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Long-Term Monitoring 2009 Data Summary Report

Watervliet Arsenal
Watervliet, New York

January 2010

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Report Prepared For:

U.S. Army Corps of Engineers
Baltimore District
Baltimore, Maryland
Contract No. W912DR-05-D-0004

2118157

MALCOLM PIRNIE

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1. Introduction

1.1. Purpose

Malcolm Pirnie, Inc. (Malcolm Pirnie) has been retained by the Baltimore District of the US Army Corps of Engineers (USACE) to implement the Long-Term Monitoring Plan (LTM Plan) for the Watervliet Arsenal (WVA) in Watervliet, New York. Long-term monitoring is being conducted at the WVA in support of investigations and corrective measures that have been conducted at the WVA under a United States Environmental Protection Agency (USEPA) Administrative Order on Consent (Docket No. II RCRA-3008(h)-93-0210). In accordance with the LTM Plan and its subsequent approved modifications, the purpose of this report is to summarize the data collected during the May and October 2009 monitoring events at the WVA.

1.2. Facility Description

The WVA encompasses approximately 140 acres in and around the City of Watervliet, New York, approximately 3.5 miles northeast of the City of Albany (Figure 1-1). To the east of the WVA, Broadway Street and a six-lane interstate highway (I-787) separate the WVA from the Hudson River. To the west, the WVA extends beyond the limits of the City of Watervliet into the Town of Colonie. Residential areas border the WVA to the north and south.

The WVA consists of two primary areas: (1) The "Main Manufacturing Area" (MMA), where manufacturing and administrative operations occur, comprises about 125 acres, and, (2) The "Siberia Area" (SA), which is chiefly used for the storage of raw and hazardous materials, comprises about 15 acres. These areas are shown on Figure 1-2.

1.3. Previous and Ongoing Studies

1.3.1. Main Manufacturing Area

Several environmental studies have been conducted at the MMA of the WVA. The most comprehensive investigation, an RFI, was conducted by MPI and Louis Berger & Associates, Inc. from 1995 to 1998. Previous investigations are summarized in the RFI. Two ICM studies involving in-situ groundwater remedial techniques were conducted at the MMA in the area of Buildings 25 and 40 between 2001 and 2003. Final corrective measures, in the form of in-situ chemical oxidation, were conducted at Building 40 from 2004 through 2007 in accordance with the *Corrective Measures Work Plan – Building 40 Groundwater*, dated July 2004 (Malcolm Pirnie, 2004). Monitoring of the wells in the Building 40 area (Building 40 Boundary Wells) was conducted separately under the

Corrective Measures Monitoring Plan, Building 40 Groundwater, dated August 2004 (Malcolm Pirnie, 2004a) (CMMP) during that time, until they were added to the LTM Plan in 2009 with the approval of the New York State Department of Environmental Conservation (NYSDEC).

1.3.2. Siberia Area

An RFI was conducted by Malcolm Pirnie at the Siberia Area from 1994 to 1995. Additional investigations and ICMs were completed by Malcolm Pirnie from 1996 to 2002. The CMS Report for Siberia was approved in August 2003. The CMS Certification Report was approved by the NYSDEC and USEPA in 2007. The ICMs are summarized in the CMS report. The Statement of Basis for the Siberia Area was issued in 2008.

1.4. Generalized Site Geology and Hydrogeology

1.4.1. Main Manufacturing Area

The major overburden unit identified in the MMA is fill, consisting of brown or dark gray silty sand with angular gravel. The fill material is the only unit consistently found throughout the site, with the thickest amount of fill being in the eastern portion of the MMA. Underlying the fill are the following native overburden units: a fine-grained alluvium, a coarser alluvium, and glacial till. These units are not present in all areas of the site.

The bedrock underlying the site is a black, medium-hard laminated shale, showing some characteristics of minor metamorphism. This shale is part of the Snake Hill Formation. The bedrock can be described in three ways based on the degree of weathering observed. The first is an extremely weathered zone approximately four feet thick. This extremely weathered bedrock unit was encountered at depths ranging from near ground surface to approximately 20 feet below ground surface (bgs). Beneath this extremely weathered bedrock is a zone of less weathered shale showing minimal competency. Competent bedrock is generally encountered at depths ranging from approximately 1.5 feet bgs to 18 feet bgs.

The majority of the MMA is relatively impervious to rainfall except at the residential and recreational areas of the northeastern portion of the WVA. Due to the shallow depth of bedrock and the limited amount of overburden in several areas of the WVA, groundwater is encountered within different geologic units (overburden, weathered bedrock, or bedrock) depending on the location. For instance, groundwater is encountered in the bedrock at the western end of WVA (topographic high and local recharge area); progressing eastward toward the Hudson River, groundwater is encountered in the weathered bedrock and then in the overburden deposits.

Groundwater flow in bedrock in the MMA is primarily controlled by the degree of fracturing within the bedrock itself and in the local recharge area, which is coincident with a topographic high along a bedrock ridge in the central portion of the facility. The most prominent feature on the potentiometric surface is a groundwater divide trending approximately north to south through Buildings 135 and 125. This feature appears to mirror the bedrock ridge. The primary discharge area for groundwater from the Main Manufacturing Area is the Hudson River, which is located to the east of WVA. For the area surrounding Building 25, groundwater in each of the hydrostratigraphic units flows from west to east towards the Hudson River, with a component of flow to the northeast. In the Building 40 area, groundwater in the bedrock unit flows to the east-southeast. West of the groundwater divide, shallow groundwater flow discharges toward the Kromma Kill.

1.4.2. Siberia Area

According to the "Surficial Geologic Map of New York - Hudson-Mohawk Sheet, 1987", a majority of the SA is underlain by recent alluvial deposits. These are defined as fine sand and gravel deposits overlain by silt. The SA, which is at a lower elevation than the MMA of the WVA located to the east, is generally underlain by a layer of fill (sand, shale fragments, slag, cinders, brick, wire, wood and concrete). Alluvium, lenses of peat, and lacustrine clay deposits were encountered beneath the layer of fill material. Bedrock beneath the SA is also the Snake Hill shale. During the SA investigation, highly weathered shale was encountered from approximately 3.5 feet bgs to 31 feet bgs. In general, competent bedrock was encountered at approximately 12 feet bgs. The upper portion of the competent bedrock was found to be fissile and highly fractured with 45 to 60 degree bedding planes.

Groundwater flows generally to the north-northwest in the NE Quadrant of the SA, and generally to the west across the remainder of the SA. The water table responds quickly to recharge events, and during times of low precipitation the water table may be present in the shale bedrock over portions of the SA. However, on the average, the water table is encountered in the overburden. Surface water in the SA that does not infiltrate is generally directed into the existing storm sewers. The WVA storm sewers are connected to the City of Watervliet storm sewer network.

2. Field Sampling

2.1. Sampling Dates and Methods

Monitoring of all wells included in the LTM Plan was conducted at the WVA from May 18 through June 3 and June 17, and October 26 through 30, 2009. Monitoring wells currently sampled as part of the LTM are listed in Tables 2-1 and 2-2 and shown on Figures 2-1 and 2-2. With the exception of the reactive wall monitoring wells, groundwater sampling was conducted according to the USEPA protocol for Low Stress (Low Flow) Purging and Sampling (USEPA, 1998) using dedicated, permanent, bladder pumps installed in each of the wells included in the LTM Plan. In accordance with the USEPA letter dated September 20, 2002 (USEPA, 2002), the reactive wall monitoring wells were sampled using Passive Diffusion Bag (PDB) samplers. Water levels were measured in all wells (including those not included in the LTM Plan) at the site prior to groundwater sampling.

In accordance with the LTM Plan, LTM Plan Update (Malcolm Pirnie, 2008), and subsequent modifications, and with the exception of the above mentioned reactive wall wells, groundwater samples were analyzed by Katahdin Analytical Services, a New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP)-certified laboratory, for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), dissolved sulfide, dissolved organic carbon (DOC), and dissolved gases. Samples collected from reactive wall wells were analyzed for VOCs only. Additional laboratory analyses, including RCRA-listed metals, were also performed at select locations listed in the LTM Plan. Field parameters, consisting of temperature, pH, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity were measured during purging using a Horiba U-22 water quality meter equipped with a flow-through cell. Additional field parameters, consisting of ferrous iron, nitrate, nitrite, sulfate, chloride, and alkalinity, were measured at each location in SA area wells (excluding the reactive wall wells) and select wells in the MMA area using Hach®-brand field analysis kits. Sampling methods, specific analytical methods, and sampling locations are discussed in detail in the LTM Plan. Purge logs for the May and October 2009 monitoring events are presented in Appendix A. Analytical laboratory reporting forms for the May and October 2009 monitoring events are presented in Appendix B.

2.2. Sampling Summary

In accordance with the LTM Plan, a total of 54 MMA wells (including all zones of the Building 40 Boundary wells) and 32 SA wells (including four sewer monitoring points) were scheduled for sampling during the May 2009 monitoring event. During the October 2009 monitoring event, a total of eight MMA wells were scheduled for sampling. However, some wells either were not sampled or were sampled for limited analytical parameters during the monitoring event. Table 2-3 summarizes the monitoring wells that were not sampled for all or some parameters during the May and October 2009 monitoring events. As shown in Table 2-3, three monitoring wells in the MMA and four monitoring wells in the SA were not sampled during the May 2009 monitoring event. All wells scheduled for sampling during the October 2009 monitoring event were sampled.

Sixteen sampling zones within six MMA wells (WVA-79 and multi-level wells WVA-MW-82R through WVA-MW-86R) were added to the LTM Plan in 2009 and are sampled annually as part of the May monitoring event to monitor the bedrock groundwater quality in the vicinity of Building 40. Monitoring well WVA-MW-79, which is located on the rear side of Building 40, contained sodium permanganate ($NaMnO_4$) (remaining from the bedrock chemical oxidation conducted between 2004 and 2007) at the time of sampling and was not sampled.

3. Sampling Results

3.1. Groundwater Flow

Groundwater elevations measured prior to sampling in May and October 2009 are presented in Table 3-1. Groundwater elevations measured during previous LTM events are also summarized in Table 3-1.

3.1.1. Main Manufacturing Area

Potentiometric contour maps for the first water bearing unit at the MMA in May and October 2009 are presented in Appendix C. As shown in Appendix C, groundwater flow patterns at the MMA in May and October 2009 are similar to those documented during the MMA RFI and previous LTM events, as groundwater levels at the MMA do not vary significantly from season to season.

3.1.2. Siberia Area

Potentiometric contour maps for the overburden and bedrock units at the SA in May and October 2009 are also presented in Appendix C. As shown on the maps, groundwater flow patterns in both the overburden and bedrock were similar to those observed during previous monitoring events. Though the reactive walls cause local anomalies, the groundwater flow paths in the overburden indicate that groundwater from the former burn pit area (the VOC source area) is being directed through the reactive walls.

3.2. Main Manufacturing Area Analytical Results

Analytical results for MMA long-term monitoring groundwater samples are summarized on Figures 3-1 (May 2009) and 3-2 (October 2009). Summary tables presenting results for each MMA well sampled during LTM are presented in Appendix D.

3.2.1. VOCs and SVOCs

Figures 3-1 and 3-2 summarize exceedences of NYSDEC Class GA standards for groundwater samples collected from the MMA LTM monitoring wells in the May and October 2009 LTM sampling events, respectively. As shown on Figure 3-1, NYSDEC Class GA standards for VOCs were exceeded in samples collected from 23 of the 54 MMA LTM monitoring wells (including all zones of Building 40 Boundary wells) sampled during the May monitoring event. Figure 3-2 shows that NYSDEC Class GA standards for VOCs were exceeded in samples collected from seven of the eight MMA LTM monitoring wells sampled during the October monitoring event. NYSDEC Class GA standards for SVOCs were not exceeded in any samples collected from the MMA

long-term monitoring wells during the May 2009 monitoring event. Consistent with results from previous monitoring events, VOC concentrations in MMA groundwater samples exceeded Class GA standards in three general areas:

- East of Building 40;
- East of Building 25;
- In the area of Buildings 121/116; and
- East of Building 20.

3.2.2. Data Trends

Due to the spatial and geological separation between the areas of concern in the MMA long-term monitoring program, analysis of trends in concentrations of parameters over the entire MMA is not feasible. However, trends in total contaminant concentrations in samples collected from representative monitoring wells in the areas of concern discussed above have been utilized to evaluate variations in groundwater conditions.

3.2.2.1. VOCs

Figures 3-3 through 3-9 present trends in total chlorinated VOC concentrations in groundwater samples collected from the following representative LTM wells located in the listed areas of concern.

- MW-82R, MW-83, MW-84R, MW-85R, MW-86R: Building 40 Area.
- 86EM-SP-1A, 25-MW-2, 25-MW-3, and 25-MW-7: Building 25 Area.
- MW-121S: Building 121 Area.
- AW-MW-35: Building 20 Area.

3.2.2.2. Building 40

As shown on Figures 3-3 through 3-7, generally stable or decreasing trends in total chlorinated VOC concentrations are evident in samples collected from the multi-level boundary well network east of Building 40, with the exception of MW-83R-2 and MW-86R-3 which show increases in cis-1,2-dichloroethene and vinyl chloride. Temporary increases in the concentrations of these compounds is expected as the concentrations of tetrachloroethene and trichloroethene decrease due to natural attenuation from documented anaerobic biodegradation.

3.2.2.3. Building 25

As shown on Figure 3-8, generally decreasing overall trends in total chlorinated VOC concentrations are evident in samples collected from monitoring wells WVA-25-MW-2

and WVA-25-MW-7. These trends are likely associated with the Hydrogen-Release Compound (HRC©) ICM pilot study at Building 25. Trends in total chlorinated VOC concentrations in samples collected from monitoring well 86EM-SP-1A (stable) do not appear to have been affected by the HRC ICM pilot study, while data from monitoring well WVA-25-MW-3 show an overall downward trend in total chlorinated VOC concentrations.

3.2.2.4. Building 121 and 20

As shown on Figure 3-9, the generally decreasing trends in total chlorinated VOC concentrations evident in samples collected from monitoring wells WVA-AW-MW-35, and WVA-MW-121S continued in 2009 and are likely the result of ongoing natural attenuation processes. The increase in total chlorinated VOCs in WVA-MW-121S observed in 2007 appears to be anomalous based on 2008 and 2009 data.

3.3. Siberia Area Analytical Results

3.3.1. VOCs and SVOCs

Figure 3-10 summarizes exceedances of NYSDEC Class GA standards for groundwater samples collected from SA monitoring wells during the May 2009 LTM event. In accordance the NYSDEC letter dated December 6, 2006, SA monitoring wells are no longer sampled in October. As shown on Figure 3-10, NYSDEC Class GA standards for VOCs were exceeded in groundwater samples from nine of the 32 SA LTM wells sampled during the May 2009 monitoring event. NYSDEC Class GA standards for SVOCs were not exceeded in any of the groundwater samples collected from SA long-term monitoring wells during the May 2009 event. The number of samples containing VOCs and SVOCs at concentrations that exceed NYSDEC Class GA standards in the SA have been generally decreasing since the April 2000 sampling event.

Consistent with results from previous monitoring events, VOC concentrations in SA groundwater samples generally exceeded Class GA standards only in the area of the former burn pit and in monitoring wells up-gradient of the reactive walls.

3.3.2. Reactive Wall Sampling

As discussed in Section 2.1, the reactive wall monitoring wells (SA-MW-49, 54, 59, 60, 66, 70, 76, and 85) were sampled using PDB samplers in accordance with the USEPA letter dated September 20, 2002 and analyzed for VOCs only.

3.3.3. Data Trends

Figure 3-11 presents total chlorinated VOC concentrations in wells up-gradient of reactive wall A and down-gradient of reactive wall B. As shown on Figure 3-11, total chlorinated VOC concentrations in both up-gradient and down-gradient reactive wall monitoring wells have decreased since the beginning of long-term monitoring. These

trends indicate that the ICMs at the former burn pit and the reactive wall are successfully reducing total chlorinated VOC concentrations up-gradient and down-gradient of the reactive wall, respectively. Chlorinated VOCs were not detected in the groundwater sample collected in May 2009 from monitoring well SA-MW-85, which was installed at the western end of reactive wall A (southern wall) to evaluate groundwater conditions between the reactive wall and the sewer.

4. Conclusions and Recommendations

4.1. Conclusions

The following conclusions can be drawn based on the data generated during the 2009 LTM events.

1. Groundwater flow in the MMA and SA is consistent with that documented during previous monitoring events.

2. In general, VOC concentrations in groundwater in the MMA are stable or decreasing.

3. VOC concentrations in groundwater in the area of the former burn pit and current permeable reactive walls in the SA are decreasing.

4.2. LTM Modifications and Recommendations

The following modifications to the LTM program are recommended.

1. As recommended in the 2008 LTM Report, and based on groundwater data collected to-date and the observed trends, it is recommended that, beginning with the May 2010 monitoring event, the monitoring frequency be reduced to annual for the eight MMA wells currently monitored semi-annually.

2. Based on consistent water levels and groundwater flow patterns during the last 10 years of monitoring, it is recommended that, beginning with the May 2010 monitoring event, WVA-wide water level measurements and potentiometric contour maps no longer be required. Water levels would continue to be measured in wells that are sampled.

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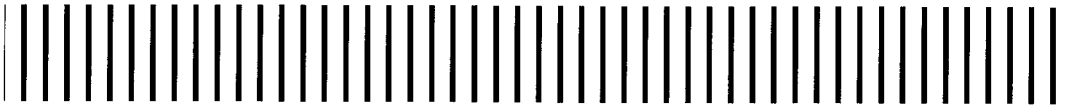
INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS AND CONSULTANTS

Figures

GREEN SEAL

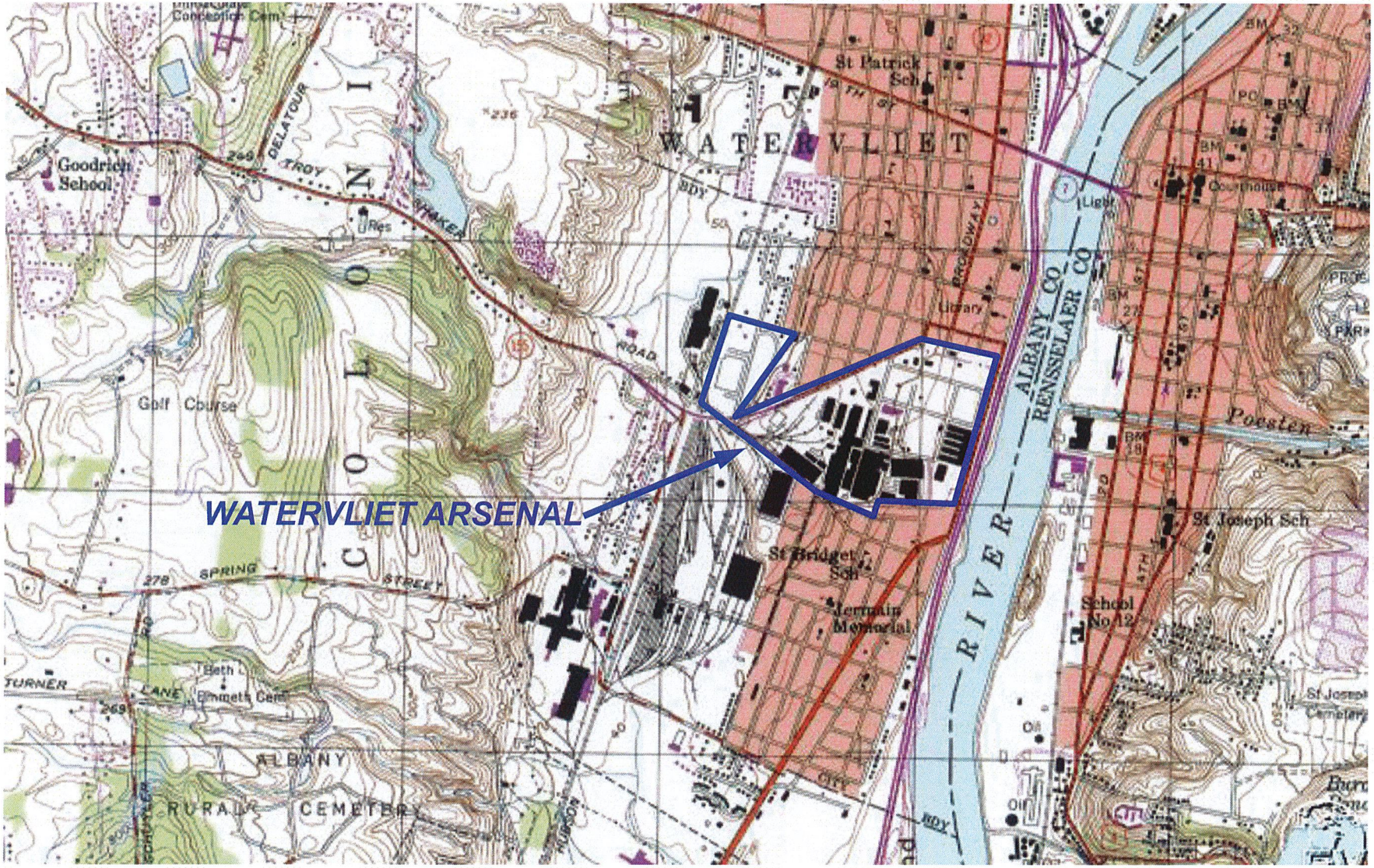
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WVA Long-Term Monitoring 2009 Data Summary Report

Figures



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SCALE IN FEET

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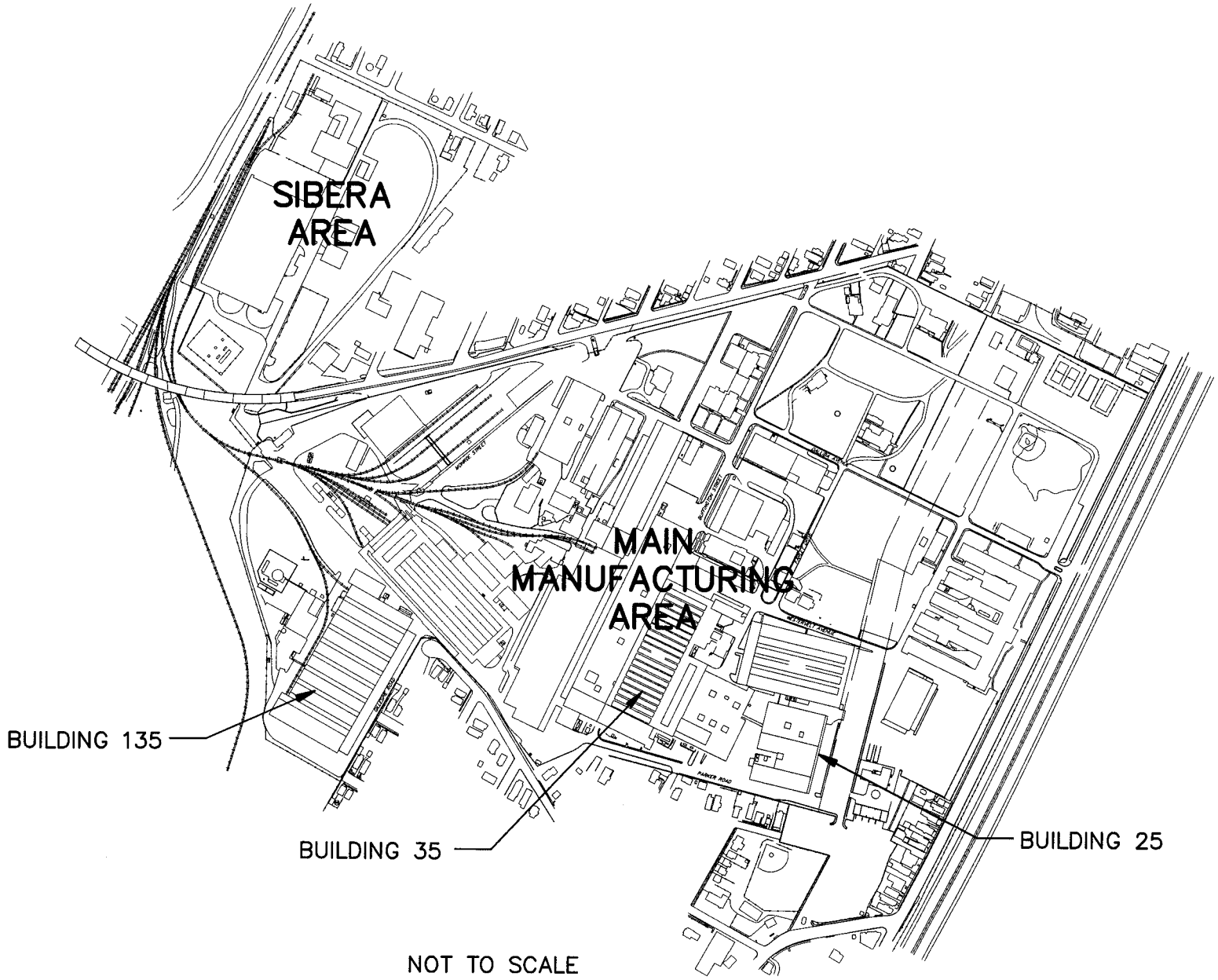
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WATERVLIET ARSENAL
WATERVLIET, NEW YORK

SITE LOCATION

FIGURE 1-1

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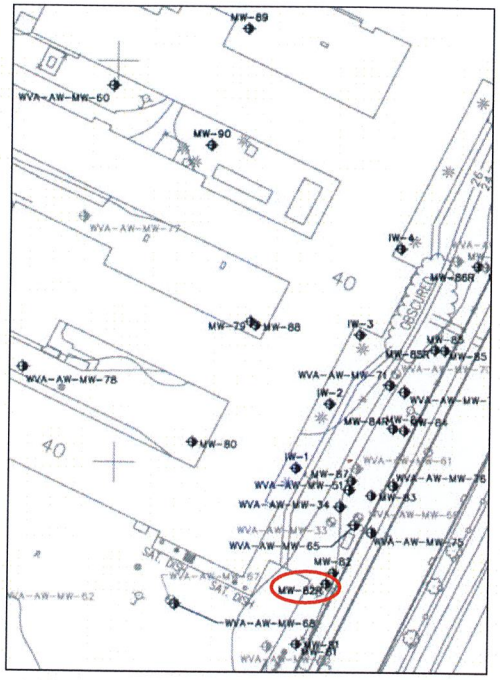


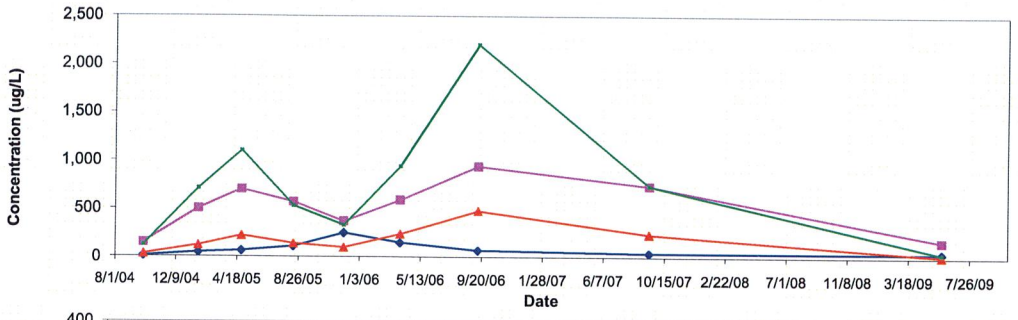
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MAIN MANUFACTURING AREA
SITE PLAN
WATERVLIET ARSENAL
USACE CONTRACT NO. DACA31-94-D-0017

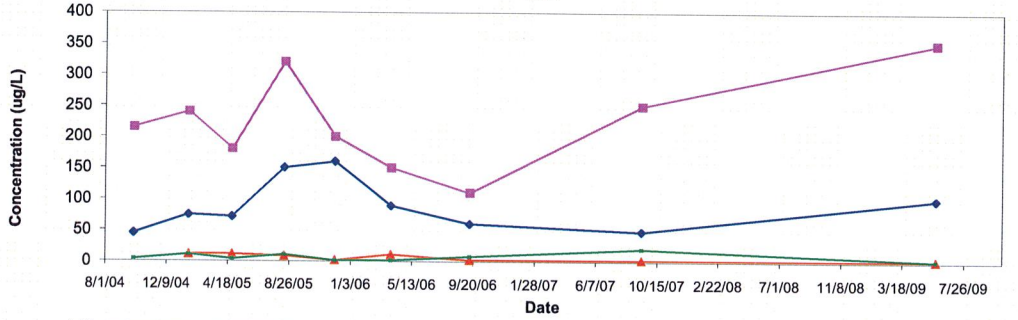
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FIGURE 1-2

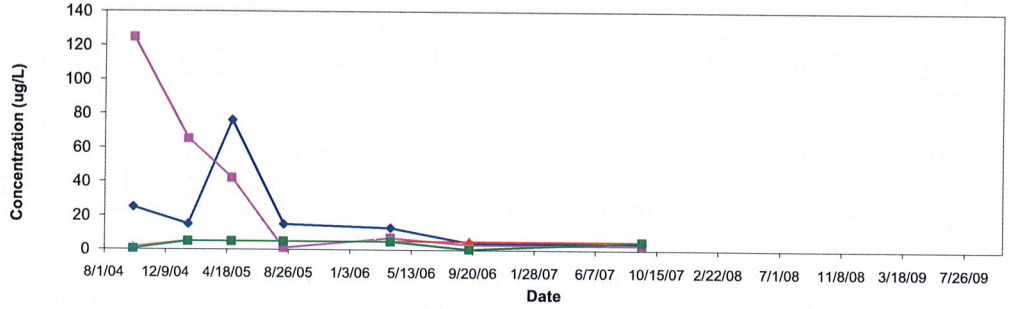




MW-82R-1



MW-82R-2



MW-82R-3

Note: Vertical scales are not the same.

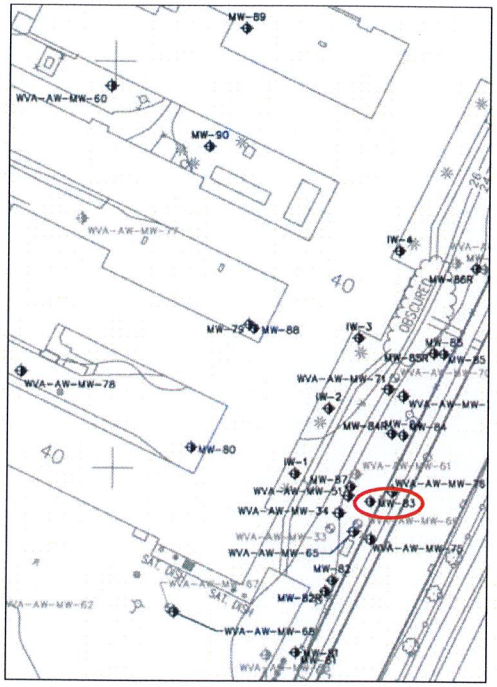
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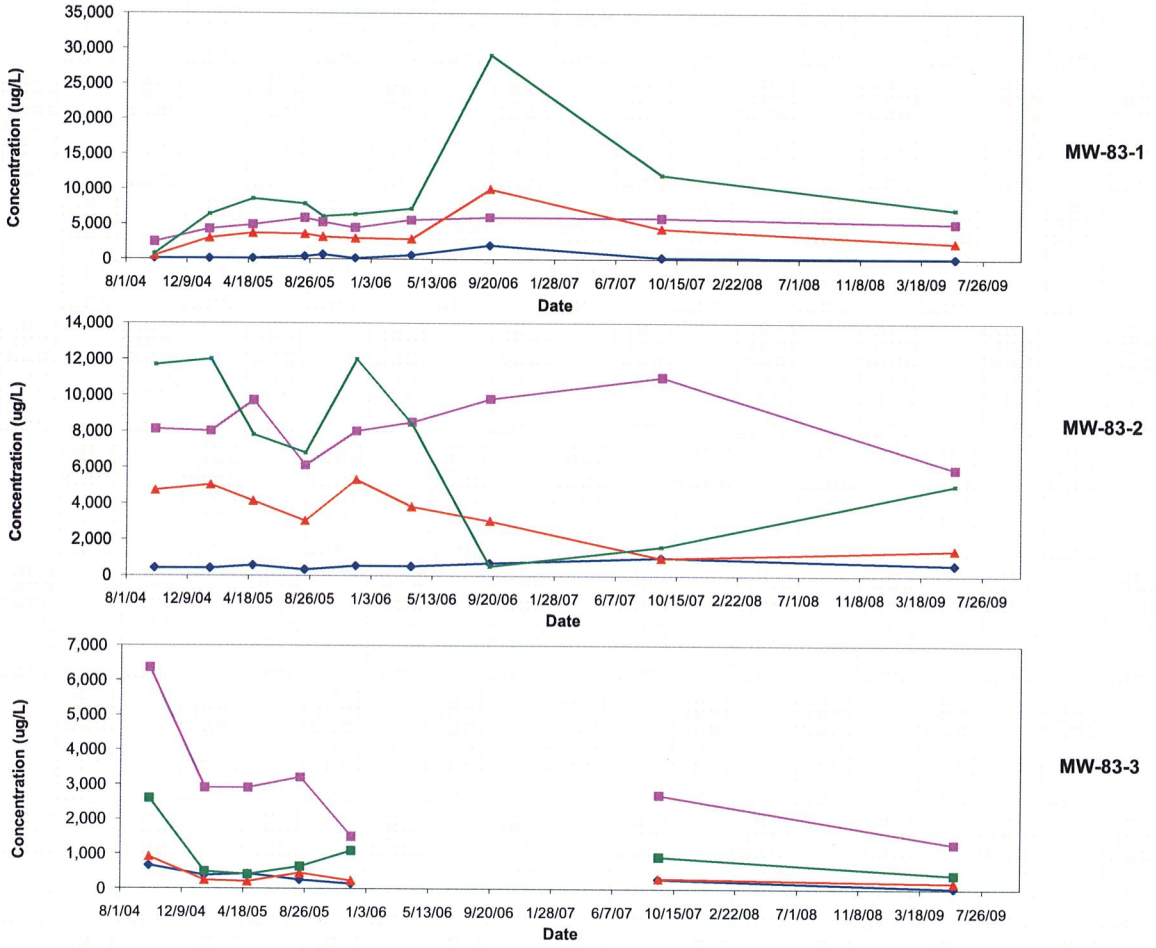
LONG-TERM MONITORING
BUILDING 40, WATERVLIET ARSENAL, WATERVLIET, NEW YORK

TRENDS IN TOTAL CHLORINATED VOC CONCENTRATIONS IN MONITORING WELL MW-82R

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FIGURE 3-3





Note: Vertical scales are not the same.

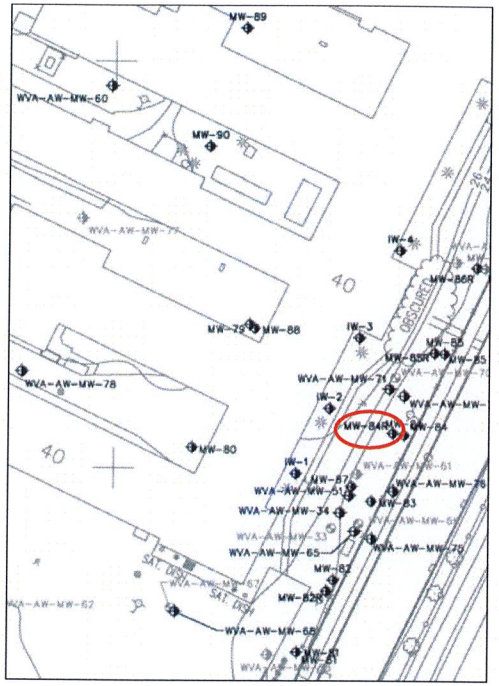
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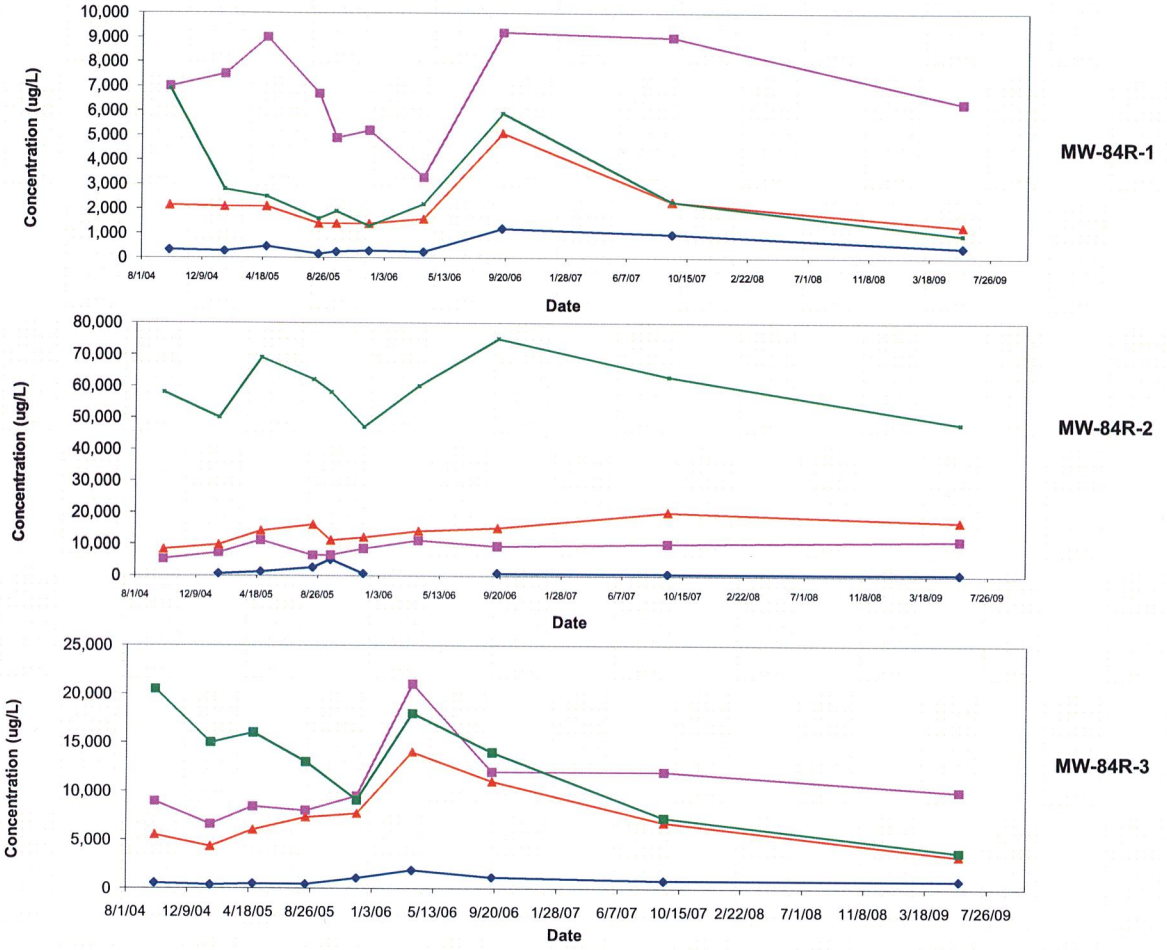
LONG-TERM MONITORING
BUILDING 40, WATERVLIET ARSENAL, WATERVLIET, NEW YORK

TRENDS IN TOTAL CHLORINATED VOC CONCENTRATIONS IN MONITORING WELL MW-83

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DECEMBER 2009

FIGURE 3-4





Note: Vertical scales are not the same.

