35.0	U	8.7	35.0
Tl	25.0	U	10.2	25.0
V	50.0	U	1.1	50.0
Zn	60.0	U	1.7	60.0

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Lab Control Sample - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	LCS 480-21081/2-A	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1549	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ag	50.0	51.35	103	80 - 120	
Al	10000	9976	100	80 - 120	
As	200	211.2	106	80 - 120	
Ba	200	208.1	104	80 - 120	
Be	200	207.7	104	80 - 120	
Ca	10000	10580	106	80 - 120	
Cd	200	214.5	107	80 - 120	
Co	200	206.4	103	80 - 120	
Cr	200	206.2	103	80 - 120	
Cu	200	209.6	105	80 - 120	
Fe	10000	10190	102	80 - 120	
K	10000	10340	103	80 - 120	
Mg	10000	11070	111	80 - 120	
Mn	200	211.0	105	80 - 120	
Na	10000	10340	103	80 - 120	
Ni	200	203.8	102	80 - 120	
Pb	200	209.3	105	80 - 120	
Sb	200	210.0	105	80 - 120	
Se	200	222.3	111	80 - 120	
Tl	200	209.4	105	80 - 120	
V	200	202.6	101	80 - 120	
Zn	200	215.1	108	80 - 120	

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Post Digestion Spike - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1601	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Ag	10.0	U	50.0	52.41	105	75 - 125	
Al	200	U	10000	10210	102	75 - 125	
As	10.0	U	200	216.4	108	75 - 125	
Ba	2.5	J	200	210.4	104	75 - 125	
Be	5.0	U	200	214.1	107	75 - 125	
Ca	8550		10000	18770	102	75 - 125	
Cd	5.0	U	200	218.0	109	75 - 125	
Co	50.0	U	200	213.5	107	75 - 125	
Cr	10.0	U	200	211.0	106	75 - 125	
Cu	25.0	U	200	211.0	106	75 - 125	
Fe	228		10000	10490	103	75 - 125	
K	2070	J	10000	12520	104	75 - 125	
Mg	18600		10000	29060	105	75 - 125	
Mn	6.7	J	200	219.5	106	75 - 125	
Na	66900		10000	75570	87	75 - 125	
Ni	40.0	U	200	211.3	106	75 - 125	
Pb	10.0	U	200	213.9	107	75 - 125	
Sb	60.0	U	200	212.2	106	75 - 125	
Se	35.0	U	200	227.1	114	75 - 125	
Tl	25.0	U	200	215.1	108	75 - 125	
V	50.0	U	200	206.9	103	75 - 125	
Zn	7.2	J	200	224.6	109	75 - 125	

Matrix Spike - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1606	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Ag	10.0	U	50.0	51.89	104	75 - 125	
Al	200	U	2000	2039	102	75 - 125	
As	10.0	U	40.0	43.31	108	75 - 125	
Ba	2.5	J	2000	2041	102	75 - 125	
Be	5.0	U	50.0	51.73	103	75 - 125	

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Matrix Spike - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1606	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Cd	5.0	U	50.0	52.84	106	75 - 125	
Co	50.0	U	500	480.6	96	75 - 125	
Cr	10.0	U	200	203.3	102	75 - 125	
Cu	25.0	U	250	259.6	104	75 - 125	
Fe	228		1000	1253	102	75 - 125	
Mn	6.7	J	500	525.0	104	75 - 125	
Ni	40.0	U	500	500.5	100	75 - 125	
Pb	10.0	U	20.0	20.95	105	75 - 125	
Sb	60.0	U	100	103.1	103	75 - 125	
Se	35.0	U	50.0	56.50	113	75 - 125	
Tl	25.0	U	50.0	52.98	106	75 - 125	
V	50.0	U	500	501.7	100	75 - 125	
Zn	7.2	J	500	533.2	105	75 - 125	

Serial Dilution - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1559	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Ag	10.0	U	50.0			U
Al	200	U	1000			U
As	10.0	U	50.0			U
Ba	2.5	J	3.75	50	10	J
Be	5.0	U	25.0			U
Ca	8550		8356	2	10	J
Cd	5.0	U	25.0			U
Co	50.0	U	250			U
Cr	10.0	U	50.0			U
Cu	25.0	U	125			U
Fe	228		230.6	1	10	J
K	2070	J	2210	7	10	J
Mg	18600		17490	6	10	J
Mn	6.7	J	6.30	6	10	J
Na	66900		66540	1	10	
Ni	40.0	U	200			U
Pb	10.0	U	50.0			U
Sb	60.0	U	300			U
Se	35.0	U	175			U
Tl	25.0	U	125			U
V	50.0	U	250			U
Zn	7.2	J	300	100	10	U

Duplicate - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1603	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Ag	10.0	U	10.0	NC	20	U
Al	200	U	200	NC	20	U
As	10.0	U	10.0	NC	20	U
Ba	2.5	J	2.52	0.8	20	J
Be	5.0	U	5.0	NC	20	U
Ca	8550		8581	0.4	20	
Cd	5.0	U	0.420	NC	20	J

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Duplicate - Batch: 480-21081

Method: ILM05.3/ICP
Preparation: ILM05.3

Lab Sample ID:	220-15768-11	Analysis Batch:	480-21384	Instrument ID:	ICAP1
Client Matrix:	Water	Prep Batch:	480-21081	Lab File ID:	I1062311A-1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/23/2011 1603	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/22/2011 1130				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Co	50.0	U	50.0	NC	20	U
Cr	10.0	U	10.0	NC	20	U
Cu	25.0	U	25.0	NC	20	U
Fe	228		237.6	4	20	
K	2070	J	2091	0.9	20	J
Mg	18600		18660	0.4	20	
Mn	6.7	J	6.79	1	20	J
Na	66900		68520	2	20	
Ni	40.0	U	40.0	NC	20	U
Pb	10.0	U	10.0	NC	20	U
Sb	60.0	U	60.0	NC	20	U
Se	35.0	U	35.0	NC	20	U
Tl	25.0	U	25.0	NC	20	U
V	50.0	U	50.0	NC	20	U
Zn	7.2	J	6.63	9	20	J

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

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.
Metals		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-52116					
LCS 220-52116/2	Lab Control Sample	T	Water	8260B	
MB 220-52116/3	Method Blank	T	Water	8260B	
220-15768-6	4009-14	T	Water	8260B	
Analysis Batch:220-52130					
LCS 220-52130/9	Lab Control Sample	T	Water	8260B	
MB 220-52130/10	Method Blank	T	Water	8260B	
220-15768-1	4009-3	T	Water	8260B	
220-15768-2	4009-2	T	Water	8260B	
220-15768-3	4009-1	T	Water	8260B	
220-15768-4	4009-4	T	Water	8260B	
220-15768-5	4009-DUP1	T	Water	8260B	
220-15768-7	4009-13	T	Water	8260B	
220-15768-8	4009-13A	T	Water	8260B	
220-15768-10	4009-12A	T	Water	8260B	
220-15768-11	4009-15	T	Water	8260B	
220-15768-15TB	TB-61511-01	T	Water	8260B	
Analysis Batch:220-52159					
LCS 220-52159/2	Lab Control Sample	T	Water	8260B	
MB 220-52159/3	Method Blank	T	Water	8260B	
220-15768-3MS	Matrix Spike	T	Water	8260B	
220-15768-3MSD	Matrix Spike Duplicate	T	Water	8260B	
220-15768-9	4009-12	T	Water	8260B	
220-15768-12	4009-8	T	Water	8260B	
220-15768-13	4009-5	T	Water	8260B	
Analysis Batch:220-52201					
LCS 220-52201/2	Lab Control Sample	T	Water	8260B	
MB 220-52201/3	Method Blank	T	Water	8260B	
220-15768-14	4009-9	T	Water	8260B	

Report Basis
T = Total

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 480-20970					
LCS 480-20970/7-A	Lab Control Sample	T	Water	ILM05.3/HG	
MB 480-20970/8-A	Method Blank	T	Water	ILM05.3/HG	
220-15768-7	4009-13	T	Water	ILM05.3/HG	
220-15768-9	4009-12	T	Water	ILM05.3/HG	
220-15768-10	4009-12A	T	Water	ILM05.3/HG	
220-15768-11	4009-15	T	Water	ILM05.3/HG	
220-15768-11DU	Duplicate	T	Water	ILM05.3/HG	
220-15768-11MS	Matrix Spike	T	Water	ILM05.3/HG	
Prep Batch: 480-21081					
LCS 480-21081/2-A	Lab Control Sample	T	Water	ILM05.3	
MB 480-21081/1-A	Method Blank	T	Water	ILM05.3	
220-15768-7	4009-13	T	Water	ILM05.3	
220-15768-9	4009-12	T	Water	ILM05.3	
220-15768-10	4009-12A	T	Water	ILM05.3	
220-15768-11	4009-15	T	Water	ILM05.3	
220-15768-11DU	Duplicate	T	Water	ILM05.3	
220-15768-11MS	Matrix Spike	T	Water	ILM05.3	
Analysis Batch:480-21237					
LCS 480-20970/7-A	Lab Control Sample	T	Water	ILM05.3/HG	480-20970
MB 480-20970/8-A	Method Blank	T	Water	ILM05.3/HG	480-20970
220-15768-7	4009-13	T	Water	ILM05.3/HG	480-20970
220-15768-9	4009-12	T	Water	ILM05.3/HG	480-20970
220-15768-10	4009-12A	T	Water	ILM05.3/HG	480-20970
220-15768-11	4009-15	T	Water	ILM05.3/HG	480-20970
220-15768-11DU	Duplicate	T	Water	ILM05.3/HG	480-20970
220-15768-11MS	Matrix Spike	T	Water	ILM05.3/HG	480-20970
Analysis Batch:480-21384					
LCS 480-21081/2-A	Lab Control Sample	T	Water	ILM05.3/ICP	480-21081
MB 480-21081/1-A	Method Blank	T	Water	ILM05.3/ICP	480-21081
220-15768-7	4009-13	T	Water	ILM05.3/ICP	480-21081
220-15768-9	4009-12	T	Water	ILM05.3/ICP	480-21081
220-15768-10	4009-12A	T	Water	ILM05.3/ICP	480-21081
220-15768-11	4009-15	T	Water	ILM05.3/ICP	480-21081
220-15768-11DU	Duplicate	T	Water	ILM05.3/ICP	480-21081
220-15768-11MS	Matrix Spike	T	Water	ILM05.3/ICP	480-21081

Report Basis
T = Total

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Laboratory Chronicle

Lab ID: 220-15768-1 **Client ID: 4009-3**

Sample Date/Time: 06/14/2011 14:45 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-1		220-52130		06/21/2011 19:41	1	TAL CT	BK
A:8260B	220-15768-A-1		220-52130		06/21/2011 19:41	1	TAL CT	BK

Lab ID: 220-15768-2 **Client ID: 4009-2**

Sample Date/Time: 06/14/2011 16:00 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-2		220-52130		06/21/2011 20:06	1	TAL CT	BK
A:8260B	220-15768-A-2		220-52130		06/21/2011 20:06	1	TAL CT	BK

Lab ID: 220-15768-3 **Client ID: 4009-1**

Sample Date/Time: 06/14/2011 17:20 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-3		220-52130		06/21/2011 20:30	1	TAL CT	BK
A:8260B	220-15768-A-3		220-52130		06/21/2011 20:30	1	TAL CT	BK

