

New York State Department of Environmental Conservation

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

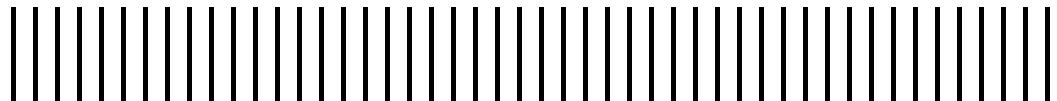
Site Number 7-04-009A

Vestal Water Supply Site Quarterly Report

Second Quarter 2008

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

September 2008



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**MALCOLM
PIRNIE**

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1. Introduction

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



2. Site Activities

2.1. 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.

2.2. Operation and Maintenance

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

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

2.2.1. System Operation

The groundwater treatment system was operated with no interruption during the second quarter, 2008. As shown in the Monthly Reports and System O&M Logs provided by ECI (Appendix A), no repairs were required during the second quarter operating period. Groundwater treatment system flow rates from the Monthly Reports and System O&M Logs are summarized on Table 2-1. As shown on Table 2-1, the average flow rate for Well 1-1A decreased from 166 gallons per minute (GPM) in April 2008 to 137 GPM in June 2008. Table 2-1 also shows that approximately 41,973,000 gallons of water have been treated since January 2008. The total flow for the second quarter 2008 operational period was approximately 19,652,000 gallons.



2.2.2. Influent – Effluent Sampling

Second quarter, 2008 influent and effluent groundwater samples were collected from the Well 1-1A treatment system in accordance with the Work Plan. Influent and effluent groundwater samples were sent to Test America Laboratories (formerly Severn Trent Laboratories) following chain-of-custody protocols for analysis of volatile organic compounds (VOCs) by USEPA Method 8260B. The laboratory analytical reporting forms are provided in Appendix B. The laboratory data for the influent samples is presented in Table 2-2 and the effluent laboratory data is presented in table 2-3.

As shown in Table 2-2, 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 New York State Department of Environmental Conservation (NYSDEC) Class GA Standards in each of the three samples collected in the second quarter, 2008. Acetone and methylene chloride (common laboratory contaminants) were detected at estimated concentrations (indicated by the "J" qualifier) below their respective NYSDEC Class GA Standards.

Table 2-3 shows that acetone was detected in the April and May 2008 effluent samples at estimated concentrations of 1.2 ug/l and 1.8 ug/l, respectively. Although there is no NYSDEC Class GA Standard for acetone, these results are significantly less than the corresponding NYSDEC Class GA Guidance Value of 50 ug/l. The May 2008 effluent sample also contained methylene chloride at an estimated concentration of 0.38 ug/l, which is less than the NYSDEC Class GA Standard of 5 ug/l. As mentioned above, both of these compounds are common laboratory contaminants. The estimated concentration of trichloroethene in the effluent sample from April 2008 was 1.1 ug/l. This result is less than the corresponding NYSDEC Class GA Standard of 5 ug/l. This compound was not detected in the May or June 2008 effluent samples. Based on influent sample concentrations and total flow volumes from the Well 1-1A treatment system, approximately 72.6 pounds of VOCs have been removed by the treatment system during the second quarter, 2008.

2.2.3. General Operation and Maintenance

The following site repairs or upgrades were performed during the third quarter of 2007:

- The flush-mount protective casing for groundwater monitoring well 4009-9 was apparently damaged during snow removal. The protective casing was replaced on April 22, 2008 by Nothnagle Drilling.
- On May 5, 2008, Sharon Trocher of The United States Environmental Protection Agency (USEPA) visited the site to conduct a site inspection. The NYSDEC and Malcolm Pirnie accompanied USEPA during the inspection.



2.3. Groundwater Monitoring Program

Groundwater monitoring wells were sampled in accordance with the Work Plan during the third quarter, 2007. The results of the sampling event were submitted with third quarter 2007 Vestal Water Supply Site Quarterly Report and Annual Groundwater Monitoring Summary (Malcolm Pirnie, 2007). The next annual groundwater monitoring event is scheduled for the fourth quarter, 2008.

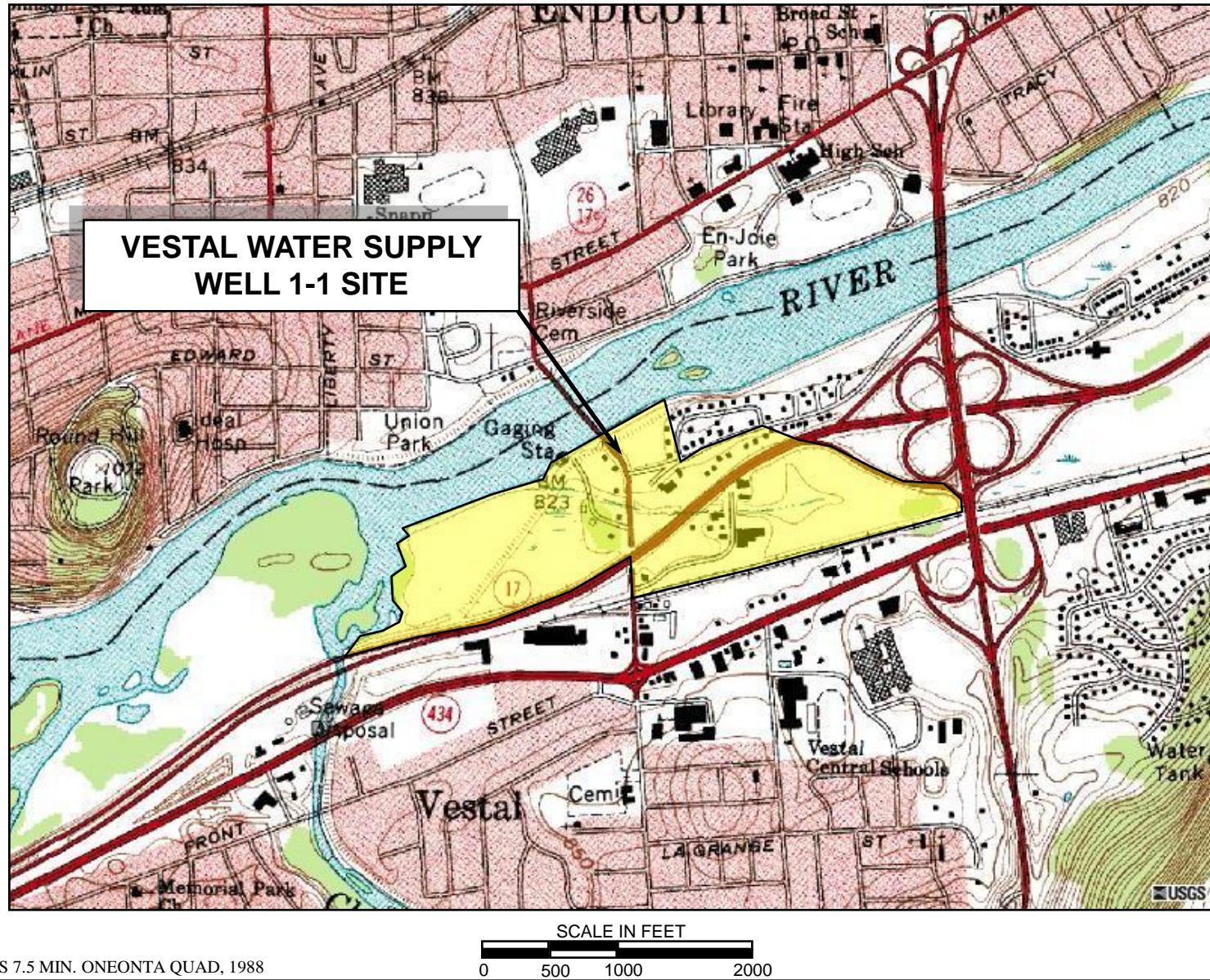


3. Summary

The Vestal Well 1-1A groundwater treatment system operated with no interruptions during the second quarter, 2008 operation and maintenance period. The flow rate through the treatment system continued to decrease and is approximately 30 GPM less than the first quarter 2008 and approximately one-half of the flow reported in January 2007. Well redevelopment and pump replacement options are currently being evaluated to address the flow issues. Total flow through the treatment system from April to June 2008 was approximately 19.7 million gallons. Based on monthly influent and effluent sampling, the treatment system successfully removes VOCs from extracted groundwater in the capture zone to concentrations less than treatment/discharge goals. Approximately 73 pounds of VOCs were removed by the treatment system during the second quarter, 2008 operational period.



N



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

SCALE IN FEET
0 500 1000 2000

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

VESTAL WATER SUPPLY SITE 1-1 LOCATION

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FIGURE 2-1

TABLE 2-1
WELL 1-1A FLOW SUMMARY
VESTAL WATER SUPPLY
VESTAL, NEW YORK
NYSDEC SITE NO. 7-04-009A

Date	System Operation* (days/month)	Pumping Rate* (gpm)	Total Flow** (gallons)	Quarterly Flow (gallons)
January-07	31	280	12,499,200	
February-07	28	260	10,483,200	33,840,000
March-07	29 ***	260	10,857,600	
April-07	30	260	11,232,000	
May-07	31	260	11,606,400	31,910,400
June-07	30	210	9,072,000	
July-07	31	210	9,374,400	
August-07	31	200	8,928,000	26,942,400
September-07	30	200	8,640,000	
October-07	31	186	8,303,040	24,874,560
November-07	29	198	8,268,480	
December-07	31	186	8,303,040	
January-08	31	170	7,588,800	
February-08	29	170	7,099,200	22,321,440
March-08	31	171	7,633,440	
April-08	30	166	7,171,200	
May-08	31	147	6,562,080	19,651,680
June-08	30	137	5,918,400	
Total Flow (2007)			117,567,360	
Toal Flow (2008)			41,973,120	

Notes:

* - Average monthly flow from Environmental Compliance, Inc. O&M Reports.

