

Data Validation Package

October 2015
Groundwater and Surface Water
Sampling at the
Monticello, Utah, Processing Site

January 2016



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

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Attachment 2—Data Presentation

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Sampling Event Summary

Site: Monticello, Utah, Processing Site

Sampling Period: October 12–14, 2015

This semiannual event includes sampling groundwater and surface water at the Monticello Mill Tailings Site. Sampling and analyses were conducted as specified in the 2004 *Monticello Mill Tailings Site Operable Unit III Post-Record of Decision Monitoring Plan*, Draft Final and *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites* (LMS/PRO/S04351, continually updated).

Samples were collected from 52 of 61 planned locations (15 of 17 former mill site wells, 17 of 18 downgradient wells, 9 of 9 downgradient permeable reactive barrier wells, 2 of 7 seeps and wetlands, and 9 of 10 surface water locations). Locations MW00-07, Seep 1, Seep 2, Seep 3, Seep 5, Seep 6, SW00-01, T01-13, and T01-19 were not sampled because of insufficient water availability. All samples were filtered as specified in the monitoring plan. Duplicate samples were collected from surface water location W3-04 and from monitoring wells 82-08, 92-09, and 92-10. Water levels were measured at all but one sampled well and an additional set of wells.

The contaminants of concern (COCs) for the Monticello Mill Tailings Site are arsenic, manganese, molybdenum, nitrate + nitrite as nitrogen (nitrate + nitrite as N), selenium, uranium, and vanadium. Time-concentration graphs of the COCs for all groundwater and surface water locations are included in this report. Locations with COCs that exceeded remediation goals are listed in Table 1 and Table 2.

Table 1. Monticello Groundwater Locations that Exceed Remediation Goal

Contaminant of Concern	Remediation Goal ^a (mg/L)	Location	Concentration (mg/L)
Arsenic	0.01	92-07	0.011
Arsenic	0.01	88-85	0.014
Arsenic	0.01	R1-M3	0.014
Arsenic	0.01	T01-05	0.014
Arsenic	0.01	T01-04	0.015
Arsenic	0.01	92-11	0.016
Arsenic	0.01	T01-02	0.020
Manganese	0.88	R6-M3	1.3
Manganese	0.88	T01-25	2.2
Manganese	0.88	T01-18	3.2
Manganese	0.88	T01-20	3.7
Molybdenum	0.1	R3-M2	0.12
Nitrate + Nitrite as N	10	None	-----
Selenium	0.05	None	-----
Uranium	0.03	T01-23	0.042

Table 1 (continued). Monticello Groundwater Locations that Exceed Remediation Goal

Contaminant of Concern	Remediation Goal ^a (mg/L)	Location	Concentration (mg/L)
Uranium	0.03	R6-M3	0.043
Uranium	0.03	T00-01	0.043
Uranium	0.03	T01-01	0.045
Uranium	0.03	T00-04	0.085
Uranium	0.03	T01-35	0.09
Uranium	0.03	T01-02	0.12
Uranium	0.03	T01-05	0.12
Uranium	0.03	T01-04	0.13
Uranium	0.03	T01-07	0.13
Uranium	0.03	T01-12	0.14
Uranium	0.03	92-11	0.15
Uranium	0.03	82-08	0.17
Uranium	0.03	PW-28	0.17
Uranium	0.03	0202	0.19
Uranium	0.03	88-85	0.19
Uranium	0.03	0200	0.21
Uranium	0.03	92-08	0.21
Uranium	0.03	T01-20	0.22
Uranium	0.03	R3-M3	0.24
Uranium	0.03	R1-M3	0.31
Uranium	0.03	R1-M4	0.34
Uranium	0.03	R3-M2	0.36
Uranium	0.03	92-09	0.37
Uranium	0.03	MW00-06	0.4
Uranium	0.03	T01-18	0.41
Uranium	0.03	P92-06	0.43
Uranium	0.03	92-07	0.47
Uranium	0.03	PW-10	0.56
Uranium	0.03	PW-17	0.68
Vanadium	0.33	92-07	0.35
Vanadium	0.33	T01-04	0.37
Vanadium	0.33	88-85	0.39
Vanadium	0.33	R1-M3	0.4
Vanadium	0.33	92-11	0.41
Vanadium	0.33	T01-02	0.43

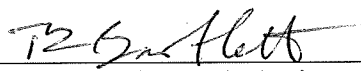
^a Remediation Goal is from Table 1-2 of the *Long-Term Surveillance and Maintenance Plan for the Monticello NPL Sites*, DOE-LM/1465-2007. Concentrations are expressed in milligrams per liter (mg/L).

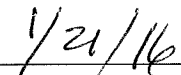
Table 2. Monticello Surface Water Locations that Exceed Remediation Goal

Contaminant of Concern	Remediation Goal ^a (mg/L)	Location	Concentration (mg/L)
Arsenic	0.01	None	-----
Nitrate + Nitrite as N	4	None	-----
Selenium	0.005	Sorenson	0.0052
Uranium	0.044 ^b	SW94-01	0.094
Uranium	0.044 ^b	SW92-08	0.096
Uranium	0.044 ^b	SW00-04	0.1
Uranium	0.044 ^b	SW92-09	0.1
Uranium	0.044 ^b	Sorenson	0.12

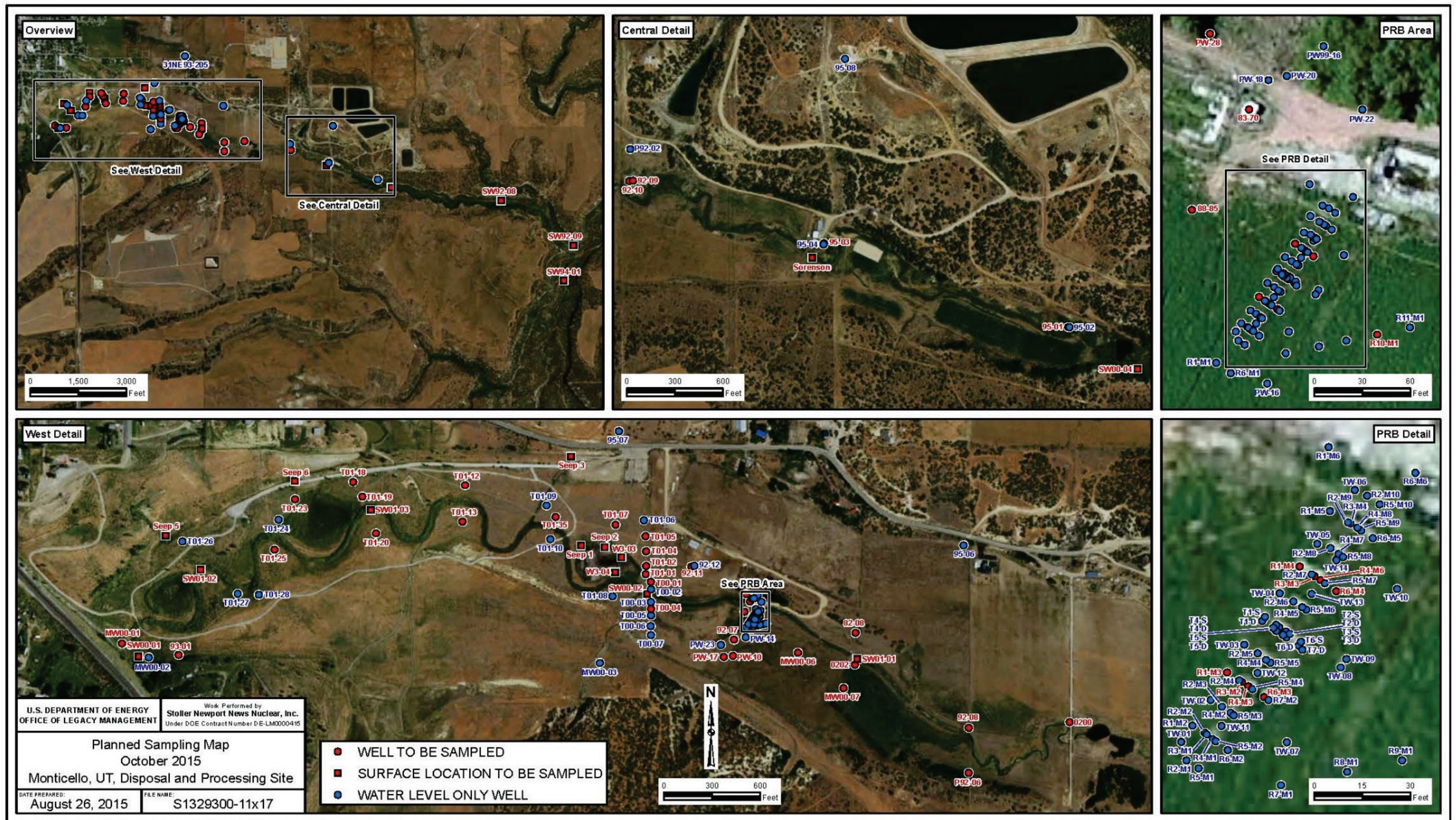
^a Remediation Goal is from Table 1-3 of the *Long-Term Surveillance and Maintenance Plan for the Monticello NPL Sites*, DOE-LM/1465-2007. Concentrations are expressed in milligrams per liter (mg/L).

^b The 30 pCi/L surface water standard for uranium-234/238 converts to approximately 0.044 mg/L uranium.


 Tim Bartlett, Site Hydrologist
 Navarro Research and Engineering, Inc.


 Date

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Monticello, Utah, Processing Site Sample Location Map

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Data Assessment Summary

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Water Sampling Field Activities Verification Checklist

Project	Monticello, Utah, Processing Site	Date(s) of Water Sampling	October 12–14, 2015
Date(s) of Verification	December 23, 2015	Name of Verifier	Samantha Tigar

	Response (Yes, No, NA)	Comments
1. Is the SAP the primary document directing field procedures?	No	<i>Monticello Mill Tailings Site Operable Unit III Post-Record of Decision Monitoring Plan.</i> Work Order letter dated September 3, 2015.
List any Program Directives or other documents, SOPs, instructions.		With the exception of 5 seeps, 3 wells, and one surface water location that were dry.
2. Were the sampling locations specified in the planning documents sampled?	Yes	
3. Were calibrations conducted as specified in the above-named documents?	Yes	Pre-trip calibrations were performed on October 9, 2015.
4. Was an operational check of the field equipment conducted twice daily?	No	Not all field equipment was checked at the required frequency. However, the daily and post-trip checks were within limits, indicating that the instruments were acceptable during sampling.
Did the operational checks meet criteria?	Yes	Dissolved oxygen was calibrated daily on a YSI. Specific conductivity was incorrectly marked on a post-trip check as having been recalibrated.
5. Were the number and types (alkalinity, temperature, specific conductance, pH, turbidity, DO, ORP) of field measurements taken as specified?	No	Insufficient volume was available for some or all field parameters at T01-18 and T01-20. Phenolphthalein alkalinity was not recorded at R4-M6, SW92-09, and SW94-01.
6. Were wells categorized correctly?	No	MW00-07, PW-17, and 0202 should have been labeled as Category II wells. PRB wells do not follow low-flow purging and are exempt from categorizing.
7. Were the following conditions met when purging a Category I well:		
Was one pump/tubing volume purged prior to sampling?	Yes	
Did the water level stabilize prior to sampling?	Yes	
Did pH, specific conductance, and turbidity measurements meet criteria prior to sampling?	No	The specific conductivity stability requirement was not met at 0200, 82-08, and 92-08. Associated data are qualified as “J” (estimated).
Was the flow rate less than 500 mL/min?	Yes	

Water Sampling Field Activities Verification Checklist (continued)

	Response (Yes, No, NA)	Comments
8. Were the following conditions met when purging a Category II well:		
Was the flow rate less than 500 mL/min?	Yes	
Was one pump/tubing volume removed prior to sampling?	Yes	One pump/tubing volume was not recorded at well PW-10 or PW-17; however, the total volume purged before sampling was sufficient.
9. Were duplicates taken at a frequency of one per 20 samples?	Yes	Duplicate samples were collected from surface water location W3-04 and from monitoring wells 82-08, 92-09, and 92-10.
10. Were equipment blanks taken at a frequency of one per 20 samples that were collected with non-dedicated equipment?	Yes	One equipment blank was collected.
11. Were trip blanks prepared and included with each shipment of VOC samples?	NA	
12. Were the true identities of the QC samples documented?	Yes	QC samples are recorded in the field notes and trip report.
13. Were samples collected in the containers specified?	Yes	
14. Were samples filtered and preserved as specified?	Yes	All samples were filtered as specified in the program directive.
15. Were the number and types of samples collected as specified?	No	At locations T01-18 and T01-20, the wells purged dry before all sample bottles could be collected; metals were collected. An extra sample container was collected at location 92-07.
16. Were chain of custody records completed and was sample custody maintained?	Yes	
17. Was all pertinent information documented on the field data sheets?	Yes	
18. Was the presence or absence of ice in the cooler documented at every sample location?	Yes	The presence of ice was unintentionally not documented at locations SW92-08 and T01-20.
19. Were water levels measured at the locations specified in the planning documents?	Yes	With the exception of well 83-70 which is an irrigation pump with power lines inside, making it impossible to get a water level.

Laboratory Performance Assessment

General Information

Report Number (RIN): 15107423
Sample Event: October 12–14, 2015
Site(s): Monticello, Utah, Processing Site
Laboratory: ALS Laboratory Group, Fort Collins, Colorado
Work Order No.: 1510325
Analysis: Metals and Wet Chemistry
Validator: Samantha Tigar
Review Date: December 28, 2015

This validation was performed according to the *Environmental Procedures Catalog* (LMS/POL/S04325, continually updated), “Standard Practice for Validation of Environmental Data.” The procedure was applied at Level 3, Data Validation. See attached Data Validation Worksheets for supporting documentation on the data review and validation. All analyses were successfully completed. The samples were prepared and analyzed using accepted procedures based on methods specified by line item code, which are listed in Table 3.

Table 3. Analytes and Methods

Analyte	Line Item Code	Prep Method	Analytical Method
Arsenic, Molybdenum, Selenium, Uranium, Vanadium	LMM-02	SW-846 3005A	SW-846 6020A
Calcium, Iron, Magnesium, Manganese, Potassium, Sodium	LMM-01	SW-846 3005A	SW-846 6010B
Chloride, Fluoride, Sulfate	MIS-A-045	SW-846 9056	SW-846 9056
Nitrate + Nitrite as N	WCH-A-022	EPA 353.2 R2.0	EPA 353.2 R2.0
Total Dissolved Solids (TDS)	WCH-A-033	EPA 160.1	EPA 160.1

Data Qualifier Summary

Analytical results were qualified as listed in Table 4. Refer to the sections below for an explanation of the data qualifiers applied.

Table 4. Data Qualifier Summary

Sample Number	Location	Analyte(s)	Flag	Reason
1510325-1	0200	Arsenic	J	CRI recovery >130%
1510325-2	0202	Arsenic	J	CRI recovery >130%
1510325-3	92-09 duplicate	Arsenic	J	CRI recovery >130%
1510325-4	82-08 duplicate	Arsenic	U	Less than 5 times CCB
1510325-5	92-10 duplicate	Arsenic	U	Less than 5 times CCB
1510325-7	W3-04 duplicate	Arsenic	J	CRI recovery >130%
1510325-8	82-08	Arsenic	U	Less than 5 times CCB

Table 4 (continued). Data Qualifier Summary

Sample Number	Location	Analyte(s)	Flag	Reason
1510325-9	83-70	Arsenic	U	Less than 5 times CCB
1510325-12	92-08	Arsenic	U	Less than 5 times CCB
1510325-13	92-09	Arsenic	J	CRI recovery >130%
1510325-16	93-01	Arsenic	U	Less than 5 times CCB
1510325-17	95-01	Arsenic	J	CRI recovery >130%
1510325-18	95-03	Arsenic	J	CRI recovery >130%
1510325-19	MW00-01	Arsenic	J	CRI recovery >130%
1510325-21	P92-06	Arsenic	U	Less than 5 times method blank
1510325-24	PW-28	Arsenic	J	CRI recovery >130%
1510325-25	R10-M1	Arsenic	J	CRI recovery >130%
1510325-28	R3-M2	Arsenic	U	Less than 5 times method blank
1510325-29	R3-M3	Arsenic	U	Less than 5 times method blank
1510325-30	R4-M3	Arsenic	U	Less than 5 times method blank
1510325-31	R4-M6	Arsenic	U	Less than 5 times method blank
1510325-33	R6-M4	Arsenic	U	Less than 5 times method blank
1510325-34	Sorenson	Arsenic	J	CRI recovery >130%
1510325-35	SW00-02	Arsenic	J	CRI recovery >130%
1510325-36	SW00-04	Arsenic	J	CRI recovery >130%
1510325-37	SW01-01	Arsenic	U	Less than 5 times method blank
1510325-38	SW01-02	Arsenic	U	Less than 5 times method blank
1510325-39	SW01-03	Arsenic	U	Less than 5 times method blank
1510325-40	SW92-08	Arsenic	J	CRI recovery >130%
1510325-41	SW92-09	Arsenic	J	CRI recovery >130%
1510325-42	SW94-01	Arsenic	J	CRI recovery >130%
1510325-51	T01-18	Arsenic	J	CRI recovery >130%
1510325-52	T01-20	Arsenic	J	CRI recovery >130%
1510325-56	W3-03	Arsenic	J	CRI recovery >130%
1510325-57	W3-04	Arsenic	J	CRI recovery >130%
1510325-6	Equipment blank	Calcium	J	[Negative CCB] greater than the MDL
1510325-1	0200	Iron	U	Less than 5 times the method blank
1510325-4	82-08 duplicate	Iron	U	Less than 5 times the method blank
1510325-6	Equipment blank	Iron	U	Less than 5 times the method blank
1510325-11	92-07	Iron	U	Less than 5 times the method blank
1510325-12	92-08	Iron	U	Less than 5 times the method blank
1510325-15	92-11	Iron	U	Less than 5 times the method blank
1510325-19	MW00-01	Iron	U	Less than 5 times the method blank
1510325-20	MW00-06	Iron	U	Less than 5 times the method blank
1510325-24	PW-28	Iron	U	Less than 5 times the method blank
1510325-25	R10-M1	Iron	U	Less than 5 times CCB
1510325-26	R1-M3	Iron	U	Less than 5 times the method blank
1510325-27	R1-M4	Iron	U	Less than 5 times the method blank
1510325-30	R4-M3	Iron	U	Less than 5 times the method blank

Table 4 (continued). Data Qualifier Summary

Sample Number	Location	Analyte(s)	Flag	Reason
1510325-31	R4-M6	Iron	U	Less than 5 times the method blank
1510325-33	R6-M4	Iron	U	Less than 5 times the method blank
1510325-34	Sorenson	Iron	J	Less than 5 times the equipment blank
1510325-39	SW01-03	Iron	U	Less than 5 times the method blank
1510325-41	SW92-09	Iron	U	Less than 5 times the method blank
1510325-42	SW94-01	Iron	U	Less than 5 times the method blank
1510325-43	T00-01	Iron	U	Less than 5 times the method blank
1510325-44	T00-04	Iron	U	Less than 5 times the method blank
1510325-45	T01-01	Iron	U	Less than 5 times the method blank
1510325-46	T01-02	Iron	U	Less than 5 times the method blank
1510325-47	T01-04	Iron	U	Less than 5 times the method blank
1510325-48	T01-05	Iron	U	Less than 5 times the method blank
1510325-49	T01-07	Iron	U	Less than 5 times the method blank
1510325-50	T01-12	Iron	U	Less than 5 times the method blank
1510325-55	T01-35	Iron	U	Less than 5 times the method blank
1510325-56	W3-03	Iron	U	Less than 5 times the method blank
1510325-57	W3-04	Iron	U	Less than 5 times the method blank
1510325-6	Equipment blank	Magnesium	J	CRI recovery <70%
1510325-4	82-08 duplicate	Manganese	J	Field duplicate range > PQL
1510325-6	Equipment blank	Manganese	U	Less than 5 times the method blank
1510325-8	82-08	Manganese	J	Field duplicate range > PQL
1510325-10	88-85	Manganese	U	Less than 5 times the method blank
1510325-11	92-07	Manganese	U	Less than 5 times the method blank
1510325-15	92-11	Manganese	U	Less than 5 times the method blank
1510325-19	MW00-01	Manganese	U	Less than 5 times the method blank
1510325-20	MW00-06	Manganese	U	Less than 5 times the method blank
1510325-55	T01-35	Manganese	U	Less than 5 times CCB
1510325-3	92-09 duplicate	Molybdenum	J	CRI recovery >130%
1510325-5	92-10 duplicate	Molybdenum	J	CRI recovery >130%
1510325-7	W3-04 duplicate	Molybdenum	J	CRI recovery >130%
1510325-9	83-70	Molybdenum	J	CRI recovery >130%
1510325-13	92-09	Molybdenum	J	CRI recovery >130%
1510325-14	92-10	Molybdenum	J	CRI recovery >130%
1510325-17	95-01	Molybdenum	J	CRI recovery >130%
1510325-18	95-03	Molybdenum	J	CRI recovery >130%
1510325-19	MW00-01	Molybdenum	J	CRI recovery >130%
1510325-25	R10-M1	Molybdenum	J	CRI recovery >130%
1510325-32	R6-M3	Molybdenum	J	CRI recovery >130%
1510325-33	R6-M4	Molybdenum	J	CRI recovery >130%
1510325-35	SW00-02	Molybdenum	J	CRI recovery >130%
1510325-37	SW01-01	Molybdenum	J	CRI recovery >130%
1510325-38	SW01-02	Molybdenum	J	CRI recovery >130%

Table 4 (continued). Data Qualifier Summary

Sample Number	Location	Analyte(s)	Flag	Reason
1510325-39	SW01-03	Molybdenum	J	CRI recovery >130%
1510325-45	T01-01	Molybdenum	J	CRI recovery >130%
1510325-49	T01-07	Molybdenum	J	CRI recovery >130%
1510325-50	T01-12	Molybdenum	J	CRI recovery >130%
1510325-51	T01-18	Molybdenum	J	CRI recovery >130%
1510325-53	T01-23	Molybdenum	J	CRI recovery >130%
1510325-54	T01-25	Molybdenum	J	CRI recovery >130%
1510325-55	T01-35	Molybdenum	J	CRI recovery >130%
1510325-56	W3-03	Molybdenum	J	CRI recovery >130%
1510325-57	W3-04	Molybdenum	J	CRI recovery >130%
1510325-2	0202	Potassium	J	Serial dilution %D > 10%
1510325-6	Equipment blank	Potassium	U	Less than 5 times CCB
1510325-1	0200	Selenium	U	Less than 5 times CCB
1510325-3	92-09 duplicate	Selenium	U	Less than 5 times CCB
1510325-5	92-10 duplicate	Selenium	J	CRI recovery >130%
1510325-6	Equipment blank	Selenium	J	CRI recovery >130%
1510325-7	W3-04 duplicate	Selenium	J	CRI recovery >130%
1510325-9	83-70	Selenium	J	CRI recovery >130%
1510325-12	92-08	Selenium	J	CRI recovery >130%
1510325-16	93-01	Selenium	J	CRI recovery >130%
1510325-18	95-03	Selenium	U	Less than 5 times CCB
1510325-19	MW00-01	Selenium	U	Less than 5 times CCB
1510325-25	R10-M1	Selenium	J	CRI recovery >130%
1510325-28	R3-M2	Selenium	U	Less than 5 times method blank
1510325-29	R3-M3	Selenium	U	Less than 5 times method blank
1510325-30	R4-M3	Selenium	U	Less than 5 times method blank
1510325-31	R4-M6	Selenium	U	Less than 5 times method blank
1510325-32	R6-M3	Selenium	U	Less than 5 times method blank
1510325-33	R6-M4	Selenium	U	Less than 5 times method blank
1510325-34	Sorenson	Selenium	J	CRI recovery >130%
1510325-35	SW00-02	Selenium	U	Less than 5 times method blank
1510325-36	SW00-04	Selenium	J	CRI recovery >130%
1510325-37	SW01-01	Selenium	U	Less than 5 times method blank
1510325-38	SW01-02	Selenium	J	CRI recovery >130%
1510325-40	SW92-08	Selenium	U	Less than 5 times method blank
1510325-41	SW92-09	Selenium	U	Less than 5 times CCB
1510325-42	SW94-01	Selenium	U	Less than 5 times CCB
1510325-43	T00-01	Selenium	U	Less than 5 times CCB
1510325-44	T00-04	Selenium	J	CRI recovery >130%
1510325-45	T01-01	Selenium	U	Less than 5 times CCB
1510325-51	T01-18	Selenium	J	CRI recovery >130%
1510325-53	T01-23	Selenium	J	CRI recovery >130%

Table 4 (continued). Data Qualifier Summary

Sample Number	Location	Analyte(s)	Flag	Reason
1510325-54	T01-25	Selenium	J	CRI recovery >130%
1510325-56	W3-03	Selenium	J	CRI recovery >130%
1510325-57	W3-04	Selenium	U	Less than 5 times CCB
1510325-5	92-10 duplicate	Uranium	J	CRI recovery >130%
1510325-9	83-70	Uranium	J	CRI recovery >130%
1510325-16	93-01	Uranium	J	CRI recovery >130%
1510325-17	95-01	Uranium	J	CRI recovery >130%
1510325-31	R4-M6	Uranium	J	CRI recovery >130%
1510325-1	0200	Vanadium	U	Less than 5 times method blank
1510325-3	92-09 duplicate	Vanadium	J	CRI recovery >130%
1510325-5	92-10 duplicate	Vanadium	U	Less than 5 times method blank
1510325-6	Equipment blank	Vanadium	U	Less than 5 times method blank
1510325-7	W3-04 duplicate	Vanadium	U	Less than 5 times method blank
1510325-9	83-70	Vanadium	U	Less than 5 times CCB
1510325-12	92-08	Vanadium	U	Less than 5 times CCB
1510325-13	92-09	Vanadium	U	Less than 5 times CCB
1510325-14	92-10	Vanadium	U	Less than 5 times method blank
1510325-16	93-01	Vanadium	U	Less than 5 times method blank
1510325-17	95-01	Vanadium	U	Less than 5 times method blank
1510325-18	95-03	Vanadium	U	Less than 5 times method blank
1510325-19	MW00-01	Vanadium	U	Less than 5 times CCB
1510325-21	P92-06	Vanadium	U	Less than 5 times method blank
1510325-28	R3-M2	Vanadium	U	Less than 5 times method blank
1510325-29	R3-M3	Vanadium	U	Less than 5 times method blank
1510325-30	R4-M3	Vanadium	U	Less than 5 times method blank
1510325-31	R4-M6	Vanadium	U	Less than 5 times method blank
1510325-33	R6-M4	Vanadium	U	Less than 5 times method blank
1510325-34	Sorenson	Vanadium	U	Less than 5 times method blank
1510325-35	SW00-02	Vanadium	U	Less than 5 times method blank
1510325-36	SW00-04	Vanadium	U	Less than 5 times method blank
1510325-37	SW01-01	Vanadium	U	Less than 5 times method blank
1510325-38	SW01-02	Vanadium	U	Less than 5 times method blank
1510325-39	SW01-03	Vanadium	U	Less than 5 times method blank
1510325-40	SW92-08	Vanadium	U	Less than 5 times method blank
1510325-41	SW92-09	Vanadium	U	Less than 5 times method blank
1510325-42	SW94-01	Vanadium	U	Less than 5 times method blank
1510325-51	T01-18	Vanadium	U	Less than 5 times method blank
1510325-52	T01-20	Vanadium	U	Less than 5 times method blank
1510325-53	T01-23	Vanadium	U	Less than 5 times method blank
1510325-54	T01-25	Vanadium	U	Less than 5 times method blank
1510325-56	W3-03	Vanadium	U	Less than 5 times method blank
1510325-57	W3-04	Vanadium	U	Less than 5 times method blank

Sample Shipping/Receiving

ALS Laboratory Group in Fort Collins, Colorado, received 57 water samples on October 20, 2015, accompanied by a Chain of Custody form. Copies of the air bills were included in the receiving documentation. The Chain of Custody form was checked to confirm that all of the samples were listed with sample collection dates and times, and that signatures and dates were present indicating sample relinquishment and receipt. The Chain of Custody form contained two errors. Location 2918 was missing a total dissolved solids (TDS) sample container and a TDS sample was collected from 92-07 but not listed. The lab was told to disregard both samples since TDS results were not required for either location.

Preservation and Holding Times

The sample shipment was received intact. The temperatures inside the two iced coolers were 0.6 °C and 1.8 °C, which complies with requirements. All samples were received in the correct container types and had been preserved correctly for the requested analyses. All samples were analyzed within the applicable holding times, with a holding time for total dissolved solids of 14 days for this project.

Detection and Quantitation Limits

The method detection limit (MDL) was reported for all analytes as required. The MDL, as defined in 40 CFR 136, is the minimum concentration of an analyte that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero. The practical quantitation limit (PQL) for these analytes is the lowest concentration that can be reliably measured, and is defined as 5 times the MDL. The reported MDLs for all analytes demonstrate compliance with contractual requirements.

Laboratory Instrument Calibration

Compliance requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable qualitative and quantitative data for all analytes. Initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear curve. Compliance requirements for continuing calibration checks are established to ensure that the instrument continues to be capable of producing acceptable qualitative and quantitative data. All laboratory instrument calibrations were performed correctly in accordance with the cited methods. All calibration and laboratory spike standards were prepared from independent sources.

Method EPA 160.1

There are no initial or continuing calibration requirements associated with the determination of total dissolved solids.

Method EPA 353.2

Calibrations for nitrate + nitrite as N were performed using seven calibration standards on October 23, 2015. The calibration curve correlation coefficient values were greater than 0.995 and the absolute values of the intercepts were less than 3 times the MDL. Initial and continuing

calibration verification checks were made at the required frequency. All calibration checks met the acceptance criteria.

Method SW-846 6010B

Calibrations for calcium, iron, magnesium, manganese, potassium, and sodium were performed on October 23 and 26, 2015, using three calibration standards. The calibration curve correlation coefficient values were greater than 0.995 and the absolute values of the intercepts were less than 3 times the MDL. Initial and continuing calibration verification checks were made at the required frequency. All calibration checks met the acceptance criteria. Reporting limit verification checks were made at the required frequency to verify the linearity of the calibration curve near the PQL and all results were within the acceptance range with the exception of magnesium. The associated result was qualified with a “J” flag for an estimated value.

Method SW-846 6020A

Calibrations for arsenic, molybdenum, selenium, uranium, and vanadium were performed on October 22 and 28, 2015, using four calibration standards. The calibration curve correlation coefficient values were greater than 0.995 and the absolute values of the intercepts were less than or only slightly greater than 3 times the MDL. Initial and continuing calibration verification checks were made at the required frequency. All calibration checks associated with reported results met the acceptance criteria. Reporting limit verification checks were made at the required frequency to verify the linearity of the calibration curve near the PQL and all results were above the acceptance range. Affected (dilution-factor-corrected) results less than 5 times the PQL and above the MDL are qualified with a “J” flag (estimated). Mass calibration and resolution verifications were performed at the beginning of each analytical run in accordance with the analytical procedure. Internal standard recoveries associated with requested analytes were stable and within acceptable ranges.

Method SW-846 9056

Calibrations for chloride, fluoride, and sulfate were performed using six calibration standards on October 12 and 25, 2015. The calibration curve correlation coefficient values were greater than 0.995 and the absolute values of the intercepts were less than 3 times the MDL. Initial and continuing calibration verification checks were made at the required frequency. All calibration checks met the acceptance criteria.