Lab ID: 220-15768-3 **Client ID: 4009-1**

Sample Date/Time: 06/14/2011 17:20 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-3 MS		220-52159		06/22/2011 12:02	1	TAL CT	BK
A:8260B	220-15768-A-3 MS		220-52159		06/22/2011 12:02	1	TAL CT	BK

Lab ID: 220-15768-3 **Client ID: 4009-1**

Sample Date/Time: 06/14/2011 17:20 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-3 MSD		220-52159		06/22/2011 12:26	1	TAL CT	BK
A:8260B	220-15768-A-3 MSD		220-52159		06/22/2011 12:26	1	TAL CT	BK

Lab ID: 220-15768-4 **Client ID: 4009-4**

Sample Date/Time: 06/14/2011 17:35 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-4		220-52130		06/21/2011 20:55	1	TAL CT	BK
A:8260B	220-15768-A-4		220-52130		06/21/2011 20:55	1	TAL CT	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Laboratory Chronicle

Lab ID: 220-15768-5 **Client ID: 4009-DUP1**

Sample Date/Time: 06/14/2011 12:00 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-5		220-52130		06/21/2011 21:19	1	TAL CT	BK
A:8260B	220-15768-A-5		220-52130		06/21/2011 21:19	1	TAL CT	BK

Lab ID: 220-15768-6 **Client ID: 4009-14**

Sample Date/Time: 06/15/2011 09:45 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-6		220-52116		06/21/2011 22:18	1	TAL CT	BK
A:8260B	220-15768-A-6		220-52116		06/21/2011 22:18	1	TAL CT	BK

Lab ID: 220-15768-7 **Client ID: 4009-13**

Sample Date/Time: 06/15/2011 12:05 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-7		220-52130		06/21/2011 21:43	1	TAL CT	BK
A:8260B	220-15768-A-7		220-52130		06/21/2011 21:43	1	TAL CT	BK
P:ILM05.3/HG	220-15768-D-7-A		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	220-15768-D-7-A		480-21237	480-20970	06/22/2011 15:33	1	TAL BUF	MM
P:ILM05.3	220-15768-D-7-B		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-D-7-B		480-21384	480-21081	06/23/2011 15:51	1	TAL BUF	LH

Lab ID: 220-15768-8 **Client ID: 4009-13A**

Sample Date/Time: 06/15/2011 13:35 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-8		220-52130		06/21/2011 22:08	1	TAL CT	BK
A:8260B	220-15768-A-8		220-52130		06/21/2011 22:08	1	TAL CT	BK

Lab ID: 220-15768-9 **Client ID: 4009-12**

Sample Date/Time: 06/15/2011 12:20 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-C-9		220-52159		06/22/2011 13:15	5	TAL CT	BK
A:8260B	220-15768-C-9		220-52159		06/22/2011 13:15	5	TAL CT	BK
P:ILM05.3/HG	220-15768-D-9-A		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	220-15768-D-9-A		480-21237	480-20970	06/22/2011 15:35	1	TAL BUF	MM
P:ILM05.3	220-15768-E-9-A		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-E-9-A		480-21384	480-21081	06/23/2011 15:53	1	TAL BUF	LH

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Laboratory Chronicle

Lab ID: 220-15768-10 **Client ID: 4009-12A**

Sample Date/Time: 06/15/2011 10:40 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-10		220-52130		06/22/2011 00:09	1	TAL CT	BK
A:8260B	220-15768-A-10		220-52130		06/22/2011 00:09	1	TAL CT	BK
P:ILM05.3/HG	220-15768-D-10-A		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	220-15768-D-10-A		480-21237	480-20970	06/22/2011 15:36	1	TAL BUF	MM
P:ILM05.3	220-15768-E-10-A		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-E-10-A		480-21384	480-21081	06/23/2011 15:55	1	TAL BUF	LH

Lab ID: 220-15768-11 **Client ID: 4009-15**

Sample Date/Time: 06/15/2011 09:10 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-11		220-52130		06/21/2011 22:56	1	TAL CT	BK
A:8260B	220-15768-A-11		220-52130		06/21/2011 22:56	1	TAL CT	BK
P:ILM05.3/HG	220-15768-D-11-A		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	220-15768-D-11-A		480-21237	480-20970	06/22/2011 15:38	1	TAL BUF	MM
P:ILM05.3	220-15768-E-11-A		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-E-11-A		480-21384	480-21081	06/23/2011 15:57	1	TAL BUF	LH

Lab ID: 220-15768-11 MS **Client ID: 4009-15**

Sample Date/Time: 06/15/2011 09:10 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:ILM05.3/HG	220-15768-D-11-C MS		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	220-15768-D-11-C MS		480-21237	480-20970	06/22/2011 15:43	1	TAL BUF	MM
P:ILM05.3	220-15768-E-11-E MS		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-E-11-E MS		480-21384	480-21081	06/23/2011 16:06	1	TAL BUF	LH

Lab ID: 220-15768-11 DU **Client ID: 4009-15**

Sample Date/Time: 06/15/2011 09:10 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:ILM05.3/HG	220-15768-D-11-B DU		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	220-15768-D-11-B DU		480-21237	480-20970	06/22/2011 15:42	1	TAL BUF	MM
P:ILM05.3	220-15768-E-11-C DU		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-E-11-C DU		480-21384	480-21081	06/23/2011 16:03	1	TAL BUF	LH

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Laboratory Chronicle

Lab ID: 220-15768-11 SD **Client ID: 4009-15**

Sample Date/Time: 06/15/2011 09:10 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:ILM05.3/HG	220-15768-D-11-A SD ^5		480-21237	480-20970	06/22/2011 11:50	5	TAL BUF	MM
A:ILM05.3/HG	220-15768-D-11-A SD ^5		480-21237	480-20970	06/22/2011 15:40	5	TAL BUF	MM
P:ILM05.3	220-15768-E-11-B SD		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-E-11-B SD		480-21384	480-21081	06/23/2011 15:59	1	TAL BUF	LH
P:ILM05.3	220-15768-E-11-A PDS		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	220-15768-E-11-A PDS		480-21384	480-21081	06/23/2011 16:01	1	TAL BUF	LH

Lab ID: 220-15768-12 **Client ID: 4009-8**

Sample Date/Time: 06/15/2011 16:15 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-B-12		220-52159		06/22/2011 13:39	20	TAL CT	BK
A:8260B	220-15768-B-12		220-52159		06/22/2011 13:39	20	TAL CT	BK

Lab ID: 220-15768-13 **Client ID: 4009-5**

Sample Date/Time: 06/15/2011 15:15 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-C-13		220-52159		06/22/2011 14:04	1	TAL CT	BK
A:8260B	220-15768-C-13		220-52159		06/22/2011 14:04	1	TAL CT	BK

Lab ID: 220-15768-14 **Client ID: 4009-9**

Sample Date/Time: 06/15/2011 17:10 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-14		220-52201		06/23/2011 11:56	1	TAL CT	BK
A:8260B	220-15768-A-14		220-52201		06/23/2011 11:56	1	TAL CT	BK

Lab ID: 220-15768-15 **Client ID: TB-61511-01**

Sample Date/Time: 06/15/2011 09:45 Received Date/Time: 06/16/2011 10:25

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15768-A-15		220-52130		06/21/2011 19:17	1	TAL CT	BK
A:8260B	220-15768-A-15		220-52130		06/21/2011 19:17	1	TAL CT	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15768-1

Laboratory Chronicle

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 220-52116/3		220-52116		06/21/2011 12:44	1	TAL CT	BK
A:8260B	MB 220-52116/3		220-52116		06/21/2011 12:44	1	TAL CT	BK
P:5030B	MB 220-52130/10		220-52130		06/21/2011 17:40	1	TAL CT	BK
A:8260B	MB 220-52130/10		220-52130		06/21/2011 17:40	1	TAL CT	BK
P:5030B	MB 220-52159/3		220-52159		06/22/2011 11:38	1	TAL CT	BK
A:8260B	MB 220-52159/3		220-52159		06/22/2011 11:38	1	TAL CT	BK
P:5030B	MB 220-52201/3		220-52201		06/23/2011 11:31	1	TAL CT	BK
A:8260B	MB 220-52201/3		220-52201		06/23/2011 11:31	1	TAL CT	BK
P:ILM05.3/HG	MB 480-20970/8-A		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	MB 480-20970/8-A		480-21237	480-20970	06/22/2011 15:47	1	TAL BUF	MM
P:ILM05.3	MB 480-21081/1-A		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	MB 480-21081/1-A		480-21384	480-21081	06/23/2011 15:46	1	TAL BUF	LH

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 220-52116/2		220-52116		06/21/2011 11:22	1	TAL CT	BK
A:8260B	LCS 220-52116/2		220-52116		06/21/2011 11:22	1	TAL CT	BK
P:5030B	LCS 220-52130/9		220-52130		06/21/2011 16:26	1	TAL CT	BK
A:8260B	LCS 220-52130/9		220-52130		06/21/2011 16:26	1	TAL CT	BK
P:5030B	LCS 220-52159/2		220-52159		06/22/2011 10:24	1	TAL CT	BK
A:8260B	LCS 220-52159/2		220-52159		06/22/2011 10:24	1	TAL CT	BK
P:5030B	LCS 220-52201/2		220-52201		06/23/2011 10:17	1	TAL CT	BK
A:8260B	LCS 220-52201/2		220-52201		06/23/2011 10:17	1	TAL CT	BK
P:ILM05.3/HG	LCS 480-20970/7-A		480-21237	480-20970	06/22/2011 11:50	1	TAL BUF	MM
A:ILM05.3/HG	LCS 480-20970/7-A		480-21237	480-20970	06/22/2011 15:45	1	TAL BUF	MM
P:ILM05.3	LCS 480-21081/2-A		480-21384	480-21081	06/22/2011 11:30	1	TAL BUF	MM
A:ILM05.3/ICP	LCS 480-21081/2-A		480-21384	480-21081	06/23/2011 15:49	1	TAL BUF	LH

Lab References:
TAL BUF = TestAmerica Buffalo
TAL CT = TestAmerica Connecticut

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-15792-1

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.
Cheryl Cascella
Project Manager I
6/30/2011 4:37 PM

Designee for
Jackie Trudell
Project Manager I
jackie.trudell@testamericainc.com
06/30/2011

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

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

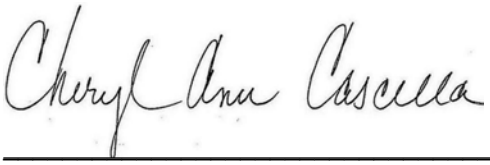
TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Number: 220-15792-1

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.
Cheryl Cascella
Project Manager I
6/30/2011 4:37 PM

Designee for
Jackie Trudell

Table of Contents

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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

(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: 220-15792-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-15792-1	4009-6	Water	06/16/2011 1130	06/17/2011 1000
220-15792-2	4009-10	Water	06/16/2011 1110	06/17/2011 1000
220-15792-3	4009-11	Water	06/16/2011 0812	06/17/2011 1000
220-15792-4	4009-11A	Water	06/16/2011 0945	06/17/2011 1000
220-15792-5TB	TB-61611-02	Water	06/16/2011 0000	06/17/2011 1000
220-15792-6	4009-7	Water	06/16/2011 1239	06/17/2011 1000

