010407 - 1004270002

Stoller

established 1959

Task Order LM00-721
Control Number: 10-0441

March 16, 2010

U.S. Department of Energy
Office of Legacy Management
ATTN: Arthur W. Kleinrath
Site Manager
955 Mound Road
Miamisburg, OH 45342

Subject: Contract No. DE-AM01-07LM00060, Stoller
Parcel 6, 7, and 8 Groundwater Monitoring Report – Calendar Year 2009

Reference: LM712-06-508, Mound OH Support, Reporting

Dear Mr. Kleinrath:

Enclosed are 20 copies of the subject document for transmittal to the regulators and other interested parties. This report is due to the regulators by March 31, 2010. The *Parcel 6, 7, and 8 Groundwater Monitoring Report - Calendar Year 2009* was prepared to provide a summary of the data collected during 2009. This report represents the third submittal of an annual report documenting groundwater quality in the Parcel 6, 7, and 8 area. All sampling and data analyses were performed in accordance with the *Parcel 6, 7, and 8 Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan* (Draft Final), unless noted otherwise.

The report includes data collected during the four quarterly groundwater sampling events performed during 2009. Data are presented in both time-series plots and map-view plots. Trend analysis was performed on selected wells using the non-parametric Mann-Kendal test in order to confirm trends in contaminant concentrations over time. The time-series plots are also used to evaluate changes in groundwater quality over time. The report also documents operational changes and maintenance or repair activities performed during 2009.

Monitoring data from source wells 0315 and 0347 and seeps 0602 and 0605 indicate a general increase in Trichloroethylene (TCE) concentrations starting in 2007. These wells and seeps may be influenced by surface water infiltration on the Main Hill that has flushed residual Volatile Organic Chemical (VOCs) into the groundwater. Data from downgradient monitoring wells do not indicate adverse TCE impact in the Buried Valley Aquifer (BVA). Because of the increased TCE concentrations in the two source wells and two Main Hill seeps, quarterly monitoring will continue in 2010.

Tritium levels in the Main Hill seeps continued to be elevated and were higher than those measured in downgradient wells. Tritium levels in the seeps were highest during remediation activities on the Main Hill and have decreased since that time. Data from downgradient

monitoring wells do not indicate adverse tritium impact in the BVA. Quarterly sampling for tritium and other radionuclides will continue in 2010.

If you have any questions or comments, please contact Rebecca Cato at (636) 926-7038.

Sincerely,

Glenn Griffiths

Glenn Griffiths
Stoller Site Manager

GG:jp

Enclosures

cc: Paul Lucas, DOE EM
Rebecca Cato, Stoller
Charles Friedman, Stoller
Kathy Gunckle, Source One
Joyce Massie, Stoller
Robert Ransbottom, Stoller
rc-mound

Department of Energy
Office of Legacy Management

March 16, 2010

Mr. Tim Fischer
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

Mr. Brian Nickel
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, OH 45402-2911

Subject: Parcel 6, 7 and 8 Groundwater Monitoring Report – Calendar Year 2009

Dear Sirs:

Enclosed are the Mound Site Parcel 6, 7 and 8 Groundwater Monitoring Report Calendar Year 2009. Results are consistent with the past and no changes to monitoring programs is suggested. Distribution of this document is as below:

Sincerely,

Arthur W. Kleinrath
DOE LM Mound Site Manager

AWK:jp

Enclosure

Tim Fischer (provided previously)
Joe Crombie (provided previously)
Paul Lucas
Randy Tormey
Rebecca Cato
Frank Bullick
Ellen Stanifer
Reading Room
LM Web
rc-mound

010407- 1004270002

LMS/MND/S06216

Mound Site

Parcel 6, 7, and 8 Groundwater Monitoring Report Calendar Year 2009

March 2010

U.S. DEPARTMENT OF ENERGY | Legacy Management

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Parcel 6, 7, and 8 Groundwater Monitoring Report Calendar Year 2009

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Abbreviations

BVA	Buried Valley Aquifer
DCE	dichloroethylene
DOE	U.S. Department of Energy
MCL	maximum contaminant level
µg/L	micrograms per liter
MNA	monitored natural attenuation
nCi/L	nanocuries per liter
PCE	tetrachloroethylene
pCi/L	picocuries per liter
TCE	trichloroethylene
VOC	volatile organic compound

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1.0 Introduction

Parcels 6, 7, and 8 occupy approximately 101 acres of the northern portion of the Mound Plant site. The main production facilities were located within parcels 6 and 8, and this area is called the Main Hill area. A tributary valley runs between these two parcels and parcel 7; it contains a narrow tongue of glacial deposits that are in hydraulic communication with the Buried Valley Aquifer (BVA). Groundwater within the fractured bedrock beneath the Main Hill area, and in topographic highs within parcel 7, flows along horizontal bedding planes and fractures and ultimately discharges to seeps or to the downgradient BVA.

Two monitoring wells in the BVA indicate volatile organic compound (VOC) impact, primarily trichloroethylene (TCE) that exceeds maximum contaminant levels (MCLs) established in the Safe Drinking Water Act. Monitored natural attenuation (MNA) is being proposed as the remedy for the VOCs in the groundwater associated with the Main Hill (DOE 2009a). Sampling is being performed to assess the contaminant concentrations and to ensure that the downgradient BVA is not being affected.

Also associated with this area are seeps located along the Main Hill of the plant property. Two seeps are within the plant property boundary, and the remaining four seeps are off site to the north. Several seeps in this area have elevated levels of tritium and VOCs. One seep also has elevated levels of radium (Ra)-226, Ra-228, and strontium (Sr)-90. These seeps and several downgradient wells are being monitored to verify that source removal (buildings and soil) on the Main Hill will result in decreasing concentrations over time.

1.1 Purpose

This Groundwater Monitoring Report was prepared to summarize the data collected in 2009. This report is the third submittal of an annual report documenting the groundwater quality in the Parcel 6, 7, and 8 area. All sampling and data analyses were performed in accordance with the *Parcel 6, 7, and 8 Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan* (Final Draft) (DOE 2006), unless noted otherwise.

The report includes data collected in the four quarterly groundwater sampling events performed in 2009. Data are presented in time-series plots and map-view plots (contained in Appendix A). Trend analysis was performed on selected wells using the nonparametric Mann-Kendall test. This type of long-term trend analysis can be used to confirm downward trends in contaminant concentrations. The time-series plots will also be used to evaluate changes in data over time.

The report also documents any operational changes that occurred during the reporting period and identifies any maintenance or repair activities associated with the monitoring wells being sampled.

1.2 Summary of 2008 Report

The conclusions from the 2008 Annual Report (DOE 2009b) were as follows:

- VOC data demonstrated that TCE impact is associated with wells 0315 and 0347, where concentrations exceeded the MCL of 5 micrograms per liter (µg/L). TCE impact extended

to four wells immediately downgradient of this area that are screened in the BVA. TCE remained undetected in the remainder of the downgradient BVA wells. Concentrations of TCE in wells 0315 and 0347 were more stable than in previous years. Concentrations in 2008 returned to historical levels after variable concentrations were reported in 2006 and 2007. Statistical analysis indicated a downward trend in the TCE concentrations in well 0386. The concentrations in the four BVA wells (0386, 0387, 0389 and 0392) remained below the MCL.

- VOC impact is associated with the Main Hill seeps, and TCE concentrations at some locations continued to exceed the MCL in 2008; however, no locations had TCE concentrations that exceeded the trigger level of 150 µg/L (established for seep 0605). The highest concentrations in 2008 were in seep 0602, which is on site. Historical data indicate that TCE concentrations in the seeps increased during the remediation of contaminated buildings (namely the R and SW buildings) and soils on the Main Hill. Concentrations of *cis*-1,2- dichloroethylene (DCE) were reported in all of the seeps in 2008. Statistical analysis using data collected from 2005 through 2008 indicated an upward trend in TCE for seep 0602. A downward trend was calculated for seep 0605 for the same period. Monitoring results indicated low concentrations of TCE in wells downgradient of the seeps.
- Tetrachloroethylene (PCE) concentrations continued to exceed the MCL of 5 µg/L at seep 0601; however, concentrations at this location did not exceed the trigger level of 75 µg/L. The PCE concentrations in seep 0601 have been variable but were lower in 2008 than in previous years, namely 2004 and 2005. The increases during that 2-year period resulted from the remediation of buildings and soil on the Main Hill.
- Tritium levels in the Main Hill seeps during 2008 were elevated and were higher than the levels in the downgradient groundwater wells. The highest tritium activity was observed in seep 0601, which is on site. None of the seep locations had tritium levels that exceeded the trigger level of 1,500 nanocuries per liter (nCi/L). Tritium levels in all of the seeps except 0607 exceeded the MCL of 20 nCi/L at some time in 2008. Statistical analysis using data collected from 2005 through 2008 indicated downward trends in several seeps and one downgradient well. Tritium levels in several wells downgradient of the Main Hill area also continued to be elevated in 2008. The highest levels were observed in wells 0138 and 0347, which are downgradient of seeps 0601 and 0602. None of the groundwater wells had tritium levels that exceeded the MCL of 20 nCi/L.
- Ra-226, Ra-228, and Sr-90 continued to be present in seep 0601. The activities observed at this location did not exceed the trigger level of 20 picocuries per liter (pCi/L) for Sr-90 or combined Ra-226/228. Statistical analysis of data collected since 2005 indicated a downward trend in Sr-90 in this seep.

2.0 Monitoring Program

Groundwater in the Parcel 6, 7, and 8 area is monitored for TCE and its degradation products to verify that the downgradient BVA is not affected and that concentrations are decreasing. In addition, groundwater discharging from seeps is monitored for TCE and its degradation products, tritium, and radioisotopes (Sr-90, Ra-226, and Ra-228) to verify that source removal will cause concentrations to decrease over time.

The sampling is separated into two programs that relate to the areas of impact. These areas are:

- *Well 0315/0347 Area*—Wells at the edge of the BVA on the southwestern corner of parcel 8 that have elevated concentrations of VOCs. The program consists of wells that have TCE greater than the MCL and downgradient wells to the west.
- *Main Hill Seeps*—Seeps on the northern and southern sides of the Main Hill that have elevated concentrations of VOCs and tritium. The program consists of seeps and downgradient wells to the west.

Under the Parcel 6, 7, and 8 MNA monitoring program, samples are collected quarterly for selected wells and seeps (Figure 2–1) and analyzed as outlined in Sections 4.1 and 4.2 of the *Parcel 6, 7, and 8 Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan* (Final Draft) (DOE 2006) and as summarized in the following sections.

2.1 Well 0315/0347 Monitoring

The two source wells and other selected downgradient BVA wells are monitored for VOCs—namely, PCE, DCE, TCE, and vinyl chloride. A summary of the monitoring locations is provided in Table 2–1.

Table 2–1. Monitoring for the Well 0315/0347 Area

Monitoring Location	Area	VOC
Well 0315	Source Wells	TCE PCE DCE Vinyl Chloride
Well 0347		
Well 0124	Downgradient BVA Monitoring	
Well 0126		
Well 0386		
Well 0387		
Well 0389		
Well 0392		

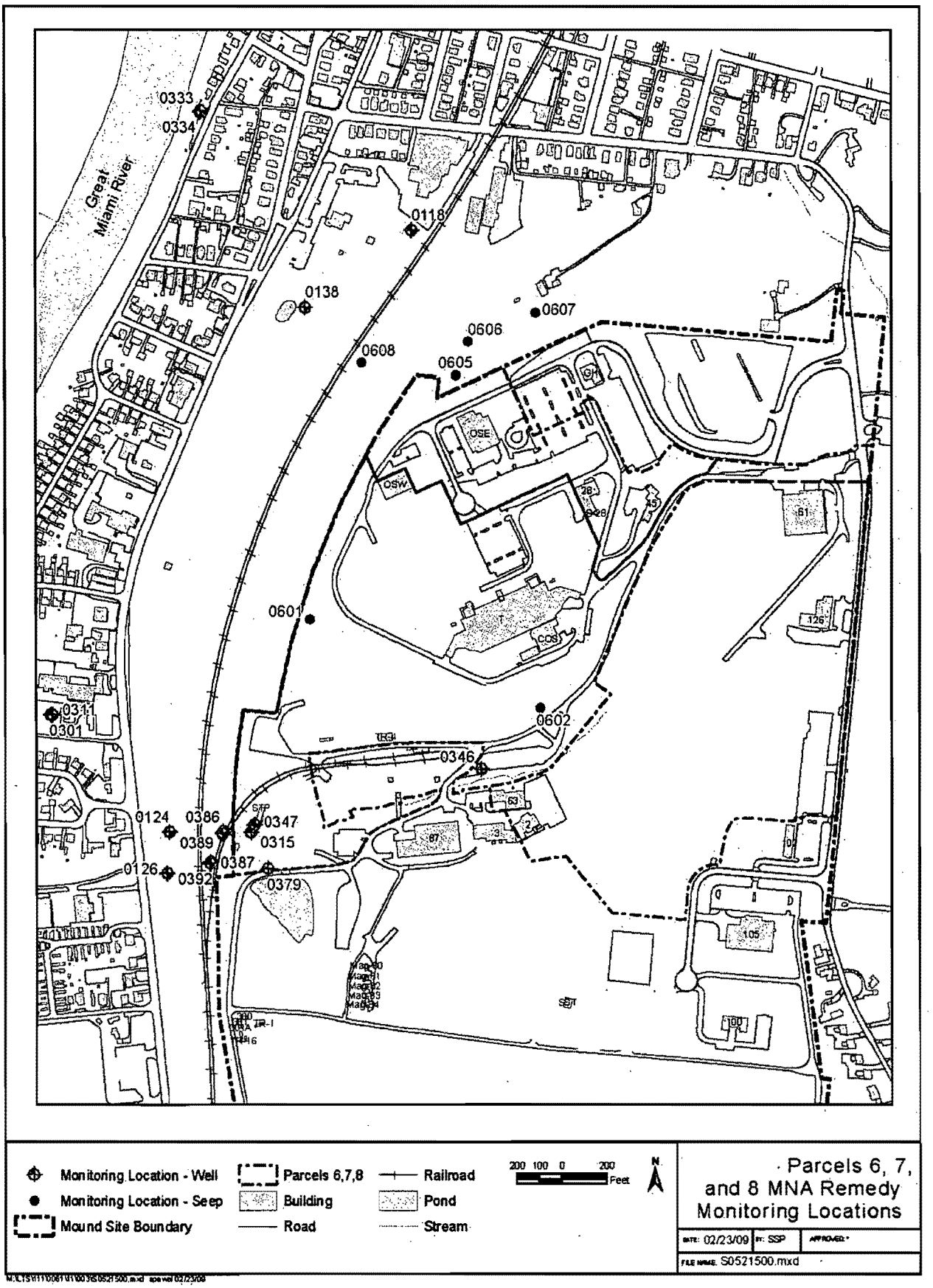

Figure 2–1. Parcel 6, 7, and 8 Groundwater and Seep Monitoring Locations

2.2 Main Hill Seep Monitoring

Water from seeps 0601, 0602, 0605, 0606, 0607, and 0608 is collected and analyzed for VOCs and the radiological constituents shown in Table 2–2. Wells within the BVA that are downgradient of the bedrock groundwater discharge area of the Main Hill will also be sampled to monitor the levels of tritium and VOC contamination.

Table 2–2. Monitoring for the Main Hill Seeps and Groundwater

Monitoring Location	Area	Parameters
Seep 0601	Main Hill Seeps	TCE PCE DCE Vinyl Chloride Ra-226 and Ra-228 Tritium Sr-90
Seep 0602		TCE PCE DCE Vinyl Chloride Tritium
Seep 0605		
Seep 0607		
Seep 0608		
Well 0118	Downgradient BVA Monitoring Wells	TCE PCE DCE Vinyl Chloride Tritium
Well 0138		
Well 0301		
Well 0333		
Well 0334		
Well 0346		
Well 0379		

2.3 Triggers

The contaminant data are evaluated against previous data collected at each location to determine if downward trends are occurring. Trigger levels and response actions have been established for each contaminant as presented in the *Parcel 6, 7, and 8 Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan* (Draft Final) (DOE 2006). The triggers are summarized in Table 2–3.

The U.S. Environmental Protection Agency and the Ohio Environmental Protection Agency must be notified if these trigger levels are exceeded. After notification, the core team (the U.S. Environmental Protection Agency, the Ohio Environmental Protection Agency, and the U.S. Department of Energy [DOE]) will determine an appropriate course of action.

Table 2–3. Trigger Levels for Parcel 6, 7, and 8 Monitoring Locations

Location	TCE (µg/L)	PCE (µg/L)	Tritium (nCi/L)	Ra-226/228 (pCi/L)	Sr-90 (pCi/L)
0315	30				
0347	30				
0124	5				
0126	5				
0386	5				
0387	5				
0389	5				
0392	5				
0601 (seep)		75	1,500	20.	20
0605 (seep)	150				

2.4 Groundwater Flow

Static water level measurements are collected prior to sampling at each well location. Since these measurements were made within a short time frame, the data were used to depict the general groundwater flow in the area (Figure 2–2). Two groundwater regimes are present at the site: groundwater in the bedrock and groundwater in the BVA. Groundwater flow in the bedrock typically mimics the topography, with groundwater discharging to the BVA or at seeps from the upper bedrock. Groundwater flow in the BVA flows south, following the course of the Great Miami River.

2.5 Deviations from the Sampling Plan

Seep 0602 was dry during the third quarter of 2009, and no samples were collected.

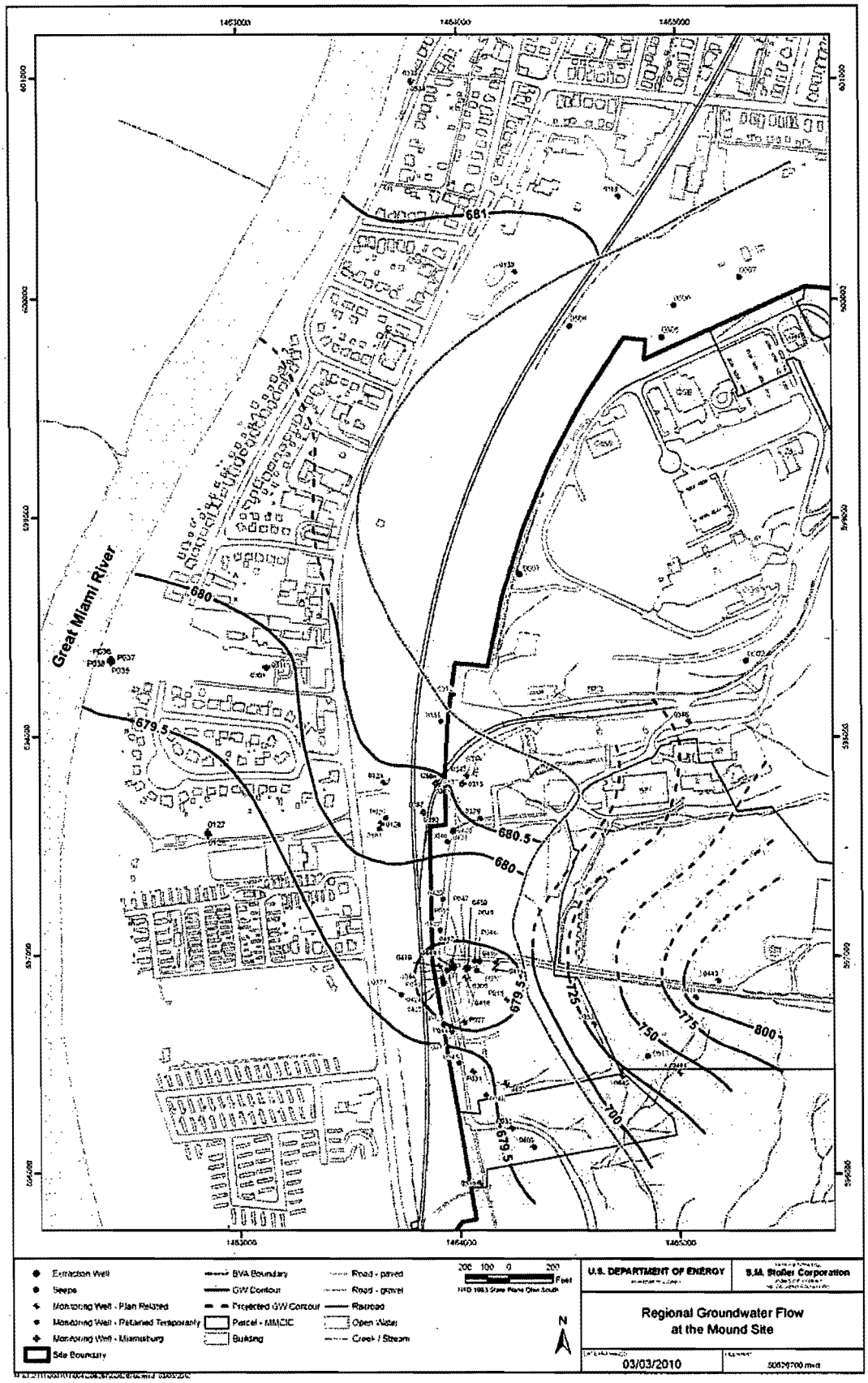

Figure 2–2. Regional Groundwater Flow at the Mound Site

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3.0 Well 0315 and 0347 Area

3.1 Monitoring Results

Monitoring results for 2009 (Table 3–1) continue to show the detection of TCE in wells 0315, 0347, 0386, and 0389; the highest concentrations are detected in wells 0315 and 0347 (source wells), where concentrations also exceed the MCL. Wells 0386 and 0389 are immediately downgradient of the two source wells, and prior to 2000, they had concentrations greater than the MCL. Estimated detections of TCE were reported in wells 0387 and 0392 in the first and fourth quarters. No detectable concentrations of TCE were measured in the other wells. All TCE concentrations were below applicable trigger levels. PCE was detected in well 0126 in the fourth quarter. Low levels of PCE (less than the MCL) were detected in wells 0126, 0386, 0387, 0389, and 0392. No trigger levels are established for PCE. No DCE or vinyl chloride was detected in any of these wells.