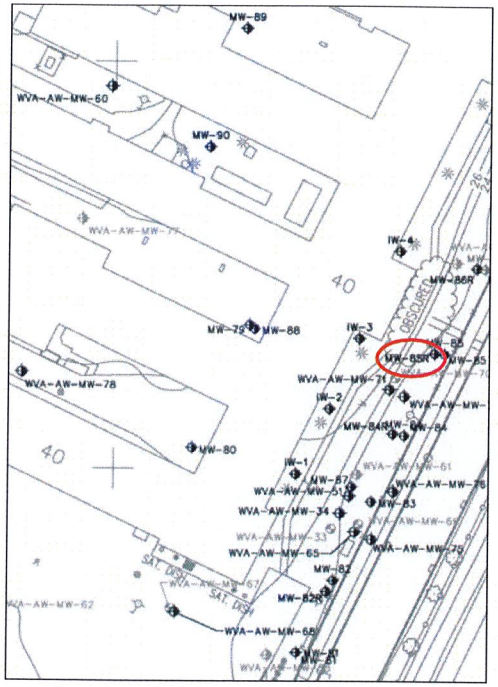
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LONG-TERM MONITORING
BUILDING 40, WATERVLIET ARSENAL, WATERVLIET, NEW YORK

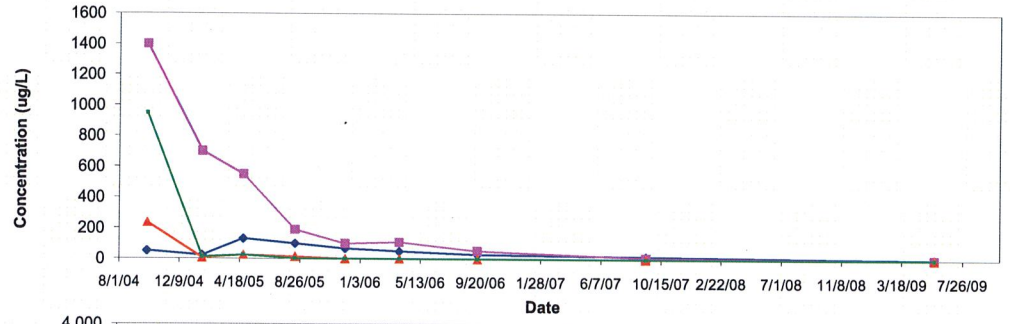
TRENDS IN TOTAL CHLORINATED VOC CONCENTRATIONS IN MONITORING WELL MW-84R

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DECEMBER 2009

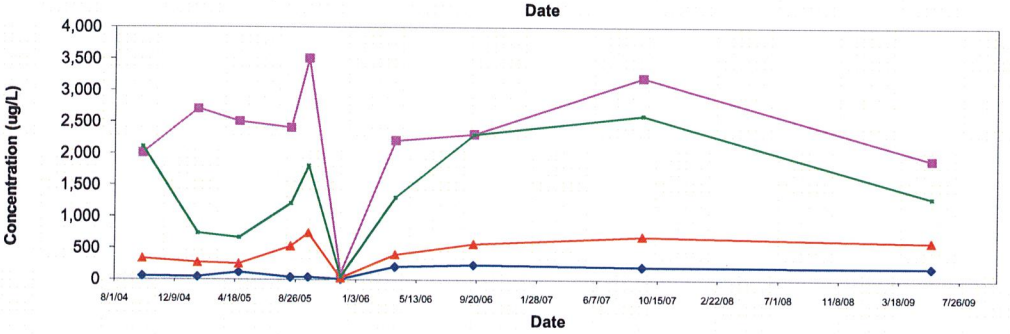
FIGURE 3-5



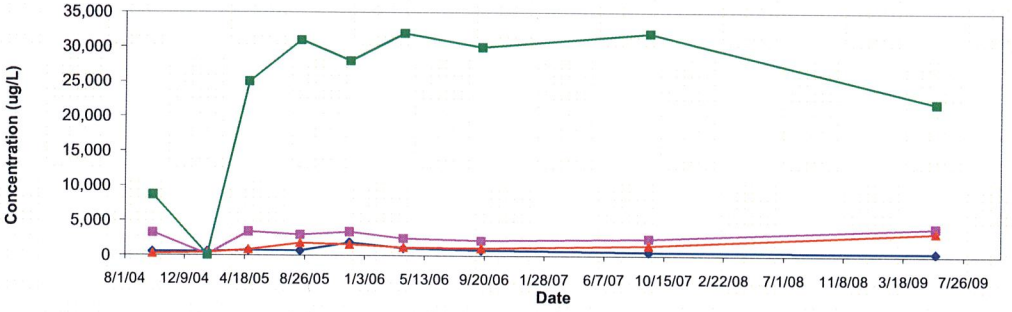




MW-85R-1



MW-85R-2



MW-85R-3

Note: Vertical scales are not the same.

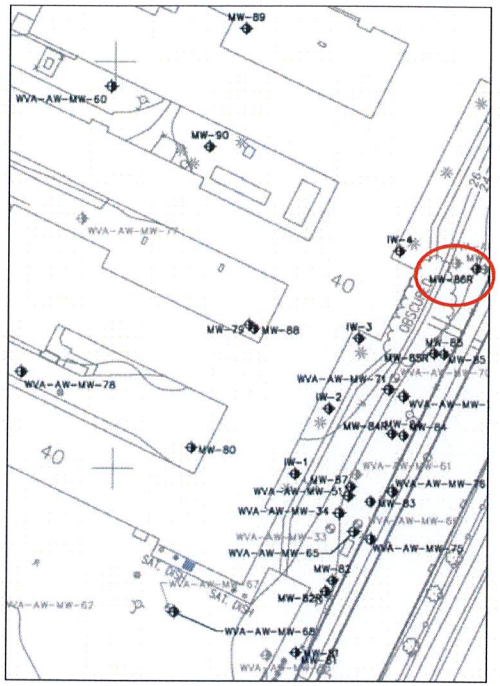
US Army Corps of Engineers
Baltimore District

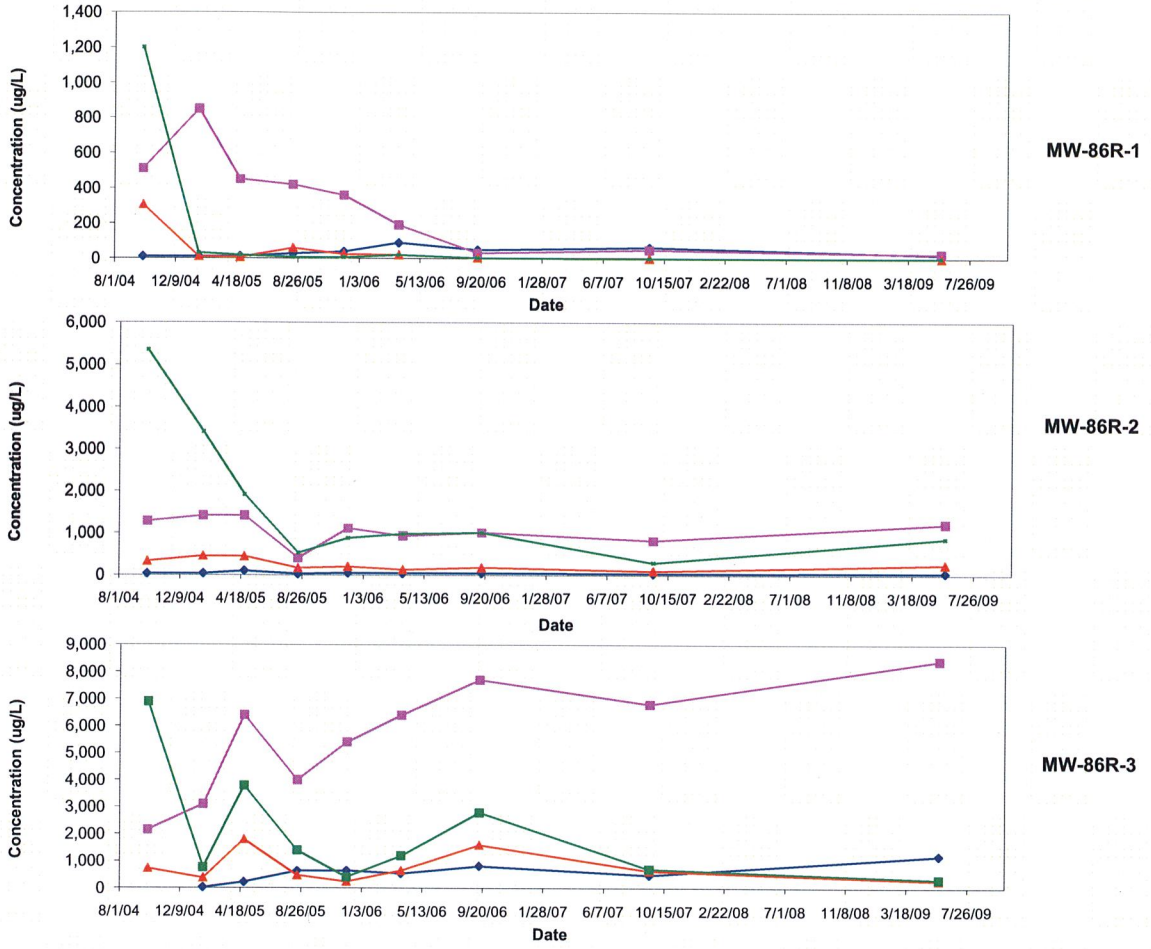
LONG-TERM MONITORING
BUILDING 40, WATERVLIET ARSENAL, WATERVLIET, NEW YORK

TRENDS IN TOTAL CHLORINATED VOC CONCENTRATIONS IN MONITORING WELL MW-85R

MALCOLM PIRNIE, INC.
DECEMBER 2009

FIGURE 3-6





Note: Vertical scales are not the same.

US Army Corps of Engineers
Baltimore District

CORRECTIVE MEASURES STUDY
BUILDING 40, WATERVLIET ARSENAL, WATERVLIET, NEW YORK

TARGET CHLORINATED ORGANIC COMPOUNDS AND INORGANICS IN MONITORING WELL MW-86R

MALCOLM PIRNIE, INC.
DECEMBER 2009

FIGURE 3-7

Figure 3-8
Trends in Total Chlorinated VOC Concentrations
Building 25 Area
Watervliet Arsenal, Watervliet, New York

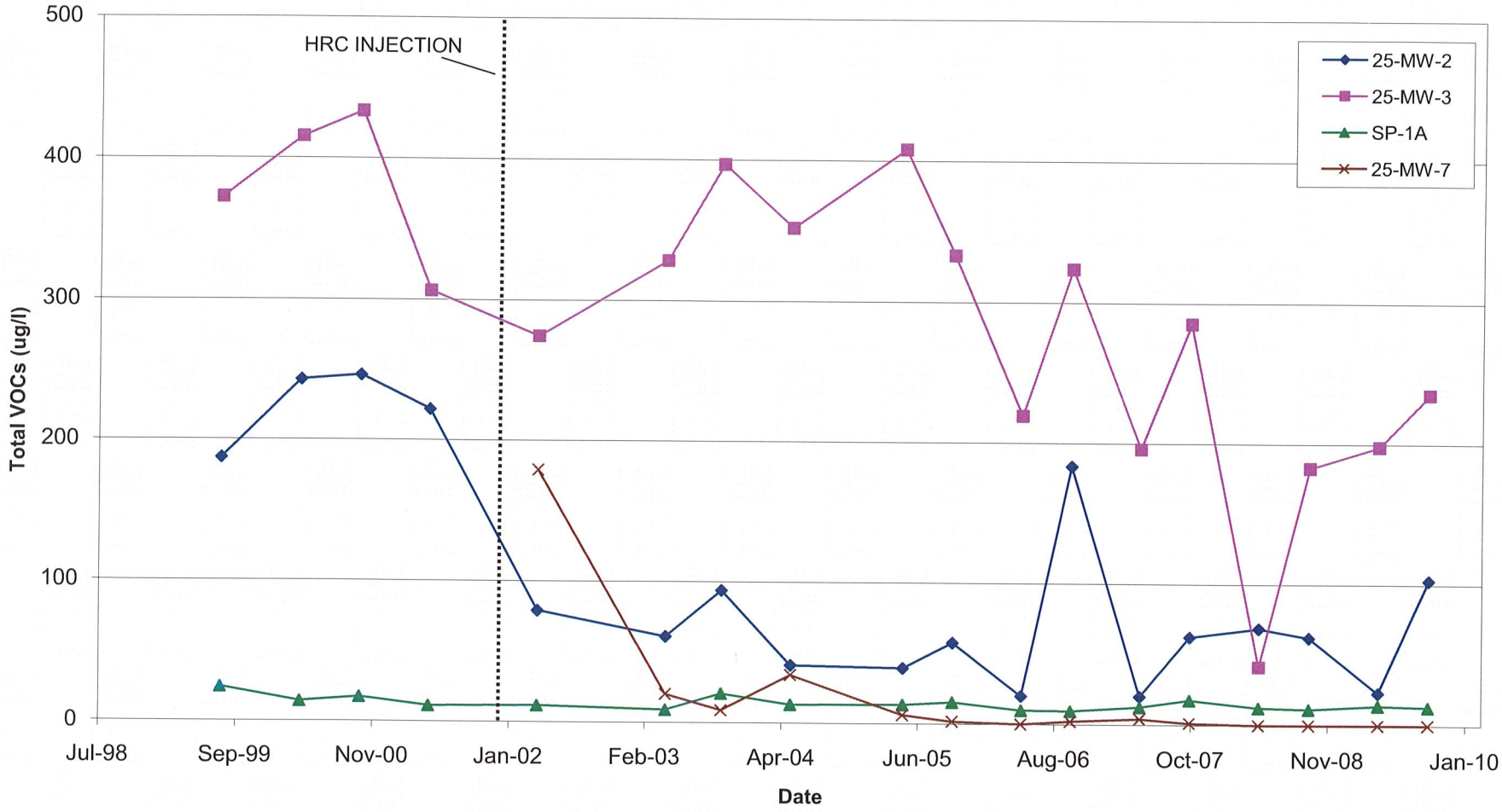
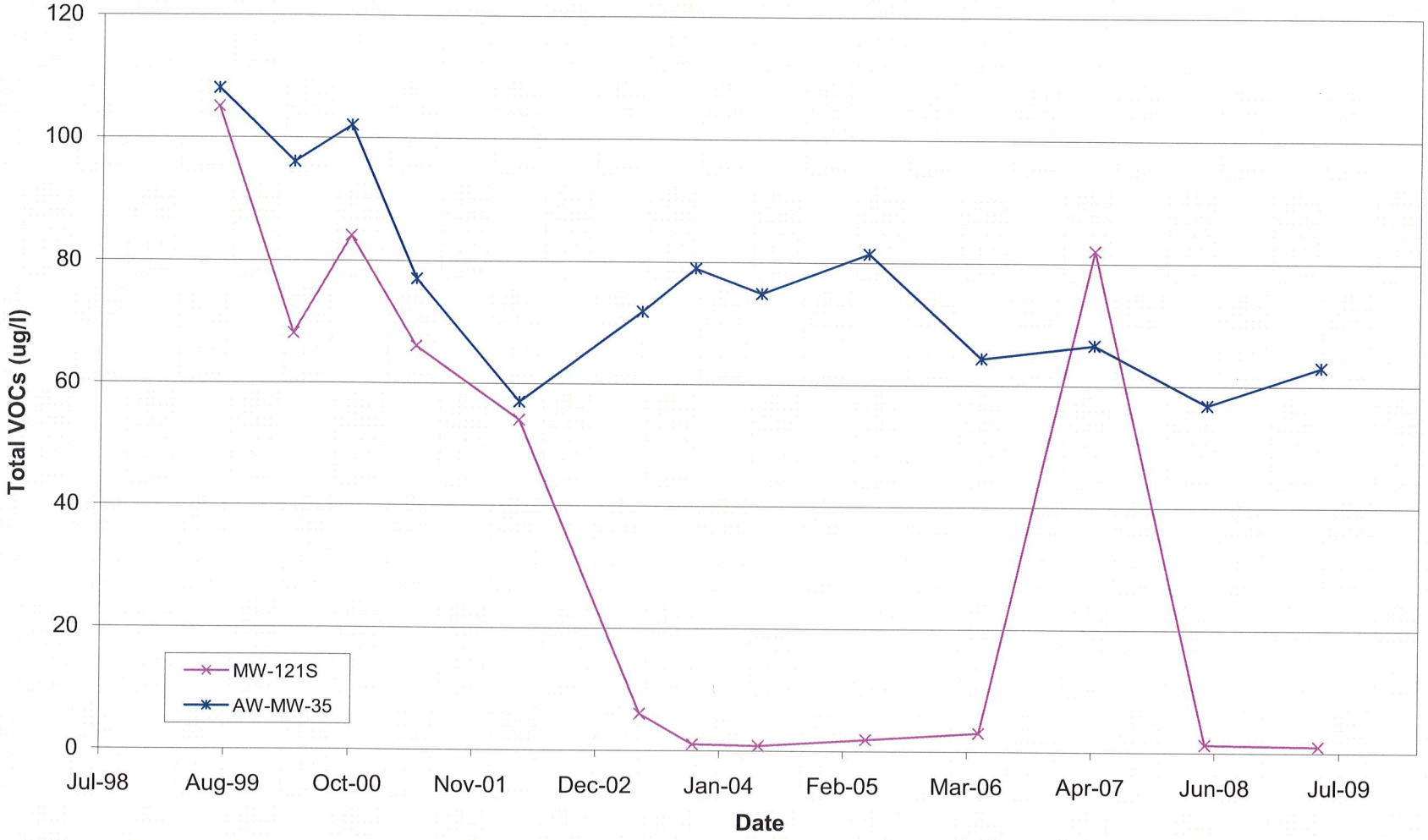
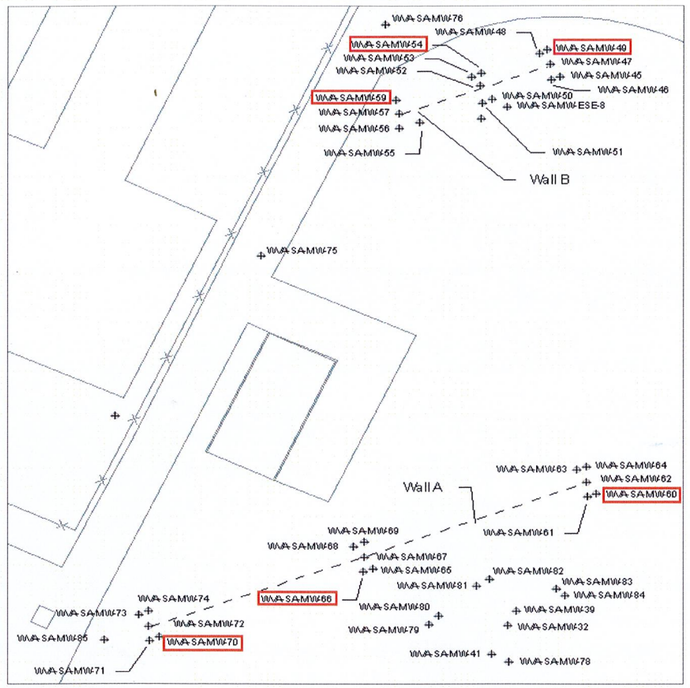


Figure 3-9
Trends in Total Chlorinated VOC Concentrations
Main Manufacturing Area
Watervliet Arsenal, Watervliet, New York



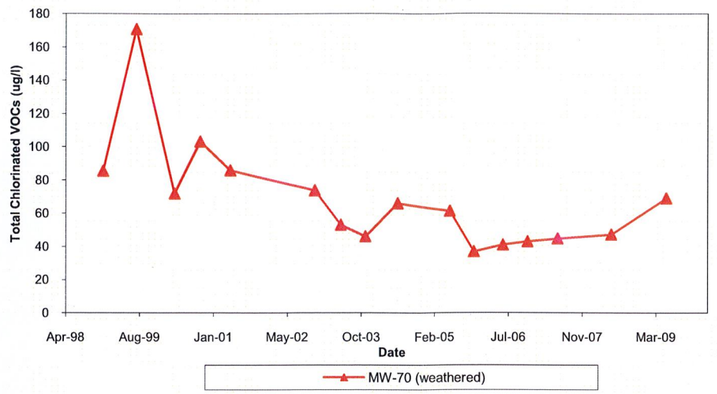


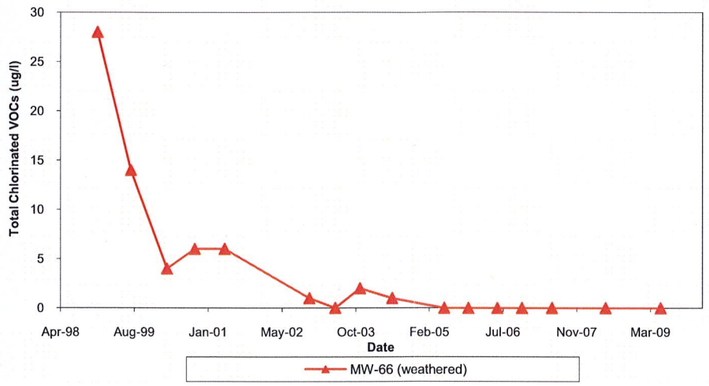
LEGEND

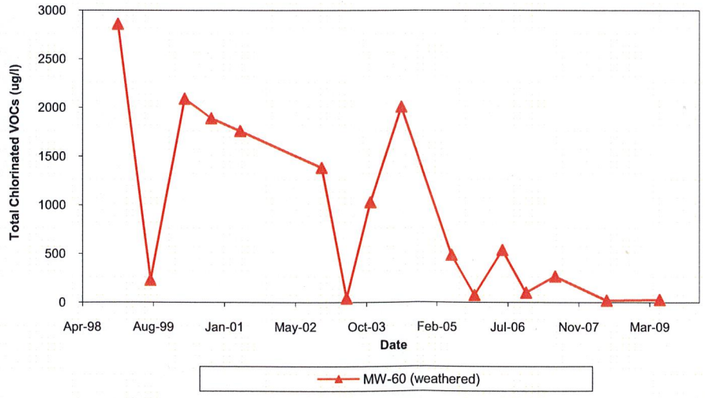
Weathered Bedrock Monitoring Well

Note: Vertical scales are not the same.

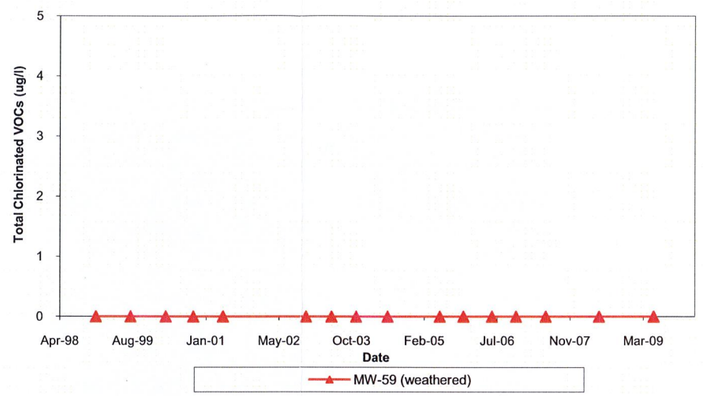
UP-GRADIENT

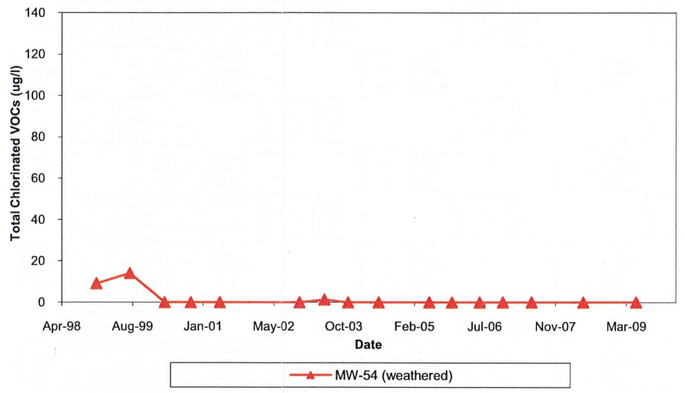


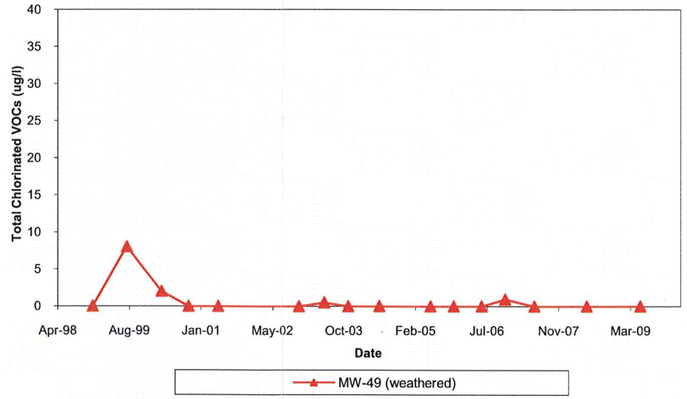




DOWN-GRADIENT







US Army Corps of Engineers
Baltimore District

LONG-TERM MONITORING
SIBERIA AREA, WATERVLIET ARSENAL, WATERVLIET, NEW YORK

TOTAL CHLORINATED ORGANIC COMPOUNDS UP- AND DOWN-GRADIENT OF PERMEABLE REACTIVE WALLS

FIGURE 3-11

MALCOLM PIRNIE

INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS AND CONSULTANTS

Tables

GREEN SEAL

US Army Corps of Engineers
WVA Long-Term Monitoring 2009 Data Summary Report

Tables



2118157 / ALB

MALCOLM PIRNIE

Table 2-1
Long Term Monitoring Wells (Updated June 2009)
Main Manufacturing Area
Watervliet Arsenal, Watervliet, New York

Well	Area Monitored	Geologic Unit	Water Level	Sample in LTM	VOCs	SVOCs	Metals	NAP	Sampling Frequency
87GTI-MW-1BP	PBS	Hybrid (a)	X						
87GTI-MW-2BP	PBS	Hybrid (a)	X						
87GTI-MW-3BP	PBS	Hybrid (a)	X						
87GTI-MW-4BP	PBS	Hybrid (a)	X						
83DM-SP-1	Building 25	Hybrid (a)	X	X	X			X	Semi-annual
83DM-SP-2	WVA boundary	Bedrock	X						
83DM-SP-3	WWTP	Bedrock	X	X	X		X (d)	X	Annual
83DM-SP-4	WWTP	Bedrock	X	X	X				Annual
86EM-SP-1A	Building 25	Overburden	X	X	X				Semi-annual
86EM-SP-1B	Building 25	Overburden	X	X	X				Annual
86EM-SP-5	Building 25	Overburden	X	X	X	X		X	Annual
86EM-SP-6	WWTP	Overburden	X	X	X		X	X	Annual
92EM-SP-7	WWTP	Overburden	X	X	X			X	Annual
92EM-SP-8	WWTP	Overburden	X	X	X	X		X	Annual
93EM-SP-9	WVA boundary	Overburden	X	X	X				Annual
93EM-SP-10	WVA boundary	Hybrid (a)	X						
93EM-SP-11	Building 25	Overburden	X	X	X				Annual
93EM-SP-12	Building 35	Overburden	X						
93EM-SP-13	Building 135	Bedrock	X	X	X	X			Annual
93EM-SP-14	Building 135	Bedrock	X						
93EM-SP-15	Building 114	Bedrock	X						
93EM-SP-16	Building 114	Bedrock	X						
94EM-MW-19	Building 15	Bedrock	X	X	X		X		Annual
94EM-MW-20	Building 15	Bedrock	X	X	X		X		Annual
94EM-MW-21	Building 15	Bedrock	X	X	X		X		Annual
93EM-RW-2	Building 114	Bedrock	X	X	X			X	Annual
WVA-AW-25-MW-2	Building 25	Bedrock	X	X	X			X	Semi-annual
WVA-AW-25-MW-3	Building 25	Overburden	X	X	X			X	Semi-annual
WVA-AW-25-MW-4	Building 25	Weathered	X						
WVA-AW-25-MW-5	Building 25	Hybrid (a)	X	X	X	X			Annual
WVA-AW-25-MW-6	Building 25	Overburden	X	X	X				Semi-annual
WVA-AW-25-MW-7	Building 25	Bedrock	X	X	X			X	Semi-annual
WVA-AW-35-MW-5	Building 35	Bedrock	X	X	X				Pent-annual
WVA-AW-35-MW-6	Building 35	Overburden	X						
WVA-AW-35-MW-7	Building 35	Bedrock	X						
WVA-AW-35-MW-8	Building 35	Bedrock	X	X	X	X			Annual
WVA-AW-135-MW-2	Building 135	Bedrock	X	X	X				Pent-annual
WVA-AW-135-MW-3	Building 135	Bedrock	X						
WVA-AW-135-MW-4	Building 135	Bedrock	X	X	X	X		X	Pent-annual
WVA-AW-MW-20	WVA boundary	Overburden	X						
WVA-AW-MW-21	WVA boundary	Overburden	X						
WVA-AW-MW-22	WVA boundary	Bedrock	X	X	X				Pent-annual
WVA-AW-MW-25	WVA boundary	Weathered	X						
WVA-AW-MW-26	WVA boundary	Bedrock	X	X	X				Pent-annual
WVA-AW-MW-27	WVA boundary	Overburden	X	X	X				Annual
WVA-AW-MW-28	WVA boundary	Bedrock	X						
WVA-AW-MW-29	Building 125	Bedrock	X						
WVA-AW-MW-31	Building 20	Overburden	X						
WVA-AW-MW-32	WVA boundary	Weathered	X	X	X				Annual
WVA-AW-MW-33	Building 40	Bedrock	X						
WVA-AW-MW-34	Building 40	Bedrock	X						
WVA-AW-MW-35	Building 20	Bedrock	X	X	X				Annual
WVA-AW-MW-36	Building 20	Overburden	X	X	X				Annual
WVA-AW-MW-37	WVA boundary	Bedrock	X						
WVA-AW-MW-38	WVA boundary	Bedrock	X	X	X				Pent-annual
WVA-AW-MW-39	Building 125	Bedrock	X						

Notes:
PBS - Petroleum bulk storage area.
WWTP - Wastewater treatment plant.
(a) Overburden and weathered bedrock.
(b) Equipped with Westbay multilevel device.
(c) Inaccessible.
(d) Chromium only.

Table 2-1
Long Term Monitoring Wells (Updated June 2009)
Main Manufacturing Area
Watervliet Arsenal, Watervliet, New York

Well	Area Monitored	Geologic Unit	Water Level	Sample in LTM	VOCs	SVOCs	Metals	NAP	Sampling Frequency
WVA-AW-MW-40	Building 125	Bedrock	X						
WVA-AW-MW-41	WVA boundary	Bedrock	X	X	X				Pent-annual
WVA-AW-MW-42	Building 120	Weathered	X						
WVA-AW-MW-43	Building 25	Overburden	X	X	X	X			Annual
WVA-AW-MW-44	Building 25	Overburden	X	X	X	X			Annual
WVA-AW-MW-45	WVA boundary	Bedrock	X						
WVA-AW-MW-46	WWTP	Bedrock	X						
WVA-AW-MW-47	WVA boundary	Weathered	X	X	X			X	Annual
WVA-AW-MW-48	Building 20	Bedrock	X						
WVA-AW-MW-49	Building 25	Weathered	X						
WVA-AW-MW-50	Building 125	Bedrock	X						
WVA-AW-MW-51	Building 40	Bedrock	X						
WVA-AW-MW-52	Building 114	Bedrock	X	X	X			X	Semi-annual
WVA-AW-MW-53	Building 25	Bedrock	X						
WVA-AW-MW-54	Building 35	Bedrock	X						
WVA-AW-MW-55	WVA boundary	Bedrock	X						
WVA-AW-MW-56	WVA boundary	Overburden	X						
WVA-AW-MW-57	WWTP	Overburden	X						
WVA-AW-MW-58	Building 40	Bedrock	X						
WVA-AW-MW-59	Building 40	Bedrock	X						
WVA-AW-MW-60	Building 40	Bedrock	X						
WVA-AW-MW-61	Building 40	Bedrock	X						
WVA-AW-MW-62	Building 40	Bedrock	X						
WVA-AW-MW-63	WVA boundary	Bedrock	X						
WVA-AW-MW-64	Building 114	Bedrock	X	X	X			X	Semi-annual
WVA-AW-MW-65	Building 40	Bedrock	X						
WVA-AW-MW-66	Building 40	Overburden	X						
WVA-AW-MW-67	Building 40	Overburden	X						
WVA-AW-MW-68	Building 40	Bedrock	(b)						
WVA-AW-MW-70	Building 40	Overburden	X						
WVA-AW-MW-71	Building 40	Bedrock	(b)						
WVA-AW-MW-72	Building 40	Bedrock	(c)						
WVA-AW-MW-73	Building 40	Overburden	(c)						
WVA-AW-MW-74	Building 40	Bedrock	X						
WVA-AW-MW-75	Building 40	Bedrock	X						
WVA-AW-MW-76	Building 40	Bedrock	(b)						
WVA-AW-MW-77	Building 40	Bedrock	X						
WVA-AW-MW-78	Building 40	Bedrock	(b)						
WVA-P-1	Building 110	Bedrock	X						
WVA-P-2	Building 110	Bedrock	X						
WVA-P-3	Building 110	Bedrock	X						
WVA-P-4	Building 110	Bedrock	X						
B121N	Building 121	Hybrid (a)	X	X	X			X	Annual
B121S	Building 121	Hybrid (a)	X	X	X			X	Annual
WVA-AW-MW-BLD-110	Building 110	Bedrock	X	X	X	X			Annual
WVA-AW-RW-1	WVA Boundary	Bedrock	X						
WVA-B35-PW-1	Building 110	Bedrock	X	X	X	X			Annual
WVA-MW-79	Building 40	Bedrock	X	X	X				Annual
WVA-MW-81-1	Building 40	Bedrock	X	X	X				Annual
WVA-MW-81-2	Building 40	Bedrock	X	X	X				Annual
WVA-MW-81-3	Building 40	Bedrock	X	X	X				Annual
WVA-MW-82R-1	Building 40	Bedrock	X	X	X				Annual
WVA-MW-82R-2	Building 40	Bedrock	X	X	X				Annual
WVA-MW-82R-3	Building 40	Bedrock	X	X	X				Annual
WVA-MW-83-1	Building 40	Bedrock	X	X	X				Annual
WVA-MW-83-2	Building 40	Bedrock	X	X	X				Annual
WVA-MW-83-3	Building 40	Bedrock	X	X	X				Annual
WVA-MW-84R-1	Building 40	Bedrock	X	X	X				Annual
WVA-MW-84R-2	Building 40	Bedrock	X	X	X				Annual
WVA-MW-84R-3	Building 40	Bedrock	X	X	X				Annual
WVA-MW-85R-1	Building 40	Bedrock	X	X	X				Annual
WVA-MW-85R-2	Building 40	Bedrock	X	X	X				Annual
WVA-MW-85R-3	Building 40	Bedrock	X	X	X				Annual
WVA-MW-86-1	Building 40	Bedrock	X	X	X				Annual
WVA-MW-86-2	Building 40	Bedrock	X	X	X				Annual
WVA-MW-86-3	Building 40	Bedrock	X	X	X				Annual

Notes:
PBS - Petroleum bulk storage area.
WWTP - Wastewater treatment plant.
(a) Overburden and weathered bedrock.
(b) Equipped with Westbay multilevel device.
(c) Inaccessible.
(d) Chromium only.

Table 2-2
Long Term Monitoring Wells (Updated December 2007)
Siberia Area
Watervliet Arsenal, Watervliet, New York

Well	Area Monitored	Geologic Unit	Water Level	Sample in LTM	VOCs	SVOCs	Metals	NAP	Sampling Frequency
WVA-SA-MW-19R	WVA boundary	Overburden	X	X	X	X		X	Annual
WVA-SA-MW-20	WVA boundary	Overburden	X	X	X	X		X	Annual
WVA-SA-MW-21	Chip Handling	Overburden	X						
WVA-SA-MW-22	Chip Handling	Bedrock	X						
WVA-SA-MW-23	WVA boundary	Bedrock	X	X	X	X		X	Annual
WVA-SA-MW-24	WVA boundary	Overburden	X						
WVA-SA-MW-25	SE Quadrant	Overburden	X						
WVA-SA-MW-26	WVA boundary	Overburden	X						
WVA-SA-MW-27R	Transformer	Overburden	X						
WVA-SA-MW-28	Transformer	Bedrock	X						
WVA-SA-MW-29	Transformer	Overburden	X						
WVA-SA-MW-30	NE Quadrant	Bedrock	X						
WVA-SA-MW-31	Transformer	Overburden	X						
WVA-SA-MW-32	Burn Pit	Overburden	X	X	X	X		X	Annual
WVA-SA-MW-33	WVA boundary	Overburden	X	X	X	X		X	Annual
WVA-SA-MW-34	WVA boundary	Bedrock	X	X	X	X		X	Annual
WVA-SA-MW-35	SE Quadrant	Overburden	X						
WVA-SA-MW-36	WVA boundary	Overburden	X						
WVA-SA-MW-37	WVA boundary	Overburden	X						
WVA-SA-MW-38	WVA boundary	Weathered	X	X	X	X		X	Annual
WVA-SA-MW-39	Burn Pit	Weathered	X	X	X	X		X	Annual
WVA-SA-MW-40	WVA boundary	Bedrock	X						
WVA-SA-MW-41	Burn Pit	Bedrock	X	X	X	X		X	Annual
WVA-SA-MW-45	Reactive Wall	Weathered	X						
WVA-SA-MW-46	Reactive Wall	Overburden	X						
WVA-SA-MW-47	Reactive Wall	Reac. Wall	X						
WVA-SA-MW-48	Reactive Wall	Overburden	X						
WVA-SA-MW-49	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-50	Reactive Wall	Weathered	X						
WVA-SA-MW-51	Reactive Wall	Overburden	X						
WVA-SA-MW-52	Reactive Wall	Reac. Wall	X						
WVA-SA-MW-53	Reactive Wall	Overburden	X						
WVA-SA-MW-54	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-55	Reactive Wall	Weathered	X						
WVA-SA-MW-56	Reactive Wall	Hybrid (a)	X						
WVA-SA-MW-57	Reactive Wall	Reac. Wall	X						
WVA-SA-MW-59	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-60	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-61	Reactive Wall	Overburden	X						
WVA-SA-MW-62	Reactive Wall	Reac. Wall	X						
WVA-SA-MW-63	Reactive Wall	Overburden	X						
WVA-SA-MW-64	Reactive Wall	Weathered	X						
WVA-SA-MW-65	Reactive Wall	Overburden	X						
WVA-SA-MW-66	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-67	Reactive Wall	Reac. Wall	X						
WVA-SA-MW-68	Reactive Wall	Weathered	X						
WVA-SA-MW-69	Reactive Wall	Overburden	X						

Notes:
(a) Overburden and weathered bedrock.
(b) Sampled using passive diffusion bags.

Table 2-2
Long Term Monitoring Wells (Updated December 2007)
Siberia Area
Watervliet Arsenal, Watervliet, New York

Well	Area Monitored	Geologic Unit	Water Level	Sample in LTM	VOCs	SVOCs	Metals	NAP	Sampling Frequency
WVA-SA-MW-70	Reactive Wall	Overburden	X	X (b)	X				Annual
WVA-SA-MW-71	Reactive Wall	Weathered	X						
WVA-SA-MW-72	Reactive Wall	Reac. Wall	X						
WVA-SA-MW-73	Reactive Wall	Weathered	X						
WVA-SA-MW-74	Reactive Wall	Overburden	X						
WVA-SA-MW-75	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-76	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-77	Reactive Wall	Weathered	X	X (b)	X				Annual
WVA-SA-MW-78	Burn Pit	Bedrock	X	X	X			X	Annual
WVA-SA-MW-79	Burn Pit	Bedrock	X	X	X			X	Annual
WVA-SA-MW-80	Burn Pit	Bedrock	X	X	X			X	Annual
WVA-SA-MW-81	Burn Pit	Bedrock	X	X	X			X	Annual
WVA-SA-MW-82	Burn Pit	Bedrock	X	X	X			X	Annual
WVA-SA-MW-83	Burn Pit	Bedrock	X	X	X			X	Annual
WVA-SA-MW-84	Burn Pit	Bedrock	X	X	X			X	Annual
WVA-SA-MW-85	Reactive Wall	Hybrid (a)	X	X (b)	X				Annual
MW-DEC-1	Perfec. Plating	Bedrock	X						
MW-DEC-2	Perfec. Plating	Weathered	X						
MW-EA-5	WVA boundary	Overburden	X						
MW-EA-6	WVA boundary	Weathered	X	X	X	X		X	Annual
MW-EA-7	WVA boundary	Weathered	X						
MW-EA-8	WVA boundary	Overburden	X						
MW-ESE-1	WVA boundary	Bedrock	X						
MW-ESE-2	WVA boundary	Bedrock	X						
MW-ESE-3	WVA boundary	Bedrock	X						
MW-ESE-4	WVA boundary	Overburden	X						
MW-ESE-5	WVA boundary	Bedrock	X						
MW-ESE-6	WVA boundary	Overburden	X	X	X	X		X	Annual
MW-ESE-7	SE Quadrant	Bedrock	X						
MW-ESE-8	NE Quadrant	Weathered	X						
MW-ESE-9	WVA boundary	Bedrock	X						
MW-GTI-1	SE Quadrant	Overburden	X						
MW-GTI-2	SE Quadrant	Overburden	X						
MW-GTI-3	SE Quadrant	Bedrock	X						
MW-GTI-4	SE Quadrant	Bedrock	X						
STS-3	Sewer	Storm Sewer		X	X	X			Annual
STS-5	Sewer	Storm Sewer		X	X	X			Annual
STS-6	Sewer	Storm Sewer		X	X	X			Annual
SNS-6	Sewer	Sanitary Sewer		X	X	X		X	Annual

Notes:
(a) Overburden and weathered bedrock.
(b) Sampled using passive diffusion bags.