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-15792-1	**4009-6**					
cis-1,2-Dichloroethene		0.33	J	0.50	ug/L	8260B
Trichloroethene		0.75		0.50	ug/L	8260B
220-15792-2	**4009-10**					
Acetone		0.77	J	2.0	ug/L	8260B
Chloroform		0.12	J B	0.50	ug/L	8260B
Toluene		0.27	J	0.50	ug/L	8260B
1,1,1-Trichloroethane		1.2		0.50	ug/L	8260B
220-15792-3	**4009-11**					
Acetone		8.9		2.0	ug/L	8260B
Methyl Ethyl Ketone		1.4	J	2.0	ug/L	8260B
Carbon disulfide		0.42	J	0.50	ug/L	8260B
Chloromethane		0.23	J	0.50	ug/L	8260B
Toluene		0.30	J	0.50	ug/L	8260B
220-15792-4	**4009-11A**					
Acetone		0.84	J	2.0	ug/L	8260B
Toluene		0.27	J	0.50	ug/L	8260B
220-15792-5TB	**TB-61611-02**					
Methylene Chloride		1.8	J B	2.0	ug/L	8260B
220-15792-6	**4009-7**					
Acetone		5.2	J	10	ug/L	8260B
Benzene		0.78	J	2.5	ug/L	8260B
Chloroform		0.68	J B	2.5	ug/L	8260B
1,1-Dichloroethane		43		2.5	ug/L	8260B
1,1-Dichloroethene		10		2.5	ug/L	8260B
cis-1,2-Dichloroethene		210		2.5	ug/L	8260B
trans-1,2-Dichloroethene		1.9	J	2.5	ug/L	8260B
1,1,1-Trichloroethane		46		2.5	ug/L	8260B
Trichloroethene		46		2.5	ug/L	8260B
Vinyl chloride		310		2.5	ug/L	8260B

METHOD SUMMARY

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

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: 220-15792-1

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Client Sample ID: 4009-6

Lab Sample ID: 220-15792-1 Date Sampled: 06/16/2011 1130
Client Matrix: Water Date Received: 06/17/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52129	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1698.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1824			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1824				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.33	J	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	2.0	U	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.75		0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		57 - 121
4-Bromofluorobenzene	75		57 - 121
Dibromofluoromethane	110		67 - 133
Toluene-d8 (Surr)	76		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Client Sample ID: 4009-10

Lab Sample ID: 220-15792-2 Date Sampled: 06/16/2011 1110
Client Matrix: Water Date Received: 06/17/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52129	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1699.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1851			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1851				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	0.77	J	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.12	J B	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	2.0	U	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.27	J	0.18	0.50
1,1,1-Trichloroethane	1.2		0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		57 - 121
4-Bromofluorobenzene	75		57 - 121
Dibromofluoromethane	111		67 - 133
Toluene-d8 (Surr)	76		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Client Sample ID: 4009-11

Lab Sample ID: 220-15792-3 Date Sampled: 06/16/2011 0812
Client Matrix: Water Date Received: 06/17/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52129	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1700.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1919			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1919				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	8.9		0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	1.4	J	0.32	2.0
Carbon disulfide	0.42	J	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.23	J	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	2.0	U	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.30	J	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		57 - 121
4-Bromofluorobenzene	77		57 - 121
Dibromofluoromethane	109		67 - 133
Toluene-d8 (Surr)	75		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Client Sample ID: 4009-11A

Lab Sample ID: 220-15792-4 Date Sampled: 06/16/2011 0945
Client Matrix: Water Date Received: 06/17/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52129	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1701.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1947			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1947				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	0.84	J	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	2.0	U	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.27	J	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		57 - 121
4-Bromofluorobenzene	74		57 - 121
Dibromofluoromethane	114		67 - 133
Toluene-d8 (Surr)	75		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Client Sample ID: **TB-61611-02**

Lab Sample ID: 220-15792-5TB Date Sampled: 06/16/2011 0000
Client Matrix: Water Date Received: 06/17/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52129	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1695.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1700			Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1700				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.50	U	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	1.8	J B	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	120		57 - 121
4-Bromofluorobenzene	79		57 - 121
Dibromofluoromethane	118		67 - 133
Toluene-d8 (Surr)	80		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Client Sample ID: 4009-7

Lab Sample ID: 220-15792-6 Date Sampled: 06/16/2011 1239
Client Matrix: Water Date Received: 06/17/2011 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	220-52282	Instrument ID:	MSV
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	V1740.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/23/2011 1854			Final Weight/Volume:	5 mL
Prep Date:	06/23/2011 1854				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.2	J	2.9	10
Benzene	0.78	J	0.70	2.5
Bromodichloromethane	2.5	U	0.39	2.5
Bromoform	2.5	U	0.65	2.5
Bromomethane	5.0	U *	1.1	5.0
Methyl Ethyl Ketone	10	U	1.6	10
Carbon disulfide	2.5	U	0.39	2.5
Carbon tetrachloride	2.5	U	0.50	2.5
Chlorobenzene	2.5	U	0.29	2.5
Chloroethane	5.0	U *	0.75	5.0
Chloroform	0.68	J B	0.60	2.5
Chloromethane	2.5	U	1.0	2.5
Dibromochloromethane	2.5	U	0.44	2.5
1,1-Dichloroethane	43		0.65	2.5
1,2-Dichloroethane	2.5	U	0.60	2.5
1,1-Dichloroethene	10		0.95	2.5
cis-1,2-Dichloroethene	210		1.1	2.5
trans-1,2-Dichloroethene	1.9	J	1.2	2.5
1,2-Dichloropropane	2.5	U	0.55	2.5
cis-1,3-Dichloropropene	2.5	U	0.65	2.5
trans-1,3-Dichloropropene	2.5	U	0.95	2.5
Ethylbenzene	2.5	U	0.70	2.5
2-Hexanone	10	U	2.6	10
Methylene Chloride	10	U	0.46	10
methyl isobutyl ketone	10	U	1.5	10
Styrene	2.5	U	0.85	2.5
1,1,2,2-Tetrachloroethane	2.5	U	0.75	2.5
Tetrachloroethene	2.5	U	0.55	2.5
Toluene	2.5	U	0.90	2.5
1,1,1-Trichloroethane	46		0.80	2.5
1,1,2-Trichloroethane	2.5	U	0.55	2.5
Trichloroethene	46		0.55	2.5
Vinyl chloride	310		0.70	2.5
Xylenes, Total	5.0	U	1.5	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		57 - 121
4-Bromofluorobenzene	73		57 - 121
Dibromofluoromethane	100		67 - 133
Toluene-d8 (Surr)	77		62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

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
220-15792-1	4009-6	110	110	76	75
220-15792-2	4009-10	111	113	76	75
220-15792-3	4009-11	109	112	75	77
220-15792-4	4009-11A	114	116	75	74
220-15792-5	TB-61611-02	118	120	80	79
220-15792-6	4009-7	100	106	77	73
MB 220-52129/3		98	94	75	95
MB 220-52282/3		104	107	75	77
LCS 220-52129/2		80	77	82	88
LCS 220-52282/2		85	87	83	68

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	67-133
DCA = 1,2-Dichloroethane-d4 (Surr)	57-121
TOL = Toluene-d8 (Surr)	62-121
BFB = 4-Bromofluorobenzene	57-121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Method Blank - Batch: 220-52129

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52129/3	Analysis Batch:	220-52129	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1685.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1224	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1224				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.283	J	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.588	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	57 - 121
4-Bromofluorobenzene	95	57 - 121
Dibromofluoromethane	98	67 - 133
Toluene-d8 (Surr)	75	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Lab Control Sample - Batch: 220-52129

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52129/2	Analysis Batch:	220-52129	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1682.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/22/2011 1102	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/22/2011 1102				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	7.86	79	33 - 150	
Benzene	10.0	10.1	101	72 - 123	
Bromodichloromethane	10.0	10.2	102	71 - 128	
Bromoform	10.0	9.41	94	66 - 120	
Bromomethane	10.0	12.9	129	35 - 150	
Methyl Ethyl Ketone	10.0	8.24	82	30 - 150	
Carbon disulfide	10.0	10.0	100	51 - 140	
Carbon tetrachloride	10.0	10.1	101	67 - 134	
Chlorobenzene	10.0	9.21	92	68 - 120	
Chloroethane	10.0	14.4	144	35 - 150	
Chloroform	10.0	10.2	102	72 - 131	
Chloromethane	10.0	12.6	126	30 - 150	
Dibromochloromethane	10.0	9.62	96	66 - 120	
1,1-Dichloroethane	10.0	10.4	104	74 - 127	
1,2-Dichloroethane	10.0	10.7	107	64 - 136	
1,1-Dichloroethene	10.0	9.13	91	70 - 134	
cis-1,2-Dichloroethene	10.0	9.55	95	70 - 120	
trans-1,2-Dichloroethene	10.0	9.15	91	63 - 120	
1,2-Dichloropropane	10.0	9.43	94	71 - 120	
cis-1,3-Dichloropropene	10.0	8.94	89	66 - 120	
trans-1,3-Dichloropropene	10.0	9.21	92	70 - 120	
Ethylbenzene	10.0	8.60	86	63 - 120	
2-Hexanone	10.0	8.00	80	29 - 150	
Methylene Chloride	10.0	10.7	107	47 - 150	
methyl isobutyl ketone	10.0	8.88	89	52 - 137	
Styrene	10.0	7.82	78	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	8.57	86	62 - 129	
Tetrachloroethene	10.0	9.49	95	55 - 120	
Toluene	10.0	10.3	103	64 - 120	
1,1,1-Trichloroethane	10.0	10.4	104	70 - 134	
1,1,2-Trichloroethane	10.0	10.1	101	73 - 126	
Trichloroethene	10.0	9.44	94	66 - 120	
Vinyl chloride	10.0	10.8	108	48 - 150	
Xylenes, Total	30.0	27.1	90	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	77	57 - 121
4-Bromofluorobenzene	88	57 - 121
Dibromofluoromethane	80	67 - 133
Toluene-d8 (Surr)	82	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Method Blank - Batch: 220-52282

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 220-52282/3	Analysis Batch:	220-52282	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1726.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/23/2011 1231	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/23/2011 1231				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.0	U	0.58	2.0
Benzene	0.50	U	0.14	0.50
Bromodichloromethane	0.50	U	0.078	0.50
Bromoform	0.50	U	0.13	0.50
Bromomethane	1.0	U	0.21	1.0
Methyl Ethyl Ketone	2.0	U	0.32	2.0
Carbon disulfide	0.50	U	0.077	0.50
Carbon tetrachloride	0.50	U	0.10	0.50
Chlorobenzene	0.50	U	0.057	0.50
Chloroethane	1.0	U	0.15	1.0
Chloroform	0.204	J	0.12	0.50
Chloromethane	0.50	U	0.20	0.50
Dibromochloromethane	0.50	U	0.088	0.50
1,1-Dichloroethane	0.50	U	0.13	0.50
1,2-Dichloroethane	0.50	U	0.12	0.50
1,1-Dichloroethene	0.50	U	0.19	0.50
cis-1,2-Dichloroethene	0.50	U	0.21	0.50
trans-1,2-Dichloroethene	0.50	U	0.24	0.50
1,2-Dichloropropane	0.50	U	0.11	0.50
cis-1,3-Dichloropropene	0.50	U	0.13	0.50
trans-1,3-Dichloropropene	0.50	U	0.19	0.50
Ethylbenzene	0.50	U	0.14	0.50
2-Hexanone	2.0	U	0.51	2.0
Methylene Chloride	0.863	J	0.091	2.0
methyl isobutyl ketone	2.0	U	0.30	2.0
Styrene	0.50	U	0.17	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.15	0.50
Tetrachloroethene	0.50	U	0.11	0.50
Toluene	0.50	U	0.18	0.50
1,1,1-Trichloroethane	0.50	U	0.16	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Trichloroethene	0.50	U	0.11	0.50
Vinyl chloride	0.50	U	0.14	0.50
Xylenes, Total	1.0	U	0.30	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107	57 - 121
4-Bromofluorobenzene	77	57 - 121
Dibromofluoromethane	104	67 - 133
Toluene-d8 (Surr)	75	62 - 121