Method and Calibration Blanks

Method blanks are analyzed to assess any contamination that may have occurred during sample preparation. Calibration blanks are analyzed to assess instrument contamination prior to and during sample analysis. All method and calibration blank results were below the PQL for all analytes with the exception of vanadium. In cases where a blank concentration exceeds the MDL, the associated sample results are qualified with a “U” flag (not detected) when the sample result is greater than the MDL but less than 5 times the blank concentration. In cases where the absolute value of a negative blank concentration exceeds the MDL, the associated sample results are qualified with a “J” flag (estimated) when the sample result is greater than the MDL but less than 5 times the MDL.

Inductively Coupled Plasma Interference Check Sample Analysis

Interference check samples were analyzed at the required frequency to verify the instrumental interference and background correction factors. All check sample results met the acceptance criteria.

Matrix Spike Analysis

Matrix spike and matrix spike duplicate (MS/MSD) samples are used to measure method performance in the sample matrix. The MS/MSD data are not evaluated when the concentration of the unspiked sample is greater than 4 times the spike. The spike recovery for chloride exceeded the laboratory's acceptance criteria, but was within the ± 25 percent requirement. No qualification is required.

Laboratory Replicate Analysis

Laboratory replicate analyses are used to determine laboratory precision for each sample matrix. The relative percent difference for replicate results that are greater than 5 times the PQL should be less than 20 percent. For results that are less than 5 times the PQL, the range should be no greater than the PQL. All replicate results met these criteria.

Laboratory Control Sample

Laboratory control samples were analyzed at the correct frequency to provide information on the accuracy of the analytical method and the overall laboratory performance, including sample preparation. Methods without sample preparation do not require the analysis of a laboratory control sample. All control sample results were acceptable.

Metals Serial Dilution

Serial dilutions were prepared and analyzed for the metals analyses to monitor chemical or physical interferences in the sample matrix. Serial dilution data are evaluated when the concentration of the undiluted sample is greater than 50 times the MDL. All evaluated serial dilution data were acceptable with the following exceptions. The percent difference for a potassium dilution did not meet the acceptance criteria. Because of the possible reduced accuracy due to matrix interference, the associated result is qualified with a "J" flag (estimated).

Completeness

Results were reported in the correct units for all analytes requested using contract-required laboratory qualifiers.

Chromatography Peak Integration

The integration of analyte peaks was reviewed for all ion chromatography data. All peak integrations were satisfactory.

Anion/Cation Balance

Environmental water should be electrically neutral. Expressed in milliequivalents per liter (meq/L), the sum of the anions should equal the sum of the cations. The anion/cation balance is calculated as the difference between the anions and cations, divided by the sum of the anions and cations. The anion/cation balance can be used to identify potential errors in the analytical results. Typically, a charge balance of less than 10 percent is considered acceptable. When a charge balance is greater than 10 percent, the associated data are closely examined for error. If no errors are found, the results are considered to be acceptable. Table 5 shows the total anion and cation results from this event and the charge balance.

Table 5. Cation/Anion Balance

Location	Cations (meq/L)	Anions (meq/L)	Charge Balance (%)
0200	22.8	26.0	6.6
0202	21.2	22.0	1.8
82-08	22.0	25.1	6.5
83-70	6.0	6.3	2.2
88-85	19.9	21.9	5.0
92-07	17.6	19.3	4.8
92-08	14.8	15.9	3.5
92-09	27.8	30.7	5.1
92-10	13.2	14.1	3.5
92-11	21.0	22.5	3.4
93-01	8.6	7.5	6.8
95-01	6.1	6.4	2.0
95-03	16.7	19.2	7.2
MW00-01	16.0	15.1	2.4
MW00-06	17.5	23.0	13.3
P92-06	21.1	22.1	2.2
PW-10	18.7	19.3	1.5
PW-17	17.0	18.0	3.0
PW-28	25.5	26.4	1.8
R10-M1	10.3	10.2	0.5
R1-M3	18.6	18.2	1.2
R1-M4	18.7	20.0	3.3
R3-M2	17.6	17.6	0.1
R3-M3	17.0	22.3	13.6
R4-M3	5.6	4.8	7.4
R4-M6	7.4	8.8	8.9
R6-M3	21.8	22.0	0.4

Table 5 (continued). Cation/Anion Balance

Location	Cations (meq/L)	Anions (meq/L)	Charge Balance (%)
R6-M4	7.2	7.3	0.9
Sorenson	15.4	16.3	2.7
SW00-02	15.1	15.3	0.5
SW00-04	14.7	15.7	3.1
SW01-01	15.1	15.8	2.1
SW01-02	17.1	16.4	2.1
SW01-03	15.5	14.7	2.8
SW92-08	14.4	15.4	3.1
SW92-09	15.1	15.3	0.5
SW94-01	15.0	16.0	3.0
T00-01	11.8	8.6	15.4
T00-04	14.6	15.1	1.7
T01-01	12.7	12.7	0.2
T01-02	16.7	18.3	4.4
T01-04	20.5	21.7	2.9
T01-05	20.5	21.3	2.0
T01-07	28.8	30.6	3.0
T01-12	24.8	25.9	2.1
T01-23	15.6	12.9	9.7
T01-25	32.8	32.7	0.3
T01-35	20.3	20.3	0.12
W3-03	11.2	11.7	2.0
W3-04	11.7	12.5	3.4

Locations MW00-06, R3-M3, and T00-01 had charge balances greater than 10 percent. There were no analytical errors identified during the review of the laboratory data. The field measurement for alkalinity at MW00-06 was identified as a potential high outlier, which may have contributed to a large anion number.

Electronic Data Deliverable (EDD) File

The EDD file arrived on November 6, 2015. The Sample Management System EDD validation module was used to verify that the EDD file was complete and in compliance with requirements. The module compares the contents of the file to the requested analyses to ensure all and only the requested data are delivered. The contents of the EDD were manually examined to verify that the sample results accurately reflect the data contained in the sample data package.

SAMPLE MANAGEMENT SYSTEM

General Data Validation Report

RIN: 15107423 Lab Code: PAR Validator: Samantha Tigar Validation Date: 12/30/2015
Project: Monticello Monitoring Analysis Type: ☒ Metals ☒ General Chem ☐ Rad ☐ Organics
of Samples: 57 Matrix: WATER Requested Analysis Completed: Yes

Chain of Custody

Present: OK Signed: OK Dated: OK

Sample

Integrity: OK Preservation: OK Temperature: OK

Select Quality Parameters

- ☒ Holding Times
- ☒ Detection Limits
- ☒ Field/Trip Blanks
- ☒ Field Duplicates

There are 0 holding time failures.

The reported detection limits are equal to or below contract requirements.

There was 1 trip/equipment blank evaluated.

There were 4 duplicates evaluated.

SAMPLE MANAGEMENT SYSTEM

Wet Chemistry Data Validation Worksheet

RIN: 15107423 **Lab Code:** PAR **Date Due:** 11/17/2015
Matrix: Water **Site Code:** MNT01 **Date Completed:** 11/6/2015

Analyte	Date Analyzed	CALIBRATION			Method	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	CCV/CCB						
Chloride	10/25/2015	0.000	1.0000	OK	OK	103	93	98	1	
Chloride	10/26/2015				OK	106	100	101	0	
Chloride	10/27/2015					103	76	76	0	
Fluoride	10/25/2015	0.000	1.0000	OK	OK	102	109.0	110.0	1.00	
Fluoride	10/26/2015				OK	105				
Fluoride	10/27/2015					103	103	105	2	
Fluoride	10/28/2015					109	110	110	1	
NITRATE/NITRITE AS N	10/23/2015	0.000	1.0000	OK	OK	96	96	90	7	
NITRATE/NITRITE AS N	10/23/2015				OK	95	102	103	1	
NITRATE/NITRITE AS N	10/23/2015				OK	95	99	99	0	
Sulfate	10/25/2015	0.000	1.0000	OK	OK	102	105	111	2	
Sulfate	10/26/2015				OK	104	103	104	0	
Sulfate	10/27/2015					102	101	102	1	
Total Dissolved Solids	10/24/2015				OK	100				

SAMPLE MANAGEMENT SYSTEM **Metals Data Validation Worksheet**

RIN: 15107423 Lab Code: PAR Date Due: 11/17/2015
 Matrix: Water Site Code: MNT01 Date Completed: 11/6/2015

Analyte	Method Type	Date Analyzed	CALIBRATION			Method	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
			Int.	R^2	CCV/CCB								
Arsenic	ICP/MS	10/22/2015	0.0000	1.0000	OK	OK	113.0	106.0	109.0	3.0	104.0		106.0
Arsenic	ICP/MS	10/22/2015				OK	93.0	99.0	96.0	3.0			131.0
Arsenic	ICP/MS	10/22/2015				OK	93.0	97.0	92.0	5.0			
Calcium	ICP/ES	10/23/2015	0.0000	1.0000	OK	OK	101.0			1.0	97.0	0.0	118.0
Calcium	ICP/ES	10/23/2015				OK	101.0	92.0	90.0	1.0	93.0	1.0	94.0
Calcium	ICP/ES	10/26/2015	0.0000	1.0000	OK	OK	102.0	92.0	91.0	1.0	98.0	1.0	91.0
Iron	ICP/ES	10/23/2015	0.0000	1.0000	OK	OK	102.0	96.0	105.0	8.0	94.0		116.0
Iron	ICP/ES	10/23/2015				OK	98.0	93.0	94.0	2.0	100.0		98.0
Iron	ICP/ES	10/26/2015	0.0000	1.0000	OK	OK	101.0	96.0	95.0	1.0	92.0		119.0
Magnesium	ICP/ES	10/23/2015	0.0000	1.0000	OK	OK	96.0	94.0	94.0	1.0	100.0	5.0	69.0
Magnesium	ICP/ES	10/23/2015				OK	95.0	94.0	94.0	2.0	98.0	6.0	92.0
Magnesium	ICP/ES	10/26/2015	0.0000	1.0000	OK	OK	99.0	101.0	99.0	0.0	106.0	3.0	112.0
Manganese	ICP/ES	10/23/2015	0.0000	1.0000	OK	OK	105.0	102.0	102.0	1.0	99.0	3.0	108.0
Manganese	ICP/ES	10/23/2015				OK	99.0	104.0	102.0	2.0	100.0		109.0
Manganese	ICP/ES	10/26/2015	0.0000	1.0000	OK	OK	101.0	100.0	98.0	1.0	102.0	4.0	98.0
Molybdenum	ICP/MS	10/22/2015	0.0000	1.0000	OK	OK	100.0	100.0	95.0	5.0	101.0		135.0
Molybdenum	ICP/MS	10/22/2015				OK	95.0	103.0	97.0	3.0		0.0	148.0

SAMPLE MANAGEMENT SYSTEM **Metals Data Validation Worksheet**

RIN: 15107423 Lab Code: PAR Date Due: 11/17/2015
 Matrix: Water Site Code: MNT01 Date Completed: 11/6/2015

Analyte	Method Type	Date Analyzed	CALIBRATION			Method	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
			Int.	R^2	CCV/CCB	Blank							
Molybdenum	ICP/MS	10/22/2015					96.0	99.0	102.0	2.0			
Potassium	ICP/ES	10/23/2015	0.0000	1.0000	OK	OK	100.0	100.0	101.0	1.0		19.0	86.0
Potassium	ICP/ES	10/23/2015					OK	100.0	105.0	4.0		1.0	108.0
Potassium	ICP/ES	10/26/2015	0.0000	1.0000	OK	OK	100.0	101.0	101.0	3.0		10.0	94.0
Selenium	ICP/MS	10/22/2015	0.0000	1.0000	OK	OK	111.0	100.0	101.0	2.0	94.0		258.0
Selenium	ICP/MS	10/22/2015					OK	102.0	100.0	5.0			188.0
Selenium	ICP/MS	10/22/2015					OK	102.0	103.0	4.0			
Sodium	ICP/ES	10/23/2015	0.0000	1.0000	OK	OK	101.0	91.0	90.0	0.0		1.0	95.0
Sodium	ICP/ES	10/23/2015					OK	101.0	101.0	4.0		2.0	117.0
Sodium	ICP/ES	10/26/2015	0.0000	1.0000	OK	OK	102.0	95.0	97.0	1.0		4.0	107.0
Uranium	ICP/MS	10/22/2015	0.0000	1.0000	OK	OK	109.0	109.0	106.0	3.0	104.0		120.0
Uranium	ICP/MS	10/22/2015	0.0000	1.0000	OK	OK	106.0	114.0	109.0	0.0	102.0	5.0	160.0
Uranium	ICP/MS	10/22/2015					OK	109.0	117.0	0.0		3.0	130.0
Vanadium	ICP/MS	10/22/2015	-0.0710	1.0000	OK	.095	OK	100.0	98.0	4.0	97.0		168.0
Vanadium	ICP/MS	10/22/2015					0.11	98.0	97.0	4.0			270.0
Vanadium	ICP/MS	10/22/2015					0.12	98.0	99.0	1.0			

Sampling Quality Control Assessment

The following information summarizes and assesses quality control for this sampling event.

Sampling Protocol

Samples were collected as specified in the *Monticello Mill Tailings Site Operable Unit III Post-Record of Decision Monitoring Plan*. All samples were filtered. The purge stability criteria specified in the monitoring plan were used for monitoring wells (not located in the permeable reactive barrier), including:

Temperature: ± 10 percent over the last three consecutive readings and

Turbidity: ≤ 5 nephelometric turbidity units for the final reading

The turbidity requirement could not be met or determined at groundwater locations 0202, 83-70, PW-10, PW-17, T01-18, T01-20, and T01-25 because the wells purged dry before the purge criteria could be met.

All monitoring wells were purged and sampled using low-flow sampling techniques. Wells R1-M3, R1-M4, R3-M2, R3-M3, R4-M3, R4-M6, R6-M3, R6-M4, and R10-M1 are permeable reactive barrier (PRB) wells, which are not sampled using low-flow criteria.

Sample results are not flagged based on sampling technique according to the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites* because the samples were collected using the *Monticello Mill Tailings Site Operable Unit III Post-Record of Decision Monitoring Plan* (August 2004).

The specific conductivity stability criteria were not met for wells 0200, 82-08, and 92-08. The associated results from these wells are qualified with a “J” flag (estimated) because purging criteria were not met.

Equipment Blank Assessment

Equipment blanks are prepared and analyzed to document contamination attributable to the sample collection process. An equipment blank was collected after decontamination of non-dedicated equipment. Calcium, sodium, and selenium were detected in the equipment blank. Sample results that are less than 5 times (or 10 times for major cations and anions) the equipment blank concentration are qualified with a “J” flag as an estimated value. Iron, manganese, potassium, and vanadium were also detected in the blank by the laboratory, but these analytes have been qualified during validation with a “U” flag as not detected.

Field Duplicate Analysis

Field duplicate samples are collected and analyzed as an indication of overall precision of the measurement process. The precision observed includes both field and laboratory precision and has more variability than laboratory duplicates, which measure only laboratory performance. Duplicate samples were collected from surface water location W3-04 and from monitoring wells 82-08, 92-09, and 92-10. The relative percent difference (RPD) for duplicate results that are greater than 5 times the PQL should be less than 20 percent. The RPD is not used to evaluate

results that are less than 5 times the PQL. For these results (RPD is 'N/A' on the Field Duplicates report), the range should be no greater than the PQL. The duplicate results met the criteria, with the exception of manganese at location 82-08. The result was qualified with a "J" flag as an estimated value.

SAMPLE MANAGEMENT SYSTEM
Validation Report: Equipment/Trip Blanks

Page 1 of 2

RIN: 15107423 Lab Code: PAR Project: Monticello Monitoring Validation Date: 12/30/2015

Blank Data

Blank Type	Lab Sample ID	Lab Method	Analyte Name	Result	Qualifier	MDL	Units
Equipment Blank	1510325-6	SW6010	Calcium	40	J	24	UG/L

Sample ID	Sample Ticket	Location	Result	Dilution Factor	Lab Qualifier	Validation Qualifier
1510325-34	NLV 663	Sorenson	160000	1		
1510325-35	NLV 698	SW00-02	190000	1		
1510325-36	NLV 664	SW00-04	150000	1		
1510325-37	NLV 662	SW01-01	190000	1		
1510325-38	NLV 699	SW01-02	230000	1		
1510325-39	NLV 661	SW01-03	200000	1		
1510325-40	NLV 665	SW92-08	150000	1		
1510325-41	NLV 673	SW92-09	160000	1		
1510325-42	NLV 674	SW94-01	160000	1		
1510325-56	NLV 695	W3-03	120000	1		
1510325-57	NLV 696	W3-04	130000	1		

Blank Data

Blank Type	Lab Sample ID	Lab Method	Analyte Name	Result	Qualifier	MDL	Units
Equipment Blank	1510325-6	SW6010	Sodium	66	J	47	UG/L

Sample ID	Sample Ticket	Location	Result	Dilution Factor	Lab Qualifier	Validation Qualifier
1510325-34	NLV 663	Sorenson	100000	1		
1510325-35	NLV 698	SW00-02	60000	1		
1510325-36	NLV 664	SW00-04	94000	1		
1510325-37	NLV 662	SW01-01	60000	1		
1510325-38	NLV 699	SW01-02	51000	1		
1510325-39	NLV 661	SW01-03	58000	1		
1510325-40	NLV 665	SW92-08	90000	1		
1510325-41	NLV 673	SW92-09	88000	1		
1510325-42	NLV 674	SW94-01	88000	1		
1510325-56	NLV 695	W3-03	63000	1		
1510325-57	NLV 696	W3-04	59000	1		

SAMPLE MANAGEMENT SYSTEM
Validation Report: Equipment/Trip Blanks

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RIN: 15107423 Lab Code: PAR Project: Monticello Monitoring Validation Date: 12/30/2015

Blank Data

Blank Type	Lab Sample ID	Lab Method	Analyte Name	Result	Qualifier	MDL	Units
Equipment Blank	1510325-6	SW6020	Selenium	0.42	J	0.32	UG/L

Sample ID	Sample Ticket	Location	Result	Dilution Factor	Lab Qualifier	Validation Qualifier
1510325-34	NLV 663	Sorenson	5.2	10		
1510325-35	NLV 698	SW00-02	0.88	10	J	J
1510325-36	NLV 664	SW00-04	4	10		
1510325-37	NLV 662	SW01-01	0.87	10	J	J
1510325-38	NLV 699	SW01-02	3.2	10		
1510325-39	NLV 661	SW01-03	0.32	10	U	
1510325-40	NLV 665	SW92-08	1.5	10		J
1510325-41	NLV 673	SW92-09	2	10		J
1510325-42	NLV 674	SW94-01	2.3	10		
1510325-56	NLV 695	W3-03	0.75	10	J	J
1510325-57	NLV 696	W3-04	1.3	10		J

SAMPLE MANAGEMENT SYSTEM

Validation Report: Field Duplicates

Page 1 of 2

RIN: 15107423 Lab Code: PAR Project: Monticello Monitoring Validation Date: 11/23/2015

Duplicate: 2477

Sample: 92-09

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
Arsenic	1.7			10	2			10	16.22		UG/L
Calcium	280000			1	280000			1	0		UG/L
Chloride	110			20	110			20	0		MG/L
Fluoride	0.5	U		5	0.5	U		5			MG/L
Iron	1300			1	1400			1	7.41		UG/L
Magnesium	66000			1	66000			1	0		UG/L
Manganese	140			1	150			1	6.90		UG/L
Molybdenum	3.5			10	3.5			10	N/A		UG/L
NITRATE/NITRITE AS N	0.01	U		1	0.01	U		1			MG/L
Potassium	2400			1	2700			1	11.76		UG/L
Selenium	0.32	U		10	0.52	J		10			UG/L
Sodium	190000			1	190000			1	0		UG/L
Sulfate	960			20	960			20	0		MG/L
Uranium	370			10	380			10	2.67		UG/L
Vanadium	1.4	J		10	1.4	J		10	N/A		UG/L

Duplicate: 2583

Sample: 82-08

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
Arsenic	0.71	J		10	0.74	J		10			UG/L
Calcium	230000			1	220000			1	4.44		UG/L
Chloride	120			10	120			10	0		MG/L
Fluoride	1.3			5	1.3			5			MG/L
Iron	100			1	64	J		1	N/A		UG/L
Magnesium	64000			1	62000			1	3.17		UG/L
Manganese	8.2			1	5.4			1	N/A		UG/L
Molybdenum	13			10	14			10	7.41		UG/L
NITRATE/NITRITE AS N	1.3			1	1.3			1	0		MG/L
Potassium	4400			1	4700			1	6.59		UG/L
Selenium	20			10	22			10	9.52		UG/L
Sodium	120000			1	120000			1	0		UG/L
Sulfate	840			10	840			10	0		MG/L
Total Dissolved Solids	1500			1	1600			1	6.45		MG/L
Uranium	170			10	180			10	5.71		UG/L
Vanadium	7.3			10	7.6			10	4.03		UG/L

SAMPLE MANAGEMENT SYSTEM

Validation Report: Field Duplicates

Page 2 of 2

RIN: 15107423 Lab Code: PAR Project: Monticello Monitoring Validation Date: 11/23/2015

Duplicate: 2586

Sample: 92-10

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
Arsenic	0.15	U		10	0.21	J		10			UG/L
Calcium	150000			1	150000			1	0		UG/L
Chloride	69			10	69			10	0		MG/L
Fluoride	0.4	U		4	0.5	U		5			MG/L
Iron	990			1	1000			1	1.01		UG/L
Magnesium	26000			1	25000			1	3.92		UG/L
Manganese	750			1	720			1	4.08		UG/L
Molybdenum	1.8			10	1.4			10			UG/L
NITRATE/NITRITE AS N	0.01	U		1	0.01	U		1			MG/L
Potassium	4200			1	4300			1	2.35		UG/L
Selenium	0.32	U		10	0.77	J		10			UG/L
Sodium	79000			1	77000			1	2.56		UG/L
Sulfate	410			10	410			10	0		MG/L
Uranium	0.12			10	0.1			10			UG/L
Vanadium	1.2	J		10	1.3	J		10	N/A		UG/L

Duplicate: 2918

Sample: W3-04

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
Arsenic	2.3			10	2.3			10	N/A		UG/L
Calcium	130000			1	130000			1	0		UG/L
Chloride	45			5	44			10	N/A		MG/L
Fluoride	0.5	U		5	0.2	U		2			MG/L
Iron	110			1	90	J		1	N/A		UG/L
Magnesium	29000			1	28000			1	3.51		UG/L
Manganese	200			1	210			1	4.88		UG/L
Molybdenum	1.8			10	1.4			10			UG/L
NITRATE/NITRITE AS N	0.01	U		1	0.01	U		1			MG/L
Potassium	8900			1	9100			1	2.22		UG/L
Selenium	1.3			10	0.67	J		10			UG/L
Sodium	59000			1	58000			1	1.71		UG/L
Sulfate	300			5	300			10	0		MG/L
Uranium	12			10	11			10	8.70		UG/L
Vanadium	1.6	J		10	1.2	J		10	N/A		UG/L

Certification

All laboratory analytical quality control criteria were met except as qualified in this report. The data qualifiers listed on the SEEPro database reports are defined on the last page of each report. All data in this package are considered validated and available for use.

Laboratory Coordinator:

Steph Doniv
Stephen Donovan

1-20-2016
Date

Data Validation Lead:

Samantha Tigar
Samantha Tigar

1-20-2016
Date

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Attachment 1

Assessment of Anomalous Data

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Potential Outliers Report

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Potential Outliers Report

Potential outliers are measurements that are extremely large or small relative to the rest of the data and, therefore, are suspected of misrepresenting the population from which they were collected. Potential outliers can result from transcription errors, data-coding errors, or measurement system problems. However, outliers can also represent true extreme values of a distribution and can indicate more variability in the population than was expected.

Statistical outlier tests give probabilistic evidence that an extreme value does not "fit" with the distribution of the remainder of the data and is therefore a statistical outlier. These tests should only be used to identify data points that require further investigation. The tests alone cannot determine whether a statistical outlier should be discarded or corrected within a data set.

There are three steps involved in identifying extreme values or outliers:

1. **Identify extreme values that may be potential outliers.** Do this by generating the Outliers Report using the Sample Management System from data in the environmental database. The application compares the new data set (in standard environmental database units) with historical data and lists the new data that fall outside the historical data range. A determination is also made as to whether the data are normally distributed using the Shapiro-Wilk Test.
2. **Apply the appropriate statistical test.** Dixon's Test for extreme values is used to test for statistical outliers when the sample size is less than or equal to 25. This test considers both extreme values that are much smaller than the rest of the data (case 1) and extreme values that are much larger than the rest of the data (case 2). This test is valid only if the data without the suspected outlier are normally distributed. Rosner's Test is a parametric test that is used to detect outliers for sample sizes of 25 or more. This test also assumes that the data without the suspected outliers are normally distributed.
3. **Scientifically review statistical outliers and decide on their disposition.** The review should include an evaluation of any notable trends in the data that may indicate the outliers represent true extreme values.

The 'Data Validation Outliers Report' was generated using historical data for filtered samples. Twenty-one laboratory results were identified as potentially anomalous because of the low variability of the historical data or because of downward or upward trending in the data. The data associated with these results were further reviewed. There were no errors noted and the data for this RIN are acceptable as qualified. A field result (alkalinity at location MW00-06) was unusually high and is listed on the Anomalous Data Review Checksheet for further review.

Potential anomalies in the field parameters were also examined for patterns of repeated high or low bias, which suggest a systematic error due to instrument malfunction. No such patterns were found and all field data from this event are acceptable.

There were no anomalies identified during data validation for the previous sampling events in October 2014 and April 2015.

Data Validation Outliers Report - No Field Parameters

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: ALS Laboratory Group

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	0200	0001	10/14/2015	Calcium	200			420		F	250			24	0	No
MNT01	0200	0001	10/14/2015	Chloride	420			390		F	81.0			24	0	NA
MNT01	0200	0001	10/14/2015	Magnesium	52.0			130		F	63.0			24	0	No
MNT01	0200	0001	10/14/2015	Manganese	0.0820			0.0450			0.000095	B	UF	24	13	No
MNT01	0200	0001	10/14/2015	Selenium	0.00032		U	0.110		F	0.00410		F	24	0	No
MNT01	0200	0001	10/14/2015	Sulfate	340			1300		F	690			24	0	No
MNT01	0202	0001	10/14/2015	Magnesium	52.0			85.0		F	56.0			21	0	No
MNT01	82-08	0002	10/14/2015	Calcium	220			620		F	230			33	0	No
MNT01	82-08	0002	10/14/2015	Magnesium	62.0			180			67.0			33	0	No
MNT01	82-08	0001	10/14/2015	Magnesium	64.0			180			67.0			33	0	No
MNT01	82-08	0001	10/14/2015	Total Dissolved Solids	1500			3300			1600			19	0	No
MNT01	83-70	0001	10/13/2015	Iron	1.30			0.571			0.00310	U		12	1	Yes
MNT01	83-70	0001	10/13/2015	Selenium	0.00053	J	J	0.0003	U		0.000023	U		12	11	NA
MNT01	88-85	0001	10/13/2015	Selenium	0.0220			0.135			0.0230			44	0	NA
MNT01	92-07	0001	10/13/2015	Uranium	0.470			1.30		F	0.560			40	0	No
MNT01	92-08	0001	10/14/2015	Calcium	170			420		F	210		FQ	33	0	Yes
MNT01	92-08	0001	10/14/2015	Magnesium	35.0			76.6	E	J	42.0		FQ	33	0	Yes

Data Validation Outliers Report - No Field Parameters

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: ALS Laboratory Group

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	92-08	0001	10/14/2015	Nitrate + Nitrite as Nitrogen	0.01000	U		5.79			0.330			33	0	No
MNT01	92-08	0001	10/14/2015	Potassium	6.40			17.0			7.00			33	0	No
MNT01	92-08	0001	10/14/2015	Selenium	0.00240		J	0.130			0.0140		F	33	0	No
MNT01	92-09	0001	10/14/2015	Calcium	280			460		J	290			30	0	No
MNT01	92-09	0002	10/14/2015	Calcium	280			460		J	290			30	0	No
MNT01	92-09	0002	10/14/2015	Magnesium	66.0			120			70.0			30	0	No
MNT01	92-09	0001	10/14/2015	Magnesium	66.0			120			70.0			30	0	No
MNT01	92-10	0002	10/14/2015	Chloride	69.0			58.0			9.78			14	0	No
MNT01	92-10	0001	10/14/2015	Chloride	69.0			58.0			9.78			14	0	No
MNT01	92-10	0001	10/14/2015	Fluoride	0.400	U		0.217	N	J	0.110			14	0	Yes
MNT01	92-10	0002	10/14/2015	Fluoride	0.500	U		0.217	N	J	0.110			14	0	Yes
MNT01	92-10	0002	10/14/2015	Iron	1.000			0.990			0.00310	U	FQ	14	1	No
MNT01	92-10	0001	10/14/2015	Manganese	0.750			0.710			0.303			14	0	No
MNT01	92-10	0002	10/14/2015	Manganese	0.720			0.710			0.303			14	0	No
MNT01	92-10	0002	10/14/2015	Selenium	0.00077	J	J	0.0003	U		0.000023	U	F	14	14	NA
MNT01	92-10	0002	10/14/2015	Sodium	77.0			75.0			43.0		F	14	0	No
MNT01	92-10	0001	10/14/2015	Sodium	79.0			75.0			43.0		F	14	0	No

Data Validation Outliers Report - No Field Parameters

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: ALS Laboratory Group

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	92-10	0001	10/14/2015	Sulfate	410			360			126			14	0	No
MNT01	92-10	0002	10/14/2015	Sulfate	410			360			126			14	0	No
MNT01	93-01	0001	10/14/2015	Chloride	7.10	N		6.10		F	2.72			14	0	No
MNT01	93-01	0001	10/14/2015	Fluoride	0.740			0.710		F	0.169	B		14	0	NA
MNT01	93-01	0001	10/14/2015	Iron	0.130			0.0540	B	F	0.0008	B	U	14	9	Yes
MNT01	93-01	0001	10/14/2015	Selenium	0.00067	J	J	0.0003	U		0.000023	U	F	14	14	NA
MNT01	93-01	0001	10/14/2015	Sodium	150			140		F	38.2			14	0	NA
MNT01	93-01	0001	10/14/2015	Uranium	0.00046		J	0.0002	B		0.0000035		UF	14	4	Yes
MNT01	95-01	0001	10/14/2015	Chloride	8.70			8.41			6.50			14	0	No
MNT01	95-01	0001	10/14/2015	Magnesium	10.00			13.8			10.7			14	0	NA
MNT01	95-03	0001	10/14/2015	Chloride	98.0			87.0			2.85			16	0	NA
MNT01	95-03	0001	10/14/2015	Sulfate	570			520			76.9			16	0	NA
MNT01	P92-06	0001	10/14/2015	Calcium	210			511			230			35	0	No
MNT01	P92-06	0001	10/14/2015	Magnesium	64.0			147			70.0			35	0	No
MNT01	PW-10	0001	10/13/2015	Calcium	200			340			210			24	0	No
MNT01	PW-10	0001	10/13/2015	Iron	0.900			0.122			0.0008	B	U	24	11	No
MNT01	PW-10	0001	10/13/2015	Magnesium	39.0			67.0			45.0			24	0	Yes