** - Calculated assuming system operating 24-hours per day

*** - System shut down for 2-days due to flooding

**** - System shut down for 1-day for repairs

gpm - Gallons per minute

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

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

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

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

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

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

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

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

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 2-3
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
VOCs				
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-Butanone (MEK)	50	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)		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
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 2-3
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
VOCs				
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-Butanone (MEK)	50	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)		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
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 2-3
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
VOCs				
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-Butanone (MEK)	50	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)		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
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 2-3
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
VOCs				
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-Butanone (MEK)	50	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)		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
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

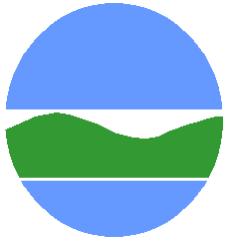
U - Not detected at the indicated concentration.

J - Estimated concentration.

M - Manual integrated compound.

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

* - MS or MSD exceeded control limits.



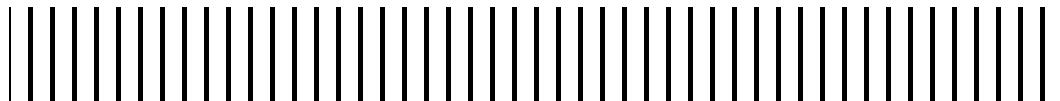
New York State Department of Environmental Conservation
Vestal Water Supply Site Quarterly Report

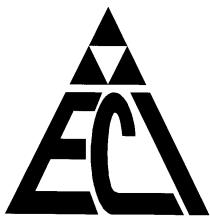
A. Monthly Reports and System
Operation and Maintenance Logs

APPENDIX

A

**Monthly Reports and System
Operation and Maintenance Logs**





ENVIRONMENTAL COMPLIANCE, INC.

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

Vestal Well 1-1 Monthly Report

April 2008

SECTION I – SUMMARY OF ACTIVITIES

The system operated continuously the entire month without interruption.

The system flow rate as recorded by the digital flow meter ranged between 166 GPM and 171 GPM. Daily system checks are recorded on attached log.

Routine maintenance activities conducted during the month are outlined below.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Routine weekly inspection of facility
- Pumps checked & lubricated
- Blower belts adjusted
- Filters cleaned or replaced, as needed
- Cleaned up litter
- Mowed grass

SECTION III – REPAIR WORK COMPLETED

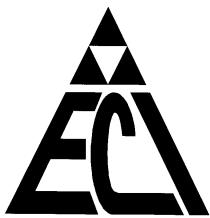
- None

SECTION IV – REPAIR WORK NEEDED

- None

SECTION V – RECOMMENDATIONS

- Notify operator before locks are changed. Locks have been changed on several occasions preventing access to facility.



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

May 2008

SECTION I – SUMMARY OF ACTIVITIES

The system operated continuously the entire month without interruption.

The system flow rate as recorded by the digital flow meter ranged between 144 GPM and 151 GPM. Daily system checks are recorded on attached log.

Routine maintenance activities conducted during the month are outlined below.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Routine weekly inspection of facility
- Pumps checked & lubricated
- Blower belts adjusted
- Filters cleaned or replaced, as needed
- Cleaned up litter
- Mowed grass

SECTION III – REPAIR WORK COMPLETED

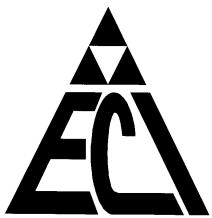
- None

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> (email)
j.jimenez@eci-nj.com (email)

Vestal Well 1-1 Monthly Report

June 2008

SECTION I – SUMMARY OF ACTIVITIES

The system operated continuously the entire month without interruption.

The system flow rate as recorded by the digital flow meter declined from 140 GPM at beginning of month to 133 GPM at end of the month. Daily system checks are recorded on attached log.

Routine maintenance activities conducted during the month are outlined below.

SECTION II – MONTHLY OPERATIONS & MAINTENANCE

- Routine weekly inspection of facility
- Pumps checked & lubricated
- Blower belts replaced
- Filters cleaned or replaced, as needed
- Cleaned up litter
- Mowed grass

SECTION III – REPAIR WORK COMPLETED

- None

SECTION IV – REPAIR WORK NEEDED

- None

SECTION V – RECOMMENDATIONS

- None

VESTAL WELL 1-1 MONTHLY O & M LOG

April 2008

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																															
WELL PUMP PACKING	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PRE LUBE LINE	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PUMP MOTOR OIL	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PUMP VIBRATION / HEAT	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CHEMICAL BUILDING																															
SUMP PUMP	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
DISCHARGE VALVES	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
FLOW METER (GPM)	171	171	171	171	171		168	168	168	168	168	168	168	166	166	166	166	166	166	163	163	163	163	163	163	163	163	163	163	163	
DIALER - ALARMS	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CHLORINE ROOM																															
GENERAL CONDITION	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
TOWER PACKING INSP.	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MAIN PUMPHOUSE																															
BLOWER AND MOTOR	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
BLOWER AIR FILTERS	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALARM / CONTROL PANEL	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	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	<1	X		
FLOAT & BYPASS LINE																															
H.S. PUMP PACKING	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
H.S. PUMP MOTOR OIL	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PUMP VIBRATION / HEAT	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SURGE RELIEF VALVE	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	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	X	X		
INGROUND TANK LEVEL	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

X - Normal Operation

VESTAL WELL 1-1 MONTHLY O & M LOG

May 2008

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																															
WELL PUMP PACKING	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PRE LUBE LINE	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PUMP MOTOR OIL	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PUMP VIBRATION / HEAT	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CHEMICAL BUILDING																															
SUMP PUMP	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
DISCHARGE VALVES	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
FLOW METER (GPM)	151	151	151		151	151	151	151	151	151	147	147	147	147	147	147	147	147	145	145	145	145	145	145	144	144	144	144	144		
DIALER - ALARMS	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CHLORINE ROOM																															
GENERAL CONDITION	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
TOWER PACKING INSP.	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MAIN PUMPHOUSE																															
BLOWER AND MOTOR	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
BLOWER AIR FILTERS	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALARM / CONTROL PANEL	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	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	<1	X	X			
FLOAT & BYPASS LINE																															
H.S. PUMP PACKING	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
H.S. PUMP MOTOR OIL	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PUMP VIBRATION / HEAT	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SURGE RELIEF VALVE	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	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	X	X		
INGROUND TANK LEVEL	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

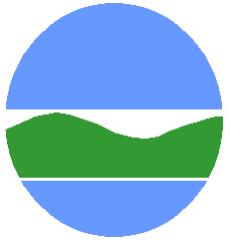
X - Normal Operation

VESTAL WELL 1-1 MONTHLY O & M LOG

June 2008

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																															
WELL PUMP PACKING	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
PRE LUBE LINE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PUMP MOTOR OIL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
PUMP VIBRATION / HEAT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
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	X	X			
FLOW METER (GPM)	140	140	140	140	140	140	140	138	138	138	138	138	138	138	138	137	137	137	137	137	137	133	133	133	133	133	133	133	133		
DIALER - ALARMS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
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	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	X	X			
ALARM / CONTROL PANEL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	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	X	X			
FLOAT & BYPASS LINE																															
H.S. PUMP PACKING	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		
H.S. PUMP MOTOR OIL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
PUMP VIBRATION / HEAT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SURGE RELIEF VALVE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	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	X	X			

X - Normal Operation



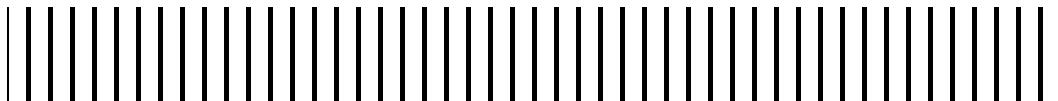
New York State Department of Environmental Conservation
Vestal Water Supply Site Quarterly Report

APPENDIX

B

Analytical Reporting Forms

B. Analytical Reporting Forms



ANALYTICAL REPORT

Job Number: 220-4794-1

SDG Number: 220-4794

Job Description: NYSDEC Standby - Vestal Water Supply

For:
Malcolm Pirnie, Inc.
43 British American Boulevard
1st Floor
Latham, NY 12110
Attention: Mr. Jeremy Wyckoff



Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
05/02/2008

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

Case Narrative for Job: 220-4794-1

Client: Malcolm Pirnie, Inc.
Date: May 2, 2008

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

May 2, 2008

Date

**Job Narrative
220-J4794-1**

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

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

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

SemiVolatiles

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

Pesticides

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

PCBs for compound/retention time

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

DRO/CTETPH

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

AX = area of the target Ion

AIS = Area of Internal standard

C = concentration as ug/L or ug/Kg

DF = dilution

IS = Internal standard concentration (ng)

RRF = average RF (from initial cal except CLP methods from continuing cal)

V = sample volume for liquids in mls or sample weight for solids in grams

VA = volume of aliquot for medium level soils

VE = volume of concentrated extract

VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1
Sdg Number: 220-4794

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-4794-1	WELL 1-1A INF	Water	04/22/2008 1000	04/23/2008 0945
220-4794-2	WELL 1-1A EFF	Water	04/22/2008 1010	04/23/2008 0945
220-4794-3TB	TRIP BLANK	Water	04/22/2008 0000	04/23/2008 0945

METHOD SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1

Sdg Number: 220-4794

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS Purge-and-Trap	TAL CT TAL CT	SW846 8260B 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: 220-4794-1
Sdg Number: 220-4794

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1

Sdg Number: 220-4794

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-4794-1

Date Sampled: 04/22/2008 1000

Client Matrix: Water

Date Received: 04/23/2008 0945

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	220-15527	Instrument ID:	HP 5890/5971 GC/MS
Preparation:	5030B			Lab File ID:	L6115.D
Dilution:	2.0			Initial Weight/Volume:	5 mL
Date Analyzed:	04/29/2008 1644			Final Weight/Volume:	5 mL
Date Prepared:	04/29/2008 1644				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	20	U	3.2	20
Benzene	10	U	0.46	10
Bromodichloromethane	10	U	0.48	10
Bromoform	10	U	2.3	10
Bromomethane	10	U	2.0	10
Methyl Ethyl Ketone	20	U	2.1	20
Carbon disulfide	10	U	0.28	10
Carbon tetrachloride	10	U	0.58	10
Chlorobenzene	10	U	0.30	10
Chloroethane	10	U	0.96	10
Chloroform	10	U	0.54	10
Chloromethane	10	U	0.48	10
Dibromochloromethane	10	U	0.42	10
1,1-Dichloroethane	26		0.46	10
1,2-Dichloroethane	10	U	0.50	10
1,1-Dichloroethene	9.7	J	0.50	10
1,2-Dichloropropane	10	U	0.64	10
cis-1,3-Dichloropropene	10	U	0.56	10
trans-1,3-Dichloropropene	10	U	0.56	10
Ethylbenzene	10	U	0.56	10
2-Hexanone	20	U	0.74	20
Methylene Chloride	2.2	J B	0.52	10
methyl isobutyl ketone	20	U	0.76	20
Styrene	10	U	1.4	10
1,1,2,2-Tetrachloroethane	10	U	0.46	10
Tetrachloroethene	10	U	0.60	10
Toluene	10	U	0.18	10
1,1,1-Trichloroethane	180		0.76	10
1,1,2-Trichloroethane	10	U	0.66	10
Trichloroethene	54	* B	0.52	10
Vinyl chloride	4.1	J	0.60	10
Xylenes, Total	10	U	0.92	10
cis-1,2-Dichloroethene	72		0.66	10
trans-1,2-Dichloroethene	10	U	0.44	10
Surrogate		%Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	80		53 - 125	
4-Bromofluorobenzene	123		73 - 127	
Dibromofluoromethane	82		54 - 137	
Toluene-d8 (Surr)	92		63 - 121	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1