Table 3–1. Summary of VOC Results in the 0315 and 0347 Area for 2009

Well ID	Location	VOC	Q1	Q2	Q3	Q4
0124	BVA	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0126	BVA	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	0.94 (J)	0.92 (J)	0.95 (J)	1.09
0315	Source Area	TCE (µg/L)	**11.7**	**12.5**	**11.8**	**14.1**
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0347	Source Area	TCE (µg/L)	**26.1**	**27.3**	**23.3**	**29.2**
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0386	BVA	TCE (µg/L)	ND (<1)	1.3	2.4	3.1
		PCE (µg/L)	0.15 (J)	ND (<1)	0.15 (J)	ND (<1)
0387	BVA	TCE (µg/L)	0.12 (J)	ND (<1)	ND (<1)	0.18 (J)
		PCE (µg/L)	0.21 (J)	ND (<1)	ND (<1)	0.24 (J)
0389	BVA	TCE (µg/L)	1.1	0.26 (J)	0.89 (J)	0.89 (J)
		PCE (µg/L)	0.44 (J)	ND (<1)	0.32 (J)	0.26 (J)
0392	BVA	TCE (µg/L)	0.12 (J)	ND (<1)	ND (<1)	0.14 (J)
		PCE (µg/L)	0.38 (J)	0.34 (J)	0.32 (J)	0.27 (J)

ND = Not detected
J = Estimated value that is less than the reporting limit
Q = Quarter
TCE trigger level for 0315 and 0347 = 30 µg/L
TCE trigger level for other wells = 5 µg/L

TCE concentrations in wells 0315 and 0347 have been variable. Concentration trends in these two wells were similar until the end of 2006, when a substantial increase was identified in well 0347 (Figure 3–1). Starting in 2007, both wells have shown a general increase in TCE concentrations. Surface drainage was changed on the Main Hill when site improvements began in late 2006, and the changes in TCE concentrations may be due to surface water infiltration that resulted from the drainage changes. Starting in 2000, the concentrations in the two BVA wells (0386 and 0389) decreased below the MCL.

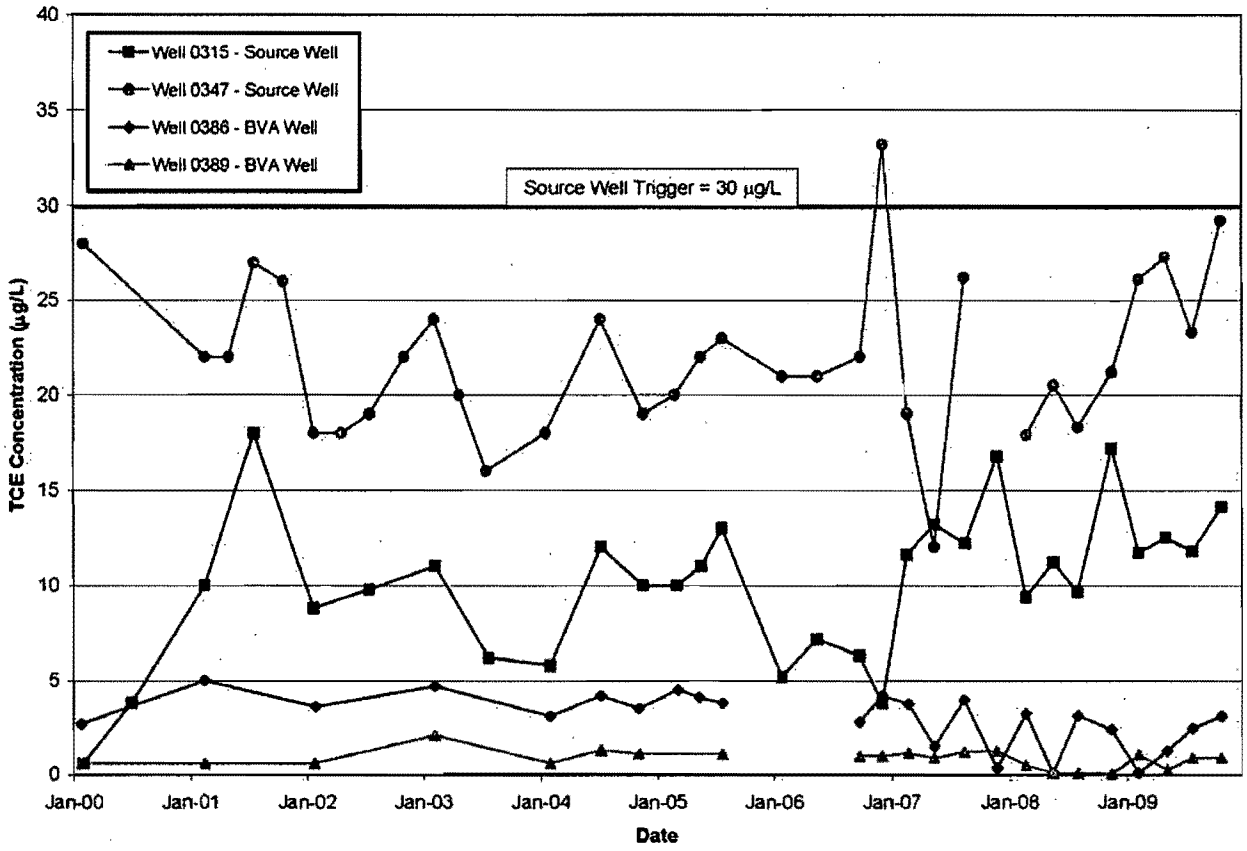

Figure 3–1. TCE Concentrations in Well 0315/0347 Area (2000–2009)

The distribution of TCE in groundwater (Figure 3–2) indicates that the greatest impact is still associated with wells 0315 and 0347. TCE concentrations in these wells continue to exceed the MCL. The two BVA wells immediately downgradient of this area have TCE concentrations below the MCL, with slight impact extending downgradient. Figure 3–2 depicts the 2009 annual averages of TCE in the monitoring network.

3.2 Trend Analysis

The nonparametric Mann-Kendall test was used to analyze trends in TCE data. This test is used for temporal trend identification because it does not require the data to conform to a particular distribution (such as a normal or log-normal distribution). This type of long-term trend analysis can be used to confirm downward trends in contaminant concentrations.

Trend analysis for TCE data collected since 2005 from wells 0315, 0347, 0386, and 0389 indicates a downward trend in well 0386 and an upward trend in well 0315 (Table 3–2). No trends, upward or downward, were identified in wells 0347 or 0389. This is consistent with the 2008 evaluation. Trend analysis was not performed on data from the remainder of the wells because results consistently showed nondetects or sporadic low detections.

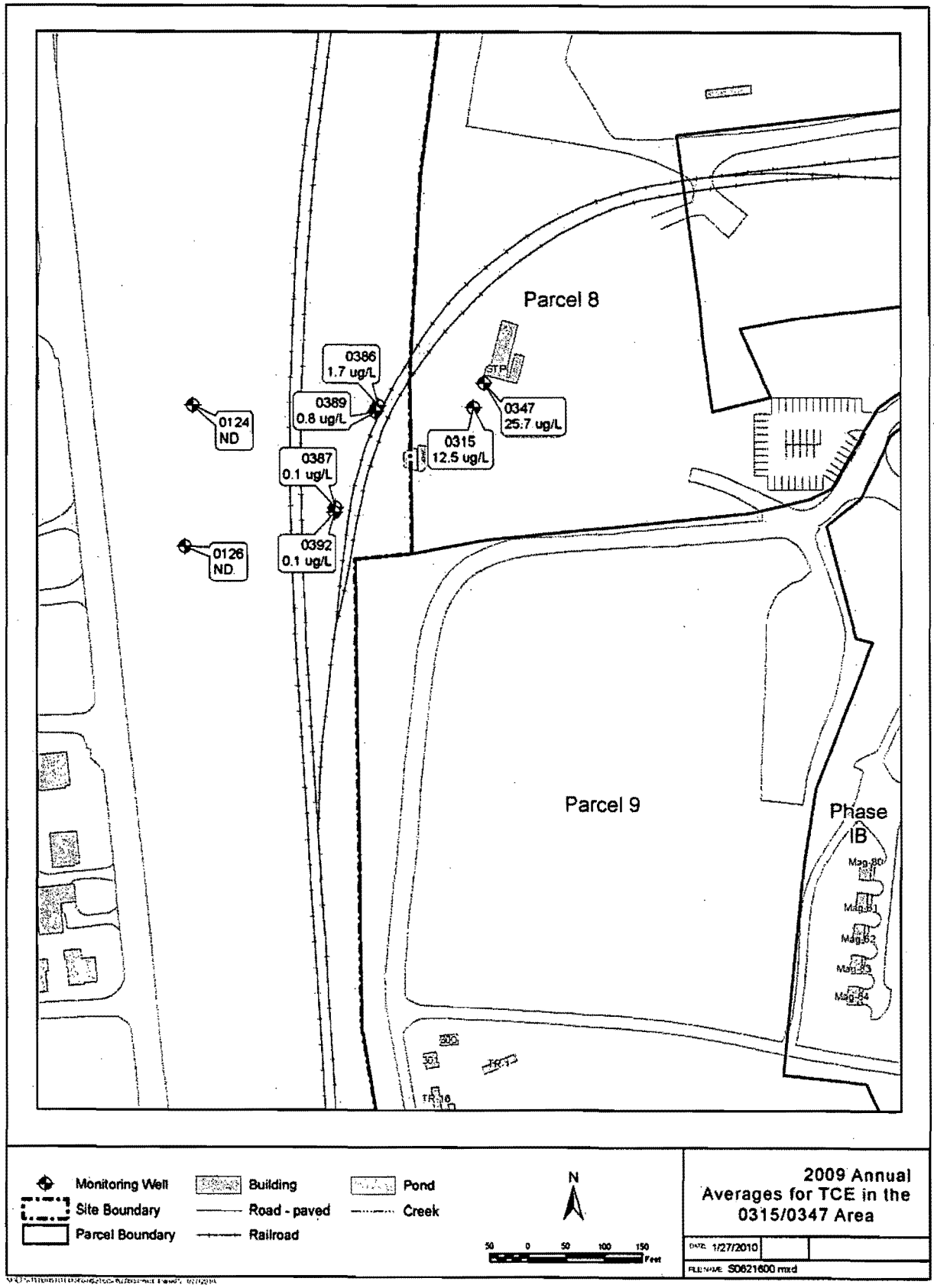

Figure 3–2. 2009 Annual Average TCE Concentrations in Well 0315/0347 Area

Table 3–2. Summary of Trend Analysis Results for TCE in the Source Area and Downgradient Wells (2005–2009)

Location	Number of Samples	Trend	Slope (µg/L/year)	Confidence Interval (µg/L/year)	
				Lower	Upper
0315	19	Upward	1.1	0.06	2.4
0347	19	None			
0386	17	Downward	-0.50	-1.1	-0.18
0389	15	None			

3.3 Recommendations

No changes to the 0315 and 0347 area monitoring program are warranted at this time. Source wells 0315 and 0347 may be influenced by surface water that has infiltrated on the Main Hill and flushed residual VOCs into the groundwater. Subsequent data will be evaluated to determine whether surface water infiltration caused the increases in VOC concentrations.

4.0 Main Hill Seeps

4.1 Volatile Organic Compounds Results

Although TCE concentrations in some Main Hill seeps continued to exceed the MCL in 2009 (Table 4–1), no locations had concentrations that exceeded the trigger level of 150 µg/L (established for seep 0605). The highest concentrations in 2009 were in seep 0602, which is on site. PCE concentrations continued to exceed the MCL of 5 µg/L in seep 0601; however, PCE concentrations at this location did not exceed the trigger level of 75 µg/L. Detectable concentrations of *cis*-1,2-DCE were also observed in all of the seeps; seep 0602 had the highest concentrations. Estimated detections of *trans*-1,2-DCE (less than 1 µg/L) were reported in seeps 0602 and 0605. No vinyl chloride was detected.

Monitoring results (Table 4–1) show low concentrations of TCE and PCE in wells 0311, 0333, and 0379 downgradient of the Main Hill seeps. Elevated concentrations of TCE are reported in well 0347 (discussed in Section 3.0). No trigger levels have been set for these locations, but concentrations in wells 0311, 0333, and 0379 do not exceed the MCL of 5 µg/L for TCE or PCE. Neither DCE nor vinyl chloride was detected in the downgradient wells.

The presence of VOCs in well 0333 is not attributable to elevated concentrations at the Mound Site. Wells 0118 and 0138, which are situated between the Main Hill (source area) and well 0333, do not exhibit VOC impact. Furthermore, well cluster 0333/0334 is located cross-gradient from the Main Hill area; therefore, these wells could not intercept impacted groundwater discharging from the bedrock regime into the BVA.

A graph of TCE concentrations in the seeps since 2005 (Figure 4–1) shows that concentrations in seep 0602 have increased since the end of the remediation of contaminated buildings and soil on the Main Hill (mid-2006). The concentration measured in the fourth quarter of 2009 was lower than previous values. A possible cause for the sudden increase in 2008 and decrease at the end of 2009 may be site improvements started in 2006 on the Main Hill. A new parking lot was constructed where the SW building was located. It was discovered in late 2009 that grading in the area had exposed two manholes over a large tritium capture pit that was located along the western side of the building. These test pits extend into the weathered bedrock. Surface water had been infiltrating into these uncovered access ports and was lost to the subsurface. The access ports were coved in October of 2009, and the subsequent decrease in TCE occurred.

Table 4–1. Summary of VOC Results in the Main Hill Area for 2009

Location	Area	VOC Concentrations				
		VOC	Q1	Q2	Q3	Q4
Seeps						
0601	On site	TCE (µg/L)	3.6	5.3	5.7	6.0
		PCE (µg/L)	11.9	19.3	18.5	18.9
		cis-1,2-DCE (µg/L)	0.53 (J)	0.74 (J)	0.79 (J)	0.87 (J)
		trans-1,2-DCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0602	On site	TCE (µg/L)	56.1	49.6	Dry	18.9
		PCE (µg/L)	0.30 (J)	0.28 (J)		ND (<1)
		cis-1,2-DCE (µg/L)	19.1	17.8		18.1
		trans-1,2-DCE (µg/L)	0.34 (J)	0.35 (J)		0.24 (J)
0605	Off site	TCE (µg/L)	10.5	18.3	14.0	9.5
		PCE (µg/L)	ND (<1)	0.23 (J)	ND (<1)	ND (<1)
		cis-1,2-DCE (µg/L)	7.9	8.8	6.8	4.4
		trans-1,2-DCE (µg/L)	0.22 (J)	0.34 (J)	0.43 (J)	ND (<1)
0607	Off site	TCE (µg/L)	3.7	9.4	11.5	3.6
		PCE (µg/L)	ND (<1)	0.30 (J)	0.22 (J)	ND (<1)
		cis-1,2-DCE (µg/L)	1.1	2.4	3.4	0.72 (J)
		trans-1,2-DCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0608	Off site	TCE (µg/L)	1.7	1.1	1.0	0.48 (J)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		cis-1,2-DCE (µg/L)	0.25 (J)	0.16 (J)	0.17 (J)	ND (<1)
		trans-1,2-DCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
Downgradient Wells						
0118	Off site	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0138	Off site	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0301	Off site	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0311	Off site	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	0.30 (J)
0333	Off site	TCE (µg/L)	0.24 (J)	0.16 (J)	0.19 (J)	0.23 (J)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0334	Off site	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0346	On site	TCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0347	On site	TCE (µg/L)	26.1	27.3	23.3	29.2
		PCE (µg/L)	ND (<1)	ND (<1)	ND (<1)	ND (<1)
0379	On site	TCE (µg/L)	1.7	1.9	1.7	1.7
		PCE (µg/L)	0.66 (J)	0.56 (J)	0.40 (J)	0.50 (J)

ND = Not detected
J = Estimated value that is less than the reporting limit
Q = Quarter
PCE trigger level at 0601 = 75 µg/L
TCE trigger level at the seeps = 150 µg/L

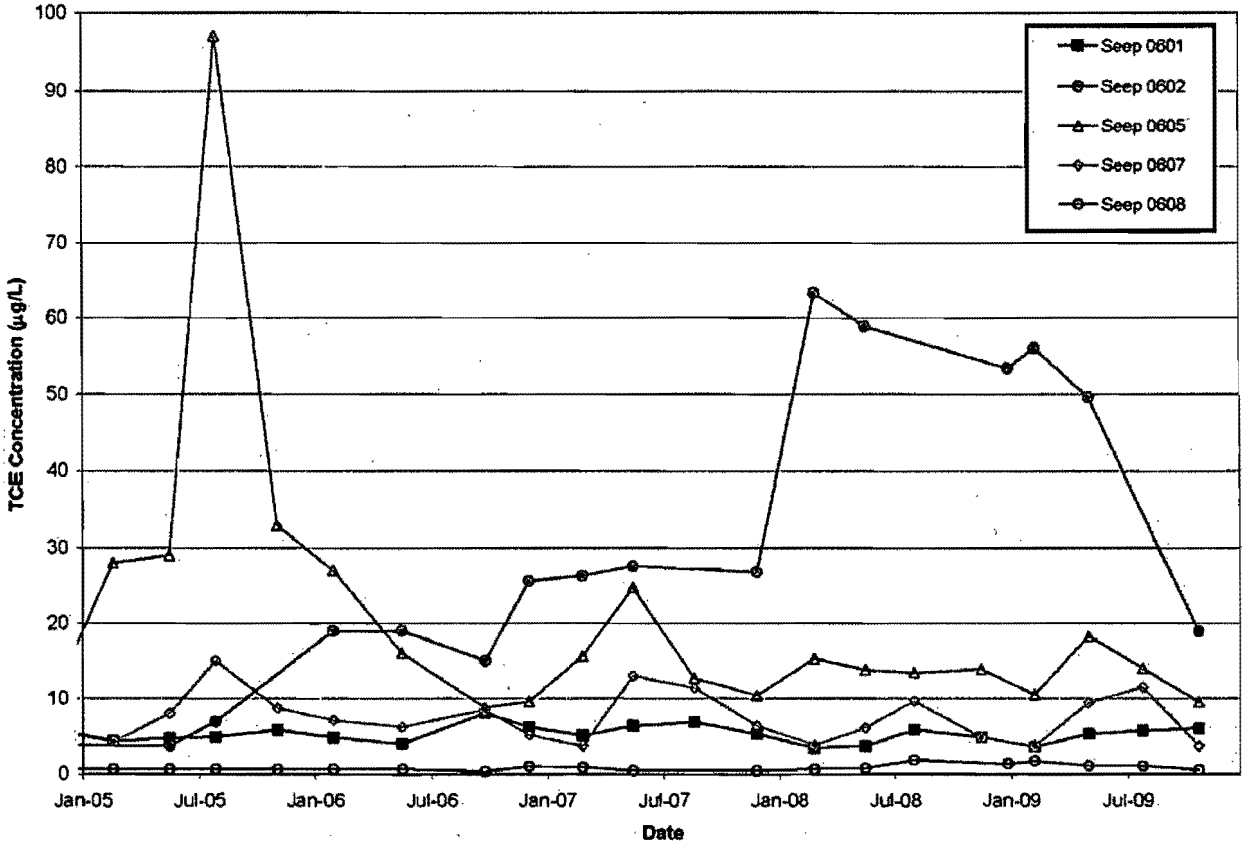

Figure 4–1. TCE Concentrations in the Main Hill Seeps (2005–2009)

In seep 0601, PCE concentrations (Figure 4–2) are higher than TCE concentrations. The concentrations of PCE have generally ranged between 10 and 20 µg/L and are similar to those measured prior to remediation on the Main Hill. Estimated detections of PCE (less than 1 µg/L) were reported in seeps 0602, 0605, and 0607.