Table 2-3
Summary of Incomplete Sampling Locations
2009 Long Term Monitoring
Watervliet Arsenal
Watervliet, New York

Monitoring Well	May 2009	October 2009
Main Manufacturing Area		
93EM-SP-9	Pump clogged with sediment, no sample collected.	-
WVA-MW-79	Water contained MnO4-, no sample collected.	-
WVA-MW-82R-3	Well dry, not accessible upon return, no sample collected.	-
		-
Siberia Area		
STS-3	Could not locate, no sample collected.	-
MPI-SA-MW-77	Well dry, no sample collected.	-
MPI-SA-MW-78	Water contained MnO4-, no sample collected.	-
MPI-SA-MW-33	Well dry, no sample collected.	-

Table 3-1
Summary of Groundwater Elevations
Long Term Monitoring
Watervliet Arsenal
Watervliet, New York

Well	Groundwater Elevation (feet AMSL)							
	5/10/2006	10/23/2006	5/22/2007	10/23/2007	5/12/2008	10/28/2008	5/18/2009	10/26/2009
Main Manufacturing Area								
83DM-SP-1	24.62	24.74	24.73	24.90	26.27	25.03	24.83	24.87
83DM-SP-2	16.31	16.77	16.68	16.30	16.37	17.00	16.52	16.66
83DM-SP-3	18.15	18.36	18.20	18.19	17.91	18.82	18.16	18.49
83DM-SP-4	18.36	18.58	18.48	18.56	18.28	18.97	18.47	18.66
86-EM-SP-1A	25.43	25.53	25.56	25.61	26.16	25.66	25.57	25.55
86-EM-SP-1B	21.88	22.29	21.86	21.27	21.12	22.77	21.92	22.69
86EM-SP-5	21.29	20.86	20.56	20.69	20.51	20.74	20.75	20.31
86EM-SP-6	23.63	24.21	30.50	obstructed	well filled in	23.30	23.25	23.20
87GTI-MW-1BP	62.27	63.35	63.13	64.13	62.86	64.31	63.55	63.46
87GTI-MW-2BP	61.93	63.33	62.88	64.25	62.25	64.25	63.68	63.56
87GTI-MW-3BP	61.67	62.40	62.20	63.07	61.92	63.41	62.44	62.41
87GTI-MW-4BP	61.23	62.53	62.31	64.05	61.72	64.31	62.72	62.95
92EM-SP-7	19.02	19.12	18.96	19.00	18.76	19.10	19.01	18.93
92EM-SP-8	20.35	20.33	18.92	19.80	19.68	20.14	20.13	19.70
93-EM-RW-2	61.90	60.86	59.21	62.08	61.93	70.32	62.28	62.38
93-EM-SP-11	26.60	26.84	26.98	27.40	26.57	27.86	26.87	26.84
93-EM-SP-12	29.11	29.30	29.27	29.43	29.25	29.93	29.22	29.31
93-EM-SP-13	62.17	62.88	63.07	63.48	62.13	61.32	61.22	61.36
93-EM-SP-14	62.95		63.08	obstructed	63.16	63.56	63.28	63.35
93-EM-SP-15	59.60	59.75	59.83	59.88	59.66	59.92	59.79	59.85
93-EM-SP-9		34.66	36.78	37.03	dry	37.23	35.61	35.34
94EM-MW-19	47.47	47.95	47.92	48.11	47.88	48.37	47.98	48.15
94EM-MW-20	43.62	44.24	44.16	45.15	44.34	44.93	44.65	44.70
94EM-MW-21	46.35	46.79	46.64	47.43	46.83	47.39	47.18	47.36
WVA-135-MW-1	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
WVA-135-MW-2	64.87	66.34	66.22	66.72	66.07	67.34	66.65	66.77
WVA-135-MW-3	62.20	62.94	58.51	obstructed	62.16	63.39	62.75	62.93
WVA-135-MW-4	58.15	58.35	66.31	58.38	58.14	58.28	57.94	58.04
WVA-25-MW-1	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
WVA-25-MW-2	23.71	22.76	23.24	22.75	23.35	23.91	23.59	23.35
WVA-25-MW-3	23.94	24.08	24.08	24.13	23.95	24.56	24.22	24.23
WVA-25-MW-4		22.78	22.84	21.01	19.38	22.42	20.69	21.76
WVA-25-MW-5	19.41	15.49	19.42	19.48	19.30	NM	19.46	19.18
WVA-25-MW-6	25.35	25.47	25.48	25.49	22.15	25.64	25.45	25.53
WVA-35-MW-5	39.89		39.68	40.01	39.65	39.91	39.36	39.64
WVA-35-MW-6	30.28	30.67	30.58	30.73	30.32	30.06	30.40	30.69
WVA-35-MW-7	44.42	44.31	44.92	44.13	45.66	45.47	45.07	45.28
WVA-35-MW-8	49.89	49.95	50.20	49.98	50.50	53.69	50.56	50.08
WVA-AW-MW-20	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
WVA-AW-MW-21	20.99	20.99	21.13	20.83	20.96	21.23	20.84	20.57
WVA-AW-MW-22	41.28	41.31	41.41	41.59	41.10	41.56	41.38	41.47
WVA-AW-MW-23	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
WVA-AW-MW-24	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
WVA-AW-MW-25	55.91	56.51	56.65	56.89	55.94	57.05	56.71	56.80
WVA-AW-MW-26	58.79	59.03	59.05	59.32	59.79	59.65	59.24	59.48
WVA-AW-MW-27	52.73	53.41	53.10	54.00	52.54	50.12	53.42	52.50
WVA-AW-MW-28	60.15	60.48	60.29	60.47	60.14	60.65	60.10	60.33
WVA-AW-MW-29	60.57	60.67	60.69	60.77	60.61	abandoned	abandoned	abandoned
WVA-AW-MW-30	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned

Note:
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TOC- Water level at top of well casing
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Long Term Monitoring
Watervliet Arsenal
Watervliet, New York

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	5/10/2006	10/23/2006	5/22/2007	10/23/2007	5/12/2008	10/28/2008	5/18/2009	10/26/2009
WVA-AW-MW-31	22.62	22.70	22.70	22.63	22.71	22.94	22.44	22.57
WVA-AW-MW-32	14.72	14.75	14.77	14.16	14.52	14.62	14.33	14.11
WVA-AW-MW-33	9.14	8.33	9.90	DRY	dry	10.51	9.03	7.98
WVA-AW-MW-34	8.90	8.97	8.77	8.85	8.65	9.36	8.77	8.90
WVA-AW-MW-35	20.83	20.97	21.05	20.85	21.18	21.27	20.81	20.89
WVA-AW-MW-36	22.22	21.02	-	-	20.98	21.09	26.60	24.87
WVA-AW-MW-37	47.51	48.58	48.18	49.55	48.14	49.49	48.76	49.33
WVA-AW-MW-38	46.07	47.57	46.82	47.84	47.41	47.69	46.93	47.81
WVA-AW-MW-39	63.91	64.56	64.51	65.12	NM	71.76	USGS	USGS
WVA-AW-MW-40	64.38	65.15	65.07	65.37	64.61	65.55	65.31	65.33
WVA-AW-MW-41	58.44	58.83	58.76	58.98	58.47	59.31	58.96	59.13
WVA-AW-MW-42	60.06	60.18	-	60.24	60.05	60.40	60.28	60.32
WVA-AW-MW-43	20.58	20.59	20.57	20.61	20.23	20.60	20.54	20.29
WVA-AW-MW-44	20.49	20.36	20.43	20.53	19.94	20.27	20.06	19.99
WVA-AW-MW-45	53.92	54.83	54.46	55.31	54.73	54.80	54.23	54.93
WVA-AW-MW-46	20.48	22.35	21.52	21.32	NM	21.05	21.50	20.53
WVA-AW-MW-47	21.30	21.63	21.36	21.46	NM	22.07	21.32	21.87
WVA-AW-MW-49	22.54	22.80	22.69	22.63	21.23	23.04	22.44	22.60
WVA-AW-MW-50	54.17	54.23	54.46	54.03	54.49	54.15	54.28	54.23
WVA-AW-MW-51	5.33	4.26	-	7.53	9.59	9.58	9.55	9.24
WVA-AW-MW-55	66.79	66.81	66.96	66.92	66.66	68.18	66.97	67.23
WVA-AW-MW-56	20.16	20.07	20.28	20.16	19.86	20.09	20.22	19.83
WVA-AW-MW-57	20.29	20.20	20.48	20.24	19.82	20.15	20.30	19.83
WVA-AW-MW-58	10.97	11.62	10.20	18.00	10.38	12.46	10.90	11.56
WVA-AW-MW-59	9.19	9.32	9.25	9.33	9.09	10.33	9.35	9.37
WVA-AW-MW-60	17.25	17.41	16.89	17.25	16.64	16.82	16.78	16.66
WVA-AW-MW-62	14.11	14.38	14.26	14.55	14.09	14.77	14.49	14.61
WVA-AW-MW-63	63.16	63.79	63.55	63.92	64.39	64.34	63.43	63.95
WVA-AW-MW-64	59.29	59.71	34.32	59.90	59.32	59.90	59.53	59.74
WVA-AW-MW-66		8.35	18.43	8.64	8.31	9.28	8.37	8.43
WVA-AW-MW-67		12.21	12.14	21.23	12.21	12.77	12.43	12.44
WVA-AW-MW-70		8.46	8.50	8.65	8.42	9.02	8.46	8.48
WVA-AW-25-IW-1		obstructed	22.46	obstructed	obstructed	obstructed	28.83	obstructed
WVA-AW-25-IW-2		obstructed	19.41	19.75	19.87	21.11	19.85	19.97
WVA-AW-25-IW-3		20.81	20.93	20.47	20.74	19.80	21.17	21.74
WVA-AW-25-IW-4		28.68		28.68	28.68	28.68	28.68	28.68
WVA-AW-25-IW-5		obstructed	23.58	obstructed	NM	21.47	obstructed	obstructed
WVA-AW-25-IW-6		27.37		26.87	25.29	25.77	26.09	26.04
WVA-P-1	55.15	55.75	55.55	55.08	55.61	55.56	55.46	55.55
WVA-P-2	47.30	47.58	47.55	47.46	50.90	47.55	47.55	47.58
WVA-P-3	42.64	42.93	43.25	43.21	43.25	43.05	42.85	42.86
WVA-P-4	45.09	45.34	45.31	45.23	45.26	45.26	45.29	45.38
WVA-B35-PW-1	48.79	49.28	49.06	49.88	49.11	54.88	52.06	51.63
WVA-AW-RW-1	25.35	25.49	25.58	26.92	27.30	26.82	25.87	25.61
Bldg 110	obstructed	51.07	obstructed	51.20	51.07	51.08	51.19	51.08
Bldg 121-North Well	56.62	58.27	51.05	53.63	58.67	59.15	59.04	59.08
Bldg 121-South Well	56.97	55.65	51.91	54.82	59.03	59.56	59.42	59.48
Siberia Area								
WVA-SA-MW-19(R)	-	-	-	-	39.38	NM	39.56	39.44
WVA-SA-MW-20	39.00	39.89	40.84	40.72	40.50	40.91	39.83	41.48
WVA-SA-MW-21	32.26	33.70	33.51	33.54	33.34	34.72	33.29	32.87
WVA-SA-MW-22	38.40	38.48	38.51	38.43	29.34	38.77	38.64	38.54
WVA-SA-MW-23	39.92	40.54	40.15	40.40	39.37	41.39	40.40	40.53

Note:
Blank space - well dry or water level below top of pump
NI - Not Installed
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Summary of Groundwater Elevations
Long Term Monitoring
Watervliet Arsenal
Watervliet, New York

Well	Groundwater Elevation (feet AMSL)							
	5/10/2006	10/23/2006	5/22/2007	10/23/2007	5/12/2008	10/28/2008	5/18/2009	10/26/2009
WVA-SA-MW-24	36.14	36.60	36.25	36.43	36.05	37.74	36.17	36.12
WVA-SA-MW-25	39.20	39.74	39.57	39.69	38.89	41.28	39.74	39.75
WVA-SA-MW-26	41.93	-	-	flooded	41.79	flooded	flooded	flooded
WVA-SA-MW-27(R)	38.99	39.70		39.80	39.25	40.58	39.65	39.63
WVA-SA-MW-28	38.38	38.29	37.98	41.82	37.9	38.46	37.95	38.27
WVA-SA-MW-29	38.92	39.64	39.85	39.63	38.91	41.41	40.40	39.86
WVA-SA-MW-30	34.67	35.22	36.00	34.66	35.91	35.03	35.52	34.93
WVA-SA-MW-31	36.59	36.75	36.61	36.88	36.76	37.09	36.66	36.79
WVA-SA-MW-32	37.84	39.53		39.34	37.36	41.64	39.38	38
WVA-SA-MW-33	34.22	35.84	34.35	dry	33.95	35.13	34.34	29.88
WVA-SA-MW-34	32.10	32.24	32.14	32.26	32.19	32.58	32.26	32.25
WVA-SA-MW-35	38.03	dry	37.92	38.05	37.39	obstructed	38.46	not found
WVA-SA-MW-36	32.76	33.25	32.97	33.01	37.09	35.02	33.92	33.83
WVA-SA-MW-37	39.16	39.58	39.56	39.60	39.21	41.11	39.79	40.82
WVA-SA-MW-38	32.99	33.27	33.06	33.16	32.80	33.64	33.08	not found
WVA-SA-MW-39	38.03	38.50	3.68	38.07	37.49	38.73	37.75	37.53
WVA-SA-MW-45	35.53	36.56	3.92	36.19	35.76	38.05	35.76	36.54
WVA-SA-MW-46	37.00	37.22	2.81	37.08	36.94	38.24	37.25	37.18
WVA-SA-MW-47	35.70	36.72	3.12	36.36	35.88	38.23	35.63	36.64
WVA-SA-MW-48	35.96	36.81	3.76	36.7	36.31	39.58	37.78	36.03
WVA-SA-MW-49	35.65	36.68	3.6	36.29	35.77	37.92	35.74	36.53
WVA-SA-MW-50	36.13	37.09	3.19	36.3	36.20	38.49	35.93	36.87
WVA-SA-MW-51	37.52	37.05	2.34	37.34	37.20	38.15	36.68	37.02
WVA-SA-MW-52	35.86	37.43	2.53	37.1	36.11	39.32	35.60	37.45
WVA-SA-MW-53	36.09	35.75	3.10	35.37	36.38	35.82	35.83	35.33
WVA-SA-MW-54	35.72	36.87	3.17	36.49	35.82	38.15	35.79	36.79
WVA-SA-MW-55	35.86	36.64	3.10	36.51	36.53	37.64	35.60	36.69
WVA-SA-MW-56	36.68	37.63	2.41	37.33	36.22	39.61	37.04	37.67
WVA-SA-MW-57	36.76	38.57	1.11	37.56	36.45	39.07	35.73	37.76
WVA-SA-MW-59	35.47	36.57	2.96	36.27	35.85	38.03	36.10	36.66
WVA-SA-MW-60	38.30	38.59	4.05	38.19	38.02	38.96	37.91	37.65
WVA-SA-MW-61	38.35	38.64	4.10	38.24	37.98	39.01	37.71	37.84
WVA-SA-MW-62	38.59	38.58	3.95	38.17	38.00	38.94	37.87	37.57
WVA-SA-MW-63	38.33	38.32	3.85	37.74	38.12	39.18	37.82	37.29
WVA-SA-MW-64	35.27	38.55	3.89	38.15	37.99	38.89	37.86	37.55
WVA-SA-MW-65	39.16	39.71	2.24	39.49	39.18	41.03	40.42	40.18
WVA-SA-MW-66	37.80	38.05	4.12	37.68	37.70	38.49	37.60	37.12
WVA-SA-MW-67	37.90	38.02	3.70	37.65	37.82	38.31	37.54	37.03
WVA-SA-MW-68	37.59	37.65	4.11	37.3	37.42	37.69	37.16	36.76
WVA-SA-MW-69	37.91	37.55	3.47	36.89	38.29	38.22	37.69	dry
WVA-SA-MW-70	38.53	38.89	1.89	38.63	38.56	40.73	38.67	38.88
WVA-SA-MW-71	37.23	37.40	3.48	36.86	37.30	37.78	37.20	36.41
WVA-SA-MW-72	37.31	37.49	3.27	37.22	37.42	39.18	37.14	37.10
WVA-SA-MW-73	37.64	37.62	3.24	36.91	37.51	38.21	37.26	36.84
WVA-SA-MW-74	37.12	37.30	3.55	36.96	37.09	37.75	36.75	36.41
WVA-SA-MW-75	33.17	33.15	6.46	33.02	33.16	33.29	32.97	32.96
WVA-SA-MW-76	32.55	32.54	6.34	32.54	32.58	32.58	32.51	32.55
WVA-SA-MW-77	35.02	35.65	4.42	35.69	35.07	37.19	dry	dry
WVA-SA-MW-78	37.24	37.54	37.43	37.3	36.85	38.32	37.11	36.84
WVA-SA-MW-79	37.28	37.27	37.28	37.16	36.96	38.4	38.07	36.89
WVA-SA-MW-80	37.32	37.63	37.58	37.38	36.98	38.18	37.46	36.87
WVA-SA-MW-81	34.09	34.04	33.95	33.85	33.61	34.03	33.61	33.55
WVA-SA-MW-82	34.61	34.06	34.03	34.17	33.65	34	33.69	33.52
WVA-SA-MW-83	33.92	33.02	33.94	33.98	33.63	34	33.59	33.5
WVA-SA-MW-84	38.06	38.40	38.06	38.06	---	38.82	37.78	37.52
WVA-SA-MW-85	34.63	34.31	34.66	34.28	34.53	34.45	34.53	34.46
WVA-SA-MW-40	-	-	-	paved over	paved over	paved over	paved over	paved over
WVA-SA-MW-41	41.77	41.62	42.02	42.02	36.07	42.02	42.01	42.02

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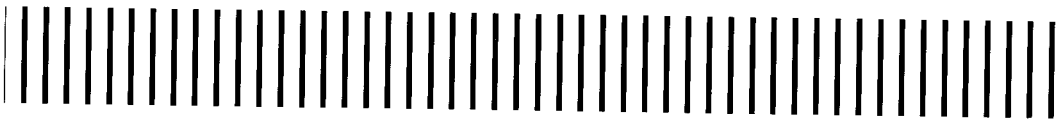
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Summary of Groundwater Elevations
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	5/10/2006	10/23/2006	5/22/2007	10/23/2007	5/12/2008	10/28/2008	5/18/2009	10/26/2009
DEC-1				dry				
DEC-2	36.30	36.44	33.38	36.4	36.03	36.86	36.12	36.49
DEC-3	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
MW-EA-5	41.00	41.69	41.22	41.54	40.58	42.25	41.6	41.81
MW-EA-6	39.31	39.90	39.32	dry	38.88	41.66	39.44	39.86
MW-EA-7	41.17	41.14	40.79	41.37	40.91	41.74	41.11	40.97
MW-EA-8	37.65	37.93	37.38	37.49	37.09	40.62	36.7	37.19
MW-ESE-1	38.57	39.04	38.80	39.18	38.51	39.24	38.55	38.70
MW-ESE-2	39.28	40.84	40.22	40.94	39.33	41.63	40.84	41.66
MW-ESE-3	34.37	34.78	34.55	34.71	34.30	37.57	34.45	34.43
MW-ESE-4	31.72	32.24	31.92	32.04	31.58	34.04	31.81	32
MW-ESE-5	40.43	40.82	40.81	40.90	40.27	41.18	40.64	35.67
MW-ESE-6	32.33	32.90	35.88	32.62	32.18	34.68	32.42	32.61
MW-ESE-7	33.01	32.98	32.92	33.09	33.03	32.98	32.82	32.99
MW-ESE-8	35.90	36.42	36.04	36.18	35.12	34.90	35.57	36.14
MW-ESE-9	obstructed	dry		damaged	damaged	36.32	35.7	35.84
MW-GTI-1	-	-		not found	not found	not found	not found	not found
MW-GTI-2	38.23	38.21	38.48	38.18	34.78	38.57	38.11	37.79
MW-GTI-3	34.17	34.20	34.38	34.31	34.13	34.58	34.36	34.28
MW-GTI-4	38.57	39.18	39.50	39.14	45.14	45.14	39.22	39.39

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US Army Corps of Engineers
WVA Long-Term Monitoring 2009 Data Summary Report

Appendices



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MALCOLM PIRNIE

MALCOLM PIRNIE

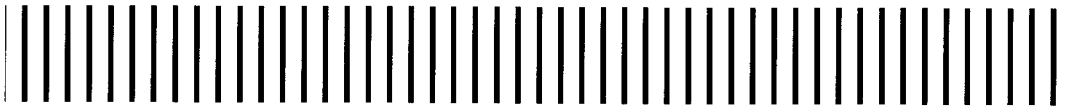
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A

APPENDIX

US Army Corps of Engineers
WVA Long-Term Monitoring 2009 Data Summary Report

Appendix A: Purge Logs



2118157 / ALB

MALCOLM PIRNIE

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: SNS-6 DATE: 6.4.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1045												
Gallons													
Well Volume													
Conductivity (mohm/cm)	0.754												
Dissolved Oxygen	0.00												
REDOX (mV)	-169												
pH	6.46												
Temperature (°C)	15.0												
Turbidity	0.0												
Salinity	0.0												
TDS	0.48												

ANALYTE	CONCENTRATION
Nitrate (mg/l)	.54
Nitrite (mg/l)	0.024
Sulfate (mg/l)	31
Chloride (mgl)	136
Alkalinity (mg/l)	144
Ferrous Iron (mg/l)	.16

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

Notes: Collect Sample 1050

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: STS-5 DATE: 6.4.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG ETM

A: Total Casing and Screen Length:

B: Casing Internal Diameter:

C: Water Level Below Top of Casing:

D: Volume of Water in Casing:

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1015											
Gallons												
Well Volume												
Conductivity (mohm/cm)	0.905											
Dissolved Oxygen	0.00											
REDOX (mV)	-40											
pH	6.75											
Temperature (°C)	15.6											
Turbidity	0.0											
Salinity	0.0											
TDS	0.602											

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Collect Sample 1020

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: STS-6 ~~MW-08A (MW)~~ DATE: 6.4.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0930											
Gallons												
Well Volume												
Conductivity (mohm/cm)	0.373											
Dissolved Oxygen	3.58											
REDOX (mV)	69											
pH	6.14											
Temperature (°C)	15.9											
Turbidity	0.0											
Salinity	0.0											
TDS	0.24											

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Collect Sample 0935.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-80 DATE: 5/22/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: DCG & EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	930	935	940	945	950	955	1000	1005	1010	1015		
Gallons	-	1	2	3	4	5	6	7	8	9		
Well Volume												
Conductivity (mohm/cm)	0.444	28.6	>99.9	28.2	15.8	0.99	0.99	0.90	0.476	0.447		
Dissolved Oxygen	0.4	0	0	0	0	0	0	0	0	0		
REDOX (mV)	-101	-58	-59	-75	-78	-80	-80	-80	-79	-78		
pH	7.9	7.21	7.07	7.05	7.09	7.04	7.00	6.97	6.86	6.84		
Temperature (°C)	11.5	11.3	11.3	11.3	11.3	11.3	11.3	11.4	11.4	11.5		
Turbidity	6.2	0	0	33.2	41	170	253	295	254	296		
Salinity	0	0	>40	2.2	1.0	0.2	0	0	0	0		
TDS	0.31	23	>99	20	10	0.5	0.4	0.4	0.32	0.32		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.98
Nitrite (mg/l)	0.108
Sulfate (mg/l)	39
Chloride (mgl)	154
Alkalinity (mg/l)	286
Ferrous Iron (mg/l)	1.74

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

Notes: Begin purging @ 930
Collect sample @ 1020

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-79 DATE: 5/22/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York
PROJECT NUMBER: 2118157
SAMPLERS: DCG & ETM

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	810	815	820	825	830	835	840	845	850	855	900	
Gallons	-	1	2	3	4	5	6	7	8	9	10	
Well Volume												
Conductivity (mohm/cm)	>99.9	1.23	1.02	0.91	0.494	0.444	0.400	0.325	0.227	0.219	0.215	
Dissolved Oxygen	3.47	0	0	0	0	0	0	0	0	0	0	
REDOX (mV)	-121	-208	-228	-243	-252	-258	-262	-265	-262	-259	-255	
pH	9.04	9.15	9.40	9.48	9.51	9.56	9.60	9.69	9.73	7.77	9.78	
Temperature (°C)	13.2	12.2	12.1	12.2	12.6	12.5	12.6	12.5	12.5	12.5	12.5	
Turbidity	0	28	0	0	0	0	0	0	0	0	0	
Salinity	>4.0	0.1	0	0	0	0	0	0	0	0	0	
TDS	>99	2.8	2.7	0.6	0.31	0.29	0.26	0.21	0.15	0.14	0.14	

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.22
Nitrite (mg/l)	0.008
Sulfate (mg/l)	2
Chloride (mgl)	53
Alkalinity (mg/l)	60
Ferrous Iron (mg/l)	0.11

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

Notes: Begin Purge @ 810
Collect Sample @ 900

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-~~08~~82 DATE: 5.21.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED 1530											
Time	1443	1448	1453	1500	1507	1512	1519	1524	1528			
Gallons		1.25	2.0	2.75		5		7	8			
Well Volume												
Conductivity (mohm/cm)	0.593	>99.9	>99.9	55.0	3.22	0.90	0.90	0.90	0.91			
Dissolved Oxygen	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	-125	-109	+112	+118	-120	-122	-121	+126	-120			
pH	7.97	7.63	7.62	7.71	7.74	7.73	7.74	7.76	7.76			
Temperature (°C)	13.5	12.8	12.6	12.6	12.5	12.5	12.5	12.5	12.5			
Turbidity	2050	73.4	61.0	72.8	62.2	63.4	64.8	63.8	64.9			
Salinity	0.0	>4.0	>4.0	2.7	0.1	0.1	0.0	0.0	0.0			
TDS	0.5	>99	>99	98	1.5	1.4	0.40	0.38	0.34			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	.45
Nitrite (mg/l)	.030
Sulfate (mg/l)	7
Chloride (mgl)	90
Alkalinity (mg/l)	157
Ferrous Iron (mg/l)	0.24

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

Notes: Initiate Purge 1443.

Collect Sample 1530.

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MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-81 DATE: 5.21.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1340	1350	1355	1400	1407	1413	1420	1425	1430			
Gallons		2	3.5	4	6		8	9	10			
Well Volume												
Conductivity (mohm/cm)	1.79	58.1	48.1	15.5	2.49	1.90	1.48	1.40	1.42			
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	-102	-132	-133	-135	-140	-143	-146	-148	-149			
pH	7.13	7.45	7.52	7.57	7.03	7.00	7.68	7.69	7.69			
Temperature (°C)	13.2	12.7	12.7	12.7	12.7	12.8	12.7	12.8	12.8			
Turbidity	18.0	22.6	14.7	0.0	6.3	0.0	8.8	8.16	8.7			
Salinity	0.1	>4.0	3.2	0.8	0.1	0.1	0.1	.1	.1			
TDS	1.7	32	31	8	1.5	1.4	0.9	0.8	0.8			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.24
Nitrite (mg/l)	0.012
Sulfate (mg/l)	
Chloride (mgl)	144
Alkalinity (mg/l)	2.95
Ferrous Iron (mg/l)	0.1

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

Notes: Initiate Purge 1340.

Collect Sample 1430.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-84 DATE: 5.21.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1219	1224	1230	1235	1240	1245	1250	1255				
Gallons		2	2.5	3.5	4.5	6.5	7.5	8				
Well Volume												
Conductivity (mohm/cm)	6.75	34.7	>99.9	10.0	1.24	1.10	1.08	1.04				
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
REDOX (mV)	-116	-107	-73	-56	-49	-47	-47	-47				
pH	7.64	7.22	6.63	6.18	6.03	5.97	5.96	5.97				
Temperature (°C)	11.6	11.9	11.9	11.8	11.9	11.9	11.8	11.8				
Turbidity	188.0	98.1	97.8	82.1	63.9	50.6	42.4	44.9				
Salinity	0.4	2.3	>4.0	0.7	0.1	0.0	0.0	0.0				
TDS	3.1	22	799	2.7	0.7	0.7	0.7	0.7				

ANALYTE	CONCENTRATION
Nitrate (mg/l)	.25
Nitrite (mg/l)	.013
Sulfate (mg/l)	44
Chloride (mgl)	212
Alkalinity (mg/l)	148
Ferrous Iron (mg/l)	>3.30

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

Notes: Initiate Purge 1217

Collect Sample 1255

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-83 DATE: 5.21.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1112	1121	1127	1132	1139	1144	1150					
Gallons		2	3.5	4	6.5	8						
Well Volume												
Conductivity (mohm/cm)	>99.9	1.65	1.35	1.34	1.32	1.30	1.32					
Dissolved Oxygen	3.41	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-44	-122	-135	-142	-150	-155	-158					
pH	8.18	7.55	7.56	7.69	7.73	7.76	7.77					
Temperature (°C)	15.2	12.7	12.10	12.10	12.7	12.7	12.7					
Turbidity	0.0	0.9	0.0	0.0	0.0	0.0	0.0					
Salinity	4.0	0.1	0.1	0.1	0.1	0.1	0.1					
TDS	>99	1.0	0.9	0.9	0.9	0.8	0.8					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.14
Nitrite (mg/l)	.007
Sulfate (mg/l)	2
Chloride (mgl)	154
Alkalinity (mg/l)	309
Ferrous Iron (mg/l)	0.15

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

Notes: Initiate Purge 1109

Collect Sample 1150

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-39 DATE: 5.21.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG / EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	1008	ACCUMULATED VOLUME PURGED									
Time	~~8:27~~	1014	1019	1023	1032	1037	1042	1047			
Gallons		1.5		2.5		4		6			
Well Volume											
Conductivity (mohm/cm)	>99.9	>99.9	799.9	24.8	1.80	1.46	1.45	1.41			
Dissolved Oxygen	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	-10	-6	-17	-22	-24	-25	-210	-206			
pH	6.13	5.74	5.94	5.99	6.02	6.02	10.02	6.08			
Temperature (°C)	12.6	11.2	11.1	[illegible]	11.2	11.1	11.2	11.1			
Turbidity	39.4	28.7	21.5	13.5	7.8	7.3	5.1	5.5			
Salinity	>4.0	>4.0	>4.0	1.1	0.1	0.1	0.1	0.1			
TDS	>99	>99	>99	13	1.1	0.9	0.9	0.9			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.21
Nitrite (mg/l)	0.01
Sulfate (mg/l)	28
Chloride (mgl)	140
Alkalinity (mg/l)	107
Ferrous Iron (mg/l)	>3.3

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

Notes: Initiate Purge 1008.

Collect Sample 1047

QC

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA - SA - MW-32 DATE: 5 21 09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0818	0825	0834	0841	0847	0852	0856	0902	0907	0912		
Gallons			.5		1			1.5		1.75		
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9		
Dissolved Oxygen	6.22	5.80	6.14	5.90	5.56	5.31	5.16	5.06	4.98	4.79		
REDOX (mV)	182	162	141	130	122	122	115	111	111	110		
pH	6.74	6.99	7.37	7.50	7.63	7.59	7.61	7.63	7.69	7.61		
Temperature (°C)	15.9	16.5	16.8	17.0	17.1	17.3	17.2	17.4	17.4	17.5		
Turbidity	551.0	155	95.5	54.9	38.5	24.8	19.6	17.7	17.1	14.3		
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0		
TDS	>99	>99	>99	>99	>99	>99	>99	>99	>99	>99		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.34
Nitrite (mg/l)	0.022
Sulfate (mg/l)	16
Chloride (mgl)	8
Alkalinity (mg/l)	105
Ferrous Iron (mg/l)	0.29

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

Notes: Initiate Purge 0818

Collect Sample 0912

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-78 DATE: 5.21.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time												
Gallons												
Well Volume												
Conductivity (mohm/cm)												
Dissolved Oxygen												
REDOX (mV)												
pH												
Temperature (°C)												
Turbidity												
Salinity												
TDS												

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Initiate Purge 0900
Stop Purge 0903
Permanganate Present.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-41 DATE: 5.20.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG / EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1425	1433	1441	1447	1453	1458	1503					
Gallons		1		2		2.5						
Well Volume												
Conductivity (mohm/cm)	1.68	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9					
Dissolved Oxygen	8.23	5.92	6.25	6.36	6.58	6.61	6.62					
REDOX (mV)	92	103	96	88	83	80	79					
pH	7.99	7.64	7.71	7.90	8.10	8.21	8.22					
Temperature (°C)	13.1	12.8	12.9	12.9	12.8	12.9	12.9					
Turbidity	108.1	59.7	45.2	26.5	20.2	17.3	19.1					
Salinity	0.2	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0					
TDS	3.10	>99	>99	>99	>99	>99	>99					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.24
Nitrite (mg/l)	0.16
Sulfate (mg/l)	31
Chloride (mgl)	27
Alkalinity (mg/l)	59
Ferrous Iron (mg/l)	0.19

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

Notes: Initiate Purge @ 1425

Collect Sample 1503

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-EA-6 DATE: 5.20.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG | EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1252	1300	1310	1318	1324	1330	1335					
Gallons				1.5	7.44		2.5					
Well Volume												
Conductivity (mohm/cm)	3.23	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9					
Dissolved Oxygen	6.86	6.90	6.84	6.86	7.09	6.91	6.97					
REDOX (mV)	109	107	90	79	80	81	83					
pH	6.24	6.30	6.60	6.66	6.73	6.73	6.71					
Temperature (°C)	12.5	12.8	12.7	13.0	12.9	12.6	13.0					
Turbidity	3.4	20.5	3.6	5.2	4.3	4.9	3.2					
Salinity	0.1	2.6	>4.0	>4.0	>4.0	>4.0	>4.0					
TDS	4.8	1.7	>99	>99	>99	>99	>99					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.24
Nitrite (mg/l)	0.01
Sulfate (mg/l)	31
Chloride (mgl)	62
Alkalinity (mg/l)	223
Ferrous Iron (mg/l)	0.08

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

Notes: Initiate Purge 1250

Collect Sample at 1335

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-23 DATE: 5 2009

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1142	1149	1157	1206	1211	1217	1223	1228				
Gallons		2	2.5	3.5		5.0	6.5					
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9				
Dissolved Oxygen	3.28	1.32	0.80	0.42	0.16	0.00	0.00	0.00				
REDOX (mV)	121	34	-31	-42	-46	-50	-56	-59				
pH	7.21	7.14	7.14	6.98	6.90	6.83	6.79	6.77				
Temperature (°C)	11.0	10.8	10.8	10.7	10.6	10.5	10.5	10.5				
Turbidity	9.2	2.6	1.6	8.4	0.0	0.0	0.3	0.0				
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0				
TDS	>99	>99	>99	>99	>99	>99	>99	>99				

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.21
Nitrite (mg/l)	0.011
Sulfate (mg/l)	33
Chloride (mgl)	
Alkalinity (mg/l)	110
Ferrous Iron (mg/l)	0.80

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

Notes: Initiate Purge 1142

Collect Sample 1228

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-38 DATE: 5 20 09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1008	1014	1020	1026	1031	1036	1040						
Gallons		.5			1.5		2.25						
Well Volume													
Conductivity (mohm/cm)	7999	21.1	3.87	1.38	1.25	1.24	1.24						
Dissolved Oxygen	2.42	0.00	0.00	0.00	0.00	0.00	0.00						
REDOX (mV)	84	113	115	116	117	119	120						
pH	6.81	6.29	6.35	6.46	6.43	6.45	6.47						
Temperature (°C)	10.6	10.6	10.8	10.8	10.6	10.6	10.9						
Turbidity	5.0	0.0	0.0	0.0	0.0	0.0	0.0						
Salinity	>4.0	1.0	0.2	0.1	0.1	0.1	0.1						
TDS	>99	12	2.5	0.9	0.8	0.8	0.8						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.17
Nitrite (mg/l)	0.014
Sulfate (mg/l)	47
Chloride (mgl)	39
Alkalinity (mg/l)	141
Ferrous Iron (mg/l)	1.58

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

Notes: Initiate Purge 1008.
Collect Sample 1040

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-33 DATE: 5.20.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG / EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0930	0937	0944	0950								
Gallons	0		0.598									
Well Volume												
Conductivity (mohm/cm)	0.302	0.303	0.599	4.160								
Dissolved Oxygen	4.97	7.39	8.90	9.23								
REDOX (mV)	22	14	17	17								
pH	7.13	7.17	7.36	7.51								
Temperature (°C)	14.7	15.7	16.8	17.9								
Turbidity	118.0	85.5	55.7	32.3								
Salinity	0.0	0.0	0.1	0.2								
TDS	0.24	0.24	0.42	0.47								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Initiate Purge 0930.

Stop Purge 1000 Water drew down below bottom of Pump.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA - SA-MW-34 DATE: 5-20-09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJH

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	810	819	824	830	835	840	845	850				
Gallons				3		4		6.5				
Well Volume												
Conductivity (mohm/cm)	15.4	2.96	2.89	2.87	2.86	2.91	2.91	2.91				
Dissolved Oxygen	2.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
REDOX (mV)	-73	-95	-105	-115	-119	-122	-124	-125				
pH	7.25	7.11	7.18	7.24	7.25	7.23	7.21	7.21				
Temperature (°C)	11.2	10.9	10.9	11.1	11.1	11.2	11.2	11.3				
Turbidity	0.0	0.9	2.9	0.0	0.0	0.0	0.0	0.0				
Salinity	1.2	.1	.1	.1	0.1	0.1	0.1	0.1				
TDS	12	1.9	1.8	1.8	1.8	1.9	1.8	1.9				

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.50
Nitrite (mg/l)	.06
Sulfate (mg/l)	0
Chloride (mgl)	
Alkalinity (mg/l)	71
Ferrous Iron (mg/l)	0.21

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

Notes: Initiate Purge 0810.

Collect Sample @ 0850.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-20 DATE: 5.19.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	1210	1215	1225	1230	1235	1240	1245	1251	1255	1300	1305
Gallons		1		2				2.5			
Well Volume											
Conductivity (mohm/cm)	>999	>99.9	>99.9	>99.9	>99.9	>99.9	39.8	73.6	>99.9	>99.9	>99.9
Dissolved Oxygen	1.93	0.66	0.31	0.15	0.00	0.00	0.00	0.00	1.96	2.01	2.11
REDOX (mV)	81	100	90	76	86	94	96	97	103	107	105
pH	7.19	6.64	6.60	6.66	6.68	6.71	6.72	6.74	6.70	6.71	6.73
Temperature (°C)	17.3	17.5	17.1	16.9	16.8	16.8	16.7	16.8	17.0	17.1	17.3
Turbidity	48.1	10.1	2.8	4.8	1.9	3.2	3.6	3.3	0.0	0.0	0.0
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	2.5	>4.0	>4.0	>4.0	>4.0
TDS	>99	>99	>99	>99	>99	53	27	>99	>99	>99	>99

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.23
Nitrite (mg/l)	0.011
Sulfate (mg/l)	41
Chloride (mgl)	272
Alkalinity (mg/l)	240
Ferrous Iron (mg/l)	0

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

Notes: Initiate Purge @ 1210

Collect Sample 1305

* Very low Flow - water appears to draw down
May be consider lowering pump in well?