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Lab Control Sample - Batch: 220-52282

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 220-52282/2	Analysis Batch:	220-52282	Instrument ID:	MSV
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	V1723.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/23/2011 1109	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/23/2011 1109				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	9.97	100	33 - 150	
Benzene	10.0	10.9	109	72 - 123	
Bromodichloromethane	10.0	10.8	108	71 - 128	
Bromoform	10.0	9.80	98	66 - 120	
Bromomethane	10.0	15.1	151	35 - 150	*
Methyl Ethyl Ketone	10.0	9.32	93	30 - 150	
Carbon disulfide	10.0	12.2	122	51 - 140	
Carbon tetrachloride	10.0	12.7	127	67 - 134	
Chlorobenzene	10.0	9.96	100	68 - 120	
Chloroethane	10.0	18.2	182	35 - 150	*
Chloroform	10.0	10.6	106	72 - 131	
Chloromethane	10.0	14.7	147	30 - 150	
Dibromochloromethane	10.0	9.93	99	66 - 120	
1,1-Dichloroethane	10.0	11.0	110	74 - 127	
1,2-Dichloroethane	10.0	10.9	109	64 - 136	
1,1-Dichloroethene	10.0	11.5	115	70 - 134	
cis-1,2-Dichloroethene	10.0	9.80	98	70 - 120	
trans-1,2-Dichloroethene	10.0	10.8	108	63 - 120	
1,2-Dichloropropane	10.0	9.67	97	71 - 120	
cis-1,3-Dichloropropene	10.0	9.27	93	66 - 120	
trans-1,3-Dichloropropene	10.0	9.61	96	70 - 120	
Ethylbenzene	10.0	9.74	97	63 - 120	
2-Hexanone	10.0	8.60	86	29 - 150	
Methylene Chloride	10.0	10.4	104	47 - 150	
methyl isobutyl ketone	10.0	8.71	87	52 - 137	
Styrene	10.0	8.25	83	52 - 120	
1,1,2,2-Tetrachloroethane	10.0	8.68	87	62 - 129	
Tetrachloroethene	10.0	10.9	109	55 - 120	
Toluene	10.0	11.1	111	64 - 120	
1,1,1-Trichloroethane	10.0	12.3	123	70 - 134	
1,1,2-Trichloroethane	10.0	9.86	99	73 - 126	
Trichloroethene	10.0	11.0	110	66 - 120	
Vinyl chloride	10.0	14.8	148	48 - 150	
Xylenes, Total	30.0	30.5	102	61 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87	57 - 121
4-Bromofluorobenzene	68	57 - 121
Dibromofluoromethane	85	67 - 133
Toluene-d8 (Surr)	83	62 - 121

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

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: 220-15792-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-52129					
LCS 220-52129/2	Lab Control Sample	T	Water	8260B	
MB 220-52129/3	Method Blank	T	Water	8260B	
220-15792-1	4009-6	T	Water	8260B	
220-15792-2	4009-10	T	Water	8260B	
220-15792-3	4009-11	T	Water	8260B	
220-15792-4	4009-11A	T	Water	8260B	
220-15792-5TB	TB-61611-02	T	Water	8260B	
Analysis Batch:220-52282					
LCS 220-52282/2	Lab Control Sample	T	Water	8260B	
MB 220-52282/3	Method Blank	T	Water	8260B	
220-15792-6	4009-7	T	Water	8260B	

Report Basis
T = Total

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Laboratory Chronicle

Lab ID: 220-15792-1 **Client ID: 4009-6**

Sample Date/Time: 06/16/2011 11:30 Received Date/Time: 06/17/2011 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15792-A-1		220-52129		06/22/2011 18:24	1	TAL CT	BK
A:8260B	220-15792-A-1		220-52129		06/22/2011 18:24	1	TAL CT	BK

Lab ID: 220-15792-2 **Client ID: 4009-10**

Sample Date/Time: 06/16/2011 11:10 Received Date/Time: 06/17/2011 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15792-A-2		220-52129		06/22/2011 18:51	1	TAL CT	BK
A:8260B	220-15792-A-2		220-52129		06/22/2011 18:51	1	TAL CT	BK

Lab ID: 220-15792-3 **Client ID: 4009-11**

Sample Date/Time: 06/16/2011 08:12 Received Date/Time: 06/17/2011 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15792-A-3		220-52129		06/22/2011 19:19	1	TAL CT	BK
A:8260B	220-15792-A-3		220-52129		06/22/2011 19:19	1	TAL CT	BK

Lab ID: 220-15792-4 **Client ID: 4009-11A**

Sample Date/Time: 06/16/2011 09:45 Received Date/Time: 06/17/2011 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15792-B-4		220-52129		06/22/2011 19:47	1	TAL CT	BK
A:8260B	220-15792-B-4		220-52129		06/22/2011 19:47	1	TAL CT	BK

Lab ID: 220-15792-5 **Client ID: TB-61611-02**

Sample Date/Time: 06/16/2011 00:00 Received Date/Time: 06/17/2011 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15792-A-5		220-52129		06/22/2011 17:00	1	TAL CT	BK
A:8260B	220-15792-A-5		220-52129		06/22/2011 17:00	1	TAL CT	BK

Lab ID: 220-15792-6 **Client ID: 4009-7**

Sample Date/Time: 06/16/2011 12:39 Received Date/Time: 06/17/2011 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-15792-A-6		220-52282		06/23/2011 18:54	5	TAL CT	BK
A:8260B	220-15792-A-6		220-52282		06/23/2011 18:54	5	TAL CT	BK

Client: Malcolm Pirnie, Inc. Job Number: 220-15792-1

Laboratory Chronicle

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 220-52129/3		220-52129		06/22/2011 12:24	1	TAL CT	BK
A:8260B	MB 220-52129/3		220-52129		06/22/2011 12:24	1	TAL CT	BK
P:5030B	MB 220-52282/3		220-52282		06/23/2011 12:31	1	TAL CT	BK
A:8260B	MB 220-52282/3		220-52282		06/23/2011 12:31	1	TAL CT	BK

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 220-52129/2		220-52129		06/22/2011 11:02	1	TAL CT	BK
A:8260B	LCS 220-52129/2		220-52129		06/22/2011 11:02	1	TAL CT	BK
P:5030B	LCS 220-52282/2		220-52282		06/23/2011 11:09	1	TAL CT	BK
A:8260B	LCS 220-52282/2		220-52282		06/23/2011 11:09	1	TAL CT	BK

Lab References:
TAL CT = TestAmerica Connecticut

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Appendix **C**

Well Identification Summary

APPENDIX C
WELL IDENTIFICATION SUMMARY
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE NO. 7-04-009A

Old Well ID	New Well ID	Coordinates*	
		Easting	Northing
S-8	4009-1	413364	4660154
EB-33	4009-2	413133	4660121
S-7	4009-3	413142	4660260
S-6	4009-4	413234	4660298
EB-31	4009-5	413126	4660311
S-1	4009-6	413001	4660085
S-2	4009-7	413035	4660235
S-11	4009-8	412951	4660163
EB-41	4009-9	413058	4660402
EB-42	4009-10	413110	4660446
1-32	4009-11	412845	4660404
1-32A	4009-11A	412846	4660387
1-29	4009-12	412743	4660293
1-29A	4009-12A	412741	4660294
1-30	4009-13	412737	4660116
1-30A	4009-13A	412738	4660117
1-23	4009-14	412608	4660065
1-24	4009-15	412582	4660290
1-20	4009-16	412417	4660188
1-20A	4009-16A	412415	4660193
Piezometer - between levee and tree line	4009-17	412431	4660077
Well - west of well house	4009-18	412324	4660137
Well - south of well house	4009-19	412327	4660120
Piezometer -northernmost in fire training area	4009-20	412288	4660117
Piezometer - westernmost in fire training area	4009-21	412284	4660117

Notes:
* -GPS survey conducted on 8/28/2007 in NAD 83 coordinate system.

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Appendix **D**

Groundwater Monitoring Well Inspection Forms

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal | PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 | INSPECTOR: EBlack / SNatale

WELL DESIGNATION: 4009-1

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	3.0 feet	N/A [ ]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other ____
Integrity of Surface Seal/Apron	Describe: NA		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	locking lid is broken - steel part
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	6.0 ppm		
Depth to Water (to top of casing)	7.10 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	19.65 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-2

WELL LOCATION:

Outward Appearance

Flushmount Diameter	___ inches	N/A [X]	
Approximate Stickup Height	2.3 feet	N/A [ ]	
Integrity of Protective Casing	Describe: ok - but was hit, still upright but mismpen		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ___
Protective Casing Width or Dia.	6 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ___
Integrity of Surface Seal/Apron	Describe: OK		
Surface Drainage	Away from Wellhead [ ]	Toward Wellhead [X]	
Bollards Present?	Yes [ ]	No [X]	Describe:
Well ID. Visible?	Yes [X]	No [ ]	Describe:
Lock Present and Functional?	Yes [X]	No [ ]	Describe:
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe:

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: non-existant → put new cap on from Aztech		
Surface Water in Casing?	Yes [ ]	No [X]	Describe:
Well Casing Diameter	4 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe:

Downhole

Odor	Yes [ ]	No [X]	Describe:
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	17.35 feet (nearest 0.01)	Depth to LNAPL	___ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	37.60 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Hard		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal Water Supply PROJECT NUMBER: 0266352

DATE OF INSPECTION: 4/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009 -3

WELL LOCATION: 0266352

Outward Appearance

Flushmount Diameter	_____ inches	N/A [X]	
Approximate Stickup Height	~~4x4~~ feet	N/A [ ]	
Integrity of Protective Casing	Describe: ok		
Protective Casing Material	Steel [ ]	Stainless Steel [ ]	Other Aluminum / Steel ?
Protective Casing Width or Dia.	4x4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: ok		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe:
Well ID. Visible?	Yes [X]	No [ ]	Describe:
Lock Present and Functional?	Yes [X]	No [ ]	Describe:
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe:

Inner Appearance

Integrity of Well Casing	Describe: ok		
Integrity of Cap Seal	Describe: ok		
Surface Water in Casing?	Yes [ ]	No [X]	Describe:
Well Casing Diameter	2 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe:

Downhole

Odor	Yes [ ]	No [X]	Describe:
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	14.96 feet (nearest 0.01)	Depth to LNAPL	_____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	30.55 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Hard		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack/JNatale

WELL DESIGNATION: 4009-04

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	0.5 feet	N/A [ ]	
Integrity of Protective Casing	Describe: ok		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: ok		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: ok		
Integrity of Cap Seal	Describe: ok		
Surface Water in Casing?	Yes [X]	No [ ] Describe:	clear
Well Casing Diameter	2 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.6 ppm		
Depth to Water (to top of casing)	9.60 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	43.38 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-05