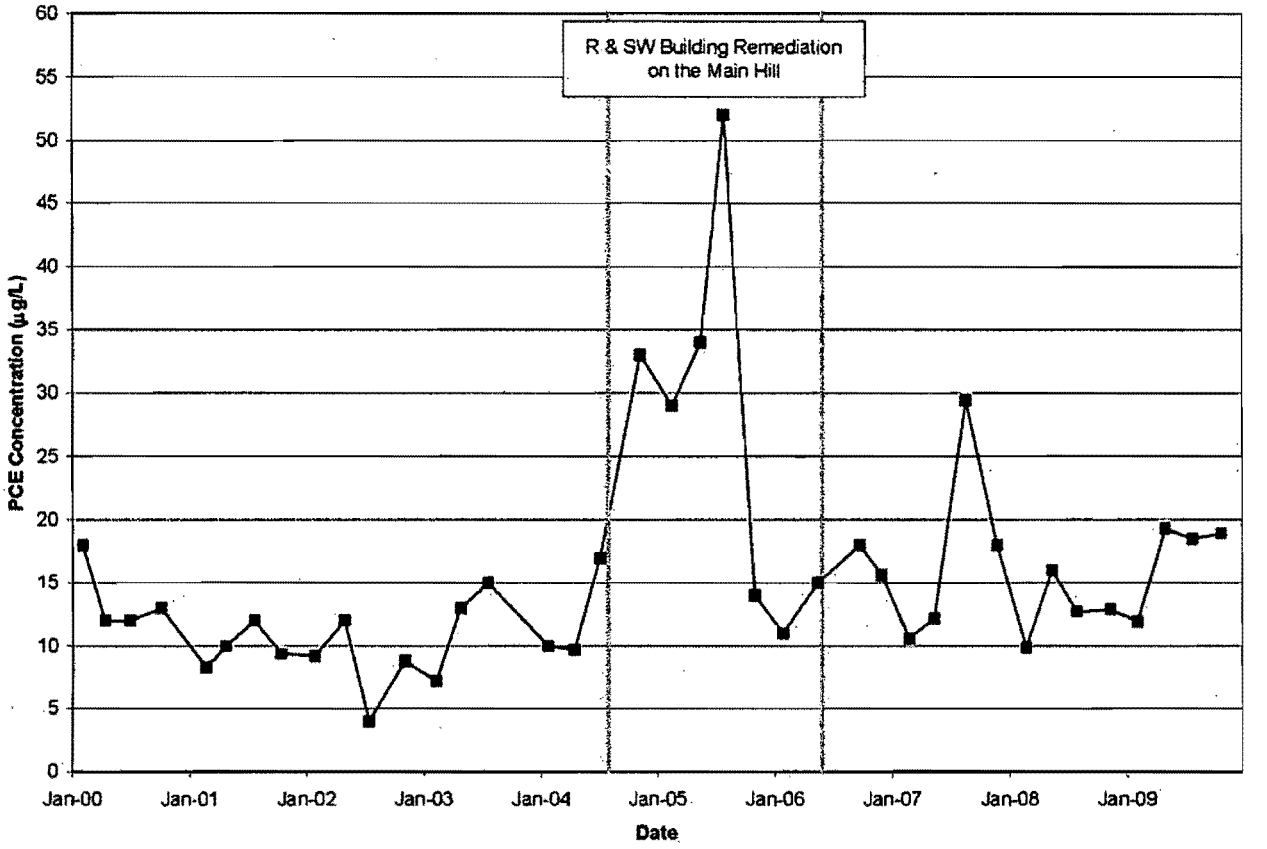

Figure 4–2. PCE Concentrations in Seep 0601 (2000–2009)

Concentrations of *cis*-1,2-DCE have been reported in all of the seeps. The highest concentrations have been reported in seeps 0602 and 0605 and have generally increased at both locations in recent years. A comparison of TCE and *cis*-1,2-DCE concentrations (Figure 4–3) in these two seeps indicates that the concentration changes in the two contaminants have generally behaved similarly. This is illustrated more strongly in the data from seep 0605. Data from seep 0602 has been influenced by the introduction of surface water into the subsurface, resulting in flushing of residual VOCs. Although an increase in *cis*-1,2-DCE concentrations is an expected indicator of TCE degradation, in this instance, it is likely the result of flushing of residual DCE from the system. When degradation occurs, TCE concentrations typically decrease as *cis*-1,2-DCE concentrations increase. Subsequent data will continue to be evaluated for evidence of TCE degradation.

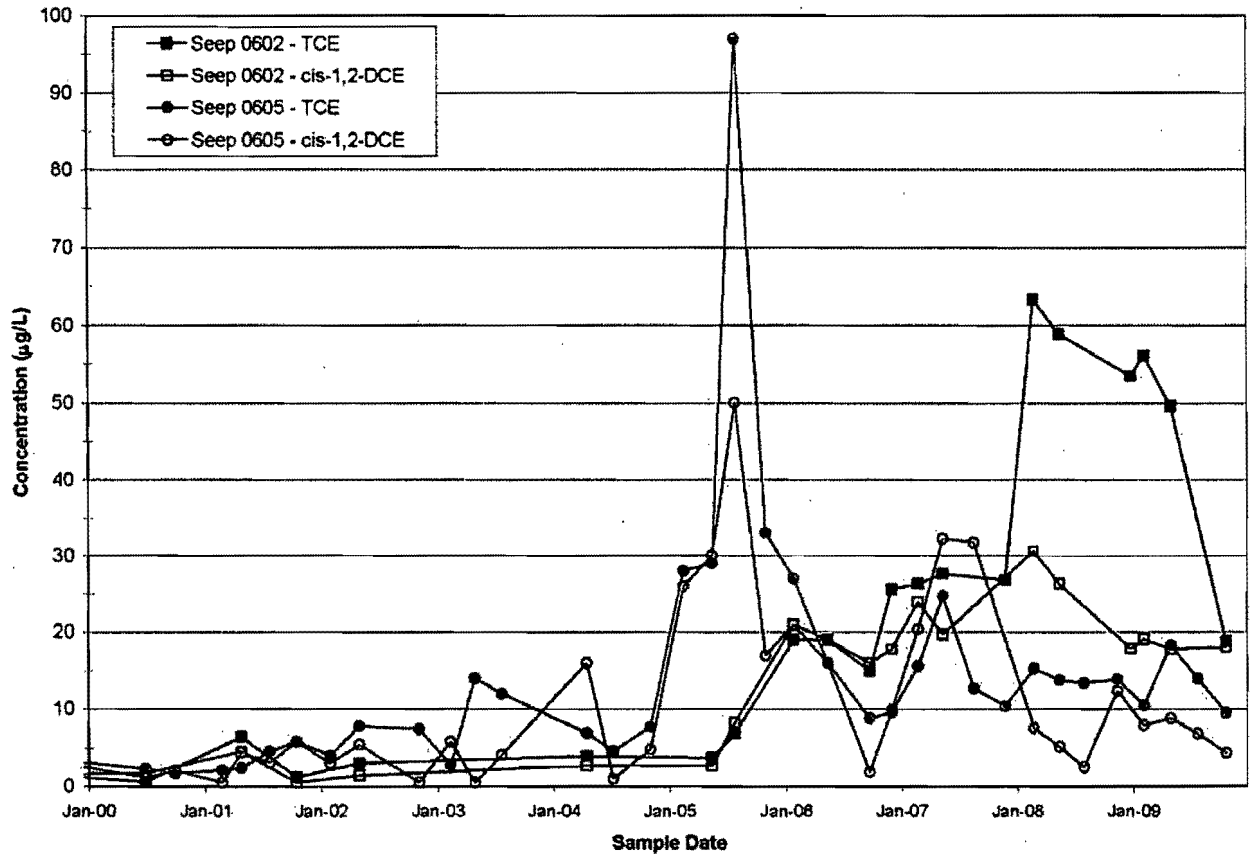

Figure 4–3. TCE and cis-1,2-DCE Concentrations in Seeps 0602 and 0605 (2000–2009)

The distribution of TCE in groundwater (Figure 4–4) in the Main Hill area indicates that the highest area of impact is associated with the seeps, particularly seep 0602. Downgradient wells 0138 and 0347 have TCE levels that exceed the MCL of 5 µg/L. Figure 4–4 depicts the 2009 annual averages of TCE in the monitoring network.

4.2 Tritium Results

Tritium levels in the Main Hill seeps continued to be elevated in 2009 and were higher than those in the downgradient groundwater wells (Table 4–2). The highest tritium activity was observed in seep 0601, which is located on site. No seep locations had tritium levels that exceeded the trigger level of 1,500 nCi/L. Levels in seeps 0601, 0602, and 0605 exceeded the MCL of 20 nCi/L during 2009.

Four wells downgradient of the Main Hill area continued to show tritium impact in 2009 (Table 4–2). The highest levels were observed in well 0347, downgradient of seeps 0601 and 0602. The three remaining wells periodically had tritium levels greater than background (1.5 nCi/L). None of the groundwater wells had tritium levels that exceeded the MCL of 20 nCi/L.

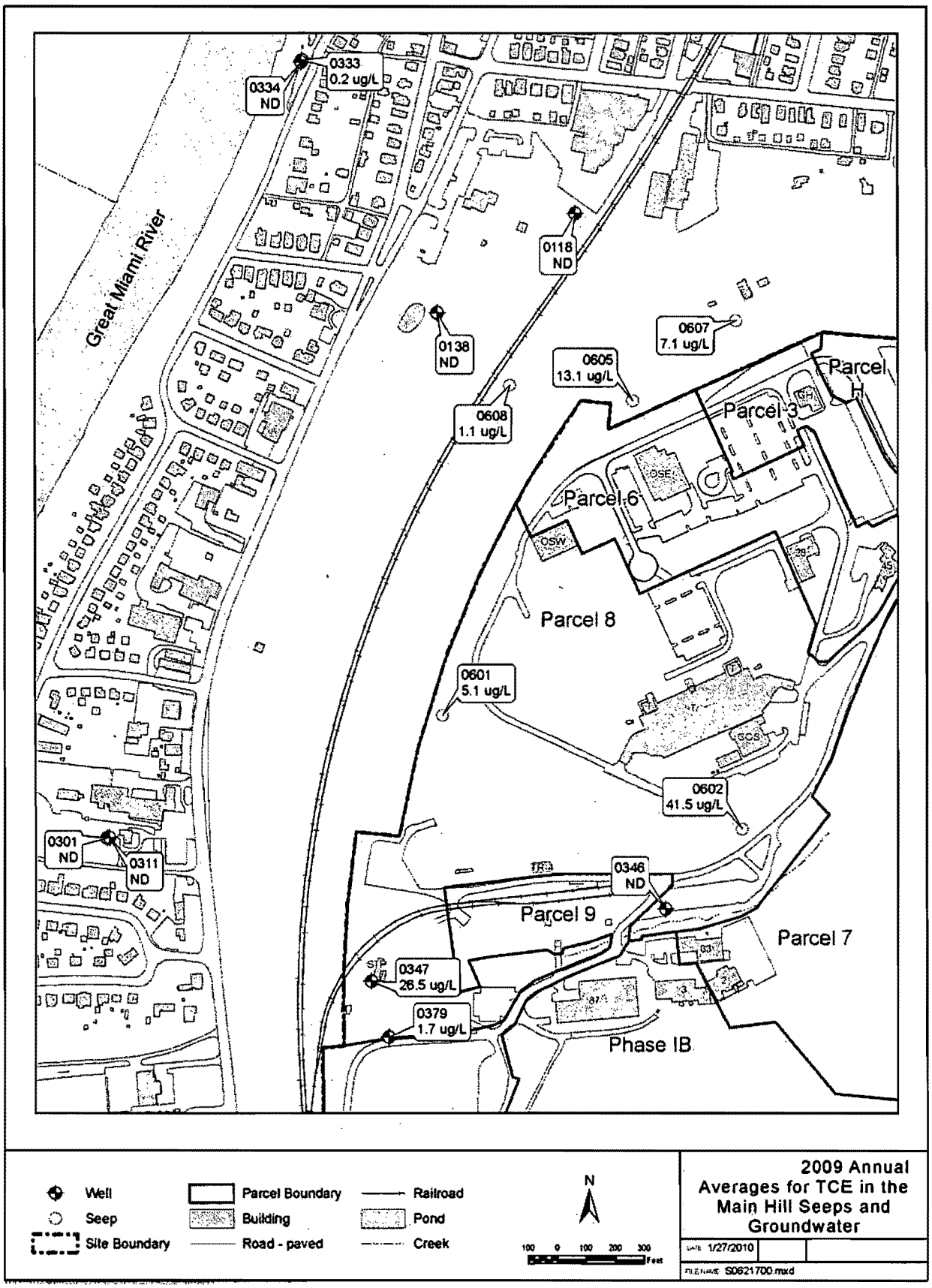

Figure 4–4. 2009 Annual Average TCE Concentrations in the Main Hill Seeps

Table 4–2. Summary of Tritium Results in the Main Hill Area for 2009

Location	Tritium Activity (nCi/L)			
	Q1	Q2	Q3	Q4
Seeps				
0601	**46.3**	**67.1**	**104**	**64.5**
0602	14.2	14.8	Dry	**22.5**
0605	14.8	18.4	**27.1**	19.3
0607	4.8	7.7	10.7	5.8
0608	18.3	15.9	16.9	19.5
Downgradient Wells				
0118	ND (<0.27)	ND (<0.33)	ND (<0.30)	ND (<0.30)
0138	0.87	1.4	2.5	1.6
0301	ND (<0.27)	ND (<0.33)	ND (<0.31)	ND (<0.29)
0311	1.9	1.0	1.1	1.4
0333	ND (<0.27)	ND (<0.33)	ND (<0.31)	ND (<0.29)
0334	0.28	ND (<0.33)	ND (<0.39)	ND (<0.30)
0346	1.8	1.8	2.0	2.0
0347	6.6	6.9	4.6	6.5
0379	1.7	1.5	1.5	1.8

Q = Quarter
ND = Not detected
Tritium trigger level at the seeps = 1,500 nCi/L

Tritium levels in the seeps were highest during remediation activities on the Main Hill (2004–2006). Tritium data collected after building demolition and soil removal indicate decreasing levels in all of the seeps (Figure 4–4). Seep 0601 indicated a possible seasonal effect as levels typically increase in the fall due to precipitation and flushing. Comparisons of tritium concentrations in the seeps with those measured in downgradient monitoring wells indicates that the seeps have responded more quickly than the wells because they are direct discharge points for groundwater.

A graph of tritium levels in downgradient wells (Figure 4–5) illustrates that groundwater impact lagged behind that of the seeps. Groundwater impact increased near the end of remediation activities on the Main Hill, and impact in the seeps occurred as remediation activities were being performed and began to decrease as activities were completed. Wells 0138 and 0347 had the highest levels of tritium and responded rapidly to remediation activities. Wells 0346 and 0379 have also shown evidence of impact but have leveled off over recent years. The other wells have shown little change over time.

The distribution of tritium in groundwater (Figure 4–6) in the Main Hill area indicates that the greatest impact is still associated with the seeps, particularly seep 0601. Downgradient wells 0138, 0347, and 0379 also had elevated levels of tritium. Figure 4–6 depicts the 2009 annual averages of tritium in the monitoring network.

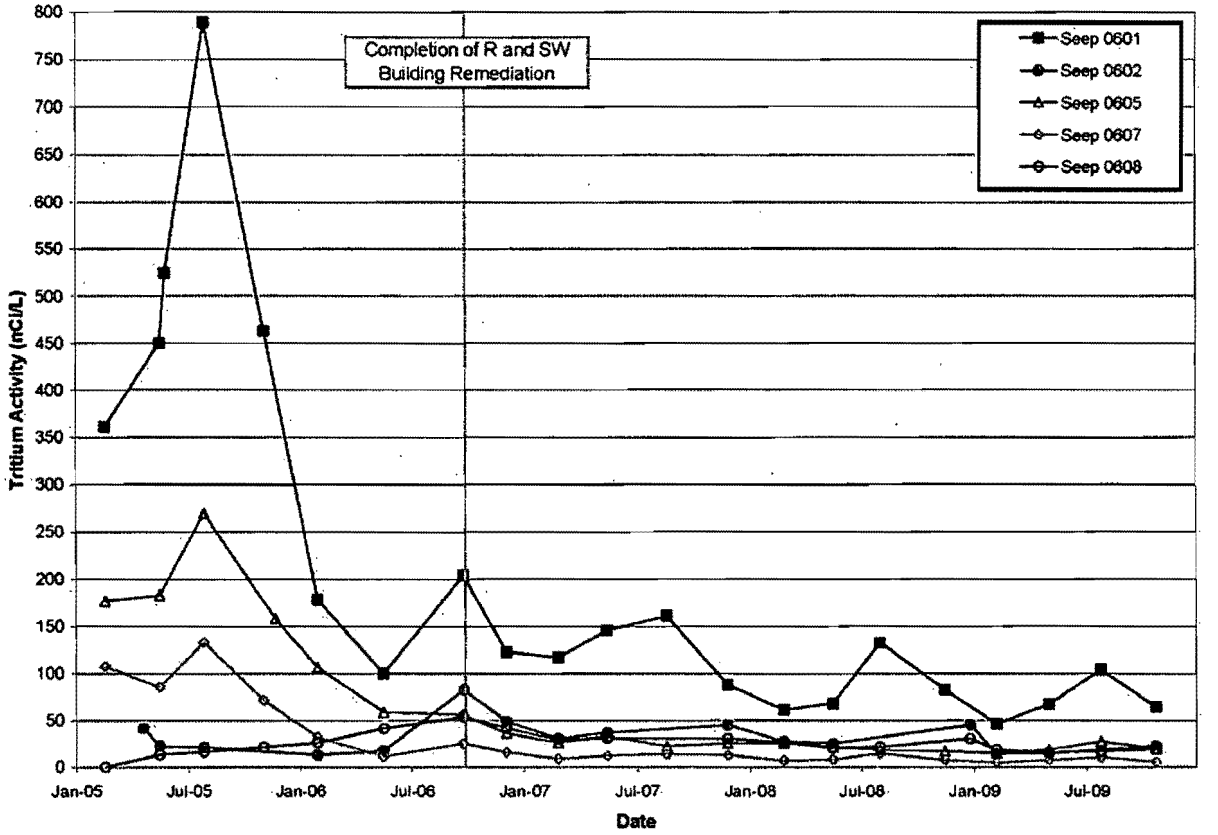

Figure 4–5. Tritium Activity in Seeps (2005–2009)