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-ESE-6 DATE: 5-19-09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length:

B: Casing Internal Diameter:

C: Water Level Below Top of Casing: 11.26

D: Volume of Water in Casing:

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1032	1037	1042	1047	1053	1058	1103	1107				
Gallons					3.5		5	5.5				
Well Volume												
Conductivity (mohm/cm)	>99.9	1.28	1.19	1.18	1.17	1.16	1.16	1.16				
Dissolved Oxygen	~~0.49~~	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
REDOX (mV)	-101	-99	-111	-124	-130	-133	-136	-136				
pH	6.95	6.55	6.78	6.93	7.04	7.07	7.00	7.07				
Temperature (°C)	11.7	11.4	11.5	11.5	11.5	11.5	11.5	11.5				
Turbidity	4.4	8.6	8.3	9.5	7.5	10.3	5.7	6.3				
Salinity	>4.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1				
TDS	>99	0.8	0.8	0.8	0.8	0.7	0.7	0.7				

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.25
Nitrite (mg/l)	0.025
Sulfate (mg/l)	1
Chloride (mgl)	3.5
Alkalinity (mg/l)	23.5
Ferrous Iron (mg/l)	> 3.30

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

Notes: Initiate Purge 1032

Collect Sample 1107

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SA-MW-19R DATE: 5-19-09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: PLG, EJM

A: Total Casing and Screen Length:

B: Casing Internal Diameter:

C: Water Level Below Top of Casing: 2.34

D: Volume of Water in Casing:

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0840	0845	0850	0855	0900	0905	0910	0915	0922	0930	0935	
Gallons			1.5			3						
Well Volume												
Conductivity (mohm/cm)	78.3	4.08	>9.99	73.1	3.97	2.26	2.46	2.49	2.41	2.59	2.51	
Dissolved Oxygen	1.02	~~780~~	0.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
REDOX (mV)	-51	-78	-83	-93	-104	-108	-105	-100	-99	-91	-86	
pH	7.26	6.86	6.85	6.82	6.77	6.76	6.69	6.59	6.49	6.41	6.40	
Temperature (°C)	10.5	12.1	13.0	12.9	12.5	12.1	11.9	11.7	11.9	11.1	11.1	
Turbidity	301.0	86.9	37.3	27.8	19.7	14.8	14.6	14.9	13.9	19.0	23.4	
Salinity	>4.0	0.2	>4.0	>4.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
TDS	45	2.6	99	41	1.8	1.5	1.6	1.7	1.7	1.9	1.9	

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.17
Nitrite (mg/l)	0.020
Sulfate (mg/l)	5.0
Chloride (mgl)	184
Alkalinity (mg/l)	25
Ferrous Iron (mg/l)	3.30

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

Notes: Initiate Purge 0840
Collect Sample 0935

VOC SVOC MEE CO_2 DOC/Sulfide

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: B121-S

DATE: 6.3.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: PLG ETM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1352	1357	1402	1407								
Gallons	0											
Well Volume												
Conductivity (mohm/cm)	1.08	1.08	1.08	1.08								
Dissolved Oxygen	0.00	0.00	0.00	0.00								
REDOX (mV)	-242	-265	-271	-273								
pH	7.82	7.88	7.89	7.89								
Temperature (°C)	20.0	19.8	19.8	19.7								
Turbidity	0.0	0.0	0.0	0.0								
Salinity	0.0	0.0	0.0	0.0								
TDS	0.7	0.7	0.7	0.7								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.22
Nitrite (mg/l)	0.02
Sulfate (mg/l)	22
Chloride (mgl)	261
Alkalinity (mg/l)	92
Ferrous Iron (mg/l)	0.26

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

Notes: Begin Purge 1352

Collect Sample 1407

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: B12I-N DATE: 6.3.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DCG FJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1305	1310	1315	1320	1325	1330						
Gallons	0		1.5			3						
Well Volume												
Conductivity (mohm/cm)	1.17	0.98	0.97	0.97	0.97	0.97						
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.06						
REDOX (mV)	-197	-236	-256	-262	-267	-269						
pH	7.59	7.52	7.62	7.71	7.73	7.76						
Temperature (°C)	16.7	16.2	16.2	16.2	16.3	16.2						
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0						
Salinity	0.1	0.0	0.0	0.0	0.0	0.0						
TDS	0.7	0.6	0.6	0.6	0.6	0.6						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.27
Nitrite (mg/l)	0.006
Sulfate (mg/l)	4
Chloride (mgl)	111
Alkalinity (mg/l)	228
Ferrous Iron (mg/l)	0.7

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

Notes: Begin Purge 1305.
Collect Sample 1330.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-13LD-110 DATE: ~~6.3.09~~ 6.4.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	~~1230~~	1235	1240	1245	1250	1255					
Gallons			1			4					
Well Volume											
Conductivity (mohm/cm)	~~1.75~~	1.71	1.70	1.63	1.61	1.60					
Dissolved Oxygen	~~0.00~~	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	~~+109~~	+109	+135	+146	+149	+150					
pH	~~7.03~~	7.04	6.68	6.76	6.77	6.78					
Temperature (°C)	~~23.4~~	23.5	22.8	22.7	22.7	22.7					
Turbidity	~~0.0~~	0.0	0.0	0.0	0.0	0.0					
Salinity	~~0.1~~	0.1	0.1	0.1	0.1	0.1					
TDS	~~1.0~~	1.1	1.1	1.0	1.0	1.0					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1235 Peristaltic
Collect Sample 1255.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-35-MW-8 DATE: 10.3.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1150	1155	1200	1205	1210	1215						
Gallons	0			2.5								
Well Volume												
Conductivity (mohm/cm)	3.29	3.92	4.01	4.03	4.04	4.04						
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00						
REDOX (mV)	+108	-175	+193	+200	+205	+207						
pH	7.13	7.28	7.36	7.38	7.40	7.40						
Temperature (°C)	16.3	16.1	16.1	16.1	16.1	16.1						
Turbidity	0.0	0	0.0	0.0	0.0	0.0						
Salinity	0.2	0.2	0.2	0.2	0.2	0.2						
TDS	2.2	2.5	2.6	2.6	2.6	2.6						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1150

Collect Sample 1215

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-B35-PW-1 DATE: 6.3.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1100	1110	1115	1120	1125	1130	1135					
Gallons	0	1		2			3					
Well Volume												
Conductivity (mohm/cm)	0.165	0.155	0.155	0.154	0.154	0.154	0.154					
Dissolved Oxygen	0.02	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-204	-241	-260	-273	-288	-296	-298					
pH	7.39	7.00	7.03	7.07	7.10	7.12	7.13					
Temperature (°C)	17.5	17.1	17.0	17.0	17.0	17.1	17.1					
Turbidity	54.2	48.1	0.0	0.0	0.0	0.0	0.0					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.11	0.10	0.10	0.10	0.10	0.10	0.10					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1100

Collect Sample 1135

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 93EM-SP-13 DATE: 6.3.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1002	1007	1012	1017	1022	1027						
Gallons	0	1	2	3	4	5						
Well Volume												
Conductivity (mohm/cm)	0.601	0.597	0.597	0.595	0.594	0.597						
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00						
REDOX (mV)	-189	-204	-216	-221	-227	-230						
pH	7.08	6.91	6.95	6.99	7.02	7.03						
Temperature (°C)	12.8	12.7	12.7	12.6	12.6	12.7						
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0						
Salinity	0.0	0.0	0.0	0.0	0.0	0.0						
TDS	0.39	0.38	0.38	0.38	0.38	0.39						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1002 VOA/SVOC

Collect 1027

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 86EM-SP-6 DATE: 6.3.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0842	0848	0853	0858	0903	0908	0913					
Gallons		1		2.5								
Well Volume												
Conductivity (mohm/cm)	1.65	1.26	1.22	1.25	1.30	1.33	1.34					
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-47	-42	-26	-18	-10	-8	-4					
pH	6.58	6.57	6.60	6.59	6.58	6.58	6.57					
Temperature (°C)	14.0	14.5	14.5	14.3	14.1	14.1	13.9					
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1					
TDS	1.1	0.8	0.8	0.8	0.8	0.9	0.9					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.25
Nitrite (mg/l)	0.023
Sulfate (mg/l)	>80
Chloride (mgl)	306
Alkalinity (mg/l)	242
Ferrous Iron (mg/l)	0.2

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

Notes: Begin Purge 0842

Collect Sample 0913

VOC metals NAP

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-07 DATE: 6.3.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0750	0756	0800	0805	0810	0815	0820					
Gallons	0		1			2.5						
Well Volume												
Conductivity (mohm/cm)	0.458	0.380	0.373	0.385	0.406	0.426	0.429					
Dissolved Oxygen	0.11	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-130	-134	-137	-143	-145	-146	-147					
pH	6.86	6.01	6.04	6.11	6.13	6.12	6.12					
Temperature (°C)	14.7	14.3	14.3	14.3	14.3	14.4	14.4					
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.30	0.25	0.24	0.25	0.26	0.26	0.28					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 0750.
Collect Sample 0820

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-32 DATE: 6.2.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1500	1505	1510	1515	1520	1525						
Gallons			1			2						
Well Volume												
Conductivity (mohm/cm)	7.84	7.43	7.54	7.65	7.67	7.67						
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00						
REDOX (mV)	58	67	70	74	77	79						
pH	6.26	6.03	6.07	6.09	6.09	6.09						
Temperature (°C)	16.3	15.4	15.6	15.6	15.7	15.7						
Turbidity	22.3	0	0.0	0.0	0.0	0.0						
Salinity	0.4	0.4	0.4	0.4	0.4	0.4						
TDS	4.9	4.7	4.8	4.8	4.8	4.8						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 1500

Collect Sample 1525

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-25-mw-7 DATE: 6/2/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: DLG & EJM

VOCs & VAP

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1408	1413	1418	1423	1429							
Gallons		1		3								
Well Volume												
Conductivity (mohm/cm)	61.5	61.3	61.3	61.4	61.5							
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00							
REDOX (mV)	-215	-220	-224	-225	-226							
pH	6.67	7.03	7.09	7.10	7.09							
Temperature (°C)	15.8	15.4	15.4	15.3	15.3							
Turbidity	0.0	0.0	0	0	0							
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0							
TDS	37	37	37	37	37							

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.33
Nitrite (mg/l)	0.011
Sulfate (mg/l)	>80
Chloride (mgl)	>1000
Alkalinity (mg/l)	98
Ferrous Iron (mg/l)	2.87

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

Notes: Begin Purge 1408

Collect Sample 1429

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WA-AW-25-MW-5 DATE: 5/2/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: DLG & EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2" _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1325	1330	1335	1340								
Gallons	-		1									
Well Volume												
Conductivity (mohm/cm)	16.7	10.7	7.09	5.99								
Dissolved Oxygen	0.00	0.00	0.00	0.00								
REDOX (mV)	-6	-26	-62	-74								
pH	7.27	6.96	6.99	6.96								
Temperature (°C)	15.4	15.2	16.3	18.4								
Turbidity	19	0	0	9								
Salinity	0.9	0.6	0.4	0.3								
TDS	9	7	4.5	3.2								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin purge @ 1325.
Purged well dry @ 1340, DID NOT COLLECT SAMPLE
Purged ~ 1.25 gallons

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 93EM-SP-9 DATE: 6.2.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1202	1207	1212	1217	1222	1228	1233					
Gallons			2.5			3.5						
Well Volume												
Conductivity (mohm/cm)	2.78	1.49	0.920	0.450	0.507	0.618	0.782					
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-144	-129	-108	-89	-86	-81	-87					
pH	7.03	6.95	6.86	6.90	6.87	6.90	6.95					
Temperature (°C)	16.4	15.1	15.6	16.1	16.3	16.6	16.6					
Turbidity	>999	>999	>999	>999	>999	>999	>999					
Salinity	0.1	0.1	0.0	0.0	0.0	0.0	0.0					
TDS	1.8	0.9	0.6	0.29	0.32	0.44	0.51					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mg/l)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin 1207 Using Peristaltic

Purged Well Dry at 1235.

Shut off pump. Let sit for 10 min

Collect Sample at 1256.

Bladder pumps needs cleaning. Attached poly tubing to bladder pump w/ rubber band to sample from same zone as bladder pump screen.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-47 DATE: 6.2.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM.

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1021	1026	1031	1036	1041	1046	1051					
Gallons	1		2		3		4					
Well Volume												
Conductivity (mohm/cm)	3.41	3.41	3.41	3.39	3.39	3.40	3.40					
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-132	-156	-177	-186	-191	-194	-196					
pH	6.80	6.78	6.82	6.85	6.85	6.86	6.86					
Temperature (°C)	12.8	12.7	13.0	13.0	13.2	13.3	13.2					
Turbidity	0.0	0	0	0	0	0	0					
Salinity	0.2	0.2	0.2	0.2	0.2	0.2	0.2					
TDS	2.2	2.2	2.2	2.2	2.2	2.2	2.2					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.21
Nitrite (mg/l)	0.007
Sulfate (mg/l)	33
Chloride (mgl)	722
Alkalinity (mg/l)	224
Ferrous Iron (mg/l)	0.51

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

Notes: Begin Purge 1021.
Collected Samples @ 1055

Collect duplicate (WVA-MW-X-2)

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 86EM-SP-1B DATE: 6.2.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0940	0945	0950	0955	1000	1005	1010					
Gallons	0					1.5						
Well Volume												
Conductivity (mohm/cm)	1.67	1.89	2.26	2.53	2.56	2.58	2.58					
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	49	-19	-22	-35	-38	-42	-45					
pH	6.54	6.31	6.27	6.26	6.29	6.29	6.30					
Temperature (°C)	14.3	14.4	14.2	14.1	14.1	14.2	14.0					
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1					
TDS	1.1	1.2	1.5	1.6	1.6	1.7	1.7					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 0940

Collect Sample 1010 VOCs only

DUPLICATE

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 83DM-SP-1 DATE: 6.2.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0830	0835	0840	0845	0850	0855	0900					
Gallons			1				1.5					
Well Volume												
Conductivity (mohm/cm)	3.38	3.63	3.63	3.64	3.55	3.54	3.54					
Dissolved Oxygen	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	77	79	79	78	74	73	73					
pH	7.10	6.75	6.72	6.68	6.64	6.64	6.64					
Temperature (°C)	14.3	14.5	14.7	14.9	15.0	15.0	15.1					
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Salinity	0.2	0.2	0.2	0.2	0.2	0.2	0.2					
TDS	2.3	2.2	2.3	2.3	2.2	2.3	2.3					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.27
Nitrite (mg/l)	0.007
Sulfate (mg/l)	>80
Chloride (mgl)	960
Alkalinity (mg/l)	141
Ferrous Iron (mg/l)	0.23

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

Notes: Begin Purge 0830

VOCs, NAP

Collect Sample 0900

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-25-MW-6 DATE: 6.2.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	758	804	809	0814									
Gallons													
Well Volume													
Conductivity (mohm/cm)	5.76	5.98	5.96	5.96	5.98								
Dissolved Oxygen	2.59	0.00	0.00	0.00	0.00								
REDOX (mV)	120	77	68	101	59								
pH	5.68	6.49	6.61	6.64	6.65								
Temperature (°C)	15.4	14.8	14.8	14.8	14.8								
Turbidity	0.0	0.0	0	0.0	0.0								
Salinity	0.3	0.3	0.3	0.3	0.3								
TDS	3.7	3.8	3.8	3.8	3.8								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 758.
VOCs only.
Collect Sample 0819

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-~~25~~ MW-2 DATE: 6/1/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS:

VOCs + NAP

A: Total Casing and Screen Length:

B: Casing Internal Diameter:

C: Water Level Below Top of Casing:

D: Volume of Water in Casing:

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1515	1524	1530	1535	1540	1545						
Gallons	-	0.5		2.5		4						
Well Volume												
Conductivity (mohm/cm)	2.04	2.11	2.12	2.12	2.08	2.09						
Dissolved Oxygen	1.34	0.00	0.00	0.00	0.00	0.00						
REDOX (mV)	-202	-288	-322	-331	-340	-339						
pH	6.56	6.56	6.62	6.59	6.54	6.53						
Temperature (°C)	16.4	15.2	15.2	15.1	15.2	15.1						
Turbidity	19.4	0.0	0.0	60.2	64.7	61.6						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	1.4	1.4	1.4	1.3	1.3	1.3						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.56
Nitrite (mg/l)	0.054
Sulfate (mg/l)	>80
Chloride (mgl)	533
Alkalinity (mg/l)	206
Ferrous Iron (mg/l)	1.07

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

Notes: Begin Purge 1515

Collect Sample 1545

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WA-AW-25-MW-3 DATE: 6/1/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2115157

SAMPLERS: DLG & EJM

VOC & NAP

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1410	1415	1420	1425	1430	1435	1440	1445	1450	1455		
Gallons		1	2	3	4	5	6	7	8	9		
Well Volume												
Conductivity (mohm/cm)	5.35	2.15	2.83	3.88	9.09	16.3	5.83	2.91	2.80	2.81		
Dissolved Oxygen	0.72	1.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
REDOX (mV)	10	-10	-41	-52	-61	-66	-69	-71	-72	-72		
pH	6.86	6.62	6.47	6.48	6.50	6.57	6.57	6.57	6.57	6.57		
Temperature (°C)	14.8	14.4	14.6	14.5	14.5	14.5	14.7	14.8	14.8	14.7		
Turbidity	182	0	0	0	0	0	0	0	0	0		
Salinity	0.2	0.1	0.1	0.2	0.5	1.0	0.3	0.1	0.1	0.1		
TDS	2.1	1.4	1.8	2.4	5.3	11	3.6	1.9	1.8	1.8		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.30
Nitrite (mg/l)	0.020
Sulfate (mg/l)	80
Chloride (mgl)	583
Alkalinity (mg/l)	295
Ferrous Iron (mg/l)	0.59

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

Notes: Begin Purge @ 1410
Collect Sample @ 1455

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: ~~8[illegible]~~ 86EM-SP-1A DATE: 6.1.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1320	1325	1331	1336	1341	1346	1351	1356				
Gallons		1.5			4.0			6.0				
Well Volume												
Conductivity (mohm/cm)	9.05	6.11	6.83	6.11	4.68	4.89	4.79	4.69				
Dissolved Oxygen	0.89	0.54	0.45	0.48	0.45	0.46	0.43	0.43				
REDOX (mV)	-32	11	36	44	52	57	61	62				
pH	6.67	6.50	6.44	6.44	6.44	6.44	6.45	6.45				
Temperature (°C)	17.1	17.0	17.0	17.0	17.0	17.1	17.0	17.1				
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Salinity	0.4	0.4	0.3	0.3	0.5	0.2	0.2	0.2				
TDS	4.9	4.7	4.4	3.2	3.2	2.9	3.1	3.1				

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1320

Collect Sample 1396 Tubing broken off at top.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-35 DATE: 6.1.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 211857

SAMPLERS: DLG & ETM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1225	1230	1235	1240	1245	1250	1255	1300	1305			
Gallons	-	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0			
Well Volume												
Conductivity (mohm/cm)	>99.9	23.4	15.7	22.9	18.4	3.37	2.99	2.99	2.98			
Dissolved Oxygen	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	3	6	7	6	5	3	1	-2	-4			
pH	6.68	6.63	6.65	6.72	6.74	6.78	6.79	6.79	6.79			
Temperature (°C)	16.2	15.6	15.5	15.5	15.5	15.5	15.4	15.3	15.4			
Turbidity	0	0	0	0	0	0	0	0	0			
Salinity	>4.0	1.3	0.9	1.4	1.1	0.9	0.7	0.7	0.7			
TDS	>99	12	10	15	12	2.2	1.9	1.9	1.9			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 1225
Collect sample @ 1305

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-36 DATE: 6.1.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS:

A: Total Casing and Screen Length:

B: Casing Internal Diameter:

C: Water Level Below Top of Casing:

D: Volume of Water in Casing:

PARAMETER	ACCUMULATED VOLUME PURGED											
Time												
Gallons												
Well Volume												
Conductivity (mohm/cm)												
Dissolved Oxygen												
REDOX (mV)												
pH												
Temperature (°C)												
Turbidity												
Salinity												
TDS												

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1220.

well Dry. Not Able to Purge enough for reading/sample.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-43 DATE: 6.1.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS:

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1123	1128	1133	1140	1145	1150	1155					
Gallons			1.5		2.5		3.25					
Well Volume												
Conductivity (mohm/cm)	>99.9	13.6	4.11	2.88	2.80	2.79	2.78					
Dissolved Oxygen	0.95	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-92	-98	-94	-89	-87	-85	-84					
pH	10.27	6.19	6.22	6.26	6.28	6.29	6.30					
Temperature (°C)	18.1	17.0	17.0	17.0	17.0	17.0	17.0					
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Salinity	>4.0	0.8	0.2	0.1	0.1	0.1	0.1					
TDS	>99	8	2.6	1.8	1.8	1.8	1.8					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1123

Collect Sample 1155

Taking hydrocarbon odor. Slight sheen

Tubing broken. Bladder Pump head too high - well casing needs to be lowered a few inches

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 94EM-MW-19 DATE: 6.1.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG, EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1010	1015	1020	1025	1030	1035	1040					
Gallons		1.0	2.0	3								
Well Volume							7.61					
Conductivity (mohm/cm)	18.3	10.2	9.4	7.13	7.91	7.91	~~8230~~					
Dissolved Oxygen	0.85	0.00	0.00	0.00	0.08	0.00	0.00					
REDOX (mV)	510	25	-75	-105	-23	-21	-18					
pH	6.20	6.17	6.30	6.24	6.19	6.19	6.20					
Temperature (°C)	15.0	14.1	14.1	14.1	13.9	13.9	13.9					
Turbidity	509	238	59.0	19.3	97.8	98.7	104.0					
Salinity	1.4	0.6	0.5	0.4	0.4	0.4	0.4					
TDS	10	6	6	4.5	5.1	5.0	4.8					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 1010 Bladder Pump not working. Clogged? Peristaltic Used

Collect Sample 1040.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 94Em-MW-20 DATE: 6/1/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG & EDM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	855	0900	0906	0911	0917	0923	0930	0935	0940	0945	0950	
Gallons		1.0		2.5		4.0					7.5	
Well Volume												
Conductivity (mohm/cm)	>99.9	66.9	51.0	31.0	21.9	20.0	20.2	20.4	20.6	19.4	19.3	
Dissolved Oxygen	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.15	1.18	1.21	1.22	
REDOX (mV)	152	70	-13	-80	-90	-63	-53	-47	-20	-14	-14	
pH	3.73	4.26	5.05	5.68	5.96	5.94	5.81	5.81	5.77	5.77	5.81	
Temperature (°C)	13.3	13.2	13.2	13.3	13.4	13.6	13.9	13.9	14.0	14.1	14.1	
Turbidity	>999	107.0	105	123.0	113	44.7	36.5	40.3	41.4	44.6	44.8	
Salinity	>4.0	>4.0	3.2	1.9	1.3	1.2	1.2	1.2	1.2	1.2	1.1	
TDS	46	39	30	18	13	13	13	13	12	12	12	

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge 0855

Collect Sample 0950

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 94EM-MW-21 DATE: 6/1/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	755	800	805	810	815	820	825	830	835	840		
Gallons	-	0.5	1.0	1.5	2nd 0	4.0	5.0	6.0	7.0	8.0		
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	76.9	23.1	16.5	11.6	9.10	5.38	5.28	5.29		
Dissolved Oxygen	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
REDOX (mV)	129	126	109	71	26	23	18	-15	-9	-12		
pH	7.83	7.12	6.96	6.92	6.92	6.93	6.90	6.84	6.84	6.85		
Temperature (°C)	14	13.8	13.8	13.8	13.8	13.8	13.9	14.0	14.1	14.2		
Turbidity	>999	517	305	168	204	124.0	84	93	89	85		
Salinity	>4.0	>4.0	>4.0	1.4	0.9	1.0	0.2	0.3	0.3	0.3		
TDS	>99	>99	>99	15	10	10	2.4	2.9	3.1	3.2		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 755
Collect Sample @ 840

Sampled w/ Peri on 6.2.09

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 93EM-SP-9 DATE: 5.29.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG ETM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time												
Gallons												
Well Volume												
Conductivity (mohm/cm)												
Dissolved Oxygen												
REDOX (mV)												
pH												
Temperature (°C)												
Turbidity												
Salinity												
TDS												

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Well Purged dry in 1 minute.

LAB SAMPLE Pump needs to be Cleaned

Bladder Pump Port Clogged w/ Sediment.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 93EM-SP-11 DATE: 5.29.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1403	1411	1416	1422	1429	1434	1440					
Gallons				3		4	4.5					
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9					
Dissolved Oxygen	9.68	3.99	4.00	4.76	4.26	4.14	4.03					
REDOX (mV)	450	441	433	405	396	390	388					
pH	6.87	6.85	6.92	7.00	7.00	6.99	6.98					
Temperature (°C)	14.7	13.8	14.0	14.2	14.2	14.2	14.2					
Turbidity	41.7	0.0	0.0	0.0	0.0	0.0	0.0					
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0					
TDS	>99	>99	>99	>99	>99	>99	>99					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 1403.

Collect Sample 1440

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-79 DATE: 5.29.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1327	1332	1338	1344								
Gallons			1									
Well Volume												
Conductivity (mohm/cm)	0.192	0.229	0.330	0.409								
Dissolved Oxygen	12.31	11.37	11.08	11.02								
REDOX (mV)	515	549	586	596								
pH	7.060	6.63	6.46	6.57								
Temperature (°C)	15.6	15.2	15.4	15.4								
Turbidity	36.0	30.7	4.4	33.2								
Salinity	0.0	0.0	0.0	0.0								
TDS	0.12	0.15	0.24	0.27								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin 1327. Stop Purge

Permanganate Present.

Also Low Water Level - Peristalic Barely Making It.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-81-3 DATE: 5.29.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1102	1109	1115	1121	1126	1131	1136	1143	1148			
Gallons								4.5	5			
Well Volume												
Conductivity (mohm/cm)	0.94	4.15	5.93	20.9	20.7	17.3	11.2	12.9	11.7			
Dissolved Oxygen	4.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	-101	-249	-258	-260	-261	-263	-264	-267	-268			
pH	7.57	8.23	8.55	8.59	8.62	8.61	8.65	8.63	8.60			
Temperature (°C)	13.4	13.6	13.7	13.8	13.8	13.8	13.8	13.8	13.9			
Turbidity	24.8	17.1	8.40	0.0	0.0	0.0	0.0	0.0	0.0			
Salinity	0.0	0.2	0.3	1.2	1.2	1.0	0.6	0.2	0.2			
TDS	0.6	27	4.0	13	13	11	7	6	6			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 1102

Collect Samples 1148

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-81-2 DATE: 5.29.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0953	0959	1004	1012	1017	1023	1028	1035	1040	1045		
Gallons			1.0	2.5			3.5			5		
Well Volume												
Conductivity (mohm/cm)	0.562	5.00	44.5	11.5	9.6	4.97	4.61	4.30	4.22	4.26		
Dissolved Oxygen	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
REDOX (mV)	-110	-106	-110	-128	-132	-136	-139	-143	-147	-148		
pH	6.88	6.56	6.52	6.46	6.48	6.48	6.48	6.48	6.51	6.50		
Temperature (°C)	13.3	13.6	13.6	13.6	13.7	13.7	13.7	13.7	13.8	13.9		
Turbidity	29.6	124.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Salinity	0.0	0.3	2.8	0.06	0.5	0.3	0.2	0.2	0.2	0.2		
TDS	0.47	3.4	27	7	10	3.2	2.9	2.8	2.7	2.7		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 0953

Collect Sample 1045.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-81-1 DATE: 5/29/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 21815?

SAMPLERS: DLG & BM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0839	0844	0851	0900	0905	0911	0916	0923	0928	0933	0939	0945
Gallons						1.5						3.5
Well Volume												
Conductivity (mohm/cm)	1.91	2.34	2.26	2.07	2.44	4.76	5.38	5.84	7.04	5.64	5.47	5.51
Dissolved Oxygen	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REDOX (mV)	-197	-198	-195	-184	-180	-175	-174	-172	-170	-170	-168	-170
pH	7.14	7.29	7.26	7.08	7.02	6.97	6.94	6.93	6.92	6.91	6.90	6.93
Temperature (°C)	13.2	13.3	13.5	13.6	13.5	13.6	13.6	13.7	13.7	13.7	13.7	13.7
Turbidity	0.0	6.7	16.0	45.2	51.1	35.5	40.7	53.3	44.8	0.0	0.0	0.0
Salinity	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.3	0.4	0.4
TDS	1.3	1.5	1.4	1.3	1.6	3.1	3.4	3.6	4.6	3.7	3.9	4.0

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 0839

Collect Sample 0945

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-92R-3 DATE: 5/29/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG FJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0755	800	805	810	815								
Gallons	-	0.5	1.0	1.5	2.0								
Well Volume													
Conductivity (mohm/cm)	>99.9	12.8	2.15	2.14	2.16								
Dissolved Oxygen	0.94	0.00	0.00	0.00	0.00	WELL IS DRY							
REDOX (mV)	-99	-214	-221	-223	-221								
pH	6.81	6.91	6.91	6.92	6.92								
Temperature (°C)	13.4	13.4	13.9	12.9	14.0								
Turbidity	25.7	0.0	0.0	0.0	0.0								
Salinity	>4.0	0.6	0.1	0.1	0.1								
TDS	>99	7	1.4	1.4	1.4								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 0755

~~Collected sample @ 820~~ COULD NOT COLLECT SAMPLE -DT

WELL WAS PURGED DRY @ ~2.0 GALLONS

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: IWP-MW-8 22-2 DATE: 5/28/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: DLG & EDM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1500	1505	1510	1515	1520	1525	1530					
Gallons		0.5	1	1.5	2.0	2.5	3.0					
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	59.3	4.32	3.93	3.94	3.92					
Dissolved Oxygen	1.96	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-80	-72	-78	-81	-83	-85	-85					
pH	6.88	6.41	6.43	6.44	6.44	6.43	6.43					
Temperature (°C)	13.4	13.5	13.5	13.6	13.5	13.5	13.5					
Turbidity	6.9	12.4	13.5	0.0	0.0	0.0	0.0					
Salinity	>4.0	>4.0	2.9	0.2	0.2	0.2	0.2					
TDS	>99	>99	>99	2.7	2.5	2.5	2.4					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Collect Sample @ 1530

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-82R-1 DATE: 5/28/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS:

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1350	1355	1400	1405	1410	1415	1420	1425	1430	1435	1440	
Gallons	-	0.5	1.0									
Well Volume	-											
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	48.1	13.8	4.95	4.28	4.01	3.99	
Dissolved Oxygen	0.15	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
REDOX (mV)	-68	-100	-104	-107	-109	-111	-112	-113	-113	-113	-113	
pH	6.54	6.59	6.62	6.63	6.63	6.67	6.66	6.66	6.66	6.66	6.66	
Temperature (°C)	13.4	13.5	13.5	13.5	13.5	13.5	13.5	13.6	13.6	13.6	13.6	
Turbidity	52	30.2	15.7	1.7	2.8	[illegible]13	23.1	35	50	57	53	
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	2.8	0.07	0.3	0.2	0.2	0.2	
TDS	>99	>99	>99	>99	>99	28	9	3.2	2.8	2.5	2.5	

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Collect Sample 1440

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-83-3 DATE: 5/28/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: DLG & EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1215	1220	1225	1230	1235	1240	1245	1250	1255			
Gallons	-	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0			
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	10.4	2.27	2.15	2.1	2.11			
Dissolved Oxygen	3.41	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	-62	-79	-76	-100	-98	-94	-92	-90	-89			
pH	8.15	7.27	6.33	6.92	7.00	7.02	7.02	7.02	7.01			
Temperature (°C)	13.2	13.4	13.4	13.5	13.5	13.5	13.5	13.6	13.5			
Turbidity	0.0	0.0	0	0	0	0	0	0	0			
Salinity	>4.0	>4.0	>4.0	>4.0	0.6	0.1	0.1	0.1	0.1			
TDS	>99	>99	>99	>99	7	1.5	1.4	1.3	1.4			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 1215
Collected Sample @ 1300

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-83-2 DATE: 5/26/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: DCG & ETM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1135	1140	1145	1150	1155	1200	1205					
Gallons	-	0.5	1.0	1.5	2.0	2.5	3.0					
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	19.7	3.11	2.61	2.59	2.61					
Dissolved Oxygen	0.05	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-126	-171	-179	-172	-167	-166	-165					
pH	7.40	7.54	7.71	7.66	7.59	7.59	7.58					
Temperature (°C)	13.3	13.5	13.6	13.6	13.6	13.6	13.6					
Turbidity	46	44	33	33	39	40	36					
Salinity	>4.0	>4.0	1.4	0.1	0.1	0.1	0.1					
TDS	>99	>99	14	1.9	1.7	1.7	1.7					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 1135
Collected Sample @ 1210

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-83-1 DATE: 5/28/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York
PROJECT NUMBER: 2118157
SAMPLERS: DLG & ESM

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1045	1050	1055	1100	1105	1110	1115	1120	1125			
Gallons	-	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0			
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	~~>99.9~~ 3.41	3.41	2.14	1.86	1.77	1.77	1.77			
Dissolved Oxygen	0.93	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	-164	-119	-105	-100	-98	-96	-94	-92	-91			
pH	7.68	7.62	7.50	7.44	7.42	7.39	7.37	7.35	7.34			
Temperature (°C)	13.3	13.4	13.4	13.5	13.5	13.5	13.5	13.5	13.5			
Turbidity	258	27.9	0	0	0	0	0	0	0			
Salinity	>4.0	>4.0	3	0.2	0.1	0.1	0.1	0.1	0.1			
TDS	>99	>99	27	1.9	1.3	1.2	1.1	1.1	1.1			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 1045
Collected Sample @ 1130

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-84R-3 DATE: 5/28/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0940	945	950	955	1000	1005	1010	1015	1020	1025		
Gallons	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0		
Well Volume												
Conductivity (mohm/cm)	0.999	>99.9	>99.9	66.1	21.3	11.2	3.03	2.50	2.31	2.30		
Dissolved Oxygen	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
REDOX (mV)	-88	-183	-187	-183	-181	-178	-176	174	-172	-170		
pH	7.46	7.75	7.54	7.55	7.53	7.52	7.52	7.50	7.57	7.52		
Temperature (°C)	13.5	13.5	13.5	13.6	13.6	13.6	13.6	13.6	13.6	13.6		
Turbidity	0.0	0.0	0.0	0	0	0	0	0	0	0		
Salinity	>4.0	>4.0	>4.0	>4	1.4	0.8	0.2	0.1	0.1	0.1		
TDS	>99	>99	>99	44	15	8	2	1.6	1.5	1.5		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mg/l)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 0940
Collected Sample @ 1030

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-24R-2 DATE: 5/28/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York
PROJECT NUMBER: 21457
SAMPLERS: DLG & EJW

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	852	857	902	907	912	917	923					
Gallons	-	0.5	1.0	1.5	2.0	2.5	3.0					
Well Volume			10.1									
Conductivity (mohm/cm)	>99.9	>99.9	~~99.9~~	2.47	2.21	2.21	2.21					
Dissolved Oxygen	1.19	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-150	-140	-139	-140	-140	-138	-139					
pH	7.30	7.59	7.68	7.74	7.75	7.75	7.75					
Temperature (°C)	13.4	13.5	13.6	13.7	13.9	14.0	13.7					
Turbidity	17.3	46.1	0	40	14.1	21.2	24.3					
Salinity	>4.0	>4.0	0.5	0.1	0.1	0.1	0.1					
TDS	>99	>99	6	1.7	1.4	1.4	1.4					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Collect Sample 0923

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-84R-1 DATE: 5/28/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2116157

SAMPLERS: DG & BM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	748	753	758	803	808	813	818	823	828			
Gallons	-	2.5	1	1.5	2.0	2.5	3.0	3.5	4			
Well Volume				90.2								
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	[illegible]	17.9	4.14	2.75	2.44	2.43			
Dissolved Oxygen	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	-87	-155	-161	-165	-171	-172	-172	-172	-172			
pH	7.22	7.55	7.60	7.63	7.66	7.67	7.67	7.67	7.67			
Temperature (°C)	13.8	13.6	13.6	13.6	13.6	13.6	13.6	13.7	13.6			
Turbidity	187	80	25	33	28	21	0	0	0			
Salinity	>4.0	>4.0	>4.0	>4.0	1.0	0.2	0.1	0.1	0.1			
TDS	>99	>99	>99	[illegible]	11	2.7	1.8	1.6	1.5			

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ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin purge @ 748
Collect sample @ 830

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WA-MW-85R-3 DATE: 5/27/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York
PROJECT NUMBER: 2116157
SAMPLERS: DLG & ESM

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1533	1538	1543	1548	1553	1558	1603					
Gallons	-	0.5	1.0	1.5	2.0	2.5	3.0					
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	52.8	17.6	16.9	16.7					
Dissolved Oxygen	0.16	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	-134	-132	-145	-160	-170	-178	-179					
pH	7.77	7.66	7.66	7.76	7.81	7.83	7.85					
Temperature (°C)	13.4	13.4	13.5	13.5	13.5	13.6	13.7					
Turbidity	320	279	227	229	40	45	47					
Salinity	>4.0	>4.0	>4.0	>4.0	1.0	1.0	1.0					
TDS	>99	>99	>99	45	10	9	10					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 1533
Collect Sample @ 1605

duplicate collected (WVA-MW-X-1)

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-15R-2 DATE: 5.27.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1452	1459	1504	1509	1514	1519	1524						
Gallons		0.5	1	1.5	2.0	2.5	3.0						
Well Volume													
Conductivity (mohm/cm)	>99.9	>99.9	57.3	20.5	14.1	13.9	13.5						
Dissolved Oxygen	1.40	0.00	0.00	0.00	0.00	0.00	0.00						
REDOX (mV)	-172	-196	-205	-209	-210	-211	-211						
pH	7.71	8.31	8.57	8.53	8.62	8.65	8.65						
Temperature (°C)	13.4	13.5	13.5	13.5	13.5	13.5	13.5						
Turbidity	374	242	246	237	203	198	207						
Salinity	>4.0	>4.0	2.6	1.2	0.8	0.6	0.6						
TDS	>99	>99	25	13	9	8	8						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 1452

DUPLICATE

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-85R-1 DATE: 5/27/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DCG & EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1350	1355	1304	1309	1316	1325	1330	1336	1341	1346		
Gallons	-				2							
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	0.001	>99.9	>99.9	>99.9	>99.9	>99.9		
Dissolved Oxygen	3.20	0.00	.44	.81	2.52	0.27	0.00	0.00	0.00	0.00		
REDOX (mV)	-209	-221	-153	-158	-139	+196	-200	-212	-221	-222		
pH	8.13	8.11	7.55	7.64	7.43	7.89	7.85	7.93	8.03	8.03		
Temperature (°C)	12.3	13.4	13.5	13.7	13.4	13.0	13.6	13.6	13.7	13.7		
Turbidity	3.3	48.3	182	27.9	5720	38.3	33.6	34.7	38.0	36.5		
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0		
TDS	>99	>99	>99	>99	>99	>99	>99	>99	>99	>99		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 1350.

Collect Sample 1346.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-816R-3 DATE: 5.27.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJML

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1051	1056	1101	1108	1113	1118	1124	1129	1134			
Gallons				2		2.5			4			
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	11.7	2.40	2.39	2.38	2.38	2.39	2.39			
Dissolved Oxygen	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
REDOX (mV)	6	-142	-168	-206	-237	-272	-281	-289	-291			
pH	7.88	8.04	8.07	8.11	8.14	8.16	8.15	8.16	8.16			
Temperature (°C)	13.2	13.3	13.3	13.3	13.3	13.4	13.4	13.4	13.4			
Turbidity	34.0	36.1	18.1	0.0	0.0	0.0	0.0	0.0	0.0			
Salinity	>4.0	>4.0	0.5	0.1	0.1	0.1	0.1	0.1	0.1			
TDS	>99	>99	6	1.5	1.5	1.5	1.5	1.5	1.5			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 1050

Collect Sample 1134

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-MW-86R-2 DATE: 5.27.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0954	959	1006	1012	1017	1023	1027	1032	1037	1042		
Gallons							2.5			4		
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	2.65	2.45	2.43	2.57	2.45	2.36	2.37	2.35		
Dissolved Oxygen	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
REDOX (mV)	216	158	130	121	116	112	109	105	104	101		
pH	7.40	7.82	7.92	7.90	7.89	7.88	7.88	7.88	7.88	7.88		
Temperature (°C)	13.3	13.4	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.0		
Turbidity	157.0	38	0.0	1.5	4.2	0.1	11.9	9.4	10.1	9.9		
Salinity	>4.0	>4.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
TDS	>99	>99	1.7	1.6	1.6	1.6	1.6	1.5	1.5	1.5		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 0954.

Collect Sample 1042.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WA-MW-86R-1 DATE: 5.27.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	855	0900	0905	0910	0915	0920	0927	0932	0937	0942	0947
Gallons		1			2.5		3				4
Well Volume											
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	31.0	9.6	3.12	2.29	2.16	2.08	2.01	1.99
Dissolved Oxygen	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REDOX (mV)	-204	-173	-169	-171	-174	-171	-179	-179	-173	-175	-170
pH	8.25	8.53	8.17	8.15	8.13	8.13	8.13	8.12	8.07	7.91	7.80
Temperature (°C)	13.5	13.5	13.5	13.5	13.5	13.4	13.4	13.4	13.4	13.4	13.4
Turbidity	34.5	820.0	67.6	4.7	8.5	15.5	0.0	24.3	0.0	0.0	0.0
Salinity	>4.0	>4.0	>4.0	1.8	0.3	0.1	0.1	0.1	0.1	0.1	0.1
TDS	>99	>99	>99	18	3.3	1.9	1.5	1.4	1.3	1.3	1.2

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 855

Collect Sample 0947

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-mw-44 DATE: 5/20/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York
PROJECT NUMBER: 2118157
SAMPLERS: DLG & EJM

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1510	1515	1520	1525	1530								
Gallons	-	1	1.5	2.0	2.5								
Well Volume													
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9								
Dissolved Oxygen	2.55	0.22	0	0	0								
REDOX (mV)	-4	14	13	12	12								
pH	6.61	6.20	6.22	6.23	6.23								
Temperature (°C)	18.1	17.7	17.7	17.6	17.7								
Turbidity	60	0.0	0	0	0								
Salinity	>4.0	>4.0	>4	>4	>4								
TDS	>99	>99	>99	>99	>99								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Begin Purge @ 1510
Collect Sample @ 1530

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 92EM-SP-7 DATE: 5.26.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1341	1347	1352	1357	1402	1407	1412	1418	1423	1428		
Gallons		.5			1.5		2			2.5		
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9		
Dissolved Oxygen	5.37	0.00	0.00	0.00	0.09	0.05	0.01	0.00	0.00	0.00		
REDOX (mV)	49	38	24	13	-8	-28	-141	-141	-135	-132		
pH	8.18	8.38	8.40	8.40	8.35	8.22	7.66	7.11	7.11	7.12		
Temperature (°C)	16.0	15.7	15.8	15.8	15.8	15.7	15.8	15.8	15.6	15.7		
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0		
TDS	>99	>99	>99	>99	>99	>99	>99	>99	>99	>99		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.16
Nitrite (mg/l)	0.01
Sulfate (mg/l)	63
Chloride (mgl)	492
Alkalinity (mg/l)	30
Ferrous Iron (mg/l)	0.41

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

Notes: Start Purge 1341.
Collect Sample 1428.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 92EM-SP-8 DATE: 5/20/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York
PROJECT NUMBER: 2118157
SAMPLERS: DLG & EJM

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1230	1235	1240	1245	1250	1255	1300	1305	1310	1315		
Gallons	-	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5		
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	46.9	53.3	33	28.9	27.7		
Dissolved Oxygen	3.31	0.0	0.0	0	0	0	6	0	0	0		
REDOX (mV)	124	127	91	71	55	42	33	27	22	20		
pH	6.46	6.48	6.50	6.53	6.55	6.57	6.58	6.59	6.59	6.60		
Temperature (°C)	15.3	14.9	15	15	15	15	15	15	15	15		
Turbidity	30	10.4	0	0	0	0	0	0	0	0		
Salinity	>4	>4	>4	>4	>4	3.2	3.7	1.8	1.4	1.4		
TDS	>99	>99	>99	>99	>99	32	25	18	16	20		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.51
Nitrite (mg/l)	0.012
Sulfate (mg/l)	> 80
Chloride (mgl)	> 2,000
Alkalinity (mg/l)	196
Ferrous Iron (mg/l)	0.28

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

Notes: Begin Purge @ 1230
Collect Sample @ 1315

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 816M-SP-5 DATE: 5 20 09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York
PROJECT NUMBER: 2118157
SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1035	1040	1045	1050	1055	1102	1109	1114				
Gallons			1		2.5		1	3.5				
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	92.6	2.89	2.30	2.26	2.24	2.24				
Dissolved Oxygen	5.82	0.07	0.00	0.00	0.00	0.00	0.00	0.00				
REDOX (mV)	-58	-71	-82	-89	-94	-96	-99	-100				
pH	6.75	6.38	6.38	6.38	6.40	6.41	6.42	6.41				
Temperature (°C)	13.5	13.0	12.9	13.0	13.2	13.2	13.2	13.3				
Turbidity	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Salinity	>4.0	>4.0	>4.0	0.1	0.1	0.1	0.1	0.1				
TDS	>99	>99	37	1.8	1.50	1.4	1.4	1.4				

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.70
Nitrite (mg/l)	0.009
Sulfate (mg/l)	28
Chloride (mg/l)	541
Alkalinity (mg/l)	141
Ferrous Iron (mg/l)	3.12

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

Notes: Start Purge 1035
Collect Sample 1114

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 83DM-SP-3 DATE: 5.26.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0906	911	916	921	926	931	936	941	946	957		
Gallons	-	1	2	3	4	5	6	7	8	9		
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	81.1	2.55	2.65	2.66		
Dissolved Oxygen	3.52	0.16	0.00	0	0	0	0	0	0	0		
REDOX (mV)	39	30	14	3	-5	-10	-12	-13	-14	-14		
pH	10.61	6.49	6.44	6.42	6.4	6.4	6.4	6.37	6.38	6.38		
Temperature (°C)	10.6	10.6	10.6	10.5	10.6	10.5	10.4	10.5	10.5	10.5		
Turbidity	0.0	0	0	0	0	0	0	0	0	0		
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	0.1	0.1	0.1		
TDS	>99	>99	>99	>99	>99	>99	48	1.8	1.7	1.7		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.17
Nitrite (mg/l)	0.005
Sulfate (mg/l)	>80
Chloride (mgl)	457
Alkalinity (mg/l)	207
Ferrous Iron (mg/l)	2.03

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

Notes: Begin Purge @ 825
Collect sample @ 957

Needs new silicone tubing.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: ~~B3~~ S3DM ~~B3~~ DM-SP-4 DATE: 5/20/09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: DLG & EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	~~810~~	815	820	825	830	835	840	845	850	855		
Gallons	-			2.5			4			6.5		
Well Volume										.10		
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	109	3.35	3.13	3.11	3~~0~~		
Dissolved Oxygen	4.1	1.16	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
REDOX (mV)	195	155	-11	-41	-50	-53	-56	-57	-57	-58		
pH	5.78	6.24	6.35	6.27	6.26	6.27	6.26	6.25	6.25	6.23		
Temperature (°C)	10.6	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6		
Turbidity	10.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Salinity	>4	>4	>4.0	>4.0	>4.0	0.6	0.2	0.2	0.2	0.2		
TDS	>99	>99	>99	>99	>99	6	2.1	2.0	2.0	2.0		

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: Start Purge 810.