Sdg Number: 220-4794

Client Sample ID: WELL 1-1A EFF

Lab Sample ID: 220-4794-2

Date Sampled: 04/22/2008 1010

Client Matrix: Water

Date Received: 04/23/2008 0945

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	220-15527	Instrument ID:	HP 5890/5971 GC/MS
Preparation:	5030B			Lab File ID:	L6109.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	04/29/2008 1417			Final Weight/Volume:	5 mL
Date Prepared:	04/29/2008 1417				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.8	J	1.6	10
Benzene	5.0	U	0.23	5.0
Bromodichloromethane	5.0	U	0.24	5.0
Bromoform	5.0	U	1.2	5.0
Bromomethane	5.0	U	1.0	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.14	5.0
Carbon tetrachloride	5.0	U	0.29	5.0
Chlorobenzene	5.0	U	0.15	5.0
Chloroethane	5.0	U	0.48	5.0
Chloroform	5.0	U	0.27	5.0
Chloromethane	5.0	U	0.24	5.0
Dibromochloromethane	5.0	U	0.21	5.0
1,1-Dichloroethane	5.0	U	0.23	5.0
1,2-Dichloroethane	5.0	U	0.25	5.0
1,1-Dichloroethene	5.0	U	0.25	5.0
1,2-Dichloropropane	5.0	U	0.32	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.28	5.0
Ethylbenzene	5.0	U	0.28	5.0
2-Hexanone	10	U	0.37	10
Methylene Chloride	5.0	U	0.26	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.70	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.23	5.0
Tetrachloroethene	5.0	U	0.30	5.0
Toluene	5.0	U	0.090	5.0
1,1,1-Trichloroethane	5.0	U	0.38	5.0
1,1,2-Trichloroethane	5.0	U	0.33	5.0
Trichloroethene	1.1	J * B	0.26	5.0
Vinyl chloride	5.0	U	0.30	5.0
Xylenes, Total	5.0	U	0.46	5.0
cis-1,2-Dichloroethene	5.0	U	0.33	5.0
trans-1,2-Dichloroethene	5.0	U	0.22	5.0
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	79		53 - 125	
4-Bromofluorobenzene	119		73 - 127	
Dibromofluoromethane	79		54 - 137	
Toluene-d8 (Surr)	88		63 - 121	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1

Sdg Number: 220-4794

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-4794-3TB

Client Matrix: Water

Date Sampled: 04/22/2008 0000

Date Received: 04/23/2008 0945

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	220-15527	Instrument ID:	HP 5890/5971 GC/MS
Preparation:	5030B			Lab File ID:	L6110.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	04/29/2008 1442			Final Weight/Volume:	5 mL
Date Prepared:	04/29/2008 1442				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.6	10
Benzene	5.0	U	0.23	5.0
Bromodichloromethane	5.0	U	0.24	5.0
Bromoform	5.0	U	1.2	5.0
Bromomethane	5.0	U	1.0	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	0.41	J	0.14	5.0
Carbon tetrachloride	5.0	U	0.29	5.0
Chlorobenzene	5.0	U	0.15	5.0
Chloroethane	5.0	U	0.48	5.0
Chloroform	5.0	U	0.27	5.0
Chloromethane	5.0	U	0.24	5.0
Dibromochloromethane	5.0	U	0.21	5.0
1,1-Dichloroethane	5.0	U	0.23	5.0
1,2-Dichloroethane	5.0	U	0.25	5.0
1,1-Dichloroethene	5.0	U	0.25	5.0
1,2-Dichloropropane	5.0	U	0.32	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.28	5.0
Ethylbenzene	5.0	U	0.28	5.0
2-Hexanone	10	U	0.37	10
Methylene Chloride	5.0	U	0.26	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.70	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.23	5.0
Tetrachloroethene	5.0	U	0.30	5.0
Toluene	5.0	U	0.090	5.0
1,1,1-Trichloroethane	5.0	U	0.38	5.0
1,1,2-Trichloroethane	5.0	U	0.33	5.0
Trichloroethene	0.87	J * B	0.26	5.0
Vinyl chloride	5.0	U	0.30	5.0
Xylenes, Total	5.0	U	0.46	5.0
cis-1,2-Dichloroethene	5.0	U	0.33	5.0
trans-1,2-Dichloroethene	5.0	U	0.22	5.0
Surrogate		%Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	78		53 - 125	
4-Bromofluorobenzene	116		73 - 127	
Dibromofluoromethane	82		54 - 137	
Toluene-d8 (Surr)	89		63 - 121	

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1
Sdg Number: 220-4794

Surrogate Recovery Report

8260B Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	12DCE %Rec	TOL %Rec	BFB %Rec
220-4794-1	WELL 1-1A INF	82	80	92	123
220-4794-2	WELL 1-1A EFF	79	79	88	119
220-4794-3	TRIP BLANK	82	78	89	116
MB 220-15527/3		86	81	92	118
LCS 220-15527/2		83	78	86	88

Surrogate

Acceptance Limits

DBFM = Dibromofluoromethane	54-137
12DCE = 1,2-Dichloroethane-d4 (Surr)	53-125
TOL = Toluene-d8 (Surr)	63-121
BFB = 4-Bromofluorobenzene	73-127

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1
Sdg Number: 220-4794

Method Blank - Batch: 220-15527

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 220-15527/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/29/2008 1150
Date Prepared: 04/29/2008 1150

Analysis Batch: 220-15527
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L6103.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	10	U	1.6	10
Benzene	5.0	U	0.23	5.0
Bromodichloromethane	5.0	U	0.24	5.0
Bromoform	5.0	U	1.2	5.0
Bromomethane	5.0	U	1.0	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.14	5.0
Carbon tetrachloride	5.0	U	0.29	5.0
Chlorobenzene	5.0	U	0.15	5.0
Chloroethane	5.0	U	0.48	5.0
Chloroform	5.0	U	0.27	5.0
Chloromethane	5.0	U	0.24	5.0
Dibromochloromethane	5.0	U	0.21	5.0
1,1-Dichloroethane	5.0	U	0.23	5.0
1,2-Dichloroethane	5.0	U	0.25	5.0
1,1-Dichloroethene	5.0	U	0.25	5.0
1,2-Dichloropropane	5.0	U	0.32	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.28	5.0
Ethylbenzene	5.0	U	0.28	5.0
2-Hexanone	10	U	0.37	10
Methylene Chloride	0.54	J	0.26	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.70	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.23	5.0
Tetrachloroethene	5.0	U	0.30	5.0
Toluene	5.0	U	0.090	5.0
1,1,1-Trichloroethane	5.0	U	0.38	5.0
1,1,2-Trichloroethane	5.0	U	0.33	5.0
Trichloroethene	0.87	J	0.26	5.0
Vinyl chloride	5.0	U	0.30	5.0
Xylenes, Total	5.0	U	0.46	5.0
cis-1,2-Dichloroethene	5.0	U	0.33	5.0
trans-1,2-Dichloroethene	5.0	U	0.22	5.0
<hr/>				
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	81		53 - 125	
4-Bromofluorobenzene	118		73 - 127	
Dibromofluoromethane	86		54 - 137	
Toluene-d8 (Surr)	92		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1
Sdg Number: 220-4794

Lab Control Spike - Batch: 220-15527

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 220-15527/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/29/2008 1036
Date Prepared: 04/29/2008 1036

Analysis Batch: 220-15527
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L6100.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	31.6	158	18 - 263	
Benzene	20.0	22.1	111	68 - 126	
Bromodichloromethane	20.0	20.5	102	67 - 118	
Bromoform	20.0	18.6	93	63 - 115	
Bromomethane	20.0	23.1	116	27 - 171	
Methyl Ethyl Ketone	20.0	25.7	129	30 - 222	
Carbon disulfide	20.0	25.4	127	44 - 142	
Carbon tetrachloride	20.0	18.9	94	56 - 131	
Chlorobenzene	20.0	20.6	103	71 - 114	
Chloroethane	20.0	20.0	100	53 - 167	
Chloroform	20.0	21.7	109	70 - 124	
Chloromethane	20.0	25.1	126	43 - 134	
Dibromochloromethane	20.0	19.2	96	65 - 114	
1,1-Dichloroethane	20.0	21.8	109	67 - 121	
1,2-Dichloroethane	20.0	20.5	103	68 - 124	
1,1-Dichloroethene	20.0	22.2	111	57 - 137	
1,2-Dichloropropane	20.0	21.6	108	69 - 122	
cis-1,3-Dichloropropene	20.0	21.1	106	60 - 122	
trans-1,3-Dichloropropene	20.0	18.9	95	55 - 126	
Ethylbenzene	20.0	20.9	104	71 - 115	
2-Hexanone	20.0	21.3	107	54 - 179	
Methylene Chloride	20.0	20.2	101	61 - 129	
methyl isobutyl ketone	20.0	18.4	92	61 - 140	
Styrene	20.0	18.8	94	69 - 112	
1,1,2,2-Tetrachloroethane	20.0	20.5	103	66 - 129	
Tetrachloroethene	20.0	21.0	105	62 - 118	
Toluene	20.0	21.4	107	70 - 116	
1,1,1-Trichloroethane	20.0	21.6	108	60 - 128	
1,1,2-Trichloroethane	20.0	20.5	102	70 - 119	
Trichloroethene	20.0	25.3	127	58 - 125	*
Vinyl chloride	20.0	21.0	105	51 - 139	
Xylenes, Total	60.0	63.0	105	66 - 118	
cis-1,2-Dichloroethene	20.0	22.2	111	65 - 120	
trans-1,2-Dichloroethene	20.0	22.2	111	57 - 129	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		78		53 - 125	
4-Bromofluorobenzene		88		73 - 127	
Dibromofluoromethane		83		54 - 137	
Toluene-d8 (Surr)		86		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1