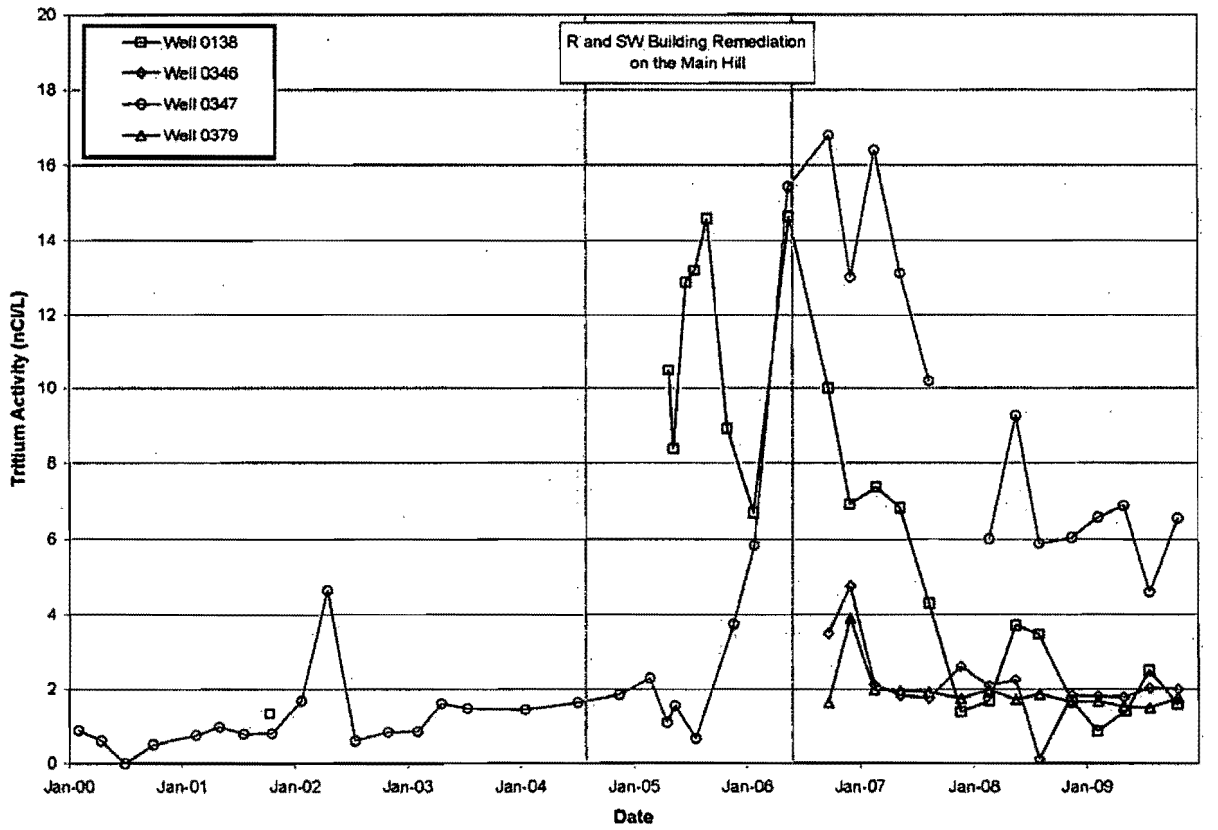

Figure 4–6. Tritium Activity in Wells 0138, 0346, 0347, and 0379 (2000–2008)

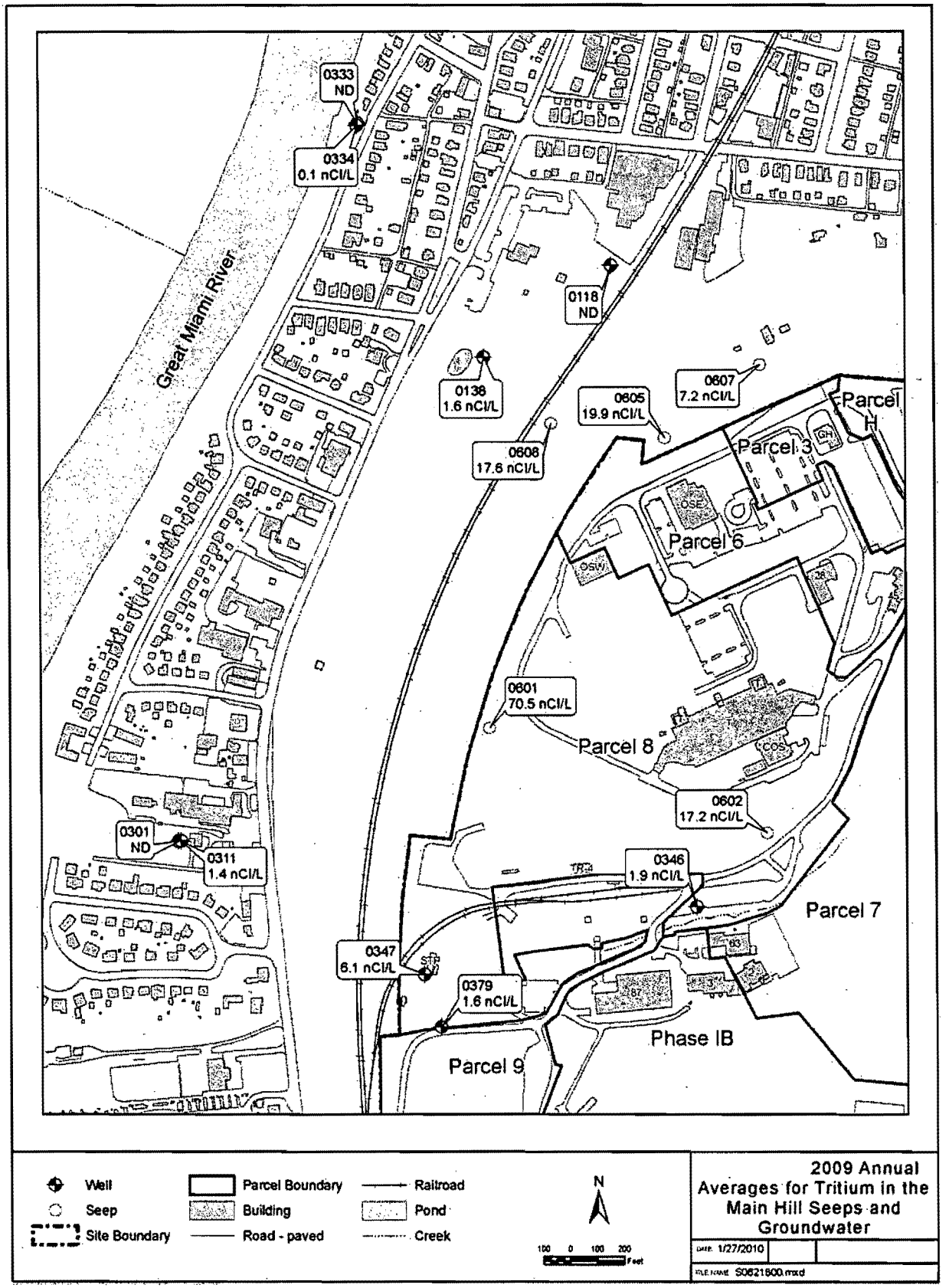

Figure 4–7. 2009 Annual Average Tritium Levels in the Main Hill Seeps

4.3 Other Radionuclides Results

Ra-226, Ra-228, and Sr-90 continue to be present in seep 0601 (Table 4–3). The activity observed at this location does not exceed the trigger level of 20 pCi/L for Sr-90 or combined Ra-226/228.

Table 4–3. Summary of Radionuclides in Seep 0601 for 2009

Location	Radionuclide	Q1	Q2	Q3	Q4
0601	Ra-226 (pCi/L)	<0.64	<0.64	0.48 (J)	2.4
	Ra-228 (pCi/L)	0.81	<0.50	<0.67	2.0
	Sr-90 (pCi/L)	1.4	1.6	2.9	<0.96

J = Estimated value that is less than the reporting limit
Q = Quarter
Ra-226/228 trigger level at seep 0601 = 20 pCi/L
Sr-90 trigger level at seep 0601 = 20 pCi/L

Data have been collected consistently for Sr and Ra in seep 0601 since 2005. Graphs of the concentrations over time (Figures 4–8 and 4–9) indicate that levels have decreased.

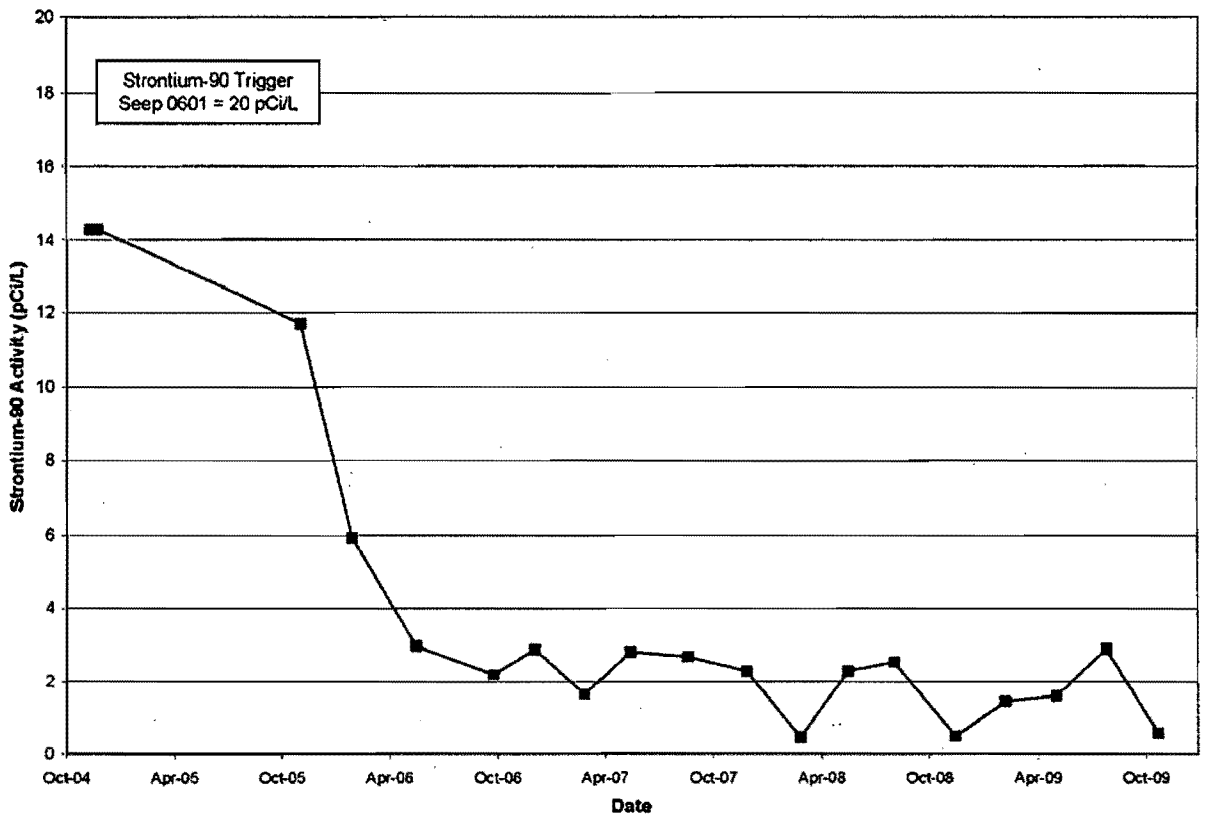

Figure 4–8. Sr-90 Activity over Time in Seep 0601 (2004–2009)

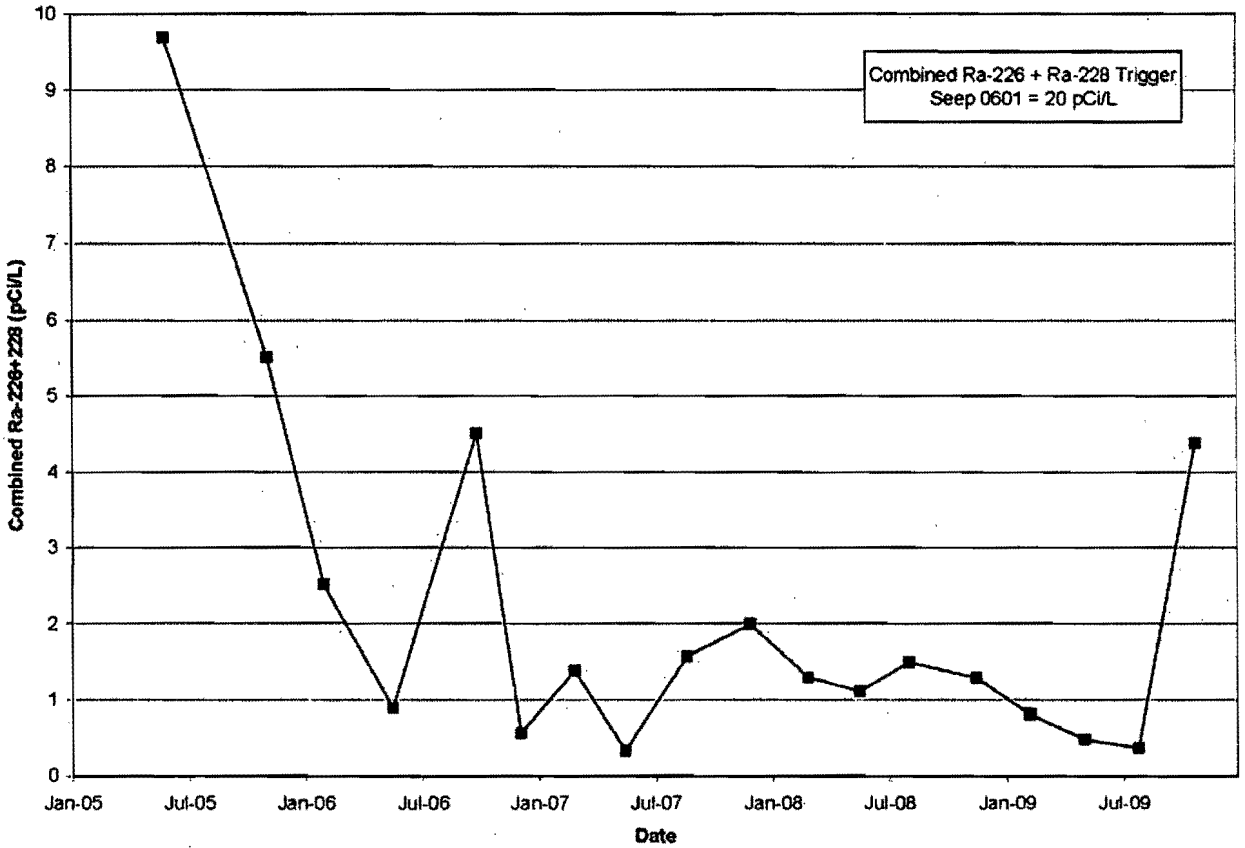

Figure 4–9. Combined Ra-226/228 Activity over Time in Seep 0601 (2005–2009)

4.4 Trend Analysis

Trend analysis was performed on VOC, tritium, and other radionuclide data using the nonparametric Mann-Kendall test. This test is used for temporal trend identification because it does not require the data to conform to a particular distribution (such as a normal or log-normal distribution). This type of long-term trend analysis can be used to confirm downward trends in contaminant concentrations. Trend analysis is reported for data collected from 2005 through 2009. This period was selected to represent data collected since the completion of remediation activities on the Main Hill.

4.4.1 Volatile Organic Compounds

Trend analysis for TCE data collected since 2005 indicates an upward trend in seep 0602 (Table 4–4). This is consistent with statistical analysis performed in 2008. The upward trend in seep 0602 may be the influence of the introduction of surface water into the subsurface, resulting in flushing of residual VOCs, as discussed previously. No trend was indicated in the PCE data from seep 0601.

Data from the downgradient wells were not used in trend analysis. TCE concentrations have been sporadic in these wells, with the exception of wells 0347 and 0379, which are discussed in Section 3.0.

Table 4–4. Summary of Trend Analysis Results for TCE in the Main Hill Seeps (2005–2009)

Location	Number of Samples	Trend	Slope (µg/L/year)	Confidence Interval (µg/L/year)	
				Lower	Upper
0601	20	None			
0602	15	Upward	11.6	4.9	15.5
0605	20	None			
0607	20	None			
0608	19	None			

4.4.2 Tritium and Other Radionuclides

Trend analysis for tritium data collected since 2005 indicates downward trends in seeps 0601, 0605, and 0607 and in wells 0138 and 0379 (Table 4–5). Downward trends were also reported for these locations in 2008, except for well 0379, where no trend was calculated. The tritium levels in the seeps overall are consistently higher than those measured prior to remediation activities. The downward trends determined from post-remediation data suggest that the majority of the source has been removed from the Main Hill area and that, with continued flushing, the levels should continue to decrease.

Table 4–5. Summary of Trend Analysis Results for Tritium in the Main Hill Seeps and Downgradient Wells (2005–2009)

Location	Number of Samples	Trend	Slope (µg/L/year)	Confidence Interval (nCi/L/year)	
				Lower	Upper
0601	21	Downward	-58	-108	-30
0602	16	None			
0605	20	Downward	-22	-43	-10
0607	20	Downward	-8.6	-21	-3.7
0608	19	None			
0138	22	Downward	-2.6	-3.3	-1.8
0346	14	None			
0347	21	None			
0379	14	Downward	-0.15	-0.27	-0.05

Trend analysis for Sr-90 and combined Ra-226/228 from seep 0601 (Table 4–6) indicates a downward trend in both constituents. The downward trend in Sr-90 is consistent with results from trend analysis performed in 2008. No trend was reported in the radium levels in 2008.

Table 4–6. Summary of Trend Analysis Results for Other Radionuclides in Seep 0601 (2005–2009)

Radionuclide	Number of Samples	Trend	Slope (µg/L/year)	Confidence Interval (nCi/L/year)	
				Lower	Upper
Ra-226/228	12	Downward	-0.60	-1.4	-0.04
Sr-90	10	Downward	-0.69	-1.5	-0.20

4.5 Recommendations

Based on groundwater flow data, it is recommended that wells 0333 and 0334 be removed from the long-term monitoring network for the Main Hill monitoring program. These wells do not monitor groundwater originating from the Main Hill area. Wells 0118 and 0138 provide sufficient coverage to ensure that groundwater discharging from the bedrock aquifer does not impact the water quality of the BVA.

Seeps 0602 and 0605 may be influenced by surface water that has infiltrated on the Main Hill and flushed residual VOCs into the groundwater. Subsequent data will be evaluated to determine whether surface water infiltration was the cause for the increases in VOC concentrations.

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5.0 Inspection of the Monitoring System

A routine maintenance program has been established for the long-term groundwater monitoring locations at the Mound Site. This program includes periodic inspections focusing on the integrity of each well and the condition of the protective casing and surface pad, the surrounding area, and the route of access. These inspections are usually performed during each sampling event. If these wells were neglected, the surface seals could fail, and contamination could migrate from surface sources to the subsurface.

It was noted during some of the sampling events that flush-mounted wells 0138, 0301, 0311, 0386, 0387, 0389, and 0392 do not have watertight seals. This has periodically allowed water to fill the space between the well casing and the protective casing.

Other deficiencies identified during 2009 were general maintenance issues, such as drainage and vegetation. Also, ants in the well casing were reported in well 0443 during the third quarter sampling event.

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6.0 Data Validation

Each quarter's data were validated in accordance with procedures specified in the *Environmental Procedures Catalog*, LMS/POL/S04325, "Standard Practice for Validation of Laboratory Data." This procedure also fulfills the requirements of applicable procedures in the *Mound Methods Compendium* (MD 80045). Data validation was documented in quarterly reports prepared within 90 days of the end of each quarter (DOE 2009c, 2009d, 2009e, and 2010). All 2009 data, including data validation qualifiers, are summarized in Appendix A.