Data Validation Outliers Report - No Field Parameters

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: ALS Laboratory Group

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	PW-10	0001	10/13/2015	Potassium	11.0			27.0			12.0			24	0	No
MNT01	PW-10	0001	10/13/2015	Sulfate	530			1120			590			23	0	No
MNT01	PW-10	0001	10/13/2015	Uranium	0.560			1.16	E		0.711			24	0	No
MNT01	PW-17	0001	10/13/2015	Magnesium	39.0			74.1	E	J	40.0			35	0	No
MNT01	PW-17	0001	10/13/2015	Sodium	91.0			356			100.0			35	0	NA
MNT01	PW-17	0001	10/13/2015	Uranium	0.680			1.40		Q	0.686			35	0	No
MNT01	PW-28	0001	10/13/2015	Magnesium	70.0			120			72.0		F	33	0	NA
MNT01	R10-M1	0001	10/13/2015	Calcium	84.0			360			89.0			36	0	NA
MNT01	R10-M1	0001	10/13/2015	Magnesium	26.0			85.0			27.0			36	0	No
MNT01	R10-M1	0001	10/13/2015	Potassium	8.50			20.0			11.0		J	36	0	NA
MNT01	R10-M1	0001	10/13/2015	Sodium	86.0			266			87.0			36	0	NA
MNT01	R1-M3	0001	10/12/2015	Potassium	8.70			20.9			8.90			38	0	No
MNT01	R1-M4	0001	10/13/2015	Potassium	9.50			18.0			10.00			38	0	No
MNT01	R3-M2	0001	10/12/2015	Iron	1.90			36.7			2.40			29	0	No
MNT01	R3-M2	0001	10/12/2015	Manganese	0.0920			0.431			0.120			29	0	No
MNT01	R3-M2	0001	10/12/2015	Vanadium	0.00015	J	U	0.0156	B		0.00095			29	3	NA
MNT01	R3-M3	0001	10/13/2015	Potassium	10.00			20.0			10.3			29	0	No

Data Validation Outliers Report - No Field Parameters

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: ALS Laboratory Group

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	R4-M3	0001	10/12/2015	Chloride	31.0			136			46.0			28	0	No
MNT01	R4-M3	0001	10/12/2015	Nitrate + Nitrite as Nitrogen	1.000			0.380			0.00450	U		29	16	NA
MNT01	R4-M3	0001	10/12/2015	Sulfate	79.0			865			210			28	0	No
MNT01	R4-M3	0001	10/12/2015	Uranium	0.00760			0.00076		J	0.0000022	B	U	33	15	NA
MNT01	R6-M4	0001	10/13/2015	Iron	0.00670	J	U	39.0			0.0532	B		35	0	No
MNT01	Sorenson	0001	10/14/2015	Arsenic	0.00290		J	0.00270	B		0.00031	J		35	2	Yes
MNT01	SW00-02	0001	10/13/2015	Vanadium	0.00015	J	U	0.0894			0.00044			35	2	NA
MNT01	SW00-04	0001	10/14/2015	Iron	0.0830	J		0.0600	J		0.0008	BE	UJ	28	16	Yes
MNT01	SW01-01	0001	10/14/2015	Selenium	0.00032	J	U	0.01000			0.00045			33	1	No
MNT01	SW01-01	0001	10/14/2015	Vanadium	0.00015	J	U	0.0591			0.00069			33	0	No
MNT01	SW92-08	0001	10/14/2015	Selenium	0.00032		U	0.0119			0.0008	B		28	0	No
MNT01	SW92-09	0001	10/14/2015	Arsenic	0.00190		J	0.00170			0.00049	J		12	0	No
MNT01	SW92-09	0001	10/14/2015	Manganese	0.0320			0.190			0.0360			12	0	No
MNT01	SW92-09	0001	10/14/2015	Selenium	0.00032		U	0.00660			0.00062			12	0	No
MNT01	SW92-09	0001	10/14/2015	Vanadium	0.00015		U	0.00540			0.00190			12	0	No
MNT01	SW94-01	0001	10/14/2015	Arsenic	0.00190		J	0.00180			0.00028	J		16	0	No
MNT01	SW94-01	0001	10/14/2015	Selenium	0.00032		U	0.00780			0.00059			16	0	No

Data Validation Outliers Report - No Field Parameters

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: ALS Laboratory Group

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	SW94-01	0001	10/14/2015	Vanadium	0.00015		U	0.0130			0.00200			16	0	NA
MNT01	T00-01	0001	10/14/2015	Chloride	19.0			98.5		J	26.0			28	0	No
MNT01	T00-01	0001	10/14/2015	Manganese	0.0350			3.20		F	0.0380			28	0	NA
MNT01	T00-01	0001	10/14/2015	Molybdenum	0.00980			0.167			0.0130			28	0	NA
MNT01	T00-01	0001	10/14/2015	Potassium	5.40			29.9			8.20		F	28	0	NA
MNT01	T00-01	0001	10/14/2015	Sodium	56.0			342			58.0		F	28	0	NA
MNT01	T00-01	0001	10/14/2015	Sulfate	130			948			200		F	28	0	No
MNT01	T00-04	0001	10/14/2015	Magnesium	34.0			158			45.2			23	0	NA
MNT01	T00-04	0001	10/14/2015	Molybdenum	0.0400			0.389			0.0410			23	0	No
MNT01	T00-04	0001	10/14/2015	Potassium	3.70			13.0			5.00			23	0	No
MNT01	T00-04	0001	10/14/2015	Sodium	62.0			856			66.0			23	0	NA
MNT01	T00-04	0001	10/14/2015	Sulfate	390			3080			480			23	0	NA
MNT01	T00-04	0001	10/14/2015	Uranium	0.0850			3.69			0.120			23	0	No
MNT01	T01-01	0001	10/14/2015	Uranium	0.0450			0.651			0.0540		F	36	0	No
MNT01	T01-02	0001	10/14/2015	Nitrate + Nitrite as Nitrogen	0.0760			6.39			0.0960			32	0	NA
MNT01	T01-04	0001	10/14/2015	Sulfate	560			850			570		F	33	0	No
MNT01	T01-05	0001	10/14/2015	Sulfate	550			940			570		F	31	0	No

Data Validation Outliers Report - No Field Parameters

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: ALS Laboratory Group

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	T01-12	0001	10/13/2015	Arsenic	0.00420			0.00410			0.00120	B		31	1	No
MNT01	T01-18	0001	10/13/2015	Arsenic	0.00330		J	0.00190	B		0.000023		U	18	3	Yes
MNT01	T01-18	0001	10/13/2015	Manganese	3.20			2.50			0.930			18	0	Yes
MNT01	T01-18	0001	10/13/2015	Selenium	0.00110		J	0.0660			0.00130			18	0	No
MNT01	T01-20	0001	10/13/2015	Magnesium	32.0			110			34.0			20	0	No
MNT01	T01-23	0001	10/13/2015	Selenium	0.00081	J	J	0.0003	U		0.000023	U	F	25	17	NA
MNT01	T01-23	0001	10/13/2015	Sulfate	290			4820			296			25	0	NA
MNT01	T01-25	0001	10/13/2015	Manganese	2.20			9.64			2.40			19	0	No
MNT01	T01-35	0001	10/13/2015	Magnesium	48.0			77.0			50.0		F	35	0	No

STATISTICAL TESTS:

The distribution of the data is tested for normality or lognormality using the Shapiro-Wilk Test

Outliers are identified using Dixon's Test when there are 25 or fewer data points.

Outliers are identified using Rosner's Test when there are 26 or more data points.

See Data Quality Assessment: Statistical Methods for Practitioners, EPA QC/G-9S, February 2006.

NA: Data are not normally or lognormally distributed.

Data Validation Outliers Report - Field Parameters Only

Comparison: Historical Data Beginning 1/1/2001 for Filtered Samples

Laboratory: Field Measurements

RIN: 15107423

Report Date: 1/4/2016

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current	Qualifiers		Historical Maximum			Historical Minimum			Number of Data Points		Statistical Outlier
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect	
MNT01	MW00-06	0001	10/14/2015	Alkalinity, Total (as CaCO ₃)	500			344			75.0			32	0	Yes

STATISTICAL TESTS:

The distribution of the data is tested for normality or lognormality using the Shapiro-Wilk Test

Outliers are identified using Dixon's Test when there are 25 or fewer data points.

Outliers are identified using Rosner's Test when there are 26 or more data points.

See Data Quality Assessment: Statistical Methods for Practitioners, EPA QC/G-9S, February 2006.

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Anomalous Data Review Checksheet

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Anomalous Data Review Checksheet

Site: Monticello, Utah, Processing Site

Sampling Data: October 12–14, 2015

Reviewer:	Samantha Tigar		
	Name (print)	Signature	Date

Site Hydrologist:	Tim Bartlett		
	Name (print)	Signature	Date

Date of Review: December 28, 2015[illegible]

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Attachment 2

Data Presentation

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Groundwater Quality Data

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Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 0200 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	5.32	-	10.26	350			#		
Arsenic	mg/L	10/14/2015	0001	5.32	-	10.26	0.00071	J	J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	5.32	-	10.26	200			#	0.024	
Chloride	mg/L	10/14/2015	0001	5.32	-	10.26	420			#	10	
Dissolved Oxygen	mg/L	10/14/2015	N001	5.32	-	10.26	1.37			#		
Fluoride	mg/L	10/14/2015	0001	5.32	-	10.26	1	U		#	1	
Iron	mg/L	10/14/2015	0001	5.32	-	10.26	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	5.32	-	10.26	52			#	0.03	
Manganese	mg/L	10/14/2015	0001	5.32	-	10.26	0.082			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	5.32	-	10.26	0.025			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	5.32	-	10.26	0.72			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	5.32	-	10.26	39.4			#		
pH	s.u.	10/14/2015	N001	5.32	-	10.26	6.95			#		
Potassium	mg/L	10/14/2015	0001	5.32	-	10.26	9.5			#	0.052	
Selenium	mg/L	10/14/2015	0001	5.32	-	10.26	0.00032		U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	5.32	-	10.26	190			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	5.32	-	10.26	2231		J	#		
Sulfate	mg/L	10/14/2015	0001	5.32	-	10.26	340			#	25	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 0200 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/14/2015	N001	5.32	-	10.26	14.69			#		
Turbidity	NTU	10/14/2015	N001	5.32	-	10.26	3.43			#		
Uranium	mg/L	10/14/2015	0001	5.32	-	10.26	0.21			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	5.32	-	10.26	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 0202 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	N001	10.32	-	15.26	328			#		
Arsenic	mg/L	10/14/2015	0001	10.32	-	15.26	0.0018		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	10.32	-	15.26	240			#	0.024	
Chloride	mg/L	10/14/2015	0001	10.32	-	15.26	86			#	2	
Dissolved Oxygen	mg/L	10/14/2015	N001	10.32	-	15.26	4.09			#		
Fluoride	mg/L	10/14/2015	0001	10.32	-	15.26	0.56			#	0.5	
Iron	mg/L	10/14/2015	0001	10.32	-	15.26	0.16			#	0.0067	
Magnesium	mg/L	10/14/2015	0001	10.32	-	15.26	52			#	0.03	
Manganese	mg/L	10/14/2015	0001	10.32	-	15.26	0.048			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	10.32	-	15.26	0.03			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	10.32	-	15.26	1.3			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	10.32	-	15.26	20.4			#		
pH	s.u.	10/14/2015	N001	10.32	-	15.26	6.87			#		
Potassium	mg/L	10/14/2015	0001	10.32	-	15.26	6.6	E	J	#	0.052	
Selenium	mg/L	10/14/2015	0001	10.32	-	15.26	0.02			#	0.00032	
Sodium	mg/L	10/14/2015	0001	10.32	-	15.26	110			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	10.32	-	15.26	1852			#		
Sulfate	mg/L	10/14/2015	0001	10.32	-	15.26	620			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 0202 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/14/2015	N001	10.32	-	15.26	12.74			#		
Turbidity	NTU	10/14/2015	N001	10.32	-	15.26	24.7			#		
Uranium	mg/L	10/14/2015	0001	10.32	-	15.26	0.19			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	10.32	-	15.26	0.038			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 82-08 WELL Original 82-08 destroyed during excavation before 1/28/1999. Replacement well installed on 2/23/1999 and also called 82-08.

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	12	-	17	208			#		
Arsenic	mg/L	10/14/2015	0001	12	-	17	0.00015	J	U	#	0.00015	
Arsenic	mg/L	10/14/2015	0002	12	-	17	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/14/2015	0001	12	-	17	230			#	0.024	
Calcium	mg/L	10/14/2015	0002	12	-	17	220			#	0.024	
Chloride	mg/L	10/14/2015	0001	12	-	17	120			#	2	
Chloride	mg/L	10/14/2015	0002	12	-	17	120			#	2	
Dissolved Oxygen	mg/L	10/14/2015	N001	12	-	17	2.08			#		
Fluoride	mg/L	10/14/2015	0001	12	-	17	1.3			#	0.5	
Fluoride	mg/L	10/14/2015	0002	12	-	17	1.3			#	0.5	
Iron	mg/L	10/14/2015	0001	12	-	17	0.1			#	0.0067	
Iron	mg/L	10/14/2015	0002	12	-	17	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	12	-	17	64			#	0.03	
Magnesium	mg/L	10/14/2015	0002	12	-	17	62			#	0.03	
Manganese	mg/L	10/14/2015	0001	12	-	17	0.0082		J	#	0.00024	
Manganese	mg/L	10/14/2015	0002	12	-	17	0.0054		J	#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	12	-	17	0.013			#	0.00032	
Molybdenum	mg/L	10/14/2015	0002	12	-	17	0.014			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	12	-	17	1.3			#	0.01	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0002	12	-	17	1.3			#	0.01	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 82-08 WELL Original 82-08 destroyed during excavation before 1/28/1999. Replacement well installed on 2/23/1999 and also called 82-08.

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Oxidation Reduction Potential	mV	10/14/2015	N001	12	-	17	68			#		
pH	s.u.	10/14/2015	N001	12	-	17	6.52			#		
Potassium	mg/L	10/14/2015	0001	12	-	17	4.4			#	0.052	
Potassium	mg/L	10/14/2015	0002	12	-	17	4.7			#	0.052	
Selenium	mg/L	10/14/2015	0001	12	-	17	0.02			#	0.00032	
Selenium	mg/L	10/14/2015	0002	12	-	17	0.022			#	0.00032	
Sodium	mg/L	10/14/2015	0001	12	-	17	120			#	0.047	
Sodium	mg/L	10/14/2015	0002	12	-	17	120			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	12	-	17	2120		J	#		
Sulfate	mg/L	10/14/2015	0001	12	-	17	840			#	5	
Sulfate	mg/L	10/14/2015	0002	12	-	17	840			#	5	
Temperature	C	10/14/2015	N001	12	-	17	12.74			#		
Total Dissolved Solids	mg/L	10/14/2015	0001	12	-	17	1500			#	40	
Total Dissolved Solids	mg/L	10/14/2015	0002	12	-	17	1600			#	40	
Turbidity	NTU	10/14/2015	N001	12	-	17	1.2			#		
Uranium	mg/L	10/14/2015	0001	12	-	17	0.17			#	0.000029	
Uranium	mg/L	10/14/2015	0002	12	-	17	0.18			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	12	-	17	0.0073			#	0.00015	
Vanadium	mg/L	10/14/2015	0002	12	-	17	0.0076			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 83-70 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	50.4	-	170.4	195			#		
Arsenic	mg/L	10/13/2015	0001	50.4	-	170.4	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/13/2015	0001	50.4	-	170.4	52			#	0.024	
Chloride	mg/L	10/13/2015	0001	50.4	-	170.4	3.8			#	0.4	
Dissolved Oxygen	mg/L	10/13/2015	N001	50.4	-	170.4	3.39			#		
Fluoride	mg/L	10/13/2015	0001	50.4	-	170.4	0.15			#	0.1	
Iron	mg/L	10/13/2015	0001	50.4	-	170.4	1.3			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	50.4	-	170.4	9.7			#	0.03	
Manganese	mg/L	10/13/2015	0001	50.4	-	170.4	0.27			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	50.4	-	170.4	0.00077	J	J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	50.4	-	170.4	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	50.4	-	170.4	42			#		
pH	s.u.	10/13/2015	N001	50.4	-	170.4	7.48			#		
Potassium	mg/L	10/13/2015	0001	50.4	-	170.4	2.9			#	0.052	
Selenium	mg/L	10/13/2015	0001	50.4	-	170.4	0.00053	J	J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	50.4	-	170.4	59			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	50.4	-	170.4	667			#		
Sulfate	mg/L	10/13/2015	0001	50.4	-	170.4	110			#	1	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 83-70 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	50.4	-	170.4	9.74			#		
Turbidity	NTU	10/13/2015	N001	50.4	-	170.4	15.3			#		
Uranium	mg/L	10/13/2015	0001	50.4	-	170.4	0.0001		J	#	0.000029	
Vanadium	mg/L	10/13/2015	0001	50.4	-	170.4	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 88-85 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	6.71	-	11.71	376			#		
Arsenic	mg/L	10/13/2015	0001	6.71	-	11.71	0.014			#	0.00015	
Calcium	mg/L	10/13/2015	0001	6.71	-	11.71	230			#	0.024	
Chloride	mg/L	10/13/2015	0001	6.71	-	11.71	87			#	2	
Dissolved Oxygen	mg/L	10/13/2015	N001	6.71	-	11.71	1.94			#		
Fluoride	mg/L	10/13/2015	0001	6.71	-	11.71	0.5			#	0.5	
Iron	mg/L	10/13/2015	0001	6.71	-	11.71	0.072	J		#	0.0067	
Magnesium	mg/L	10/13/2015	0001	6.71	-	11.71	47			#	0.03	
Manganese	mg/L	10/13/2015	0001	6.71	-	11.71	0.00024	J	U	#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	6.71	-	11.71	0.029			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	6.71	-	11.71	1.4			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	6.71	-	11.71	-32.7			#		
pH	s.u.	10/13/2015	N001	6.71	-	11.71	6.99			#		
Potassium	mg/L	10/13/2015	0001	6.71	-	11.71	6.4			#	0.052	
Selenium	mg/L	10/13/2015	0001	6.71	-	11.71	0.022			#	0.00032	
Sodium	mg/L	10/13/2015	0001	6.71	-	11.71	100			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	6.71	-	11.71	1732			#		
Sulfate	mg/L	10/13/2015	0001	6.71	-	11.71	570			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 88-85 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	6.71	-	11.71	13.64			#		
Total Dissolved Solids	mg/L	10/13/2015	0001	6.71	-	11.71	1300			#	40	
Turbidity	NTU	10/13/2015	N001	6.71	-	11.71	1.38			#		
Uranium	mg/L	10/13/2015	0001	6.71	-	11.71	0.19			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	6.71	-	11.71	0.39			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-07 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	15.6	-	20.6	340			#		
Arsenic	mg/L	10/13/2015	0001	15.6	-	20.6	0.011			#	0.00015	
Calcium	mg/L	10/13/2015	0001	15.6	-	20.6	200			#	0.024	
Chloride	mg/L	10/13/2015	0001	15.6	-	20.6	66			#	2	
Dissolved Oxygen	mg/L	10/13/2015	N001	15.6	-	20.6	1.18			#		
Fluoride	mg/L	10/13/2015	0001	15.6	-	20.6	0.59			#	0.5	
Iron	mg/L	10/13/2015	0001	15.6	-	20.6	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	15.6	-	20.6	40			#	0.03	
Manganese	mg/L	10/13/2015	0001	15.6	-	20.6	0.00024	J	U	#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	15.6	-	20.6	0.066			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	15.6	-	20.6	0.59			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	15.6	-	20.6	-3.2			#		
pH	s.u.	10/13/2015	N001	15.6	-	20.6	7.12			#		
Potassium	mg/L	10/13/2015	0001	15.6	-	20.6	11			#	0.052	
Selenium	mg/L	10/13/2015	0001	15.6	-	20.6	0.019			#	0.00032	
Sodium	mg/L	10/13/2015	0001	15.6	-	20.6	92			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	15.6	-	20.6	1587			#		
Sulfate	mg/L	10/13/2015	0001	15.6	-	20.6	510			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-07 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	15.6	-	20.6	12.96			#		
Turbidity	NTU	10/13/2015	N001	15.6	-	20.6	1.17			#		
Uranium	mg/L	10/13/2015	0001	15.6	-	20.6	0.47			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	15.6	-	20.6	0.35			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-08 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	12.9	-	17.9	284			#		
Arsenic	mg/L	10/14/2015	0001	12.9	-	17.9	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/14/2015	0001	12.9	-	17.9	170			#	0.024	
Chloride	mg/L	10/14/2015	0001	12.9	-	17.9	45			#	2	
Dissolved Oxygen	mg/L	10/14/2015	N001	12.9	-	17.9	1.3			#		
Fluoride	mg/L	10/14/2015	0001	12.9	-	17.9	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	12.9	-	17.9	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	12.9	-	17.9	35			#	0.03	
Manganese	mg/L	10/14/2015	0001	12.9	-	17.9	0.032			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	12.9	-	17.9	0.035			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	12.9	-	17.9	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	12.9	-	17.9	130.5			#		
pH	s.u.	10/14/2015	N001	12.9	-	17.9	6.95			#		
Potassium	mg/L	10/14/2015	0001	12.9	-	17.9	6.4			#	0.052	
Selenium	mg/L	10/14/2015	0001	12.9	-	17.9	0.0024		J	#	0.00032	
Sodium	mg/L	10/14/2015	0001	12.9	-	17.9	76			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	12.9	-	17.9	1311		J	#		
Sulfate	mg/L	10/14/2015	0001	12.9	-	17.9	430			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-08 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/14/2015	N001	12.9	-	17.9	12.79			#		
Turbidity	NTU	10/14/2015	N001	12.9	-	17.9	1.95			#		
Uranium	mg/L	10/14/2015	0001	12.9	-	17.9	0.21			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	12.9	-	17.9	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-09 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	10.9	-	16	380			#		
Arsenic	mg/L	10/14/2015	0001	10.9	-	16	0.0017		J	#	0.00015	
Arsenic	mg/L	10/14/2015	0002	10.9	-	16	0.002		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	10.9	-	16	280			#	0.024	
Calcium	mg/L	10/14/2015	0002	10.9	-	16	280			#	0.024	
Chloride	mg/L	10/14/2015	0001	10.9	-	16	110			#	4	
Chloride	mg/L	10/14/2015	0002	10.9	-	16	110			#	4	
Fluoride	mg/L	10/14/2015	0001	10.9	-	16	0.5	U		#	0.5	
Fluoride	mg/L	10/14/2015	0002	10.9	-	16	0.5	U		#	0.5	
Iron	mg/L	10/14/2015	0001	10.9	-	16	1.3			#	0.0067	
Iron	mg/L	10/14/2015	0002	10.9	-	16	1.4			#	0.0067	
Magnesium	mg/L	10/14/2015	0001	10.9	-	16	66			#	0.03	
Magnesium	mg/L	10/14/2015	0002	10.9	-	16	66			#	0.03	
Manganese	mg/L	10/14/2015	0001	10.9	-	16	0.14			#	0.00024	
Manganese	mg/L	10/14/2015	0002	10.9	-	16	0.15			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	10.9	-	16	0.0035		J	#	0.00032	
Molybdenum	mg/L	10/14/2015	0002	10.9	-	16	0.0035		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	10.9	-	16	0.01	U		#	0.01	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-09 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0002	10.9	-	16	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	10.9	-	16	-4.7			#		
pH	s.u.	10/14/2015	N001	10.9	-	16	7.02			#		
Potassium	mg/L	10/14/2015	0001	10.9	-	16	2.4			#	0.052	
Potassium	mg/L	10/14/2015	0002	10.9	-	16	2.7			#	0.052	
Selenium	mg/L	10/14/2015	0001	10.9	-	16	0.00032	U		#	0.00032	
Selenium	mg/L	10/14/2015	0002	10.9	-	16	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	10.9	-	16	190			#	0.047	
Sodium	mg/L	10/14/2015	0002	10.9	-	16	190			#	0.047	
Specific Conductance	umhos/cm	10/14/2015	N001	10.9	-	16	2369			#		
Sulfate	mg/L	10/14/2015	0001	10.9	-	16	960			#	10	
Sulfate	mg/L	10/14/2015	0002	10.9	-	16	960			#	10	
Temperature	C	10/14/2015	N001	10.9	-	16	14.09			#		
Turbidity	NTU	10/14/2015	N001	10.9	-	16	2.33			#		
Uranium	mg/L	10/14/2015	0001	10.9	-	16	0.37			#	0.000029	
Uranium	mg/L	10/14/2015	0002	10.9	-	16	0.38			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	10.9	-	16	0.00015	J	U	#	0.00015	
Vanadium	mg/L	10/14/2015	0002	10.9	-	16	0.0014	J	J	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-10 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	34.4	-	64.4	182			#		
Arsenic	mg/L	10/14/2015	0001	34.4	-	64.4	0.00015	U		#	0.00015	
Arsenic	mg/L	10/14/2015	0002	34.4	-	64.4	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/14/2015	0001	34.4	-	64.4	150			#	0.024	
Calcium	mg/L	10/14/2015	0002	34.4	-	64.4	150			#	0.024	
Chloride	mg/L	10/14/2015	0001	34.4	-	64.4	69			#	2	
Chloride	mg/L	10/14/2015	0002	34.4	-	64.4	69			#	2	
Fluoride	mg/L	10/14/2015	0001	34.4	-	64.4	0.4	U		#	0.4	
Fluoride	mg/L	10/14/2015	0002	34.4	-	64.4	0.5	U		#	0.5	
Iron	mg/L	10/14/2015	0001	34.4	-	64.4	0.99			#	0.0067	
Iron	mg/L	10/14/2015	0002	34.4	-	64.4	1			#	0.0067	
Magnesium	mg/L	10/14/2015	0001	34.4	-	64.4	26			#	0.03	
Magnesium	mg/L	10/14/2015	0002	34.4	-	64.4	25			#	0.03	
Manganese	mg/L	10/14/2015	0001	34.4	-	64.4	0.75			#	0.00024	
Manganese	mg/L	10/14/2015	0002	34.4	-	64.4	0.72			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	34.4	-	64.4	0.0018		J	#	0.00032	
Molybdenum	mg/L	10/14/2015	0002	34.4	-	64.4	0.0014		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	34.4	-	64.4	0.01	U		#	0.01	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-10 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0002	34.4	-	64.4	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	34.4	-	64.4	-67			#		
pH	s.u.	10/14/2015	N001	34.4	-	64.4	7.38			#		
Potassium	mg/L	10/14/2015	0001	34.4	-	64.4	4.2			#	0.052	
Potassium	mg/L	10/14/2015	0002	34.4	-	64.4	4.3			#	0.052	
Selenium	mg/L	10/14/2015	0001	34.4	-	64.4	0.00032	U		#	0.00032	
Selenium	mg/L	10/14/2015	0002	34.4	-	64.4	0.00077	J	J	#	0.00032	
Sodium	mg/L	10/14/2015	0001	34.4	-	64.4	79			#	0.047	
Sodium	mg/L	10/14/2015	0002	34.4	-	64.4	77			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	34.4	-	64.4	1230			#		
Sulfate	mg/L	10/14/2015	0001	34.4	-	64.4	410			#	5	
Sulfate	mg/L	10/14/2015	0002	34.4	-	64.4	410			#	5	
Temperature	C	10/14/2015	N001	34.4	-	64.4	12.61			#		
Turbidity	NTU	10/14/2015	N001	34.4	-	64.4	3.49			#		
Uranium	mg/L	10/14/2015	0001	34.4	-	64.4	0.00012			#	0.000029	
Uranium	mg/L	10/14/2015	0002	34.4	-	64.4	0.0001		J	#	0.000029	
Vanadium	mg/L	10/14/2015	0001	34.4	-	64.4	0.00015	J	U	#	0.00015	
Vanadium	mg/L	10/14/2015	0002	34.4	-	64.4	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-11 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	9.5	-	13.9	366			#		
Arsenic	mg/L	10/14/2015	0001	9.5	-	13.9	0.016			#	0.00015	
Calcium	mg/L	10/14/2015	0001	9.5	-	13.9	240			#	0.024	
Chloride	mg/L	10/14/2015	0001	9.5	-	13.9	99			#	2	
Dissolved Oxygen	mg/L	10/14/2015	N001	9.5	-	13.9	5.04			#		
Fluoride	mg/L	10/14/2015	0001	9.5	-	13.9	0.5	U		#	0.5	
Iron	mg/L	10/14/2015	0001	9.5	-	13.9	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	9.5	-	13.9	50			#	0.03	
Manganese	mg/L	10/14/2015	0001	9.5	-	13.9	0.00024	J	U	#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	9.5	-	13.9	0.017			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	9.5	-	13.9	1.3			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	9.5	-	13.9	179.9			#		
pH	s.u.	10/14/2015	N001	9.5	-	13.9	6.97			#		
Potassium	mg/L	10/14/2015	0001	9.5	-	13.9	6.2			#	0.052	
Selenium	mg/L	10/14/2015	0001	9.5	-	13.9	0.024			#	0.00032	
Sodium	mg/L	10/14/2015	0001	9.5	-	13.9	110			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	9.5	-	13.9	1808			#		
Sulfate	mg/L	10/14/2015	0001	9.5	-	13.9	590			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 92-11 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/14/2015	N001	9.5	-	13.9	11.44			#		
Turbidity	NTU	10/14/2015	N001	9.5	-	13.9	3.15			#		
Uranium	mg/L	10/14/2015	0001	9.5	-	13.9	0.15			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	9.5	-	13.9	0.41			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 93-01 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	119	-	179	364			#		
Arsenic	mg/L	10/14/2015	0001	119	-	179	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/14/2015	0001	119	-	179	28			#	0.024	
Chloride	mg/L	10/14/2015	0001	119	-	179	7.1	N		#	0.2	
Fluoride	mg/L	10/14/2015	0001	119	-	179	0.74			#	0.1	
Iron	mg/L	10/14/2015	0001	119	-	179	0.13			#	0.0067	
Magnesium	mg/L	10/14/2015	0001	119	-	179	7.2			#	0.03	
Manganese	mg/L	10/14/2015	0001	119	-	179	0.068			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	119	-	179	0.00032	U		#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	119	-	179	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	119	-	179	-2.6			#		
pH	s.u.	10/14/2015	N001	119	-	179	7.66			#		
Potassium	mg/L	10/14/2015	0001	119	-	179	3.5			#	0.052	
Selenium	mg/L	10/14/2015	0001	119	-	179	0.00067	J	J	#	0.00032	
Sodium	mg/L	10/14/2015	0001	119	-	179	150			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	119	-	179	735			#		
Sulfate	mg/L	10/14/2015	0001	119	-	179	1.1			#	0.5	
Temperature	C	10/14/2015	N001	119	-	179	11.03			#		
Turbidity	NTU	10/14/2015	N001	119	-	179	1.05			#		
Uranium	mg/L	10/14/2015	0001	119	-	179	0.00046		J	#	0.000029	
Vanadium	mg/L	10/14/2015	0001	119	-	179	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 95-01 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	3.5	-	8.5	170			#		
Arsenic	mg/L	10/14/2015	0001	3.5	-	8.5	0.0028		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	3.5	-	8.5	38			#	0.024	
Chloride	mg/L	10/14/2015	0001	3.5	-	8.5	8.7			#	0.4	
Fluoride	mg/L	10/14/2015	0001	3.5	-	8.5	0.27			#	0.1	
Iron	mg/L	10/14/2015	0001	3.5	-	8.5	0.75			#	0.0067	
Magnesium	mg/L	10/14/2015	0001	3.5	-	8.5	10			#	0.03	
Manganese	mg/L	10/14/2015	0001	3.5	-	8.5	0.21			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	3.5	-	8.5	0.00053	J	J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	3.5	-	8.5	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	3.5	-	8.5	-65			#		
pH	s.u.	10/14/2015	N001	3.5	-	8.5	7.25			#		
Potassium	mg/L	10/14/2015	0001	3.5	-	8.5	3.3			#	0.052	
Selenium	mg/L	10/14/2015	0001	3.5	-	8.5	0.00032	U		#	0.00032	
Sodium	mg/L	10/14/2015	0001	3.5	-	8.5	76			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	3.5	-	8.5	597			#		
Sulfate	mg/L	10/14/2015	0001	3.5	-	8.5	130			#	1	
Temperature	C	10/14/2015	N001	3.5	-	8.5	13.33			#		
Turbidity	NTU	10/14/2015	N001	3.5	-	8.5	4.77			#		
Uranium	mg/L	10/14/2015	0001	3.5	-	8.5	0.00042		J	#	0.000029	
Vanadium	mg/L	10/14/2015	0001	3.5	-	8.5	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: 95-03 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	5.56	-	10.56	230			#		
Arsenic	mg/L	10/14/2015	0001	5.56	-	10.56	0.00018	J	J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	5.56	-	10.56	150			#	0.024	
Chloride	mg/L	10/14/2015	0001	5.56	-	10.56	98			#	2	
Fluoride	mg/L	10/14/2015	0001	5.56	-	10.56	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	5.56	-	10.56	1.2			#	0.0067	
Magnesium	mg/L	10/14/2015	0001	5.56	-	10.56	52			#	0.03	
Manganese	mg/L	10/14/2015	0001	5.56	-	10.56	0.38			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	5.56	-	10.56	0.0042		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	5.56	-	10.56	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	5.56	-	10.56	-61.7			#		
pH	s.u.	10/14/2015	N001	5.56	-	10.56	7.21			#		
Potassium	mg/L	10/14/2015	0001	5.56	-	10.56	3.5			#	0.052	
Selenium	mg/L	10/14/2015	0001	5.56	-	10.56	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	5.56	-	10.56	110			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	5.56	-	10.56	1556			#		
Sulfate	mg/L	10/14/2015	0001	5.56	-	10.56	570			#	5	
Temperature	C	10/14/2015	N001	5.56	-	10.56	15.15			#		
Turbidity	NTU	10/14/2015	N001	5.56	-	10.56	2.59			#		
Uranium	mg/L	10/14/2015	0001	5.56	-	10.56	0.0082			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	5.56	-	10.56	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: MW00-01 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/12/2015	0001	7.37	-	13.4	240			#		
Arsenic	mg/L	10/12/2015	0001	7.37	-	13.4	0.00032	J	J	#	0.00015	
Calcium	mg/L	10/12/2015	0001	7.37	-	13.4	220			#	0.024	
Chloride	mg/L	10/12/2015	0001	7.37	-	13.4	12			#	2	
Fluoride	mg/L	10/12/2015	0001	7.37	-	13.4	0.4	U		#	0.4	
Iron	mg/L	10/12/2015	0001	7.37	-	13.4	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/12/2015	0001	7.37	-	13.4	34			#	0.03	
Manganese	mg/L	10/12/2015	0001	7.37	-	13.4	0.00024	J	U	#	0.00024	
Molybdenum	mg/L	10/12/2015	0001	7.37	-	13.4	0.0016		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/12/2015	0001	7.37	-	13.4	0.068			#	0.01	
Oxidation Reduction Potential	mV	10/12/2015	N001	7.37	-	13.4	94.9			#		
pH	s.u.	10/12/2015	N001	7.37	-	13.4	6.73			#		
Potassium	mg/L	10/12/2015	0001	7.37	-	13.4	3			#	0.052	
Selenium	mg/L	10/12/2015	0001	7.37	-	13.4	0.00032		U	#	0.00032	
Sodium	mg/L	10/12/2015	0001	7.37	-	13.4	47			#	0.047	
Specific Conductance	umhos /cm	10/12/2015	N001	7.37	-	13.4	1334			#		
Sulfate	mg/L	10/12/2015	0001	7.37	-	13.4	480			#	5	
Temperature	C	10/12/2015	N001	7.37	-	13.4	10.08			#		
Turbidity	NTU	10/12/2015	N001	7.37	-	13.4	4.26			#		
Uranium	mg/L	10/12/2015	0001	7.37	-	13.4	0.0056			#	0.000029	
Vanadium	mg/L	10/12/2015	0001	7.37	-	13.4	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: MW00-06 WELL Erroneously labeled as Somerville.