Sdg Number: 220-4794

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.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1
Sdg Number: 220-4794

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-15527					
CCVIS 220-15527/1	Continuing Calibration and ISTD		Water	8260B	
LCS 220-15527/2	Lab Control Spike	T	Water	8260B	
MB 220-15527/3	Method Blank	T	Water	8260B	
220-4794-1	WELL 1-1A INF	T	Water	8260B	
220-4794-2	WELL 1-1A EFF	T	Water	8260B	
220-4794-3TB	TRIP BLANK	T	Water	8260B	

Report Basis

=

T = Total

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-4794-1
SDG: 220-4794

Laboratory Chronicle

Lab ID: 220-4794-1

Client ID: WELL 1-1A INF

Sample Date/Time: 04/22/2008 10:00 Received Date/Time: 04/23/2008 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-4794-B-1		220-15527		04/29/2008 16:44	2	TAL CT	BK
A:8260B	220-4794-B-1		220-15527		04/29/2008 16:44	2	TAL CT	BK

Lab ID: 220-4794-2

Client ID: WELL 1-1A EFF

Sample Date/Time: 04/22/2008 10:10 Received Date/Time: 04/23/2008 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-4794-B-2		220-15527		04/29/2008 14:17	1	TAL CT	BK
A:8260B	220-4794-B-2		220-15527		04/29/2008 14:17	1	TAL CT	BK

Lab ID: 220-4794-3

Client ID: TRIP BLANK

Sample Date/Time: 04/22/2008 00:00 Received Date/Time: 04/23/2008 09:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-4794-B-3		220-15527		04/29/2008 14:42	1	TAL CT	BK
A:8260B	220-4794-B-3		220-15527		04/29/2008 14:42	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 220-15527/3		220-15527		04/29/2008 11:50	1	TAL CT	BK
A:8260B	MB 220-15527/3		220-15527		04/29/2008 11:50	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 220-15527/2		220-15527		04/29/2008 10:36	1	TAL CT	BK
A:8260B	LCS 220-15527/2		220-15527		04/29/2008 10:36	1	TAL CT	BK

Lab References:

TAL CT = TestAmerica Connecticut

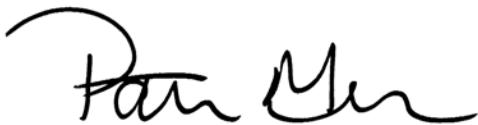
ANALYTICAL REPORT

Job Number: 220-5237-1

SDG Number: 220-5237

Job Description: NYSDEC Standby - Vestal Water Supply

For:
Malcolm Pirnie, Inc.
43 British American Boulevard
1st Floor
Latham, NY 12110
Attention: Mr. Jeremy Wyckoff



Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
06/13/2008

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.

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TestAmerica Laboratories, Inc.

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com



Case Narrative for Job: 220-5237-1

Client: Malcolm Pirnie, Inc.
Date: June 13, 2008

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

June 13, 2008

Date

**Job Narrative
220-J5237-1**

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

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

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

SemiVolatiles

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

Pesticides

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

PCBs for compound/retention time

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

DRO/CTETPH

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

AX = area of the target Ion

AIS = Area of Internal standard

C = concentration as ug/L or ug/Kg

DF = dilution

IS = Internal standard concentration (ng)

RRF = average RF (from initial cal except CLP methods from continuing cal)

V = sample volume for liquids in mls or sample weight for solids in grams

VA = volume of aliquot for medium level soils

VE = volume of concentrated extract

VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-5237-1	WELL 1-1A INF	Water	05/30/2008 0735	05/31/2008 1050
220-5237-2	WELL 1-1A EFF	Water	05/30/2008 0745	05/31/2008 1050
220-5237-3TB	TRIP BLANK	Water	05/30/2008 0000	05/31/2008 1050

METHOD SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Description	Lab Location	Method	Preparation Method
Matrix Water			
CLP Volatile Organic Compounds Purge-and-Trap	TAL CT TAL CT	OLM04.2 OLM04.2/Vol SW846 5030B	

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

OLM04.2 = "Statement of Work for Organic Analysis", Multi-Media, Multi-Concentration September 1998

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: 220-5237-1
Sdg Number: 220-5237

Method	Analyst	Analyst ID
OLM04.2 OLM04.2/Vol	Humbert, Dave	DH

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-5237-1

Client Matrix: Water

Date Sampled: 05/30/2008 0735

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4274.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 2002			Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 2002				

Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
Tentatively Identified Compound				None
Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:
Preparation:	5030B			HP 6890/5973 GC/MS
Dilution:	1.0			Lab File ID:
Date Analyzed:	06/09/2008 2002			Y4274.D
Date Prepared:	06/09/2008 2002			Initial Weight/Volume:
				5 mL
				Final Weight/Volume:
				5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	6.4	J	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	17		0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	0.50	J B	0.10	10
Methylene Chloride	0.32	J B	0.10	10
1,1-Dichloroethane	27		0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	300	E	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	65		0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-5237-1

Date Sampled: 05/30/2008 0735

Client Matrix: Water

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4274.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 2002			Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 2002				

Analyte	Result (ug/L)	Qualifier	MDL	RL
cis-1,2-Dichloroethene	78		0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	6.6	J	0.10	10
Methyl tert-butyl ether	4.1	J	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		76 - 114	
4-Bromofluorobenzene	90		86 - 115	
Toluene-d8 (Surr)	101		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-5237-1

Client Matrix: Water

Date Sampled: 05/30/2008 0735

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4277.D
Dilution:	2.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 2237	Run Type:	DL	Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 2237				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	20	U	0.20	20
Vinyl chloride	5.1	J	0.20	20
Bromomethane	20	U	0.20	20
Chloroethane	20	U	0.20	20
1,1-Dichloroethene	15	J	0.20	20
Carbon disulfide	20	U	0.20	20
Acetone	1.6	J B	0.20	20
Methylene Chloride	1.5	J B	0.20	20
1,1-Dichloroethane	27		0.20	20
Methyl Ethyl Ketone	20	U	0.20	20
Chloroform	20	U	0.20	20
1,1,1-Trichloroethane	270		0.20	20
Carbon tetrachloride	20	U	0.20	20
Benzene	20	U	0.20	20
1,2-Dichloroethane	20	U	0.20	20
Trichloroethene	55		0.20	20
1,2-Dichloropropane	20	U	0.20	20
Bromodichloromethane	20	U	0.20	20
cis-1,3-Dichloropropene	20	U	0.20	20
methyl isobutyl ketone	20	U	0.20	20
Toluene	20	U	0.20	20
trans-1,3-Dichloropropene	20	U	0.20	20
1,1,2-Trichloroethane	20	U	0.20	20
Tetrachloroethene	20	U	0.20	20
2-Hexanone	20	U	0.20	20
Dibromochloromethane	20	U	0.20	20
Chlorobenzene	20	U	0.20	20
Ethylbenzene	20	U	0.20	20
Styrene	20	U	0.20	20
Bromoform	20	U	0.20	20
1,1,2,2-Tetrachloroethane	20	U	0.20	20
Xylenes, Total	20	U	0.20	20
cis-1,2-Dichloroethene	71		0.20	20
trans-1,2-Dichloroethene	20	U	0.20	20
Dichlorodifluoromethane	20	U	0.20	20
Trichlorofluoromethane	20	U	0.20	20
1,1,2-Trichloro-1,2,2-trifluoroethane	5.8	J	0.20	20
Methyl tert-butyl ether	4.3	J	0.20	20
1,2-Dibromoethane	20	U	0.20	20
Isopropylbenzene	20	U	0.20	20
1,3-Dichlorobenzene	20	U	0.20	20
1,4-Dichlorobenzene	20	U	0.20	20
1,2-Dichlorobenzene	20	U	0.20	20
1,2-Dibromo-3-Chloropropane	20	U	0.20	20

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-5237-1

Date Sampled: 05/30/2008 0735

Client Matrix: Water

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4277.D
Dilution:	2.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 2237	Run Type:	DL	Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 2237				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	20	U	0.20	20
Methyl acetate	20	U	0.20	20
Cyclohexane	20	U	0.20	20
Methylcyclohexane	20	U	0.20	20
Surrogate		%Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	106		76 - 114	
4-Bromofluorobenzene	89		86 - 115	
Toluene-d8 (Surr)	100		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-5237-1

Date Sampled: 05/30/2008 0735

Client Matrix: Water

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4277.D
Dilution:	2.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 2237	Run Type:	DL	Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 2237				

Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Client Sample ID: WELL 1-1A EFF

Lab Sample ID: 220-5237-2

Client Matrix: Water

Date Sampled: 05/30/2008 0745
Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4273.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 1936			Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 1936				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	1.2	J B	0.10	10
Methylene Chloride	0.34	J B	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	0.30	J	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	0.23	J	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: WELL 1-1A EFF

Lab Sample ID: 220-5237-2

Date Sampled: 05/30/2008 0745

Client Matrix: Water

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B	Lab File ID:	Y4273.D		
Dilution:	1.0	Initial Weight/Volume:	5 mL		
Date Analyzed:	06/09/2008 1936	Final Weight/Volume:	5 mL		
Date Prepared:	06/09/2008 1936				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	103		76 - 114	
4-Bromofluorobenzene	90		86 - 115	
Toluene-d8 (Surr)	103		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: WELL 1-1A EFF

Lab Sample ID: 220-5237-2

Date Sampled: 05/30/2008 0745

Client Matrix: Water

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4273.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 1936			Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 1936				

Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5237-3TB

Client Matrix: Water

Date Sampled: 05/30/2008 0000
Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4272.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 1909			Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 1909				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	0.62	J B	0.10	10
Methylene Chloride	0.60	J B	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5237-3TB