Laboratory performance is assessed by reviewing and evaluating the following quality indicators:

- Sample shipping and receiving practices
- Chain of custody
- Laboratory blanks
- Preparation blanks
- Laboratory replicates
- Serial dilutions
- Detection limits
- Peak integrations
- Matrix spikes and matrix spike duplicates
- Holding times
- Instrument calibrations
- Interference check samples
- Radiochemical uncertainty
- Laboratory control samples
- Sample dilutions
- Surrogate recoveries
- Confirmation analyses
- Electronic data

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7.0 Summary and Recommendations

This report documents the groundwater sampling results for the Parcel 6, 7, and 8 area. Monitoring was performed to assess the changes in TCE concentrations in the groundwater and the changes in tritium levels and VOC concentrations in the seeps since contaminated buildings and soil were removed from the Main Hill area of the site.

Remediation activities, including the excavation of contaminated soil and the demolition of contaminated buildings, significantly affected groundwater quality in the Main Hill area. Substantial increases in contaminant levels were observed in 2004 and 2005 when remediation was performed. General decreases in concentrations were observed in 2009; however, concentrations in some areas have not decreased to pre-remediation concentrations.

Monitoring will continue so that the effect of source removal on groundwater quality can be evaluated, so that trends in contaminant levels can be determined, and to ensure that the BVA is not adversely affected.

7.1 Wells 0315/0347

Monitoring results for 2009 continue to show TCE in wells 0315, 0347, 0386, and 0389, and the highest concentrations are in wells 0315 and 0347 (source wells). Estimated detection concentrations (less than 1 µg/L) of TCE were reported in wells 0387 and 0392. TCE was not detected in the other wells. All TCE concentrations were below applicable trigger levels. Low levels of PCE were detected in wells 0126, 0386, 0387, 0389, and 0392. These wells had no detectable concentrations of DCE or vinyl chloride.

TCE concentrations in wells 0315 and 0347 have been variable. Starting in 2006, influence of surface water infiltration from the Main Hill into the subsurface has been determined. The access points were addressed in October 2009, and subsequent data will be evaluated. Statistical analysis of the TCE data indicated a downward trend in well 0386 and an upward trend in well 0315. No trends were identified in wells 0347 and 0389. Starting in 2000, the concentrations in BVA wells 0386 and 0389, which have consistently shown TCE impact, have remained below the MCL.

Monitoring associated with TCE in wells 0315 and 0347 will continue. The evaluation of the 2009 data does not suggest that the monitoring program should be changed at this time. Quarterly sampling will continue in 2010.

7.2 Main Hill Seeps

7.2.1 VOC Monitoring

Although TCE concentrations in some of the Main Hill seeps continued to exceed the MCL in 2009, no locations exceeded the trigger level of 150 µg/L (established for seep 0605). The highest concentrations were in seep 0602, which is on site. PCE concentrations continued to exceed the MCL of 5 µg/L at seep 0601; however, this location does not exceed the trigger level of 75 µg/L. Detectable concentrations of *cis*-1,2-DCE were also observed in all of the seeps.

Estimated detections of *trans*-1,2-DCE were reported in seeps 0602 and 0605. No vinyl chloride was detected in 2009.

Monitoring of downgradient wells indicates elevated concentrations of TCE in wells 0347 and 0379. Low level detections of VOCs were reported in wells 0311 and 0333. Concentrations of TCE exceed the MCL of 5 µg/L in well 0347. None of the other wells had concentrations that exceed the MCL for TCE. No DCE or vinyl chloride was detected in the downgradient wells. The presence of VOCs in well 0333 is not attributable to elevated concentrations at the Mound Site, as this well is located cross-gradient from the Main Hill area, and wells situated between the Main Hill (source area) and well 0333 do not exhibit VOC impact.

Concentrations of *cis*-1,2-DCE have been reported in all of the seeps. The highest concentrations have been reported for seeps 0602 and 0605 and have generally increased at both locations in recent years. Evaluation of TCE and *cis*-1,2-DCE concentrations in these two seeps indicate that the contaminants have behaved similarly. Although an increase in *cis*-1,2-DCE concentrations is an expected indicator of TCE degradation, in this instance, it is likely the result of flushing DCE from the system.

Trend analysis for TCE data collected since 2005 indicates an upward trend in seep 0602. This seep may have been influenced by the infiltration of surface water though an exposed tritium capture pit on the Main Hill.

VOC monitoring associated with seeps and downgradient monitoring wells will continue. The evaluation of the 2009 data does not suggest that the monitoring program should be significantly changed now. Quarterly sampling will continue at the seep and monitoring well locations in 2010.

Wells 0333 and 0334 should be removed from the long-term monitoring network for the Main Hill monitoring program; based on the evaluation of groundwater flow, these wells do not monitor groundwater originating from the Main Hill area. Wells 0118 and 0138 provide sufficient coverage to ensure that groundwater discharging from the bedrock aquifer does not impact the water quality of the BVA.

7.2.2 Tritium and Other Radionuclide Monitoring

Elevated tritium levels are present in the Main Hill seeps, and some downgradient groundwater monitoring wells show tritium impact. Tritium levels in the Main Hill seeps continue to be higher than those of the downgradient groundwater wells. The highest tritium activity is observed in seep 0601, which is on site. No locations have tritium levels that exceed the trigger level of 1,500 nCi/L. Levels in seeps 0601, 0602, and 0605 have exceeded the MCL of 20 nCi/L at some time in 2009. Tritium was detected in four wells (0138, 0346, 0347, and 0379) downgradient of the seeps. The highest tritium levels in groundwater are in well 0347, which is downgradient of seeps 0601 and 0602. None of the groundwater wells had tritium levels that exceeded the MCL of 20 nCi/L.

Statistical analysis of tritium data collected since 2005 indicates downward trends in several seeps and in two monitoring wells. The downward trends determined from post-remediation data suggest that the majority of the source has been removed from the Main Hill area and that continued flushing should continue to lower the levels. Also, tritium levels will likely decrease

more rapidly than the VOCs because tritium does not attenuate through degradation or sorption in the natural environment; therefore, it moves more quickly in the groundwater system.

Ra-226, Ra-228, and Sr-90 continue to be present in seep 0601. The activities observed at this location do not exceed the trigger level of 20 pCi/L for Sr-90 or combined Ra-226/228. Trend analysis indicates a downward trend in Sr-90 levels and combined Ra-226/228 levels.

Tritium monitoring associated with seeps and downgradient monitoring wells, and Ra-226/228 and Sr-90 monitoring at seep 0601, will continue. The evaluation of the 2009 data does not suggest that the monitoring program should be significantly changed at this time. Quarterly sampling will continue at the other seep and monitoring well locations in 2010.

Wells 0333 and 0334 should be removed from the long-term monitoring network for the Main Hill monitoring program; based on the evaluation of groundwater flow, these wells do not monitor groundwater originating from the Main Hill area. Wells 0118 and 0138 provide sufficient coverage to ensure that groundwater discharging from the bedrock aquifer does not impact the water quality of the BVA.