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	14.08	-	19.11	500			#		
Arsenic	mg/L	10/14/2015	0001	14.08	-	19.11	0.0039			#	0.00015	
Calcium	mg/L	10/14/2015	0001	14.08	-	19.11	190			#	0.024	
Chloride	mg/L	10/14/2015	0001	14.08	-	19.11	72			#	2	
Dissolved Oxygen	mg/L	10/14/2015	N001	14.08	-	19.11	4.93			#		
Fluoride	mg/L	10/14/2015	0001	14.08	-	19.11	0.43			#	0.4	
Iron	mg/L	10/14/2015	0001	14.08	-	19.11	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	14.08	-	19.11	43			#	0.03	
Manganese	mg/L	10/14/2015	0001	14.08	-	19.11	0.00024	J	U	#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	14.08	-	19.11	0.048			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	14.08	-	19.11	0.68			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	14.08	-	19.11	67.5			#		
pH	s.u.	10/14/2015	N001	14.08	-	19.11	6.94			#		
Potassium	mg/L	10/14/2015	0001	14.08	-	19.11	9.5			#	0.052	
Selenium	mg/L	10/14/2015	0001	14.08	-	19.11	0.021			#	0.00032	
Sodium	mg/L	10/14/2015	0001	14.08	-	19.11	98			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	14.08	-	19.11	1565			#		
Sulfate	mg/L	10/14/2015	0001	14.08	-	19.11	520			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: MW00-06 WELL Erroneously labeled as Somerville.

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/14/2015	N001	14.08	-	19.11	12.26			#		
Total Dissolved Solids	mg/L	10/14/2015	0001	14.08	-	19.11	1100			#	40	
Turbidity	NTU	10/14/2015	N001	14.08	-	19.11	1.97			#		
Uranium	mg/L	10/14/2015	0001	14.08	-	19.11	0.4			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	14.08	-	19.11	0.13			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: P92-06 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	11.7	-	14.2	320			#		
Arsenic	mg/L	10/14/2015	0001	11.7	-	14.2	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/14/2015	0001	11.7	-	14.2	210			#	0.024	
Chloride	mg/L	10/14/2015	0001	11.7	-	14.2	74			#	2	
Dissolved Oxygen	mg/L	10/14/2015	N001	11.7	-	14.2	4			#		
Fluoride	mg/L	10/14/2015	0001	11.7	-	14.2	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	11.7	-	14.2	0.0067	U		#	0.0067	
Magnesium	mg/L	10/14/2015	0001	11.7	-	14.2	64			#	0.03	
Manganese	mg/L	10/14/2015	0001	11.7	-	14.2	0.0019	J		#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	11.7	-	14.2	0.037			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	11.7	-	14.2	0.74			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	11.7	-	14.2	150.2			#		
pH	s.u.	10/14/2015	N001	11.7	-	14.2	6.99			#		
Potassium	mg/L	10/14/2015	0001	11.7	-	14.2	6.6			#	0.052	
Selenium	mg/L	10/14/2015	0001	11.7	-	14.2	0.043			#	0.00032	
Sodium	mg/L	10/14/2015	0001	11.7	-	14.2	120			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	11.7	-	14.2	1829			#		
Sulfate	mg/L	10/14/2015	0001	11.7	-	14.2	650			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: P92-06 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/14/2015	N001	11.7	-	14.2	12.17			#		
Turbidity	NTU	10/14/2015	N001	11.7	-	14.2	1.56			#		
Uranium	mg/L	10/14/2015	0001	11.7	-	14.2	0.43			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	11.7	-	14.2	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: PW-10 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	27.91	-	32.91	316			#		
Arsenic	mg/L	10/13/2015	0001	27.91	-	32.91	0.005			#	0.00015	
Calcium	mg/L	10/13/2015	0001	27.91	-	32.91	200			#	0.024	
Chloride	mg/L	10/13/2015	0001	27.91	-	32.91	65			#	2	
Dissolved Oxygen	mg/L	10/13/2015	N001	27.91	-	32.91	8.26			#		
Fluoride	mg/L	10/13/2015	0001	27.91	-	32.91	0.51			#	0.4	
Iron	mg/L	10/13/2015	0001	27.91	-	32.91	0.9			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	27.91	-	32.91	39			#	0.03	
Manganese	mg/L	10/13/2015	0001	27.91	-	32.91	0.07			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	27.91	-	32.91	0.072			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	27.91	-	32.91	1			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	27.91	-	32.91	47.8			#		
pH	s.u.	10/13/2015	N001	27.91	-	32.91	7.19			#		
Potassium	mg/L	10/13/2015	0001	27.91	-	32.91	11			#	0.052	
Selenium	mg/L	10/13/2015	0001	27.91	-	32.91	0.018			#	0.00032	
Sodium	mg/L	10/13/2015	0001	27.91	-	32.91	120			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	27.91	-	32.91	1638			#		
Sulfate	mg/L	10/13/2015	0001	27.91	-	32.91	530			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: PW-10 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	27.91	-	32.91	13.42			#		
Turbidity	NTU	10/13/2015	N001	27.91	-	32.91	293			#		
Uranium	mg/L	10/13/2015	0001	27.91	-	32.91	0.56			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	27.91	-	32.91	0.14			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: PW-17 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	30.47	-	35.47	355			#		
Arsenic	mg/L	10/13/2015	0001	30.47	-	35.47	0.0093			#	0.00015	
Calcium	mg/L	10/13/2015	0001	30.47	-	35.47	190			#	0.024	
Chloride	mg/L	10/13/2015	0001	30.47	-	35.47	53			#	2	
Dissolved Oxygen	mg/L	10/13/2015	N001	30.47	-	35.47	8.37			#		
Fluoride	mg/L	10/13/2015	0001	30.47	-	35.47	0.58			#	0.4	
Iron	mg/L	10/13/2015	0001	30.47	-	35.47	0.27			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	30.47	-	35.47	39			#	0.03	
Manganese	mg/L	10/13/2015	0001	30.47	-	35.47	0.032			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	30.47	-	35.47	0.095			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	30.47	-	35.47	0.43			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	30.47	-	35.47	57.3			#		
pH	s.u.	10/13/2015	N001	30.47	-	35.47	7.14			#		
Potassium	mg/L	10/13/2015	0001	30.47	-	35.47	12			#	0.052	
Selenium	mg/L	10/13/2015	0001	30.47	-	35.47	0.021			#	0.00032	
Sodium	mg/L	10/13/2015	0001	30.47	-	35.47	91			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	30.47	-	35.47	1427			#		
Sulfate	mg/L	10/13/2015	0001	30.47	-	35.47	450			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: PW-17 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	30.47	-	35.47	13.91			#		
Turbidity	NTU	10/13/2015	N001	30.47	-	35.47	220			#		
Uranium	mg/L	10/13/2015	0001	30.47	-	35.47	0.68			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	30.47	-	35.47	0.24			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: PW-28 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	-	360			#		
Arsenic	mg/L	10/13/2015	0001	-	0.0026		J	#	0.00015	
Calcium	mg/L	10/13/2015	0001	-	270			#	0.024	
Chloride	mg/L	10/13/2015	0001	-	130			#	4	
Dissolved Oxygen	mg/L	10/13/2015	N001	-	3.74			#		
Fluoride	mg/L	10/13/2015	0001	-	0.52			#	0.5	
Iron	mg/L	10/13/2015	0001	-	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	-	70			#	0.03	
Manganese	mg/L	10/13/2015	0001	-	0.002	J		#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	-	0.014			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	-	4.7			#	0.1	
Oxidation Reduction Potential	mV	10/13/2015	N001	-	33.2			#		
pH	s.u.	10/13/2015	N001	-	6.8			#		
Potassium	mg/L	10/13/2015	0001	-	5.2			#	0.052	
Selenium	mg/L	10/13/2015	0001	-	0.032			#	0.00032	
Sodium	mg/L	10/13/2015	0001	-	140			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	-	2164			#		
Sulfate	mg/L	10/13/2015	0001	-	730			#	10	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: PW-28 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers Lab Data QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	-	12.13	#		
Turbidity	NTU	10/13/2015	N001	-	4.39	#		
Uranium	mg/L	10/13/2015	0001	-	0.17	#	0.000029	
Vanadium	mg/L	10/13/2015	0001	-	0.19	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R1-M3 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/12/2015	0001	8.5	-	13.5	290			#		
Arsenic	mg/L	10/12/2015	0001	8.5	-	13.5	0.014			#	0.00015	
Calcium	mg/L	10/12/2015	0001	8.5	-	13.5	210			#	0.024	
Chloride	mg/L	10/12/2015	0001	8.5	-	13.5	67			#	2	
Dissolved Oxygen	mg/L	10/12/2015	N001	8.5	-	13.5	1.75			#		
Fluoride	mg/L	10/12/2015	0001	8.5	-	13.5	0.57			#	0.4	
Iron	mg/L	10/12/2015	0001	8.5	-	13.5	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/12/2015	0001	8.5	-	13.5	43			#	0.03	
Manganese	mg/L	10/12/2015	0001	8.5	-	13.5	0.023			#	0.00024	
Molybdenum	mg/L	10/12/2015	0001	8.5	-	13.5	0.044			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/12/2015	0001	8.5	-	13.5	0.85			#	0.01	
Oxidation Reduction Potential	mV	10/12/2015	N001	8.5	-	13.5	70.5			#		
pH	s.u.	10/12/2015	N001	8.5	-	13.5	6.98			#		
Potassium	mg/L	10/12/2015	0001	8.5	-	13.5	8.7			#	0.052	
Selenium	mg/L	10/12/2015	0001	8.5	-	13.5	0.021			#	0.00032	
Sodium	mg/L	10/12/2015	0001	8.5	-	13.5	100			#	0.047	
Specific Conductance	umhos /cm	10/12/2015	N001	8.5	-	13.5	2025			#		
Sulfate	mg/L	10/12/2015	0001	8.5	-	13.5	500			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R1-M3 WELL Pert Wall

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/12/2015	N001	8.5	-	13.5	13.61			#		
Turbidity	NTU	10/12/2015	N001	8.5	-	13.5	23.4			#		
Uranium	mg/L	10/12/2015	0001	8.5	-	13.5	0.31			#	0.000029	
Vanadium	mg/L	10/12/2015	0001	8.5	-	13.5	0.4			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R1-M4 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	8.49	-	13.49	362			#		
Arsenic	mg/L	10/13/2015	0001	8.49	-	13.49	0.0077			#	0.00015	
Calcium	mg/L	10/13/2015	0001	8.49	-	13.49	210			#	0.024	
Chloride	mg/L	10/13/2015	0001	8.49	-	13.49	72			#	2	
Dissolved Oxygen	mg/L	10/13/2015	N001	8.49	-	13.49	1.65			#		
Fluoride	mg/L	10/13/2015	0001	8.49	-	13.49	0.58			#	0.4	
Iron	mg/L	10/13/2015	0001	8.49	-	13.49	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	8.49	-	13.49	44			#	0.03	
Manganese	mg/L	10/13/2015	0001	8.49	-	13.49	0.0083			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	8.49	-	13.49	0.05			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	8.49	-	13.49	0.92			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	8.49	-	13.49	-54.8			#		
pH	s.u.	10/13/2015	N001	8.49	-	13.49	7.06			#		
Potassium	mg/L	10/13/2015	0001	8.49	-	13.49	9.5			#	0.052	
Selenium	mg/L	10/13/2015	0001	8.49	-	13.49	0.019			#	0.00032	
Sodium	mg/L	10/13/2015	0001	8.49	-	13.49	100			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	8.49	-	13.49	1683			#		
Sulfate	mg/L	10/13/2015	0001	8.49	-	13.49	510			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R1-M4 WELL Pert Wall

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	8.49	-	13.49	13.44			#		
Turbidity	NTU	10/13/2015	N001	8.49	-	13.49	13.9			#		
Uranium	mg/L	10/13/2015	0001	8.49	-	13.49	0.34			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	8.49	-	13.49	0.27			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R10-M1 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	10.25	-	15.25	108			#		
Arsenic	mg/L	10/13/2015	0001	10.25	-	15.25	0.0015		J	#	0.00015	
Calcium	mg/L	10/13/2015	0001	10.25	-	15.25	84			#	0.024	
Chloride	mg/L	10/13/2015	0001	10.25	-	15.25	63			#	1	
Dissolved Oxygen	mg/L	10/13/2015	N001	10.25	-	15.25	2.72			#		
Fluoride	mg/L	10/13/2015	0001	10.25	-	15.25	0.21			#	0.2	
Iron	mg/L	10/13/2015	0001	10.25	-	15.25	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	10.25	-	15.25	26			#	0.03	
Manganese	mg/L	10/13/2015	0001	10.25	-	15.25	0.0024	J		#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	10.25	-	15.25	0.0031		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	10.25	-	15.25	0.085			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	10.25	-	15.25	-8			#		
pH	s.u.	10/13/2015	N001	10.25	-	15.25	6.8			#		
Potassium	mg/L	10/13/2015	0001	10.25	-	15.25	8.5			#	0.052	
Selenium	mg/L	10/13/2015	0001	10.25	-	15.25	0.0033		J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	10.25	-	15.25	86			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	10.25	-	15.25	1017			#		
Sulfate	mg/L	10/13/2015	0001	10.25	-	15.25	300			#	2.5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R10-M1 WELL Pert Wall

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	10.25	-	15.25	14.16			#		
Turbidity	NTU	10/13/2015	N001	10.25	-	15.25	2.51			#		
Uranium	mg/L	10/13/2015	0001	10.25	-	15.25	0.0088			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	10.25	-	15.25	0.026			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R3-M2 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/12/2015	0001	9.16	-	14.16	310			#		
Arsenic	mg/L	10/12/2015	0001	9.16	-	14.16	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/12/2015	0001	9.16	-	14.16	190			#	0.024	
Chloride	mg/L	10/12/2015	0001	9.16	-	14.16	70			#	2	
Dissolved Oxygen	mg/L	10/12/2015	N001	9.16	-	14.16	1.08			#		
Fluoride	mg/L	10/12/2015	0001	9.16	-	14.16	0.55			#	0.4	
Iron	mg/L	10/12/2015	0001	9.16	-	14.16	1.9			#	0.0067	
Magnesium	mg/L	10/12/2015	0001	9.16	-	14.16	42			#	0.03	
Manganese	mg/L	10/12/2015	0001	9.16	-	14.16	0.092			#	0.00024	
Molybdenum	mg/L	10/12/2015	0001	9.16	-	14.16	0.12			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/12/2015	0001	9.16	-	14.16	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/12/2015	N001	9.16	-	14.16	-104			#		
pH	s.u.	10/12/2015	N001	9.16	-	14.16	7.63			#		
Potassium	mg/L	10/12/2015	0001	9.16	-	14.16	11			#	0.052	
Selenium	mg/L	10/12/2015	0001	9.16	-	14.16	0.00032		U	#	0.00032	
Sodium	mg/L	10/12/2015	0001	9.16	-	14.16	100			#	0.047	
Specific Conductance	umhos /cm	10/12/2015	N001	9.16	-	14.16	1612			#		
Sulfate	mg/L	10/12/2015	0001	9.16	-	14.16	450			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R3-M2 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/12/2015	N001	9.16	-	14.16	14.31			#		
Turbidity	NTU	10/12/2015	N001	9.16	-	14.16	16.1			#		
Uranium	mg/L	10/12/2015	0001	9.16	-	14.16	0.36			#	0.000029	
Vanadium	mg/L	10/12/2015	0001	9.16	-	14.16	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R3-M3 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	8.43	-	13.43	550			#		
Arsenic	mg/L	10/13/2015	0001	8.43	-	13.43	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/13/2015	0001	8.43	-	13.43	180			#	0.024	
Chloride	mg/L	10/13/2015	0001	8.43	-	13.43	68			#	2	
Dissolved Oxygen	mg/L	10/13/2015	N001	8.43	-	13.43	1.06			#		
Fluoride	mg/L	10/13/2015	0001	8.43	-	13.43	0.51			#	0.4	
Iron	mg/L	10/13/2015	0001	8.43	-	13.43	7.1			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	8.43	-	13.43	41			#	0.03	
Manganese	mg/L	10/13/2015	0001	8.43	-	13.43	0.21			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	8.43	-	13.43	0.061			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	8.43	-	13.43	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	8.43	-	13.43	-165.8			#		
pH	s.u.	10/13/2015	N001	8.43	-	13.43	7.69			#		
Potassium	mg/L	10/13/2015	0001	8.43	-	13.43	10			#	0.052	
Selenium	mg/L	10/13/2015	0001	8.43	-	13.43	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/13/2015	0001	8.43	-	13.43	100			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	8.43	-	13.43	1531			#		
Sulfate	mg/L	10/13/2015	0001	8.43	-	13.43	450			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R3-M3 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	8.43	-	13.43	15.37			#		
Turbidity	NTU	10/13/2015	N001	8.43	-	13.43	25.7			#		
Uranium	mg/L	10/13/2015	0001	8.43	-	13.43	0.24			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	8.43	-	13.43	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R4-M3 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/12/2015	0001	9.04	-	14.04	110			#		
Arsenic	mg/L	10/12/2015	0001	9.04	-	14.04	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/12/2015	0001	9.04	-	14.04	11			#	0.024	
Chloride	mg/L	10/12/2015	0001	9.04	-	14.04	31			#	0.4	
Dissolved Oxygen	mg/L	10/12/2015	N001	9.04	-	14.04	1.19			#		
Fluoride	mg/L	10/12/2015	0001	9.04	-	14.04	0.12			#	0.1	
Iron	mg/L	10/12/2015	0001	9.04	-	14.04	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/12/2015	0001	9.04	-	14.04	20			#	0.03	
Manganese	mg/L	10/12/2015	0001	9.04	-	14.04	0.0088			#	0.00024	
Molybdenum	mg/L	10/12/2015	0001	9.04	-	14.04	0.021			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/12/2015	0001	9.04	-	14.04	1			#	0.01	
Oxidation Reduction Potential	mV	10/12/2015	N001	9.04	-	14.04	-75.3			#		
pH	s.u.	10/12/2015	N001	9.04	-	14.04	9.61			#		
Potassium	mg/L	10/12/2015	0001	9.04	-	14.04	19			#	0.052	
Selenium	mg/L	10/12/2015	0001	9.04	-	14.04	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/12/2015	0001	9.04	-	14.04	66			#	0.047	
Specific Conductance	umhos /cm	10/12/2015	N001	9.04	-	14.04	541			#		
Sulfate	mg/L	10/12/2015	0001	9.04	-	14.04	79			#	1	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R4-M3 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/12/2015	N001	9.04	-	14.04	13.6			#		
Turbidity	NTU	10/12/2015	N001	9.04	-	14.04	18.2			#		
Uranium	mg/L	10/12/2015	0001	9.04	-	14.04	0.0076			#	0.000029	
Vanadium	mg/L	10/12/2015	0001	9.04	-	14.04	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R4-M6 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	8.47	-	13.47	95			#		
Arsenic	mg/L	10/13/2015	0001	8.47	-	13.47	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/13/2015	0001	8.47	-	13.47	8.2			#	0.024	
Chloride	mg/L	10/13/2015	0001	8.47	-	13.47	69			#	1	
Dissolved Oxygen	mg/L	10/13/2015	N001	8.47	-	13.47	0.98			#		
Fluoride	mg/L	10/13/2015	0001	8.47	-	13.47	0.2	U		#	0.2	
Iron	mg/L	10/13/2015	0001	8.47	-	13.47	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	8.47	-	13.47	30			#	0.03	
Manganese	mg/L	10/13/2015	0001	8.47	-	13.47	0.014			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	8.47	-	13.47	0.016			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	8.47	-	13.47	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	8.47	-	13.47	-108			#		
pH	s.u.	10/13/2015	N001	8.47	-	13.47	9.59			#		
Potassium	mg/L	10/13/2015	0001	8.47	-	13.47	10			#	0.052	
Selenium	mg/L	10/13/2015	0001	8.47	-	13.47	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/13/2015	0001	8.47	-	13.47	98			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	8.47	-	13.47	805			#		
Sulfate	mg/L	10/13/2015	0001	8.47	-	13.47	240			#	2.5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R4-M6 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	8.47	-	13.47	15.03			#		
Turbidity	NTU	10/13/2015	N001	8.47	-	13.47	15.1			#		
Uranium	mg/L	10/13/2015	0001	8.47	-	13.47	0.00006	J	J	#	0.000029	
Vanadium	mg/L	10/13/2015	0001	8.47	-	13.47	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R6-M3 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/12/2015	0001	7.72	-	12.72	384			#		
Arsenic	mg/L	10/12/2015	0001	7.72	-	12.72	0.0048			#	0.00015	
Calcium	mg/L	10/12/2015	0001	7.72	-	12.72	220			#	0.024	
Chloride	mg/L	10/12/2015	0001	7.72	-	12.72	92			#	2	
Dissolved Oxygen	mg/L	10/12/2015	N001	7.72	-	12.72	3.25			#		
Fluoride	mg/L	10/12/2015	0001	7.72	-	12.72	0.4	U		#	0.4	
Iron	mg/L	10/12/2015	0001	7.72	-	12.72	2.1			#	0.0067	
Magnesium	mg/L	10/12/2015	0001	7.72	-	12.72	48			#	0.03	
Manganese	mg/L	10/12/2015	0001	7.72	-	12.72	1.3			#	0.00024	
Molybdenum	mg/L	10/12/2015	0001	7.72	-	12.72	0.007		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/12/2015	0001	7.72	-	12.72	0.11			#	0.01	
Oxidation Reduction Potential	mV	10/12/2015	N001	7.72	-	12.72	-58			#		
pH	s.u.	10/12/2015	N001	7.72	-	12.72	6.86			#		
Potassium	mg/L	10/12/2015	0001	7.72	-	12.72	12			#	0.052	
Selenium	mg/L	10/12/2015	0001	7.72	-	12.72	0.00032		U	#	0.00032	
Sodium	mg/L	10/12/2015	0001	7.72	-	12.72	150			#	0.047	
Specific Conductance	umhos /cm	10/12/2015	N001	7.72	-	12.72	1898			#		
Sulfate	mg/L	10/12/2015	0001	7.72	-	12.72	560			#	5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R6-M3 WELL Pert Wall

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/12/2015	N001	7.72	-	12.72	13.8			#		
Turbidity	NTU	10/12/2015	N001	7.72	-	12.72	46.7			#		
Uranium	mg/L	10/12/2015	0001	7.72	-	12.72	0.043			#	0.000029	
Vanadium	mg/L	10/12/2015	0001	7.72	-	12.72	0.0085			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R6-M4 WELL Pert Wall

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	7.96	-	12.96	65			#		
Arsenic	mg/L	10/13/2015	0001	7.96	-	12.96	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/13/2015	0001	7.96	-	12.96	32			#	0.024	
Chloride	mg/L	10/13/2015	0001	7.96	-	12.96	66			#	1	
Dissolved Oxygen	mg/L	10/13/2015	N001	7.96	-	12.96	2.25			#		
Fluoride	mg/L	10/13/2015	0001	7.96	-	12.96	0.2	U		#	0.2	
Iron	mg/L	10/13/2015	0001	7.96	-	12.96	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	7.96	-	12.96	19			#	0.03	
Manganese	mg/L	10/13/2015	0001	7.96	-	12.96	0.091			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	7.96	-	12.96	0.0047		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	7.96	-	12.96	0.11			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	7.96	-	12.96	-45.7			#		
pH	s.u.	10/13/2015	N001	7.96	-	12.96	6.95			#		
Potassium	mg/L	10/13/2015	0001	7.96	-	12.96	8.6			#	0.052	
Selenium	mg/L	10/13/2015	0001	7.96	-	12.96	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/13/2015	0001	7.96	-	12.96	88			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	7.96	-	12.96	774			#		
Sulfate	mg/L	10/13/2015	0001	7.96	-	12.96	200			#	2.5	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: R6-M4 WELL Pert Wall

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/13/2015	N001	7.96	-	12.96	15.19			#		
Turbidity	NTU	10/13/2015	N001	7.96	-	12.96	31.8			#		
Uranium	mg/L	10/13/2015	0001	7.96	-	12.96	0.0022			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	7.96	-	12.96	0.00015		U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T00-01 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	7.2	-	12.2	270			#		
Arsenic	mg/L	10/14/2015	0001	7.2	-	12.2	0.0069			#	0.00015	
Calcium	mg/L	10/14/2015	0001	7.2	-	12.2	140			#	0.024	
Chloride	mg/L	10/14/2015	0001	7.2	-	12.2	19			#	1	
Fluoride	mg/L	10/14/2015	0001	7.2	-	12.2	0.27			#	0.1	
Iron	mg/L	10/14/2015	0001	7.2	-	12.2	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	7.2	-	12.2	27			#	0.03	
Manganese	mg/L	10/14/2015	0001	7.2	-	12.2	0.035			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	7.2	-	12.2	0.0098			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	7.2	-	12.2	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	7.2	-	12.2	-6.5			#		
pH	s.u.	10/14/2015	N001	7.2	-	12.2	7.02			#		
Potassium	mg/L	10/14/2015	0001	7.2	-	12.2	5.4			#	0.052	
Selenium	mg/L	10/14/2015	0001	7.2	-	12.2	0.00032		U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	7.2	-	12.2	56			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	7.2	-	12.2	1047			#		
Sulfate	mg/L	10/14/2015	0001	7.2	-	12.2	130			#	2.5	
Temperature	C	10/14/2015	N001	7.2	-	12.2	13.89			#		
Turbidity	NTU	10/14/2015	N001	7.2	-	12.2	3.09			#		
Uranium	mg/L	10/14/2015	0001	7.2	-	12.2	0.043			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	7.2	-	12.2	0.12			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T00-04 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	2.7	-	7.7	307			#		
Arsenic	mg/L	10/14/2015	0001	2.7	-	7.7	0.0078			#	0.00015	
Calcium	mg/L	10/14/2015	0001	2.7	-	7.7	180			#	0.024	
Chloride	mg/L	10/14/2015	0001	2.7	-	7.7	29			#	2	
Fluoride	mg/L	10/14/2015	0001	2.7	-	7.7	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	2.7	-	7.7	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	2.7	-	7.7	34			#	0.03	
Manganese	mg/L	10/14/2015	0001	2.7	-	7.7	0.00066	J		#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	2.7	-	7.7	0.04			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	2.7	-	7.7	0.098			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	2.7	-	7.7	185.2			#		
pH	s.u.	10/14/2015	N001	2.7	-	7.7	7.17			#		
Potassium	mg/L	10/14/2015	0001	2.7	-	7.7	3.7			#	0.052	
Selenium	mg/L	10/14/2015	0001	2.7	-	7.7	0.0027		J	#	0.00032	
Sodium	mg/L	10/14/2015	0001	2.7	-	7.7	62			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	2.7	-	7.7	1261			#		
Sulfate	mg/L	10/14/2015	0001	2.7	-	7.7	390			#	5	
Temperature	C	10/14/2015	N001	2.7	-	7.7	14.99			#		
Turbidity	NTU	10/14/2015	N001	2.7	-	7.7	2.36			#		
Uranium	mg/L	10/14/2015	0001	2.7	-	7.7	0.085			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	2.7	-	7.7	0.17			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-01 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	5.01	-	10.01	276			#		
Arsenic	mg/L	10/14/2015	0001	5.01	-	10.01	0.0088			#	0.00015	
Calcium	mg/L	10/14/2015	0001	5.01	-	10.01	150			#	0.024	
Chloride	mg/L	10/14/2015	0001	5.01	-	10.01	42			#	1	
Fluoride	mg/L	10/14/2015	0001	5.01	-	10.01	0.24			#	0.2	
Iron	mg/L	10/14/2015	0001	5.01	-	10.01	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	5.01	-	10.01	30			#	0.03	
Manganese	mg/L	10/14/2015	0001	5.01	-	10.01	0.4			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	5.01	-	10.01	0.0078		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	5.01	-	10.01	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	5.01	-	10.01	-31.6			#		
pH	s.u.	10/14/2015	N001	5.01	-	10.01	7.07			#		
Potassium	mg/L	10/14/2015	0001	5.01	-	10.01	5.5			#	0.052	
Selenium	mg/L	10/14/2015	0001	5.01	-	10.01	0.00032		U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	5.01	-	10.01	60			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	5.01	-	10.01	1098			#		
Sulfate	mg/L	10/14/2015	0001	5.01	-	10.01	290			#	2.5	
Temperature	C	10/14/2015	N001	5.01	-	10.01	13.38			#		