Date Sampled: 05/30/2008 0000

Client Matrix: Water

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B	Lab File ID:	Y4272.D	Initial Weight/Volume:	5 mL
Dilution:	1.0	Final Weight/Volume:	5 mL	MDL:	
Date Analyzed:	06/09/2008 1909			RL:	
Date Prepared:	06/09/2008 1909				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107		76 - 114	
4-Bromofluorobenzene	92		86 - 115	
Toluene-d8 (Surr)	102		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5237-3TB

Date Sampled: 05/30/2008 0000

Client Matrix: Water

Date Received: 05/31/2008 1050

OLM04.2/Vol CLP Volatile Organic Compounds

Method:	OLM04.2/Vol	Analysis Batch:	220-16832	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	Y4272.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	06/09/2008 1909			Final Weight/Volume:	5 mL
Date Prepared:	06/09/2008 1909				

Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Surrogate Recovery Report

OLM04.2/Vol CLP Volatile Organic Compounds

Client Matrix: Water

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec
220-5237-1	WELL 1-1A INF	100	101	90
220-5237-1 DL	WELL 1-1A INF DL	106	100	89
220-5237-2	WELL 1-1A EFF	103	103	90
220-5237-3	TRIP BLANK	107	102	92
MB 220-16832/7		100	104	94
LCS 220-16832/8		102	100	97

Surrogate	Acceptance Limits
12DCE = 1,2-Dichloroethane-d4 (Surr)	76-114
TOL = Toluene-d8 (Surr)	88-110
BFB = 4-Bromofluorobenzene	86-115

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Method Blank - Batch: 220-16832

Lab Sample ID: MB 220-16832/7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/09/2008 1749
Date Prepared: 06/09/2008 1749

Analysis Batch: 220-16832
Prep Batch: N/A
Units: ug/L

Method: OLM04.2/Vol
Preparation: 5030B

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4269.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	0.45	J	0.10	10
Methylene Chloride	1.1	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Method Blank - Batch: 220-16832

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MB 220-16832/7

Analysis Batch: 220-16832

Instrument ID: HP 6890/5973 GC/MS

Client Matrix: Water

Prep Batch: N/A

Lab File ID: Y4269.D

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 5 mL

Date Analyzed: 06/09/2008 1749

Final Weight/Volume: 5 mL

Date Prepared: 06/09/2008 1749

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		76 - 114	
4-Bromofluorobenzene	94		86 - 115	
Toluene-d8 (Surr)	104		88 - 110	

Method Blank TICs- Batch: 220-16832

Cas Number	Analyte	RT	Est. Result	Qual
	Tentatively Identified Compound		None	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

Lab Control Spike - Batch: 220-16832

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-16832/8
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/09/2008 1815
Date Prepared: 06/09/2008 1815

Analysis Batch: 220-16832
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4270.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	18.7	93	61 - 145	
Benzene	20.0	18.9	95	76 - 127	
Trichloroethene	20.0	18.9	94	71 - 120	
Toluene	20.0	19.4	97	76 - 125	
Chlorobenzene	20.0	19.7	99	75 - 130	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		102		76 - 114	
4-Bromofluorobenzene		97		86 - 115	
Toluene-d8 (Surr)		100		88 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1

Sdg Number: 220-5237

Lab Section	Qualifier	Description
GC/MS VOA	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
	B	The analyte was found in an associated blank, as well as in the sample.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
Sdg Number: 220-5237

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-16832					
LCS 220-16832/8	Lab Control Spike	T	Water	OLM04.2/Vol	
MB 220-16832/7	Method Blank	T	Water	OLM04.2/Vol	
220-5237-1	WELL 1-1A INF	T	Water	OLM04.2/Vol	
220-5237-1DL	WELL 1-1A INF	T	Water	OLM04.2/Vol	
220-5237-2	WELL 1-1A EFF	T	Water	OLM04.2/Vol	
220-5237-3TB	TRIP BLANK	T	Water	OLM04.2/Vol	

Report Basis

T = Total

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5237-1
SDG: 220-5237

Laboratory Chronicle

Lab ID: 220-5237-1

Client ID: WELL 1-1A INF

Sample Date/Time: 05/30/2008 07:35 Received Date/Time: 05/31/2008 10:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-5237-A-1		220-16832		06/09/2008 20:02	1	TAL CT	DH
A:OLM04.2/Vol	220-5237-A-1		220-16832		06/09/2008 20:02	1	TAL CT	DH
P:5030B	220-5237-A-1	DL	220-16832		06/09/2008 22:37	2	TAL CT	DH
A:OLM04.2/Vol	220-5237-A-1	DL	220-16832		06/09/2008 22:37	2	TAL CT	DH

Lab ID: 220-5237-2

Client ID: WELL 1-1A EFF

Sample Date/Time: 05/30/2008 07:45 Received Date/Time: 05/31/2008 10:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-5237-A-2		220-16832		06/09/2008 19:36	1	TAL CT	DH
A:OLM04.2/Vol	220-5237-A-2		220-16832		06/09/2008 19:36	1	TAL CT	DH

Lab ID: 220-5237-3

Client ID: TRIP BLANK

Sample Date/Time: 05/30/2008 00:00 Received Date/Time: 05/31/2008 10:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-5237-A-3		220-16832		06/09/2008 19:09	1	TAL CT	DH
A:OLM04.2/Vol	220-5237-A-3		220-16832		06/09/2008 19:09	1	TAL CT	DH

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 220-16832/7		220-16832		06/09/2008 17:49	1	TAL CT	DH
A:OLM04.2/Vol	MB 220-16832/7		220-16832		06/09/2008 17:49	1	TAL CT	DH

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 220-16832/8		220-16832		06/09/2008 18:15	1	TAL CT	DH
A:OLM04.2/Vol	LCS 220-16832/8		220-16832		06/09/2008 18:15	1	TAL CT	DH

Lab References:

TAL CT = TestAmerica Connecticut

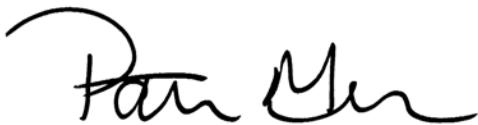
ANALYTICAL REPORT

Job Number: 220-5672-1

SDG Number: 220-5672

Job Description: NYSDEC Standby - Vestal Water Supply

For:
Malcolm Pirnie, Inc.
43 British American Boulevard
1st Floor
Latham, NY 12110
Attention: Mr. Jeremy Wyckoff



Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
07/16/2008

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.

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TestAmerica Laboratories, Inc.

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



Case Narrative for Job: 220-5672-1

Client: **Malcolm Pirnie, Inc.**

Date: July 16, 2008

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

July 16, 2008

Date

**Job Narrative
220-J5672-1**

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

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

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

SemiVolatiles

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

Pesticides

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

PCBs for compound/retention time

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

DRO/CTETPH

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

AX = area of the target Ion

AIS = Area of Internal standard

C = concentration as ug/L or ug/Kg

DF = dilution

IS = Internal standard concentration (ng)

RRF = average RF (from initial cal except CLP methods from continuing cal)

V = sample volume for liquids in mls or sample weight for solids in grams

VA = volume of aliquot for medium level soils

VE = volume of concentrated extract

VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-5672-1	WELL 1-1A INF	Water	06/27/2008 1035	06/28/2008 1048
220-5672-2	WELL 1-1A EFF	Water	06/27/2008 1045	06/28/2008 1048
220-5672-3TB	TRIP BLANK	Water	06/27/2008 0000	06/28/2008 1048

METHOD SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Description	Lab Location	Method	Preparation Method
Matrix Water			
Volatile Organic Compounds by GC/MS Purge-and-Trap	TAL CT TAL CT	SW846 8260B 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: 220-5672-1
Sdg Number: 220-5672

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1

Sdg Number: 220-5672

Client Sample ID: WELL 1-1A INF

Lab Sample ID: 220-5672-1

Date Sampled: 06/27/2008 1035

Client Matrix: Water

Date Received: 06/28/2008 1048

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	220-17868	Instrument ID:	HP 6890/5973 GC/MS
Preparation:	5030B			Lab File ID:	W7269.D
Dilution:	4.0			Initial Weight/Volume:	5 mL
Date Analyzed:	07/10/2008 2015			Final Weight/Volume:	5 mL
Date Prepared:	07/10/2008 2015				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11	J B	6.4	40
Benzene	20	U	0.92	20
Bromodichloromethane	20	U	0.96	20
Bromoform	20	U	4.6	20
Bromomethane	20	U	4.1	20
Methyl Ethyl Ketone	40	U	4.2	40
Carbon disulfide	20	U	0.56	20
Carbon tetrachloride	20	U	1.2	20
Chlorobenzene	20	U	0.60	20
Chloroethane	20	U	1.9	20
Chloroform	20	U	1.1	20
Chloromethane	20	U	0.96	20
Dibromochloromethane	20	U	0.84	20
1,1-Dichloroethane	28		0.92	20
1,2-Dichloroethane	20	U	1.0	20
1,1-Dichloroethene	20	J	1.0	20
1,2-Dichloropropane	20	U	1.3	20
cis-1,3-Dichloropropene	20	U	1.1	20
trans-1,3-Dichloropropene	20	U	1.1	20
Ethylbenzene	20	U	1.1	20
2-Hexanone	40	U	1.5	40
Methylene Chloride	3.5	J B	1.0	20
methyl isobutyl ketone	40	U	1.5	40
Styrene	20	U	2.8	20
1,1,2,2-Tetrachloroethane	20	U	0.92	20
Tetrachloroethene	20	U	1.2	20
Toluene	20	U	0.36	20
1,1,1-Trichloroethane	290		1.5	20
1,1,2-Trichloroethane	20	U	1.3	20
Trichloroethene	64		1.0	20
Vinyl chloride	6.7	J	1.2	20
Xylenes, Total	20	U	1.8	20
cis-1,2-Dichloroethene	77		1.3	20
trans-1,2-Dichloroethene	20	U	0.88	20
Surrogate		%Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	91		53 - 125	
4-Bromofluorobenzene	107		73 - 127	
Dibromofluoromethane	96		54 - 137	
Toluene-d8 (Surr)	92		63 - 121	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1