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Appendix A

2009 Data for Parcel 6, 7, and 8 Groundwater Monitoring

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Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0118	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	0.1	0.1	ug/L	U	
0118	Main Hill Seeps	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0118	Main Hill Seeps	cis-1,2-Dichloroethene	7/27/2009	0.1	0.1	ug/L	U	
0118	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0118	Main Hill Seeps	Dissolved Oxygen	2/9/2009	6.19		mg/L		
0118	Main Hill Seeps	Dissolved Oxygen	5/11/2009	6.55		mg/L		
0118	Main Hill Seeps	Dissolved Oxygen	7/27/2009	6.74		mg/L		
0118	Main Hill Seeps	Dissolved Oxygen	10/26/2009	6.02		mg/L		
0118	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	26.8		mV		
0118	Main Hill Seeps	Oxidation Reduction Potential	5/11/2009	110.6		mV		
0118	Main Hill Seeps	Oxidation Reduction Potential	7/27/2009	68.3		mV		
0118	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	33		mV		
0118	Main Hill Seeps	pH	2/9/2009	7.08		s.u.		
0118	Main Hill Seeps	pH	5/11/2009	7.26		s.u.		
0118	Main Hill Seeps	pH	7/27/2009	7.1		s.u.		
0118	Main Hill Seeps	pH	10/26/2009	6.99		s.u.		
0118	Main Hill Seeps	Specific Conductance	2/9/2009	1.242		umhos/cm		
0118	Main Hill Seeps	Specific Conductance	5/11/2009	1.288		umhos/cm		
0118	Main Hill Seeps	Specific Conductance	7/27/2009	1343		umhos/cm		
0118	Main Hill Seeps	Specific Conductance	10/26/2009	1304		umhos/cm		
0118	Main Hill Seeps	Temperature	2/9/2009	13.11		C		
0118	Main Hill Seeps	Temperature	5/11/2009	13.62		C		
0118	Main Hill Seeps	Temperature	7/27/2009	14.42		C		
0118	Main Hill Seeps	Temperature	10/26/2009	13.74		C		
0118	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	Tetrachloroethene	7/27/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	Trichloroethene	2/9/2009	0.11	0.11	ug/L	U	
0118	Main Hill Seeps	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	
0118	Main Hill Seeps	Trichloroethene	7/27/2009	0.11	0.11	ug/L	U	
0118	Main Hill Seeps	Trichloroethene	10/26/2009	0.11	0.11	ug/L	U	
0118	Main Hill Seeps	Tritium	2/9/2009	227	269	pCi/L	U	
0118	Main Hill Seeps	Tritium	5/11/2009	101	326	pCi/L	U	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0118	Main Hill Seeps	Tritium	7/27/2009	214	300	pCi/L	U	
0118	Main Hill Seeps	Tritium	10/26/2009	-17.5	295	pCi/L	U	
0118	Main Hill Seeps	Turbidity	2/9/2009	9		NTU		
0118	Main Hill Seeps	Turbidity	5/11/2009	12		NTU		
0118	Main Hill Seeps	Turbidity	7/27/2009	10.6		NTU		
0118	Main Hill Seeps	Turbidity	10/26/2009	13.2		NTU		
0118	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0118	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	0.1	0.1	ug/L	U	
0138	Main Hill Seeps	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0138	Main Hill Seeps	cis-1,2-Dichloroethene	7/27/2009	0.1	0.1	ug/L	U	
0138	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0138	Main Hill Seeps	Dissolved Oxygen	2/9/2009	4.28		mg/L		
0138	Main Hill Seeps	Dissolved Oxygen	5/11/2009	4.07		mg/L		
0138	Main Hill Seeps	Dissolved Oxygen	7/27/2009	3.75		mg/L		
0138	Main Hill Seeps	Dissolved Oxygen	10/26/2009	3.78		mg/L		
0138	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	12.3		mV		
0138	Main Hill Seeps	Oxidation Reduction Potential	5/11/2009	17.4		mV		
0138	Main Hill Seeps	Oxidation Reduction Potential	7/27/2009	54.2		mV		
0138	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	30.7		mV		
0138	Main Hill Seeps	pH	2/9/2009	6.91		s.u.		
0138	Main Hill Seeps	pH	5/11/2009	7.08		s.u.		
0138	Main Hill Seeps	pH	7/27/2009	7.03		s.u.		
0138	Main Hill Seeps	pH	10/26/2009	7.09		s.u.		
0138	Main Hill Seeps	Specific Conductance	2/9/2009	1267		umhos/cm		
0138	Main Hill Seeps	Specific Conductance	5/11/2009	1.361		umhos/cm		
0138	Main Hill Seeps	Specific Conductance	7/27/2009	1425		umhos/cm		
0138	Main Hill Seeps	Specific Conductance	10/26/2009	1398		umhos/cm		
0138	Main Hill Seeps	Temperature	2/9/2009	11.86		C		
0138	Main Hill Seeps	Temperature	5/11/2009	12.51		C		
0138	Main Hill Seeps	Temperature	7/27/2009	13.75		C		
0138	Main Hill Seeps	Temperature	10/26/2009	13.42		C		
0138	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	Tetrachloroethene	7/27/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.2	0.2	ug/L	U	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0138	Main Hill Seeps	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	Trichloroethene	2/9/2009	0.11	0.11	ug/L	U	
0138	Main Hill Seeps	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	
0138	Main Hill Seeps	Trichloroethene	7/27/2009	0.11	0.11	ug/L	U	
0138	Main Hill Seeps	Trichloroethene	10/26/2009	0.11	0.11	ug/L	U	
0138	Main Hill Seeps	Tritium	2/9/2009	873	274	pCi/L		
0138	Main Hill Seeps	Tritium	5/11/2009	1400	326	pCi/L		
0138	Main Hill Seeps	Tritium	7/27/2009	2500	309	pCi/L		
0138	Main Hill Seeps	Tritium	10/26/2009	1590	294	pCi/L		
0138	Main Hill Seeps	Turbidity	2/9/2009	48		NTU		
0138	Main Hill Seeps	Turbidity	5/11/2009	21.8		NTU		
0138	Main Hill Seeps	Turbidity	7/27/2009	19.3		NTU		
0138	Main Hill Seeps	Turbidity	10/26/2009	88.9		NTU		
0138	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0138	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	0.1	0.1	ug/L	U	
0301	Main Hill Seeps	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0301	Main Hill Seeps	cis-1,2-Dichloroethene	7/27/2009	0.1	0.1	ug/L	U	
0301	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0301	Main Hill Seeps	Dissolved Oxygen	2/9/2009	1.34		mg/L		
0301	Main Hill Seeps	Dissolved Oxygen	5/11/2009	2.01		mg/L		
0301	Main Hill Seeps	Dissolved Oxygen	7/27/2009	2.69		mg/L		
0301	Main Hill Seeps	Dissolved Oxygen	10/26/2009	0.86		mg/L		
0301	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	-0.2		mV		
0301	Main Hill Seeps	Oxidation Reduction Potential	5/11/2009	93.5		mV		
0301	Main Hill Seeps	Oxidation Reduction Potential	7/27/2009	-225.3		mV		
0301	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	-228.8		mV		
0301	Main Hill Seeps	pH	2/9/2009	10.96		s.u.		
0301	Main Hill Seeps	pH	5/11/2009	11.36		s.u.		
0301	Main Hill Seeps	pH	7/27/2009	11.82		s.u.		
0301	Main Hill Seeps	pH	10/26/2009	11.73		s.u.		
0301	Main Hill Seeps	Specific Conductance	2/9/2009	1164		umhos/cm		
0301	Main Hill Seeps	Specific Conductance	5/11/2009	1.426		umhos/cm		
0301	Main Hill Seeps	Specific Conductance	7/27/2009	1520		umhos/cm		
0301	Main Hill Seeps	Specific Conductance	10/26/2009	1679		umhos/cm		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0301	Main Hill Seeps	Temperature	2/9/2009	13.78		C		
0301	Main Hill Seeps	Temperature	5/11/2009	13.98		C		
0301	Main Hill Seeps	Temperature	7/27/2009	16.73		C		
0301	Main Hill Seeps	Temperature	10/26/2009	15.03		C		
0301	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	Tetrachloroethene	7/27/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	Trichloroethene	2/9/2009	0.11	0.11	ug/L	U	
0301	Main Hill Seeps	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	
0301	Main Hill Seeps	Trichloroethene	7/27/2009	0.11	0.11	ug/L	U	
0301	Main Hill Seeps	Trichloroethene	10/26/2009	0.11	0.11	ug/L	U	
0301	Main Hill Seeps	Tritium	2/9/2009	176	274	pCi/L	U	
0301	Main Hill Seeps	Tritium	5/11/2009	63	327	pCi/L	U	
0301	Main Hill Seeps	Tritium	7/27/2009	197	307	pCi/L	U	
0301	Main Hill Seeps	Tritium	10/26/2009	87.3	294	pCi/L	U	
0301	Main Hill Seeps	Turbidity	5/11/2009	3.21		NTU		
0301	Main Hill Seeps	Turbidity	7/27/2009	1.58		NTU		
0301	Main Hill Seeps	Turbidity	10/26/2009	2.16		NTU		
0301	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0301	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	0.1	0.1	ug/L	U	
0311	Main Hill Seeps	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0311	Main Hill Seeps	cis-1,2-Dichloroethene	7/27/2009	0.1	0.1	ug/L	U	
0311	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0311	Main Hill Seeps	Dissolved Oxygen	2/9/2009	2.63		mg/L		
0311	Main Hill Seeps	Dissolved Oxygen	5/11/2009	2.68		mg/L		
0311	Main Hill Seeps	Dissolved Oxygen	7/27/2009	3.33		mg/L		
0311	Main Hill Seeps	Dissolved Oxygen	10/26/2009	3.15		mg/L		
0311	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	17.1		mV		
0311	Main Hill Seeps	Oxidation Reduction Potential	5/11/2009	52.9		mV		
0311	Main Hill Seeps	Oxidation Reduction Potential	7/27/2009	-3.5		mV		
0311	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	18.6		mV		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0311	Main Hill Seeps	pH	2/9/2009	7.17		s.u.		
0311	Main Hill Seeps	pH	5/11/2009	7.49		s.u.		
0311	Main Hill Seeps	pH	7/27/2009	7.26		s.u.		
0311	Main Hill Seeps	pH	10/26/2009	7.17		s.u.		
0311	Main Hill Seeps	Specific Conductance	2/9/2009	1.162		umhos/cm		
0311	Main Hill Seeps	Specific Conductance	5/11/2009	1.143		umhos/cm		
0311	Main Hill Seeps	Specific Conductance	7/27/2009	1177		umhos/cm		
0311	Main Hill Seeps	Specific Conductance	10/26/2009	1141		umhos/cm		
0311	Main Hill Seeps	Temperature	2/9/2009	14.24		C		
0311	Main Hill Seeps	Temperature	5/11/2009	13.77		C		
0311	Main Hill Seeps	Temperature	7/27/2009	15.45		C		
0311	Main Hill Seeps	Temperature	10/26/2009	16.24		C		
0311	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	Tetrachloroethene	7/27/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.295	0.2	ug/L	J	
0311	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	Trichloroethene	2/9/2009	0.11	0.11	ug/L	U	
0311	Main Hill Seeps	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	
0311	Main Hill Seeps	Trichloroethene	7/27/2009	0.11	0.11	ug/L	U	
0311	Main Hill Seeps	Trichloroethene	10/26/2009	0.11	0.11	ug/L	U	
0311	Main Hill Seeps	Tritium	2/9/2009	1890	275	pCi/L		
0311	Main Hill Seeps	Tritium	5/11/2009	1050	327	pCi/L		
0311	Main Hill Seeps	Tritium	7/27/2009	1100	301	pCi/L		
0311	Main Hill Seeps	Tritium	10/26/2009	1410	295	pCi/L		
0311	Main Hill Seeps	Turbidity	2/9/2009	7		NTU		
0311	Main Hill Seeps	Turbidity	5/11/2009	45.3		NTU		
0311	Main Hill Seeps	Turbidity	7/27/2009	46		NTU		
0311	Main Hill Seeps	Turbidity	10/26/2009	13.1		NTU		
0311	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0311	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	cis-1,2-Dichloroethene	2/12/2009	0.162	0.1	ug/L	J	
0333	Main Hill Seeps	cis-1,2-Dichloroethene	5/12/2009	0.156	0.1	ug/L	J	
0333	Main Hill Seeps	cis-1,2-Dichloroethene	7/27/2009	0.19	0.1	ug/L	J	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0333	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.227	0.1	ug/L	J	
0333	Main Hill Seeps	Dissolved Oxygen	2/12/2009	0.41		mg/L		
0333	Main Hill Seeps	Dissolved Oxygen	5/12/2009	0.71		mg/L		
0333	Main Hill Seeps	Dissolved Oxygen	7/27/2009	0.51		mg/L		
0333	Main Hill Seeps	Dissolved Oxygen	10/26/2009	0.79		mg/L		
0333	Main Hill Seeps	Oxidation Reduction Potential	2/12/2009	-85.8		mV		
0333	Main Hill Seeps	Oxidation Reduction Potential	5/12/2009	-117.2		mV		
0333	Main Hill Seeps	Oxidation Reduction Potential	7/27/2009	-69.8		mV		
0333	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	-114.9		mV		
0333	Main Hill Seeps	pH	2/12/2009	7.23		s.u.		
0333	Main Hill Seeps	pH	5/12/2009	7.35		s.u.		
0333	Main Hill Seeps	pH	7/27/2009	7.46		s.u.		
0333	Main Hill Seeps	pH	10/26/2009	7.2		s.u.		
0333	Main Hill Seeps	Specific Conductance	2/12/2009	822		umhos/cm		
0333	Main Hill Seeps	Specific Conductance	5/12/2009	0.935		umhos/cm		
0333	Main Hill Seeps	Specific Conductance	7/27/2009	853		umhos/cm		
0333	Main Hill Seeps	Specific Conductance	10/26/2009	850		umhos/cm		
0333	Main Hill Seeps	Temperature	2/12/2009	12.84		C		
0333	Main Hill Seeps	Temperature	5/12/2009	13.34		C		
0333	Main Hill Seeps	Temperature	7/27/2009	16.03		C		
0333	Main Hill Seeps	Temperature	10/26/2009	14.58		C		
0333	Main Hill Seeps	Tetrachloroethene	2/12/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	Tetrachloroethene	5/12/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	Tetrachloroethene	7/27/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	trans-1,2-Dichloroethene	2/12/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	trans-1,2-Dichloroethene	5/12/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	Trichloroethene	2/12/2009	0.24	0.11	ug/L	J	
0333	Main Hill Seeps	Trichloroethene	5/12/2009	0.154	0.11	ug/L	J	
0333	Main Hill Seeps	Trichloroethene	7/27/2009	0.192	0.11	ug/L	J	
0333	Main Hill Seeps	Trichloroethene	10/26/2009	0.228	0.11	ug/L	J	
0333	Main Hill Seeps	Tritium	2/12/2009	202	273	pCi/L	U	
0333	Main Hill Seeps	Tritium	5/12/2009	225	329	pCi/L	U	
0333	Main Hill Seeps	Tritium	7/27/2009	270	308	pCi/L	U	
0333	Main Hill Seeps	Tritium	10/26/2009	146	293	pCi/L	U	
0333	Main Hill Seeps	Turbidity	2/12/2009	33		NTU		
0333	Main Hill Seeps	Turbidity	5/12/2009	24.3		NTU		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0333	Main Hill Seeps	Turbidity	7/27/2009	89.6		NTU		
0333	Main Hill Seeps	Turbidity	10/26/2009	120		NTU		
0333	Main Hill Seeps	Vinyl chloride	2/12/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	Vinyl chloride	5/12/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0333	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	cis-1,2-Dichloroethene	2/12/2009	0.1	0.1	ug/L	U	
0334	Main Hill Seeps	cis-1,2-Dichloroethene	5/12/2009	0.1	0.1	ug/L	U	
0334	Main Hill Seeps	cis-1,2-Dichloroethene	7/27/2009	0.1	0.1	ug/L	U	
0334	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0334	Main Hill Seeps	Dissolved Oxygen	2/12/2009	4.74		mg/L		
0334	Main Hill Seeps	Dissolved Oxygen	5/12/2009	6.68		mg/L		
0334	Main Hill Seeps	Dissolved Oxygen	7/27/2009	6.13		mg/L		
0334	Main Hill Seeps	Dissolved Oxygen	10/26/2009	5.33		mg/L		
0334	Main Hill Seeps	Oxidation Reduction Potential	2/12/2009	50.5		mV		
0334	Main Hill Seeps	Oxidation Reduction Potential	5/12/2009	165		mV		
0334	Main Hill Seeps	Oxidation Reduction Potential	7/27/2009	50.9		mV		
0334	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	48.9		mV		
0334	Main Hill Seeps	pH	2/12/2009	7.15		s.u.		
0334	Main Hill Seeps	pH	5/12/2009	7.11		s.u.		
0334	Main Hill Seeps	pH	7/27/2009	7.17		s.u.		
0334	Main Hill Seeps	pH	10/26/2009	7.06		s.u.		
0334	Main Hill Seeps	Specific Conductance	2/12/2009	1.183		umhos/cm		
0334	Main Hill Seeps	Specific Conductance	5/12/2009	1.315		umhos/cm		
0334	Main Hill Seeps	Specific Conductance	7/27/2009	1336		umhos/cm		
0334	Main Hill Seeps	Specific Conductance	10/26/2009	1344		umhos/cm		
0334	Main Hill Seeps	Temperature	2/12/2009	13.28		C		
0334	Main Hill Seeps	Temperature	5/12/2009	12.69		C		
0334	Main Hill Seeps	Temperature	7/27/2009	16.05		C		
0334	Main Hill Seeps	Temperature	10/26/2009	15.28		C		
0334	Main Hill Seeps	Tetrachloroethene	2/12/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	Tetrachloroethene	5/12/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	Tetrachloroethene	7/27/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	trans-1,2-Dichloroethene	2/12/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	trans-1,2-Dichloroethene	5/12/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	Trichloroethene	2/12/2009	0.11	0.11	ug/L	U	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0334	Main Hill Seeps	Trichloroethene	5/12/2009	0.11	0.11	ug/L	U	
0334	Main Hill Seeps	Trichloroethene	7/27/2009	0.11	0.11	ug/L	U	
0334	Main Hill Seeps	Trichloroethene	10/26/2009	0.11	0.11	ug/L	U	
0334	Main Hill Seeps	Tritium	2/12/2009	279	274	pCi/L		J
0334	Main Hill Seeps	Tritium	5/12/2009	140	327	pCi/L	U	
0334	Main Hill Seeps	Tritium	7/27/2009	67.6	387	pCi/L	U	
0334	Main Hill Seeps	Tritium	10/26/2009	164	295	pCi/L	U	
0334	Main Hill Seeps	Turbidity	2/12/2009	48		NTU		
0334	Main Hill Seeps	Turbidity	5/12/2009	9.58		NTU		
0334	Main Hill Seeps	Turbidity	7/27/2009	82.2		NTU		
0334	Main Hill Seeps	Turbidity	10/26/2009	25.7		NTU		
0334	Main Hill Seeps	Vinyl chloride	2/12/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	Vinyl chloride	5/12/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0334	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	cis-1,2-Dichloroethene	2/11/2009	0.1	0.1	ug/L	U	
0346	Main Hill Seeps	cis-1,2-Dichloroethene	5/5/2009	0.1	0.1	ug/L	U	
0346	Main Hill Seeps	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0346	Main Hill Seeps	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0346	Main Hill Seeps	Dissolved Oxygen	2/11/2009	4.13		mg/L		
0346	Main Hill Seeps	Dissolved Oxygen	5/5/2009	4.53		mg/L		
0346	Main Hill Seeps	Dissolved Oxygen	7/28/2009	1.39		mg/L		
0346	Main Hill Seeps	Dissolved Oxygen	10/27/2009	1.06		mg/L		
0346	Main Hill Seeps	Oxidation Reduction Potential	2/11/2009	61		mV		
0346	Main Hill Seeps	Oxidation Reduction Potential	5/5/2009	-26.4		mV		
0346	Main Hill Seeps	Oxidation Reduction Potential	7/28/2009	-1.9		mV		
0346	Main Hill Seeps	Oxidation Reduction Potential	10/27/2009	7.6		mV		
0346	Main Hill Seeps	pH	2/11/2009	7.94		s.u.		
0346	Main Hill Seeps	pH	5/5/2009	7.25		s.u.		
0346	Main Hill Seeps	pH	7/28/2009	7.09		s.u.		
0346	Main Hill Seeps	pH	10/27/2009	7		s.u.		
0346	Main Hill Seeps	Specific Conductance	2/11/2009	795		umhos/cm		
0346	Main Hill Seeps	Specific Conductance	5/5/2009	1.919		umhos/cm		
0346	Main Hill Seeps	Specific Conductance	7/28/2009	1934		umhos/cm		
0346	Main Hill Seeps	Specific Conductance	10/27/2009	1913		umhos/cm		
0346	Main Hill Seeps	Temperature	2/11/2009	13.77		C		
0346	Main Hill Seeps	Temperature	5/5/2009	14.7		C		
0346	Main Hill Seeps	Temperature	7/28/2009	15.22		C		
0346	Main Hill Seeps	Temperature	10/27/2009	14.38		C		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0346	Main Hill Seeps	Tetrachloroethene	2/11/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	Tetrachloroethene	5/5/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	Tetrachloroethene	7/28/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	Tetrachloroethene	10/27/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	trans-1,2-Dichloroethene	2/11/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	trans-1,2-Dichloroethene	5/5/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	Trichloroethene	2/11/2009	0.11	0.11	ug/L	U	
0346	Main Hill Seeps	Trichloroethene	5/5/2009	0.11	0.11	ug/L	U	
0346	Main Hill Seeps	Trichloroethene	7/28/2009	0.11	0.11	ug/L	U	
0346	Main Hill Seeps	Trichloroethene	10/27/2009	0.11	0.11	ug/L	U	
0346	Main Hill Seeps	Tritium	2/11/2009	1810	273	pCi/L		
0346	Main Hill Seeps	Tritium	5/5/2009	1780	326	pCi/L		
0346	Main Hill Seeps	Tritium	7/28/2009	2030	385	pCi/L		
0346	Main Hill Seeps	Tritium	10/27/2009	2000	294	pCi/L		
0346	Main Hill Seeps	Turbidity	2/11/2009	50		NTU		
0346	Main Hill Seeps	Turbidity	5/5/2009	13.3		NTU		
0346	Main Hill Seeps	Turbidity	7/28/2009	3.13		NTU		
0346	Main Hill Seeps	Turbidity	10/27/2009	30.3		NTU		
0346	Main Hill Seeps	Vinyl chloride	2/11/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0346	Main Hill Seeps	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	cis-1,2-Dichloroethene	2/12/2009	0.1	0.1	ug/L	U	
0379	Main Hill Seeps	cis-1,2-Dichloroethene	5/5/2009	0.1	0.1	ug/L	U	
0379	Main Hill Seeps	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0379	Main Hill Seeps	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0379	Main Hill Seeps	Dissolved Oxygen	2/12/2009	1.98		mg/L		
0379	Main Hill Seeps	Dissolved Oxygen	5/5/2009	2.15		mg/L		
0379	Main Hill Seeps	Dissolved Oxygen	7/28/2009	1.1		mg/L		
0379	Main Hill Seeps	Dissolved Oxygen	10/27/2009	1.7		mg/L		
0379	Main Hill Seeps	Oxidation Reduction Potential	2/12/2009	-15.1		mV		
0379	Main Hill Seeps	Oxidation Reduction Potential	5/5/2009	-44.8		mV		
0379	Main Hill Seeps	Oxidation Reduction Potential	7/28/2009	-11.1		mV		
0379	Main Hill Seeps	Oxidation Reduction Potential	10/27/2009	-20.1		mV		
0379	Main Hill Seeps	pH	2/12/2009	6.73		s.u.		
0379	Main Hill Seeps	pH	5/5/2009	7.08		s.u.		
0379	Main Hill Seeps	pH	7/28/2009	7.29		s.u.		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0379	Main Hill Seeps	pH	10/27/2009	6.98		s.u.		
0379	Main Hill Seeps	Specific Conductance	2/12/2009	2074		umhos/cm		
0379	Main Hill Seeps	Specific Conductance	5/5/2009	2.11		umhos/cm		
0379	Main Hill Seeps	Specific Conductance	7/28/2009	2149		umhos/cm		
0379	Main Hill Seeps	Specific Conductance	10/27/2009	2090		umhos/cm		
0379	Main Hill Seeps	Temperature	2/12/2009	13.01		C		
0379	Main Hill Seeps	Temperature	5/5/2009	14.99		C		
0379	Main Hill Seeps	Temperature	7/28/2009	16.03		C		
0379	Main Hill Seeps	Temperature	10/27/2009	14		C		
0379	Main Hill Seeps	Tetrachloroethene	2/12/2009	0.655	0.2	ug/L	J	
0379	Main Hill Seeps	Tetrachloroethene	5/5/2009	0.564	0.2	ug/L	J	
0379	Main Hill Seeps	Tetrachloroethene	7/28/2009	0.402	0.2	ug/L	J	
0379	Main Hill Seeps	Tetrachloroethene	10/27/2009	0.495	0.2	ug/L	J	
0379	Main Hill Seeps	trans-1,2-Dichloroethene	2/12/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	trans-1,2-Dichloroethene	5/5/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	Trichloroethene	2/12/2009	1.67	0.11	ug/L		
0379	Main Hill Seeps	Trichloroethene	5/5/2009	1.89	0.11	ug/L		
0379	Main Hill Seeps	Trichloroethene	7/28/2009	1.65	0.11	ug/L		
0379	Main Hill Seeps	Trichloroethene	10/27/2009	1.71	0.11	ug/L		
0379	Main Hill Seeps	Tritium	2/12/2009	1680	273	pCi/L		
0379	Main Hill Seeps	Tritium	5/5/2009	1530	328	pCi/L		
0379	Main Hill Seeps	Tritium	7/28/2009	1500	356	pCi/L		
0379	Main Hill Seeps	Tritium	10/27/2009	1770	294	pCi/L		
0379	Main Hill Seeps	Turbidity	2/12/2009	21		NTU		
0379	Main Hill Seeps	Turbidity	5/5/2009	38.3		NTU		
0379	Main Hill Seeps	Turbidity	7/28/2009	19.5		NTU		
0379	Main Hill Seeps	Turbidity	10/27/2009	39.6		NTU		
0379	Main Hill Seeps	Vinyl chloride	2/12/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0379	Main Hill Seeps	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	0.529	0.1	ug/L	J	
0601	Main Hill Seeps	cis-1,2-Dichloroethene	5/5/2009	0.736	0.1	ug/L	J	
0601	Main Hill Seeps	cis-1,2-Dichloroethene	7/29/2009	0.787	0.1	ug/L	J	