Collect Sample 0855. VOCs only.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-64 DATE: 5.22.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG / EJM

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	1340	1347	1352	1358	1405	1410	1415	1420	1425	1430	1435
Gallons		1.5		3			5		6.5		8
Well Volume											
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9
Dissolved Oxygen	0.35	0.00	0.00	2.75	2.83	2.61	2.36	2.14	1.86	1.85	1.78
REDOX (mV)	-1	-76	-160	-102	-39	-24	-15	-7	3	5	7
pH	8.51	7.82	8.25	9.84	9.72	9.55	9.40	9.27	9.05	8.90	8.86
Temperature (°C)	14.5	14.4	14.4	14.4	14.6	14.5	14.5	14.5	14.5	14.5	14.5
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0
TDS	>99	>99	>99	>99	>99	>99	>99	>99	>99	>99	>99

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.18
Nitrite (mg/l)	0.012
Sulfate (mg/l)	3
Chloride (mgl)	190
Alkalinity (mg/l)	144
Ferrous Iron (mg/l)	0.73

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

Notes: Start Purge 1340

Collect Sample 1435

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-52 DATE: 5.22.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS:

A: Total Casing and Screen Length:

B: Casing Internal Diameter:

C: Water Level Below Top of Casing:

D: Volume of Water in Casing:

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1245	1250	1255	1300	1305	1310	1315					
Gallons	-	0.5	1.0	1.5	2	2.5	3.0					
Well Volume												
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9					
Dissolved Oxygen	8.09	0.85	0.51	0.45	0.45	0.43	0.42					
REDOX (mV)	-126	-146	-149	-149	-149	-149	-149					
pH	12.95	12.94	12.93	12.95	12.98	12.99	13.01					
Temperature (°C)	15.6	15.2	15.1	15.1	15.2	15.2	15.2					
Turbidity	0	0	0	0	0	0	0					
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0					
TDS	>99	>99	>99	>99	>99	>99	>99					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	1.96
Nitrite (mg/l)	<0.10
Sulfate (mg/l)	
Chloride (mgl)	10
Alkalinity (mg/l)	105
Ferrous Iron (mg/l)	0.27

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

Notes: Begin purge @ 1245
Collect Sample @ 1315

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

93EM-RW-2

WELL NUMBER: 93EM-RW-2 DATE: 5.22.09

PROJECT NAME: WVA LTM, May 2009, Watervliet, New York

PROJECT NUMBER:

SAMPLERS: DLG EJM

A: Total Casing and Screen Length:

B: Casing Internal Diameter:

C: Water Level Below Top of Casing:

D: Volume of Water in Casing:

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	1145	1150	1155	1205	1210	1215	1220				
Gallons	1	2.5	3.5	4		5.5					
Well Volume											
Conductivity (mohm/cm)	>99.9	>99.9	>99.9	>99.9	799.9	799.9					
Dissolved Oxygen	0.69	0.35	0.49	0.80	0.82	0.79					
REDOX (mV)	103	96	99	102	102	99					
pH	6.65	6.64	6.68	6.68	6.65	6.65					
Temperature (°C)	13.6	13.5	13.6	13.7	13.8	13.8					
Turbidity	0.0	0.0	0.0	0.0	0.0	0.0					
Salinity	>4.0	>4.0	>4.0	>4.0	>4.0	>4.0					
TDS	>99	>99	>99	>99	>99	>99					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.14
Nitrite (mg/l)	0.017
Sulfate (mg/l)	29
Chloride (mgl)	590
Alkalinity (mg/l)	123
Ferrous Iron (mg/l)	0.74

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

Notes: Start Purge 1140

Collect Sample 1215.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-MW-52 DATE: 10/30/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: SB/JR

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0955	1005	1015	1020	1025								
Gallons	0				1								
Well Volume													
Conductivity (mohm/cm)	0.666	6.13	6.67	6.72	6.72								
Dissolved Oxygen	4.94	0.58	0.13	0.10	0.10								
REDOX (mV)	-61	-149	-154	-152	-150								
pH	11.36	12.17	12.28	12.31	12.31								
Temperature (°C)	15.37	15.31	15.22	15.21	15.29								
Turbidity	0.0	0.0	0.0	0.0	0.0								
Salinity	0.0	0.3	0.4	0.4	0.4								
TDS	0.36	3.9	4.2	4.2	4.2								

ANALYTE	CONCENTRATION
Nitrate (mg/l)	1.58
Nitrite (mg/l)	0.071
Sulfate (mg/l)	0
Chloride (mgl)	31
Alkalinity (mg/l)	88
Ferrous Iron (mg/l)	0.03

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

Notes: 0955- BEGIN PURGING.

1025- COLLECT SAMPLES.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-SW-MW-64 DATE: 10/30/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: SB/JR

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0900	0905	0915	0920	0925	0930	0935					
Gallons	0						2					
Well Volume												
Conductivity (mohm/cm)	1.61	1.63	1.63	1.62	1.62	1.59	1.59					
Dissolved Oxygen	1.09	0.00	0.00	0.00	0.00	0.00	0.00					
REDOX (mV)	18	-31	-67	-73	-81	-80	-78					
pH	7.77	7.84	7.77	7.72	7.71	7.56	7.48					
Temperature (°C)	16.44	16.38	16.35	16.35	16.34	16.33	16.30					
Turbidity	0.0	1.1	0.0	0.0	0.0	0.0	0.0					
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1					
TDS	1.0	1.0	1.0	1.0	1.0	1.0	1.0					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.63
Nitrite (mg/l)	0.045
Sulfate (mg/l)	3
Chloride (mgl)	191
Alkalinity (mg/l)	136
Ferrous Iron (mg/l)	1.43

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

Notes: 0900- BEGIN PURGING
0935- COLLECT SAMPLES.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 86EM-SP-1A DATE: 10/29/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: SB/JR

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1440	1450	1500	1505	1510							
Gallons	0			2	2.5							
Well Volume												
Conductivity (mohm/cm)	2.84	2.01	2.14	2.18	2.20							
Dissolved Oxygen	4.56	2.23	2.03	1.96	1.90							
REDOX (mV)	58	69	72	74	76							
pH	7.09	6.78	6.78	6.73	6.72							
Temperature (°C)	19.51	19.89	19.86	19.87	19.89							
Turbidity	0.0	0.0	0.0	0.0	0.0							
Salinity	0.1	0.1	0.1	0.1	0.1							
TDS	1.7	1.3	1.4	1.4	1.4							

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: 1440 BEGIN PURGING.
1510 - COLLECT SAMPLES.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-25-MW-6 DATE: 10/29/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: SB/JR

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1400	1405	1410	1415	1420	1425	1430					
Gallons	0						3					
Well Volume												
Conductivity (mohm/cm)	7.23	4.88	6.10	7.05	7.14	7.25	7.29					
Dissolved Oxygen	0.77	2.75	1.49	0.30	0.17	0.06	0.00					
REDOX (mV)	-43	-24	14	15	16	16	16					
pH	7.38	7.81	7.12	6.97	6.95	6.93	6.91					
Temperature (°C)	18.49	18.67	18.63	18.63	18.60	18.60	18.59					
Turbidity	146	116	49.3	6.0	4.9	4.1	2.0					
Salinity	0.4	0.3	0.3	0.4	0.4	0.4	0.4					
TDS	4.3	3.1	3.8	4.4	4.5	4.6	4.6					

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: 1400 - BEGIN PURGING
1430 - COLLECT SAMPLES.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA Aw 25-MW-7 DATE: 10/29/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: SD/JR

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1300	1305	1310	1315	1320	1325	1330	1335	1340	1345	1350	
Gallons	0										5	
Well Volume												
Conductivity (mohm/cm)	73.2	70.0	50.7	34.3	19.2	12.9	11.2	10.6	9.6	6.91	6.56	
Dissolved Oxygen	5.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
REDOX (mV)	-150	-211	-257	-282	-305	-314	-316	-316	-316	-315	-313	
pH	6.71	6.91	7.19	7.47	7.90	8.08	8.14	8.18	8.20	8.20	8.21	
Temperature (°C)	16.28	16.10	15.98	16.01	16.06	16.08	16.04	16.00	16.02	16.06	16.05	
Turbidity	23.4	37.4	180	95.2	44.0	20.1	16.1	12.7	14.2	14.2	13.1	
Salinity	4.0	4.0	3.2	2.2	1.2	0.8	0.6	0.6	0.5	0.4	0	
TDS	44	42	31	21	12	8	7	7	6	4.3	4.2	

ANALYTE	CONCENTRATION
Nitrate (mg/l)	
Nitrite (mg/l)	
Sulfate (mg/l)	
Chloride (mgl)	
Alkalinity (mg/l)	
Ferrous Iron (mg/l)	

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

Notes: 1300 - BEGIN PURGING.

1350 - COLLECT 5 SAMPLES

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-AW-25-MW-2 DATE: 10/29/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York

PROJECT NUMBER: 2118157

SAMPLERS: SB / JR

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1145	1150	1155	1200	1205	1210						
Gallons	0					2						
Well Volume												
Conductivity (mohm/cm)	2.89	3.30	3.29	3.29	3.30	3.31						
Dissolved Oxygen	5.16	0.00	0.00	0.00	0.00	0.00						
REDOX (mV)	-99	-213	-231	-248	-261	-270						
pH	6.44	6.65	6.64	6.63	6.63	6.64						
Temperature (°C)	18.53	17.85	17.87	17.94	17.94	17.80						
Turbidity	14.1	0.0	0.0	0.0	0.0	0.0						
Salinity	0.1	0.2	0.2	0.2	0.2	0.2						
TDS	1.8	2.1	2.1	2.1	2.1	2.1						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.11
Nitrite (mg/l)	0.084
Sulfate (mg/l)	>80
Chloride (mgl)	580
Alkalinity (mg/l)	143
Ferrous Iron (mg/l)	0.79

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

Notes: 1145 - BEGIN PURGING

1210 - COLLECT SAMPLES

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: WVA-1W-25-MW-3 DATE: 10/29/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York
PROJECT NUMBER: 2118157
SAMPLERS: SB, JR

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1040	1045	1050	1100	1105	1110	1115	1120	1125			
Gallons	0								3			
Well Volume												
Conductivity (mohm/cm)	2.62	3.41	4.39	4.63	4.70	4.77	4.83	4.87	4.86			
Dissolved Oxygen	8.37	2.66	0.60	0.00	0.0	0.00	0.00	0.00	0.00			
REDOX (mV)	29	-23	-52	-72	-77	-80	-83	-83	-83			
pH	6.82	6.49	6.49	6.52	6.53	6.54	6.54	6.54	6.55			
Temperature (°C)	17.49	18.52	18.56	18.53	18.53	18.70	18.82	18.94	18.89			
Turbidity	29.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Salinity	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3			
TDS	1.9	2.2	2.8	3.0	3.0	3.0	3.1	3.1	3.1			

ANALYTE	CONCENTRATION
Nitrate (mg/l)	0.33
Nitrite (mg/l)	0.072
Sulfate (mg/l)	> 80
Chloride (mgl)	772
Alkalinity (mg/l)	153
Ferrous Iron (mg/l)	0.41

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

Notes: 1040- BEGIN PURGING
1125- COLLECT SAMPLES.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 83DM-SP-1 DATE: 10/29/09

PROJECT NAME: WVA LTM, October 2009, Watervliet, New York
PROJECT NUMBER: 2118157
SAMPLERS: SB, JR

A: Total Casing and Screen Length: _____
B: Casing Internal Diameter: _____
C: Water Level Below Top of Casing: _____
D: Volume of Water in Casing: _____

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0920	0930	0935	0940	0945	0950						
Gallons	0					2						
Well Volume												
Conductivity (mohm/cm)	3.36	3.24	3.21	3.17	3.17	3.16						
Dissolved Oxygen	2.28	0.21	0.00	0.00	0.00	0.00						
REDOX (mV)	135	140	143	145	146	147						
pH	6.70	6.79	6.77	6.76	6.76	6.76						
Temperature (°C)	18.56	18.10	17.86	17.72	17.75	17.84						
Turbidity	9.5	6.4	6.2	6.3	6.7	6.1						
Salinity	0.2	0.2	0.2	0.2	0.2	0.2						
TDS	2.1	2.1	2.1	2.0	2.0	2.0						

ANALYTE	CONCENTRATION
Nitrate (mg/l)	1.91
Nitrite (mg/l)	0.140
Sulfate (mg/l)	47
Chloride (mgl)	462
Alkalinity (mg/l)	191
Ferrous Iron (mg/l)	0.14

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

Notes: 0920- BEGIN PURGING.
0950 - COLLECT SAMPLES.

MALCOLM PIRNIE

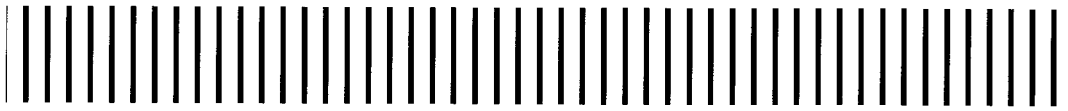
INDEPENDENT ENVIRONMENTAL
ENGINEERS, SCIENTISTS
AND CONSULTANTS

B

APPENDIX

US Army Corps of Engineers
WVA Long-Term Monitoring 2009 Data Summary Report

Appendix B: CD Containing Analytical Laboratory Reporting Forms in Adobe PDF Format



2118157 / ALB

MALCOLM PIRNIE

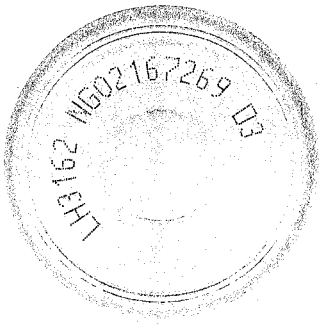
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__Audio Cassette
__VHS Cassette
X CD/DVD, Computer Disk
__Misc. Non-Paper Evidence

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Appendix B:
Analytical Laboratory Reporting Forms

2009



Watervliet Arsenal
Watervliet, New York

MALCOLM PIRNIE

INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS AND CONSULTANTS

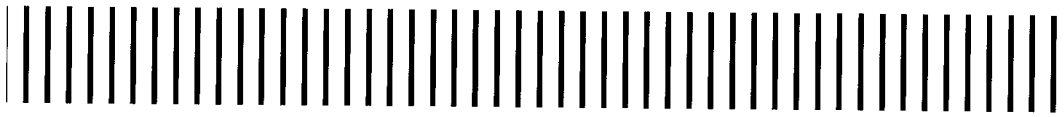
C

APPENDIX



US Army Corps of Engineers
WVA Long-Term Monitoring 2009 Data Summary Report

Appendix C:
Potentiometric Contour Maps



2118157 / ALB

MALCOLM PIRNIE

MALCOLM PIRNIE

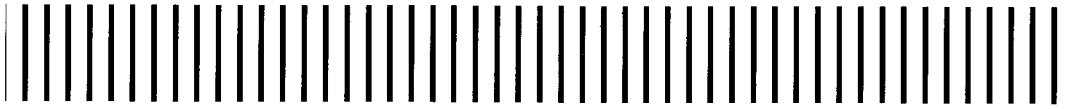
INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS AND CONSULTANTS

D

APPENDIX

US Army Corps of Engineers
WVA Long-Term Monitoring 2009 Data Summary Report

Appendix D: Summary Tables and CD Containing WVA Groundwater Monitoring Database in Microsoft Access Format



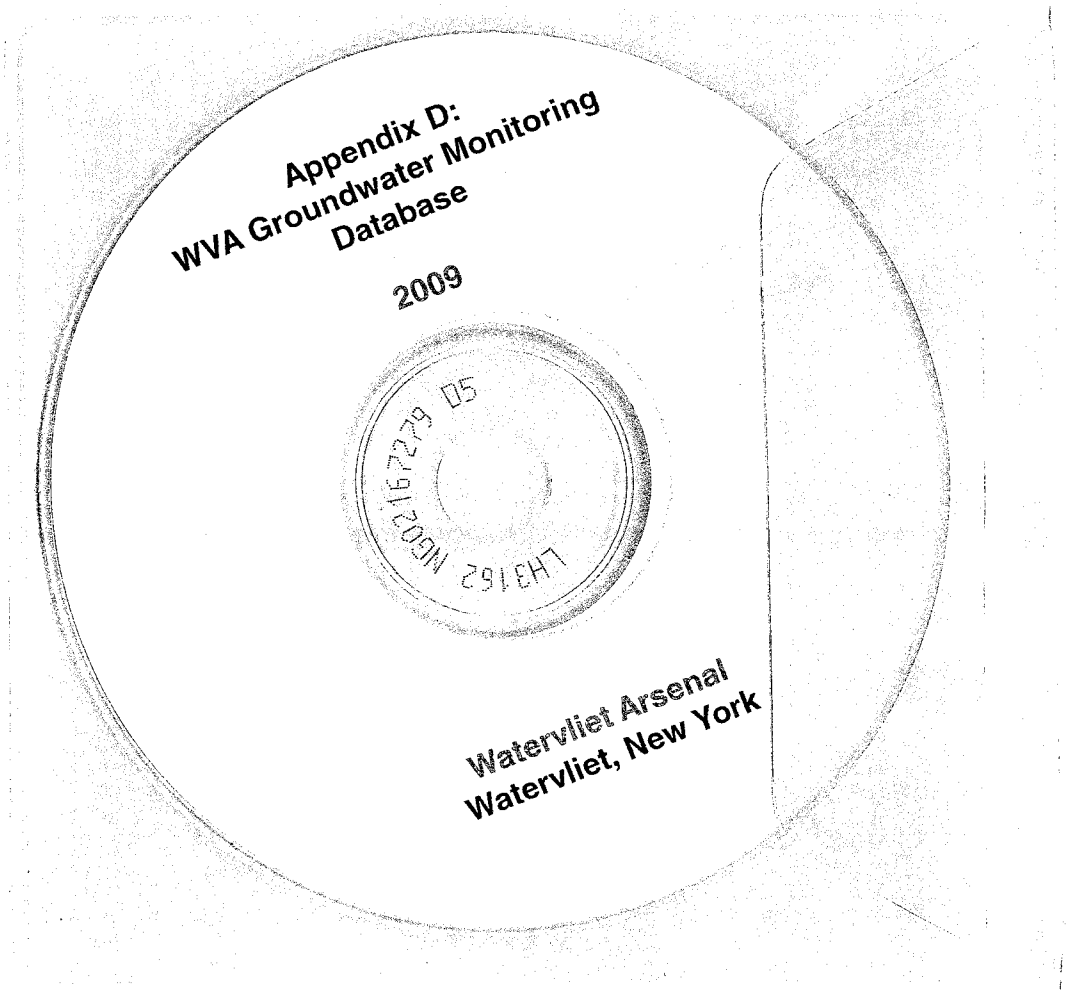
2118157 / ALB

MALCOLM PIRNIE

This file contained items that could not be scanned:

__Audio Cassette
__VHS Cassette
X CD/DVD, Computer Disk
__Misc. Non-Paper Evidence

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Appendix D:
WVA Groundwater Monitoring
Database
2009
Watervliet Arsenal
Watervliet, New York

Well ID: 83DM-SP-1

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					162									
Carbon Dioxide	mg/l														32
Carbon Dioxide	ug/l							40000		4500	7800	20300 ( )	30400 ( )		
Chloride	mg/L					235									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/L											2 ( )	2.5 ( )		
DOC Average Quads-Dissolved	mg/L	1.7	2.3			2.5		3.4		7.9	2				
Ethane	ug/l												0.5 (J)		
Ethene	ug/L												0.712 ( )		
Ferrous Iron	mg/L					1.13									
Methane	ug/L	2.7	9.7			7.1		2.6		15		6.25 ( )	781 ( )		19
Nitrate	mg/L					0.23									
Nitrite	mg/L					0.009									
pH															
Redox	mV														
Sulfate	mg/L					48									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )	0.1 ( )		
Temperature	C														
Total Dissolved Solids	mg/l									596	494	1200 ( )	940 ( )		
Turbidity	NTUs														

Well ID: 83DM-SP-1

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenol	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1 1 1-Trichloroethane	ug/L		5.1												
1 1-Dichloroethane	ug/L		1.8 (JM)												
1 1-Dichloroethene	ug/L														
1,1,1-Trichloroethane	ug/l												3.6 ( )		
1,1,2,2-Tetrachloroethane	ug/L														
1,1-Dichloroethane	ug/l												1.6 ( )		
2-Butanone	ug/L														
2-Butanone (MEK)	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)	5 (R)				
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
4-Methyl-2-Pentanone	ug/L														
Bromodichloromethane	ug/L														
Carbon disulfide	ug/L														
cis-1 2-Dichloroethene	ug/L		9.3			1.5 (J)		2.4 (J)							
cis-1,2-Dichloroethene	ug/L	2.6 (J)								1.7 (J)		1.2 ( )	18 ( )		4
Methylene chloride	ug/L														
Tetrachloroethene	ug/L														
trans-1,2-Dichloroethene	ug/L														
Trichloroethene	ug/L	8.9	21			4.9 (J)		7		6.4	6.3	3.6 ( )	15 ( )		8
Vinyl chloride	ug/L		2.5 (J)										1.8 ( )		

Well ID: 83DM-SP-3

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					208									
Alkalinity (Dup)	mg/L														
Carbon Dioxide	ug/L	576				850				28000		86100 ( )			
Carbon Dioxide	mg/l													82	
Chloride	mg/L					404									
Chloride (Dup)	mg/L														
Conductivity	mohm/cm														
Conductivity (Dup)	mohm/cm														
Dissolved Organic Carbon	mg/l													1.4	
Dissolved Oxygen	mg/L														
Dissolved Oxygen (Dup)	mg/L														
DOC	mg/L											1.7 ( )			
)OC Average Quads-Dissolvec	mg/L	1.7				2.7				18.5					
C Average Quads-Dissolved (D	mg/L														
Ethane	ug/l											0.863 ( )			
Ethene	ug/l											0.675 ( )			
Ferrous Iron	mg/L					0.65									
Ferrous Iron (Dup)	mg/L														
Methane	ug/L	34				21				14		35.2 ( )		36	
Methane (Dup)	ug/L														
Nitrate	mg/L					0.08									
Nitrate (Dup)	mg/L														
Nitrite	mg/L					0.037									
Nitrite (Dup)	mg/L														
pH															
pH (Dup)															
Redox	mV														
Redox (Dup)	mV														
Salinity															

Well ID: 83DM-SP-3

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Sulfate	mg/L					80									
Sulfate (Dup)	mg/L														
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Temperature (Dup)	C														
Total Dissolved Solids	mg/l									1520		1500 ( )			
Turbidity	NTUs														
Turbidity (Dup)	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Carbon disulfide	ug/L														
Methylene chloride	ug/L														

Well ID: 83DM-SP-4

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					176									
Carbon Dioxide	ug/l	589				950				31000					
Carbon Dioxide (Dup)	ug/L														
Chloride	mg/L					606									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/L	1.7				2.4				13.9					
Ferrous Iron	mg/L					3.3									
Methane	ug/L	37				28				32					
Methane (Dup)	ug/L														
Nitrate	mg/L					0.06									
Nitrite	mg/L					0									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
Sulfide (Dup)	mg/L														
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									1740					
Turbidity	NTUs														

Well ID: 83DM-SP-4

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
is(2-Ethylhexyl)phthalate (Dup	ug/L														
Butyl benzyl phthalate	ug/L														
Butyl benzyl phthalate (Dup)	ug/L														
Diethyl phthalate	ug/L														
Diethyl phthalate (Dup)	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-butyl phthalate (Dup)	ug/L														
Di-n-octyl phthalate	ug/L														
Di-n-octyl phthalate (Dup)	ug/L														
Naphthalene	ug/L														
Naphthalene (Dup)	ug/L														
Phenol	ug/L														
Phenol (Dup)	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene chloride	ug/L														

Well ID: 86EM-SP-1A

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: 86EM-SP-1A

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)	5 (R)				
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)		5 (R)							
2-Chloroethylvinylether (BS)	ug/L		5 (R)												
Chloroform	ug/L														
cis-1 2-Dichloroethene	ug/L					1.7 (J)		3.2 (J)							
cis-1 2-Dichloroethene (BS)	ug/L		2.3 (J)												
cis-1,2-Dichloroethene	ug/L	2.4 (J)								1.5 (J)	2.6 (J)	2.3 ( )	1.5 ( )		2
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L							0.64 (J)							
Trichloroethene	ug/L	11				8.2		15		11	15	10 ( )	10 ( )		11
Trichloroethene (BS)	ug/L		13												
Trichlorofluoromethane	ug/L														

Well ID: 86EM-SP-1B

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
C Average Quads-Dissolved (D	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: 86EM-SP-1B

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
2-Chloroethylvinylether (Dup)	ug/L														
cis-1,2-Dichloroethene	ug/L											0.52 ( )			
Methylene chloride	ug/L														
Trichloroethene	ug/L	0.98 (J)								1.1 (J)		0.73 ( )			

Well ID: 86EM-SP-5

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					209									
Carbon Dioxide	mg/l													81	
Carbon Dioxide	ug/l	567				720				20000		99400 ( )			
Carbon Dioxide (Dup)	ug/L														
Chloride	mg/L					414									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													8.9	
Dissolved Oxygen	mg/L														
DOC	mg/L											7.4 ( )			
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/l	4				8.7				17.6					
C Average Quads-Dissolved (D	mg/L														
Ethane	ug/L											0.66 ( )			
Ethene	ug/L														
Ferrous Iron	mg/L					322									
Methane	ug/l	290				220				160		349 ( )		640	
Methane (Dup)	ug/L														
Nitrate	mg/L					0.37									
Nitrite	mg/L					0.009									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					71									
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									785		1500 ( )			
Turbidity	NTUs														

Well ID: 86EM-SP-5

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
4-Chloro-3-methylphenol	ug/L	63								45		37 ( )			
4-Chloro-3-methylphenol (Dup)	ug/L					57									
bis(2-Ethylhexyl)phthalate	ug/L														
bis(2-Ethylhexyl)phthalate (Dup	ug/L														
Butyl benzyl phthalate	ug/L														
Butyl benzyl phthalate (Dup)	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-butyl phthalate (Dup)	ug/L														
Fluoranthene	ug/L														
Fluoranthene (Dup)	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1 1-Dichloroethane	ug/L														
1,1-Dichloroethane	ug/L											0.75 (J)			
1,1-Dichloroethane (Dup)	ug/L														
2-Butanone	ug/L														
2-Butanone (Dup)	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
2-Chloroethylvinylether (Dup)	ug/L														
Carbon disulfide	ug/L														
Chloroform (Dup)	ug/L														
Chloromethane	ug/L														
Methylene chloride	ug/L														

Well ID: 86EM-SP-6

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Carbon Dioxide	mg/l														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC Average Quads-Dissolved	mg/L	7.6													
Ferrous Iron	mg/L														
Methane	ug/L	16													
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: 86EM-SP-6

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Diethyl phthalate (Dup)	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1 1-Dichloroethane	ug/L														
1 1-Dichloroethane (Dup)	ug/L														
1,1-Dichloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)													
Chloromethane	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Trichloroethene	ug/L														
Vinyl chloride	ug/L														

Well ID: 92EM-SP-7

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					216									
Carbon Dioxide	ug/l									8700		19600 ( )			
Carbon Dioxide	mg/l													14	
Chloride	mg/L					21									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													1.5	
Dissolved Oxygen	mg/L														
DOC	mg/L											2.5 ( )			
)OC Average Quads-Dissolvec	mg/L	4.5								13.7					
C Average Quads-Dissolved (D	mg/L					3.8									
Ethane	ug/L											0.5 (J)			
Ethene	ug/L											0.5 (J)			
Ferrous Iron	mg/L					0.06									
Methane	ug/L	4.7								5.2		9.12 ( )		11	
Nitrate	mg/L					0.04									
Nitrite	mg/L					0.02									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )		2.6	
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									1210		850 ( )			
Turbidity	NTUs														

Well ID: 92EM-SP-7

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Naphthalene	ug/L														
Phenol	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1,1-Dichloroethane	ug/l											0.8 ( )		1	
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Chloromethane	ug/L														
Methylene chloride	ug/L														
Tetrachloroethene	ug/L	3.7 (JB)													

Well ID: 92EM-SP-8

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					146									
Carbon Dioxide	mg/l													41	
Carbon Dioxide	ug/l									9300		31700 ( )			
Chloride	mg/L					228									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													2.8	
Dissolved Oxygen	mg/L														
DOC	mg/L											4.4 ( )			
)OC Average Quads-Dissolvec	mg/L	6.2				6.6				18.4					
Ethane	ug/l											1.06 ( )			
Ferrous Iron	mg/L					3.26									
Methane	ug/L									8.3		18.9 ( )		22	
Methane (Dup)	ug/L					4.7									
Nitrate	mg/L					0.12									
Nitrite	mg/L					0.018									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									1530		10 (J)			
Turbidity	NTUs														

Well ID: 92EM-SP-8

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
4-Chloro-3-methylphenol	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Naphthalene	ug/L														
Phenol	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1 1-Dichloroethane	ug/L														
1,1-Dichloroethane	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Chloromethane	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Vinyl Chloride	ug/L														

Well ID: 93EM-RW-2

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					47									
Carbon Dioxide	ug/l									6200		7340 ( )			
Chloride	mg/L					17									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													1.5	
Dissolved Oxygen	mg/L														
DOC	mg/L											2.2 ( )			
)OC Average Quads-Dissolve	mg/L	2					2.3			2.6					
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L					0.13									
Methane	ug/l									4.1		0.578 ( )			
Nitrate	mg/L					0.32									
Nitrite	mg/L					0.011									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					12									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									287		280 ( )			
Turbidity	NTUs														

Well ID: 93EM-RW-2

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Acenaphthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluorene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)					5 (R)								
Benzene	ug/L														
Bromodichloromethane	ug/L	5.1					5					5.7 ( )			
Bromodichloromethane (BS)	ug/L														
Carbon Disulfide	ug/L														
Chloroform	ug/L	46					71			8.8		49 ( )		2	
Chloroform (BS)	ug/L														
cis-1 2-Dichloroethene	ug/L						0.64 (J)								
cis-1,2-Dichloroethene	ug/L	4.6 (J)								49				55	
Dibromochloromethane	ug/L	0.5 (J)													
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	1.2 (J)					1.1 (J)			1.7 (J)		0.59 ( )		7	
trans-1,2-Dichloroethene	ug/L														
Trichloroethene	ug/L	2.3 (J)					1.9 (J)			6.8		0.83 ( )		20	
Vinyl chloride	ug/L														

Well ID: 93EM-SP-11

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC Average Quads-Dissolved	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: 93EM-SP-11

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene chloride	ug/L														

Well ID: 93EM-SP-13

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide (Dup)	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: 93EM-SP-13

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2,4-Dimethylphenol	ug/L														
Acenaphthene	ug/L														
Acenaphthene (Dup)	ug/L														
Benzo(a)pyrene	ug/L														
Benzo(b)fluoranthene	ug/L														
Benzo(k)fluoranthene	ug/L														
Bis(2-ethylhexyl)phthalate	ug/L														
ıis(2-Ethylhexyl)phthalate (Dup	ug/L														
Butyl benzyl phthalate	ug/l									1.3 (J)					
Butyl benzyl phthalate (Dup)	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-butyl phthalate (Dup)	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Fluoranthene (Dup)	ug/L														
Fluorene	ug/L														
Fluorene (Dup)	ug/L														
Pyrene	ug/l	0.9 (J)								0.78 (J)		0.37 ( )			
Pyrene (Dup)	ug/L														

Well ID: 93EM-SP-13

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Carbon disulfide	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Methylene Chloride (Dup)	ug/L														
Tetrachloroethene	ug/L														

Well ID: 93EM-SP-9

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
Chloroform	ug/L														
Methylene Chloride	ug/L														

Well ID: 94EM-MW-19

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
ıis(2-Ethylhexyl)phthalate (Dup	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: 94EM-MW-19

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	0.62 (J)													

Well ID: 94EM-MW-20

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: 94EM-MW-20

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Toluene	ug/L														

Well ID: 94EM-MW-21

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Chromium	mg/l														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: 94EM-MW-21

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (Dup)	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
4-Methyl-2-Pentanone	ug/L														
Barium	mg/l														
cis-1 2-Dichloroethene	ug/L					0.66 (J)									
cis-1,2-Dichloroethene	ug/l											0.7 ( )			
cis-1,2-Dichloroethene (Dup)	ug/l									0.84 (J M)					
Lead	mg/l														
Methylene Chloride	ug/L														
Tetrachloroethene (Dup)	ug/l									1.3 (J)					

Well ID: B121-N

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					135									
Carbon Dioxide	ug/l											6310 ( )			
Carbon Dioxide	mg/l														
Chloride	mg/L					120									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/L											8.7 ( )			
)OC Average Quads-Dissolvec	mg/L	4.8				3				2					
Ethane	ug/L					10				11		14.5 ( )			
Ethene	ug/L					3.2				3.8		0.5 (J)			
Ferrous Iron	mg/L					0.14									
Methane	ug/L	500 (D)				330				310 (D)		4780 ( )			
Nitrate	mg/L					0.06									
Nitrite	mg/L					0.044									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					1									
Sulfide	mg/L														
Sulfide-Dissolved	mg/L											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									352		640 ( )			
Turbidity	NTUs														

Well ID: B121-N

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Fluorene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Benzene	ug/L														
cis-1 2-Dichloroethene	ug/L					9.1									
cis-1,2-Dichloroethene	ug/L									200		0.89 ( )			
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
trans-1 2-Dichloroethene	ug/L					0.55 (JH)									
trans-1,2-Dichloroethene	ug/L									2.6 (J)					
Trichloroethene	ug/L									1.2 (J)					
Vinyl Chloride	ug/L					15				110					

Well ID: B121-S

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					97									
Carbon Dioxide	mg/l														
Carbon Dioxide	ug/l									13000		3940 ( )			
Chloride	mg/L					286									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/L											2.8 ( )			
)OC Average Quads-Dissolvec	mg/L	1.9				2.2				0.42 (J)					
Ethane	ug/L											0.604 ( )			
Ethene	ug/l											0.5 (J)			
Ferrous Iron	mg/L					0.9									
Methane	ug/L	14				190				930 (D)		1010 ( )			
Methane (Dup)	ug/L														
Nitrate	mg/L					0.06									
Nitrite	mg/L					0.124									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									1320		500 ( )			
Turbidity	NTUs														

Well ID: B121-S

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1 1 1-Trichloroethane	ug/L	0.78 (J)													
1,1,1-Trichloroethane	ug/l											0.57 ( )			
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
cis-1 2-Dichloroethene	ug/L					1.8 (J)									
cis-1,2-Dichloroethene	ug/L	1.1 (J)								61		1.3 ( )			
Methylene Chloride	ug/L														
Toluene	ug/l									0.33 (J)					
trans-1,2-Dichloroethene	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L					1.2 (J)				21					
Vinyl chloride (Dup)	ug/L														

Well ID: WVA-AW-135-MW-1

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC Average Quads-Dissolved	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-AW-135-MW-1

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,1-Trichloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L														
Methylene Chloride	ug/L														
Toluene	ug/L														

Well ID: WVA-AW-135-MW-2

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														

Well ID: WVA-AW-135-MW-2

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Toluene	ug/L														

Well ID: WVA-AW-135-MW-4

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					129									
Chloride	mg/L					286									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L	0.45 (B)				0.77 (B)									
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L					0.15									
Methane	ug/L														
Nitrate	mg/L					0.89									
Nitrite	mg/L					0.015									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					73									
Sulfide	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-135-MW-4

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Carbon Tetrachloride	ug/L														
Chloroethane	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Trichloroethene	ug/L														

Well ID: WVA-AW-25-MW-1

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-25-MW-1

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Bis(2-ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Naphthalene	ug/L														
Phenanthrene	ug/L														
Phenol	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Butanone (MEK)	ug/L														
2-Chloroethylvinylether	ug/L														
Carbon Disulfide	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Toluene	ug/L														

Well ID: WVA-AW-25-MW-2

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					>1000									
Carbon Dioxide	mg/l														61
Carbon dioxide	ug/L	6160				2400		31000		4500	33000	67300 ( )	68800 ( )		
Chloride	mg/L					324									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/l											33 ( )	25 ( )		
)OC Average Quads-Dissolvec	mg/L	620				270		39		38.3	42.4				
Ethane	ug/L	120											0.973 ( )		
Ethene	ug/L	2300										9.39 ( )	18.6 ( )		
Ferrous Iron	mg/L					3.3									
Methane	ug/L	1300 (E)	1500 (E)			7900 (D)		820 (D)		3400 (D)	1000 (D)	2140 ( )	4600 ( )		2900
Nitrate	mg/L					1.4									
Nitrite	mg/L					0									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
Sulfide-Dissolved	mg/L					8.8		1.1		12.7	1.1	0.1 ( )	0.11 ( )		
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									909	955	840 ( )	850 ( )		
Turbidity	NTUs														

Well ID: WVA-AW-25-MW-2

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenol	ug/L														

Well ID: WVA-AW-25-MW-2

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1 1 1-Trichloroethane	ug/L	2.1 (J)	4.7 (J)					22							
1 1-Dichloroethane	ug/L	5.1	8.1 (H)					9.4							
1 1-Dichloroethene	ug/L							1.6 (J)							
1,1,1-Trichloroethane	ug/l										6.3	6.8 ( )	6.9 ( )		12
1,1-Dichloroethane	ug/l									6.3	14	10 ( )	13 ( )		14
1,1-Dichloroethene	ug/L											0.5 ( )			
2-Butanone	ug/L														
2-Butanone (MEK)	ug/L		19												
2-Chloroethyl vinyl ether	ug/l									0.6 (R)	5 (R)				
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Bromomethane	ug/L														
Carbon disulfide	ug/L														
Chloroform	ug/L														
cis-1 2-Dichloroethene	ug/L		19			9.4		64							
cis-1,2-Dichloroethene	ug/L	15								13	24	22 ( )	31 ( )		64
Methylene chloride	ug/L														
Tetrachloroethene	ug/L														
trans-1 2-Dichloroethene	ug/L							0.52 (J)							
trans-1,2-Dichloroethene	ug/l										0.45 (J M)	0.75 (J)	1.2 ( )		1
Trichloroethene	ug/L	14	18			7.8		75		9.6	23	36 ( )	20 ( )		17
Vinyl chloride	ug/L	3.2 (J)	7.8			2.8 (J)		11		7 (J)	15	10 ( )	10 ( )		21