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	2.1 feet	N/A [ ]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: cracked down middle		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	4 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	16.82 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	20.38 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Hard		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-06

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	2.0 feet	N/A [ ]	
Integrity of Protective Casing	Describe: car hit, now 15-20° angle		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4.0 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other ____
Integrity of Surface Seal/Apron	Describe: ND		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	18.42 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	32.35 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Hard		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-7

WELL LOCATION:

Outward Appearance

Flushmount Diameter	_____ inches	N/A [X]	
Approximate Stickup Height	_____ feet	N/A [ ]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [ ]	Stainless Steel [ ]	Other Aluminum / steel?
Protective Casing Width or Dia.	3x3 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: OK		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [ ]	No [X] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	5.7 ppm		
Depth to Water (to top of casing)	16.70 feet (nearest 0.01)	Depth to LNAPL	_____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	32.03 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal Water Supply PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack | JNatale

WELL DESIGNATION: 4009-8

WELL LOCATION:

Outward Appearance

Flushmount Diameter	_____ inches	N/A [X]	
Approximate Stickup Height	3.1 feet	N/A [ ]	
Integrity of Protective Casing	Describe: ok		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other _____
Protective Casing Width or Dia.	4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other _____
Integrity of Surface Seal/Apron	Describe: X NA		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	1.2 ppm		
Depth to Water (to top of casing)	17.64 feet (nearest 0.01)	Depth to LNAPL	_____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	42.78 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal | PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 | INSPECTOR: EBlack/JNatale

WELL DESIGNATION: 4009-09

WELL LOCATION:

Outward Appearance

Flushmount Diameter	12 inches	N/A [ ]	
Approximate Stickup Height	____ feet	N/A [X]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	12 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: OK		
Surface Drainage	Away from Wellhead [ ]	Toward Wellhead [X]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [ ]	No [X] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [X]	No [ ] Describe:	
Well Casing Diameter	4 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	18.95 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	27.25 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: SOft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009 - 10

WELL LOCATION:

Outward Appearance

Flushmount Diameter	12 inches	N/A [ ]	
Approximate Stickup Height	____ feet	N/A [X]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [ ]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	12 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other ____
Integrity of Surface Seal/Apron	Describe: OK / NA		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [ ]	No [X] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	4 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	25.05 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	42.55 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack/JNatale

WELL DESIGNATION: 7

WELL LOCATION: 4009 - 11

Outward Appearance

Flushmount Diameter	8 inches	N/A [ ]	
Approximate Stickup Height	____ feet	N/A [X]	
Integrity of Protective Casing	Describe: ok		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: ok		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: ok		
Integrity of Cap Seal	Describe: ok		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	25.62 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	150.39 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Postal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack/JNatale

WELL DESIGNATION: 4009-11A

WELL LOCATION:

Outward Appearance

Flushmount Diameter	8 inches	N/A [X]	
Approximate Stickup Height	____ feet	N/A [X]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: OK		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [ ]	No [X] Describe:	lock off
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [ ]	Steel [X]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	13.20 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	34.52 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-12A

WELL LOCATION:

Outward Appearance

Flushmount Diameter	8 inches	N/A [ ]	
Approximate Stickup Height	____ feet	N/A [X]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: OK		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	18.71 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	112.2 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

Both 12 and 12A labeled "12"

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vistal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / SNatale

WELL DESIGNATION: 4009-12A

WELL LOCATION:

Outward Appearance

Flushmount Diameter	8 inches	N/A [ ]	
Approximate Stickup Height	____ feet	N/A [X]	
Integrity of Protective Casing	Describe: OK		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: OK		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe:
Well ID. Visible?	Yes [X]	No [ ]	Describe:
Lock Present and Functional?	Yes [X]	No [ ]	Describe:
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe:

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [X]	Describe:
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe:

Downhole

Odor	Yes [ ]	No [X]	Describe:
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	19.81 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	40.00 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: soft		

Additional Comments:

"both 12 and 12A labeled "12"

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal | PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14 | INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4609-13

WELL LOCATION:

Outward Appearance

Flushmount Diameter	8 inches	N/A [ ]	
Approximate Stickup Height	____ feet	N/A [X]	
Integrity of Protective Casing	Describe: good		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: good		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: good		
Integrity of Cap Seal	Describe: good		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	10.62 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	13.85 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack

WELL DESIGNATION: MW09-13A

WELL LOCATION:

Outward Appearance

Flushmount Diameter	8 inches	N/A [ ]	
Approximate Stickup Height	X feet	N/A [ ]	
Integrity of Protective Casing	Describe: good		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other
Protective Casing Width or Dia.	8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other
Integrity of Surface Seal/Apron	Describe: good		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [X]	No [ ] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: good		
Integrity of Cap Seal	Describe: good		
Surface Water in Casing?	Yes [ ]	No [ ] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	10.15 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	28.65 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / SNatale

WELL DESIGNATION: 4609-14

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	3.2 feet	N/A [ ]	
Integrity of Protective Casing	Describe: good		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4 8 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: ok		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [ ]	No [X] Describe:	
Lock Present and Functional?	Yes [X]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: top section (2½ ft) comes off @ PVC coupling		
Integrity of Cap Seal	Describe: ok		
Surface Water in Casing?	Yes [ ]	No [X] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [ ] Describe:	

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	15.34 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	135.2 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal Water Supply PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/19 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-15

WELL LOCATION:

Outward Appearance

Flushmount Diameter 4 inches N/A [X]

Approximate Stickup Height _____ feet N/A [ ]

Integrity of Protective Casing Describe: Good

Protective Casing Material Steel [X] Stainless Steel [ ] Other _____

Protective Casing Width or Dia. 4 inches

Weep Hole in Protective Casing Yes [ ] No [X]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [X] Other _____

Integrity of Surface Seal/Apron Describe: NA

Surface Drainage Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [ ] No [X] Describe: _____

Lock Present and Functional? Yes [X] No [ ] Describe: _____

Photograph Taken? Photo # Yes [ ] No [X] Describe: _____

Inner Appearance

Integrity of Well Casing Describe: Good

Integrity of Cap Seal Describe: Good

Surface Water in Casing? Yes [ ] No [X] Describe: _____

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [ ] None [X]

Evidence of Double Casing? Yes [ ] No [X] Describe: _____

Downhole

Odor Yes [ ] No [X] Describe: _____

PID Reading 0.0 ppm

Depth to Water (to top of casing) 21.48 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A [X]

Total Well Depth (to top of casing) 128.5 feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: Soft

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal | PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 | INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-16

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	2.75 feet	N/A [ ]	
Integrity of Protective Casing	Describe: Good		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: Good		
Surface Drainage	Away from Wellhead [ ]	Toward Wellhead [X]	
Bollards Present?	Yes [ ]	No [X]	Describe: ____
Well ID. Visible?	Yes [X]	No [ ]	Describe: ____
Lock Present and Functional?	Yes [X]	No [ ]	Describe: ____
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe: ____

Inner Appearance

Integrity of Well Casing	Describe: Good		
Integrity of Cap Seal	Describe: Good		
Surface Water in Casing?	Yes [ ]	No [X]	Describe: ____
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe: ____

Downhole

Odor	Yes [ ]	No [X]	Describe: ____
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	26.62 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	48.7 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-16A

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [✓]	
Approximate Stickup Height	2.6 feet	N/A [ ]	
Integrity of Protective Casing	Describe: Good		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: Good		
Surface Drainage	Away from Wellhead [ ]	Toward Wellhead [X]	
Bollards Present?	Yes [ ]	No [X]	Describe:
Well ID. Visible?	Yes [X]	No [ ]	Describe:
Lock Present and Functional?	Yes [X]	No [ ]	Describe:
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe:

Inner Appearance

Integrity of Well Casing	Describe: Good		
Integrity of Cap Seal	Describe: Good		
Surface Water in Casing?	Yes [ ]	No [X]	Describe:
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe:

Downhole

Odor	Yes [ ]	No [X]	Describe:
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	21.62 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	147.9 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal | PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 | INSPECTOR: EBlack / SNatale

WELL DESIGNATION: 4009-17

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	0.5 feet	N/A [ ]	
Integrity of Protective Casing	Describe: OK - rusty		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	2 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other ____
Integrity of Surface Seal/Apron	Describe: NA		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X] Describe:	
Well ID. Visible?	Yes [ ]	No [X] Describe:	
Lock Present and Functional?	Yes [ ]	No [X] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [X] Describe:	

Inner Appearance

Integrity of Well Casing	Describe:			
Integrity of Cap Seal	Describe:			
Surface Water in Casing?	Yes [ ]	No [ ] Describe:		
Well Casing Diameter	____ inches			
Well Casing Material	PVC [ ]	Steel [ ]	Stainless Steel [ ]	
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [ ]	None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [ ]	
Evidence of Double Casing?	Yes [ ]	No [ ] Describe:		

NA

Downhole

Odor	Yes [ ]	No [X] Describe:	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	19.62 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	41.61 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal Water Supply PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / SNatale

WELL DESIGNATION: 4D09-18

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	3.0 feet	N/A [ ]	
Integrity of Protective Casing	Describe: Good		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [X]	Bentonite [ ]	Not apparent [ ] Other ____
Integrity of Surface Seal/Apron	Describe: OK but little cracked		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe: ____
Well ID. Visible?	Yes [X]	No [ ]	Describe: ____
Lock Present and Functional?	Yes [X]	No [ ]	Describe: ____
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe: ____

Inner Appearance

Integrity of Well Casing	Describe: Good			
Integrity of Cap Seal	Describe: Good			
Surface Water in Casing?	Yes [ ]	No [X]	Describe: ____	
Well Casing Diameter	2 inches			
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]	
Inner Cap	Threaded [ ]	Slip [X]	Expansion Plug [ ]	None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]	
Evidence of Double Casing?	Yes [ ]	No [X]	Describe: ____	

Downhole

Odor	Yes [ ]	No [X]	Describe: ____
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	29.61 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	129.5 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR:

WELL DESIGNATION: 4009-19

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	2.2 feet	N/A [ ]	
Integrity of Protective Casing	Describe: Good		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	4 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other ____
Integrity of Surface Seal/Apron	Describe: NA		
Surface Drainage	Away from Wellhead [ ]	Toward Wellhead [X]	
Bollards Present?	Yes [ ]	No [X]	Describe:
Well ID. Visible?	Yes [X]	No [ ]	Describe:
Lock Present and Functional?	Yes [X]	No [ ]	Describe:
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe:

Inner Appearance

Integrity of Well Casing	Describe: Good		
Integrity of Cap Seal	Describe: Good		
Surface Water in Casing?	Yes [ ]	No [X]	Describe:
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [X]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe:

Downhole

Odor	Yes [ ]	No [X]	Describe:
PID Reading	6.0 ppm		
Depth to Water (to top of casing)	19.45 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	104.4 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack/SNatalle

WELL DESIGNATION: 1609-20? (confirm w/ depth) - closest to road

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]	
Approximate Stickup Height	1.0 feet	N/A [ ]	
Integrity of Protective Casing	Describe: Good - rusted		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other ____
Protective Casing Width or Dia.	2 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other ____
Integrity of Surface Seal/Apron	Describe: NA		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe: ____
Well ID. Visible?	Yes [ ]	No [X]	Describe: ____
Lock Present and Functional?	Yes [ ]	No [X]	Describe: ____
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe: ____