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-01 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Total Dissolved Solids	mg/L	10/14/2015	0001	5.01	-	10.01	770			#	20	
Turbidity	NTU	10/14/2015	N001	5.01	-	10.01	2.08			#		
Uranium	mg/L	10/14/2015	0001	5.01	-	10.01	0.045			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	5.01	-	10.01	0.068			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-02 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	6.43	-	11.43	419			#		
Arsenic	mg/L	10/14/2015	0001	6.43	-	11.43	0.02			#	0.00015	
Calcium	mg/L	10/14/2015	0001	6.43	-	11.43	190			#	0.024	
Chloride	mg/L	10/14/2015	0001	6.43	-	11.43	56			#	1	
Fluoride	mg/L	10/14/2015	0001	6.43	-	11.43	0.34			#	0.2	
Iron	mg/L	10/14/2015	0001	6.43	-	11.43	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	6.43	-	11.43	39			#	0.03	
Manganese	mg/L	10/14/2015	0001	6.43	-	11.43	0.012			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	6.43	-	11.43	0.02			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	6.43	-	11.43	0.076			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	6.43	-	11.43	22.2			#		
pH	s.u.	10/14/2015	N001	6.43	-	11.43	7.16			#		
Potassium	mg/L	10/14/2015	0001	6.43	-	11.43	7.2			#	0.052	
Selenium	mg/L	10/14/2015	0001	6.43	-	11.43	0.0094			#	0.00032	
Sodium	mg/L	10/14/2015	0001	6.43	-	11.43	89			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	6.43	-	11.43	1488			#		
Sulfate	mg/L	10/14/2015	0001	6.43	-	11.43	400			#	2.5	
Temperature	C	10/14/2015	N001	6.43	-	11.43	15.17			#		
Turbidity	NTU	10/14/2015	N001	6.43	-	11.43	4.3			#		
Uranium	mg/L	10/14/2015	0001	6.43	-	11.43	0.12			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	6.43	-	11.43	0.43			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-04 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	11.72	-	16.72	373			#		
Arsenic	mg/L	10/14/2015	0001	11.72	-	16.72	0.015			#	0.00015	
Calcium	mg/L	10/14/2015	0001	11.72	-	16.72	240			#	0.024	
Chloride	mg/L	10/14/2015	0001	11.72	-	16.72	90			#	2	
Fluoride	mg/L	10/14/2015	0001	11.72	-	16.72	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	11.72	-	16.72	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	11.72	-	16.72	49			#	0.03	
Manganese	mg/L	10/14/2015	0001	11.72	-	16.72	0.0013	J		#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	11.72	-	16.72	0.014			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	11.72	-	16.72	0.86			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	11.72	-	16.72	107.6			#		
pH	s.u.	10/14/2015	N001	11.72	-	16.72	7.11			#		
Potassium	mg/L	10/14/2015	0001	11.72	-	16.72	5.4			#	0.052	
Selenium	mg/L	10/14/2015	0001	11.72	-	16.72	0.019			#	0.00032	
Sodium	mg/L	10/14/2015	0001	11.72	-	16.72	100			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	11.72	-	16.72	1732			#		
Sulfate	mg/L	10/14/2015	0001	11.72	-	16.72	560			#	5	
Temperature	C	10/14/2015	N001	11.72	-	16.72	13.03			#		
Turbidity	NTU	10/14/2015	N001	11.72	-	16.72	2.66			#		
Uranium	mg/L	10/14/2015	0001	11.72	-	16.72	0.13			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	11.72	-	16.72	0.37			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-05 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	18.56	-	23.56	360			#		
Arsenic	mg/L	10/14/2015	0001	18.56	-	23.56	0.014			#	0.00015	
Calcium	mg/L	10/14/2015	0001	18.56	-	23.56	240			#	0.024	
Chloride	mg/L	10/14/2015	0001	18.56	-	23.56	92			#	2	
Fluoride	mg/L	10/14/2015	0001	18.56	-	23.56	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	18.56	-	23.56	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	18.56	-	23.56	49			#	0.03	
Manganese	mg/L	10/14/2015	0001	18.56	-	23.56	0.00053	J		#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	18.56	-	23.56	0.011			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	18.56	-	23.56	0.96			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	18.56	-	23.56	91.3			#		
pH	s.u.	10/14/2015	N001	18.56	-	23.56	7.13			#		
Potassium	mg/L	10/14/2015	0001	18.56	-	23.56	5			#	0.052	
Selenium	mg/L	10/14/2015	0001	18.56	-	23.56	0.017			#	0.00032	
Sodium	mg/L	10/14/2015	0001	18.56	-	23.56	100			#	0.047	
Specific Conductance	umhos /cm	10/14/2015	N001	18.56	-	23.56	1740			#		
Sulfate	mg/L	10/14/2015	0001	18.56	-	23.56	550			#	5	
Temperature	C	10/14/2015	N001	18.56	-	23.56	13.77			#		
Turbidity	NTU	10/14/2015	N001	18.56	-	23.56	1.6			#		
Uranium	mg/L	10/14/2015	0001	18.56	-	23.56	0.12			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	18.56	-	23.56	0.32			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-07 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	17.25	-	22.2	395			#		
Arsenic	mg/L	10/13/2015	0001	17.25	-	22.2	0.0048			#	0.00015	
Calcium	mg/L	10/13/2015	0001	17.25	-	22.2	290			#	0.024	
Chloride	mg/L	10/13/2015	0001	17.25	-	22.2	150			#	4	
Fluoride	mg/L	10/13/2015	0001	17.25	-	22.2	0.5	U		#	0.5	
Iron	mg/L	10/13/2015	0001	17.25	-	22.2	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	17.25	-	22.2	83			#	0.03	
Manganese	mg/L	10/13/2015	0001	17.25	-	22.2	0.00039	J		#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	17.25	-	22.2	0.0055		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	17.25	-	22.2	4.7			#	0.1	
Oxidation Reduction Potential	mV	10/13/2015	N001	17.25	-	22.2	120.5			#		
pH	s.u.	10/13/2015	N001	17.25	-	22.2	6.72			#		
Potassium	mg/L	10/13/2015	0001	17.25	-	22.2	4.4			#	0.052	
Selenium	mg/L	10/13/2015	0001	17.25	-	22.2	0.022			#	0.00032	
Sodium	mg/L	10/13/2015	0001	17.25	-	22.2	170			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	17.25	-	22.2	2354			#		
Sulfate	mg/L	10/13/2015	0001	17.25	-	22.2	870			#	10	
Temperature	C	10/13/2015	N001	17.25	-	22.2	12.7			#		
Turbidity	NTU	10/13/2015	N001	17.25	-	22.2	1.33			#		
Uranium	mg/L	10/13/2015	0001	17.25	-	22.2	0.13			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	17.25	-	22.2	0.11			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-12 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	18.5	-	23.4	400			#		
Arsenic	mg/L	10/13/2015	0001	18.5	-	23.4	0.0042			#	0.00015	
Calcium	mg/L	10/13/2015	0001	18.5	-	23.4	280			#	0.024	
Chloride	mg/L	10/13/2015	0001	18.5	-	23.4	140			#	2	
Fluoride	mg/L	10/13/2015	0001	18.5	-	23.4	0.5	U		#	0.5	
Iron	mg/L	10/13/2015	0001	18.5	-	23.4	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	18.5	-	23.4	62			#	0.03	
Manganese	mg/L	10/13/2015	0001	18.5	-	23.4	0.00075	J		#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	18.5	-	23.4	0.003		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	18.5	-	23.4	2.6			#	0.1	
Oxidation Reduction Potential	mV	10/13/2015	N001	18.5	-	23.4	134.2			#		
pH	s.u.	10/13/2015	N001	18.5	-	23.4	7.01			#		
Potassium	mg/L	10/13/2015	0001	18.5	-	23.4	4.2			#	0.052	
Selenium	mg/L	10/13/2015	0001	18.5	-	23.4	0.015			#	0.00032	
Sodium	mg/L	10/13/2015	0001	18.5	-	23.4	130			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	18.5	-	23.4	2024			#		
Sulfate	mg/L	10/13/2015	0001	18.5	-	23.4	660			#	5	
Temperature	C	10/13/2015	N001	18.5	-	23.4	12.61			#		

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-12 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Total Dissolved Solids	mg/L	10/13/2015	0001	18.5	-	23.4	1600			#	40	
Turbidity	NTU	10/13/2015	N001	18.5	-	23.4	2.37			#		
Uranium	mg/L	10/13/2015	0001	18.5	-	23.4	0.14			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	18.5	-	23.4	0.043			#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-18 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Arsenic	mg/L	10/13/2015	0001	16.3	-	21.2	0.0033		J	#	0.00015	
Calcium	mg/L	10/13/2015	0001	16.3	-	21.2	410			#	0.024	
Iron	mg/L	10/13/2015	0001	16.3	-	21.2	1.1			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	16.3	-	21.2	94			#	0.03	
Manganese	mg/L	10/13/2015	0001	16.3	-	21.2	3.2			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	16.3	-	21.2	0.003		J	#	0.00032	
Potassium	mg/L	10/13/2015	0001	16.3	-	21.2	4.3			#	0.052	
Selenium	mg/L	10/13/2015	0001	16.3	-	21.2	0.0011		J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	16.3	-	21.2	210			#	0.047	
Uranium	mg/L	10/13/2015	0001	16.3	-	21.2	0.41			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	16.3	-	21.2	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-20 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Arsenic	mg/L	10/13/2015	0001	10.85	-	15.75	0.0016		J	#	0.00015	
Calcium	mg/L	10/13/2015	0001	10.85	-	15.75	180			#	0.024	
Iron	mg/L	10/13/2015	0001	10.85	-	15.75	0.46			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	10.85	-	15.75	32			#	0.03	
Manganese	mg/L	10/13/2015	0001	10.85	-	15.75	3.7			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	10.85	-	15.75	0.025			#	0.00032	
Potassium	mg/L	10/13/2015	0001	10.85	-	15.75	12			#	0.052	
Selenium	mg/L	10/13/2015	0001	10.85	-	15.75	0.00032	U		#	0.00032	
Sodium	mg/L	10/13/2015	0001	10.85	-	15.75	370			#	0.047	
Uranium	mg/L	10/13/2015	0001	10.85	-	15.75	0.22			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	10.85	-	15.75	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-23 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	8.4	-	13.3	284			#		
Arsenic	mg/L	10/13/2015	0001	8.4	-	13.3	0.00015	U		#	0.00015	
Calcium	mg/L	10/13/2015	0001	8.4	-	13.3	200			#	0.024	
Chloride	mg/L	10/13/2015	0001	8.4	-	13.3	41			#	0.4	
Fluoride	mg/L	10/13/2015	0001	8.4	-	13.3	0.2	U		#	0.2	
Iron	mg/L	10/13/2015	0001	8.4	-	13.3	1.7			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	8.4	-	13.3	33			#	0.03	
Manganese	mg/L	10/13/2015	0001	8.4	-	13.3	0.36			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	8.4	-	13.3	0.00044	J	J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	8.4	-	13.3	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	8.4	-	13.3	-10.1			#		
pH	s.u.	10/13/2015	N001	8.4	-	13.3	7			#		
Potassium	mg/L	10/13/2015	0001	8.4	-	13.3	2.8			#	0.052	
Selenium	mg/L	10/13/2015	0001	8.4	-	13.3	0.00081	J	J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	8.4	-	13.3	66			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	8.4	-	13.3	1300			#		
Sulfate	mg/L	10/13/2015	0001	8.4	-	13.3	290			#	1	
Temperature	C	10/13/2015	N001	8.4	-	13.3	11.62			#		
Turbidity	NTU	10/13/2015	N001	8.4	-	13.3	1.93			#		
Uranium	mg/L	10/13/2015	0001	8.4	-	13.3	0.042			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	8.4	-	13.3	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-25 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	8.75	-	13.65	514			#		
Arsenic	mg/L	10/13/2015	0001	8.75	-	13.65	0.0088			#	0.00015	
Calcium	mg/L	10/13/2015	0001	8.75	-	13.65	380			#	0.024	
Chloride	mg/L	10/13/2015	0001	8.75	-	13.65	92			#	1.6	
Fluoride	mg/L	10/13/2015	0001	8.75	-	13.65	0.8	U		#	0.8	
Iron	mg/L	10/13/2015	0001	8.75	-	13.65	14			#	0.0067	
Magnesium	mg/L	10/13/2015	0001	8.75	-	13.65	86			#	0.03	
Manganese	mg/L	10/13/2015	0001	8.75	-	13.65	2.2			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	8.75	-	13.65	0.0037		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	8.75	-	13.65	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	8.75	-	13.65	-40.9			#		
pH	s.u.	10/13/2015	N001	8.75	-	13.65	6.79			#		
Potassium	mg/L	10/13/2015	0001	8.75	-	13.65	11			#	0.052	
Selenium	mg/L	10/13/2015	0001	8.75	-	13.65	0.0015		J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	8.75	-	13.65	150			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	8.75	-	13.65	1255			#		
Sulfate	mg/L	10/13/2015	0001	8.75	-	13.65	950			#	4	
Temperature	C	10/13/2015	N001	8.75	-	13.65	19.26			#		
Turbidity	NTU	10/13/2015	N001	8.75	-	13.65	74.1			#		
Uranium	mg/L	10/13/2015	0001	8.75	-	13.65	0.02			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	8.75	-	13.65	0.00015	J	U	#	0.00015	

Groundwater Quality Data by Location (USEE100) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: T01-35 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	-	373			#		
Arsenic	mg/L	10/13/2015	0001	-	0.0093			#	0.00015	
Calcium	mg/L	10/13/2015	0001	-	240			#	0.024	
Chloride	mg/L	10/13/2015	0001	-	92			#	0.8	
Fluoride	mg/L	10/13/2015	0001	-	0.4	U		#	0.4	
Iron	mg/L	10/13/2015	0001	-	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	-	48			#	0.03	
Manganese	mg/L	10/13/2015	0001	-	0.00024	J	U	#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	-	0.0047		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	-	0.91			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	-	146.8			#		
pH	s.u.	10/13/2015	N001	-	7.04			#		
Potassium	mg/L	10/13/2015	0001	-	3.4			#	0.052	
Selenium	mg/L	10/13/2015	0001	-	0.011			#	0.00032	
Sodium	mg/L	10/13/2015	0001	-	98			#	0.047	
Specific Conductance	umhos /cm	10/13/2015	N001	-	1682			#		
Sulfate	mg/L	10/13/2015	0001	-	490			#	2	
Temperature	C	10/13/2015	N001	-	11.88			#		
Turbidity	NTU	10/13/2015	N001	-	1.52			#		
Uranium	mg/L	10/13/2015	0001	-	0.09			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	-	0.18			#	0.00015	

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

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.		

QA QUALIFIER:

Validated according to quality assurance guidelines.

Surface Water Quality Data

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Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW00-02 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	286			#		
Arsenic	mg/L	10/13/2015	0001	0.0011		J	#	0.00015	
Calcium	mg/L	10/13/2015	0001	190			#	0.024	
Chloride	mg/L	10/13/2015	0001	22			#	2	
Fluoride	mg/L	10/13/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/13/2015	0001	0.062	J		#	0.0067	
Magnesium	mg/L	10/13/2015	0001	36			#	0.03	
Manganese	mg/L	10/13/2015	0001	0.068			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	0.0021		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	98.1			#		
pH	s.u.	10/13/2015	N001	8.06			#		
Potassium	mg/L	10/13/2015	0001	3.2			#	0.052	
Selenium	mg/L	10/13/2015	0001	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/13/2015	0001	60			#	0.047	
Specific Conductance	umhos/cm	10/13/2015	N001	1271			#		
Sulfate	mg/L	10/13/2015	0001	430			#	5	
Temperature	C	10/13/2015	N001	17.19			#		

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW00-02 SURFACE LOCATION

Parameter	Units	Sample		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID		Lab	Data	QA		
Total Dissolved Solids	mg/L	10/13/2015	0001	990			#	40	
Turbidity	NTU	10/13/2015	N001	9.65			#		
Uranium	mg/L	10/13/2015	0001	0.015			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	0.00015	J	U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW00-04 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	259			#		
Arsenic	mg/L	10/14/2015	0001	0.0025		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	150			#	0.024	
Chloride	mg/L	10/14/2015	0001	76			#	2	
Fluoride	mg/L	10/14/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	0.083	J		#	0.0067	
Magnesium	mg/L	10/14/2015	0001	36			#	0.03	
Manganese	mg/L	10/14/2015	0001	0.33			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	0.0091			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	71.3			#		
pH	s.u.	10/14/2015	N001	7.99			#		
Potassium	mg/L	10/14/2015	0001	7.4			#	0.052	
Selenium	mg/L	10/14/2015	0001	0.004		J	#	0.00032	
Sodium	mg/L	10/14/2015	0001	94			#	0.047	
Specific Conductance	umhos/cm	10/14/2015	N001	1341			#		
Sulfate	mg/L	10/14/2015	0001	400			#	5	
Temperature	C	10/14/2015	N001	14.44			#		
Turbidity	NTU	10/14/2015	N001	131			#		
Uranium	mg/L	10/14/2015	0001	0.1			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	0.00015		U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW01-01 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	298			#		
Arsenic	mg/L	10/14/2015	0001	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/14/2015	0001	190			#	0.024	
Chloride	mg/L	10/14/2015	0001	23			#	2	
Dissolved Oxygen	mg/L	10/14/2015	N001	8.14			#		
Fluoride	mg/L	10/14/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	0.063	J		#	0.0067	
Magnesium	mg/L	10/14/2015	0001	36			#	0.03	
Manganese	mg/L	10/14/2015	0001	0.031			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	0.0024		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	85			#		
pH	s.u.	10/14/2015	N001	8.06			#		
Potassium	mg/L	10/14/2015	0001	3.2			#	0.052	
Selenium	mg/L	10/14/2015	0001	0.00032	J	U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	60			#	0.047	
Specific Conductance	umhos/cm	10/14/2015	N001	1306			#		
Sulfate	mg/L	10/14/2015	0001	440			#	5	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW01-01 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Temperature	C	10/14/2015	N001	10.67			#		
Total Dissolved Solids	mg/L	10/14/2015	0001	1000			#	40	
Turbidity	NTU	10/14/2015	N001	5.44			#		
Uranium	mg/L	10/14/2015	0001	0.016			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	0.00015	J	U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW01-02 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	N001	260			#		
Arsenic	mg/L	10/13/2015	0001	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/13/2015	0001	230			#	0.024	
Chloride	mg/L	10/13/2015	0001	12			#	2	
Fluoride	mg/L	10/13/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/13/2015	0001	0.084	J		#	0.0067	
Magnesium	mg/L	10/13/2015	0001	40			#	0.03	
Manganese	mg/L	10/13/2015	0001	0.055			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	0.0023		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	0.011			#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	162			#		
pH	s.u.	10/13/2015	N001	7.73			#		
Potassium	mg/L	10/13/2015	0001	2.9			#	0.052	
Selenium	mg/L	10/13/2015	0001	0.0032		J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	51			#	0.047	
Specific Conductance	umhos/cm	10/13/2015	N001	1432			#		
Sulfate	mg/L	10/13/2015	0001	520			#	5	
Temperature	C	10/13/2015	N001	5.04			#		

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW01-02 SURFACE LOCATION

Parameter	Units	Sample		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID		Lab	Data	QA		
Total Dissolved Solids	mg/L	10/13/2015	0001	1100			#	40	
Turbidity	NTU	10/13/2015	N001	3.63			#		
Uranium	mg/L	10/13/2015	0001	0.0071			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	0.00015	J	U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW01-03 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	256			#		
Arsenic	mg/L	10/13/2015	0001	0.00015	J	U	#	0.00015	
Calcium	mg/L	10/13/2015	0001	200			#	0.024	
Chloride	mg/L	10/13/2015	0001	22			#	2	
Fluoride	mg/L	10/13/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/13/2015	0001	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	36			#	0.03	
Manganese	mg/L	10/13/2015	0001	0.21			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	0.0018		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	28.1			#		
pH	s.u.	10/13/2015	N001	7.73			#		
Potassium	mg/L	10/13/2015	0001	3.1			#	0.052	
Selenium	mg/L	10/13/2015	0001	0.00032	U		#	0.00032	
Sodium	mg/L	10/13/2015	0001	58			#	0.047	
Specific Conductance	umhos/cm	10/13/2015	N001	1313			#		
Sulfate	mg/L	10/13/2015	0001	430			#	5	
Temperature	C	10/13/2015	N001	8.87			#		
Turbidity	NTU	10/13/2015	N001	7.69			#		
Uranium	mg/L	10/13/2015	0001	0.014			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	0.00015	J	U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW92-08 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	270			#		
Arsenic	mg/L	10/14/2015	0001	0.0016		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	150			#	0.024	
Chloride	mg/L	10/14/2015	0001	65			#	2	
Fluoride	mg/L	10/14/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	0.052	J		#	0.0067	
Magnesium	mg/L	10/14/2015	0001	35			#	0.03	
Manganese	mg/L	10/14/2015	0001	0.16			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	0.0092			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	100.9			#		
pH	s.u.	10/14/2015	N001	8.24			#		
Potassium	mg/L	10/14/2015	0001	6.6			#	0.052	
Selenium	mg/L	10/14/2015	0001	0.00032		U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	90			#	0.047	
Specific Conductance	umhos/cm	10/14/2015	N001	1308			#		
Sulfate	mg/L	10/14/2015	0001	390			#	5	
Temperature	C	10/14/2015	N001	9.62			#		
Turbidity	NTU	10/14/2015	N001	11.2			#		
Uranium	mg/L	10/14/2015	0001	0.096			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	0.00015		U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW92-09 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	262			#		
Arsenic	mg/L	10/14/2015	0001	0.0019		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	160			#	0.024	
Chloride	mg/L	10/14/2015	0001	67			#	2	
Fluoride	mg/L	10/14/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	38			#	0.03	
Manganese	mg/L	10/14/2015	0001	0.032			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	0.011			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	153.8			#		
pH	s.u.	10/14/2015	N001	8.38			#		
Potassium	mg/L	10/14/2015	0001	6			#	0.052	
Selenium	mg/L	10/14/2015	0001	0.00032		U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	88			#	0.047	
Specific Conductance	umhos/cm	10/14/2015	N001	1309			#		
Sulfate	mg/L	10/14/2015	0001	390			#	5	
Temperature	C	10/14/2015	N001	10.21			#		
Turbidity	NTU	10/14/2015	N001	20			#		
Uranium	mg/L	10/14/2015	0001	0.1			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	0.00015		U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: SW94-01 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	296			#		
Arsenic	mg/L	10/14/2015	0001	0.0019		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	160			#	0.024	
Chloride	mg/L	10/14/2015	0001	67			#	2	
Fluoride	mg/L	10/14/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	37			#	0.03	
Manganese	mg/L	10/14/2015	0001	0.016			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	0.0097			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	92.8			#		
pH	s.u.	10/14/2015	N001	8.32			#		
Potassium	mg/L	10/14/2015	0001	5.8			#	0.052	
Selenium	mg/L	10/14/2015	0001	0.00032		U	#	0.00032	
Sodium	mg/L	10/14/2015	0001	88			#	0.047	
Specific Conductance	umhos/cm	10/14/2015	N001	1317			#		
Sulfate	mg/L	10/14/2015	0001	390			#	5	
Temperature	C	10/14/2015	N001	9.85			#		
Turbidity	NTU	10/14/2015	N001	8.85			#		
Uranium	mg/L	10/14/2015	0001	0.094			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	0.00015		U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: Sorenson SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/14/2015	0001	264			#		
Arsenic	mg/L	10/14/2015	0001	0.0029		J	#	0.00015	
Calcium	mg/L	10/14/2015	0001	160			#	0.024	
Chloride	mg/L	10/14/2015	0001	95			#	2	
Fluoride	mg/L	10/14/2015	0001	0.4	U		#	0.4	
Iron	mg/L	10/14/2015	0001	0.075	J	J	#	0.0067	
Magnesium	mg/L	10/14/2015	0001	35			#	0.03	
Manganese	mg/L	10/14/2015	0001	0.081			#	0.00024	
Molybdenum	mg/L	10/14/2015	0001	0.011			#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/14/2015	0001	0.08			#	0.01	
Oxidation Reduction Potential	mV	10/14/2015	N001	-7			#		
pH	s.u.	10/14/2015	N001	8.05			#		
Potassium	mg/L	10/14/2015	0001	8.8			#	0.052	
Selenium	mg/L	10/14/2015	0001	0.0052		J	#	0.00032	
Sodium	mg/L	10/14/2015	0001	100			#	0.047	
Specific Conductance	umhos/cm	10/14/2015	N001	1349			#		
Sulfate	mg/L	10/14/2015	0001	400			#	5	
Temperature	C	10/14/2015	N001	21.63			#		

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: Sorenson SURFACE LOCATION

Parameter	Units	Sample		Result	Lab	Qualifiers		Detection Limit	Uncertainty
		Date	ID			Data	QA		
Total Dissolved Solids	mg/L	10/14/2015	0001	1000			#	40	
Turbidity	NTU	10/14/2015	N001	12.1			#		
Uranium	mg/L	10/14/2015	0001	0.12			#	0.000029	
Vanadium	mg/L	10/14/2015	0001	0.00015		U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: W3-03 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	241			#		
Arsenic	mg/L	10/13/2015	0001	0.002		J	#	0.00015	
Calcium	mg/L	10/13/2015	0001	120			#	0.024	
Chloride	mg/L	10/13/2015	0001	52			#	0.4	
Fluoride	mg/L	10/13/2015	0001	0.2	U		#	0.2	
Iron	mg/L	10/13/2015	0001	0.0067	J	U	#	0.0067	
Magnesium	mg/L	10/13/2015	0001	28			#	0.03	
Manganese	mg/L	10/13/2015	0001	0.19			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	0.0016		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	76.1			#		
pH	s.u.	10/13/2015	N001	7.69			#		
Potassium	mg/L	10/13/2015	0001	8.5			#	0.052	
Selenium	mg/L	10/13/2015	0001	0.00075	J	J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	63			#	0.047	
Specific Conductance	umhos/cm	10/13/2015	N001	1048			#		
Sulfate	mg/L	10/13/2015	0001	260			#	1	
Temperature	C	10/13/2015	N001	14.93			#		
Turbidity	NTU	10/13/2015	N001	52			#		
Uranium	mg/L	10/13/2015	0001	0.027			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	0.00015	J	U	#	0.00015	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: W3-04 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (as CaCO ₃)	mg/L	10/13/2015	0001	248			#		
Arsenic	mg/L	10/13/2015	0001	0.0023		J	#	0.00015	
Arsenic	mg/L	10/13/2015	0002	0.0023		J	#	0.00015	
Calcium	mg/L	10/13/2015	0001	130			#	0.024	
Calcium	mg/L	10/13/2015	0002	130			#	0.024	
Chloride	mg/L	10/13/2015	0001	45			#	1	
Chloride	mg/L	10/13/2015	0002	44			#	2	
Fluoride	mg/L	10/13/2015	0001	0.5	U		#	0.5	
Fluoride	mg/L	10/13/2015	0002	0.2	U		#	0.2	
Iron	mg/L	10/13/2015	0001	0.0067		U	#	0.0067	
Iron	mg/L	10/13/2015	0002	0.09	J		#	0.0067	
Magnesium	mg/L	10/13/2015	0001	29			#	0.03	
Magnesium	mg/L	10/13/2015	0002	28			#	0.03	
Manganese	mg/L	10/13/2015	0001	0.2			#	0.00024	
Manganese	mg/L	10/13/2015	0002	0.21			#	0.00024	
Molybdenum	mg/L	10/13/2015	0001	0.0018		J	#	0.00032	
Molybdenum	mg/L	10/13/2015	0002	0.0014		J	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0001	0.01	U		#	0.01	

Surface Water Quality Data by Location (USEE102) FOR SITE MNT01, Monticello Disposal & Process Sites

REPORT DATE: 1/4/2016

Location: W3-04 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Nitrate + Nitrite as Nitrogen	mg/L	10/13/2015	0002	0.01	U		#	0.01	
Oxidation Reduction Potential	mV	10/13/2015	N001	-.2			#		
pH	s.u.	10/13/2015	N001	7.49			#		
Potassium	mg/L	10/13/2015	0001	8.9			#	0.052	
Potassium	mg/L	10/13/2015	0002	9.1			#	0.052	
Selenium	mg/L	10/13/2015	0001	0.00032		U	#	0.00032	
Selenium	mg/L	10/13/2015	0002	0.00067	J	J	#	0.00032	
Sodium	mg/L	10/13/2015	0001	59			#	0.047	
Sodium	mg/L	10/13/2015	0002	58			#	0.047	
Specific Conductance	umhos/cm	10/13/2015	N001	1062			#		
Sulfate	mg/L	10/13/2015	0001	300			#	2.5	
Sulfate	mg/L	10/13/2015	0002	300			#	5	
Temperature	C	10/13/2015	N001	17.25			#		
Turbidity	NTU	10/13/2015	N001	31.2			#		
Uranium	mg/L	10/13/2015	0001	0.012			#	0.000029	
Uranium	mg/L	10/13/2015	0002	0.011			#	0.000029	
Vanadium	mg/L	10/13/2015	0001	0.00015	J	U	#	0.00015	
Vanadium	mg/L	10/13/2015	0002	0.00015	J	U	#	0.00015	

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

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.		

QA QUALIFIER:

Validated according to quality assurance guidelines.

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Equipment Blank Data

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BLANKS REPORT

LAB: PARAGON/ALS LABORATORY GROUP (Fort Collins, CO)

RIN: 15107423

Report Date: 1/4/2016

Parameter	Site Code	Location ID	Sample Date	ID	Units	Result	Qualifiers Lab	Data	Detection Limit	Uncertainty	Sample Type
Arsenic	MNT01	0999	10/14/2015	0001	mg/L	0.00015	U		0.00015		E
Calcium	MNT01	0999	10/14/2015	0001	mg/L	0.04	J	J	0.024		E
Chloride	MNT01	0999	10/14/2015	0001	mg/L	0.2	U		0.2		E
Fluoride	MNT01	0999	10/14/2015	0001	mg/L	0.1	U		0.1		E
Iron	MNT01	0999	10/14/2015	0001	mg/L	0.0067	J	U	0.0067		E
Magnesium	MNT01	0999	10/14/2015	0001	mg/L	0.03	U	J	0.03		E
Manganese	MNT01	0999	10/14/2015	0001	mg/L	0.00024	J	U	0.00024		E
Molybdenum	MNT01	0999	10/14/2015	0001	mg/L	0.00032	U		0.00032		E
Nitrate + Nitrite as Nitrogen	MNT01	0999	10/14/2015	0001	mg/L	0.01	U		0.01		E
Potassium	MNT01	0999	10/14/2015	0001	mg/L	0.052	J	U	0.052		E
Selenium	MNT01	0999	10/14/2015	0001	mg/L	0.00042	J	J	0.00032		E
Sodium	MNT01	0999	10/14/2015	0001	mg/L	0.066	J		0.047		E
Sulfate	MNT01	0999	10/14/2015	0001	mg/L	0.5	U		0.5		E
Total Dissolved Solids	MNT01	0999	10/14/2015	0001	mg/L	20	U		20		E
Uranium	MNT01	0999	10/14/2015	0001	mg/L	0.000029	U		0.000029		E
Vanadium	MNT01	0999	10/14/2015	0001	mg/L	0.00015	J	U	0.00015		E

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

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.		