Well ID: WVA-AW-25-MW-3

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					188									
Carbon Dioxide	mg/l														51
Carbon Dioxide	ug/L					690				17000		41400 ( )	45000 ( )		
Carbon dioxide (Dup)	ug/L							27000			20000				
Chloride	mg/L					524									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/L											2.7 ( )	2.8 ( )		
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/L		0.18 (B)			3.3				12.1					
C Average Quads-Dissolved (D	mg/L	2.8						2.8			0.48 (J)				
Ethane	ug/l											2.2 ( )	0.5 (J)		
Ethene	ug/L											3.65 ( )	0.516 ( )		
Ferrous Iron	mg/L					0.96									
Methane	ug/L		470 (E)			1500 (D)				1100 (D)		2450 ( )	284 ( )		1800
Methane (Dup)	ug/L	1000 (D)						1500 (D)			720 (D)				
Nitrate	mg/L					0.19									
Nitrite	mg/L					0.006									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
Sulfide (Dup)	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )	0.1 ( )		
Sulfide-Dissolved (Dup)	mg/l										1.1				
TDS	mg/L														
Temperature	C														

Well ID: WVA-AW-25-MW-3

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Total Dissolved Solids	mg/l									1260		1200 ( )	1500 ( )		
Total Dissolved Solids (Dup)	mg/l										1180				
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
ıis(2-Ethylhexyl)phthalate (Dup	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-AW-25-MW-3

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1 1 1-Trichloroethane	ug/L		29			21									
1 1 1-Trichloroethane (Dup)	ug/L	43						24							
1 1-Dichloroethane	ug/L		8 (H)			7.3 (H)									
1 1-Dichloroethane (Dup)	ug/L	9.2 (J)						8.7 (J)							
1 1-Dichloroethene	ug/L		1.7 (J)			1.3 (JH)									
1 1-Dichloroethene (Dup)	ug/L	2.4 (J)						1.7 (J)							
1,1,1-Trichloroethane	ug/L									15		8.6 ( )	10 ( )		12
1,1,1-Trichloroethane (Dup)	ug/L										18				
1,1-Dichloroethane	ug/L									7.8		5.8 ( )	8.2 ( )		9
1,1-Dichloroethane (Dup)	ug/L										10				
1,1-Dichloroethene	ug/L									0.79 (J)					1
1,1-Dichloroethene (Dup)	ug/L										1.7 (J)				
2-Butanone	ug/L														
2-Butanone (Dup)	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethyl vinyl ether (Dup)	ug/l										5 (R)				
2-Chloroethylvinylether	ug/L		5 (R)			5 (R)									
2-Chloroethylvinylether (Dup)	ug/L	10 (R)						10 (R)							
Carbon Disulfide (Dup)	ug/L														
Carbon tetrachloride	ug/l											1 ( )			
Chloroethane	ug/L														
Chloroform	ug/L														
Chloroform (Dup)	ug/L														
cis-1 2-Dichloroethene	ug/L		140			120									
cis-1 2-Dichloroethene (Dup)	ug/L							170							
cis-1,2-Dichloroethene	ug/L									100		110 ( )	150 ( )		170
cis-1,2-Dichloroethene (Dup)	ug/L	190									190				
Methylene Chloride	ug/L														
Methylene Chloride (Dup)	ug/L														

Well ID: WVA-AW-25-MW-3

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Tetrachloroethene	ug/L														
trans-1 2-Dichloroethene	ug/L		1.1 (J)			0.85 (J)									
rans-1 2-Dichloroethene (Dup)	ug/L	1.1 (J)													
trans-1,2-Dichloroethene	ug/L											5.4 ( )	3.8 (J)		1
rans-1,2-Dichloroethene (Dup)	ug/L										0.99 (J)				
Trichloroethene	ug/L		130			76				75		22 ( )	16 ( )		40
Trichloroethene (Dup)	ug/L	140						94			68				
Vinyl Chloride	ug/L		23			18 (H)				21 (J)		13 ( )	13 ( )		24
Vinyl Chloride (Dup)	ug/L	22						25			26				

Well ID: WVA-AW-25-MW-4

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Sulfate	mg/L														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-25-MW-4

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,1-Trichloroethane	ug/L														
1,1-Dichloroethane	ug/L														
Chloroform	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Trichloroethene	ug/L														

Well ID: WVA-AW-25-MW-5

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-25-MW-5

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
4-Chloro-3-methylphenol	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Naphthalene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1,1-Dichloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)													
cis-1,2-Dichloroethene	ug/L											0.56 ( )			
Methylene Chloride	ug/L														
Toluene	ug/l									0.33 (J)					
Trichloroethene	ug/L														

Well ID: WVA-AW-25-MW-6

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-25-MW-7

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					180									
Carbon Dioxide	mg/l														
Carbon Dioxide	ug/l	0.00								45000 (D)		5290 ( )			
Chloride	mg/L					420									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/l											7.7 ( )			
DOC Average Quads-Dissolved	mg/L	10				7.7									
DOC Average Quads-Dissolved	ug/l									1.6					
Ferrous Iron	mg/L					0.47									
Methane	ug/L	8000 (D)				6300 (D)						0.597 ( )			
Nitrate	mg/L					0.55									
Nitrite	mg/L					0.016									
pH															
Redox	mV														
Sulfate	mg/L					13									
Sulfide-Dissolved	mg/L					1						0.1 ( )			
Temperature	C														
Total Dissolved Solids	mg/l											1800 ( )			
Total Dissolved Solids	ug/l									12400					
Turbidity	NTUs														

Well ID: WVA-AW-25-MW-6

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1 1 1-Trichloroethane	ug/L	7.2 (J)	8.3 (J)			7.9 (J)		11 (J)							
1,1,1-Trichloroethane	ug/L									9.3 (J)		8.2 ( )	8.4 ( )		11
1,1-Dichloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									1.2 (R)	20 (R)				
2-Chloroethylvinylether	ug/L	10 (R)	10 (R)			10 (R)		25 (R)							
Carbon Disulfide	ug/L														
Chloroform	ug/L														
cis-1 2-Dichloroethene	ug/L		1.3 (JM)			6.9 (J)									
cis-1,2-Dichloroethene	ug/L														2
Methylene Chloride	ug/L									1.5 (J)					
Tetrachloroethene	ug/L	1.6 (JB)				2.1 (J)					6.9 (J)				
Trichloroethene	ug/L	250	280			250		340		290	360	290 ( )	290 ( )		260
Vinyl chloride	ug/L					2.9 (J)									

Well ID: WVA-AW-25-MW-7

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone (MEK)	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)	5 (R)				
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
cis-1 2-Dichloroethene	ug/L		1.6 (J)			0.91 (J)		2 (J)							
cis-1,2-Dichloroethene	ug/L	4.9 (J)								2.8 (J)	1.2 (J)				
Tetrachloroethene	ug/L														
Trichloroethene	ug/L														
Vinyl chloride	ug/l	1.1 (J)								1.2 (J)					

Well ID: WVA-AW-35-MW-5

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-35-MW-5

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,2,2-Tetrachloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
4-Methyl-2-Pentanone	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-AW-35-MW-8

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-35-MW-8

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
3,3'-Dichlorobenzidine	ug/l									0.6 (R)					
bis(2-Ethylhexyl)phthalate	ug/L														
Chrysene	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluoranthene	ug/L														
Pentachlorophenol	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Carbon Disulfide	ug/L														
Ethylbenzene	ug/L														
Methylene Chloride	ug/L														
Toluene	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-AW-MW-20

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-MW-20

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														

Well ID: WVA-AW-MW-22

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolve	mg/L														
C Average Quads-Dissolved (D	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-MW-22

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenol	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)													
2-Chloroethylvinylether (Dup)	ug/L					5 (R)									
Benzene	ug/L														
Carbon Disulfide	ug/L														
Chloromethane	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-23

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-MW-23

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L														
Chlorobenzene	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Trichloroethene	ug/L														

Well ID: WVA-AW-MW-24

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Pyrene	ug/L														

Well ID: WVA-AW-MW-24

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,2,2-Tetrachloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L														
4-Methyl-2-Pentanone	ug/L														
Benzene	ug/L														
Carbon disulfide	ug/L														
Chlorobenzene	ug/L														
Methylene Chloride	ug/L														
Toluene	ug/L														
Trichloroethene	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-AW-MW-26

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
)is(2-Ethylhexyl)phthalate (Dup	ug/L														

Well ID: WVA-AW-MW-26

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene Chloride	ug/L														
Methylene Chloride (Dup)	ug/L														
Tetrachloroethene	ug/L														
Tetrachloroethene (Dup)	ug/L														

Well ID: WVA-AW-MW-27

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC Average Quads-Dissolved	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-AW-MW-27

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Chloroform	ug/L														
cis-1 2-Dichloroethene	ug/L					1.1 (J)									
cis-1,2-Dichloroethene	ug/L	1.3 (J)										1 ( )			
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Vinyl Chloride	ug/L	2.2 (J)				1.2 (J)						1.9 ( )			

Well ID: WVA-AW-MW-29

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-MW-29

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														

Well ID: WVA-AW-MW-30

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-MW-30

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-32

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-AW-MW-32

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L					5 (R)									
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-33

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L														
Chloroform	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
trans-1,2-Dichloroethene	ug/L														
Trichloroethene	ug/L														
Vinyl chloride	ug/L														

Well ID: WVA-AW-MW-34

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-AW-MW-34

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,1-Trichloroethane	ug/L														
1,1,2,2-Tetrachloroethane	ug/L														
1,1-Dichloroethene	ug/L														
Chloroform	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
trans-1,2-Dichloroethene	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L														

Well ID: WVA-AW-MW-35

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-AW-MW-35

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1-Dichloroethene	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
2-Chloroethylvinylether (Dup)	ug/L														
cis-1 2-Dichloroethene	ug/L					8.7									
cis-1,2-Dichloroethene	ug/L	11								9		7.6 ( )			
cis-1,2-Dichloroethene (Dup)	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	0.57 (JB)										0.5 (J)			
trans-1 2-Dichloroethene	ug/L	0.78 (J)				0.66 (JH)									
trans-1,2-Dichloroethene	ug/L									0.56 (J M)		0.75 (J)			
rans-1,2-Dichloroethene (Dup)	ug/L														
Trichloroethene	ug/L	69				55				57		48 ( )			
Trichloroethene (Dup)	ug/L														
Vinyl Chloride	ug/L														

Well ID: WVA-AW-MW-36

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC Average Quads-Dissolved	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Sulfate	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-AW-MW-36

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,2,2-Tetrachloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
4-Methyl-2-Pentanone	ug/L														
Chlorobenzene	ug/L														
cis-1 2-Dichloroethene	ug/L					3.5 (J)									
cis-1,2-Dichloroethene	ug/L	120								4.8 (J)		26 ( )			
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	0.62 (JB)				0.94 (J)				1.2 (J)		1.4 ( )			
trans-1 2-Dichloroethene	ug/L	2.7 (J)													
trans-1,2-Dichloroethene	ug/L											1 ( )			
Trichloroethene	ug/L	14				4.2 (J)				6.5		11 ( )			
Vinyl Chloride	ug/L	9.7													
Xylenes, Total	ug/L														

Well ID: WVA-AW-MW-38

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Alkalinity (Dup)	mg/L														
Chloride	mg/L														
Chloride (Dup)	mg/L														
Conductivity	mohm/cm														
Conductivity (Dup)	mohm/cm														
Dissolved Oxygen	mg/L														
Dissolved Oxygen (Dup)	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
C Average Quads-Dissolved (D	mg/L														
Ferrous Iron	mg/L														
Ferrous Iron (Dup)	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrate (Dup)	mg/L														
Nitrite	mg/L														
Nitrite (Dup)	mg/L														
pH															
pH (Dup)															
Redox	mV														
Redox (Dup)	mV														
Salinity															
Sulfate	mg/L														
Sulfate (Dup)	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Temperature (Dup)	C														

Well ID: WVA-AW-MW-38

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Turbidity	NTUs														
Turbidity (Dup)	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Acenaphthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluorene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-41

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide (Dup)	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
is(2-Ethylhexyl)phthalate (Dup	ug/L														

Well ID: WVA-AW-MW-41

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-43

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-MW-43

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
4-Chloro-3-methylphenol	ug/L	53				31				31		28 ( )			
Bis(2-ethylhexyl) phthalate	ug/l									2.3 (J)					
bis(2-Ethylhexyl)phthalate	ug/L	3 (J)													
Butyl benzyl phthalate	ug/L	0.9 (J)													
Diethyl phthalate	ug/L					3 (J)									
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Naphthalene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1 1-Dichloroethane	ug/L	3.1 (J)				1.9 (JH)									
1,1-Dichloroethane	ug/L									1.9 (J M)		2 ( )			
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Chloromethane	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/l									0.77 (J)					
Toluene	ug/l									0.34 (J)					

Well ID: WVA-AW-MW-44

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-MW-44

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
4-Chloro-3-methylphenol	ug/L					11 (J)				10 (J)		4.8 (J)			
4-Chloro-3-methylphenol (Dup)	ug/L	15													
bis(2-Ethylhexyl)phthalate	ug/L														
bis(2-ethylhexyl)phthalate (Dup	ug/L	3 (J)													
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1 1 2 2-Tetrachloroethane	ug/L														
1 1-Dichloroethane	ug/L														
1 1-Dichloroethane (Dup)	ug/L	2 (J)													
1,1-Dichloroethane	ug/L											0.89 ( )		2	
1,1-Dichloroethene	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L					5 (R)									
2-Chloroethylvinylether (Dup)	ug/L	5 (R)													
Bromomethane	ug/L														
Carbon Disulfide	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-47

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					197									
Carbon Dioxide	mg/l														
Carbon Dioxide	ug/l									11000		30100 ( )			
Chloride	mg/L					2.64									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/L											2.4 ( )			
)OC Average Quads-Dissolvec	mg/L	2.4				2				3.7					
Ethane	ug/l											4.03 ( )			
Ethene	ug/L											2 (J)			
Ferrous Iron	mg/L					0.21									
Methane	ug/L	910 (E)				270				690 (D)		1140 ( )			
Nitrate	mg/L					0.37									
Nitrite	mg/L					0									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					45									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									790		1300 ( )			
Turbidity	NTUs														

Well ID: WVA-AW-MW-47

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Anthracene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														
Phenanthrene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1 1-Dichloroethane	ug/L	0.62 (J)													
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Benzene	ug/L														
Chloromethane	ug/L														
cis-1 2-Dichloroethene	ug/L					1.3 (J)									
cis-1,2-Dichloroethene	ug/L	2.3 (J)								0.71 (J M)		0.5 (J)			
Methylene Chloride	ug/L														
trans-1 2-Dichloroethene	ug/L	0.64 (J)				0.69 (J)									
trans-1,2-Dichloroethene	ug/l									0.58 (J M)		0.75 (J)			
Vinyl Chloride	ug/L	8.5				8.1				7.2 (J)		5.1 ( )			

Well ID: WVA-AW-MW-51

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Alkalinity (Dup)	mg/L														
Chloride	mg/L														
Chloride (Dup)	mg/L														
Conductivity	mohm/cm														
Conductivity (Dup)	mohm/cm														
Dissolved Oxygen	mg/L														
Dissolved Oxygen (Dup)	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
C Average Quads-Dissolved (D	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Ferrous Iron (Dup)	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrate (Dup)	mg/L														
Nitrite	mg/L														
Nitrite (Dup)	mg/L														
pH															
pH (Dup)															
Redox	mV														
Redox (Dup)	mV														
Salinity															
Sulfate	mg/L														
Sulfate (Dup)	mg/L														
Sulfide	mg/L														

Well ID: WVA-AW-MW-51

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
TDS	mg/L														
Temperature	C														
Temperature (Dup)	C														
Turbidity	NTUs														
Turbidity (Dup)	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Anthracene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														
Phenol	ug/L														

Well ID: WVA-AW-MW-51

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone (MEK)	ug/L	1600 (J)													
2-Chloroethylvinylether	ug/L	2000 (R)													
Benzene	ug/L														
cis-1,2-Dichloroethene	ug/L	16000													
cis-1,2-Dichloroethene (Dup)	ug/L														
Methylene Chloride	ug/L														
Methylene chloride (Dup)	ug/L														
Tetrachloroethene	ug/L	62000													
Tetrachloroethene (Dup)	ug/L														
Trichloroethene	ug/L	21000													
Trichloroethene (Dup)	ug/L														
Vinyl Chloride	ug/L	3100													

Well ID: WVA-AW-MW-52

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					33									
Carbon Dioxide	ug/l												600 (J)		
Chloride	mg/L					1									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													1.9	
Dissolved Oxygen	mg/L														
DOC	mg/L											2 ( )	1.9 ( )		
)OC Average Quads-Dissolvec	mg/L	0.54 (B)	21			1.7		1.8		1.5	6.2				
Ethane	ug/L											5 (J)	4.15 ( )		
Ethene	ug/L							3.8				17.4 ( )	14.3 ( )		
Ferrous Iron	mg/L					1.29									
Methane	ug/L	1000 (D)	920 (E)			890 (D)		910 (D)			300	2720 ( )	3760 ( )	3000	2000
Nitrate	mg/L					1.73									
Nitrite	mg/L					0.01									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					1									
Sulfide	mg/L														
Sulfide-Dissolved	mg/L											0.1 ( )	0.1 ( )		3.1
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									1360	1220	1200 ( )	1200 ( )		
Turbidity	NTUs														

Well ID: WVA-AW-MW-52

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2 6-Dinitrotoluene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														
Phenol	ug/L		0.7 (J)												

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone (MEK)	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)	5 (R)				
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Carbon disulfide	ug/L														
Chlorobenzene	ug/L														
Chloromethane	ug/L												5.1 ( )		
cis-1 2-Dichloroethene	ug/L		1.7 (J)			1.7 (J)		1.7 (J)							
cis-1,2-Dichloroethene	ug/L	0.7 (J)								0.84 (J)	1.2 (J)	0.94 ( )	0.93 ( )		
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L		4.5 (J)			4.7 (J)		6.1		5.4	6.6	6.5 ( )	7.4 ( )	5	6
Toluene	ug/L		0.58 (J)			0.56 (J)		0.67 (J)		0.56 (J)	0.7 (J)	0.75 (J)			
Trichloroethene	ug/L		2.3 (J)			3.1 (J)		2.8 (J)		2.5 (J)	2.8 (J)	2.1 ( )	2.3 ( )	2	2

Well ID: WVA-AW-MW-58

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-AW-MW-58

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L														
Chloroform	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														

Well ID: WVA-AW-MW-59

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Phenol	ug/L														

Well ID: WVA-AW-MW-59

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,2,2-Tetrachloroethane	ug/L														
1,1-Dichloroethene	ug/L														
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L														
4-Methyl-2-Pentanone	ug/L														
Benzene	ug/L														
Bromodichloromethane	ug/L														
Carbon Disulfide	ug/L														
Chlorobenzene	ug/L														
Chloroform	ug/L														
cis-1,2-Dichloroethene	ug/L														
Dibromochloromethane	ug/L														
Ethylbenzene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Toluene	ug/L														
trans-1,2-Dichloroethene	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-AW-MW-61

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
Ethene	ug/L														
Ethene (Dup)	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide (Dup)	mg/L														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
is(2-Ethylhexyl)phthalate (Dup	ug/L														
Phenol	ug/L														
Phenol (Dup)	ug/L														

Well ID: WVA-AW-MW-61

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Carbon Disulfide	ug/L														
Carbon Disulfide (Dup)	ug/L														
Chloroform	ug/L														
Chloroform (Dup)	ug/L														
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (Dup)	ug/L														
Methylene Chloride	ug/L														
Methylene Chloride (Dup)	ug/L														
Tetrachloroethene	ug/L														
Tetrachloroethene (Dup)	ug/L														
Trichloroethene	ug/L														
Trichloroethene (Dup)	ug/L														
Vinyl Chloride	ug/L														
Vinyl Chloride (BS)	ug/L														

Well ID: WVA-AW-MW-64

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					39									
Carbon dioxide	mg/L													2.2 (J)	5.4
Carbon Dioxide	ug/l									2100	1100	1240 ( )			
Chloride	mg/L					83									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													1.3	
Dissolved Oxygen	mg/L														
DOC	mg/L											1.7 ( )	1.3 ( )		
DOC Average Quads-Dissolved	mg/L	1.9	0.35 (B)			2.1				1.3					
C Average Quads-Dissolved (D	mg/L							2							
Ethane	ug/L	9.3	20								16 (D)	93.5 ( )	11.6 ( )	72	67
Ethane (Dup)	ug/L							23							
Ethene	ug/L	4.5	9.5								6.9 (D)	35.4 ( )	8.16 ( )		
Ethene (Dup)	ug/L							8.4							
Ferrous Iron	mg/L					0.37									
Methane	ug/L	460 (E)	720 (E)			750 (D)					720 (D)	3500 ( )	351 ( )	2600	2400
Methane (Dup)	ug/L							700 (D)							
Nitrate	mg/L					0.25									
Nitrite	mg/L					0.008									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					7									
Sulfide	mg/L														
Sulfide-Dissolved	mg/L											0.1 ( )	0.1 ( )		3.2
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									401	411	400 ( )	320 ( )		
Turbidity	NTUs														

Well ID: WVA-AW-MW-64

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														
Phenol	ug/L														

Well ID: WVA-AW-MW-64

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1-Dichloroethene	ug/l													9	9
2-Chloroethyl vinyl ether	ug/l									12 (R)	100 (R)				
2-Chloroethylvinylether	ug/L	250 (R)	200 (R)			250 (R)									
2-Chloroethylvinylether (Dup)	ug/L							250 (R)							
Benzene	ug/l														2
Carbon disulfide	ug/l														3
Chloroform	ug/L														
Chloromethane	ug/L														
cis-1 2-Dichloroethene	ug/L		1800			2500									
cis-1 2-Dichloroethene (Dup)	ug/L							1700							
cis-1,2-Dichloroethene	ug/L	1500								2100	2000	1700 ( )	380 ( )	1600	2200
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	4800	3700			4700				3600	2800	3600 ( )	990 ( )	3000	4200
Tetrachloroethene (Dup)	ug/L							3700							
trans-1,2-Dichloroethene	ug/L									11 (J M)		51 ( )		12	11
Trichloroethene	ug/L	1500	1300			2200				1600	1400	1400 ( )	300 ( )	1300	1700
Trichloroethene (Dup)	ug/L							1300							
Vinyl Chloride	ug/L	430	560			750				780 (J)	720	460 ( )	58 ( )	390	
Vinyl chloride (Dup)	ug/L							480							
Xylenes, Total	ug/l										22 (J)				

Well ID: WVA-AW-MW-66

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Chloroform	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														

Well ID: WVA-AW-MW-67

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-70

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluorene	ug/L														
Naphthalene	ug/L														
Phenanthrene	ug/L														

Well ID: WVA-AW-MW-70

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Methylene Chloride	ug/L														

Well ID: WVA-AW-MW-71

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-MW-73

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Methane	ug/L														
pH															
Redox	mV														
Salinity															
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-AW-MW-73

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Methylnaphthalene	ug/L														
Acenaphthene	ug/L														
Acenaphthylene	ug/L														
Anthracene	ug/L														
Benzo(a)anthracene	ug/L														
Benzo(a)pyrene	ug/L														
Benzo(b)fluoranthene	ug/L														
Benzo(g,h,i)perylene	ug/L														
Benzo(k)fluoranthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Chrysene	ug/L														
Dibenzo(a,h)anthracene	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluoranthene	ug/L														
Fluorene	ug/L														
Indeno(1,2,3-cd)pyrene	ug/L														
Naphthalene	ug/L														
Phenanthrene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														

Well ID: WVA-AW-MW-BLD-110

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Acenaphthene	ug/L											0.43 ( )			
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluorene	ug/L														
Naphthalene	ug/L														
Pyrene	ug/L														

Well ID: WVA-AW-MW-BLD-110

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L					5 (R)									
Benzene	ug/L														
Chloromethane	ug/L														
cis-1 2-Dichloroethene	ug/L					0.67 (J)									
Methylene Chloride	ug/L														

Well ID: WVA-B35-PW-1

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-B35-PW-1

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Acenaphthene	ug/L														
Anthracene	ug/l											0.23 ( )			
Benzo[a]anthracene	ug/l									0.82 (NJ)					
Benzo[b]fluoranthene	ug/l									0.45 (J)		0.23 ( )			
Benzo[k]fluoranthene	ug/l											0.2 (J)			
Bis(2-ethylhexyl) phthalate	ug/l									1.7 (J)					
bis(2-Ethylhexyl)phthalate	ug/L					3 (J)									
Butyl benzyl phthalate	ug/l									6.6 (J)					
Chrysene	ug/L					2 (J)				2 (J)		0.44 ( )			
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluoranthene	ug/L									0.96 (J)		0.32 ( )			
Phenanthrene	ug/l									0.37 (J)					
Phenol	ug/L					2 (J)									
Pyrene	ug/L					2 (J)				1.6 (J)		0.42 ( )			

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Carbon Disulfide	ug/L														
Carbon Tetrachloride	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-MW-81-1

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
cis-1,2-Dichloroethene	ug/l													5	

Well ID: WVA-MW-81-2

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
cis-1,2-Dichloroethene	ug/l													2	

Well ID: WVA-MW-81-3

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
cis-1,2-Dichloroethene	ug/l													5	
trans-1,2-Dichloroethene	ug/l													1	

Well ID: WVA-MW-82R-1

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
cis-1,2-Dichloroethene	ug/l													170	
Tetrachloroethene	ug/l													41	
trans-1,2-Dichloroethene	ug/l													1	
Trichloroethene	ug/l													20	
Vinyl chloride	ug/l													48	

Well ID: WVA-MW-82R-2

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
cis-1,2-Dichloroethene	ug/l													350	
Vinyl chloride	ug/l													100	

Well ID: WVA-MW-83-1

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
cis-1,2-Dichloroethene	ug/l													5100	
Tetrachloroethene	ug/l													7100	
trans-1,2-Dichloroethene	ug/l													28	
Trichloroethene	ug/l													2400	
Vinyl chloride	ug/l													140	

Well ID: WVA-MW-83-2

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
cis-1,2-Dichloroethene	ug/l													5900	
Tetrachloroethene	ug/l													5000	
trans-1,2-Dichloroethene	ug/l													44	
Trichloroethene	ug/l													1400	
Vinyl chloride	ug/l													590	

Well ID: WVA-MW-83-3

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1,1-Dichloroethene	ug/l													3	
cis-1,2-Dichloroethene	ug/l													1300	
Tetrachloroethene	ug/l													420	
trans-1,2-Dichloroethene	ug/l													7	
Trichloroethene	ug/l													190	
Vinyl chloride	ug/l													49	

Well ID: WVA-MW-84R-1

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
cis-1,2-Dichloroethene	ug/l													6300	
Tetrachloroethene	ug/l													940	
trans-1,2-Dichloroethene	ug/l													52	
Trichloroethene	ug/l													1300	
Vinyl chloride	ug/l													420	

Well ID: WVA-MW-84R-2

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1,1-Dichloroethene	ug/l													27	
cis-1,2-Dichloroethene	ug/l													11000	
Tetrachloroethene	ug/l													48000	
trans-1,2-Dichloroethene	ug/l													68	
Trichloroethene	ug/l													17000	
Vinyl chloride	ug/l													440	

Well ID: WVA-MW-84R-3

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1,1-Dichloroethene	ug/l													22	
cis-1,2-Dichloroethene	ug/l													10000	
Tetrachloroethene	ug/l													3800	
trans-1,2-Dichloroethene	ug/l													69	
Trichloroethene	ug/l													3400	
Vinyl chloride	ug/l													870	

Well ID: WVA-MW-85R-1

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
cis-1,2-Dichloroethene	ug/l													2	
Vinyl chloride	ug/l													4	

Well ID: WVA-MW-85R-2

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1,1-Dichloroethene	ug/l													5	
cis-1,2-Dichloroethene	ug/l													1900	
Tetrachloroethene	ug/l													1300	
trans-1,2-Dichloroethene	ug/l													12	
Trichloroethene	ug/l													600	
Vinyl chloride	ug/l													190	

Well ID: WVA-MW-85R-3

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1-Dichloroethene	ug/l													13	
cis-1,2-Dichloroethene	ug/l													4100	
Tetrachloroethene	ug/l													22000	
trans-1,2-Dichloroethene	ug/l													19	
Trichloroethene	ug/l													3400	
Vinyl chloride	ug/l													510	

Well ID: WVA-MW-86R-1

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
cis-1,2-Dichloroethene	ug/l													26	
Tetrachloroethene	ug/l													2	
Trichloroethene	ug/l													1	
Vinyl chloride	ug/l													22	

Well ID: WVA-MW-86R-2

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1-Dichloroethene	ug/l													3	
cis-1,2-Dichloroethene	ug/l													1200	
Tetrachloroethene	ug/l													860	
trans-1,2-Dichloroethene	ug/l													17	
Trichloroethene	ug/l													240	
Vinyl chloride	ug/l													43	

Well ID: WVA-MW-86R-3

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1-Dichloroethene	ug/l													18	
cis-1,2-Dichloroethene	ug/l													8400	
Tetrachloroethene	ug/l													330	
trans-1,2-Dichloroethene	ug/l													32	
Trichloroethene	ug/l													290	
Vinyl chloride	ug/l													1200	

Well ID: WVA-SA-GTI-1

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-GTI-1

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Benzo(a)anthracene	ug/L														
Benzo(a)pyrene	ug/L														
Benzo(b)fluoranthene	ug/L														
Benzo(k)fluoranthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Chrysene	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Naphthalene	ug/L														
Phenanthrene	ug/L														
Pyrene	ug/L														

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														

Well ID: WVA-SA-GTI-3

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					492									
Carbon Dioxide	ug/L														
Chloride	mg/L					48									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L	1.7					3.4								
Ferrous Iron	mg/L					0.23									
Methane	ug/L	3.0													
Nitrate	mg/L					25									
Nitrite	mg/L					0.004									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					30									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-GTI-3

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)					5 (R)								
Carbon Disulfide	ug/L														
Chloromethane	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-SA-MW-19

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-19

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-19R

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					339									
Carbon Dioxide	ug/L					1800				37000		98200 ( )			
Carbon Dioxide	mg/l													170	
Chloride	mg/L					7									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													2.1	
Dissolved Oxygen	mg/L														
DOC	mg/l											3.4 ( )			
DOC Average Quads-Dissolvec	mg/L	4				7.6				7.8					
Ethane	ug/l											0.5 (J)			
Ferrous Iron	mg/L					3.3									
Methane	ug/L	240				1600 (D)						519 ( )		170	
Nitrate	mg/L					0.41									
Nitrite	mg/L					0.15									
pH															
Redox	mV														
Sulfate	mg/L					3									
Sulfide-Dissolved	mg/l											0.1 ( )		2.6	
Temperature	C														
Total Dissolved Solids	mg/l									688		660 ( )			
Turbidity	NTUs														

Well ID: WVA-SA-MW-19R

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Methylnaphthalene	ug/L														
Acenaphthene	ug/l					0.8 (J)				0.75 (J)		0.39 ( )			
Bis(2-ethylhexyl)phthalate	ug/L					2 (JB)									
Fluorene	ug/L	1 (J)				2 (J)				1.8 (J)		0.93 ( )			
Pyrene	ug/l											0.36 ( )			

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
cis-1 2-Dichloroethene	ug/L					1.9 (J)									
cis-1,2-Dichloroethene	ug/L	4.5 (J)								1.9 (J)		1 ( )		1	
Ethylbenzene	ug/L														
Trichloroethene	ug/L	1.6 (J)													

Well ID: WVA-SA-MW-20

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					130									
Carbon Dioxide	mg/l													27	
Carbon Dioxide	ug/l									5700		32200 ( )			
Chloride	mg/L					0									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													3.3	
Dissolved Oxygen	mg/L														
DOC	mg/L											3.3 ( )			
DOC Average Quads-Dissolved	mg/L	5.8				3.9				5					
Ethane	ug/l											3.6 ( )			
Ethene	ug/l											0.5 (J)			
Ferrous Iron	mg/L					0.04									
Methane	ug/L	2.6										11.9 ( )		18	
Nitrate	mg/L					0.03									
Nitrite	mg/L					0.023									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					31									
Sulfide	mg/L														
Sulfide-Dissolved	mg/L											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									332		380 ( )			
Turbidity	NTUs														

Well ID: WVA-SA-MW-20

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L					2 (JB)									
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Chlorobenzene	ug/L														
cis-1 2-Dichloroethene	ug/L					2.1 (J)									
cis-1,2-Dichloroethene	ug/L	1.3 (J)								1.6 (J)		3.1 ( )		2	
Ethylbenzene	ug/L														
Methylene Chloride	ug/L														
Vinyl Chloride	ug/L					1 (J)									
Xylenes, Total	ug/L														

Well ID: WVA-SA-MW-23

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					170									
Alkalinity (Dup)	mg/L														
Carbon Dioxide	mg/l													53	
Carbon Dioxide	ug/L					1300						41100 ( )			
Chloride	mg/L					274									
Chloride (Dup)	mg/L														
Conductivity	mohm/cm														
Conductivity (Dup)	mohm/cm														
Dissolved Oxygen	mg/L														
Dissolved Oxygen (Dup)	mg/L														
DOC	mg/L											1 (J)			
)OC Average Quads-Dissolvec	mg/L	0.48 (B)				1				4.1					
C Average Quads-Dissolved (D	mg/L														
Ethane	ug/l											0.5 (J)			
Ferrous Iron	mg/L					3.3									
Ferrous Iron (Dup)	mg/L														
Methane	ug/L									6.6		318 ( )		86	
Methane (Dup)	ug/L														
Nitrate	mg/L					0.37									
Nitrate (Dup)	mg/L														
Nitrite	mg/L					0.002									
Nitrite (Dup)	mg/L														
pH															
pH (Dup)															
Redox	mV														
Redox (Dup)	mV														
Salinity															
Sulfate	mg/L					43									
Sulfate (Dup)	mg/L														

Well ID: WVA-SA-MW-23

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Temperature (Dup)	C														
Total Dissolved Solids	mg/l									705		620 ( )			
Turbidity	NTUs														
Turbidity (Dup)	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (Dup)	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Carbon Disulfide	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-24

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					24									
Carbon Dioxide	ug/L														
Chloride	mg/L					12									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC Average Quads-Dissolved	mg/L	1.4				2.3									
Ferrous Iron	mg/L					0.17									
Methane	ug/L														
Nitrate	mg/L					0.27									
Nitrite	mg/L					0.008									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					1									
Sulfide	mg/L														
Sulfide-Dissolved	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-SA-MW-24

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-25

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Dissolved Oxygen	mg/L														
pH															
Redox	mV														

Well ID: WVA-SA-MW-26

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L	6													
Ferrous Iron	mg/L														
Methane	ug/L	5.2													
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-26

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Benzo(a)pyrene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)													
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-27

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-27

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Carbon Disulfide	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-27R

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					155									
Carbon Dioxide	ug/L	522				770									
Chloride	mg/L					795									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
)OC Average Quads-Dissolvec	mg/L	8.2				1.5									
Ferrous Iron	mg/L					1.59									
Methane	ug/L	650 (E)				14									
Nitrate	mg/L					0.28									
Nitrite	mg/L					0.014									
pH															
Redox	mV														
Sulfate	mg/L					33									
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Bis(2-ethylhexyl)phthalate	ug/L					3 (J)									

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									

Well ID: WVA-SA-MW-28

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					32									
Carbon Dioxide	ug/L														
Chloride	mg/L					20									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC Average Quads-Dissolved	mg/L	0.93 (B)				2.5									
Ferrous Iron	mg/L					0.7									
Methane	ug/L	220													
Nitrate	mg/L					0									
Nitrite	mg/L					0.001									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					1									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Phenol	ug/L														

Well ID: WVA-SA-MW-28

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,1-Trichloroethane	ug/L														
1,1,2,2-Tetrachloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Bromoform	ug/L														
Carbon Disulfide	ug/L														
Ethylbenzene	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Toluene	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-SA-MW-29

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					65									
Chloride	mg/L					0									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L	3.4				3.6									
Ferrous Iron	mg/L					0.6									
Methane	ug/L	170				190									
Nitrate	mg/L					0.04									
Nitrite	mg/L					0.018									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					25									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-29

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthene	ug/L														
Anthracene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluoranthene	ug/L														
Fluorene	ug/L														
Phenanthrene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Carbon Disulfide	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Toluene	ug/L														
Vinyl Chloride	ug/L	0.94 (JH)													

Well ID: WVA-SA-MW-32

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					144									
Carbon Dioxide	mg/l													4.3 (J)	
Carbon dioxide	ug/L							6100				4480 ( )			
Chloride	mg/L					27									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													2	
Dissolved Oxygen	mg/L														
DOC	mg/L											2.1 ( )			
DOC (Dup)	mg/L														
DOC Average Quads-Dissolvec	mg/L		1.4			2.7		3.3		2.6					
Ethane	ug/L											1.9 ( )			
Ethane (Dup)	ug/L														
Ethene	ug/L											0.5 (J)			
Ethene (Dup)	ug/L														
Ferrous Iron	mg/L					0.35									
Methane	ug/L	19				15		9		23		41.7 ( )		16	
Methane (Dup)	ug/L														
Nitrate	mg/L					0.31									
Nitrite	mg/L					0.015									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					38									
Sulfide	mg/L														
Sulfide (Dup)	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									151		170 ( )			

Well ID: WVA-SA-MW-32

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Turbidity	NTUs														

Well ID: WVA-SA-MW-32

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,2,4-Trichlorobenzene	ug/L														
1,2-Dichlorobenzene	ug/L														
1,2-Dichlorobenzene (Dup)	ug/L														
1,4-Dichlorobenzene	ug/L														
1,4-Dichlorobenzene (Dup)	ug/L														
2,4-Dimethylphenol	ug/L														
2-Methylnaphthalene	ug/L														
2-Methylnaphthalene (Dup)	ug/L														
Acenaphthene	ug/L														
Acenaphthene (Dup)	ug/L														
Anthracene	ug/L														
Anthracene (Dup)	ug/L														
Benzo(a)anthracene	ug/L														
Benzo(a)anthracene (Dup)	ug/L														
Benzo(a)pyrene (Dup)	ug/L														
Benzo(b)fluoranthene (Dup)	ug/L														
Benzo(g,h,i)perylene	ug/L														
Benzo(g,h,i)perylene (Dup)	ug/L														
Benzo(k)fluoranthene (Dup)	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
ıis(2-Ethylhexyl)phthalate (Dup	ug/L														
Chrysene	ug/L														
Chrysene (Dup)	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-butyl phthalate (Dup)	ug/L														
Di-n-octyl phthalate	ug/L														
Di-n-octyl phthalate (Dup)	ug/L														
Fluoranthene	ug/L														

Well ID: WVA-SA-MW-32

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Fluoranthene (Dup)	ug/L														
Fluorene	ug/L														
Fluorene (Dup)	ug/L														
Indeno(1,2,3-cd)pyrene	ug/L														
Indeno(1,2,3-cd)pyrene (Dup)	ug/L														
Naphthalene	ug/L														
Naphthalene (Dup)	ug/L														
Phenanthrene	ug/L														
Phenanthrene (Dup)	ug/L														
Phenol	ug/L														
Phenol (Dup)	ug/L														
Pyrene	ug/L														
Pyrene (Dup)	ug/L														

Well ID: WVA-SA-MW-32

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1 2-Dichloroethane	ug/L														
1,1,2,2-Tetrachloroethane	ug/L														
1,1,2-Trichloroethane	ug/L														
1,1-Dichloroethene	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L		5 (R)			5 (R)		5 (R)							
4-Methyl-2-Pentanone	ug/L														
Benzene	ug/L														
Carbon disulfide	ug/L														
Chlorobenzene	ug/L														
Chloroform (Dup)	ug/L														
cis-1 2-Dichloroethene	ug/L		2.5 (J)			31		29 (J)							
cis-1,2-Dichloroethene	ug/L	210								120		18 ( )		34	
cis-1,2-Dichloroethene (Dup)	ug/L														
Ethylbenzene	ug/L														
Methylene Chloride	ug/L	12 (JB)													
Methylene Chloride (Dup)	ug/L														
Tetrachloroethene	ug/L	54				4.1 (J)		7.1 (J)		17		4.8 ( )		5	
Toluene	ug/L														
trans-1,2-Dichloroethene	ug/L									0.77 (J M)					
Trichloroethene	ug/L	21 (J)				2.6 (J)		4.3 (J)		13		2.8 ( )		5	
Vinyl Chloride	ug/L	19 (J)				4 (J)		3.4 (J)		21		1.6 ( )		2	
Vinyl Chloride (Dup)	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-SA-MW-33

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Sulfate	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														
Phenol	ug/L														

Well ID: WVA-SA-MW-33

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L														
Methylene chloride	ug/L														

Well ID: WVA-SA-MW-34

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					279									
Alkalinity (Dup)	mg/L														
Carbon Dioxide	mg/l													46	
Carbon Dioxide	ug/L									15000		29200 ( )			
Chloride	mg/L					32									
Chloride (Dup)	mg/L														
Conductivity	mohm/cm														
Conductivity (Dup)	mohm/cm														
Dissolved Organic Carbon	mg/l													2.4	
Dissolved Oxygen	mg/L														
Dissolved Oxygen (Dup)	mg/L														
DOC	mg/L											2.9 ( )			
)OC Average Quads-Dissolve	mg/L	3.5				4.1				40					
C Average Quads-Dissolved (D	mg/L														
Ethane	ug/l											5.54 ( )			
Ferrous Iron	mg/L					0.13									
Ferrous Iron (Dup)	mg/L														
Methane	ug/L	470 (D)				1800 (D)				2200 (D)		5220 ( )		9800	
Methane (Dup)	ug/L														
Nitrate	mg/L					0.68									
Nitrate (Dup)	mg/L														
Nitrite	mg/L					0.032									
Nitrite (Dup)	mg/L														
pH															
pH (Dup)															
Redox	mV														
Redox (Dup)	mV														
Salinity															
Sulfate	mg/L					80									