Inner Appearance

Integrity of Well Casing	Describe: NA			
Integrity of Cap Seal	Describe: NA			
Surface Water in Casing?	Yes [ ]	No [ ]	Describe: NA	
Well Casing Diameter	____ inches			
Well Casing Material	PVC [ ]	Steel [ ]	Stainless Steel [ ]	
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [ ]	None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [ ]	
Evidence of Double Casing?	Yes [ ]	No [ ]	Describe: ____	

NA

Downhole

Odor	Yes [ ]	No [X]	Describe: ____
PID Reading	6.0 ppm		
Depth to Water (to top of casing)	18.01 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	40.41 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Vestal PROJECT NUMBER: 0266352

DATE OF INSPECTION: 6/14/11 INSPECTOR: EBlack / JNatale

WELL DESIGNATION: 4009-21? (confirm wl depth) - farther from road

WELL LOCATION:

Outward Appearance

Flushmount Diameter	____ inches	N/A [X]
Approximate Stickup Height	6.1 feet	N/A [ ]
Integrity of Protective Casing	Describe: good - rusty	
Protective Casing Material	Steel [X]	Stainless Steel [ ] Other ____
Protective Casing Width or Dia.	2 inches	
Weep Hole in Protective Casing	Yes [ ]	No [X]
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ] Not apparent [X] Other ____
Integrity of Surface Seal/Apron	Describe: NA	
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]
Bollards Present?	Yes [ ]	No [X] Describe: ____
Well ID. Visible?	Yes [ ]	No [X] Describe: ____
Lock Present and Functional?	Yes [ ]	No [X] Describe: ____
Photograph Taken? Photo #	Yes [ ]	No [X] Describe: ____

Inner Appearance

Integrity of Well Casing	Describe: ____		
Integrity of Cap Seal	Describe: ____		
Surface Water in Casing?	Yes [ ]	No [ ] Describe: ____	
Well Casing Diameter	____ inches		
Well Casing Material	PVC [ ]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [ ] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [ ] Describe: ____	

NA

Downhole

Odor	Yes [ ]	No [X] Describe: ____	
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	17.95 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [X]
Total Well Depth (to top of casing)	116.5 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		

Additional Comments:

ARCADIS

Appendix **E**

Water Level Data Form

GROUNDWATER LEVEL DATA FORM

PROJECT NAME: Vestal Water Supply
PROJECT NUMBER: 0266352

DATE: 6/14/2011
PERSONNEL: EB (ARCADIS) JN (Aztech)

NEW WELL ID	OLD WELL ID	Date	Headspace VOCs (ppm)	Depth to LNAPL (feet)	Depth to Water (feet)	Reference Point
4009-1	S-8	6/14/2011	6	-	7.10	TOC
4009-2	EB-33	6/14/2011	0	-	17.35	TOC
4009-3	S-7	6/14/2011	0	-	14.86	TOC
4009-4	S-6	6/14/2011	0	-	9.60	TOC
4009-5	EB-31	6/14/2011	0	-	16.82	TOC
4009-6	S-1	6/14/2011	0	-	18.42	TOC
4009-7	S-2	6/14/2011	5.7	-	16.70	TOC
4009-8	S-11	6/14/2011	1.2	-	17.64	TOC
4009-9	EB-41	6/14/2011	0	-	18.95	TOC
4009-10	EB-42	6/14/2011	0	-	25.05	TOC
4009-11	1-32	6/14/2011	0	-	25.62	TOC
4009-11A	1-32A	6/14/2011	0	-	13.20	TOC
4009-12	1-29	6/14/2011	0	-	18.31	TOC
4009-12A	1-29A	6/14/2011	0	-	19.81	TOC
4009-13	1-30	6/14/2011	0	-	10.62	TOC
4009-13A	1-30A	6/14/2011	0	-	10.15	TOC
4009-14	1-23	6/14/2011	0	-	15.34	TOC
4009-15	1-24	6/14/2011	0	-	21.48	TOC
4009-16	1-20	6/14/2011	0	-	21.62	TOC
4009-16A	1-20A	6/14/2011	0	-	21.62	TOC
4009-17	Piezo-levee*	6/14/2011	0	-	14.62	TOC
4009-18	well-west well house*	6/14/2011	0	-	29.61	TOC
4009-19	well-south well house*	6/14/2011	0	-	19.45	TOC
4009-20	Piezo-north*	6/14/2011	0	-	18.01	TOC
4009-21	Piezo-west*	6/14/2011	0	-	17.95	TOC
Well 1-1		6/14/2011	-	-	27.26	TOC
Well 1-1A		6/14/2011	-	-	68.72	TOC

Notes:
TOC - Top of casing

ARCADIS

Appendix **F**

Groundwater Sampling Purge Logs

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-8 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 42.78 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 17.94 feet

D: Volume of Water in Casing: 4.2228

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1525	1530	1535	1540	1545	1550	1555	1600	1605	1610			
Gallons					~1.75				~3.15				
Depth to Water	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94			
Temperature (°C)	20.48	18.62	17.86	17.07	17.00	13.69	13.84	15.20	15.14	15.23			
pH	7.19	6.97	6.95	6.93	6.92	6.91	6.90	6.89	6.89	6.89			
Redox (mV)	-54	-51	-49	-47	-46	-44	-43	-42	-42	-42			
Conductivity (mohm/cm	1.45	1.50	1.55	1.56	1.59	1.69	1.68	1.63	1.60	1.61			
Turbidity (ntu)	100	54.7	43.4	38.9	42.2	35.2	35.1	34.7	33.4	35.3			
Disolved Oxygen (mg/l)	1.18	0.27	0.25	0.14	0.05	0.00	0.00	0.00	0.00	0.00			
TDS	0.932	0.966	0.995	1.00	1.01	1.08	1.07	1.04	1.04	1.03			
Salinity	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			

Notes: Sample Time: 1615

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-1 DATE: 6/14/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 19.65 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 7.10 feet

D: Volume of Water in Casing: 2.1335

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1630	1635	1640	1645	1650	1655	1700	1705	1710	1715	1720		
Gallons											~3.0		
Depth to Water	7.94	8.03	8.03	8.02	8.02	8.02	8.02	8.02	8.02	8.02	8.02		
Temperature (°C)	13.22	12.59	12.72	13.07	13.26	13.32	13.42	13.54	13.53	13.56	13.57		
pH	6.72	6.56	6.58	6.46	6.56	6.59	6.60	6.60	6.61	6.61	6.61		
Redox (mV)	-48	-40	-37	-12	-33	-39	-44	-49	-52	-53	-54		
Conductivity (mohm/cm	0.643	0.616	0.604	0.589	0.599	0.601	0.604	0.606	0.605	0.605	0.605		
Turbidity (ntu)	190	143	128	112	63.10	41.10	31.50	14.60	10.50	10.20	10.00		
Disolved Oxygen (mg/l)	1.57	0.60	0.32	0.42	0.06	0.16	0.00	0.00	0.00	0.00	0.00		
TDS	0.422	0.393	0.389	0.378	0.383	0.385	0.387	0.388	0.387	0.387	0.387		
Salinity	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		

Notes: Sample Time: 1720, MS/MSD

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-2 DATE: 6/14/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 37.60 feet

B: Casing Internal Diameter: 4 inches

C: Water Level Below Top of Casing: 17.34 feet

D: Volume of Water in Casing: 13.3716

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1510	1515	1520	1525	1530	1535	1540	1545	1550	1555			
Gallons										~3.0			
Depth to Water	17.34	17.74	17.90	18.02	18.09	18.11	18.11	18.11	18.11	18.11			
Temperature (°C)	16.09	15.77	12.90	11.99	12.00	12.06	12.07	12.05	12.07	12.07			
pH	6.95	6.96	6.97	6.96	6.95	6.95	6.93	6.93	6.93	6.93			
Redox (mV)	52	55	48	27	10	4	-12	-14	-14	-14			
Conductivity (mohm/cm	1.66	1.67	1.79	1.83	1.83	1.83	1.82	1.83	1.82	1.83			
Turbidity (ntu)	61.6	50.1	43.7	38.1	32.1	30.7	27.2	24.8	24.6	25.1			
Disolved Oxygen (mg/l)	1.67	0.90	0.62	0.52	0.39	0.30	0.16	0.17	0.18	0.17			
TDS	1.06	1.07	1.15	1.17	1.17	1.17	1.17	1.17	1.17	1.17			
Salinity	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09			

Notes: Sample Time: 1600, Dup taken and named "4009-DUP1"-time given 1200

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-3 DATE: 6/14/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 30.55 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 14.86 feet

D: Volume of Water in Casing: 2.6673

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1312	1317	1322	1327	1332	1337	1342	1347	1352	1357	1402	1407	1412
Gallons													
Depth to Water	15.58	15.39	15.39	15.48	15.47	15.48	15.48	15.48	15.48	15.48	15.48	15.48	15.48
Temperature (°C)	13.15	12.80	12.54	12.63	12.72	13.71	13.32	13.14	14.34	13.85	12.64	12.51	12.55
pH	6.40	6.21	6.12	6.10	6.14	6.61	6.29	6.27	6.38	6.38	6.41	6.42	6.44
Redox (mV)	4	14	17	19	-1	-36	-13	-14	-27	-34	-45	-49	-52
Conductivity (mohm/cm	0.826	0.825	0.831	0.830	0.942	1.00	1.01	0.997	1.09	1.15	1.22	1.24	1.25
Turbidity (ntu)	249	278	280	356	470	352	341	376	179	138	111	88.9	76.1
Disolved Oxygen (mg/l)	1.76	1.07	0.71	0.48	0.25	0.41	0.09	0.00	0.00	0.00	0.00	0.00	0.00
TDS	0.528	0.528	0.532	0.531	0.607	0.642	0.645	0.637	0.702	0.734	0.780	0.790	0.799
Salinity	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06

Notes: Initial water color was orange (brown precipitate)
Cleaned out horiba (turbidity high and increasing) at 1340 and 1350
Sample Time: 1445

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-3 DATE: 6/14/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 30.55 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 14.86 feet

D: Volume of Water in Casing: 2.6673

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1417	1422	1427	1432	1437	1442							
Gallons						~5.0							
Depth to Water	15.48	15.48	15.48	15.48	15.48	15.48							
Temperature (°C)	12.56	12.61	12.56	12.47	12.45	12.43							
pH	6.45	6.46	6.47	6.44	6.47	6.49							
Redox (mV)	-55	-58	-62	-61	-63	-64							
Conductivity (mohm/cm	1.27	1.29	1.31	1.32	1.32	1.33							
Turbidity (ntu)	56.9	41.9	30.9	25.3	24.9	24.5							
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00							
TDS	0.814	0.827	0.839	0.846	0.847	0.850							
Salinity	0.06	0.06	0.06	0.07	0.07	0.07							

Notes: Initial water color was orange (brown precipitate)
Cleaned out horiba (turbidity high and increasing) at 1340 and 1350
Sample Time: 1445

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-4 DATE: 6/14/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 43.00 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 9.60 feet