SAMPLE TYPES:

E Equipment Blank.

Static Water Level Data

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STATIC WATER LEVELS (USEE700) FOR SITE MNT01, Monticello Disposal & Process Sites
REPORT DATE: 1/4/2016

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0200	D	6762.69	10/14/2015	13:10:55	5.29	6757.4	
0202	D	6785.81	10/14/2015	11:55:06	15.7	6770.11	
31NE93-205	C	6940.62	10/12/2015	15:00:00	183.35	6757.27	
31NE93-205	C	6940.62	10/14/2015	12:30:00	183.65	6756.97	
82-08	D	6787.4	10/14/2015	08:30:29	13.25	6774.15	
88-85	D	6797.09	10/13/2015	09:00:41	5.29	6791.8	
92-07	D	6804.02	10/13/2015	12:30:40	17.15	6786.87	
92-08	D	6775.68	10/14/2015	11:10:32	12.25	6763.43	
92-09	D	6733.29	10/14/2015	14:20:28	10.2	6723.09	
92-10	D	6733.8	10/14/2015	14:45:29	12.95	6720.85	
92-11	D	6813.73	10/14/2015	08:05:36	19.15	6794.58	
92-12	D	6815.05	10/14/2015	08:00:00	56.24	6758.81	
93-01	O	6889.98	10/14/2015	14:35:21	114.8	6775.18	
95-01	D	6675.83	10/14/2015	16:00:57	3.95	6671.88	
95-02	D	6678.99	10/14/2015	16:00:00	2.7	6676.29	
95-03	D	6704.78	10/14/2015	15:15:39	2.4	6702.38	
95-04	D	6706.24	10/14/2015	15:00:00	3.1	6703.14	
95-06	D	6824.91	10/12/2015	15:15:00	73.87	6751.04	
95-06	D	6824.91	10/14/2015	12:45:00	74.05	6750.86	
95-07	C	6883.34	10/12/2015	15:20:00	70.41	6812.93	
95-08	D	6841.51	10/14/2015	16:00:00	128.57	6712.94	
MW00-01	U	6882.77	10/12/2015	16:50:46	11	6871.77	
MW00-02	U	6883.26	10/12/2015	16:10:00	8.22	6875.04	
MW00-03	O	6853.15	10/13/2015	14:40:00	11.33	6841.82	
MW00-06	D	6793.14	10/14/2015	09:10:43	16.12	6777.02	
MW00-07	D	6790.85	10/14/2015	10:14:27	20.95	6769.9	
P92-02	D	6737.02	10/14/2015	14:00:00	12.51	6724.51	
P92-06	D	6774.73	10/14/2015	10:50:51	11.95	6762.78	
PW-10	D	6813.94	10/13/2015	12:00:30	31.65	6782.29	

STATIC WATER LEVELS (USEE700) FOR SITE MNT01, Monticello Disposal & Process Sites
REPORT DATE: 1/4/2016

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
PW-14	D	6800.44	10/13/2015	16:16:00	13.11	6787.33	
PW-16	D	6796.72	10/13/2015	16:25:00	18.26	6778.46	
PW-17	D	6817.35	10/13/2015	11:30:25	32.9	6784.45	
PW-18	D	6799.73	10/13/2015	16:48:00	8.7	6791.03	
PW-20	D	6799.57	10/13/2015	16:49:00	12.6	6786.97	
PW-22	D	6797.45	10/13/2015	16:55:00	11.25	6786.2	
PW-23	D	6809.15	10/13/2015	16:30:00	23.75	6785.4	
PW-28	D	6799.93	10/13/2015	08:30:17	9.23	6790.7	
PW99-16	D	6799.76	10/13/2015	16:40:00	13.06	6786.7	
R1-M1	D	6797.77	10/13/2015	16:18:00	6.15	6791.62	
R1-M2	D	6796.6	10/13/2015	16:00:00	4.85	6791.75	
R1-M3	D	6795.91	10/12/2015	16:20:07	4	6791.91	
R1-M4	D	6795.85	10/13/2015	09:10:39	4.12	6791.73	
R1-M5	D	6795.61	10/13/2015	13:10:00	4.05	6791.56	
R1-M6	D	6798.16	10/13/2015	16:35:00	6.5	6791.66	
R10-M1	D	6795.11	10/13/2015	10:10:44	13.75	6781.36	
R11-M1	D	6794.79	10/13/2015	15:43:00	13.3	6781.49	
R2-M1	D	6796.94	10/13/2015	16:08:00	5.4	6791.54	
R2-M10	D	6795.56	10/13/2015	17:07:00	.1	6795.46	
R2-M2	D	6796.43	10/13/2015	15:54:00	4.75	6791.68	
R2-M3	D	6796.03	10/13/2015	15:22:00	4.3	6791.73	
R2-M4	D	6795.84	10/13/2015	15:14:00	4.25	6791.59	
R2-M5	D	6795.71	10/13/2015	15:05:00	4	6791.71	
R2-M6	D	6795.71	10/13/2015	13:29:00	3.98	6791.73	
R2-M7	D	6795.8	10/13/2015	13:27:00	4.08	6791.72	
R2-M8	D	6795.76	10/13/2015	13:09:00	4.15	6791.61	
R2-M9	D	6795.58	10/13/2015	13:08:00	2.94	6792.64	
R3-M1	D	6796.42	10/13/2015	15:54:00	3.35	6793.07	
R3-M2	D	6795.8	10/12/2015	16:45:11	3.95	6791.85	

STATIC WATER LEVELS (USEE700) FOR SITE MNT01, Monticello Disposal & Process Sites
REPORT DATE: 1/4/2016

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
R3-M3	D	6795.76	10/13/2015	09:20:16	4.1	6791.66	
R3-M4	D	6795.55	10/13/2015	13:07:00	3.95	6791.6	
R4-M1	D	6796.41	10/13/2015	15:53:00	9.25	6787.16	
R4-M2	D	6795.97	10/13/2015	15:23:00	8.75	6787.22	
R4-M3	D	6795.76	10/12/2015	17:00:53	8.5	6787.26	
R4-M4	D	6795.66	10/13/2015	15:04:00	8.38	6787.28	
R4-M5	D	6795.72	10/13/2015	13:37:00	8.57	6787.15	
R4-M6	D	6795.71	10/13/2015	09:35:02	8.65	6787.06	
R4-M7	D	6795.58	10/13/2015	13:11:00	8.45	6787.13	
R4-M8	D	6795.67	10/13/2015	13:05:00	8.58	6787.09	
R5-M1	D	6796.84	10/13/2015	16:06:00	9.65	6787.19	
R5-M10	D	6795.63	10/13/2015	17:06:00	8.45	6787.18	
R5-M2	D	6796.39	10/13/2015	15:53:00	9.2	6787.19	
R5-M3	D	6795.98	10/13/2015	15:24:00	8.75	6787.23	
R5-M4	D	6795.76	10/13/2015	15:13:00	6.6	6789.16	
R5-M5	D	6795.63	10/13/2015	15:03:00	8.35	6787.28	
R5-M6	D	6795.7	10/13/2015	13:35:00	8.62	6787.08	
R5-M7	D	6795.7	10/13/2015	13:25:00	8.55	6787.15	
R5-M8	D	6795.52	10/13/2015	13:19:00	8.31	6787.21	
R5-M9	D	6795.66	10/13/2015	13:04:00	8.6	6787.06	
R6-M1	D	6797.41	10/13/2015	16:13:00	13.55	6783.86	
R6-M2	D	6796.18	10/13/2015	16:02:00	9.25	6786.93	
R6-M3	D	6795.71	10/12/2015	17:15:29	10.25	6785.46	
R6-M4	D	6795.53	10/13/2015	09:45:06	9.5	6786.03	
R6-M5	D	6795.54	10/13/2015	13:02:00	9.67	6785.87	
R6-M6	D	6797.22	10/13/2015	16:38:00	11.8	6785.42	
R7-M1	D	6796	10/13/2015	15:40:00	12.4	6783.6	
R7-M2	D	6795.78	10/13/2015	15:11:00	12	6783.78	
R8-M1	D	6795.6	10/13/2015	15:41:00	12.95	6782.65	

STATIC WATER LEVELS (USEE700) FOR SITE MNT01, Monticello Disposal & Process Sites
REPORT DATE: 1/4/2016

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
R9-M1	D	6795.21	10/13/2015	15:42:00	13.35	6781.86	
T00-01	O	6806.52	10/14/2015	09:00:04	8.84	6797.68	
T00-02	O	6806.77	10/13/2015	14:40:00	9.55	6797.22	
T00-03	O	6805.27	10/13/2015	14:32:00	7.43	6797.84	
T00-04	O	6804.31	10/14/2015	08:30:03	6.72	6797.59	
T00-05	O	6809.45	10/13/2015	14:30:00	12.31	6797.14	
T00-06	O	6820.77	10/13/2015	14:24:00			D
T00-07	O	6823.09	10/13/2015	14:20:00			D
T01-01	O	6806.09	10/14/2015	09:20:46	8	6798.09	
T01-02	O	6807.66	10/14/2015	09:40:59	9.2	6798.46	
T01-04	O	6814.15	10/14/2015	10:00:56	14.5	6799.65	
T01-05	O	6822.21	10/14/2015	10:20:31	20.85	6801.36	
T01-06	O	6828.41	10/13/2015	17:00:00	24.68	6803.73	
T01-07	O	6823.29	10/13/2015	16:50:05	19.78	6803.51	
T01-08	O	6808.11	10/13/2015	15:00:00	7.51	6800.6	
T01-09	O	6832.8	10/13/2015	11:15:00			D
T01-10	O	6817.45	10/13/2015	14:05:00	7.59	6809.86	
T01-12	O	6844.34	10/13/2015	10:30:01	21.47	6822.87	
T01-23	O	6858.89	10/13/2015	09:05:37	6.55	6852.34	
T01-24	O	6858.83	10/13/2015	08:30:00	5.15	6853.68	
T01-25	O	6856.33	10/13/2015	15:50:55	8.2	6848.13	
T01-26	O	6878.24	10/12/2015	16:00:00	14.99	6863.25	
T01-27	O	6864.71	10/13/2015	13:20:00	1.15	6863.56	
T01-28	O	6869.2	10/13/2015	13:15:00	4.23	6864.97	
T01-35	O	6824.26	10/13/2015	11:10:23	12.35	6811.91	
T1-D	D	6795.82	10/13/2015	13:47:00	4.13	6791.69	
T1-S	D	6795.84	10/13/2015	13:48:00	4.15	6791.69	
T2-D	D	6795.75	10/13/2015	13:44:00	4.04	6791.71	
T2-S	D	6795.71	10/13/2015	13:45:00	4.05	6791.66	

STATIC WATER LEVELS (USEE700) FOR SITE MNT01, Monticello Disposal & Process Sites
REPORT DATE: 1/4/2016

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
T3-D	D	6795.73	10/13/2015	13:50:00	4.06	6791.67	
T3-S	D	6795.77	10/13/2015	13:49:00	4.05	6791.72	
T4-D	D	6795.73	10/13/2015	13:53:00	8.45	6787.28	
T4-S	D	6795.57	10/13/2015	13:52:00	8.15	6787.42	
T5-D	D	6795.71	10/13/2015	13:56:00	8.45	6787.26	
T5-S	D	6795.7	10/13/2015	13:57:00	7.25	6788.45	
T6-D	D	6795.66	10/13/2015	14:04:00	10.55	6785.11	
T6-S	D	6795.64	10/13/2015	14:02:00			D
T7-D	D	6795.73	10/13/2015	14:05:00	11.63	6784.1	
TW-01	D	6796.54	10/13/2015	16:11:00	4.95	6791.59	
TW-02	D	6795.82	10/13/2015	15:20:00	4.1	6791.72	
TW-03	D	6795.61	10/13/2015	15:06:00	3.9	6791.71	
TW-04	D	6795.53	10/13/2015	13:41:00	3.82	6791.71	
TW-05	D	6795.29	10/13/2015	13:13:00	2.45	6792.84	
TW-06	D	6795.45	10/13/2015	17:15:00	3.77	6791.68	
TW-07	D	6795.46	10/13/2015	15:37:00	11.85	6783.61	
TW-08	D	6795.2	10/13/2015	14:10:00	11.46	6783.74	
TW-09	D	6795.24	10/13/2015	14:09:00	7.85	6787.39	
TW-10	D	6794.94	10/13/2015	13:22:00	10.53	6784.41	
TW-11	D	6796.2	10/13/2015	15:53:00	9.04	6787.16	
TW-12	D	6795.68	10/13/2015	15:10:00	8.12	6787.56	
TW-13	D	6795.61	10/13/2015	13:34:00	8.52	6787.09	
TW-14	D	6795.5	10/13/2015	13:20:00	8.25	6787.25	

FLOW CODES: B BACKGROUND C CROSS GRADIENT D DOWNGRADIENT F OFFSITE
N UNKNOWN O ONSITE U UPGRADIENT

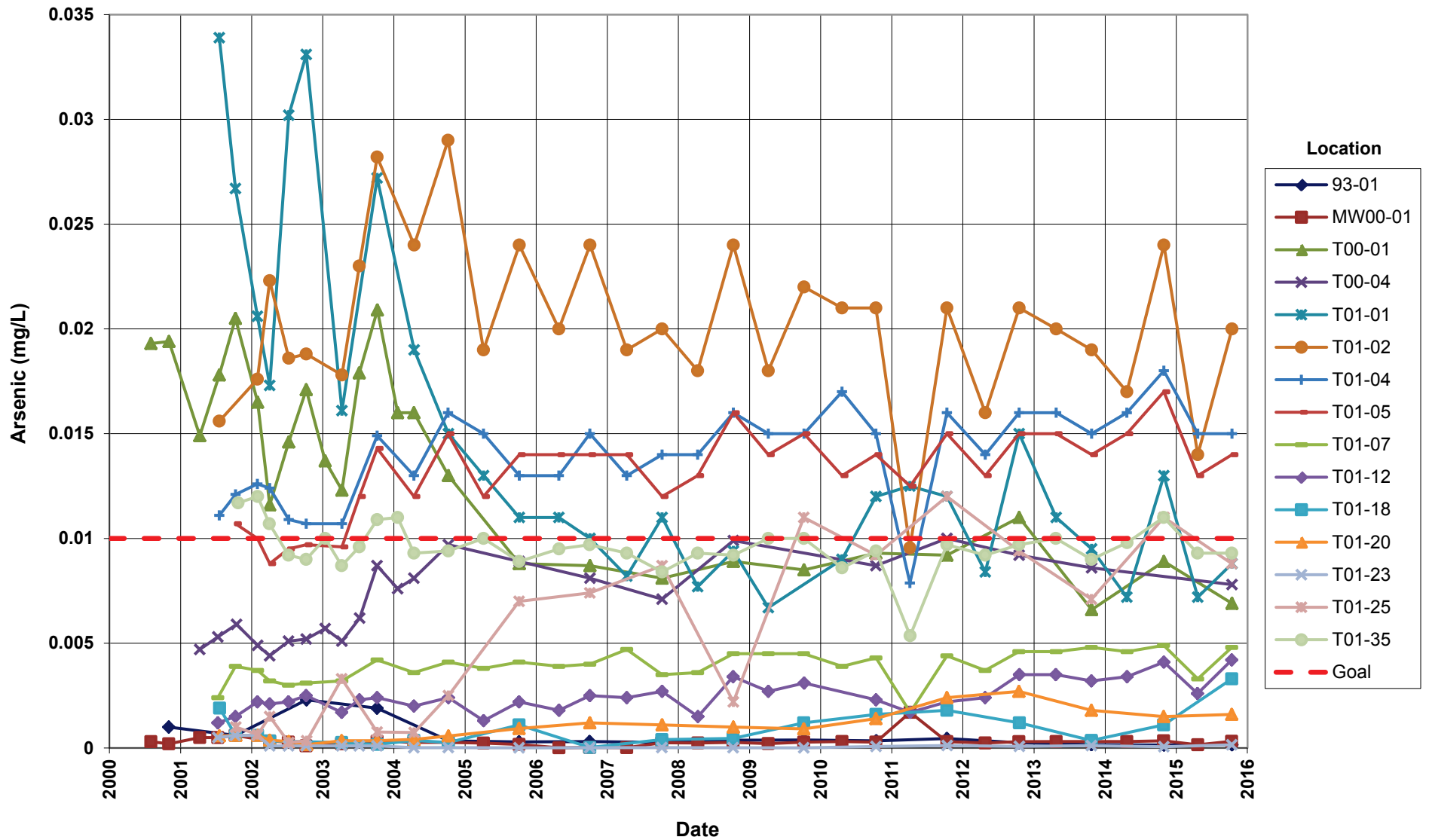
WATER LEVEL FLAGS: D Dry F Flowing B Below top of pump

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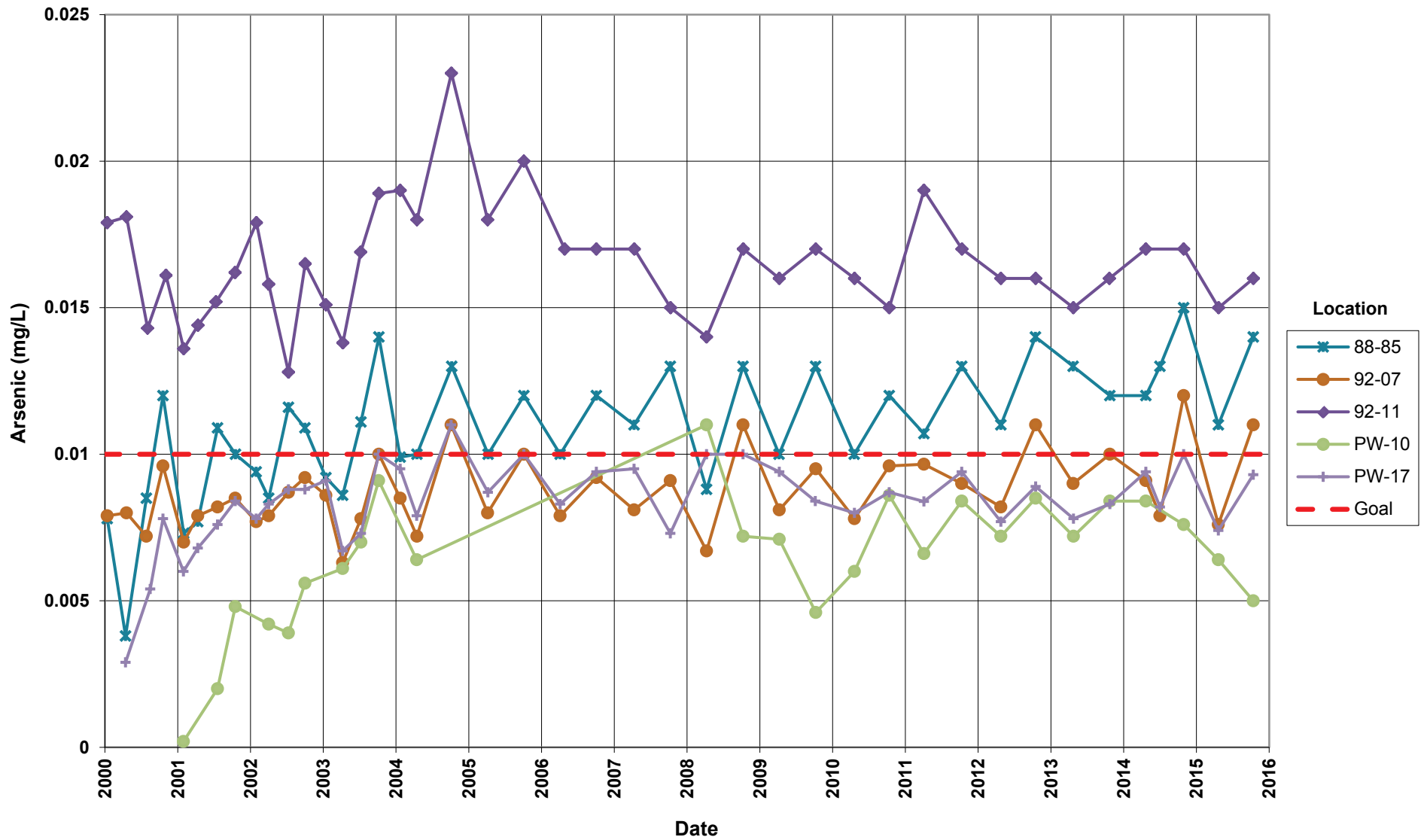
Time-Concentration Graphs Groundwater

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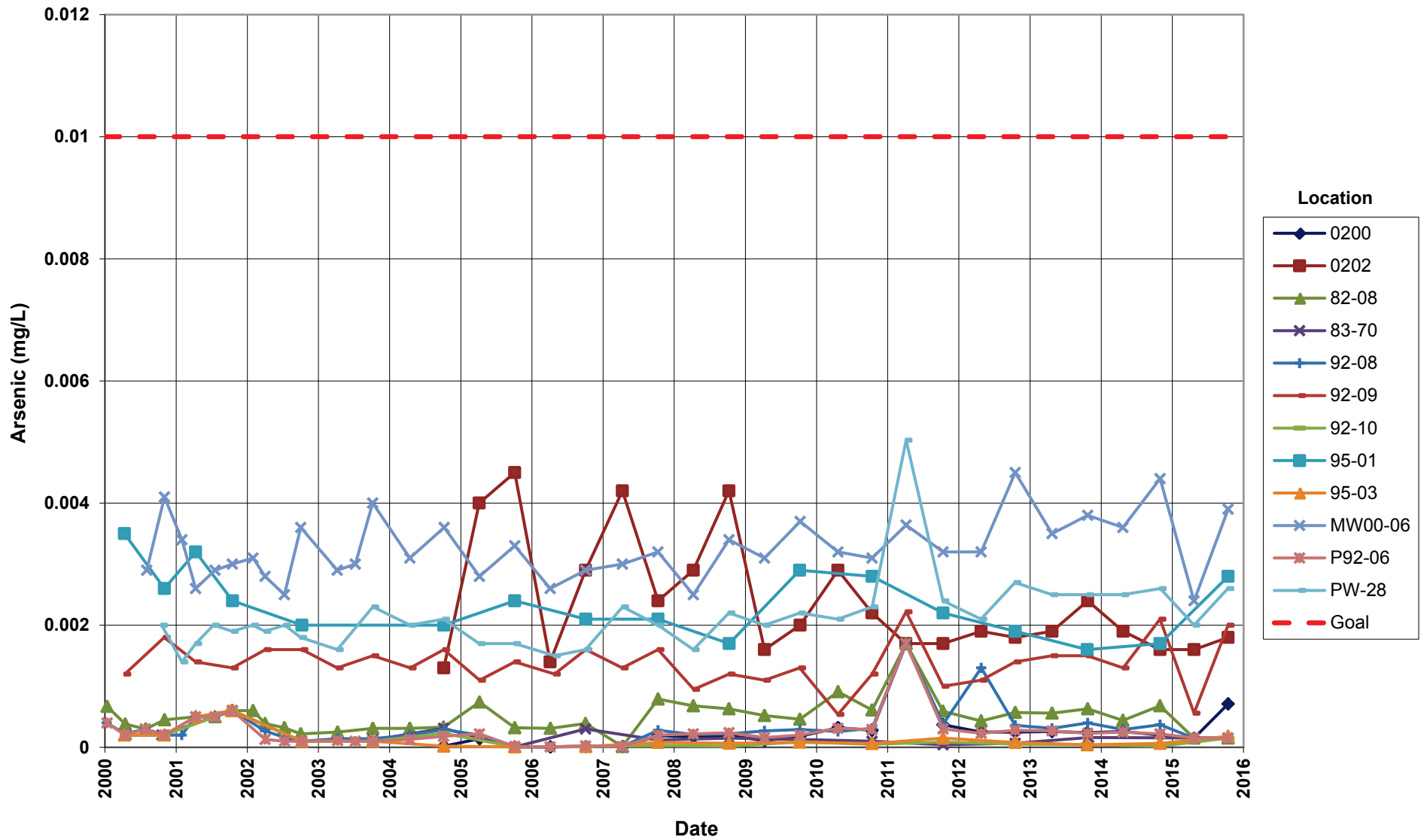
**Monticello Disposal & Process Sites
Former Mill Site Wells
Arsenic Concentration
Remediation Goal = 0.01 mg/L**



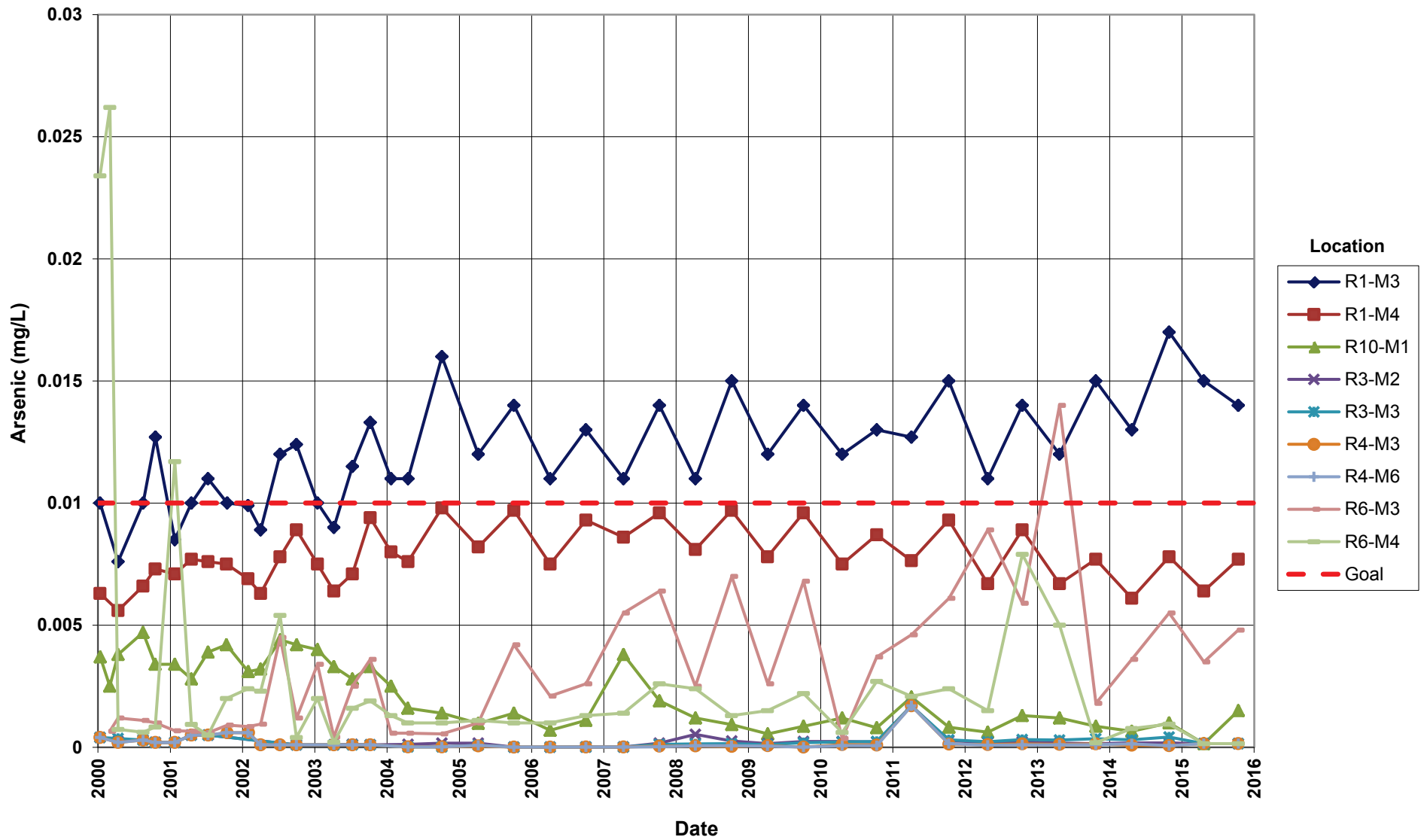
Monticello Disposal & Process Sites
Downgradient Wells
Arsenic Concentration
Remediation Goal = 0.01 mg/L



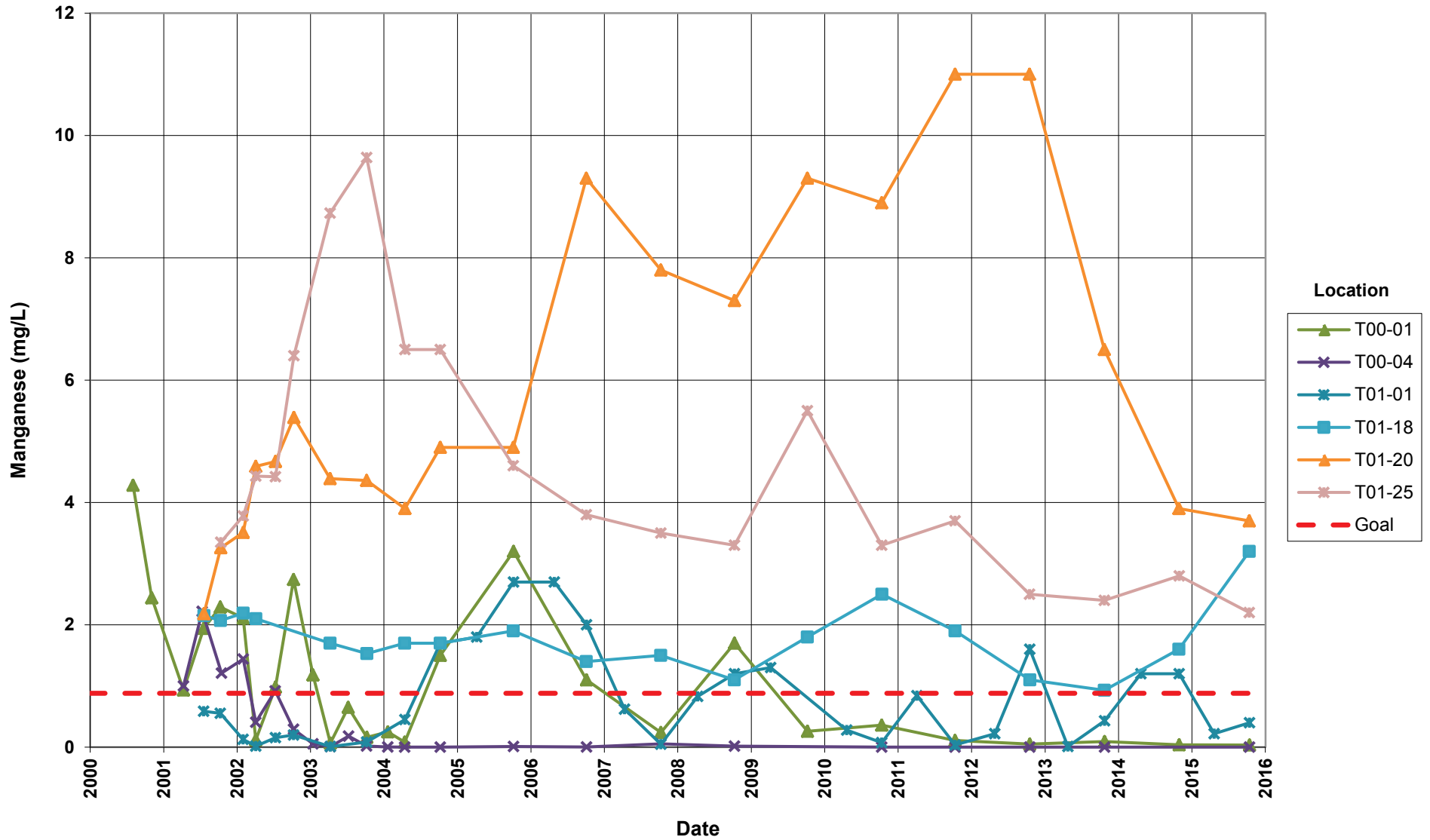
**Monticello Disposal & Process Sites
Downgradient Wells
Arsenic Concentration
Remediation Goal = 0.01 mg/L**