Well ID: WVA-SA-MW-34

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Sulfate (Dup)	mg/L														
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
Sulfide-Dissolved (Dup)	mg/L														
TDS	mg/L														
Temperature	C														
Temperature (Dup)	C														
Total Dissolved Solids	mg/l									637		740 ( )			
Turbidity	NTUs														
Turbidity (Dup)	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Methylene Chloride	ug/L														
Methylene chloride (Dup)	ug/L														
Tetrachloroethene (Dup)	ug/L														
Vinyl chloride	ug/l											2 ( )			

Well ID: WVA-SA-MW-38

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					217									
Carbon Dioxide	ug/L	967				1500				35000		102000 ( )			
Carbon Dioxide	mg/l													160	
Chloride	mg/L					13									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													3	
Dissolved Oxygen	mg/L														
DOC	mg/L											3.1 ( )			
)OC Average Quads-Dissolvec	mg/L	3.2				4.4				36.4					
Ferrous Iron	mg/L					0.13									
Methane	ug/L	2.0				71				170		2.5 ( )		25	
Nitrate	mg/L					0.36									
Nitrite	mg/L					0.019									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					69									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									476		470 ( )			
Turbidity	NTUs														

Well ID: WVA-SA-MW-38

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1,1,2,2-Tetrachloroethane	ug/L														
1,1,2-Trichloroethane	ug/L														
1,2-Dichloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
4-Methyl-2-Pentanone	ug/L														
Bromoform	ug/L														
Dibromochloromethane	ug/L														
Methylene Chloride	ug/L														
trans-1,3-Dichloropropene	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L									1 (J *)					

Well ID: WVA-SA-MW-39

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					134									
Carbon Dioxide	mg/l													250	
Carbon Dioxide	ug/L	2010				2600						129000 ( )			
Carbon dioxide (Dup)	ug/L							210000							
Chloride	mg/L					142									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													8	
Dissolved Oxygen	mg/L														
DOC	mg/L											8.4 ( )			
)OC Average Quads-Dissolvec	mg/L	7.3	5.6			9.1				7.8					
C Average Quads-Dissolved (D	mg/L							12							
Ethane	ug/L	100 (D)	83			120 (D)		130		53		752 ( )		420	
Ethene	ug/L	120 (D)	100			160 (D)		120		63		731 ( )		390	
Ferrous Iron	mg/L					2.73									
Methane	ug/L	2400 (D)	1000 (E)			2500 (D)		1600 (D)		1300 (D)		11300 ( )		6800	
Nitrate	mg/L					0.3									
Nitrite	mg/L					0.007									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					40									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									582		610 ( )			
Turbidity	NTUs														

Well ID: WVA-SA-MW-39

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Anthracene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
1 1-Dichloroethene	ug/L														
1,1-Dichloroethene	ug/l											13 ( )		18	
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									30 (R)					
2-Chloroethylvinylether	ug/L	500 (R)	5 (R)			200 (R)									
2-Chloroethylvinylether (Dup)	ug/L							400 (R)							
Benzene	ug/L		0.74 (J)			29 (J)				29 (J)		24 ( )		27	
cis-1 2-Dichloroethene	ug/L		130			4600									
cis-1 2-Dichloroethene (Dup)	ug/L							5800							
cis-1,2-Dichloroethene	ug/L	5600								4700		4800 ( )		4200	
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	1200	9.1			440				690		470 ( )		340	
Tetrachloroethene (Dup)	ug/L							530							
Toluene	ug/l											1.9 ( )		2	
trans-1 2-Dichloroethene	ug/L		0.56 (JM)			24 (J)									
trans-1,2-Dichloroethene	ug/l											200 ( )		60	
Trichloroethene	ug/L	1600	30			940				1100		900 ( )		720	
Trichloroethene (Dup)	ug/L							1600							
Vinyl Chloride	ug/L	2000	55			1700				2600		2000 ( )		1500	
Vinyl chloride (Dup)	ug/L							1800 (M)							

Well ID: WVA-SA-MW-41

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					24									
Carbon Dioxide	mg/l													1.4 (J)	
Carbon Dioxide	ug/L	3950						1200				1230 ( )			
Chloride	mg/L					19									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													1.1	
Dissolved Oxygen	mg/L														
DOC	mg/L											1.5 ( )			
DOC (Dup)	mg/L														
DOC Average Quads-Dissolvec	mg/L	2	2.3			2.1		2.7		2					
Ethane	ug/L	140													
Ethane (Dup)	ug/L														
Ethene	ug/L	130													
Ethene (Dup)	ug/L														
Ferrous Iron	mg/L					0.2									
Methane	ug/L	82										0.376 ( )			
Methane (Dup)	ug/L														
Nitrate	mg/L					0.24									
Nitrite	mg/L					0.014									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
Sulfide (Dup)	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									182		180 ( )			

Well ID: WVA-SA-MW-41

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene	ug/L														
Phenol	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Carbon Disulfide	ug/L														
Chlorobenzene	ug/L														
Chloroform	ug/L														
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (Dup)	ug/L														
Methylene Chloride	ug/L														
Toluene	ug/L														
Vinyl Chloride	ug/L														
Vinyl Chloride (Dup)	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-SA-MW-45

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-45

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthylene	ug/L														
Anthracene	ug/L														
Benzo(a)anthracene	ug/L														
Benzo(a)pyrene	ug/L														
Benzo(b)fluoranthene	ug/L														
Benzo(g,h,i)perylene	ug/L														
Benzo(k)fluoranthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Chrysene	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Indeno(1,2,3-cd)pyrene	ug/L														
Phenanthrene	ug/L														
Pyrene	ug/L														

Well ID: WVA-SA-MW-45

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Bromodichloromethane	ug/L														
Bromomethane	ug/L														
Carbon Disulfide	ug/L														
Chloromethane	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Trichlorofluoromethane	ug/L														
Vinyl Chloride	ug/L														
Vinyl chloride (BS)	ug/L														
Xylenes, Total (BS)	ug/L								1.8 (J)						

Well ID: WVA-SA-MW-46

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-SA-MW-46

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Carbon Disulfide	ug/L														
Chloromethane	ug/L														
Methylene Chloride	ug/L														
Trichloroethene (BS)	ug/L								1.9 (JB)						

Well ID: WVA-SA-MW-47

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mV														
Dissolved Oxygen	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mg/L														
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-47

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Benzo(a)anthracene	ug/L														
Benzo(a)pyrene	ug/L														
Benzo(b)fluoranthene	ug/L														
Benzo(k)fluoranthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Chrysene	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
4-Methyl-2-Pentanone	ug/L														
Benzene	ug/L														
Bromomethane	ug/L														
Chloromethane	ug/L														
Methylene Chloride	ug/L														
Trichloroethene (BS)	ug/L								1 (JB)						

Well ID: WVA-SA-MW-48

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluoranthene	ug/L														
Pyrene	ug/L														

Well ID: WVA-SA-MW-48

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Methylene Chloride	ug/L														
Toluene	ug/L														
Trichloroethene (BS)	ug/L								0.93 (JB)						

Well ID: WVA-SA-MW-49

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-49

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Methylene Chloride	ug/L														
Tetrachloroethene (BS)	ug/L														
Trichloroethene (BS)	ug/L								0.93 (JB)						
Vinyl Chloride	ug/L														

Well ID: WVA-SA-MW-50

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthylene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenol	ug/L														

Well ID: WVA-SA-MW-50

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Bromodichloromethane	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
Toluene	ug/L														
Trichloroethene (BS)	ug/L								0.71 (JB)						
Vinyl Chloride	ug/L														

Well ID: WVA-SA-MW-51

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-51

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Butanone (MEK) (BS)	ug/L					1.3 (J)									
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
cis-1,2-Dichloroethene (BS)	ug/L														
Methylene chloride (BS)	ug/L														
Tetrachloroethene (BS)	ug/L														
Trichloroethene (BS)	ug/L														
Vinyl Chloride (BS)	ug/L														

Well ID: WVA-SA-MW-52

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-SA-MW-52

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						

Well ID: WVA-SA-MW-53

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-53

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Benzo(a)anthracene	ug/L														
Benzo(a)pyrene	ug/L														
Benzo(b)fluoranthene	ug/L														
Benzo(g,h,i)perylene	ug/L														
Benzo(k)fluoranthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Chrysene	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Indeno(1,2,3-cd)pyrene	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Butanone (MEK) (BS)	ug/L					1.3 (J)									
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)			5 (R)	5 (R)			5 (R)						
Chloromethane	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-54

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-54

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Benzo(a)anthracene	ug/L														
Benzo(a)pyrene	ug/L														
Benzo(b)fluoranthene	ug/L														
Benzo(g,h,i)perylene	ug/L														
Benzo(k)fluoranthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Chrysene	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Indeno(1,2,3-cd)pyrene	ug/L														
Pyrene	ug/L														

Well ID: WVA-SA-MW-54

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1 1 2 2-Tetrachloroethane (BS)	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
4-Methyl-2-Pentanone	ug/L														
Bromodichloromethane	ug/L														
Bromomethane	ug/L														
Chloromethane	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
Tetrachloroethene (BS)	ug/L														
Vinyl Chloride	ug/L														

Well ID: WVA-SA-MW-55

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthylene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-SA-MW-55

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
4-Methyl-2-Pentanone	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-SA-MW-56

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthylene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-56

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
4-Methyl-2-Pentanone	ug/L														
Benzene	ug/L														
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
Tetrachloroethene	ug/L														
Toluene	ug/L														
Trichloroethene	ug/L														
Xylenes, Total	ug/L														

Well ID: WVA-SA-MW-57

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-SA-MW-57

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene	ug/L														
Carbon Disulfide	ug/L														
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														

Well ID: WVA-SA-MW-59

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														

METHOD: *SVOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-59

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Carbon disulfide	ug/l											23 ( )			
Chlorobenzene	ug/L														
Chloromethane	ug/L														

Well ID: WVA-SA-MW-60

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-60

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	50 (R)		5 (R)		20 (R)			5 (R)						
Benzene (BS)	ug/L														
Bromodichloromethane	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L			76		99			94						
cis-1,2-Dichloroethene	ug/L											22 ( )			
cis-1,2-Dichloroethene (BS)	ug/l	68								69					
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
trans-1 2-Dichloroethene (BS)	ug/L			0.79 (J)					0.71 (J)						
trans-1,2-Dichloroethene	ug/l											0.85 ( )			
trans-1,2-Dichloroethene (BS)	ug/L														
Vinyl Chloride	ug/L														
Vinyl chloride (BS)	ug/L	420				440			8.8	200					

Well ID: WVA-SA-MW-61

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Phenol	ug/L														

Well ID: WVA-SA-MW-61

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene	ug/L														
Benzene (BS)	ug/L	2.4 (J)		0.77 (J)		0.75 (J)			3.2 (J)	0.97 (J)					
Bromodichloromethane	ug/L														
Chlorobenzene	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L			0.63 (J)					2.6 (J)						
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/L	1.5 (J)													
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
Trichloroethene (BS)	ug/L														
Vinyl Chloride	ug/L														
Vinyl Chloride (BS)	ug/L	13		1.2 (J)		1.9 (J)			12						
Xylenes, Total (BS)	ug/L								1.9 (J)						

Well ID: WVA-SA-MW-62

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Phenol	ug/L														

Well ID: WVA-SA-MW-62

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene	ug/L														
Benzene (BS)	ug/L	1.2 (J)				0.51 (J)									
Bromodichloromethane	ug/L														
Chlorobenzene	ug/L														
Toluene (BS)	ug/L														
Vinyl chloride (BS)	ug/L	3.1 (J)		1 (J)		0.81 (J)			1.9 (J)						

Well ID: WVA-SA-MW-63

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-63

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthylene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Pyrene	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene (BS)	ug/L	0.63 (J)		0.75 (J)		0.9 (J)									
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/L														
Methylene Chloride	ug/L														
Toluene	ug/L														
Vinyl Chloride	ug/L														
Vinyl chloride (BS)	ug/L	8.1		1.2 (J)		2.3 (J)			8.2						

Well ID: WVA-SA-MW-64

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														

Well ID: WVA-SA-MW-64

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene (BS)	ug/L														
Bromodichloromethane	ug/L														
Chloromethane	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L			0.78 (J)		0.89 (J)									
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/L														
Ethylbenzene	ug/L														
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
Vinyl Chloride	ug/L														
Vinyl chloride (BS)	ug/L	1.3 (J)				29			0.96 (J)						

Well ID: WVA-SA-MW-65

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														

Well ID: WVA-SA-MW-65

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Butanone (MEK) (BS)	ug/L					1.4 (J)									
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Bromodichloromethane	ug/L														
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														

Well ID: WVA-SA-MW-66

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-66

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone (MEK) (BS)	ug/L					1.4 (J)									
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene (BS)	ug/L														
Bromodichloromethane	ug/L														
Carbon Disulfide	ug/L														
Chlorobenzene	ug/L														
Chlorobenzene (BS)	ug/L														
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/L														
Methylene Chloride	ug/L														
Trichlorofluoromethane	ug/L														
Vinyl Chloride	ug/L														

Well ID: WVA-SA-MW-67

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Phenol	ug/L														

Well ID: WVA-SA-MW-67

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Butanone (MEK) (BS)	ug/L					1.8 (J)									
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene (BS)	ug/L					0.46 (J)									
Bromodichloromethane	ug/L														
Methylene Chloride	ug/L														
Vinyl chloride (BS)	ug/L					0.88 (J)									

Well ID: WVA-SA-MW-68

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-68

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Bromodichloromethane	ug/L														
Bromomethane	ug/L														
Methylene Chloride	ug/L														
Vinyl Chloride	ug/L														

Well ID: WVA-SA-MW-69

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)			5 (R)	5 (R)			5 (R)						
Benzene (BS)	ug/L														
Chloromethane	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-70

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
N-Nitrosodiphenylamine (1)	ug/L														

Well ID: WVA-SA-MW-70

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Bromodichloromethane	ug/L														
Carbon Disulfide	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L			37		41			43						
cis-1,2-Dichloroethene	ug/L											42 ( )			
cis-1,2-Dichloroethene (BS)	ug/L	54								41					
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L														
trans-1 2-Dichloroethene (BS)	ug/L	0.68 (J)													
trans-1,2-Dichloroethene	ug/L											1.6 ( )			
trans-1,2-Dichloroethene (BS)	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L											3.6 ( )			
Vinyl Chloride (BS)	ug/L	6.8								3.8 (J)					

Well ID: WVA-SA-MW-71

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Benzo(a)pyrene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L														
Phenol	ug/L														
Pyrene	ug/L														

Well ID: WVA-SA-MW-71

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene	ug/L														
Benzene (BS)	ug/L			0.48 (J)											
Bromodichloromethane	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L			0.74 (J)											
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/l									1.4 (J)					
Methylene Chloride	ug/L														
Methylene chloride (BS)	ug/L								5 (J)						
Vinyl Chloride	ug/L														
Vinyl chloride (BS)	ug/l									0.97 (J M)					

Well ID: WVA-SA-MW-72

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide (Dup)	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
Ethane	ug/L														
Ethane (Dup)	ug/L														
Ethene	ug/L														
Ethene (Dup)	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Methane (Dup)	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Silica (Dup)	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide (Dup)	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-72

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
›is(2-Ethylhexyl)phthalate (Dup	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-butyl phthalate (Dup)	ug/L														
Phenol	ug/L														
Phenol (Dup)	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Butanone (Dup)	ug/L														
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene	ug/L														
Benzene (BS)	ug/L	0.57 (J)		0.64 (J)		0.71 (J)			0.41 (J)						
Benzene (Dup)	ug/L														
Bromodichloromethane	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L			2.8 (J)		5.7			3.3 (J)						
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/L	10													
cis-1,2-Dichloroethene (Dup)	ug/L														
Methylene Chloride	ug/L														
Methylene Chloride (Dup)	ug/L														
Vinyl Chloride	ug/L														
Vinyl Chloride (BS)	ug/L	2.3 (J)				2.3 (J)									
Vinyl Chloride (Dup)	ug/L														

Well ID: WVA-SA-MW-73

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-73

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Acenaphthylene	ug/L														
Anthracene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenol	ug/L														

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Butanone (MEK) (BS)	ug/L					1.4 (J)									
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene	ug/L														
Benzene (BS)	ug/L	1.3 (JH)													
Bromodichloromethane	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L			0.92 (J)		2.1 (J)									
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/L	1.1 (J)													
Ethylbenzene	ug/L														
Methylene Chloride	ug/L														
Toluene	ug/L														
Trichlorofluoromethane	ug/L														
Vinyl Chloride	ug/L														
Vinyl chloride (BS)	ug/L					0.87 (J)									

Well ID: WVA-SA-MW-74

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ethane	ug/L														
Ethene	ug/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Silica	mg/L														
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														

Well ID: WVA-SA-MW-74

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Acenaphthylene	ug/L														
Anthracene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenol	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Butanone (MEK) (BS)	ug/L					2.6 (J)									
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
Benzene	ug/L														
Benzene (BS)	ug/L								0.52 (J)						
Bromodichloromethane	ug/L														
cis-1 2-Dichloroethene (BS)	ug/L								0.78 (J)						
cis-1,2-Dichloroethene	ug/L														
cis-1,2-Dichloroethene (BS)	ug/L	1 (J)													
Methylene Chloride	ug/L														
Vinyl Chloride	ug/L														
Vinyl chloride (BS)	ug/L														

Well ID: WVA-SA-MW-75

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-75

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone (MEK) (BS)	ug/L					2.2 (J)									
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)			5 (R)	5 (R)			5 (R)						
Benzene (BS)	ug/l	2.4 (J)								0.41 (J)					
Carbon Disulfide	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Vinyl Chloride	ug/L											1 (J)			
Vinyl chloride (BS)	ug/L	0.82 (J)				2.1 (J)									

Well ID: WVA-SA-MW-76

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-76

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone (MEK) (BS)	ug/L	4.7 (J)				2.1 (J)									
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)			5 (R)	5 (R)			5 (R)						
4-Methyl-2-Pentanone	ug/L														
Benzene (BS)	ug/L														
Carbon disulfide	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-77

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Carbon Dioxide	ug/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenanthrene	ug/L														

Well ID: WVA-SA-MW-77

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)		5 (R)		5 (R)			5 (R)						
4-Methyl-2-Pentanone	ug/L														
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-79

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					145									
Carbon Dioxide	ug/l											600 (J)			
Chloride	mg/L					90									
Dissolved Organic Carbon	mg/l													1.8	
DOC	mg/l											7.5 ( )			
DOC Average Quads-Dissolved	mg/L	6.8				6.4				6.8					
Ethane	ug/l											11.4 ( )			
Ethene	ug/l											2.73 ( )			
Ferrous Iron	mg/L					0.26									
Methane	ug/l	2600 (D)				1900 (D)						5590 ( )		3400	
Methane (Dup)	ug/l									1100 (D)					
Nitrate	mg/L					0.18									
Nitrite	mg/L					0.027									
Sulfate	mg/L					6									
Sulfide-Dissolved	mg/l											0.1 ( )			
Total Dissolved Solids	mg/l									334		430 ( )			

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L					5 (R)									
2-Chloroethylvinylether (BS)	ug/L	5 (R)													
Benzene	ug/l					7.3				5.8		4.8 ( )		1	
Benzene (BS)	ug/L	13													
Carbon disulfide	ug/L					1.6 (J)									
cis-1,2-Dichloroethene	ug/l											0.5 (J)			
cis-1,2-Dichloroethene (BS)	ug/L	0.63 (J)													

Well ID: WVA-SA-MW-80

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					273									
Carbon Dioxide	mg/l													67	
Carbon Dioxide	ug/l					860						27200 ( )			
Chloride	mg/L					50									
Dissolved Organic Carbon	mg/l													4.3	
DOC	mg/l											7.4 ( )			
)OC Average Quads-Dissolvec	mg/l					7.1				7.1					
C Average Quads-Dissolved (D	mg/L	3.9													
Ethane	ug/l											5.97 ( )			
Ethene	ug/l											1.28 ( )			
Ferrous Iron	mg/L					0.84									
Methane	ug/l					450 (D)						1230 ( )		2000	
Methane (Dup)	ug/l	120								290 (D)					
Nitrate	mg/L					0.29									
Nitrite	mg/L					0.041									
Sulfate	mg/L					6									
Sulfide-Dissolved	mg/l											0.1 ( )		1.8	
Total Dissolved Solids	mg/l									212		300 ( )			

Well ID: WVA-SA-MW-80

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L					5 (R)									
2-Chloroethylvinylether (BS)	ug/L	5 (R)													
Benzene	ug/L					0.57 (J)									
Benzene (BS)	ug/L	1.1 (J)													
cis-1 2-Dichloroethene	ug/L					5.6									
cis-1,2-Dichloroethene	ug/l									5.9		5 ( )		15	
cis-1,2-Dichloroethene (BS)	ug/L	5.2													
Trichloroethene	ug/l									0.95 (J)		0.97 ( )		4	
Vinyl chloride	ug/l					4 (J)				4.6 (J)				7	
Vinyl chloride (BS)	ug/L	3.7 (J)													

Well ID: WVA-SA-MW-81

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					160									
Carbon Dioxide	ug/l	4030										10800 ( )			
Carbon Dioxide	mg/l													12	
Chloride	mg/L					108									
Dissolved Organic Carbon	mg/l													2.3	
DOC	mg/l											3.5 ( )			
DOC Average Quads-Dissolved	mg/L	2.3				4				9.1					
Ethane	ug/l	990								14		77.7 ( )			
Ethene	ug/l	1200								58		435 ( )			
Ferrous Iron	mg/L					3.24									
Methane	ug/l	2300				2600 (D)				3400 (D)		34600 ( )		27000	
Nitrate	mg/L					0.35									
Nitrite	mg/L					0.24									
Sulfate	mg/L					3									
Sulfide-Dissolved	mg/l											0.1 ( )			
Total Dissolved Solids	mg/l									464		700 ( )			

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Chloroethyl vinyl ether	ug/l									1.2 (R)					
2-Chloroethylvinylether	ug/L	10 (R)				10 (R)									
cis-1 2-Dichloroethene	ug/L					37									
cis-1,2-Dichloroethene	ug/l	33								18		11 ( )		17	
Vinyl chloride	ug/l	220				180				240		150 ( )		170	

Well ID: WVA-SA-MW-82

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					282									
Carbon Dioxide	mg/l													5.5	
Carbon Dioxide	ug/l											5800 ( )			
Chloride	mg/L					30									
Dissolved Organic Carbon	mg/l													2.3	
DOC	mg/l											2.5 ( )			
)OC Average Quads-Dissolvec	mg/l	3				4.8				2.7					
Ethane	ug/l											28.7 ( )			
Ethene	ug/l	5.5										28.7 ( )			
Ferrous Iron	mg/L					0.08									
Methane	ug/L	890 (E)				270				120		39400 ( )		760	
Nitrate	mg/L					0.53									
Nitrite	mg/L					0.019									
Sulfate	mg/L					66									
Sulfide-Dissolved	mg/l											0.1 ( )			
Total Dissolved Solids	mg/l									199		210 ( )			

Well ID: WVA-SA-MW-82

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L					5 (R)									
2-Chloroethylvinylether (BS)	ug/L	5 (R)													
Benzene	ug/l					1.4 (J)				0.92 (J)					
Benzene (BS)	ug/L	1.4 (J)													
cis-1 2-Dichloroethene	ug/L					0.81 (J)									
cis-1,2-Dichloroethene	ug/l											0.8 ( )			
cis-1,2-Dichloroethene (BS)	ug/L	2.4 (J)													
Vinyl chloride	ug/L					1.5 (J)				4.7 (J)				5	
Vinyl chloride (BS)	ug/L	18													

Well ID: WVA-SA-MW-83

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					176									
Carbon Dioxide	mg/l													10	
Carbon Dioxide	ug/l									3900		11300 ( )			
Chloride	mg/L					97									
Dissolved Organic Carbon	mg/l													2.2	
DOC	mg/l											2.8 ( )			
)OC Average Quads-Dissolvec	mg/L	3				3.9				3.9					
Ethane	ug/l	23								11		56.9 ( )			
Ethene	ug/l	35								40		183 ( )			
Ferrous Iron	mg/L					2.44									
Methane	ug/l	1400 (E)				2900 (D)				3300 (D)		14900 ( )		28000	
Nitrate	mg/L					0.4									
Nitrite	mg/L					0.006									
Sulfate	mg/L					0									
Sulfide-Dissolved	mg/l											0.1 ( )			
Total Dissolved Solids	mg/l									623		710 ( )			

Well ID: WVA-SA-MW-83

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethyl vinyl ether	ug/l									3 (R)					
2-Chloroethylvinylether	ug/L					20 (R)									
2-Chloroethylvinylether (BS)	ug/L	50 (R)													
Benzene	ug/l											0.5 ( )			
cis-1 2-Dichloroethene	ug/L					79									
cis-1,2-Dichloroethene	ug/l									18 (J)		41 ( )		47	
cis-1,2-Dichloroethene (BS)	ug/L	79													
trans-1,2-Dichloroethene	ug/l											0.82 ( )			
Vinyl chloride	ug/L					360				700 (J)		700 ( )		400	
Vinyl chloride (BS)	ug/L	410													

Well ID: WVA-SA-MW-84

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					214									
Carbon Dioxide	ug/L	722				830				18000					
Chloride	mg/L					160									
Dissolved Organic Carbon	mg/l													6.5	
)OC Average Quads-Dissolvec	mg/L	4.4				5.8				5.5					
Ethane	ug/L	8.1				26 (D)				4.3				260	
Ethene	ug/L	21				66 (D)				9.3					
Ferrous Iron	mg/L					3.3									
Methane	ug/L	140				520 (D)				95					
Nitrate	mg/L					0.57									
Nitrite	mg/L					0.021									
Sulfate	mg/L					17									
Total Dissolved Solids	mg/l									558					

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1-Dichloroethene	ug/l													7	
2-Chloroethyl vinyl ether	ug/l									1.2 (R)					
2-Chloroethylvinylether	ug/L	25 (R)				20 (R)									
Benzene	ug/l					1.9 (J)				1.4 (J)				8	
Carbon Dioxide	mg/l													230	
cis-1 2-Dichloroethene	ug/L					240									
cis-1,2-Dichloroethene	ug/L	110								170				1800	
Ethene	ug/l													420	
Methane	ug/l													2900	
trans-1,2-Dichloroethene	ug/l													13	
Trichloroethene	ug/l													2	
Vinyl chloride	ug/l	270				480				360 (J)				2000	

Well ID: WVA-SA-MW-85

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Sulfate	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone (MEK) (BS)	ug/L					1.3 (J)									
2-Chloroethyl vinyl ether (BS)	ug/l									0.6 (R)					
2-Chloroethylvinylether (BS)	ug/L	5 (R)				5 (R)									
Benzene (BS)	ug/L	0.43 (J)				0.56 (J)									
cis-1 2-Dichloroethene (BS)	ug/L					0.8 (J)									
Methylene chloride	ug/L														
Vinyl chloride (BS)	ug/l	3 (J)				1.4 (J)				1.1 (J M)					

Well ID: WVA-SA-MW-EA-6

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					283									
Carbon Dioxide	mg/l													1.6 (J)	
Carbon Dioxide	ug/L	745				1400		45000				5210 ( )			
Chloride	mg/L					22									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													2.2	
Dissolved Oxygen	mg/L														
DOC	mg/L											1.8 ( )			
DOC Average Quads-Dissolved	mg/l	2	4.6			5.4		4.5		9.9					
Ethane	ug/l											0.5 (J)			
Ethene	ug/l											0.5 (J)			
Ferrous Iron	mg/L					0.06									
Methane	ug/L					7.9		15		3.1		1.08 ( )			
Nitrate	mg/L					0.29									
Nitrite	mg/L					0.006									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					47									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )			
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									517		470 ( )			
Turbidity	NTUs														

Well ID: WVA-SA-MW-EA-6

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Benzo(a)pyrene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
1,1,2,2-Tetrachloroethane	ug/L														
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Chlorobenzene	ug/L														
cis-1 2-Dichloroethene	ug/L		0.69 (JM)			1.1 (J)		2 (J)							
cis-1,2-Dichloroethene	ug/L	1 (J)								1.5 (J)				2	
Methylene Chloride	ug/L														
Toluene	ug/L														
Trichloroethene	ug/L	3.2 (J)	23			24		23 (J)		28		2.3 ( )		30	

Well ID: WVA-SA-MW-ESE-1

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					495									
Chloride	mg/L					15									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L	2.3				4.3									
Ethene	ug/L														
Ferrous Iron	mg/L					1.34									
Methane	ug/L	8800 (D)				5200 (D)									
Nitrate	mg/L					0.35									
Nitrite	mg/L					0.017									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					2									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Phenanthrene	ug/L														

Well ID: WVA-SA-MW-ESE-1

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
cis-1,2-Dichloroethene	ug/L														
Methylene Chloride	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L														

Well ID: WVA-SA-MW-ESE-2

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					90									
Carbon Dioxide	ug/L					590									
Chloride	mg/L					382									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L	0.64 (B)				0.55 (B)									
Ferrous Iron	mg/L					3.3									
Methane	ug/L					580 (D)									
Methane (Dup)	ug/L														
Nitrate	mg/L					0.4									
Nitrite	mg/L					0.007									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					48									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-ESE-2

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Benzo(a)pyrene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L	3 (J)													
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Naphthalene (Dup)	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
2-Chloroethylvinylether (Dup)	ug/L														
Benzene	ug/L														
Carbon disulfide	ug/L														
Chloromethane	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-ESE-3

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L					200									
Carbon Dioxide	ug/L	700				1300									
Chloride	mg/L					10									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L	1.8				3.2									
C Average Quads-Dissolved (D	mg/L														
Ferrous Iron	mg/L					3.3									
Methane	ug/L	17				19									
Methane (Dup)	ug/L														
Nitrate	mg/L					0.31									
Nitrite	mg/L					0.009									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														

Well ID: WVA-SA-MW-ESE-3

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
4-Methyl-2-Pentanone	ug/L														
Chloromethane	ug/L														
Methylene Chloride	ug/L														

Well ID: WVA-SA-MW-ESE-6

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					212									
Carbon Dioxide	ug/L					660				23000		48000 ( )			
Carbon Dioxide	mg/l													70	
Chloride	mg/L					5									
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l													4	
Dissolved Oxygen	mg/L														
DOC	mg/L											4.2 ( )			
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/l	4.6				6.9				11.4					
Ethane	ug/l	1.1 (J)										11.8 ( )			
Ferrous Iron	mg/L					2.85									
Methane	ug/L	1300 (E)				4200 (D)						38900 ( )		15000	
Methane (Dup)	ug/L														
Nitrate	mg/L					0.4									
Nitrite	mg/L					0.003									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					5									
Sulfide	mg/L														
Sulfide-Dissolved	mg/l											0.1 ( )		2.2	
TDS	mg/L														
Temperature	C														
Total Dissolved Solids	mg/l									432		450 ( )			
Turbidity	NTUs														

Well ID: WVA-SA-MW-ESE-6

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Methylnaphthalene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/L														
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluorene	ug/L														
Naphthalene	ug/L														
Phenanthrene	ug/L														

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Butanone (Dup)	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)				5 (R)									
Benzene	ug/L														
Carbon Disulfide	ug/L														
Chlorobenzene	ug/L														
Chloromethane	ug/L														
Chloromethane (Dup)	ug/L														
Methylene Chloride	ug/L														
Methylene Chloride (Dup)	ug/L														
Tetrachloroethene	ug/L														
Trichloroethene	ug/L														

Well ID: WVA-SA-MW-ESE-8

METHOD: *NAT*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L					330									
Carbon Dioxide	ug/L	1380						130000							
Carbon Dioxide (Dup)	ug/L					1100									
Chloride	mg/L					106									
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
DOC (Dup)	mg/L														
)OC Average Quads-Dissolvec	mg/L	6.3						13							
C Average Quads-Dissolved (D	mg/L					7.9									
Ethane	ug/L		4												
Ethane (Dup)	ug/L														
Ethene	ug/L	3.0	5.6					5.4							
Ethene (Dup)	ug/L														
Ferrous Iron	mg/L					0.6									
Methane	ug/L	130	210					160							
Methane (Dup)	ug/L					58									
Nitrate	mg/L					0.11									
Nitrite	mg/L					0.011									
pH															
Redox	mV														
Salinity															
Sulfate	mg/L					80									
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-MW-ESE-8

METHOD: SVOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Anthracene (Dup)	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
ıis(2-Ethylhexyl)phthalate (Dup	ug/L														
Butyl benzyl phthalate	ug/L														
Butyl benzyl phthalate (Dup)	ug/L														
Diethyl phthalate	ug/L														
Diethyl phthalate (Dup)	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-butyl phthalate (Dup)	ug/L														
Di-n-octyl phthalate	ug/L														
Di-n-octyl phthalate (Dup)	ug/L														
Fluoranthene (Dup)	ug/L														
Phenanthrene (Dup)	ug/L														
Pyrene (Dup)	ug/L														

Well ID: WVA-SA-MW-ESE-8

METHOD: *VOC*

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethylvinylether	ug/L	25 (R)	50 (R)					100 (R)							
2-Chloroethylvinylether (Dup)	ug/L					10 (R)									
Chloroform	ug/L														
Chloroform (Dup)	ug/L														
cis-1 2-Dichloroethene	ug/L		960					1100							
cis-1 2-Dichloroethene (Dup)	ug/L					360									
cis-1,2-Dichloroethene	ug/L	500													
cis-1,2-Dichloroethene (Dup)	ug/L														
Dibromochloromethane	ug/L														
Methylene Chloride	ug/L														
Methylene Chloride (Dup)	ug/L														
Tetrachloroethene	ug/L														
trans-1 2-Dichloroethene (Dup)	ug/L					1.2 (JH)									
trans-1,2-Dichloroethene	ug/L														
Trichloroethene	ug/L														
Vinyl Chloride	ug/L	150	300					300							
Vinyl Chloride (Dup)	ug/L					94									

Well ID: WVA-SA-SNS-6

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Carbon Dioxide	ug/L	733						55000		17000		75200 ( )			
Carbon Dioxide	mg/l														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Organic Carbon	mg/l														
Dissolved Oxygen	mg/L														
DOC	mg/L											26 ( )			
DOC Average Quads-Dissolved	mg/l	4.9	7.5			100		54		23.4					
Ethane	ug/l											0.614 ( )			
Ethene	ug/L											0.5 (J)			
Ferrous Iron	mg/L														
Methane	ug/L	160				350 (D)		210				1220 ( )			
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Sulfate	mg/L														
Sulfide	mg/L														
Sulfide-Dissolved	mg/l					2.8		0.8 (B)				0.1 ( )			
Temperature	C														
Total Dissolved Solids	mg/l									416		470 ( )			
Turbidity	NTUs														

Well ID: WVA-SA-SNS-6

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Bis(2-ethylhexyl) phthalate	ug/l									3.7 (J)					
bis(2-Ethylhexyl)phthalate	ug/L														
Butyl benzyl phthalate	ug/l					5 (J)				9.5 (J)					
Diethyl phthalate	ug/L					12 (J)				0.59 (J)					
Di-n-butyl phthalate	ug/L														
Phenol	ug/L					34		3 (J)							

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone (MEK)	ug/L					5.8 (J)									
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Benzene	ug/L	1.4 (J)	1.1 (J)												
Chloroform	ug/L					7.4		3.1 (J)		2.1 (J)					
cis-1 2-Dichloroethene	ug/L		5.9			0.66 (J)		13							
cis-1,2-Dichloroethene	ug/L	11								34		2.7 ( )			
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L														
Toluene	ug/L					0.69 (J)		0.32 (J)							
Trichloroethene	ug/L					3.4 (J)		0.78 (J)		1.9 (J)		2 ( )			
Vinyl Chloride	ug/L	11	6.8							1 (J M *)		4.2 ( )			

Well ID: WVA-SA-STS-3

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
)OC Average Quads-Dissolvec	mg/L														
Methane	ug/L														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Bis(2-ethylhexyl)phthalate	ug/L		2 (J)												
Di-n-butyl phthalate	ug/L		2 (J)												
Phenol	ug/L		3 (J)												

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Chloroform	ug/L					1.2 (J)		0.88 (J)							
cis-1 2-Dichloroethene	ug/L					0.94 (J)		1.4 (J)							
cis-1,2-Dichloroethene	ug/l	0.75 (J)								1.2 (J)		1.6 ( )			
Toluene	ug/L							0.52 (J)							

Well ID: WVA-SA-STS-5

METHOD: NAT

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
Benzo(k)fluoranthene	ug/L														
bis(2-Ethylhexyl)phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Fluoranthene	ug/L														
Phenol	ug/L		2 (J)												
Pyrene	ug/L														

Well ID: WVA-SA-STS-5

METHOD: VOC

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Bromodichloromethane	ug/L														
Chloroform	ug/L					1.4 (J)									
Chloromethane	ug/L														
cis-1 2-Dichloroethene	ug/L					3.2 (J)		6							
cis-1,2-Dichloroethene	ug/L	5.5								1.8 (J)		3.6 ( )			
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	4.6 (J)						1.1 (J)		0.51 (J)		0.63 ( )			
Toluene	ug/L							0.55 (J)							
Trichloroethene	ug/L	1.7 (J)						0.87 (J)							
Vinyl chloride	ug/L	0.85 (J)				2.4 (JH)									

Well ID: WVA-SA-STS-6

METHOD: NAT

Analyte	*Units*	*May-05*	*Oct-05*	*Nov-05*	*Dec-05*	*May-06*	*Jun-06*	*Oct-06*	*Nov-06*	*May-07*	*Oct-07*	*May-08*	*Oct-08*	*May-09*	*Oct-09*
Alkalinity	mg/L														
Chloride	mg/L														
Conductivity	mohm/cm														
Dissolved Oxygen	mg/L														
DOC	mg/L														
)OC Average Quads-Dissolvec	mg/L														
Ferrous Iron	mg/L														
Methane	ug/L														
Nitrate	mg/L														
Nitrite	mg/L														
pH															
Redox	mV														
Salinity															
Sulfate	mg/L														
Sulfide	mg/L														
TDS	mg/L														
Temperature	C														
Turbidity	NTUs														

Well ID: WVA-SA-STS-6

METHOD: SVOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
bis(2-Ethylhexyl)phthalate	ug/L														
Chrysene	ug/L		1 (J)												
Diethyl phthalate	ug/L														
Di-n-butyl phthalate	ug/L														
Di-n-octyl phthalate	ug/L														
Fluoranthene	ug/L		1 (J)												
Phenol	ug/L		0.6 (J)												
Pyrene	ug/L		2 (J)												

METHOD: VOC

Analyte	Units	May-05	Oct-05	Nov-05	Dec-05	May-06	Jun-06	Oct-06	Nov-06	May-07	Oct-07	May-08	Oct-08	May-09	Oct-09
2-Butanone	ug/L														
2-Chloroethyl vinyl ether	ug/l									0.6 (R)					
2-Chloroethylvinylether	ug/L	5 (R)	5 (R)			5 (R)		5 (R)							
Bromodichloromethane	ug/L														
Chloromethane	ug/L														
cis-1 2-Dichloroethene	ug/L					8		4.8 (J)							
cis-1,2-Dichloroethene	ug/L	7.7								3.7 (J)		10 ( )			
Methylene Chloride	ug/L														
Tetrachloroethene	ug/L	12				9.1		0.64 (J)		3.1 (J)		8.5 ( )			
Toluene	ug/L							0.89 (J)		0.39 (J)					
Trichloroethene	ug/L	3.2 (J)				3.4 (J)				1.5 (J)		3.4 ( )			
Vinyl Chloride	ug/L														

MALCOLM PIRNIE

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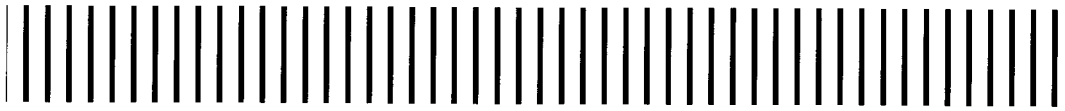
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APPENDIX