D: Volume of Water in Casing: 5.678

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1555	1601	1608	1614	1620	1629	1633	1639	1645	1651	1700	1708	1713
Gallons										~5.0			
Depth to Water	10.16	9.78	9.78	9.79	9.78	9.79	9.78	9.78	9.78	9.78	9.78	9.79	9.78
Temperature (°C)	15.70	15.17	15.07	15.33	15.31	14.82	14.37	14.16	14.06	13.89	13.91	13.95	13.76
pH	8.02	7.39	6.91	6.63	6.63	6.63	6.61	6.56	6.61	6.59	6.59	6.61	6.61
Redox (mV)	110	90	71	60	42	22	4	-31	-62	-72	-80	-91	-91
Conductivity (mohm/cm	0.972	1.03	1.33	1.44	1.48	1.53	1.69	1.96	1.98	2.00	1.99	1.99	1.99
Turbidity (ntu)	88.1	83.6	71.1	52.1	50.1	42.9	40.7	40.6	38.1	38.9	39.2	31.2	28.2
Disolved Oxygen (mg/l)	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TDS	0.655	0.882	0.908	0.946	0.848	0.988	1.1	1.22	1.27	1.28	1.28	1.28	1.27
Salinity	0.05	0.06	0.07	0.07	0.07	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10

Notes: Start Pumping at 3:55 PM
Sample Time: 5:35 PM
8 gallons total taken

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-4 DATE: 6/14/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 43.00 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 9.60 feet

D: Volume of Water in Casing: 5.678

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1718	1723	1730	1735									
Gallons				~8.0									
Depth to Water	9.78	9.78	9.79	9.78									
Temperature (°C)	13.63	13.59	13.58	13.56									
pH	6.61	6.61	6.62	6.62									
Redox (mV)	-92	-91	-91	-91									
Conductivity (mohm/cm	1.99	1.99	1.99	1.99									
Turbidity (ntu)	29.1	27.1	25.7	26.2									
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00									
TDS	1.28	1.28	1.28	1.28									
Salinity	0.10	0.10	0.10	0.10									

Notes: Start Pumping at 3:55 PM
Sample Time: 5:35 PM
8 gallons total taken

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-5 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 50.38 feet

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 16.82 feet

D: Volume of Water in Casing: _____

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1335	1341	1347	1353	1400	1410	1420	1430	1450	1500	1510		
Gallons											~5.0		
Depth to Water	17.81	17.86	17.89	17.89	17.90	17.89	17.89	17.88	17.88	17.88	17.88		
Temperature (°C)	19.10	19.25	20.51	20.70	21.54	21.01	20.98	21.43	21.01	20.43	20.61		
pH	6.98	6.96	6.95	6.90	7.39	7.08	6.96	6.96	7.00	6.98	7.02		
Redox (mV)	101	109	103	109	77	96	94	93	44	66	71		
Conductivity (mohm/cm	0.950	0.955	0.947	0.948	0.948	0.937	0.942	0.942	0.953	0.954	0.955		
Turbidity (ntu)	730	350	265	214	290	450	441	483	355	352	369		
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TDS	0.608	0.611	0.606	0.606	0.608	0.600	0.603	0.605	0.613	0.617	0.614		
Salinity	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		

Notes: Start Pumping and Taking Measurements at 1:35 PM
Took apart and cleaned Horiba 7 times, oked to sample (JW) @ 3:15 PM

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-6 DATE: 6/16/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 32.35 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 18.40 feet

D: Volume of Water in Casing: 2.3715

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1035	1040	1045	1050	1055	1100	1105	1107	1113	1118	1123	1129	
Gallons												~3.5	
Depth to Water	19.10	19.15	19.40	19.45	19.47	19.44	19.44	19.44	19.44	19.44	19.44	19.44	
Temperature (°C)	19.41	18.88	18.43	18.27	18.10	17.99	17.98	17.92	17.94	18.17	18.18	18.16	
pH	6.60	6.46	6.40	6.45	6.49	6.55	6.55	6.62	6.63	6.65	6.65	6.65	
Redox (mV)	71	40	43	47	51	48	46	49	49	49	52	50	
Conductivity (mohm/cm	1.17	1.17	1.19	1.20	1.21	1.22	1.22	1.22	1.22	1.22	1.21	1.21	
Turbidity (ntu)	77.7	68.3	67.1	66.2	59.1	55.8	49.8	40.2	40.3	38.3	37.9	35.7	
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TDS	0.790	0.749	0.761	0.768	0.773	0.778	0.777	0.728	0.777	0.777	0.775	0.777	
Salinity	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	

Notes: Start Purging at 10:35 AM
Water removed 3.5 gallons

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-7 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale/E.Black

A: Total Casing and Screen Length: 32.03 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 17.42 feet

D: Volume of Water in Casing: 2.4837

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1155	1200	1205	1210	1215	1220	1225	1230	1235	1239			
Gallons										~4.0			
Depth to Water	17.42	17.42	17.42	17.42	17.42	17.42	17.42	17.42	17.42	17.42			
Temperature (°C)	15.33	16.05	15.46	15.40	15.36	15.59	15.50	15.50	15.38	15.74			
pH	5.68	6.18	5.74	5.63	5.64	5.65	5.67	5.68	5.69	5.71			
Redox (mV)	70	-3	26	40	41	41	39	36	36	35			
Conductivity (mohm/cm	10.8	9.56	9.78	9.60	9.51	9.35	9.15	8.97	8.97	8.70			
Turbidity (ntu)	800	169	146	50	42	28.3	22.1	18.5	17.0	12.0			
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
TDS	66.07	6.05	6.17	6.06	5.99	5.90	5.75	5.64	5.65	5.46			
Salinity	0.60	0.54	0.55	0.54	0.53	0.52	0.51	0.50	0.50	0.50			

Notes:

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-9 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 27.25 feet

B: Casing Internal Diameter: 4 inches

C: Water Level Below Top of Casing: 18.95 feet

D: Volume of Water in Casing: 5.478

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1545	1550	1557	1608	1616	1622	1630	1635	1643	1651	1659	1709	
Gallons												~4.5	
Depth to Water	19.45	19.47	19.47	19.48	19.47	19.47	19.46	19.46	19.46	19.46	19.46	19.46	
Temperature (°C)	19.29	18.88	18.06	18.26	18.27	17.23	17.20	17.41	17.40	17.28	17.37	17.36	
pH	6.89	6.82	7.51	7.13	7.02	6.79	6.75	6.72	6.68	6.67	6.67	6.65	
Redox (mV)	110	107	63	55	44	43	44	50	61	65	64	64	
Conductivity (mohm/cm	1.32	1.33	1.41	1.33	1.34	1.35	1.35	1.36	1.40	1.42	1.42	1.42	
Turbidity (ntu)	544	488	201	187	170	130	121	100	91.6	77.4	77.6	75.0	
Disolved Oxygen (mg/l)	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TDS	0.849	0.849	0.901	0.853	0.858	0.863	0.866	0.871	0.899	0.905	0.906	0.905	
Salinity	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	

Notes: Start Pumping at 3:44 PM (initial sample color orange)
Sample Time: 5:10 PM
Total water purged 4.5 gallons

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-10 DATE: 6/16/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 42.55 feet

B: Casing Internal Diameter: 4 inches

C: Water Level Below Top of Casing: 25.30 feet

D: Volume of Water in Casing: 11.385

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	805	810	815	820	830	835	840	845	850	855	900	915	920
Gallons							~2.0						~3.75
Depth to Water	25.30	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31
Temperature (°C)	14.47	14.07	13.95	13.90	13.56	13.43	13.91	13.80	13.72	13.71	13.77	16.18	13.59
pH	7.02	6.98	6.97	6.96	7.01	7.02	7.12	7.04	7.01	7.00	6.97	7.40	6.99
Redox (mV)	121	99	91	25	90	96	91	97	93	83	85	190	88
Conductivity (mohm/cm	2.26	2.20	2.15	2.12	2.72	2.74	2.63	2.63	2.57	2.41	2.24	1.94	2.16
Turbidity (ntu)	184	124	104	106	411	393	340	320	262	176	106	127	121
Disolved Oxygen (mg/l)	6.40	6.71	6.85	6.97	4.12	3.85	4.31	4.15	4.33	4.91	5.90	6.06	6.97
TDS	1.44	1.40	1.37	1.36	1.74	1.75	1.66	1.69	1.64	1.54	1.43	1.29	1.38
Salinity	0.12	0.11	0.11	0.11	0.14	0.14	0.13	0.14	0.13	0.12	0.11	0.11	0.11

Notes: Initial sample color = orange-brown, rusty looking, purged for 5-10 minutes without Horiba

820 Dissolved oxygen high, lots of bubbles in line - adjust pumping rate and decrease tubing length

835 Cleaned out Horiba - rusty precipitate/sediment inside

905 Turbidity significant, clean out

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-10 DATE: 6/16/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 42.55 feet

B: Casing Internal Diameter: 4 inches

C: Water Level Below Top of Casing: 25.30 feet

D: Volume of Water in Casing: 11.385

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1040	1045	1050	1055	1100	1105							
Gallons						~5.75							
Depth to Water	25.31	25.31	25.31	25.31	25.31	25.31							
Temperature (°C)	20.41	19.17	18.77	18.38	18.39	18.40							
pH	6.80	6.90	6.95	6.95	6.96	6.96							
Redox (mV)	159	128	116	112	110	108							
Conductivity (mohm/cm	1.86	1.86	1.85	1.86	1.87	1.89							
Turbidity (ntu)	138	154	130	124	122	125							
Disolved Oxygen (mg/l)	6.96	7.06	7.13	7.12	7.10	7.26							
TDS	1.19	1.19	1.19	1.19	1.19	1.20							
Salinity	0.09	0.09	0.09	0.09	0.09	0.09							

Notes:
920 DO continues to rise, test depth of tubing, horiba, etc
945 Huge air bubbles in tubing, change tubing completely and check pump
950 Recalibrated horiba, DO results and bubbles still exist
Using alternate horiba DO readings are ~3.0 and dropping, old horiba was 6-10 with large fluctuations, will not consider DO in stability of sample, Sample Time: 1110

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-11 DATE: 6/16/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 150.39 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 25.62 feet

D: Volume of Water in Casing: 21.2109

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	639	645	650	655	701	707	712	716	722	732	740	748	753
Gallons													
Depth to Water	26.35	26.57	26.57	26.58	26.57	26.57	26.57	26.57	26.57	26.57	26.58	26.58	26.58
Temperature (°C)	15.43	15.09	14.17	14.06	13.86	13.56	13.52	13.44	13.42	13.34	13.37	13.39	13.42
pH	11.06	11.22	11.61	11.66	11.71	11.78	11.81	11.83	11.85	11.86	11.85	11.87	11.87
Redox (mV)	43	33	-2	-8	-20	-38	-46	-58	-70	-84	-89	-97	-99
Conductivity (mohm/cm	0.895	0.911	1.03	1.05	1.08	1.12	1.14	1.15	1.16	1.16	1.24	1.24	1.24
Turbidity (ntu)	27.7	27.5	23.0	24.6	23.0	22.9	21.4	22.4	22.0	21.0	19.7	19.2	19.0
Disolved Oxygen (mg/l)	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TDS	0.575	0.585	0.658	0.671	0.681	0.718	0.728	0.737	0.739	0.743	0.792	0.792	0.793
Salinity	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

Notes: Start purging at 6:35 AM

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-11 DATE: 6/16/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 150.39 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 25.62 feet

D: Volume of Water in Casing: 21.2109

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	758	805	810										
Gallons			~4.0										
Depth to Water	26.59	26.59	26.59										
Temperature (°C)	13.40	13.47	13.47										
pH	11.88	11.88	11.88										
Redox (mV)	-100	-102	-103										
Conductivity (mohm/cm	1.24	1.24	1.24										
Turbidity (ntu)	18.6	18.2	18.1										
Disolved Oxygen (mg/l)	0.00	0.00	0.00										
TDS	0.794	0.794	0.793										
Salinity	0.06	0.06	0.06										