Sdg Number: 220-5672

Client Sample ID: WELL 1-1A EFF

Lab Sample ID: 220-5672-2

Client Matrix: Water

Date Sampled: 06/27/2008 1045

Date Received: 06/28/2008 1048

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	220-17835	Instrument ID:	HP 5890/5971 GC/MS
Preparation:	5030B			Lab File ID:	L7916.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	07/08/2008 2156			Final Weight/Volume:	5 mL
Date Prepared:	07/08/2008 2156				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.6	10
Benzene	5.0	U	0.23	5.0
Bromodichloromethane	5.0	U	0.24	5.0
Bromoform	5.0	U	1.2	5.0
Bromomethane	5.0	U	1.0	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U *	0.14	5.0
Carbon tetrachloride	5.0	U	0.29	5.0
Chlorobenzene	5.0	U	0.15	5.0
Chloroethane	5.0	U *	0.48	5.0
Chloroform	5.0	U	0.27	5.0
Chloromethane	5.0	U	0.24	5.0
Dibromochloromethane	5.0	U	0.21	5.0
1,1-Dichloroethane	5.0	U	0.23	5.0
1,2-Dichloroethane	5.0	U	0.25	5.0
1,1-Dichloroethene	5.0	U *	0.25	5.0
1,2-Dichloropropane	5.0	U	0.32	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.28	5.0
Ethylbenzene	5.0	U	0.28	5.0
2-Hexanone	10	U	0.37	10
Methylene Chloride	5.0	U	0.26	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.70	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.23	5.0
Tetrachloroethene	5.0	U	0.30	5.0
Toluene	5.0	U	0.090	5.0
1,1,1-Trichloroethane	5.0	U	0.38	5.0
1,1,2-Trichloroethane	5.0	U	0.33	5.0
Trichloroethene	5.0	U	0.26	5.0
Vinyl chloride	5.0	U	0.30	5.0
Xylenes, Total	5.0	U	0.46	5.0
cis-1,2-Dichloroethene	5.0	U	0.33	5.0
trans-1,2-Dichloroethene	5.0	U	0.22	5.0
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	68		53 - 125	
4-Bromofluorobenzene	102		73 - 127	
Dibromofluoromethane	74		54 - 137	
Toluene-d8 (Surr)	76		63 - 121	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5672-3TB

Date Sampled: 06/27/2008 0000

Client Matrix: Water

Date Received: 06/28/2008 1048

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	220-17835	Instrument ID:	HP 5890/5971 GC/MS
Preparation:	5030B			Lab File ID:	L7917.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	07/08/2008 2221			Final Weight/Volume:	5 mL
Date Prepared:	07/08/2008 2221				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.6	10
Benzene	5.0	U	0.23	5.0
Bromodichloromethane	5.0	U	0.24	5.0
Bromoform	5.0	U	1.2	5.0
Bromomethane	5.0	U	1.0	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U *	0.14	5.0
Carbon tetrachloride	5.0	U	0.29	5.0
Chlorobenzene	5.0	U	0.15	5.0
Chloroethane	5.0	U *	0.48	5.0
Chloroform	5.0	U	0.27	5.0
Chloromethane	5.0	U	0.24	5.0
Dibromochloromethane	5.0	U	0.21	5.0
1,1-Dichloroethane	5.0	U	0.23	5.0
1,2-Dichloroethane	5.0	U	0.25	5.0
1,1-Dichloroethene	5.0	U *	0.25	5.0
1,2-Dichloropropane	5.0	U	0.32	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.28	5.0
Ethylbenzene	5.0	U	0.28	5.0
2-Hexanone	10	U	0.37	10
Methylene Chloride	1.1	J B	0.26	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.70	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.23	5.0
Tetrachloroethene	5.0	U	0.30	5.0
Toluene	5.0	U	0.090	5.0
1,1,1-Trichloroethane	5.0	U	0.38	5.0
1,1,2-Trichloroethane	5.0	U	0.33	5.0
Trichloroethene	5.0	U	0.26	5.0
Vinyl chloride	0.35	J	0.30	5.0
Xylenes, Total	5.0	U	0.46	5.0
cis-1,2-Dichloroethene	5.0	U	0.33	5.0
trans-1,2-Dichloroethene	5.0	U	0.22	5.0
Surrogate		%Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		67	53 - 125	
4-Bromofluorobenzene		100	73 - 127	
Dibromofluoromethane		69	54 - 137	
Toluene-d8 (Surr)		73	63 - 121	

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Surrogate Recovery Report

8260B Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	12DCE %Rec	TOL %Rec	BFB %Rec
220-5672-1	WELL 1-1A INF	96	91	92	107
220-5672-2	WELL 1-1A EFF	74	68	76	102
220-5672-3	TRIP BLANK	69	67	73	100
MB 220-17835/3		78	74	81	104
MB 220-17868/3		91	87	92	110
LCS 220-17835/2		90	88	92	95
LCS 220-17868/2		102	94	102	116
MSB 220-17835/10		76	75	78	74
MSB 220-17868/13		92	88	90	96
220-5719-L-11 MS		78	79	81	77
220-5662-F-5 MS		96	90	95	105
220-5719-L-11 MSD		84	81	85	78
220-5662-F-5 MSD		85	79	86	95

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	54-137
12DCE = 1,2-Dichloroethane-d4 (Surr)	53-125
TOL = Toluene-d8 (Surr)	63-121
BFB = 4-Bromofluorobenzene	73-127

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Method Blank - Batch: 220-17835

Lab Sample ID: MB 220-17835/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/08/2008 1319
Date Prepared: 07/08/2008 1319

Analysis Batch: 220-17835
Prep Batch: N/A
Units: ug/L

Method: 8260B
Preparation: 5030B

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L7895.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	10	U	1.6	10
Benzene	5.0	U	0.23	5.0
Bromodichloromethane	5.0	U	0.24	5.0
Bromoform	5.0	U	1.2	5.0
Bromomethane	5.0	U	1.0	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.14	5.0
Carbon tetrachloride	5.0	U	0.29	5.0
Chlorobenzene	5.0	U	0.15	5.0
Chloroethane	5.0	U	0.48	5.0
Chloroform	5.0	U	0.27	5.0
Chloromethane	5.0	U	0.24	5.0
Dibromochloromethane	5.0	U	0.21	5.0
1,1-Dichloroethane	5.0	U	0.23	5.0
1,2-Dichloroethane	5.0	U	0.25	5.0
1,1-Dichloroethene	5.0	U	0.25	5.0
1,2-Dichloropropane	5.0	U	0.32	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.28	5.0
Ethylbenzene	5.0	U	0.28	5.0
2-Hexanone	10	U	0.37	10
Methylene Chloride	0.36	J	0.26	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.70	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.23	5.0
Tetrachloroethene	5.0	U	0.30	5.0
Toluene	5.0	U	0.090	5.0
1,1,1-Trichloroethane	5.0	U	0.38	5.0
1,1,2-Trichloroethane	5.0	U	0.33	5.0
Trichloroethene	5.0	U	0.26	5.0
Vinyl chloride	5.0	U	0.30	5.0
Xylenes, Total	5.0	U	0.46	5.0
cis-1,2-Dichloroethene	5.0	U	0.33	5.0
trans-1,2-Dichloroethene	5.0	U	0.22	5.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	74		53 - 125	
4-Bromofluorobenzene	104		73 - 127	
Dibromofluoromethane	78		54 - 137	
Toluene-d8 (Surr)	81		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Lab Control Spike - Batch: 220-17835

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 220-17835/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/08/2008 1205
Date Prepared: 07/08/2008 1205

Analysis Batch: 220-17835
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L7892.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	35.0	175	18 - 263	
Benzene	20.0	21.9	110	68 - 126	
Bromodichloromethane	20.0	20.1	100	67 - 118	
Bromoform	20.0	17.4	87	63 - 115	
Bromomethane	20.0	19.1	95	27 - 171	
Methyl Ethyl Ketone	20.0	28.1	141	30 - 222	
Carbon disulfide	20.0	32.4	162	44 - 142	*
Carbon tetrachloride	20.0	22.5	112	56 - 131	
Chlorobenzene	20.0	19.0	95	71 - 114	
Chloroethane	20.0	18.5	92	53 - 167	
Chloroform	20.0	21.7	109	70 - 124	
Chloromethane	20.0	15.7	79	43 - 134	
Dibromochloromethane	20.0	19.0	95	65 - 114	
1,1-Dichloroethane	20.0	22.9	115	67 - 121	
1,2-Dichloroethane	20.0	20.4	102	68 - 124	
1,1-Dichloroethene	20.0	28.7	143	57 - 137	*
1,2-Dichloropropane	20.0	20.5	102	69 - 122	
cis-1,3-Dichloropropene	20.0	20.1	100	60 - 122	
trans-1,3-Dichloropropene	20.0	19.0	95	55 - 126	
Ethylbenzene	20.0	19.8	99	71 - 115	
2-Hexanone	20.0	21.8	109	54 - 179	
Methylene Chloride	20.0	24.2	121	61 - 129	
methyl isobutyl ketone	20.0	19.1	96	61 - 140	
Styrene	20.0	17.7	89	69 - 112	
1,1,2,2-Tetrachloroethane	20.0	19.8	99	66 - 129	
Tetrachloroethene	20.0	20.5	103	62 - 118	
Toluene	20.0	20.4	102	70 - 116	
1,1,1-Trichloroethane	20.0	21.5	108	60 - 128	
1,1,2-Trichloroethane	20.0	20.9	104	70 - 119	
Trichloroethene	20.0	22.1	110	58 - 125	
Vinyl chloride	20.0	17.3	87	51 - 139	
Xylenes, Total	60.0	58.5	98	66 - 118	
cis-1,2-Dichloroethene	20.0	22.3	111	65 - 120	
trans-1,2-Dichloroethene	20.0	23.8	119	57 - 129	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		88		53 - 125	
4-Bromofluorobenzene		95		73 - 127	
Dibromofluoromethane		90		54 - 137	
Toluene-d8 (Surr)		92		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Matrix Spike Blank - Batch: 220-17835

Method: 8260B
Preparation: 5030B

Lab Sample ID: MSB 220-17835/10
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/08/2008 1636
Date Prepared: 07/08/2008 1636