0601	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.868	0.1	ug/L	J	
0601	Main Hill Seeps	Dissolved Oxygen	2/9/2009	6.94		mg/L		
0601	Main Hill Seeps	Dissolved Oxygen	5/5/2009	4.83		mg/L		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0601	Main Hill Seeps	Dissolved Oxygen	7/29/2009	6.29		mg/L		
0601	Main Hill Seeps	Dissolved Oxygen	10/26/2009	5.83		mg/L		
0601	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	178.1		mV		
0601	Main Hill Seeps	Oxidation Reduction Potential	5/5/2009	161.2		mV		
0601	Main Hill Seeps	Oxidation Reduction Potential	7/29/2009	39.1		mV		
0601	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	35.1		mV		
0601	Main Hill Seeps	pH	2/9/2009	7.3		s.u.		
0601	Main Hill Seeps	pH	5/5/2009	7.37		s.u.		
0601	Main Hill Seeps	pH	7/29/2009	7.2		s.u.		
0601	Main Hill Seeps	pH	10/26/2009	7.16		s.u.		
0601	Main Hill Seeps	Radium-226	2/9/2009	0	0.642	pCi/L	U	
0601	Main Hill Seeps	Radium-226	5/5/2009	0.316	0.639	pCi/L	U	
0601	Main Hill Seeps	Radium-226	7/29/2009	0.481	0.299	pCi/L		J
0601	Main Hill Seeps	Radium-226	10/26/2009	2.42	0.356	pCi/L		
0601	Main Hill Seeps	Radium-228	2/9/2009	0.809	0.801	pCi/L		J
0601	Main Hill Seeps	Radium-228	5/5/2009	0.16	0.501	pCi/L	U	
0601	Main Hill Seeps	Radium-228	7/29/2009	-0.113	0.667	pCi/L	U	
0601	Main Hill Seeps	Radium-228	10/26/2009	1.97	1.54	pCi/L		J
0601	Main Hill Seeps	Specific Conductance	2/9/2009	1.27		umhos/cm		
0601	Main Hill Seeps	Specific Conductance	5/5/2009	1.554		umhos/cm		
0601	Main Hill Seeps	Specific Conductance	7/29/2009	1614		umhos/cm		
0601	Main Hill Seeps	Specific Conductance	10/26/2009	1366		umhos/cm		
0601	Main Hill Seeps	Strontium-90	2/9/2009	1.44	0.546	pCi/L		J
0601	Main Hill Seeps	Strontium-90	5/5/2009	1.59	0.756	pCi/L		J
0601	Main Hill Seeps	Strontium-90	7/29/2009	2.89	0.804	pCi/L		
0601	Main Hill Seeps	Strontium-90	10/26/2009	0.562	0.962	pCi/L	U	
0601	Main Hill Seeps	Temperature	2/9/2009	13.27		C		
0601	Main Hill Seeps	Temperature	5/5/2009	15.84		C		
0601	Main Hill Seeps	Temperature	7/29/2009	15.1		C		
0601	Main Hill Seeps	Temperature	10/26/2009	14.4		C		
0601	Main Hill Seeps	Tetrachloroethene	2/9/2009	11.9	0.2	ug/L		
0601	Main Hill Seeps	Tetrachloroethene	5/5/2009	19.3	0.2	ug/L		
0601	Main Hill Seeps	Tetrachloroethene	7/29/2009	18.5	0.2	ug/L		
0601	Main Hill Seeps	Tetrachloroethene	10/26/2009	18.9	0.2	ug/L		
0601	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	trans-1,2-Dichloroethene	5/5/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	trans-1,2-Dichloroethene	7/29/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	Trichloroethene	2/9/2009	3.55	0.11	ug/L		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0601	Main Hill Seeps	Trichloroethene	5/5/2009	5.28	0.11	ug/L		
0601	Main Hill Seeps	Trichloroethene	7/29/2009	5.71	0.11	ug/L		
0601	Main Hill Seeps	Trichloroethene	10/26/2009	5.97	0.11	ug/L		
0601	Main Hill Seeps	Tritium	2/9/2009	46300	273	pCi/L		
0601	Main Hill Seeps	Tritium	5/5/2009	67100	329	pCi/L		
0601	Main Hill Seeps	Tritium	7/29/2009	104000	385	pCi/L		
0601	Main Hill Seeps	Tritium	10/26/2009	64500	295	pCi/L		
0601	Main Hill Seeps	Turbidity	2/9/2009	34.9		NTU		
0601	Main Hill Seeps	Turbidity	5/5/2009	22.6		NTU		
0601	Main Hill Seeps	Turbidity	7/29/2009	90.1		NTU		
0601	Main Hill Seeps	Turbidity	10/26/2009	671		NTU		
0601	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	Vinyl chloride	7/29/2009	0.2	0.2	ug/L	U	
0601	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0602	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	19.1	0.1	ug/L		
0602	Main Hill Seeps	cis-1,2-Dichloroethene	5/5/2009	17.8	0.1	ug/L		
0602	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	18.1	0.1	ug/L		
0602	Main Hill Seeps	Dissolved Oxygen	2/9/2009	9.44		mg/L		
0602	Main Hill Seeps	Dissolved Oxygen	5/5/2009	6.5		mg/L		
0602	Main Hill Seeps	Dissolved Oxygen	10/26/2009	5.9		mg/L		
0602	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	182		mV		
0602	Main Hill Seeps	Oxidation Reduction Potential	5/5/2009	206.2		mV		
0602	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	46.2		mV		
0602	Main Hill Seeps	pH	2/9/2009	7.26		s.u.		
0602	Main Hill Seeps	pH	5/5/2009	7.41		s.u.		
0602	Main Hill Seeps	pH	10/26/2009	7.27		s.u.		
0602	Main Hill Seeps	Specific Conductance	2/9/2009	1.85		umhos/cm		
0602	Main Hill Seeps	Specific Conductance	5/5/2009	1.822		umhos/cm		
0602	Main Hill Seeps	Specific Conductance	10/26/2009	1878		umhos/cm		
0602	Main Hill Seeps	Temperature	2/9/2009	6.33		C		
0602	Main Hill Seeps	Temperature	5/5/2009	14.26		C		
0602	Main Hill Seeps	Temperature	10/26/2009	11.88		C		
0602	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.3	0.2	ug/L	J	
0602	Main Hill Seeps	Tetrachloroethene	5/5/2009	0.282	0.2	ug/L	J	
0602	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0602	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.336	0.2	ug/L	J	
0602	Main Hill Seeps	trans-1,2-Dichloroethene	5/5/2009	0.351	0.2	ug/L	J	
0602	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.244	0.2	ug/L	J	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0602	Main Hill Seeps	Trichloroethene	2/9/2009	56.1	0.11	ug/L		
0602	Main Hill Seeps	Trichloroethene	5/5/2009	49.6	0.11	ug/L		
0602	Main Hill Seeps	Trichloroethene	10/26/2009	18.9	0.11	ug/L		
0602	Main Hill Seeps	Tritium	2/9/2009	14200	273	pCi/L		
0602	Main Hill Seeps	Tritium	5/5/2009	14800	328	pCi/L		
0602	Main Hill Seeps	Tritium	10/26/2009	22500	295	pCi/L		
0602	Main Hill Seeps	Turbidity	2/9/2009	48		NTU		
0602	Main Hill Seeps	Turbidity	5/5/2009	495		NTU		
0602	Main Hill Seeps	Turbidity	10/26/2009	102		NTU		
0602	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0602	Main Hill Seeps	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0602	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0605	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	7.92	0.1	ug/L		
0605	Main Hill Seeps	cis-1,2-Dichloroethene	5/5/2009	8.8	0.1	ug/L		
0605	Main Hill Seeps	cis-1,2-Dichloroethene	7/29/2009	6.83	0.1	ug/L		
0605	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	4.35	0.1	ug/L		
0605	Main Hill Seeps	Dissolved Oxygen	2/9/2009	9.49		mg/L		
0605	Main Hill Seeps	Dissolved Oxygen	5/5/2009	8.5		mg/L		
0605	Main Hill Seeps	Dissolved Oxygen	7/29/2009	4.36		mg/L		
0605	Main Hill Seeps	Dissolved Oxygen	10/26/2009	7.36		mg/L		
0605	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	115.8		mV		
0605	Main Hill Seeps	Oxidation Reduction Potential	5/5/2009	209		mV		
0605	Main Hill Seeps	Oxidation Reduction Potential	7/29/2009	-79.1		mV		
0605	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	10.2		mV		
0605	Main Hill Seeps	pH	2/9/2009	7.48		s.u.		
0605	Main Hill Seeps	pH	5/5/2009	7.58		s.u.		
0605	Main Hill Seeps	pH	7/29/2009	7.24		s.u.		
0605	Main Hill Seeps	pH	10/26/2009	7.14		s.u.		
0605	Main Hill Seeps	Specific Conductance	2/9/2009	2.189		umhos/cm		
0605	Main Hill Seeps	Specific Conductance	5/5/2009	1.932		umhos/cm		
0605	Main Hill Seeps	Specific Conductance	7/29/2009	1915		umhos/cm		
0605	Main Hill Seeps	Specific Conductance	10/26/2009	1690		umhos/cm		
0605	Main Hill Seeps	Temperature	2/9/2009	6.88		C		
0605	Main Hill Seeps	Temperature	5/5/2009	11.83		C		
0605	Main Hill Seeps	Temperature	7/29/2009	16.32		C		
0605	Main Hill Seeps	Temperature	10/26/2009	12.04		C		
0605	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.2	0.2	ug/L	U	
0605	Main Hill Seeps	Tetrachloroethene	5/5/2009	0.226	0.2	ug/L	J	
0605	Main Hill Seeps	Tetrachloroethene	7/29/2009	0.2	0.2	ug/L	U	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0605	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0605	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.223	0.2	ug/L	J	
0605	Main Hill Seeps	trans-1,2-Dichloroethene	5/5/2009	0.34	0.2	ug/L	J	
0605	Main Hill Seeps	trans-1,2-Dichloroethene	7/29/2009	0.432	0.2	ug/L	J	
0605	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0605	Main Hill Seeps	Trichloroethene	2/9/2009	10.5	0.11	ug/L		
0605	Main Hill Seeps	Trichloroethene	5/5/2009	18.3	0.11	ug/L		
0605	Main Hill Seeps	Trichloroethene	7/29/2009	14	0.11	ug/L		
0605	Main Hill Seeps	Trichloroethene	10/26/2009	9.54	0.11	ug/L		
0605	Main Hill Seeps	Tritium	2/9/2009	14800	275	pCi/L		
0605	Main Hill Seeps	Tritium	5/5/2009	18400	329	pCi/L		
0605	Main Hill Seeps	Tritium	7/29/2009	27100	377	pCi/L		
0605	Main Hill Seeps	Tritium	10/26/2009	19300	293	pCi/L		
0605	Main Hill Seeps	Turbidity	2/9/2009	31.5		NTU		
0605	Main Hill Seeps	Turbidity	5/5/2009	95.9		NTU		
0605	Main Hill Seeps	Turbidity	7/29/2009	788		NTU		
0605	Main Hill Seeps	Turbidity	10/26/2009	565		NTU		
0605	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0605	Main Hill Seeps	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0605	Main Hill Seeps	Vinyl chloride	7/29/2009	0.2	0.2	ug/L	U	
0605	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	1.12	0.1	ug/L		
0607	Main Hill Seeps	cis-1,2-Dichloroethene	5/5/2009	2.41	0.1	ug/L		
0607	Main Hill Seeps	cis-1,2-Dichloroethene	7/29/2009	3.37	0.1	ug/L		
0607	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.72	0.1	ug/L	J	
0607	Main Hill Seeps	Dissolved Oxygen	2/9/2009	7.84		mg/L		
0607	Main Hill Seeps	Dissolved Oxygen	5/5/2009	5.92		mg/L		
0607	Main Hill Seeps	Dissolved Oxygen	7/29/2009	8.39		mg/L		
0607	Main Hill Seeps	Dissolved Oxygen	10/26/2009	6.16		mg/L		
0607	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	177.2		mV		
0607	Main Hill Seeps	Oxidation Reduction Potential	5/5/2009	209		mV		
0607	Main Hill Seeps	Oxidation Reduction Potential	7/29/2009	52.8		mV		
0607	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	70.3		mV		
0607	Main Hill Seeps	pH	2/9/2009	7.42		s.u.		
0607	Main Hill Seeps	pH	5/5/2009	7.32		s.u.		
0607	Main Hill Seeps	pH	7/29/2009	7.33		s.u.		
0607	Main Hill Seeps	pH	10/26/2009	7.17		s.u.		
0607	Main Hill Seeps	Specific Conductance	2/9/2009	2.66		umhos/cm		
0607	Main Hill Seeps	Specific Conductance	5/5/2009	1.9		umhos/cm		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0607	Main Hill Seeps	Specific Conductance	7/29/2009	1993		umhos/cm		
0607	Main Hill Seeps	Specific Conductance	10/26/2009	1719		umhos/cm		
0607	Main Hill Seeps	Temperature	2/9/2009	10.93		C		
0607	Main Hill Seeps	Temperature	5/5/2009	11.46		C		
0607	Main Hill Seeps	Temperature	7/29/2009	14.33		C		
0607	Main Hill Seeps	Temperature	10/26/2009	14.26		C		
0607	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	Tetrachloroethene	5/5/2009	0.302	0.2	ug/L	J	
0607	Main Hill Seeps	Tetrachloroethene	7/29/2009	0.221	0.2	ug/L	J	
0607	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	trans-1,2-Dichloroethene	5/5/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	trans-1,2-Dichloroethene	7/29/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	Trichloroethene	2/9/2009	3.67	0.11	ug/L		
0607	Main Hill Seeps	Trichloroethene	5/5/2009	9.43	0.11	ug/L		
0607	Main Hill Seeps	Trichloroethene	7/29/2009	11.5	0.11	ug/L		
0607	Main Hill Seeps	Trichloroethene	10/26/2009	3.63	0.11	ug/L		
0607	Main Hill Seeps	Tritium	2/9/2009	4760	274	pCi/L		
0607	Main Hill Seeps	Tritium	5/5/2009	7660	328	pCi/L		
0607	Main Hill Seeps	Tritium	7/29/2009	10700	369	pCi/L		
0607	Main Hill Seeps	Tritium	10/26/2009	5750	294	pCi/L		
0607	Main Hill Seeps	Turbidity	2/9/2009	10.9		NTU		
0607	Main Hill Seeps	Turbidity	5/5/2009	8.95		NTU		
0607	Main Hill Seeps	Turbidity	7/29/2009	55		NTU		
0607	Main Hill Seeps	Turbidity	10/26/2009	86		NTU		
0607	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	Vinyl chloride	7/29/2009	0.2	0.2	ug/L	U	
0607	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	cis-1,2-Dichloroethene	2/9/2009	0.257	0.1	ug/L	J	
0608	Main Hill Seeps	cis-1,2-Dichloroethene	5/5/2009	0.156	0.1	ug/L	J	
0608	Main Hill Seeps	cis-1,2-Dichloroethene	7/29/2009	0.167	0.1	ug/L	J	
0608	Main Hill Seeps	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0608	Main Hill Seeps	Dissolved Oxygen	2/9/2009	11.7		mg/L		
0608	Main Hill Seeps	Dissolved Oxygen	5/5/2009	8.4		mg/L		
0608	Main Hill Seeps	Dissolved Oxygen	7/29/2009	9.21		mg/L		
0608	Main Hill Seeps	Dissolved Oxygen	10/26/2009	11.05		mg/L		
0608	Main Hill Seeps	Oxidation Reduction Potential	2/9/2009	74.9		mV		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0608	Main Hill Seeps	Oxidation Reduction Potential	5/5/2009	204.7		mV		
0608	Main Hill Seeps	Oxidation Reduction Potential	7/29/2009	79.4		mV		
0608	Main Hill Seeps	Oxidation Reduction Potential	10/26/2009	37.2		mV		
0608	Main Hill Seeps	pH	2/9/2009	7.75		s.u.		
0608	Main Hill Seeps	pH	5/5/2009	7.9		s.u.		
0608	Main Hill Seeps	pH	7/29/2009	7.92		s.u.		
0608	Main Hill Seeps	pH	10/26/2009	7.53		s.u.		
0608	Main Hill Seeps	Specific Conductance	2/9/2009	1.886		umhos/cm		
0608	Main Hill Seeps	Specific Conductance	5/5/2009	1.928		umhos/cm		
0608	Main Hill Seeps	Specific Conductance	7/29/2009	2049		umhos/cm		
0608	Main Hill Seeps	Specific Conductance	10/26/2009	2195		umhos/cm		
0608	Main Hill Seeps	Temperature	2/9/2009	7.65		C		
0608	Main Hill Seeps	Temperature	5/5/2009	13.64		C		
0608	Main Hill Seeps	Temperature	7/29/2009	17.5		C		
0608	Main Hill Seeps	Temperature	10/26/2009	8.95		C		
0608	Main Hill Seeps	Tetrachloroethene	2/9/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	Tetrachloroethene	5/5/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	Tetrachloroethene	7/29/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	trans-1,2-Dichloroethene	2/9/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	trans-1,2-Dichloroethene	5/5/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	trans-1,2-Dichloroethene	7/29/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	Trichloroethene	2/9/2009	1.7	0.11	ug/L		
0608	Main Hill Seeps	Trichloroethene	5/5/2009	1.07	0.11	ug/L		
0608	Main Hill Seeps	Trichloroethene	7/29/2009	1.01	0.11	ug/L		
0608	Main Hill Seeps	Trichloroethene	10/26/2009	0.476	0.11	ug/L	J	
0608	Main Hill Seeps	Tritium	2/9/2009	18300	275	pCi/L		
0608	Main Hill Seeps	Tritium	5/5/2009	15900	327	pCi/L		
0608	Main Hill Seeps	Tritium	7/29/2009	16900	380	pCi/L		
0608	Main Hill Seeps	Tritium	10/26/2009	19500	294	pCi/L		
0608	Main Hill Seeps	Turbidity	2/9/2009	10		NTU		
0608	Main Hill Seeps	Turbidity	5/5/2009	451		NTU		
0608	Main Hill Seeps	Turbidity	7/29/2009	854		NTU		
0608	Main Hill Seeps	Turbidity	10/26/2009	119		NTU		
0608	Main Hill Seeps	Vinyl chloride	2/9/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	Vinyl chloride	7/29/2009	0.2	0.2	ug/L	U	
0608	Main Hill Seeps	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0124	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/11/2009	0.1	0.1	ug/L	U	
0124	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0124	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/27/2009	0.1	0.1	ug/L	U	
0124	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0124	Well 0315-0347 Area	Dissolved Oxygen	2/11/2009	2.3		mg/L		
0124	Well 0315-0347 Area	Dissolved Oxygen	5/11/2009	2.39		mg/L		
0124	Well 0315-0347 Area	Dissolved Oxygen	7/27/2009	3.02		mg/L		
0124	Well 0315-0347 Area	Dissolved Oxygen	10/26/2009	1.07		mg/L		
0124	Well 0315-0347 Area	Oxidation Reduction Potential	2/11/2009	104.1		mV		
0124	Well 0315-0347 Area	Oxidation Reduction Potential	5/11/2009	141.4		mV		
0124	Well 0315-0347 Area	Oxidation Reduction Potential	7/27/2009	80.4		mV		
0124	Well 0315-0347 Area	Oxidation Reduction Potential	10/26/2009	40.8		mV		
0124	Well 0315-0347 Area	pH	2/11/2009	6.97		s.u.		
0124	Well 0315-0347 Area	pH	5/11/2009	6.79		s.u.		
0124	Well 0315-0347 Area	pH	7/27/2009	6.98		s.u.		
0124	Well 0315-0347 Area	pH	10/26/2009	6.87		s.u.		
0124	Well 0315-0347 Area	Specific Conductance	2/11/2009	1348		umhos/cm		
0124	Well 0315-0347 Area	Specific Conductance	5/11/2009	1.395		umhos/cm		
0124	Well 0315-0347 Area	Specific Conductance	7/27/2009	1412		umhos/cm		
0124	Well 0315-0347 Area	Specific Conductance	10/26/2009	1426		umhos/cm		
0124	Well 0315-0347 Area	Temperature	2/11/2009	14.11		C		
0124	Well 0315-0347 Area	Temperature	5/11/2009	13.97		C		
0124	Well 0315-0347 Area	Temperature	7/27/2009	15.28		C		
0124	Well 0315-0347 Area	Temperature	10/26/2009	14.34		C		
0124	Well 0315-0347 Area	Tetrachloroethene	2/11/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	Tetrachloroethene	7/27/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	Tetrachloroethene	10/26/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/11/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	Trichloroethene	2/11/2009	0.11	0.11	ug/L	U	
0124	Well 0315-0347 Area	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	
0124	Well 0315-0347 Area	Trichloroethene	7/27/2009	0.11	0.11	ug/L	U	
0124	Well 0315-0347 Area	Trichloroethene	10/26/2009	0.11	0.11	ug/L	U	
0124	Well 0315-0347 Area	Turbidity	2/11/2009	1		NTU		
0124	Well 0315-0347 Area	Turbidity	5/11/2009	0.33		NTU		
0124	Well 0315-0347 Area	Turbidity	7/27/2009	4.52		NTU		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0124	Well 0315-0347 Area	Turbidity	10/26/2009	12.1		NTU		
0124	Well 0315-0347 Area	Vinyl chloride	2/11/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0124	Well 0315-0347 Area	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/11/2009	0.1	0.1	ug/L	U	
0126	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0126	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/27/2009	0.1	0.1	ug/L	U	
0126	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/26/2009	0.1	0.1	ug/L	U	
0126	Well 0315-0347 Area	Dissolved Oxygen	2/11/2009	0.63		mg/L		
0126	Well 0315-0347 Area	Dissolved Oxygen	5/11/2009	2.57		mg/L		
0126	Well 0315-0347 Area	Dissolved Oxygen	7/27/2009	3.41		mg/L		
0126	Well 0315-0347 Area	Dissolved Oxygen	10/26/2009	1.31		mg/L		
0126	Well 0315-0347 Area	Oxidation Reduction Potential	2/11/2009	67.9		mV		
0126	Well 0315-0347 Area	Oxidation Reduction Potential	5/11/2009	137.4		mV		
0126	Well 0315-0347 Area	Oxidation Reduction Potential	7/27/2009	64.9		mV		
0126	Well 0315-0347 Area	Oxidation Reduction Potential	10/26/2009	54.2		mV		
0126	Well 0315-0347 Area	pH	2/11/2009	6.93		s.u.		
0126	Well 0315-0347 Area	pH	5/11/2009	6.77		s.u.		
0126	Well 0315-0347 Area	pH	7/27/2009	7.04		s.u.		
0126	Well 0315-0347 Area	pH	10/26/2009	6.79		s.u.		
0126	Well 0315-0347 Area	Specific Conductance	2/11/2009	1349		umhos/cm		
0126	Well 0315-0347 Area	Specific Conductance	5/11/2009	1.413		umhos/cm		
0126	Well 0315-0347 Area	Specific Conductance	7/27/2009	1419		umhos/cm		
0126	Well 0315-0347 Area	Specific Conductance	10/26/2009	1484		umhos/cm		
0126	Well 0315-0347 Area	Temperature	2/11/2009	14.23		C		
0126	Well 0315-0347 Area	Temperature	5/11/2009	14.06		C		
0126	Well 0315-0347 Area	Temperature	7/27/2009	15.18		C		
0126	Well 0315-0347 Area	Temperature	10/26/2009	14.8		C		
0126	Well 0315-0347 Area	Tetrachloroethene	2/11/2009	0.936	0.2	ug/L	J	
0126	Well 0315-0347 Area	Tetrachloroethene	5/11/2009	0.925	0.2	ug/L	J	
0126	Well 0315-0347 Area	Tetrachloroethene	7/27/2009	0.953	0.2	ug/L	J	
0126	Well 0315-0347 Area	Tetrachloroethene	10/26/2009	1.09	0.2	ug/L		
0126	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/11/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/27/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/26/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	Trichloroethene	2/11/2009	0.11	0.11	ug/L	U	
0126	Well 0315-0347 Area	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0126	Well 0315-0347 Area	Trichloroethene	7/27/2009	0.11	0.11	ug/L	U	
0126	Well 0315-0347 Area	Trichloroethene	10/26/2009	0.11	0.11	ug/L	U	
0126	Well 0315-0347 Area	Turbidity	2/11/2009	2		NTU		
0126	Well 0315-0347 Area	Turbidity	5/11/2009	2.49		NTU		
0126	Well 0315-0347 Area	Turbidity	7/27/2009	4.69		NTU		
0126	Well 0315-0347 Area	Turbidity	10/26/2009	1.51		NTU		
0126	Well 0315-0347 Area	Vinyl chloride	2/11/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	Vinyl chloride	7/27/2009	0.2	0.2	ug/L	U	
0126	Well 0315-0347 Area	Vinyl chloride	10/26/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/12/2009	0.1	0.1	ug/L	U	
0315	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/5/2009	0.1	0.1	ug/L	U	
0315	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0315	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0315	Well 0315-0347 Area	Dissolved Oxygen	2/12/2009	4.6		mg/L		
0315	Well 0315-0347 Area	Dissolved Oxygen	5/5/2009	2.75		mg/L		
0315	Well 0315-0347 Area	Dissolved Oxygen	7/28/2009	2.16		mg/L		
0315	Well 0315-0347 Area	Dissolved Oxygen	10/27/2009	1.69		mg/L		
0315	Well 0315-0347 Area	Oxidation Reduction Potential	2/12/2009	16.1		mV		
0315	Well 0315-0347 Area	Oxidation Reduction Potential	5/5/2009	-10.9		mV		
0315	Well 0315-0347 Area	Oxidation Reduction Potential	7/28/2009	2.9		mV		
0315	Well 0315-0347 Area	Oxidation Reduction Potential	10/27/2009	-5.9		mV		
0315	Well 0315-0347 Area	pH	2/12/2009	6.97		s.u.		
0315	Well 0315-0347 Area	pH	5/5/2009	7.02		s.u.		
0315	Well 0315-0347 Area	pH	7/28/2009	7.1		s.u.		
0315	Well 0315-0347 Area	pH	10/27/2009	6.96		s.u.		
0315	Well 0315-0347 Area	Specific Conductance	2/12/2009	1617		umhos/cm		
0315	Well 0315-0347 Area	Specific Conductance	5/5/2009	1.652		umhos/cm		
0315	Well 0315-0347 Area	Specific Conductance	7/28/2009	1853		umhos/cm		
0315	Well 0315-0347 Area	Specific Conductance	10/27/2009	1694		umhos/cm		
0315	Well 0315-0347 Area	Temperature	2/12/2009	12.59		C		
0315	Well 0315-0347 Area	Temperature	5/5/2009	14.25		C		
0315	Well 0315-0347 Area	Temperature	7/28/2009	14.66		C		
0315	Well 0315-0347 Area	Temperature	10/27/2009	13.38		C		
0315	Well 0315-0347 Area	Tetrachloroethene	2/12/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	Tetrachloroethene	5/5/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	Tetrachloroethene	7/28/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	Tetrachloroethene	10/27/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/12/2009	0.2	0.2	ug/L	U	