Notes: Sample Time: 812
Purged 4 gallons
Note high pH

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-11A DATE: 6/16/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 34.52 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 13.20 feet

D: Volume of Water in Casing: 3.6244

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	830	835	842	847	853	900	908	914	920	927	936	945	
Gallons												~3.5	
Depth to Water	13.62	14.75	17.80	17.91	18.04	18.15	18.20	18.21	18.23	18.25	18.28	18.30	
Temperature (°C)	12.89	12.51	12.90	13.31	13.54	13.84	15.22	15.24	15.64	16.07	16.27	16.38	
pH	7.25	6.29	6.09	6.07	6.06	6.05	6.07	6.07	6.08	6.05	6.10	6.10	
Redox (mV)	91	86	93	91	89	82	75	76	74	73	71	70	
Conductivity (mohm/cm	0.966	0.927	0.873	0.887	0.888	0.884	0.884	0.888	0.888	0.888	0.888	0.888	
Turbidity (ntu)	18.7	14.8	15.4	14.9	14.7	14.6	12.0	11.9	11.5	12.0	11.9	12.2	
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TDS	0.619	0.591	0.559	0.568	0.568	0.568	0.566	0.566	0.566	0.568	0.568	0.568	
Salinity	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	

Notes: Start purging at 830 AM
Sample Time: 945 AM
Total Purged: 3.5 gallons

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-12 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 112.20 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 18.31 feet

D: Volume of Water in Casing: 15.9613

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1053	1058	1104	1110	1117	1123	1130	1137	1144	1151	1200	1206	1212
Gallons													
Depth to Water	18.87	18.89	18.87	18.88	18.89	18.88	18.88	18.88	18.89	18.88	18.89	18.88	18.88
Temperature (^{o}C)	15.34	15.17	15.13	16.15	16.47	16.48	16.60	16.62	16.88	16.90	16.92	16.90	16.90
pH	7.30	7.41	7.33	7.10	7.01	7.00	6.99	6.98	6.97	6.97	6.96	6.95	6.95
Redox (mV)	-157	-178	-154	-79	-59	-59	-46	-35	-30	-26	-23	-17	-15
Conductivity (mohm/cm	0.902	0.972	1.10	1.29	1.32	1.33	1.33	1.34	1.33	1.33	1.33	1.33	1.33
Turbidity (ntu)	82	87	93	59.3	50.1	49.3	42.5	38.4	36.6	33.5	33.5	32.7	32.0
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TDS	0.581	0.624	0.703	0.823	0.846	0.848	0.852	0.858	0.851	0.851	0.850	0.857	0.853
Salinity	0.04	0.05	0.05	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07

Notes: Start purging at 1053
Sample Time: 1220
Total Purged: 4.5 gallons

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-12A DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 60.00 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 19.81 feet

D: Volume of Water in Casing: 6.8323

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	935	940	945	952	959	1005	1015	1025	1032	1039			
Gallons										~4.0			
Depth to Water	19.62	19.73	19.99	19.94	19.93	19.93	19.93	19.94	19.96	19.96			
Temperature (°C)	14.83	13.97	13.73	13.64	13.71	13.68	14.01	14.19	14.28	14.32			
pH	9.52	8.58	7.94	7.36	7.17	7.16	7.21	7.06	7.06	7.08			
Redox (mV)	8	-91	-101	-87	-79	-23	-82	-77	-77	-78			
Conductivity (mohm/cm	0.794	0.949	1.10	1.22	1.25	1.26	1.26	1.26	1.33	1.33			
Turbidity (ntu)	20.1	19.1	18.5	17.2	17.5	17.4	17.8	16.3	16.1	15.8			
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
TDS	0.481	0.610	0.711	0.782	0.800	0.801	0.806	0.800	0.851	0.850			
Salinity	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07			

Notes: Start purging at 935 AM
Sample Time: 1040 AM
Total Purged: 4 gallons

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-13 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 113.85 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 12.93 feet

D: Volume of Water in Casing: 17.1564

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1030	1035	1040	1045	1050	1055	1100	1105	1110	1115	1120	1125	1130
Gallons							2.0		2.75		3.5		3.75
Depth to Water	12.93	14.56	14.51	14.48	14.49	14.50	14.51	14.50	14.49	14.49	14.48	14.49	14.47
Temperature (°C)	14.24	13.76	13.76	13.85	13.82	13.80	13.85	13.88	13.94	13.94	13.95	13.98	13.95
pH	10.23	9.93	9.83	9.51	9.40	9.26	9.04	8.89	8.67	8.43	8.30	8.15	8.06
Redox (mV)	-115	-130	-137	-140	-143	-149	-162	-174	-188	-202	-207	-205	-199
Conductivity (mohm/cm	0.669	0.691	0.703	0.765	0.792	0.820	0.869	0.911	0.944	0.973	0.986	1.00	1.01
Turbidity (ntu)	201	108	98.2	151	145	106	84.6	41.9	31.3	23.9	21.9	14.0	11.0
Disolved Oxygen (mg/l)	9.34	0.70	0.59	0.27	0.18	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TDS	0.428	0.443	0.451	0.491	0.508	0.526	0.558	0.584	0.605	0.623	0.631	0.642	0.649
Salinity	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05

Notes: Sample Time: 1205

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-13 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 113.85 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 12.93 feet

D: Volume of Water in Casing: 17.1564

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1135	1140	1145	1150	1155	1200							
Gallons	4.5		5.25			6.3							
Depth to Water	14.46	14.47	14.46	14.48	14.47	14.47							
Temperature (°C)	13.99	14.01	14.00	13.98	13.98	14.01							
pH	7.94	7.86	7.80	7.78	7.75	7.74							
Redox (mV)	-192	-186	-182	-180	-180	-178							
Conductivity (mohm/cm	1.03	1.04	1.06	1.06	1.06	1,07							
Turbidity (ntu)	9.2	5.9	5.2	4.6	3.0	2.0							
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00							
TDS	0.659	0.665	0.679	0.687	0.685	0.687							
Salinity	0.05	0.05	0.05	0.05	0.05	0.05							

Notes: Sample Time: 1205

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-13A DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 28.65 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 10.50 feet

D: Volume of Water in Casing: 3.0855

$v = 0.0408 (B)^2 \times (A-C) = D$

v = 0.0408 ( )^2 x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1240	1245	1250	1255	1300	1305	1310	1315	1320	1325	1330		
Gallons					1.75		2.5			3.5			
Depth to Water	10.50	10.51	10.50	10.48	10.48	10.47	10.47	10.47	10.47	10.47	10.47		
Temperature (°C)	15.91	14.20	14.15	14.07	14.05	14.08	13.98	13.98	14.11	14.15	14.16		
pH	7.36	7.05	6.98	6.93	6.92	6.92	6.91	6.92	6.91	6.91	6.91		
Redox (mV)	-127	-64	-40	-23	-17	-13	-8	-6	-3	-3	-3		
Conductivity (mohm/cm	1.48	1.71	1.74	1.74	1.75	1.75	1.75	1.75	1.77	1.77	1.77		
Turbidity (ntu)	78.1	24.9	16.1	9.1	7.1	5.8	3.9	3.7	3.5	3.2	2.9		
Disolved Oxygen (mg/l)	1.84	3.01	3.33	3.47	3.43	3.38	3.39	3.45	3.34	3.29	3.27		
TDS	0.959	1.10	1.11	1.11	1.12	1.12	1.12	1.13	1.13	1.13	1.13		
Salinity	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		

Notes: Sample Time: 1335
1308 Cleaned out horiba to check/remove potential air bubbles

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-14 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 135.2 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 16.33 feet

D: Volume of Water in Casing: 20.2079

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

v = 0.0408 ( )^2 x (-) = _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	820	825	830	835	840	845	850	855	900	905	910	915	920
Gallons								2.75		3.5			4.5
Depth to Water	16.38	18.51	18.77	18.94	18.95	18.98	18.97	18.99	18.99	18.98	18.98	18.98	18.98
Temperature (°C)	12.73	12.71	13.24	13.88	13.62	13.80	12.90	12.91	12.92	12.96	12.99	12.96	13.00
pH	8.44	8.69	8.61	8.62	8.71	8.68	8.58	8.53	8.48	8.44	8.40	8.39	8.37
Redox (mV)	-132	-214	-114	-63	-245	-272	-274	-278	-282	-279	-276	-274	-272
Conductivity (mohm/cm	0.348	0.348	0.348	0.348	0.362	0.419	0.491	0.549	0.577	0.602	0.618	0.630	0.637
Turbidity (ntu)	59.5	74.0	180	211	191	145	135	105	80.7	86.0	92.6	89.9	90.4
Disolved Oxygen (mg/l)	3.34	1.01	0.62	0.59	0.79	0.36	0.15	0.04	0.00	0.00	0.00	0.00	0.00
TDS	0.226	0.226	0.226	0.227	0.227	0.276	0.322	0.350	0.370	0.386	0.396	0.404	0.408
Salinity	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03

Notes: Sample Time: 945

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-14 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: E.Black

A: Total Casing and Screen Length: 135.2 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 16.33 feet

D: Volume of Water in Casing: 20.2079

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	925	930	935	940									
Gallons		5											
Depth to Water	18.98	18.98	18.98	18.98									
Temperature (°C)	13.03	13.07	13.11	13.13									
pH	8.35	8.32	8.32	8.31									
Redox (mV)	-268	-243	-249	-250									
Conductivity (mohm/cm	0.643	0.650	0.652	0.653									
Turbidity (ntu)	74.5	66.7	68.0	67.8									
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00									
TDS	0.412	0.417	0.418	0.419									
Salinity	0.03	0.03	0.03	0.03									

Notes: Sample Time: 945

ARCADIS

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4009-15 DATE: 6/15/2011

PROJECT NAME: Vestal
PROJECT NUMBER: 266352
SAMPLERS: J.Natale

A: Total Casing and Screen Length: 128.50 feet

B: Casing Internal Diameter: 2 inches

C: Water Level Below Top of Casing: 21.48 feet

D: Volume of Water in Casing: 18.1934

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$v = 0.0408 (B)^2 \times (A-C) = D$

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	755	802	809	815	821	828	836	843	849	854	901	909	
Gallons												4	
Depth to Water	21.94	21.95	21.96	21.95	21.95	21.95	21.96	21.96	21.95	21.95	21.95	21.95	
Temperature (°C)	12.14	11.67	11.71	12.03	11.82	11.92	12.12	12.13	12.29	12.69	12.98	13.12	
pH	9.15	9.60	9.84	9.75	9.86	9.89	9.90	9.88	9.87	9.90	9.88	9.88	
Redox (mV)	78	42	80	18	5	-9	-16	-29	-39	-50	-53	-55	
Conductivity (mohm/cm	0.431	0.513	0.512	0.524	0.523	0.522	0.519	0.519	0.562	0.511	0.510	0.510	
Turbidity (ntu)	16.3	10.7	8.9	8.1	7.9	6.5	5.8	5.4	6.2	4.2	3.7	3.7	
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TDS	0.284	0.329	0.333	0.335	0.333	0.334	0.332	0.332	0.330	0.327	0.327	0.326	
Salinity	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	

Notes: Started Purging at 7:55 AM
Sampled at 9:10 AM
Total gallons purged: 4.0