Analysis Batch: 220-17835
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L7903.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	50.0	44.4	89	18 - 263	
Benzene	50.0	49.4	99	68 - 126	
Bromodichloromethane	50.0	47.8	96	67 - 118	
Bromoform	50.0	46.1	92	63 - 115	
Bromomethane	50.0	33.8	68	27 - 171	
Methyl Ethyl Ketone	50.0	45.9	92	30 - 222	
Carbon disulfide	50.0	59.0	118	44 - 142	
Carbon tetrachloride	50.0	47.6	95	56 - 131	
Chlorobenzene	50.0	45.9	92	71 - 114	
Chloroethane	50.0	25.5	51	53 - 167	*
Chloroform	50.0	49.2	98	70 - 124	
Chloromethane	50.0	41.5	83	43 - 134	
Dibromochloromethane	50.0	46.1	92	65 - 114	
1,1-Dichloroethane	50.0	51.3	103	67 - 121	
1,2-Dichloroethane	50.0	48.1	96	68 - 124	
1,1-Dichloroethene	50.0	58.4	117	57 - 137	
1,2-Dichloropropane	50.0	48.1	96	69 - 122	
cis-1,3-Dichloropropene	50.0	48.4	97	60 - 122	
trans-1,3-Dichloropropene	50.0	47.9	96	55 - 126	
Ethylbenzene	50.0	46.4	93	71 - 115	
2-Hexanone	50.0	50.5	101	54 - 179	
Methylene Chloride	50.0	55.3	111	61 - 129	
methyl isobutyl ketone	50.0	47.0	94	61 - 140	
Styrene	50.0	47.2	94	69 - 112	
1,1,2,2-Tetrachloroethane	50.0	45.2	90	66 - 129	
Tetrachloroethene	50.0	47.5	95	62 - 118	
Toluene	50.0	46.1	92	70 - 116	
1,1,1-Trichloroethane	50.0	46.7	93	60 - 128	
1,1,2-Trichloroethane	50.0	48.6	97	70 - 119	
Trichloroethene	50.0	46.9	94	58 - 125	
Vinyl chloride	50.0	42.3	85	51 - 139	
Xylenes, Total	150	140	94	66 - 118	
cis-1,2-Dichloroethene	50.0	52.5	105	65 - 120	
trans-1,2-Dichloroethene	50.0	50.7	101	57 - 129	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		75		53 - 125	
4-Bromofluorobenzene		74		73 - 127	
Dibromofluoromethane		76		54 - 137	
Toluene-d8 (Surr)		78		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 220-17835

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 220-5719-L-11 MS Analysis Batch: 220-17835
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 07/08/2008 1522
Date Prepared: 07/08/2008 1522

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L7900.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 220-5719-L-11 MSD Analysis Batch: 220-17835
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 07/08/2008 1546
Date Prepared: 07/08/2008 1546

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L7901.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	84	93	18 - 263	10	20		
Benzene	105	102	68 - 126	3	20		
Bromodichloromethane	101	99	67 - 118	2	20		
Bromoform	94	101	63 - 115	6	20		
Bromomethane	96	95	27 - 171	2	20		
Methyl Ethyl Ketone	89	100	30 - 222	11	20		
Carbon disulfide	136	134	44 - 142	1	20		
Carbon tetrachloride	106	103	56 - 131	3	20		
Chlorobenzene	96	97	71 - 114	2	20		
Chloroethane	103	99	53 - 167	4	20		
Chloroform	105	101	70 - 124	4	20		
Chloromethane	97	95	43 - 134	2	20		
Dibromochloromethane	96	101	65 - 114	5	20		
1,1-Dichloroethane	109	107	67 - 121	2	20		
1,2-Dichloroethane	100	102	68 - 124	2	20		
1,1-Dichloroethene	129	124	57 - 137	4	20		
1,2-Dichloropropane	101	98	69 - 122	3	20		
cis-1,3-Dichloropropene	98	98	60 - 122	0	20		
trans-1,3-Dichloropropene	99	95	55 - 126	4	20		
Ethylbenzene	96	99	71 - 115	4	20		
2-Hexanone	99	112	54 - 179	12	20		
Methylene Chloride	111	111	61 - 129	0	20		
methyl isobutyl ketone	98	110	61 - 140	12	20		
Styrene	98	97	69 - 112	1	20		
1,1,2,2-Tetrachloroethane	98	97	66 - 129	2	20		
Tetrachloroethene	98	99	62 - 118	1	20		
Toluene	98	101	70 - 116	2	20		
1,1,1-Trichloroethane	104	99	60 - 128	4	20		
1,1,2-Trichloroethane	102	100	70 - 119	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 220-17835

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 220-5719-L-11 MS Analysis Batch: 220-17835
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 07/08/2008 1522
Date Prepared: 07/08/2008 1522

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L7900.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 220-5719-L-11 MSD Analysis Batch: 220-17835
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 07/08/2008 1546
Date Prepared: 07/08/2008 1546

Instrument ID: HP 5890/5971 GC/MS
Lab File ID: L7901.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Trichloroethene	99	98	58 - 125	1	20		
Vinyl chloride	102	97	51 - 139	5	20		
Xylenes, Total	96	98	66 - 118	3	20		
cis-1,2-Dichloroethene	113	107	65 - 120	5	20		
trans-1,2-Dichloroethene	110	107	57 - 129	3	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	79		81		53 - 125		
4-Bromofluorobenzene	77		78		73 - 127		
Dibromofluoromethane	78		84		54 - 137		
Toluene-d8 (Surr)	81		85		63 - 121		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Method Blank - Batch: 220-17868

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 220-17868/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/10/2008 1429
Date Prepared: 07/10/2008 1429

Analysis Batch: 220-17868
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: W7256.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	2.1	J	1.6	10
Benzene	5.0	U	0.23	5.0
Bromodichloromethane	5.0	U	0.24	5.0
Bromoform	5.0	U	1.2	5.0
Bromomethane	5.0	U	1.0	5.0
Methyl Ethyl Ketone	1.9	J	1.1	10
Carbon disulfide	5.0	U	0.14	5.0
Carbon tetrachloride	5.0	U	0.29	5.0
Chlorobenzene	5.0	U	0.15	5.0
Chloroethane	5.0	U	0.48	5.0
Chloroform	5.0	U	0.27	5.0
Chloromethane	5.0	U	0.24	5.0
Dibromochloromethane	5.0	U	0.21	5.0
1,1-Dichloroethane	5.0	U	0.23	5.0
1,2-Dichloroethane	5.0	U	0.25	5.0
1,1-Dichloroethene	5.0	U	0.25	5.0
1,2-Dichloropropane	5.0	U	0.32	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.28	5.0
Ethylbenzene	5.0	U	0.28	5.0
2-Hexanone	10	U	0.37	10
Methylene Chloride	0.59	J	0.26	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U	0.70	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.23	5.0
Tetrachloroethene	5.0	U	0.30	5.0
Toluene	5.0	U	0.090	5.0
1,1,1-Trichloroethane	5.0	U	0.38	5.0
1,1,2-Trichloroethane	5.0	U	0.33	5.0
Trichloroethene	5.0	U	0.26	5.0
Vinyl chloride	5.0	U	0.30	5.0
Xylenes, Total	5.0	U	0.46	5.0
cis-1,2-Dichloroethene	5.0	U	0.33	5.0
trans-1,2-Dichloroethene	5.0	U	0.22	5.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	87		53 - 125	
4-Bromofluorobenzene	110		73 - 127	
Dibromofluoromethane	91		54 - 137	
Toluene-d8 (Surr)	92		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Lab Control Spike - Batch: 220-17868

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 220-17868/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/10/2008 1336
Date Prepared: 07/10/2008 1336

Analysis Batch: 220-17868
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: W7254.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	14.5	145	18 - 263	
Benzene	10.0	12.1	121	68 - 126	
Bromodichloromethane	10.0	11.0	110	67 - 118	
Bromoform	10.0	9.43	94	63 - 115	
Bromomethane	10.0	8.66	87	27 - 171	
Methyl Ethyl Ketone	10.0	13.3	133	30 - 222	
Carbon disulfide	10.0	13.6	136	44 - 142	
Carbon tetrachloride	10.0	11.9	119	56 - 131	
Chlorobenzene	10.0	10.0	100	71 - 114	
Chloroethane	10.0	10.1	101	53 - 167	
Chloroform	10.0	11.5	115	70 - 124	
Chloromethane	10.0	10.2	102	43 - 134	
Dibromochloromethane	10.0	9.98	100	65 - 114	
1,1-Dichloroethane	10.0	11.3	113	67 - 121	
1,2-Dichloroethane	10.0	11.6	116	68 - 124	
1,1-Dichloroethene	10.0	12.8	128	57 - 137	
1,2-Dichloropropane	10.0	11.3	113	69 - 122	
cis-1,3-Dichloropropene	10.0	10.7	107	60 - 122	
trans-1,3-Dichloropropene	10.0	11.5	115	55 - 126	
Ethylbenzene	10.0	10.8	108	71 - 115	
2-Hexanone	10.0	9.51	95	54 - 179	J
Methylene Chloride	10.0	11.2	112	61 - 129	
methyl isobutyl ketone	10.0	10.6	106	61 - 140	
Styrene	10.0	9.84	98	69 - 112	
1,1,2,2-Tetrachloroethane	10.0	9.93	99	66 - 129	
Tetrachloroethene	10.0	10.2	102	62 - 118	
Toluene	10.0	11.3	113	70 - 116	
1,1,1-Trichloroethane	10.0	11.6	116	60 - 128	
1,1,2-Trichloroethane	10.0	11.6	116	70 - 119	
Trichloroethene	10.0	11.0	110	58 - 125	
Vinyl chloride	10.0	10.7	107	51 - 139	
Xylenes, Total	30.0	32.3	108	66 - 118	
cis-1,2-Dichloroethene	10.0	11.3	113	65 - 120	
trans-1,2-Dichloroethene	10.0	11.9	119	57 - 129	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		94		53 - 125	
4-Bromofluorobenzene		116		73 - 127	
Dibromofluoromethane		102		54 - 137	
Toluene-d8 (Surr)		102		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Matrix Spike Blank - Batch: 220-17868

Method: 8260B
Preparation: 5030B

Lab Sample ID: MSB 220-17868/13
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/10/2008 1829
Date Prepared: 07/10/2008 1829