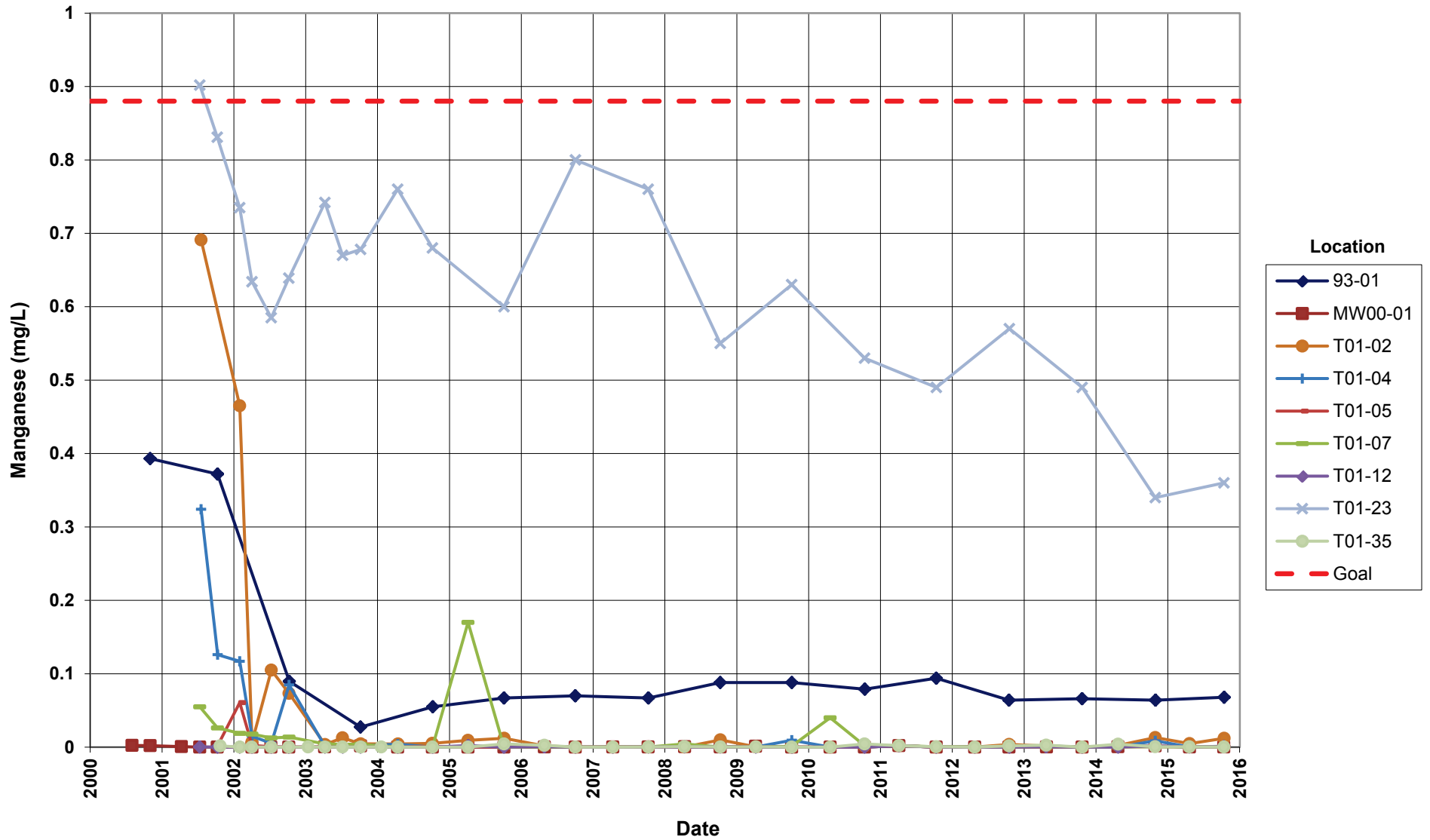
**Monticello Disposal & Process Sites
Downgradient PRB Wells
Arsenic Concentration
Remediation Goal = 0.01 mg/L**



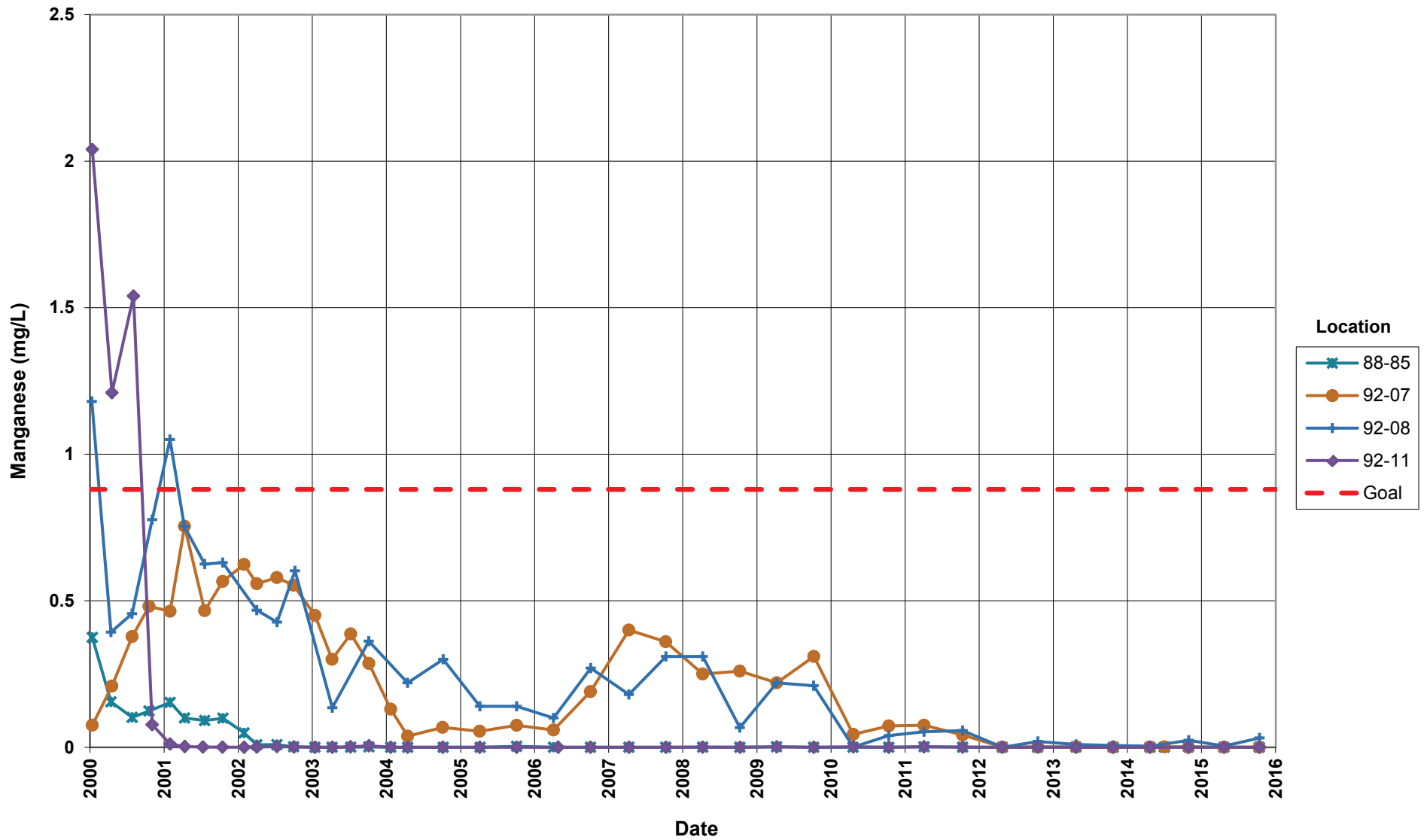
Monticello Disposal & Process Sites
Former Mill Site Wells
Manganese Concentration
Remediation Goal = 0.88 mg/L



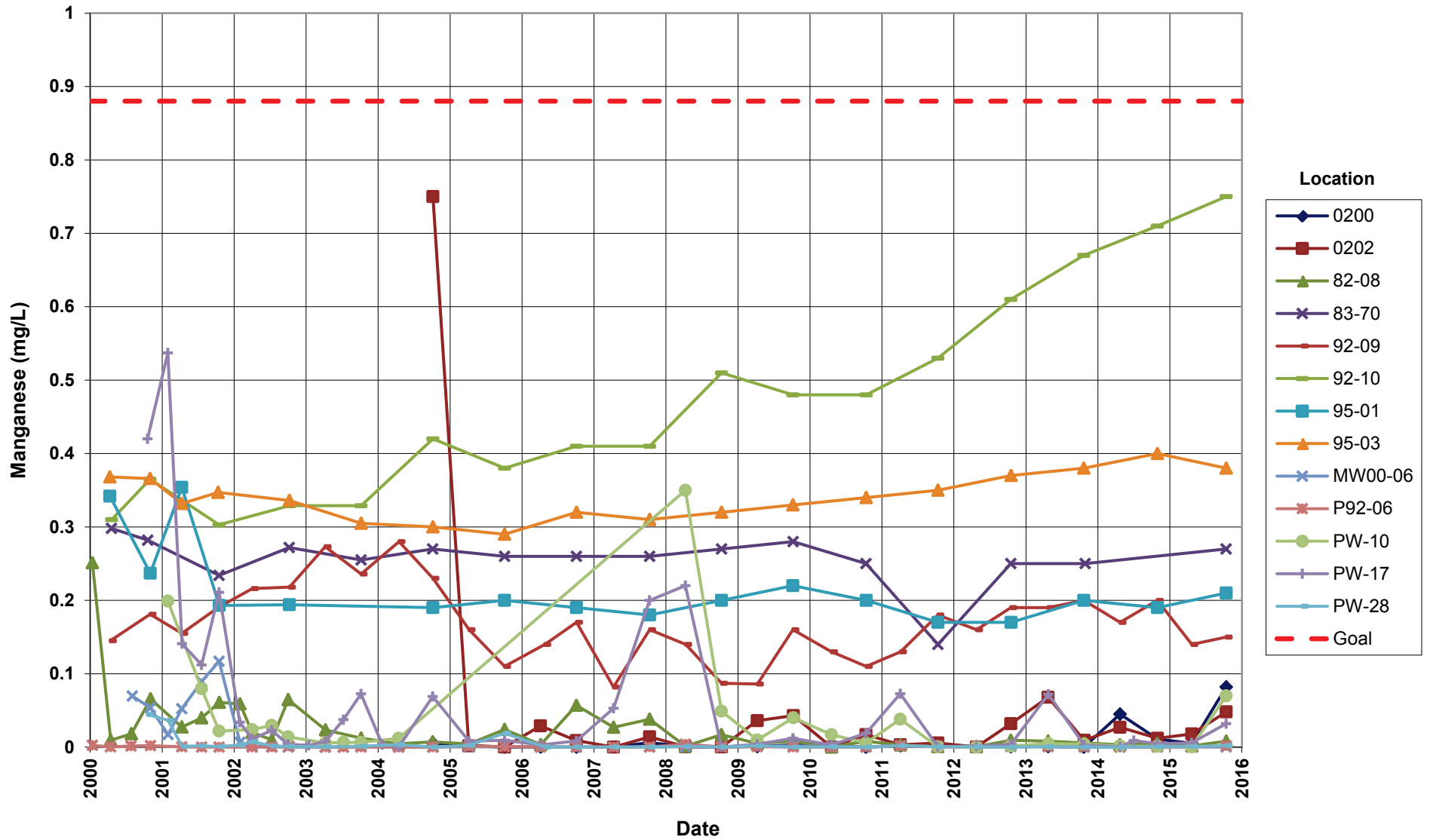
Monticello Disposal & Process Sites
Former Mill Site Wells
Manganese Concentration
Remediation Goal = 0.88 mg/L



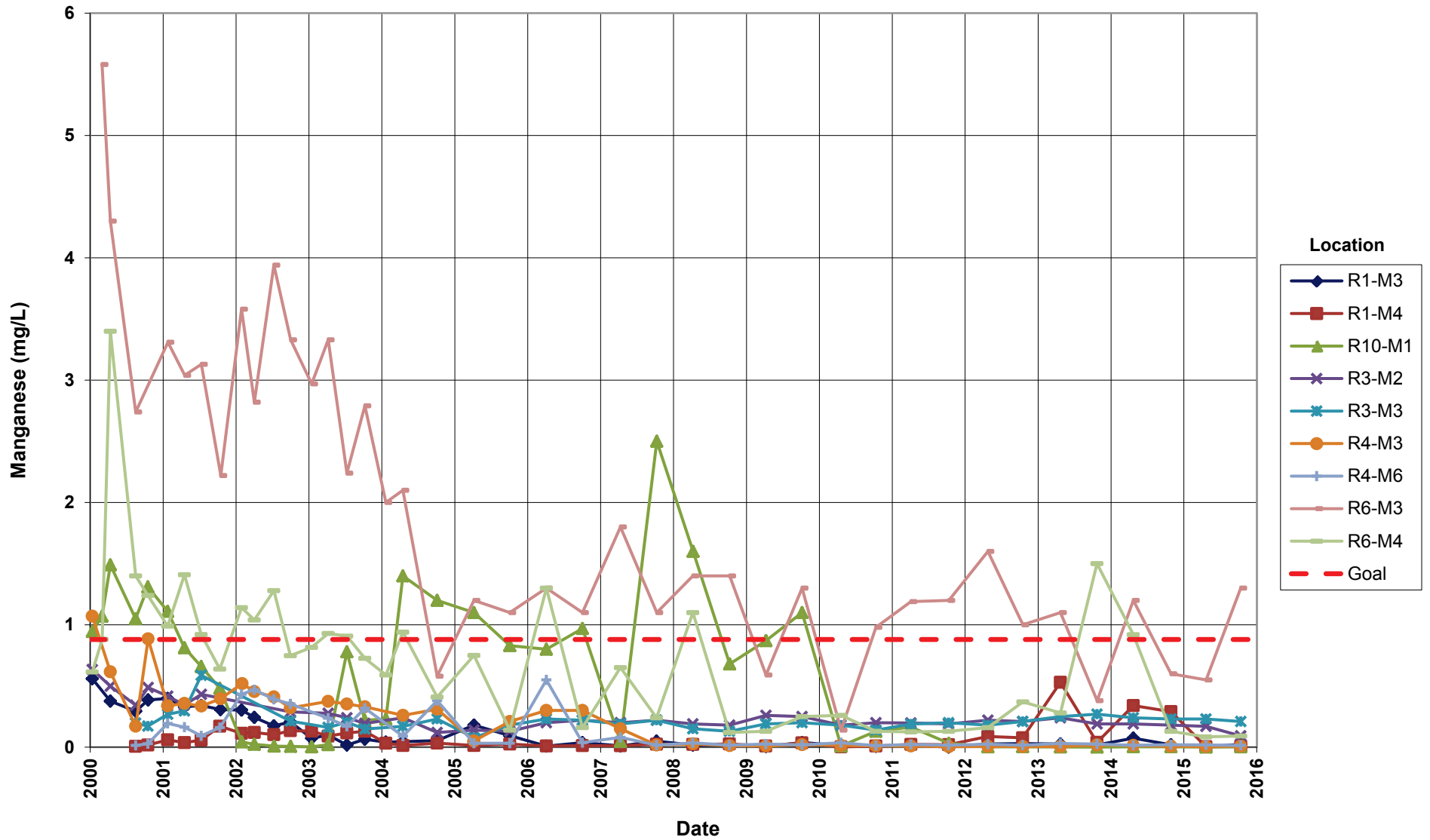
Monticello Disposal & Process Sites
Downgradient Wells
Manganese Concentration
Remediation Goal = 0.88 mg/L



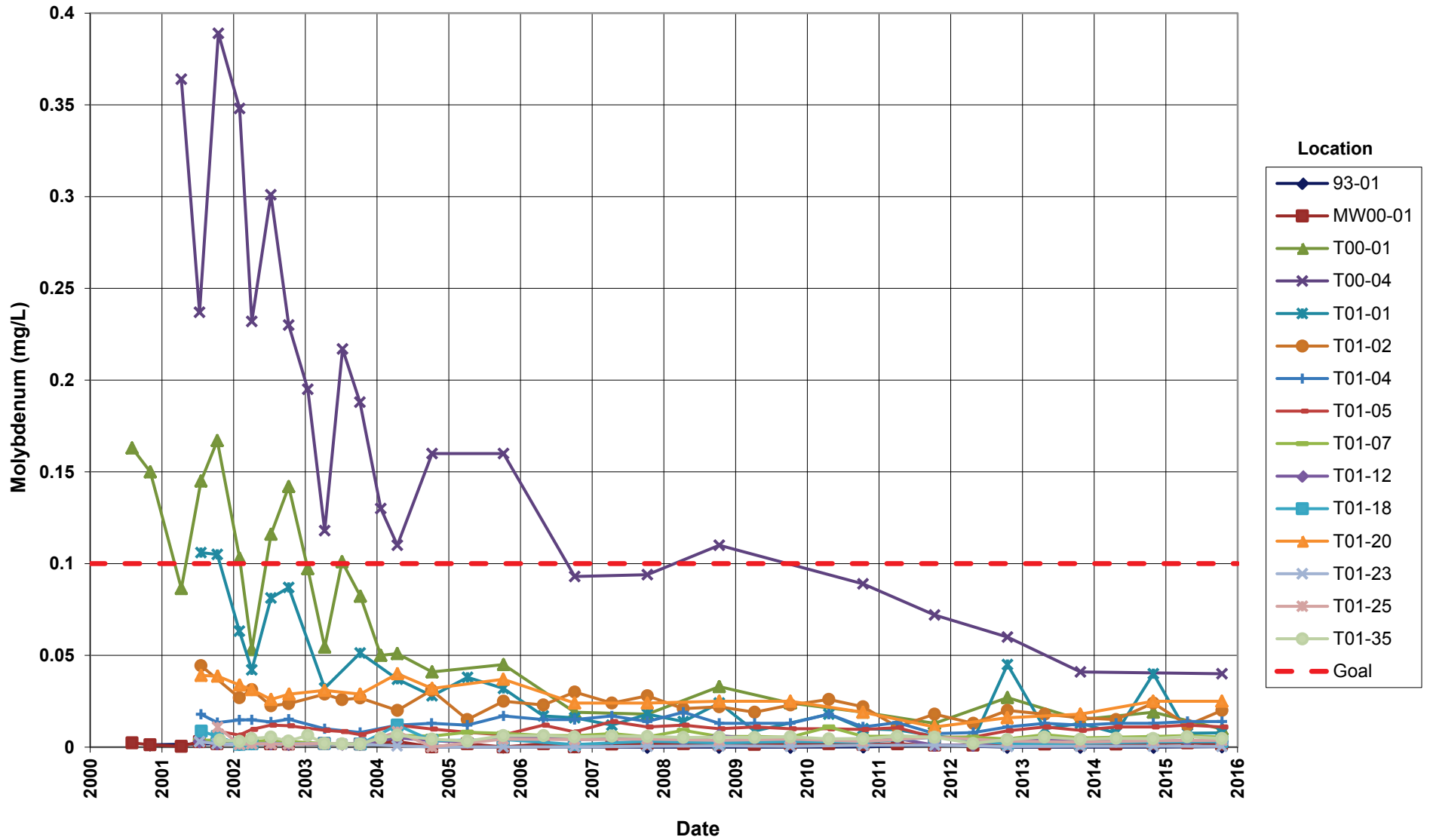
**Monticello Disposal & Process Sites
Downgradient Wells
Manganese Concentration
Remediation Goal = 0.88 mg/L**



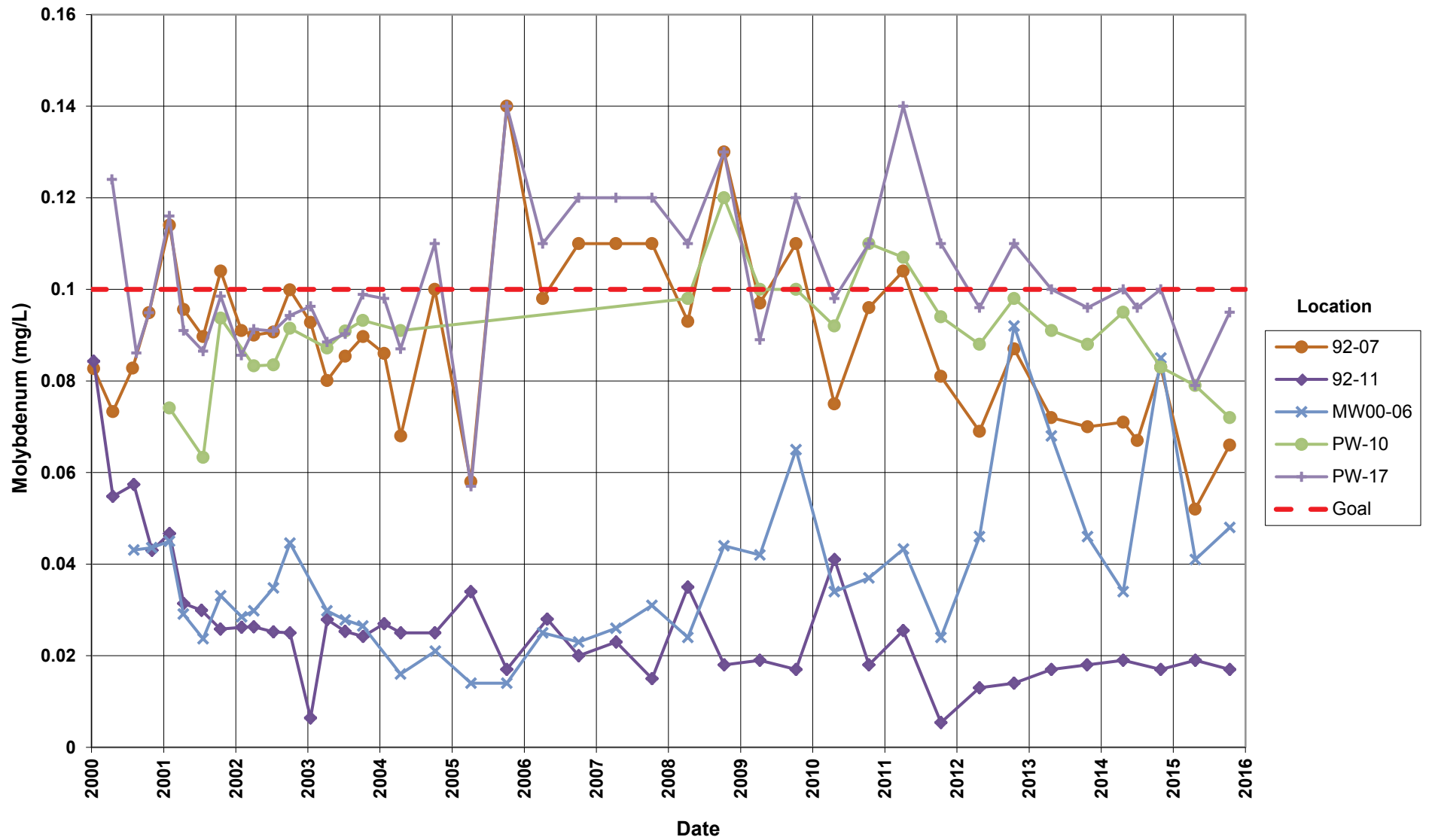
Monticello Disposal & Process Sites
Downgradient PRB Wells
Manganese Concentration
Remediation Goal = 0.88 mg/L



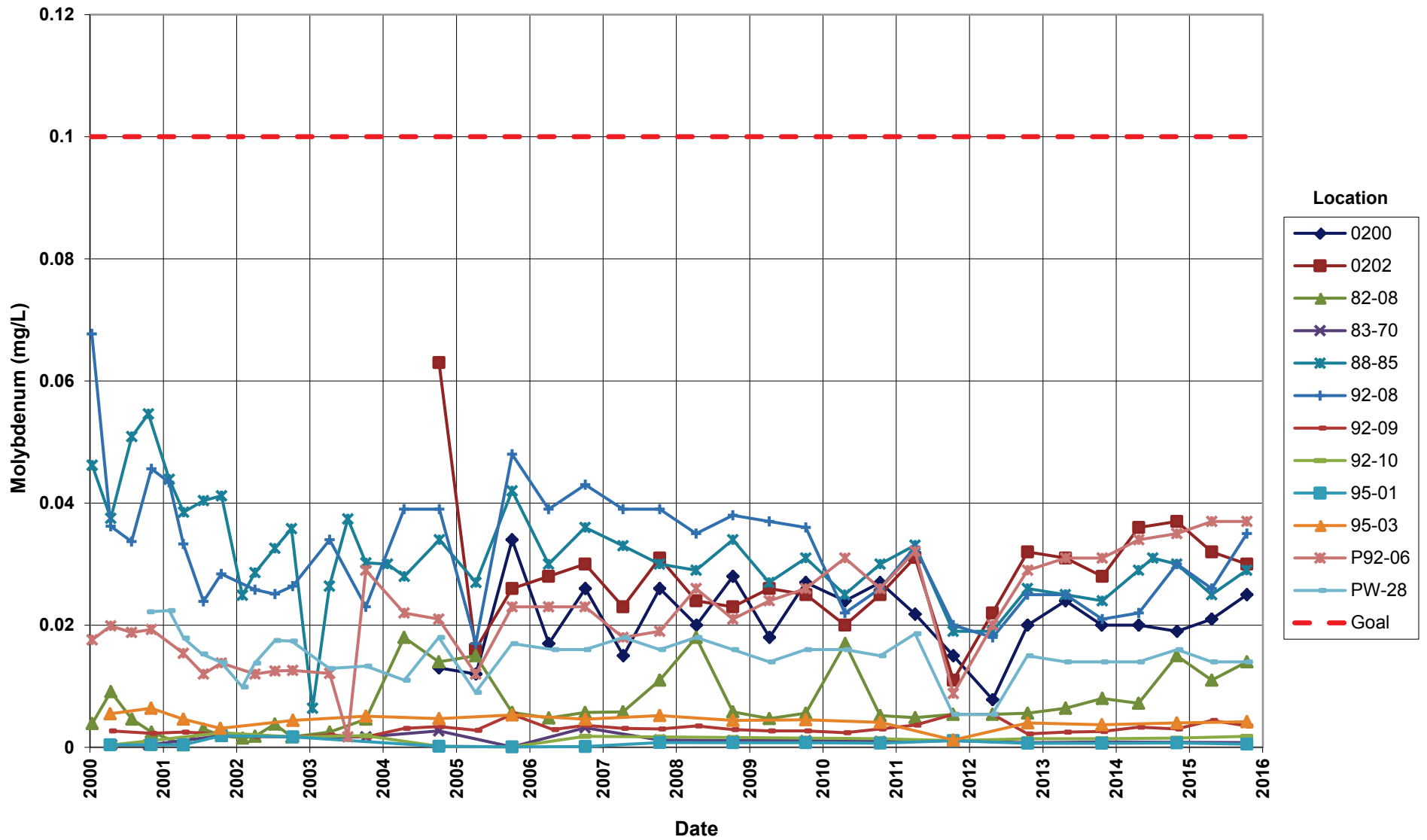
**Monticello Disposal & Process Sites
Former Mill Site Wells
Molybdenum Concentration
Remediation Goal = 0.1 mg/L**



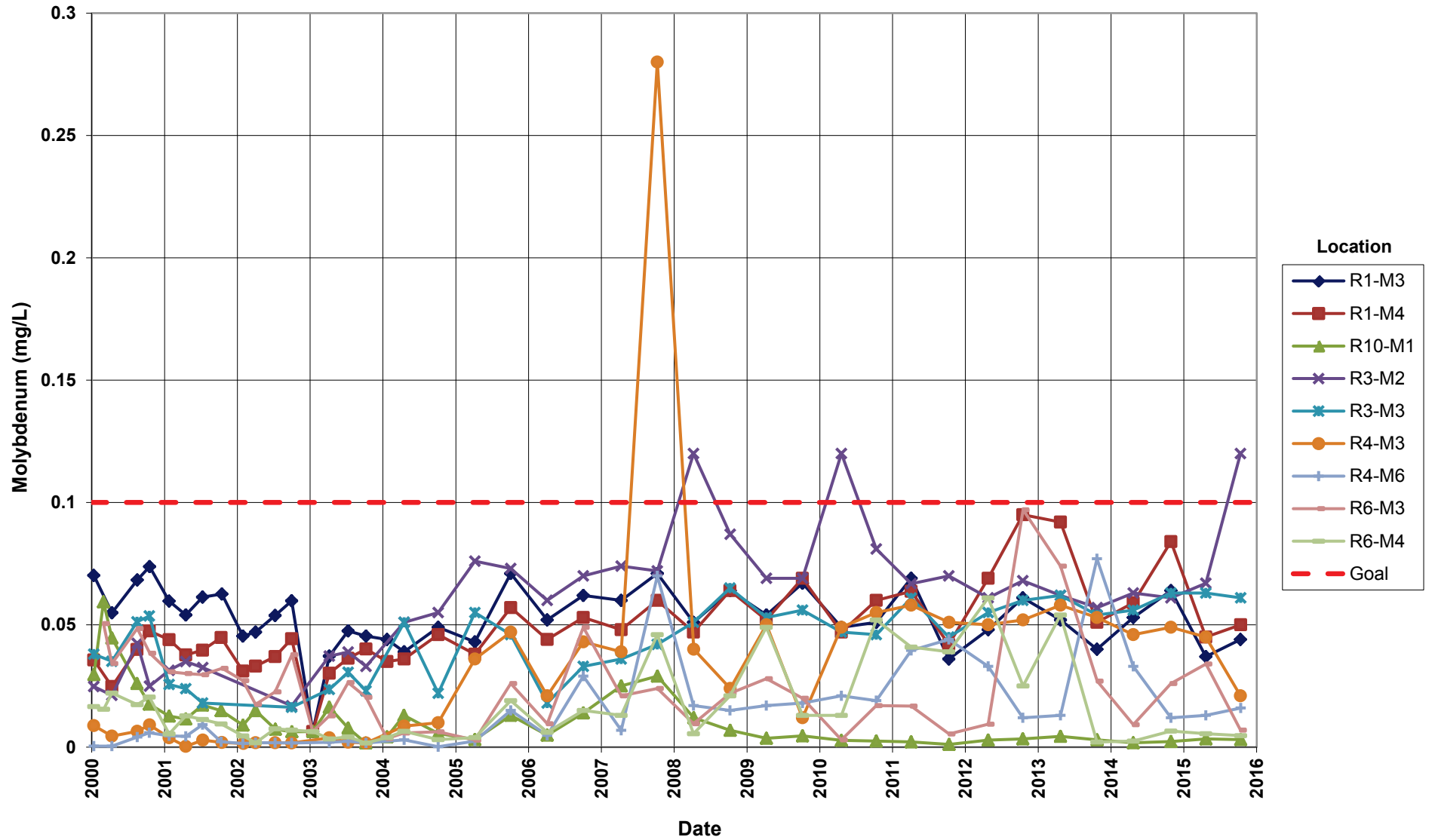
Monticello Disposal & Process Sites
Downgradient Wells
Molybdenum Concentration
Remediation Goal = 0.1 mg/L