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APPENDIX

US Army Corps of Engineers
WVA Long-Term Monitoring 2009 Data Summary Report

Appendix E: Building 40 Boundary Well Summary Tables



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MALCOLM PIRNIE

Table E-1a
MW-82R-1
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/25/2005		4/27/2005		8/15/2005		11/30/2005		3/30/2006		9/12/2006		9/12/2007		5/28/2009	
Chloromethane	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	2	U
Vinyl chloride	2	ug/L	11	47		63		110		250		150		70	J	45	J	48	
Bromomethane		ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	2	U
Chloroethane	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	2	U
1 1-Dichloroethene	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Carbon disulfide		ug/L	---	25	U	50	U	25	U	20	UJ	50	U	250	U	50	U	1	U
Acetone		ug/L	---	50	U	50	U	25	U	40	U	100	U	500	U	100	U	1	U
Methylene chloride	5	ug/L	---	5	UB	5	UB	5	UB	5	UB	12	JB	250	U	8.7	J B	5	U
trans-1 2-Dichloroethene	5	ug/L	0.55	25	U	50	U	2.7	J	2.9	J	50	U	250	U	3.1	J	1	U
1 1-Dichloroethane	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U *	1	U
cis-1 2-Dichloroethene	5	ug/L	150	500		700		570		370		590		940		740		170	
2-Butanone (MEK)		ug/L	---	50	U	50	U	25	U	40	U	100	U	500	U	100	U	5	U
Chloroform	7	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
1 1 1-Trichloroethane	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Carbon tetrachloride	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Benzene	1	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
1 2-Dichloroethane	0.6	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Trichloroethene	5	ug/L	30.5	120		220		140		100		240		480		240	B	20	
1 2-Dichloropropane	1	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Bromodichloromethane		ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
cis-1 3-Dichloropropene	0.4	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	50	U	100	U	50	U	40	U	100	U	500	U	100	U	5	U
Toluene	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U *	1	U
trans-1 3-Dichloropropene	0.4	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
1 1 2-Trichloroethane	1	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Tetrachloroethene	5	ug/L	125	710		1100		530		330		940		2200		740		41	
2-Hexanone		ug/L	---	50	U	100	U	50	U	40	U	100	U	500	U	100	U	1	U
Dibromochloromethane		ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Chlorobenzene	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Ethylbenzene	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U *	1	U
Styrene	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Bromoform		ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	1	U
Xylenes (total)	5	ug/L	---	25	U	50	U	25	U	20	U	50	U	250	U	50	U	2	U
Total VOCs		ug/L	317.65	1382		2188		1407.7		1055		1920		3690		1776.8		279	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/27/2005		8/15/2005		11/30/2005		3/30/2006		9/12/2006		9/12/2007		5/28/2009	
Potassium		mg/L	24.5	21.9		28.4	E	26.8		21.9		24.4	N	28.9		21.1		NS	
Sodium	200	mg/L	206	182		221		244		288		265	N	292		225		NS	
Sulfate	250	mg/L	51.3	28.3		25.3		64.1		144		112		191		57		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-1b
MW-82R-2
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/25/2005		4/27/2005		8/15/2005		11/30/2005		3/29/2006		9/12/2006		9/12/2007		5/28/2009	
Chloromethane	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	4	U
Vinyl chloride	2	ug/L	44.5	74		71		150		160		89	H	60		48		100	
Bromomethane		ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	4	U
Chloroethane	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
1 1-Dichloroethene	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Carbon disulfide		ug/L	---	10	U	10	U	10	U	5	UJ	10	U	10	U	20	U	2	U
Acetone		ug/L	---	20	U	20	U	10	U	10	U	20	UB	20	U	40	U	2	U
Methylene chloride	5	ug/L	---	5	UB	5	UB	5	UB	5	UB	2.7	JB	1.9	J	4.1	J B	10	U
trans-1 2-Dichloroethene	5	ug/L	0.75	10	U	10	U	1.5	J	1.4	J	10	U	10	U	1.1	J	2	U
1 1-Dichloroethane	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U *	2	U
cis-1 2-Dichloroethene	5	ug/L	215	240		180		320		200		150		110		250		350	
2-Butanone (MEK)		ug/L	---	20	U	10	U	20	UB	10	U	20	U	20	U	40	U	10	U
Chloroform	7	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
1 1 1-Trichloroethane	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Carbon tetrachloride	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Benzene	1	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
1 2-Dichloroethane	0.6	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Trichloroethene	5	ug/L	---	10	U	10	U	7.3	J	0.91	J	10	U	1.5	J	1.7	J B	2	U
1 2-Dichloropropane	1	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Bromodichloromethane		ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
cis-1 3-Dichloropropene	0.4	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	20	U	20	U	20	U	10	U	20	U	20	U	40	U	10	U
Toluene	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U *	2	U
trans-1 3-Dichloropropene	0.4	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
1 1 2-Trichloroethane	1	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Tetrachloroethene	5	ug/L	3	10	U	3	J	10	U	0.8	J	1.2	J	7.7	J	20	U	2	U
2-Hexanone		ug/L	---	20	U	20	U	20	U	10	U	20	U	20	U	40	U	2	U
Dibromochloromethane		ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Chlorobenzene	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Ethylbenzene	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U *	2	U
Styrene	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Bromoform		ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	2	U
Xylenes (total)	5	ug/L	---	10	U	10	U	10	U	5	U	10	U	10	U	20	U	4	U
Total VOCs		ug/L	262.75	319		269		483.8		368.11		242.9		181.1		304.9		450	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/27/2005		8/15/2005		11/30/2005		3/29/2006		9/12/2006		9/12/2007		5/28/2009	
Potassium		mg/L	11.6	9.94		14.5	E	12.5		9.89		11.1		11.2		10.9		NS	
Sodium	200	mg/L	155	135		199		214		150		198		198		182		NS	
Sulfate	250	mg/L	18.75	13.8		15.3		27.7		41.2		39.2		73.9		40.9		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-1c
MW-82R-3
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/25/2005		4/27/2005		8/15/2005		11/30/2005		3/29/2006		9/12/2006		9/13/2007		5/28/2009	
Chloromethane	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Vinyl chloride	2	ug/L	25	15		76		15		NS		13		4.4	J	4.2	J	NS	
Bromomethane		ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Chloroethane	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
1 1-Dichloroethene	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Carbon disulfide		ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Acetone		ug/L	---	5	U	10	U	10	UB	NS		10	U	3.7	J	10	U	NS	
Methylene chloride	5	ug/L	---	5	UB	5	UB	5	UB	NS		5	UB	5	UB	5	U	NS	
trans-1 2-Dichloroethene	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
1 1-Dichloroethane	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
cis-1 2-Dichloroethene	5	ug/L	124.5	65		42		1.1	J	NS		7		3.2	J	2.9	J	NS	
2-Butanone (MEK)		ug/L	---	5	U	10	UB	10	UB	NS		10	U	10	U	10	U	NS	
Chloroform	7	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
1 1 1-Trichloroethane	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Carbon tetrachloride	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Benzene	1	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
1 2-Dichloroethane	0.6	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Trichloroethene	5	ug/L	1.4	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
1 2-Dichloropropane	1	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Bromodichloromethane		ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
cis-1 3-Dichloropropene	0.4	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
4-Methyl-2-pentanone (MIBK)		ug/L	---	10	U	10	U	10	U	NS		10	U	10	U	10	U	NS	
Toluene	5	ug/L	---	0.34	J	5	U	5	U	NS		5	UB	5	U	0.34	J B	NS	
trans-1 3-Dichloropropene	0.4	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
1 1 2-Trichloroethane	1	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Tetrachloroethene	5	ug/L	---	5	U	5	U	5	U	NS		5	U	0.61	J	5	U	NS	
2-Hexanone		ug/L	---	10	U	10	U	10	U	NS		10	U	10	U	10	U	NS	
Dibromochloromethane		ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Chlorobenzene	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Ethylbenzene	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Styrene	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Bromoform		ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
1 1 2 2-Tetrachloroethane	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Xylenes (total)	5	ug/L	---	5	U	5	U	5	U	NS		5	U	5	U	5	U	NS	
Total VOCs		ug/L	165.1	80.34		118		21.1				20		11.91		7.44		NS	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/27/2005		8/15/2005		11/30/2005		3/29/2006		9/12/2006		9/13/2007		5/28/2009	
Potassium		mg/L	12.7	11.7		13.6	E	10.9		NS		9.86		10.9		8.1		NS	
Sodium	200	mg/L	287	337		349		339		NS		432		454		419		NS	
Sulfate	250	mg/L	50.1	55.5		55		58.6		NS		86.4		92.1		61.4		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
NS: not sampled, permanganate present
Highlighted results exceed NYS Standards

Table E-2a
MW-83-1
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/25/2005		4/27/2005		8/15/2005		9/22/2005		11/30/2005		3/29/2006		9/12/2006		9/12/2007		5/28/2009	
Chloromethane	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	40	U
Vinyl chloride	2	ug/L	151.5	120	J	150	J	420		690		170	J	590		2000	U	280	J	140	
Bromomethane		ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	40	U
Chloroethane	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	40	U
1 1-Dichloroethene	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Carbon disulfide		ug/L	---	250	U	250	U	250	U	500	U	250	UJ	500	U	2000	U	1000	U	20	U
Acetone		ug/L	---	500	U	250	U	250	U	1000	U	500	U	1000	UB	4000	U	590	J B	20	U
Methylene chloride	5	ug/L	---	250	UB	250	UB	250	UB	250	UB	250	UB	230	JB	310	JB	220	J * B	100	U
trans-1 2-Dichloroethene	5	ug/L	12.75	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	46	J	28	
1 1-Dichloroethane	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
cis-1 2-Dichloroethene	5	ug/L	2470	4300	J	4900		5900		5300		4500		5600		6000		5900		5100	
2-Butanone (MEK)		ug/L	---	500	U	250	U	250	U	1000	U	500	U	1000	U	4000	U	330	J	100	U
Chloroform	7	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
1 1 1-Trichloroethane	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Carbon tetrachloride	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Benzene	1	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
1 2-Dichloroethane	0.6	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Trichloroethene	5	ug/L	507.5	3000	J	3700		3600		3200		3000		2900		10000		4400		2400	
1 2-Dichloropropane	1	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Bromodichloromethane		ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
cis-1 3-Dichloropropene	0.4	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	500	U	500	U	500	U	1000	U	500	U	1000	U	4000	U	2000	U	100	U
Toluene	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
trans-1 3-Dichloropropene	0.4	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
1 1 2-Trichloroethane	1	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Tetrachloroethene	5	ug/L	744	6400	J	8600		7900		6100		6400		7200		29000		12000		7100	
2-Hexanone		ug/L	---	500	U	500	U	500	U	1000	U	500	U	1000	U	4000	U	2000	U	20	U
Dibromochloromethane		ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Chlorobenzene	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Ethylbenzene	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Styrene	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Bromoform		ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	20	U
Xylenes (total)	5	ug/L	---	250	U	250	U	250	U	500	U	250	U	500	U	2000	U	1000	U	40	U
Total VOCs		ug/L	3388.35	14070		18100		18570		15540		14320		16520		45310		23766		14988	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/27/2005		8/15/2005		9/22/2005		11/30/2005		3/29/2006		9/12/2006		9/12/2007		5/28/2009	
Potassium		mg/L	21.8	18.7		21.4	E	20.7		NS		21.8		17.8		15.5		19.3		NS	
Sodium	200	mg/L	193	165		195		297		NS		215		277		258		193		NS	
Sulfate	250	mg/L	42.15	88.5		82.8		154		NS		137		190		100		53.5		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-2b
MW-83-2
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/26/2005		4/27/2005		8/15/2005		12/1/2005		3/29/2006		9/12/2006		9/12/2007		5/28/2009	
Chloromethane	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	80	U
Vinyl chloride	2	ug/L	400	390	J	550		320		530		500		690		980		590	
Bromomethane		ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	40	U
Chloroethane	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	40	U
1 1-Dichloroethene	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Carbon disulfide		ug/L	---	500	U	500	U	250	U	500	UJ	500	U	500	U	500	U	20	U
Acetone		ug/L	---	1000	U	500	U	250	U	1000	U	1000	UB	1000	U	1000	U	20	U
Methylene chloride	5	ug/L	---	500	UB	500	UB	250	UB	500	UB	91	JB	73	J	500	U	100	U
trans-1 2-Dichloroethene	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U M	44	
1 1-Dichloroethane	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
cis-1 2-Dichloroethene	5	ug/L	8100	8000		9700		6100		8000		8500		9800		11000		5900	
2-Butanone (MEK)		ug/L	---	1000	U	1000	U	250	U	1000	U	1000	U	1000	U	1000	U	100	U
Chloroform	7	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
1 1 1-Trichloroethane	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Carbon tetrachloride	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Benzene	1	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
1 2-Dichloroethane	0.6	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Trichloroethene	5	ug/L	4700	5000		4100		3000		5300		3800		3000		960		1400	
1 2-Dichloropropane	1	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Bromodichloromethane		ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
cis-1 3-Dichloropropene	0.4	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	1000	U	1000	U	500	U	1000	U	1000	U	1000	U	1000	U	100	U
Toluene	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
trans-1 3-Dichloropropene	0.4	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
1 1 2-Trichloroethane	1	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Tetrachloroethene	5	ug/L	11700	12000		7800		6800		12000		8400		500	U	1600		5000	
2-Hexanone		ug/L	---	1000	U	1000	U	500	U	1000	U	1000	U	1000	U	1000	U	20	U
Dibromochloromethane		ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Chlorobenzene	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Ethylbenzene	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Styrene	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Bromoform		ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	20	U
Xylenes (total)	5	ug/L	---	500	U	500	U	250	U	500	U	500	U	500	U	500	U	40	U
Total VOCs		ug/L	22891	25890		23150		16970		26330		21291		13563		14540		12934	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/27/2005		8/15/2005		12/1/2005		3/29/2006		9/12/2006		9/12/2007		5/28/2009	
Potassium		mg/L	12.95	13.2		15.3	E	17.7		16.3		14.6		21.3		12.5		NS	
Sodium	200	mg/L	308	354		366		398		413		365		426		316		NS	
Sulfate	250	mg/L	86.1	64.6		72		58.3		44.2		40.7		352		71.6		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-2c
MW-83-3
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	CAS No.	NYS Standards	Units	9/30/2004	1/26/2005		4/27/2005		8/15/2005		12/1/2005		3/29/2006 permanganate		9/12/2006 permanganate		9/12/2007		5/28/2009	
Chloromethane	67-64-1	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	4	U
Vinyl chloride	107-13-1	2	ug/L	670	390		430		260		150		NS		NS		290		49	
Bromomethane	71-43-2		ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Chloroethane		5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	4	U
1 1-Dichloroethene	75-27-4	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	3	
Carbon disulfide	75-25-2		ug/L	---	120	U	120	U	120	U	50	UJ	NS		NS		200	U	2	U
Acetone	75-15-0		ug/L	---	250	U	250	UB	120	U	100	U	NS		NS		84	J	2	U
Methylene chloride	56-23-5	5	ug/L	---	120	UB	120	UB	120	UB	50	UB	NS		NS		32	J B	10	U
trans-1 2-Dichloroethene	108-90-7	5	ug/L	---	120	U	13	J	18	J	13	J	NS		NS		200	U	7	
1 1-Dichloroethane	75-00-3	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U *	2	U
cis-1 2-Dichloroethene	67-66-3	5	ug/L	6350	2900		2900		3200		1500		NS		NS		2700		1300	
2-Butanone (MEK)	124-48-1		ug/L	---	250	U	120	U	120	U	100	U	NS		NS		400	U	10	U
Chloroform	96-12-8	7	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
1 1 1-Trichloroethane	74-95-3	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Carbon tetrachloride	95-50-1	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Benzene	106-46-7	1	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
1 2-Dichloroethane	110-57-6	0.6	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Trichloroethene	75-34-3	5	ug/L	915	240		200		450		230		NS		NS		300	B	190	
1 2-Dichloropropane	107-06-2	1	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Bromodichloromethane	75-35-4		ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
cis-1 3-Dichloropropene	156-59-4	0.4	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
4-Methyl-2-pentanone (MIBK)	156-60-5		ug/L	---	250	U	250	U	250	U	100	U	NS		NS		400	U	10	U
Toluene	78-87-5	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U *	2	U
trans-1 3-Dichloropropene	10061-01-5	0.4	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
1 1 2-Trichloroethane	10061-02-6	1	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Tetrachloroethene	100-41-4	5	ug/L	2600	500		410		640		1100		NS		NS		930		420	
2-Hexanone	591-78-6		ug/L	---	250	U	250	U	250	U	100	U	NS		NS		400	U	2	U
Dibromochloromethane	74-83-9		ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Chlorobenzene	74-87-3	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Ethylbenzene	74-95-3	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U *	2	U
Styrene	75-09-2	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Bromoform	78-89-3		ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
1 1 2 2-Tetrachloroethane	74-88-4	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	2	U
Xylenes (total)	108-10-1	5	ug/L	---	120	U	120	U	120	U	50	U	NS		NS		200	U	4	U
Total VOCs			ug/L	10572.5	4150		4193		4928		3043						4336		1969	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/27/2005		8/15/2005		12/1/2005		3/29/2006		9/12/2006		9/12/2007		5/28/2009	
Potassium		mg/L	23	20.1		24.7	E	30.6		23.9		NS		NS		20.3		NS	
Sodium	200	mg/L	217.5	192		224		323		287		NS		NS		210		NS	
Sulfate	250	mg/L	28.55	21		29.1		314		173		NS		NS		70.8		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-3a
MW-84R-1
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/26/2005		4/26/2005		8/15/2005		9/22/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/28/2009	
Chloromethane	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	40	U
Vinyl chloride	2	ug/L	330	280		460		160	J	250	UH	290		250	U	1200		970		420	
Bromomethane		ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	40	U
Chloroethane	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	40	U
1 1-Dichloroethene	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Carbon disulfide		ug/L	---	250	U	250	U	250	U	250	U	250	UJ	250	U	500	U	500	U	20	U
Acetone		ug/L	---	500	U	500	U	250	U	500	U	500	U	500	UB	1000	U	260	J B	20	U
Methylene chloride	5	ug/L	---	500	UB	500	UB	250	UB	500	UB	500	UB	95	JB	73	JB	81	J * B	100	U
trans-1 2-Dichloroethene	5	ug/L	---	33	J	250	U	30	J	86	J	43	J	230	J	500	U	80	J	52	
1 1-Dichloroethane	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
cis-1 2-Dichloroethene	5	ug/L	7000	7500		9000		6700		4900		5200		3300		9200		9000		6300	
2-Butanone (MEK)		ug/L	---	500	U	250	J	250	U	500	U	500	U	500	U	1000	U	170	J	100	U
Chloroform	7	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
1 1 1-Trichloroethane	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Carbon tetrachloride	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Benzene	1	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
1 2-Dichloroethane	0.6	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Trichloroethene	5	ug/L	2150	2100		2100		1400		1400		1400		1600		5100		2300		1300	
1 2-Dichloropropane	1	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Bromodichloromethane		ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
cis-1 3-Dichloropropene	0.4	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	500	U	500	U	500	U	500	U	500	U	500	U	1000	U	1000	U	100	U
Toluene	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
trans-1 3-Dichloropropene	0.4	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
1 1 2-Trichloroethane	1	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Tetrachloroethene	5	ug/L	6900	2800		2500		1600		1900		1300		2200		5900		2300		940	
2-Hexanone		ug/L	---	500	U	500	U	500	U	500	U	500	U	500	U	1000	U	1000	U	20	U
Dibromochloromethane		ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Chlorobenzene	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Ethylbenzene	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Styrene	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Bromoform		ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	20	U
Xylenes (total)	5	ug/L	---	250	U	250	U	250	U	250	U	250	U	250	U	500	U	500	U	40	U
Total VOCs		ug/L	16399.5	12713		14810		10390		9036		8733		7425		21473		14731		9012	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/26/2005		8/15/2005		9/22/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/28/2009	
Potassium		mg/L	47.5	32.7		38.7		56.8		NS		48.1		45.5		53		27.4		NS	
Sodium	200	mg/L	218.5	230		266		262		NS		291		290		409		321		NS	
Sulfate	250	mg/L	107.4	126		226		241		NS		309		383		582		322		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-3b
MW-84R-2
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/26/2005		4/26/2005		8/15/2005		9/22/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/28/2009	
Chloromethane	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	40	U
Vinyl chloride	2	ug/L	---	490	J	1100	J	2500	U	5000	UH	550	J	5000	UM	880	JM	580	J	440	
Bromomethane		ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	40	U
Chloroethane	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	40	U
1 1-Dichloroethene	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	27	
Carbon disulfide		ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	UJ	5000	U	5000	U	5000	U	20	U
Acetone		ug/L	---	5000	U	5000	U	2500	U	5000	U	5000	U	10000	UB	10000	UB	2900	J B	20	U
Methylene chloride	5	ug/L	---	5000	UB	5000	UB	2500	UB	5000	UB	5000	UB	1300	JB	710	JB	990	J * B	100	U
trans-1 2-Dichloroethene	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	68	
1 1-Dichloroethane	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
cis-1 2-Dichloroethene	5	ug/L	5100	7100		11000		6300		6400		8400		11000		9200		10000		11000	
2-Butanone (MEK)		ug/L	---	5000	U	2600	J	2500	U	10000	U	5000	U	10000	U	10000	U	1600	J	100	U
Chloroform	7	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
1 1 1-Trichloroethane	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Carbon tetrachloride	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Benzene	1	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
1 2-Dichloroethane	0.6	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Trichloroethene	5	ug/L	8150	9600		14000		16000		11000		12000		14000		15000		20000		17000	
1 2-Dichloropropane	1	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Bromodichloromethane		ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
cis-1 3-Dichloropropene	0.4	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	5000	U	5000	U	5000	U	10000	U	5000	U	10000	U	10000	U	10000	U	100	U
Toluene	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
trans-1 3-Dichloropropene	0.4	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
1 1 2-Trichloroethane	1	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Tetrachloroethene	5	ug/L	58000	50000		69000		62000		58000		47000		60000		75000		63000		48000	
2-Hexanone		ug/L	---	5000	U	5000	U	5000	U	10000	U	5000	U	10000	U	10000	U	10000	U	20	U
Dibromochloromethane		ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Chlorobenzene	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Ethylbenzene	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Styrene	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Bromoform		ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	20	U
Xylenes (total)	5	ug/L	---	2500	U	2500	U	2500	U	5000	U	2500	U	5000	U	5000	U	5000	U	40	U
Total VOCs		ug/L	71475	72190		102700		89300		80400		72950		86300		100790		99070		76635	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/26/2005		8/15/2005		8/15/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/28/2009	
Potassium		mg/L	9.605	8.66		9.77		12		12		14.7		11.8		11.4		9.6		NS	
Sodium	200	mg/L	315	318		340		388		388		444		384		391		332		NS	
Sulfate	250	mg/L	35.3	52.1		53.1		223		223		303		187		247		56.6		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-3c
MW-84R-3
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/26/2005		4/26/2005		8/15/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/28/2009	
Chloromethane	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	40	U
Vinyl chloride	2	ug/L	575	380	J	510		470	J	1100		1900	J	1200	M	840	J	870	
Bromomethane		ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	40	U
Chloroethane	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	40	U
1 1-Dichloroethene	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	22	
Carbon disulfide		ug/L	---	500	U	500	U	500	U	500	UJ	2000	U	1000	U	1000	U	20	U
Acetone		ug/L	---	1000	U	1000	U	500	U	1000	U	4000	UB	2000	U	500	J B	20	U
Methylene chloride	5	ug/L	---	500	UB	500	UB	500	UB	500	UB	1400	JB	130	JB	170	J * B	100	U
trans-1 2-Dichloroethene	5	ug/L	---	500	U	500	U	500	UM	500	U	2000	U	1000	U	69	J	69	
1 1-Dichloroethane	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
cis-1 2-Dichloroethene	5	ug/L	8950	6600		8400		8000		9500		21000		12000		12000		10000	
2-Butanone (MEK)		ug/L	---	1000	U	500	U	500	U	1000	U	4000	U	2000	U	330	J	100	U
Chloroform	7	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
1 1 1-Trichloroethane	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Carbon tetrachloride	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Benzene	1	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
1 2-Dichloroethane	0.6	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Trichloroethene	5	ug/L	5500	4300		6000		7300		7700		14000		11000		6800		3400	
1 2-Dichloropropane	1	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Bromodichloromethane		ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
cis-1 3-Dichloropropene	0.4	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	1000	U	1000	U	1000	U	1000	U	4000	U	2000	U	2000	U	100	U
Toluene	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
trans-1 3-Dichloropropene	0.4	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
1 1 2-Trichloroethane	1	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Tetrachloroethene	5	ug/L	20500	15000		16000		13000		9100		18000		14000		7300		3800	
2-Hexanone		ug/L	---	1000	U	1000	U	1000	U	1000	U	4000	U	2000	U	2000	U	20	U
Dibromochloromethane		ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Chlorobenzene	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Ethylbenzene	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Styrene	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	2	U
Bromoform		ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	20	U
Xylenes (total)	5	ug/L	---	500	U	500	U	500	U	500	U	2000	U	1000	U	1000	U	40	U
Total VOCs		ug/L	32540	26780		31910		30270		27900		56300		38330		28009		18359	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/26/2005		8/15/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/28/2009	
Potassium		mg/L	16.9	12.8		15		21.6		26.1		26.9		19.8		12.8		NS	
Sodium	200	mg/L	286.5	268		293		384		526		481		410		301		NS	
Sulfate	250	mg/L	25.45	26.9		28.6		502		923		745		428		219		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-4a
MW-85R-1
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/27/2005		4/26/2005		8/15/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/27/2009	
Chloromethane	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	2	U
Vinyl chloride	2	ug/L	50.5	22	J	130		100		68		51		31	M	19		4	
Bromomethane		ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	2	U
Chloroethane	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	2	U
1 1-Dichloroethene	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Carbon disulfide		ug/L	---	25	U	25	U	10	U	5	UJ	10	U	5	U	5	U	1	U
Acetone		ug/L	---	50	U	25	U	10	U	10	U	6.3	J	10	U	10	U	1	U
Methylene chloride	5	ug/L	---	25	UB	25	UB	10	UB	5	UB	1.2	JB	5	UB	0.47	J B	5	U
trans-1 2-Dichloroethene	5	ug/L	5.5	3.2	J	25	U	10	U	1.4	J	10	U	0.75	J	0.51	J	1	U
1 1-Dichloroethane	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U *	1	U
cis-1 2-Dichloroethene	5	ug/L	1400	700		550		190		100		110		53		12		2	
2-Butanone (MEK)		ug/L	---	50	U	25	U	20	UB	10	U	20	U	10	U	10	U	5	U
Chloroform	7	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
1 1 1-Trichloroethane	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Carbon tetrachloride	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Benzene	1	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
1 2-Dichloroethane	0.6	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Trichloroethene	5	ug/L	235	5.7	J	25	U	14		0.79	J	1.8	J	1.2	J	0.55	J B	1	U
1 2-Dichloropropane	1	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Bromodichloromethane		ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
cis-1 3-Dichloropropene	0.4	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	50	U	50	U	20	U	10	U	20	U	10	U	10	U	5	U
Toluene	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U *	1	U
trans-1 3-Dichloropropene	0.4	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
1 1 2-Trichloroethane	1	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Tetrachloroethene	5	ug/L	950	11	J	25	U	3.6	J	1	J	2.6	J	1.7	J	0.87	J	1	U
2-Hexanone		ug/L	---	50	U	50	U	20	U	10	U	20	U	10	U	10	U	1	U
Dibromochloromethane		ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Chlorobenzene	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Ethylbenzene	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U *	1	U
Styrene	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Bromoform		ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	1	U
Xylenes (total)	5	ug/L	---	25	U	25	U	10	U	5	U	10	U	5	U	5	U	2	U
Total VOCs		ug/L	2647.5	766.9		755		327.6		176.19		161		87.65		33.4		6	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/26/2005		8/15/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/27/2009	
Potassium		mg/L	23.05	14.8	E	12.4		10.8		10.1		10.3		9.87		9.1		NS	
Sodium	200	mg/L	297.5	295		280		262		245		276		269		264		NS	
Sulfate	250	mg/L	196	63		52.9		33.3		26.2		35.8		23.9		27.1		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-4L
MW-85R-2
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/27/2005		4/26/2005		8/15/2005		9/22/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/27/2009	
Chloromethane	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	2	U
Vinyl chloride	2	ug/L	50	37	J	110	J	32	J	34	J	2.7	J	200	UM	230	UM	200	J	190	
Bromomethane		ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	2	U
Chloroethane	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	2	U
1 1-Dichloroethene	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	5	
Carbon disulfide		ug/L	---	100	U	120	U	120	U	200	U	5	UJ	200	U	120	U	200	U	1	U
Acetone		ug/L	---	200	U	250	U	120	U	200	U	10	U	64	J	250	U	82	J	1	U
Methylene chloride	5	ug/L	---	100	UB	120	UB	120	UB	200	UB	5	UB	40	JB	16	JB	45	J B	5	U
trans-1 2-Dichloroethene	5	ug/L	10.5	13	J	120	U	120	UM	200	U	0.63	J	200	U	120	U	14	J	12	
1 1-Dichloroethane	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U *	1	U
cis-1 2-Dichloroethene	5	ug/L	2000	2700		2500		2400		3500		88		2200		2300		3200		1900	
2-Butanone (MEK)		ug/L	---	200	U	120	U	120	U	400	U	10	U	400	U	250	U	400	U	5	U
Chloroform	7	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
1 1 1-Trichloroethane	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Carbon tetrachloride	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Benzene	1	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
1 2-Dichloroethane	0.6	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Trichloroethene	5	ug/L	325	260		240		520		730		16		390		560		680	B	600	
1 2-Dichloropropane	1	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Bromodichloromethane		ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
cis-1 3-Dichloropropene	0.4	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	200	U	250	U	250	U	400	U	10	U	400	U	250	U	400	U	5	U
Toluene	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	16	JB	120	U	200	U *	1	U
trans-1 3-Dichloropropene	0.4	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
1 1 2-Trichloroethane	1	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Tetrachloroethene	5	ug/L	2100	730		660		1200		1800		43		1300		2300		2600		1300	
2-Hexanone		ug/L	---	200	U	250	U	250	U	400	U	10	U	400	U	250	U	400	U	1	U
Dibromochloromethane		ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Chlorobenzene	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Ethylbenzene	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U *	1	U
Styrene	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Bromoform		ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	1	U
Xylenes (total)	5	ug/L	---	100	U	120	U	120	U	200	U	5	U	200	U	120	U	200	U	2	U
Total VOCs		ug/L	4327	3840		3750		4512		6630		155.33		4130		5406		6739		4007	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/26/2005		8/15/2005		9/22/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/27/2009	
Potassium		mg/L	29.75	35.8	E	29.9		28.9		NS		25.6		28.2		21		17.8		NS	
Sodium	200	mg/L	199.5	296		325		245		NS		265		298		391		278		NS	
Sulfate	250	mg/L	35.9	111		281		75.1		NS		101		146		108		105		NS	

Notes:

U: Not detected. Reporting limit provided.

B: Detected in blank.

J: Estimated.

Highlighted results exceed NYS Standards

Table E-4c
MW-85R-3
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/27/2005		4/26/2005		8/16/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/27/2009	
Chloromethane	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	2	U
Vinyl chloride	2	ug/L	550	570	J	730	J	730	J	1900	J	1100	J	820	JM	600	J	510	
Bromomethane		ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	2	U
Chloroethane	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	2	U
1 1-Dichloroethene	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	13	
Carbon disulfide		ug/L	---	1000	U	1000	U	1000	U	2000	UJ	2500	U	2000	U	2000	U	1	U
Acetone		ug/L	---	2000	U	2000	U	2000	UB	4000	UB	5000	U	4000	U	1000	J B	1	U
Methylene chloride	5	ug/L	---	1000	UB	1000	UB	1000	UB	2000	UB	630	JB	300	JB	350	J * B	5	U
trans-1 2-Dichloroethene	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	19	
1 1-Dichloroethane	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
cis-1 2-Dichloroethene	5	ug/L	3250	120		3400		3000		3400		2500	J	2200		2500		4100	
2-Butanone (MEK)		ug/L	---	2000	U	1000	U	1000	U	4000	U	5000	U	4000	U	680	J	5	U
Chloroform	7	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
1 1 1-Trichloroethane	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Carbon tetrachloride	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Benzene	1	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
1 2-Dichloroethane	0.6	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Trichloroethene	5	ug/L	255	430	J	830	J	1800		1600	J	1200	J	1100	J	1500	J	3400	
1 2-Dichloropropane	1	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Bromodichloromethane		ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
cis-1 3-Dichloropropene	0.4	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	2000	U	2000	U	2000	U	4000	U	5000	U	4000	U	4000	U	5	U
Toluene	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	UB	2000	UB	2000	U	1	U
trans-1 3-Dichloropropene	0.4	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
1 1 2-Trichloroethane	1	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Tetrachloroethene	5	ug/L	8700	100		25000		31000		28000		32000		30000		32000		22000	
2-Hexanone		ug/L	---	2000	U	2000	U	2000	U	4000	U	5000	U	4000	U	4000	U	1	U
Dibromochloromethane		ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Chlorobenzene	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Ethylbenzene	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Styrene	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Bromoform		ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	1	U
Xylenes (total)	5	ug/L	---	1000	U	1000	U	1000	U	2000	U	2500	U	2000	U	2000	U	2	U
Total VOCs		ug/L	12675	2220		31960		38530		36900		37430		34420		37950		30042	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/26/2005		8/16/2005		12/1/2005		3/28/2006		9/13/2006		9/12/2007		5/27/2009	
Potassium		mg/L	15.45	15.7	E	15.3		23.9		23.3		19.2		13.1		11.4		NS	
Sodium	200	mg/L	302	352		365		477		595		480		415		368		NS	
Sulfate	250	mg/L	29	196		274		829		970		566		311		248		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-5.
MW-86R-1
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/27/2005		4/25/2005		8/15/2005		12/1/2005		3/28/2006		9/12/2006		9/13/2007		5/27/2009	
Chloromethane	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	2	U
Vinyl chloride	2	ug/L	10.5	11	J	12	J	27		39		89		50		65		22	
Bromomethane		ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	2	U
Chloroethane	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	2	U
1 1-Dichloroethene	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Carbon disulfide		ug/L	---	50	U	25	U	25	U	25	UJ	20	U	5	U	5	U	1	U
Acetone		ug/L	---	100	U	50	U	25	U	50	UB	40	U	10	U	10	U	1	U
Methylene chloride	5	ug/L	---	50	UB	25	UB	25	UB	25	UB	3.2	JB	5	U	5	U	5	U
trans-1 2-Dichloroethene	5	ug/L	---	50	U	25	U	25	UM	25	U	20	U	5	U	0.66	J	1	U
1 1-Dichloroethane	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
cis-1 2-Dichloroethene	5	ug/L	510	850		450		420		360		190		31		50		26	
2-Butanone (MEK)		ug/L	---	100	U	25	U	U	UB	50	U	40	U	10	U	10	U	5	U
Chloroform	7	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
1 1 1-Trichloroethane	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Carbon tetrachloride	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Benzene	1	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
1 2-Dichloroethane	0.6	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Trichloroethene	5	ug/L	305	10	J	5.4	J	59		25	U	20	U	5	U	1.7	J	1	
1 2-Dichloropropane	1	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Bromodichloromethane		ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
cis-1 3-Dichloropropene	0.4	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	100	U	50	U	50	U	50	U	40	U	10	U	10	U	5	U
Toluene	5	ug/L	---	50	U	25	U	25	U	25	U	1.2	JB	5	U	0.28	J B	1	U
trans-1 3-Dichloropropene	0.4	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
1 1 2-Trichloroethane	1	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Tetrachloroethene	5	ug/L	1200	31	J	18	J	7.3	J	6.9	J	20	U	5	U	1.1	J	2	
2-Hexanone		ug/L	---	100	U	50	U	50	U	50	U	40	U	10	U	10	U	1	U
Dibromochloromethane		ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Chlorobenzene	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Ethylbenzene	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Styrene	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Bromoform		ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	1	U
Xylenes (total)	5	ug/L	---	50	U	25	U	25	U	25	U	20	U	5	U	5	U	2	U
Total VOCs		ug/L	2026	952		535.4		538.3		430.9		302.2		81		118.7		51	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/25/2005		8/15/2005		12/1/2005		3/28/2006		9/12/2006		9/13/2007		5/27/2009	
Potassium		mg/L	16.45	17.4	E	13.8		14.1		11.5		14.2		13.3		11.9		NS	
Sodium	200	mg/L	211.5	358		262		284		277		328		230		309		NS	
Sulfate	250	mg/L	69.25	28.6		31.7		27.3		12.1		7.15		5.93		3.7		NS	

Notes:

U: Not detected. Reporting limit provided.

B: Detected in blank.

J: Estimated.

Highlighted results exceed NYS Standards

Table E-5b
MW-86R-2
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/27/2005		4/25/2005		8/17/2005		12/1/2005		3/28/2006		9/12/2006		9/13/2007		5/27/2009	
Chloromethane	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	2	U
Vinyl chloride	2	ug/L	25.5	28	J	91	J	19	J	40	J	34	J	41	J	26	J	43	
Bromomethane		ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	2	U
Chloroethane	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	2	U
1 1-Dichloroethene	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	3	
Carbon disulfide		ug/L	---	120	U	100	U	25	U	100	UJ	50	U	100	U	50	U	1	U
Acetone		ug/L	---	250	U	200	UB	25	U	200	UB	16	J	32	J	100	U	1	U
Methylene chloride	5	ug/L	---	120	UB	100	UB	25	UB	100	UB	8.5	JB	21	J	4.3	J * B	5	U
trans-1 2-Dichloroethene	5	ug/L	---	120	U	100	U	25	U	11	J	6.5	J	100	U	12	J	17	
1 1-Dichloroethane	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
cis-1 2-Dichloroethene	5	ug/L	1270	1400		1400		390		1100		920		1000		810		1200	
2-Butanone (MEK)		ug/L	---	250	U	100	U	50	U	200	U	100	U	200	U	11	J B	5	U
Chloroform	7	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
1 1 1-Trichloroethane	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Carbon tetrachloride	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Benzene	1	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
1 2-Dichloroethane	0.6	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Trichloroethene	5	ug/L	315	440		430		160		190		120		170		92		240	
1 2-Dichloropropane	1	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Bromodichloromethane		ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
cis-1 3-Dichloropropene	0.4	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	250	U	200	U	50	U	200	U	100	U	200	U	100	U	5	U
Toluene	5	ug/L	---	120	U	100	U	25	U	100	U	4.2	JB	100	U	2	J	1	U
trans-1 3-Dichloropropene	0.4	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
1 1 2-Trichloroethane	1	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Tetrachloroethene	5	ug/L	5350	3400		1900		520		870		970		1000		290		860	
2-Hexanone		ug/L	---	250	U	200	U	50	U	200	U	100	U	200	U	100	U	1	U
Dibromochloromethane		ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Chlorobenzene	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Ethylbenzene	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U M	1	U
Styrene	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Bromoform		ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	1	U
Xylenes (total)	5	ug/L	---	120	U	100	U	25	U	100	U	50	U	100	U	50	U	2	U
Total VOCs		ug/L	6952.5	5388		4021		1139		2300		2052.5		1232		1236		2363	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/25/2005		8/17/2005		12/1/2005		3/28/2006		9/12/2006		9/13/2007		5/27/2009	
Potassium		mg/L	25.25	39.9	E	25.1		9.49		33.3		28.2		25.7		18.9		NS	
Sodium	200	mg/L	197	310		378		139		369		360		361		284		NS	
Sulfate	250	mg/L	19.3	43.3		442		64		277		251		261		112		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

Table E-5c
MW-86R-3
Baseline and Pre-Injection Sampling Results
Building 40
Watervliet Arsenal, Watervliet, New York

Volatile Organic Parameters Sample Date	NYS Standards	Units	9/30/2004	1/27/2005		4/25/2005		8/17/2005		12/1/2005		3/28/2006		9/12/2006		9/13/2007		5/27/2009	
Chloromethane	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	2	U
Vinyl chloride	2	ug/L	---	28	J	220	J	640		650		550		820		490	J	1200	
Bromomethane		ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	2	U
Chloroethane	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	2	U
1 1-Dichloroethene	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	18	
Carbon disulfide		ug/L	---	120	U	250	U	250	U	500	UJ	500	U	500	U	500	U	1	U
Acetone		ug/L	---	250	U	500	U	250	U	1000	UB	1000	U	1000	U	1000	U	1	U
Methylene chloride	5	ug/L	---	120	UB	250	UB	250	UB	500	UB	100	JB	100	J	43	J * B	5	U
trans-1 2-Dichloroethene	5	ug/L	---	120	U	250	U	250	U	56	J	500	U	500	U	74	J	32	
1 1-Dichloroethane	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
cis-1 2-Dichloroethene	5	ug/L	2150 J	3100		6400		4000		5400		6400		7700		6800		8400	
2-Butanone (MEK)		ug/L	---	250	U	250	U	500	UB	1000	U	1000	U	1000	U	150	J B	5	U
Chloroform	7	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
1 1 1-Trichloroethane	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Carbon tetrachloride	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Benzene	1	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
1 2-Dichloroethane	0.6	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Trichloroethene	5	ug/L	720 J	370		1800		470		240	J	650		1600		640		290	
1 2-Dichloropropane	1	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Bromodichloromethane		ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
cis-1 3-Dichloropropene	0.4	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
4-Methyl-2-pentanone (MIBK)		ug/L	---	250	U	500	U	500	U	1000	U	1000	U	1000	U	1000	U	5	U
Toluene	5	ug/L	---	120	U	250	U	250	U	31	J	31	JB	500	U	500	U	1	U
trans-1 3-Dichloropropene	0.4	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
1 1 2-Trichloroethane	1	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Tetrachloroethene	5	ug/L	6900 J	770		3800		1400		410	J	1200		2800		710		330	
2-Hexanone		ug/L	---	250	U	500	U	500	U	1000	U	1000	U	1000	U	1000	U	1	U
Dibromochloromethane		ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Chlorobenzene	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Ethylbenzene	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U M	1	U
Styrene	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Bromoform		ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
1 1 2 2-Tetrachloroethane	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	1	U
Xylenes (total)	5	ug/L	---	120	U	250	U	250	U	500	U	500	U	500	U	500	U	2	U
Total VOCs		ug/L	9786	4388		12720		7010		7256		8900		13020		8757		10270	

Analyte	NYS Standards	Units	Baseline	1/25/2005		4/25/2005		8/17/2005		12/1/2005		3/28/2006		9/12/2006		9/13/2007		5/27/2009	
Potassium		mg/L	14.95	10.4	E	19.4		13.9		12.6		12.9		11.3		9.2		NS	
Sodium	200	mg/L	398	431		546		504		537		482		458		396		NS	
Sulfate	250	mg/L	9.845	79.6		975		532		366		355		199		114		NS	

Notes:
U: Not detected. Reporting limit provided.
B: Detected in blank.
J: Estimated.
Highlighted results exceed NYS Standards

MALCOLM PIRNIE