Analysis Batch: 220-17868
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: W7265.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	18.6	93	18 - 263	
Benzene	20.0	20.2	101	68 - 126	
Bromodichloromethane	20.0	19.9	100	67 - 118	
Bromoform	20.0	18.2	91	63 - 115	
Bromomethane	20.0	10.3	51	27 - 171	
Methyl Ethyl Ketone	20.0	18.9	94	30 - 222	
Carbon disulfide	20.0	21.0	105	44 - 142	
Carbon tetrachloride	20.0	18.2	91	56 - 131	
Chlorobenzene	20.0	16.8	84	71 - 114	
Chloroethane	20.0	18.9	94	53 - 167	
Chloroform	20.0	20.1	101	70 - 124	
Chloromethane	20.0	19.7	99	43 - 134	
Dibromochloromethane	20.0	18.1	90	65 - 114	
1,1-Dichloroethane	20.0	19.6	98	67 - 121	
1,2-Dichloroethane	20.0	20.9	104	68 - 124	
1,1-Dichloroethene	20.0	19.3	97	57 - 137	
1,2-Dichloropropane	20.0	20.0	100	69 - 122	
cis-1,3-Dichloropropene	20.0	21.2	106	60 - 122	
trans-1,3-Dichloropropene	20.0	22.1	110	55 - 126	
Ethylbenzene	20.0	17.7	88	71 - 115	
2-Hexanone	20.0	20.6	103	54 - 179	
Methylene Chloride	20.0	18.9	94	61 - 129	
methyl isobutyl ketone	20.0	19.7	98	61 - 140	
Styrene	20.0	19.5	98	69 - 112	
1,1,2,2-Tetrachloroethane	20.0	15.8	79	66 - 129	
Tetrachloroethene	20.0	16.0	80	62 - 118	
Toluene	20.0	18.3	91	70 - 116	
1,1,1-Trichloroethane	20.0	18.8	94	60 - 128	
1,1,2-Trichloroethane	20.0	20.9	105	70 - 119	
Trichloroethene	20.0	19.0	95	58 - 125	
Vinyl chloride	20.0	17.1	86	51 - 139	
Xylenes, Total	60.0	54.3	90	66 - 118	
cis-1,2-Dichloroethene	20.0	19.9	100	65 - 120	
trans-1,2-Dichloroethene	20.0	19.5	97	57 - 129	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		88		53 - 125	
4-Bromofluorobenzene		96		73 - 127	
Dibromofluoromethane		92		54 - 137	
Toluene-d8 (Surr)		90		63 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 220-17868

**Method: 8260B
Preparation: 5030B**

MS Lab Sample ID:	220-5662-F-5 MS	Analysis Batch:	220-17868	Instrument ID:	HP 6890/5973 GC/MS
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W7266.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	07/10/2008 1855			Final Weight/Volume:	5 mL
Date Prepared:	07/10/2008 1855				

MSD Lab Sample ID:	220-5662-F-5 MSD	Analysis Batch:	220-17868	Instrument ID:	HP 6890/5973 GC/MS
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	W7267.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	07/10/2008 1922			Final Weight/Volume:	5 mL
Date Prepared:	07/10/2008 1922				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	83	74	18 - 263	10	20		
Benzene	98	83	68 - 126	16	20		
Bromodichloromethane	96	82	67 - 118	15	20		
Bromoform	88	80	63 - 115	10	20		
Bromomethane	50	43	27 - 171	16	20		
Methyl Ethyl Ketone	85	75	30 - 222	12	20		
Carbon disulfide	105	87	44 - 142	19	20		
Carbon tetrachloride	94	77	56 - 131	19	20		
Chlorobenzene	83	72	71 - 114	14	20		
Chloroethane	96	89	53 - 167	8	20		
Chloroform	94	82	70 - 124	14	20		
Chloromethane	96	88	43 - 134	9	20		
Dibromochloromethane	89	77	65 - 114	14	20		
1,1-Dichloroethane	93	81	67 - 121	14	20		
1,2-Dichloroethane	98	87	68 - 124	12	20		
1,1-Dichloroethene	97	81	57 - 137	18	20		
1,2-Dichloropropane	97	86	69 - 122	12	20		
cis-1,3-Dichloropropene	92	82	60 - 122	12	20		
trans-1,3-Dichloropropene	106	91	55 - 126	15	20		
Ethylbenzene	89	75	71 - 115	17	20		
2-Hexanone	99	90	54 - 179	10	20		
Methylene Chloride	89	78	61 - 129	13	20		
methyl isobutyl ketone	100	90	61 - 140	11	20		
Styrene	96	84	69 - 112	14	20		
1,1,2,2-Tetrachloroethane	82	72	66 - 129	13	20		
Tetrachloroethene	79	67	62 - 118	16	20		
Toluene	90	77	70 - 116	16	20		
1,1,1-Trichloroethane	94	76	60 - 128	21	20		*
1,1,2-Trichloroethane	98	86	70 - 119	13	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 220-17868

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 220-5662-F-5 MS Analysis Batch: 220-17868
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 07/10/2008 1855
Date Prepared: 07/10/2008 1855

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: W7266.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 220-5662-F-5 MSD Analysis Batch: 220-17868
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 07/10/2008 1922
Date Prepared: 07/10/2008 1922

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: W7267.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Trichloroethene	90	77	58 - 125	16	20		
Vinyl chloride	86	75	51 - 139	14	20		
Xylenes, Total	90	77	66 - 118	15	20		
cis-1,2-Dichloroethene	95	83	65 - 120	13	20		
trans-1,2-Dichloroethene	94	80	57 - 129	16	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	90		79		53 - 125		
4-Bromofluorobenzene	105		95		73 - 127		
Dibromofluoromethane	96		85		54 - 137		
Toluene-d8 (Surr)	95		86		63 - 121		

Calculations are performed before rounding to avoid round-off errors in calculated results.

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1

Sdg Number: 220-5672

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	*	Duplicate RPD exceeds control limits
	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.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
Sdg Number: 220-5672

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:220-17835					
LCS 220-17835/2	Lab Control Spike	T	Water	8260B	
MSB 220-17835/10	Matrix Spike Blank	T	Water	8260B	
MB 220-17835/3	Method Blank	T	Water	8260B	
220-5672-2	WELL 1-1A EFF	T	Water	8260B	
220-5672-3TB	TRIP BLANK	T	Water	8260B	
220-5719-L-11 MS	Matrix Spike	T	Water	8260B	
220-5719-L-11 MSD	Matrix Spike Duplicate	T	Water	8260B	
Analysis Batch:220-17868					
LCS 220-17868/2	Lab Control Spike	T	Water	8260B	
MSB 220-17868/13	Matrix Spike Blank	T	Water	8260B	
MB 220-17868/3	Method Blank	T	Water	8260B	
220-5662-F-5 MS	Matrix Spike	T	Water	8260B	
220-5662-F-5 MSD	Matrix Spike Duplicate	T	Water	8260B	
220-5672-1	WELL 1-1A INF	T	Water	8260B	

Report Basis

T = Total

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
SDG: 220-5672

Laboratory Chronicle

Lab ID: 220-5672-1

Client ID: WELL 1-1A INF

Sample Date/Time: 06/27/2008 10:35 Received Date/Time: 06/28/2008 10:48

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-5672-B-1		220-17868		07/10/2008 20:15	4	TAL CT	BK
A:8260B	220-5672-B-1		220-17868		07/10/2008 20:15	4	TAL CT	BK

Lab ID: 220-5672-2

Client ID: WELL 1-1A EFF

Sample Date/Time: 06/27/2008 10:45 Received Date/Time: 06/28/2008 10:48

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-5672-B-2		220-17835		07/08/2008 21:56	1	TAL CT	BK
A:8260B	220-5672-B-2		220-17835		07/08/2008 21:56	1	TAL CT	BK

Lab ID: 220-5672-3

Client ID: TRIP BLANK

Sample Date/Time: 06/27/2008 00:00 Received Date/Time: 06/28/2008 10:48

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	220-5672-A-3		220-17835		07/08/2008 22:21	1	TAL CT	BK
A:8260B	220-5672-A-3		220-17835		07/08/2008 22:21	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 220-17835/3		220-17835		07/08/2008 13:19	1	TAL CT	BK
A:8260B	MB 220-17835/3		220-17835		07/08/2008 13:19	1	TAL CT	BK
P:5030B	MB 220-17868/3		220-17868		07/10/2008 14:29	1	TAL CT	BK
A:8260B	MB 220-17868/3		220-17868		07/10/2008 14:29	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 220-17835/2		220-17835		07/08/2008 12:05	1	TAL CT	BK
A:8260B	LCS 220-17835/2		220-17835		07/08/2008 12:05	1	TAL CT	BK
P:5030B	LCS 220-17868/2		220-17868		07/10/2008 13:36	1	TAL CT	BK
A:8260B	LCS 220-17868/2		220-17868		07/10/2008 13:36	1	TAL CT	BK

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5672-1
SDG: 220-5672

Laboratory Chronicle

Lab ID: MSB

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	MSB 220-17835/10		220-17835		07/08/2008	16:36	1	TAL CT	BK
A:8260B	MSB 220-17835/10		220-17835		07/08/2008	16:36	1	TAL CT	BK
P:5030B	MSB 220-17868/13		220-17868		07/10/2008	18:29	1	TAL CT	BK
A:8260B	MSB 220-17868/13		220-17868		07/10/2008	18:29	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	220-5719-L-11 MS		220-17835		07/08/2008	15:22	1	TAL CT	BK
A:8260B	220-5719-L-11 MS		220-17835		07/08/2008	15:22	1	TAL CT	BK
P:5030B	220-5662-F-5 MS		220-17868		07/10/2008	18:55	1	TAL CT	BK
A:8260B	220-5662-F-5 MS		220-17868		07/10/2008	18:55	1	TAL CT	BK

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	220-5719-L-11 MSD		220-17835		07/08/2008	15:46	1	TAL CT	BK
A:8260B	220-5719-L-11 MSD		220-17835		07/08/2008	15:46	1	TAL CT	BK
P:5030B	220-5662-F-5 MSD		220-17868		07/10/2008	19:22	1	TAL CT	BK
A:8260B	220-5662-F-5 MSD		220-17868		07/10/2008	19:22	1	TAL CT	BK

Lab References:

TAL CT = TestAmerica Connecticut