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0315	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/5/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	Trichloroethene	2/12/2009	11.7	0.11	ug/L		
0315	Well 0315-0347 Area	Trichloroethene	5/5/2009	12.5	0.11	ug/L		
0315	Well 0315-0347 Area	Trichloroethene	7/28/2009	11.8	0.11	ug/L		
0315	Well 0315-0347 Area	Trichloroethene	10/27/2009	14.1	0.11	ug/L		
0315	Well 0315-0347 Area	Turbidity	2/12/2009	193		NTU		
0315	Well 0315-0347 Area	Turbidity	5/5/2009	213		NTU		
0315	Well 0315-0347 Area	Turbidity	7/28/2009	476		NTU		
0315	Well 0315-0347 Area	Turbidity	10/27/2009	137		NTU		
0315	Well 0315-0347 Area	Vinyl chloride	2/12/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0315	Well 0315-0347 Area	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/12/2009	0.1	0.1	ug/L	U	
0347	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/5/2009	0.1	0.1	ug/L	U	
0347	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0347	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0347	Well 0315-0347 Area	Dissolved Oxygen	2/12/2009	1.29		mg/L		
0347	Well 0315-0347 Area	Dissolved Oxygen	5/5/2009	1.65		mg/L		
0347	Well 0315-0347 Area	Dissolved Oxygen	7/28/2009	0.58		mg/L		
0347	Well 0315-0347 Area	Dissolved Oxygen	10/27/2009	0.82		mg/L		
0347	Well 0315-0347 Area	Oxidation Reduction Potential	2/12/2009	26.4		mV		
0347	Well 0315-0347 Area	Oxidation Reduction Potential	5/5/2009	44.3		mV		
0347	Well 0315-0347 Area	Oxidation Reduction Potential	7/28/2009	34.8		mV		
0347	Well 0315-0347 Area	Oxidation Reduction Potential	10/27/2009	6.4		mV		
0347	Well 0315-0347 Area	pH	2/12/2009	7.02		s.u.		
0347	Well 0315-0347 Area	pH	5/5/2009	6.77		s.u.		
0347	Well 0315-0347 Area	pH	7/28/2009	6.97		s.u.		
0347	Well 0315-0347 Area	pH	10/27/2009	6.92		s.u.		
0347	Well 0315-0347 Area	Specific Conductance	2/12/2009	1766		umhos/cm		
0347	Well 0315-0347 Area	Specific Conductance	5/5/2009	1.792		umhos/cm		
0347	Well 0315-0347 Area	Specific Conductance	7/28/2009	1720		umhos/cm		
0347	Well 0315-0347 Area	Specific Conductance	10/27/2009	1731		umhos/cm		
0347	Well 0315-0347 Area	Temperature	2/12/2009	13.01		C		
0347	Well 0315-0347 Area	Temperature	5/5/2009	14.32		C		
0347	Well 0315-0347 Area	Temperature	7/28/2009	14.97		C		
0347	Well 0315-0347 Area	Temperature	10/27/2009	13.79		C		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0347	Well 0315-0347 Area	Tetrachloroethene	2/12/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	Tetrachloroethene	5/5/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	Tetrachloroethene	7/28/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	Tetrachloroethene	10/27/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/12/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/5/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	Trichloroethene	2/12/2009	26.1	0.11	ug/L		
0347	Well 0315-0347 Area	Trichloroethene	5/5/2009	27.3	0.11	ug/L		J
0347	Well 0315-0347 Area	Trichloroethene	7/28/2009	23.3	0.11	ug/L		
0347	Well 0315-0347 Area	Trichloroethene	10/27/2009	29.2	0.11	ug/L		
0347	Well 0315-0347 Area	Tritium	2/12/2009	6570	274	pCi/L		
0347	Well 0315-0347 Area	Tritium	5/5/2009	6860	328	pCi/L		
0347	Well 0315-0347 Area	Tritium	7/28/2009	4590	339	pCi/L		
0347	Well 0315-0347 Area	Tritium	10/27/2009	6540	294	pCi/L		
0347	Well 0315-0347 Area	Turbidity	2/12/2009	34		NTU		
0347	Well 0315-0347 Area	Turbidity	5/5/2009	32.5		NTU		
0347	Well 0315-0347 Area	Turbidity	7/28/2009	33.5		NTU		
0347	Well 0315-0347 Area	Turbidity	10/27/2009	45.9		NTU		
0347	Well 0315-0347 Area	Vinyl chloride	2/12/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	Vinyl chloride	5/5/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0347	Well 0315-0347 Area	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/11/2009	0.1	0.1	ug/L	U	
0386	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0386	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0386	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0386	Well 0315-0347 Area	Dissolved Oxygen	2/11/2009	2.94		mg/L		
0386	Well 0315-0347 Area	Dissolved Oxygen	5/11/2009	3.3		mg/L		
0386	Well 0315-0347 Area	Dissolved Oxygen	7/28/2009	3.27		mg/L		
0386	Well 0315-0347 Area	Dissolved Oxygen	10/27/2009	3.8		mg/L		
0386	Well 0315-0347 Area	Oxidation Reduction Potential	2/11/2009	66.4		mV		
0386	Well 0315-0347 Area	Oxidation Reduction Potential	5/11/2009	5.3		mV		
0386	Well 0315-0347 Area	Oxidation Reduction Potential	7/28/2009	55.1		mV		
0386	Well 0315-0347 Area	Oxidation Reduction Potential	10/27/2009	50.4		mV		
0386	Well 0315-0347 Area	pH	2/11/2009	7.08		s.u.		
0386	Well 0315-0347 Area	pH	5/11/2009	6.73		s.u.		
0386	Well 0315-0347 Area	pH	7/28/2009	7.07		s.u.		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0386	Well 0315-0347 Area	pH	10/27/2009	6.88		s.u.		
0386	Well 0315-0347 Area	Specific Conductance	2/11/2009	851		umhos/cm		
0386	Well 0315-0347 Area	Specific Conductance	5/11/2009	1.052		umhos/cm		
0386	Well 0315-0347 Area	Specific Conductance	7/28/2009	1112		umhos/cm		
0386	Well 0315-0347 Area	Specific Conductance	10/27/2009	1031		umhos/cm		
0386	Well 0315-0347 Area	Temperature	2/11/2009	11.86		C		
0386	Well 0315-0347 Area	Temperature	5/11/2009	13.24		C		
0386	Well 0315-0347 Area	Temperature	7/28/2009	14.02		C		
0386	Well 0315-0347 Area	Temperature	10/27/2009	12.69		C		
0386	Well 0315-0347 Area	Tetrachloroethene	2/11/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	Tetrachloroethene	7/28/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	Tetrachloroethene	10/27/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/11/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	Trichloroethene	2/11/2009	0.11	0.11	ug/L	U	
0386	Well 0315-0347 Area	Trichloroethene	5/11/2009	1.28	0.11	ug/L		
0386	Well 0315-0347 Area	Trichloroethene	7/28/2009	2.45	0.11	ug/L		
0386	Well 0315-0347 Area	Trichloroethene	10/27/2009	3.11	0.11	ug/L		
0386	Well 0315-0347 Area	Turbidity	2/11/2009	42		NTU		
0386	Well 0315-0347 Area	Turbidity	5/11/2009	52.6		NTU		
0386	Well 0315-0347 Area	Turbidity	7/28/2009	99		NTU		
0386	Well 0315-0347 Area	Turbidity	10/27/2009	145		NTU		
0386	Well 0315-0347 Area	Vinyl chloride	2/11/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0386	Well 0315-0347 Area	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/11/2009	0.1	0.1	ug/L	U	
0387	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0387	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0387	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0387	Well 0315-0347 Area	Dissolved Oxygen	2/11/2009	1.53		mg/L		
0387	Well 0315-0347 Area	Dissolved Oxygen	5/11/2009	2.43		mg/L		
0387	Well 0315-0347 Area	Dissolved Oxygen	7/28/2009	5.42		mg/L		
0387	Well 0315-0347 Area	Dissolved Oxygen	10/27/2009	2.55		mg/L		
0387	Well 0315-0347 Area	Oxidation Reduction Potential	2/11/2009	-16.9		mV		
0387	Well 0315-0347 Area	Oxidation Reduction Potential	5/11/2009	-22.7		mV		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0387	Well 0315-0347 Area	Oxidation Reduction Potential	7/28/2009	21		mV		
0387	Well 0315-0347 Area	Oxidation Reduction Potential	10/27/2009	-18.1		mV		
0387	Well 0315-0347 Area	pH	2/11/2009	6.84		s.u.		
0387	Well 0315-0347 Area	pH	5/11/2009	6.95		s.u.		
0387	Well 0315-0347 Area	pH	7/28/2009	6.88		s.u.		
0387	Well 0315-0347 Area	pH	10/27/2009	6.65		s.u.		
0387	Well 0315-0347 Area	Specific Conductance	2/11/2009	1605		umhos/cm		
0387	Well 0315-0347 Area	Specific Conductance	5/11/2009	1.586		umhos/cm		
0387	Well 0315-0347 Area	Specific Conductance	7/28/2009	1579		umhos/cm		
0387	Well 0315-0347 Area	Specific Conductance	10/27/2009	1611		umhos/cm		
0387	Well 0315-0347 Area	Temperature	2/11/2009	12.93		C		
0387	Well 0315-0347 Area	Temperature	5/11/2009	14.03		C		
0387	Well 0315-0347 Area	Temperature	7/28/2009	14.22		C		
0387	Well 0315-0347 Area	Temperature	10/27/2009	13.19		C		
0387	Well 0315-0347 Area	Tetrachloroethene	2/11/2009	0.21	0.2	ug/L	J	
0387	Well 0315-0347 Area	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	Tetrachloroethene	7/28/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	Tetrachloroethene	10/27/2009	0.243	0.2	ug/L	J	
0387	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/11/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	Trichloroethene	2/11/2009	0.12	0.11	ug/L	J	
0387	Well 0315-0347 Area	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	
0387	Well 0315-0347 Area	Trichloroethene	7/28/2009	0.11	0.11	ug/L	U	
0387	Well 0315-0347 Area	Trichloroethene	10/27/2009	0.175	0.11	ug/L	J	
0387	Well 0315-0347 Area	Turbidity	2/11/2009	12		NTU		
0387	Well 0315-0347 Area	Turbidity	5/11/2009	13.5		NTU		
0387	Well 0315-0347 Area	Turbidity	7/28/2009	10.4		NTU		
0387	Well 0315-0347 Area	Turbidity	10/27/2009	21.3		NTU		
0387	Well 0315-0347 Area	Vinyl chloride	2/11/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0387	Well 0315-0347 Area	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/11/2009	0.1	0.1	ug/L	U	
0389	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0389	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0389	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0389	Well 0315-0347 Area	Dissolved Oxygen	2/11/2009	4.02		mg/L		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0389	Well 0315-0347 Area	Dissolved Oxygen	5/11/2009	5.91		mg/L		
0389	Well 0315-0347 Area	Dissolved Oxygen	7/28/2009	4.83		mg/L		
0389	Well 0315-0347 Area	Dissolved Oxygen	10/27/2009	5.27		mg/L		
0389	Well 0315-0347 Area	Oxidation Reduction Potential	2/11/2009	58.6		mV		
0389	Well 0315-0347 Area	Oxidation Reduction Potential	5/11/2009	0.6		mV		
0389	Well 0315-0347 Area	Oxidation Reduction Potential	7/28/2009	38.7		mV		
0389	Well 0315-0347 Area	Oxidation Reduction Potential	10/27/2009	44.5		mV		
0389	Well 0315-0347 Area	pH	2/11/2009	6.89		s.u.		
0389	Well 0315-0347 Area	pH	5/11/2009	7.01		s.u.		
0389	Well 0315-0347 Area	pH	7/28/2009	6.98		s.u.		
0389	Well 0315-0347 Area	pH	10/27/2009	6.84		s.u.		
0389	Well 0315-0347 Area	Specific Conductance	2/11/2009	1128		umhos/cm		
0389	Well 0315-0347 Area	Specific Conductance	5/11/2009	1.507		umhos/cm		
0389	Well 0315-0347 Area	Specific Conductance	7/28/2009	1204		umhos/cm		
0389	Well 0315-0347 Area	Specific Conductance	10/27/2009	1102		umhos/cm		
0389	Well 0315-0347 Area	Temperature	2/11/2009	12.16		C		
0389	Well 0315-0347 Area	Temperature	5/11/2009	13.62		C		
0389	Well 0315-0347 Area	Temperature	7/28/2009	13.96		C		
0389	Well 0315-0347 Area	Temperature	10/27/2009	12.33		C		
0389	Well 0315-0347 Area	Tetrachloroethene	2/11/2009	0.436	0.2	ug/L	J	
0389	Well 0315-0347 Area	Tetrachloroethene	5/11/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	Tetrachloroethene	7/28/2009	0.318	0.2	ug/L	J	
0389	Well 0315-0347 Area	Tetrachloroethene	10/27/2009	0.265	0.2	ug/L	J	
0389	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/11/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	Trichloroethene	2/11/2009	1.07	0.11	ug/L		
0389	Well 0315-0347 Area	Trichloroethene	5/11/2009	0.256	0.11	ug/L	J	
0389	Well 0315-0347 Area	Trichloroethene	7/28/2009	0.894	0.11	ug/L	J	
0389	Well 0315-0347 Area	Trichloroethene	10/27/2009	0.887	0.11	ug/L	J	
0389	Well 0315-0347 Area	Turbidity	2/11/2009	17		NTU		
0389	Well 0315-0347 Area	Turbidity	5/11/2009	46.6		NTU		
0389	Well 0315-0347 Area	Turbidity	7/28/2009	134		NTU		
0389	Well 0315-0347 Area	Turbidity	10/27/2009	27.7		NTU		
0389	Well 0315-0347 Area	Vinyl chloride	2/11/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0389	Well 0315-0347 Area	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0392	Well 0315-0347 Area	cis-1,2-Dichloroethene	2/12/2009	0.1	0.1	ug/L	U	
0392	Well 0315-0347 Area	cis-1,2-Dichloroethene	5/11/2009	0.1	0.1	ug/L	U	
0392	Well 0315-0347 Area	cis-1,2-Dichloroethene	7/28/2009	0.1	0.1	ug/L	U	
0392	Well 0315-0347 Area	cis-1,2-Dichloroethene	10/27/2009	0.1	0.1	ug/L	U	
0392	Well 0315-0347 Area	Dissolved Oxygen	2/12/2009	3.84		mg/L		
0392	Well 0315-0347 Area	Dissolved Oxygen	5/11/2009	5.75		mg/L		
0392	Well 0315-0347 Area	Dissolved Oxygen	7/28/2009	4.06		mg/L		
0392	Well 0315-0347 Area	Dissolved Oxygen	10/27/2009	4.75		mg/L		
0392	Well 0315-0347 Area	Oxidation Reduction Potential	2/12/2009	52.6		mV		
0392	Well 0315-0347 Area	Oxidation Reduction Potential	5/11/2009	65.3		mV		
0392	Well 0315-0347 Area	Oxidation Reduction Potential	7/28/2009	56.4		mV		
0392	Well 0315-0347 Area	Oxidation Reduction Potential	10/27/2009	152.7		mV		
0392	Well 0315-0347 Area	pH	2/12/2009	7		s.u.		
0392	Well 0315-0347 Area	pH	5/11/2009	7.19		s.u.		
0392	Well 0315-0347 Area	pH	7/28/2009	6.96		s.u.		
0392	Well 0315-0347 Area	pH	10/27/2009	6.71		s.u.		
0392	Well 0315-0347 Area	Specific Conductance	2/12/2009	1061		umhos/cm		
0392	Well 0315-0347 Area	Specific Conductance	5/11/2009	1.193		umhos/cm		
0392	Well 0315-0347 Area	Specific Conductance	7/28/2009	1194		umhos/cm		
0392	Well 0315-0347 Area	Specific Conductance	10/27/2009	1155		umhos/cm		
0392	Well 0315-0347 Area	Temperature	2/12/2009	12.52		C		
0392	Well 0315-0347 Area	Temperature	5/11/2009	14.07		C		
0392	Well 0315-0347 Area	Temperature	7/28/2009	14.44		C		
0392	Well 0315-0347 Area	Temperature	10/27/2009	12.92		C		
0392	Well 0315-0347 Area	Tetrachloroethene	2/12/2009	0.383	0.2	ug/L	J	
0392	Well 0315-0347 Area	Tetrachloroethene	5/11/2009	0.342	0.2	ug/L	J	J
0392	Well 0315-0347 Area	Tetrachloroethene	7/28/2009	0.317	0.2	ug/L	J	
0392	Well 0315-0347 Area	Tetrachloroethene	10/27/2009	0.266	0.2	ug/L	J	
0392	Well 0315-0347 Area	trans-1,2-Dichloroethene	2/12/2009	0.2	0.2	ug/L	U	
0392	Well 0315-0347 Area	trans-1,2-Dichloroethene	5/11/2009	0.2	0.2	ug/L	U	
0392	Well 0315-0347 Area	trans-1,2-Dichloroethene	7/28/2009	0.2	0.2	ug/L	U	
0392	Well 0315-0347 Area	trans-1,2-Dichloroethene	10/27/2009	0.2	0.2	ug/L	U	
0392	Well 0315-0347 Area	Trichloroethene	2/12/2009	0.121	0.11	ug/L	J	
0392	Well 0315-0347 Area	Trichloroethene	5/11/2009	0.11	0.11	ug/L	U	
0392	Well 0315-0347 Area	Trichloroethene	7/28/2009	0.11	0.11	ug/L	U	
0392	Well 0315-0347 Area	Trichloroethene	10/27/2009	0.135	0.11	ug/L	J	
0392	Well 0315-0347 Area	Turbidity	2/12/2009	3		NTU		
0392	Well 0315-0347 Area	Turbidity	5/11/2009	3.05		NTU		
0392	Well 0315-0347 Area	Turbidity	7/28/2009	0.33		NTU		

Location	Program	Analyte	Sample Date	Result	DL	Units	Lab Qualifier	Validation Qualifier
0392	Well 0315-0347 Area	Turbidity	10/27/2009	1.29		NTU		
0392	Well 0315-0347 Area	Vinyl chloride	2/12/2009	0.2	0.2	ug/L	U	
0392	Well 0315-0347 Area	Vinyl chloride	5/11/2009	0.2	0.2	ug/L	U	
0392	Well 0315-0347 Area	Vinyl chloride	7/28/2009	0.2	0.2	ug/L	U	
0392	Well 0315-0347 Area	Vinyl chloride	10/27/2009	0.2	0.2	ug/L	U	

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
C	Pesticide result confirmed by GC-MS.
D	Analyte determined in diluted sample.
E	Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H	Holding time expired, value suspect.
I	Increased detection limit due to required dilution.
J	Estimated
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
P	> 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X,Y,Z	Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

F	Low flow sampling method used.	G Possible grout contamination, pH > 9. J Estimated value.
L	Less than 3 bore volumes purged prior to sampling.	Q Qualitative result due to sampling technique. R Unusable result.
U	Parameter analyzed for but was not detected.	X Location is undefined.