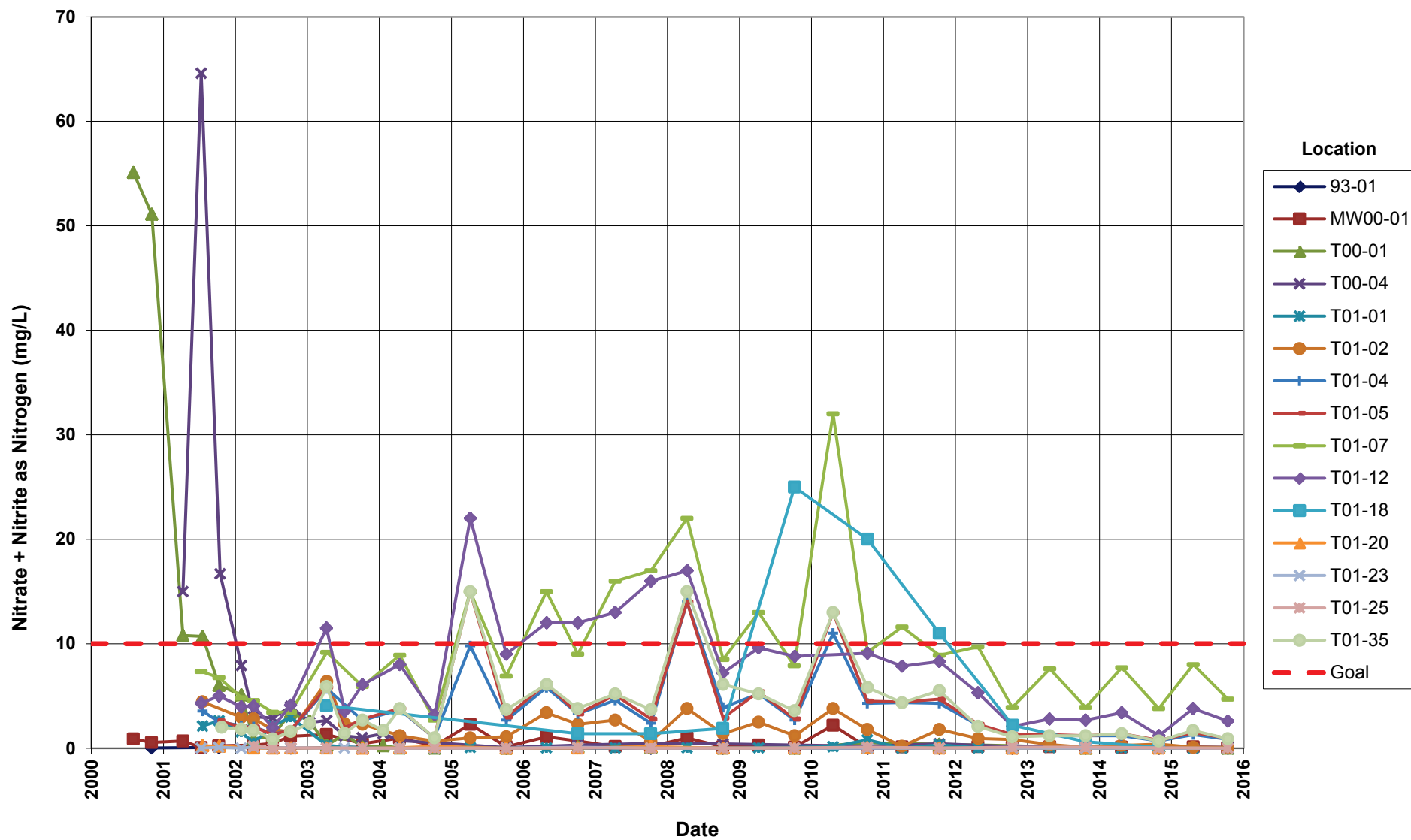
**Monticello Disposal & Process Sites
Downgradient Wells
Molybdenum Concentration
Remediation Goal = 0.1 mg/L**



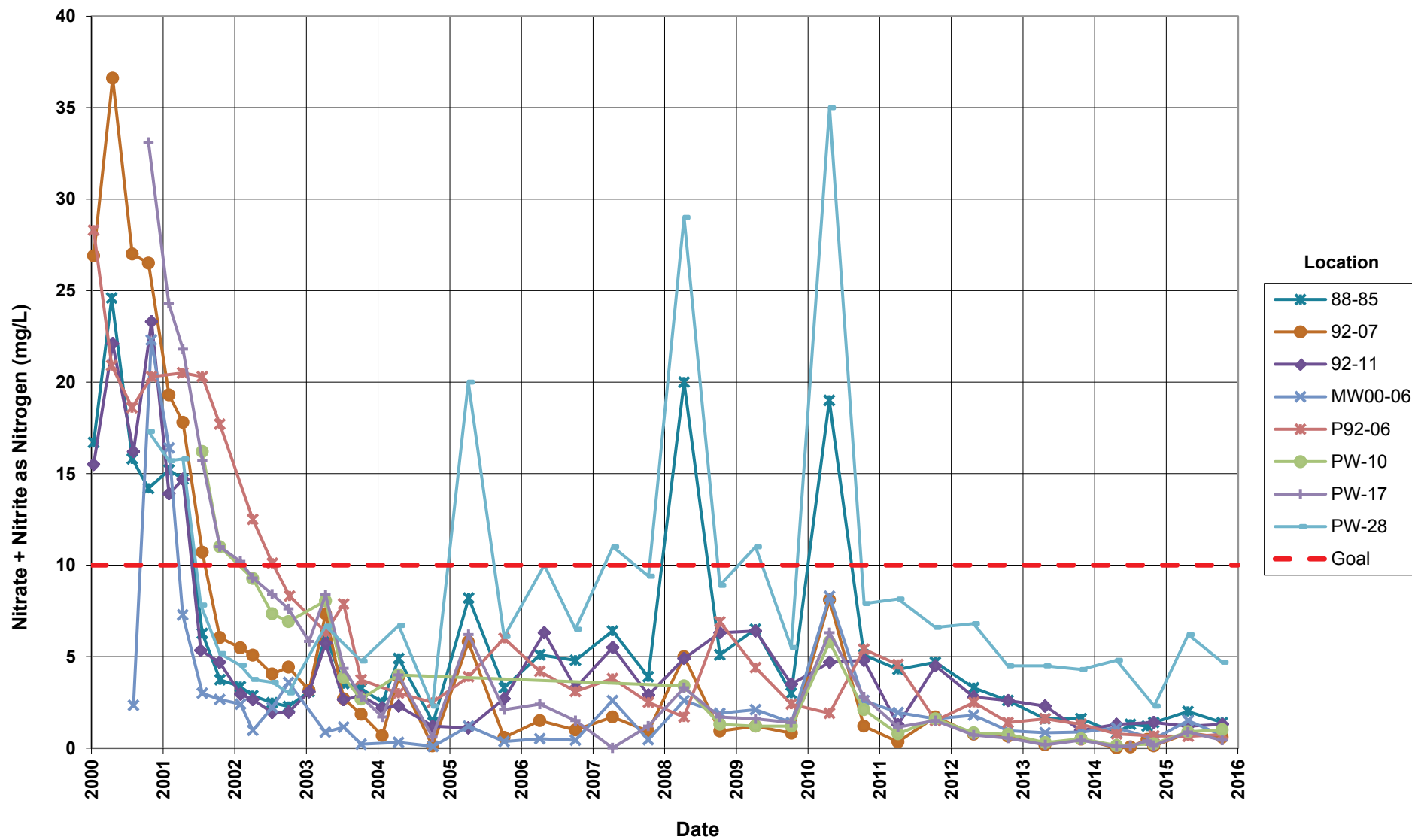
Monticello Disposal & Process Sites
Downgradient PRB Wells
Molybdenum Concentration
Remediation Goal = 0.1 mg/L



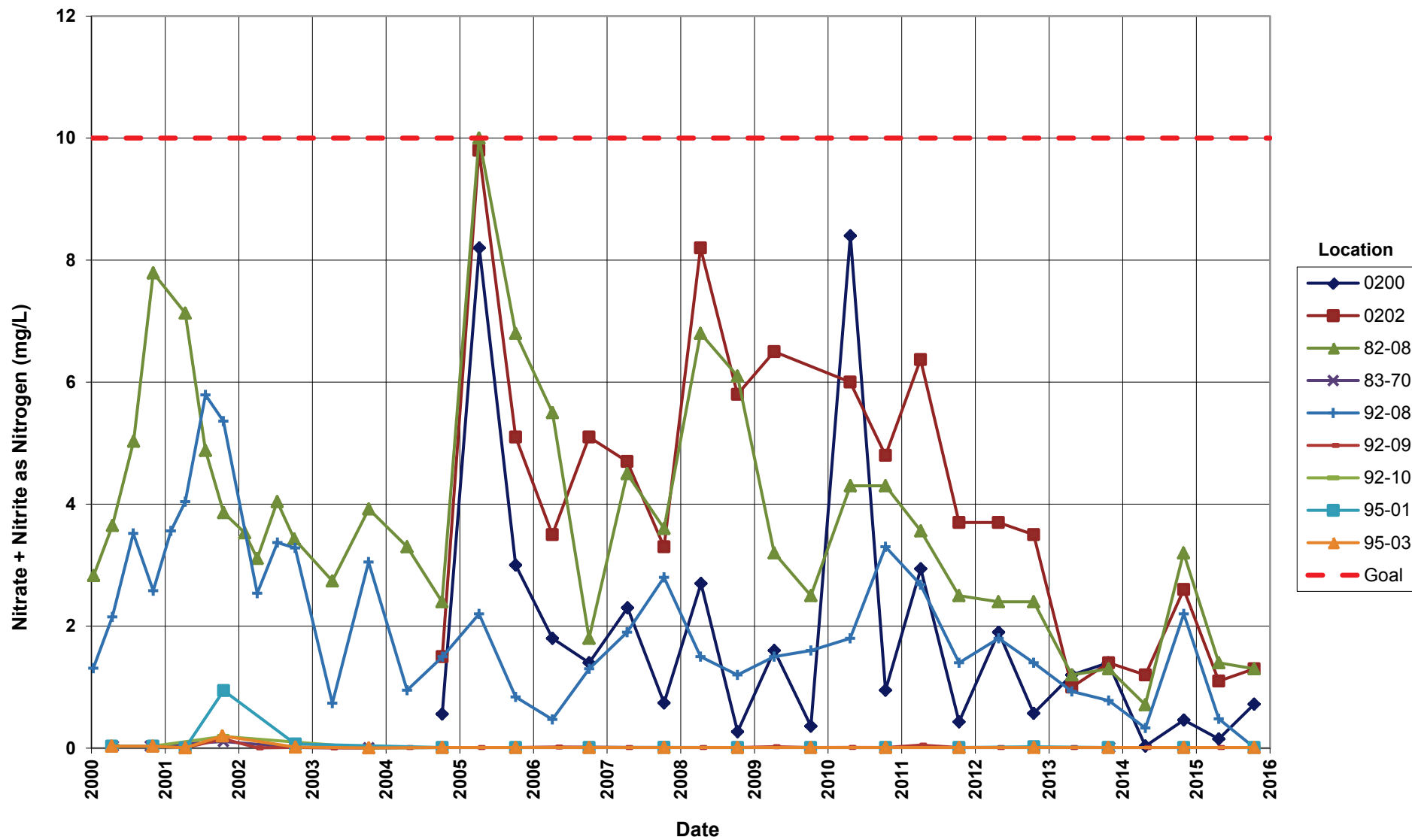
**Monticello Disposal & Process Sites
Former Mill Site Wells
Nitrate + Nitrite as Nitrogen Concentration
Remediation Goal = 10 mg/L**



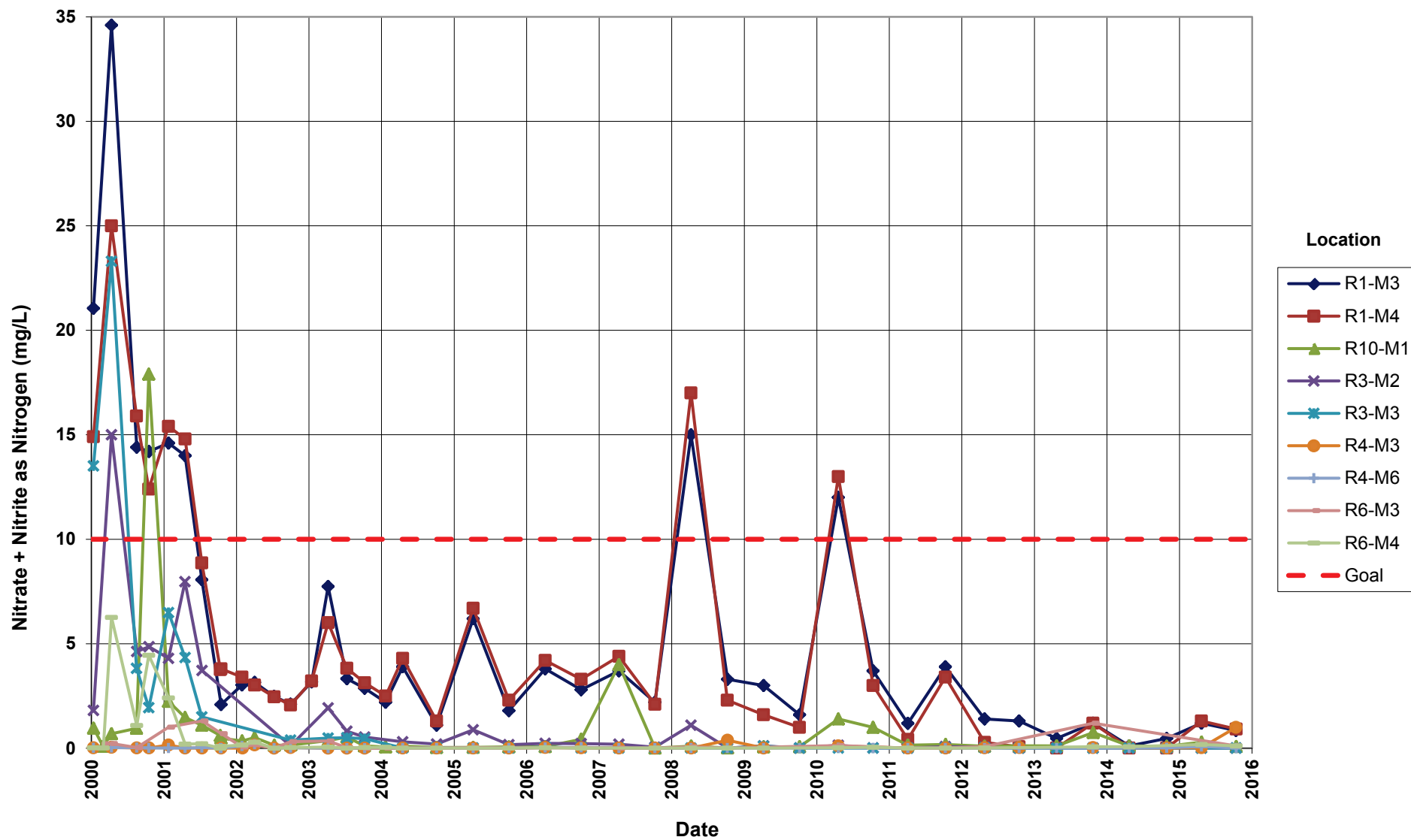
**Monticello Disposal & Process Sites
Downgradient Wells
Nitrate + Nitrite as Nitrogen Concentration
Remediation Goal = 10 mg/L**



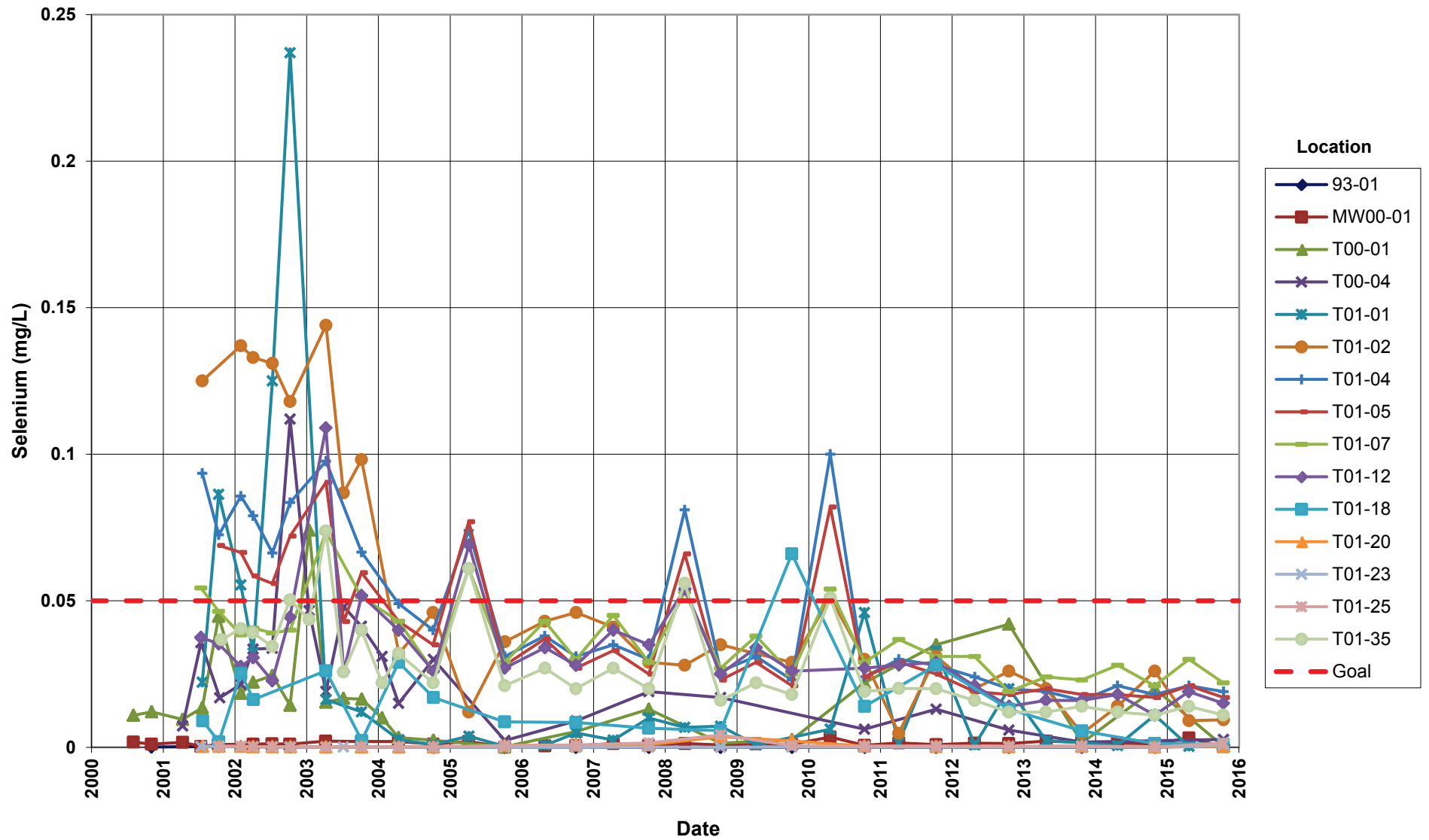
**Monticello Disposal & Process Sites
Downgradient Wells
Nitrate + Nitrite as Nitrogen Concentration
Remediation Goal = 10 mg/L**



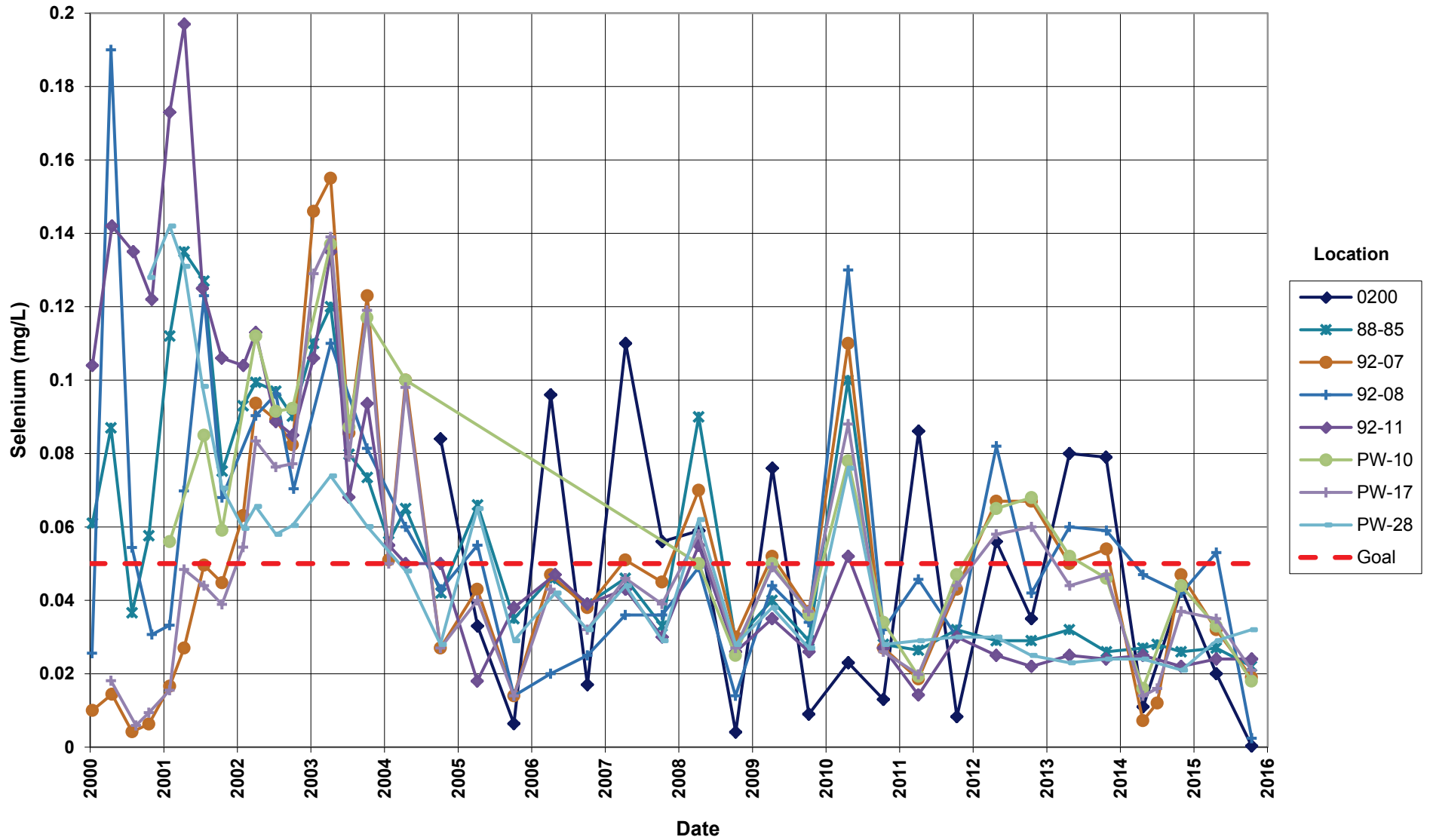
**Monticello Disposal & Process Sites
Downgradient PRB Wells
Nitrate + Nitrite as Nitrogen Concentration
Remediation Goal = 10 mg/L**



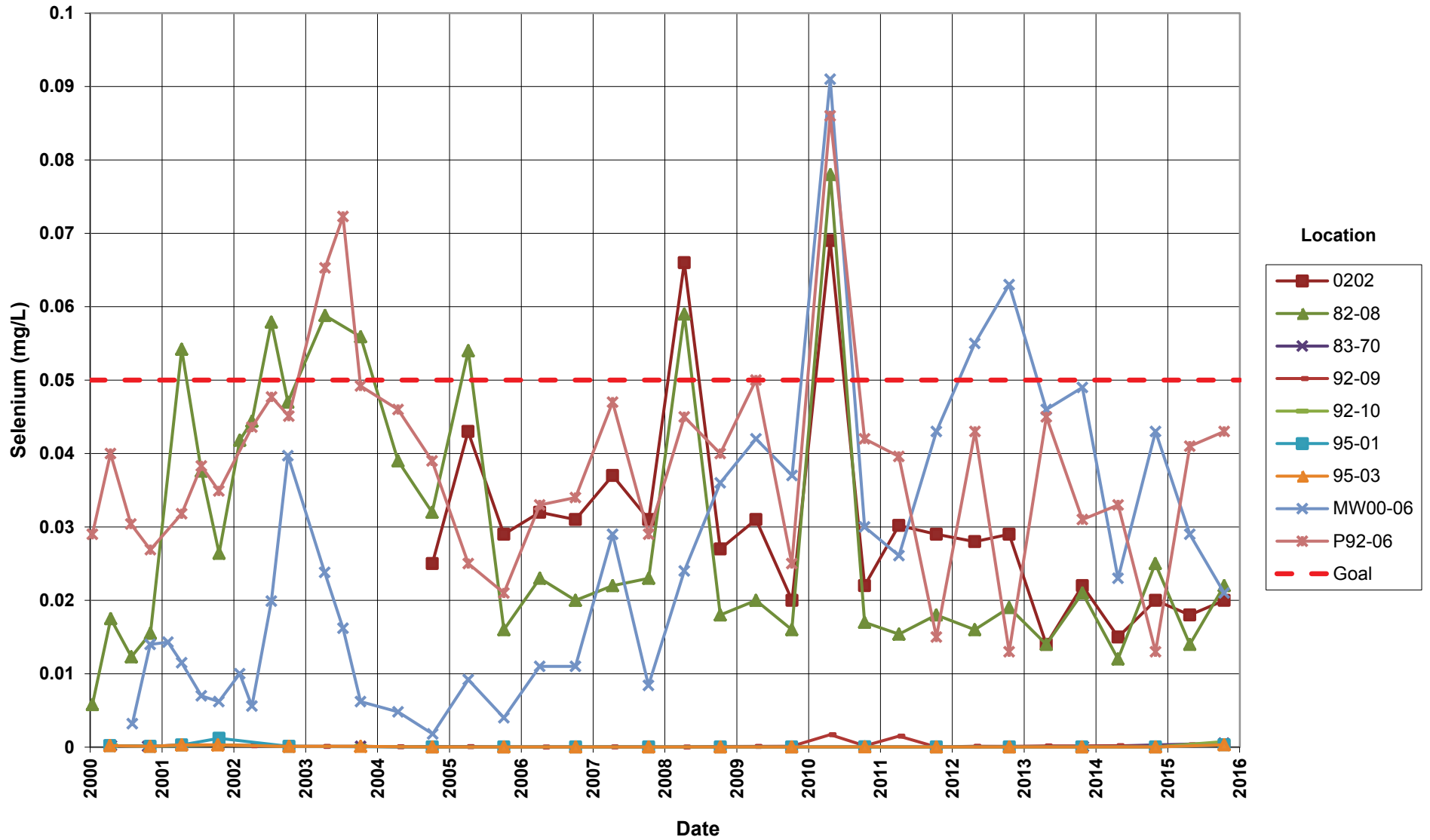
**Monticello Disposal & Process Sites
Former Mill Site Wells
Selenium Concentration
Remediation Goal = 0.05 mg/L**



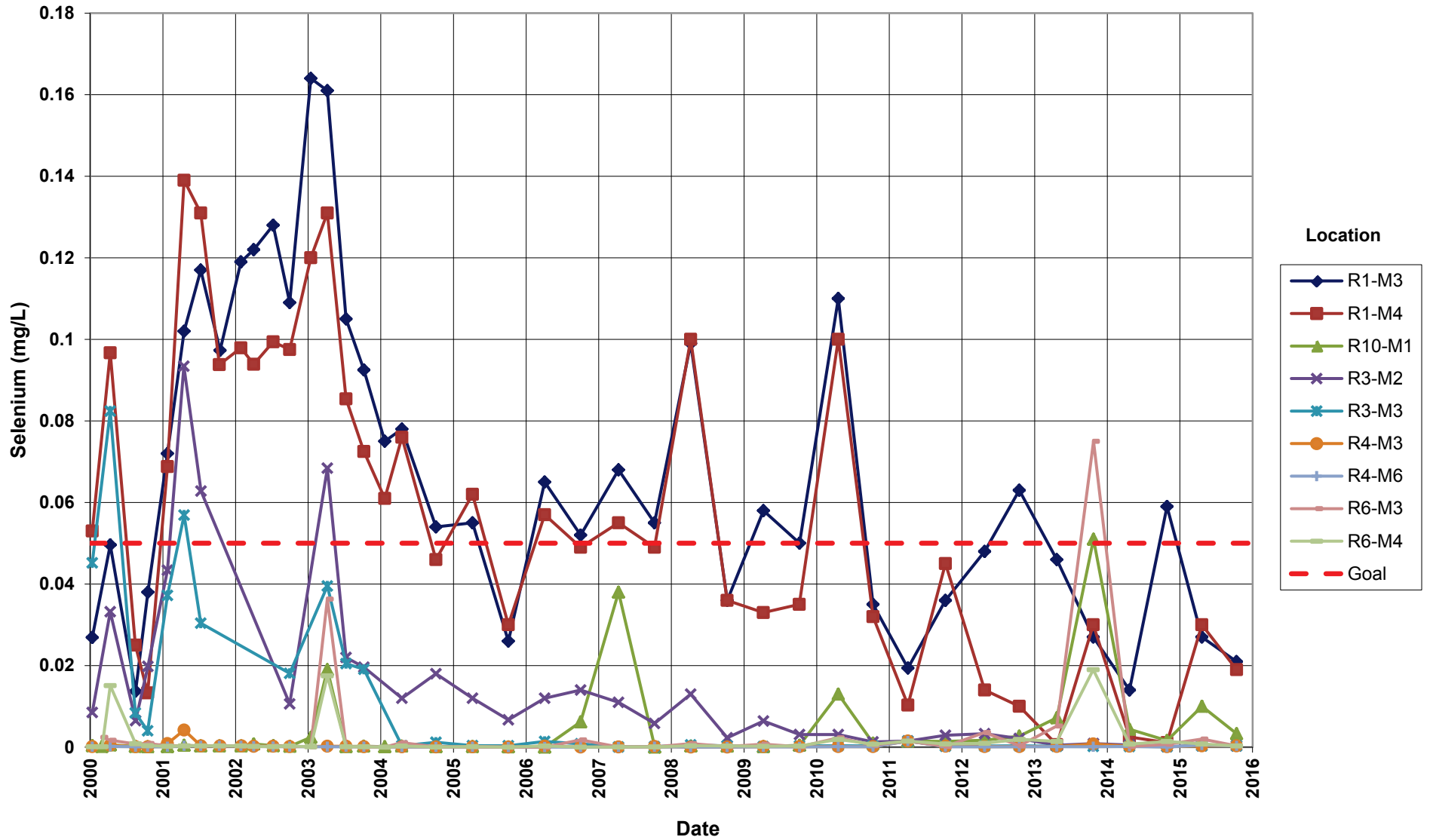
Monticello Disposal & Process Sites
Downgradient Wells
Selenium Concentration
Remediation Goal = 0.05 mg/L



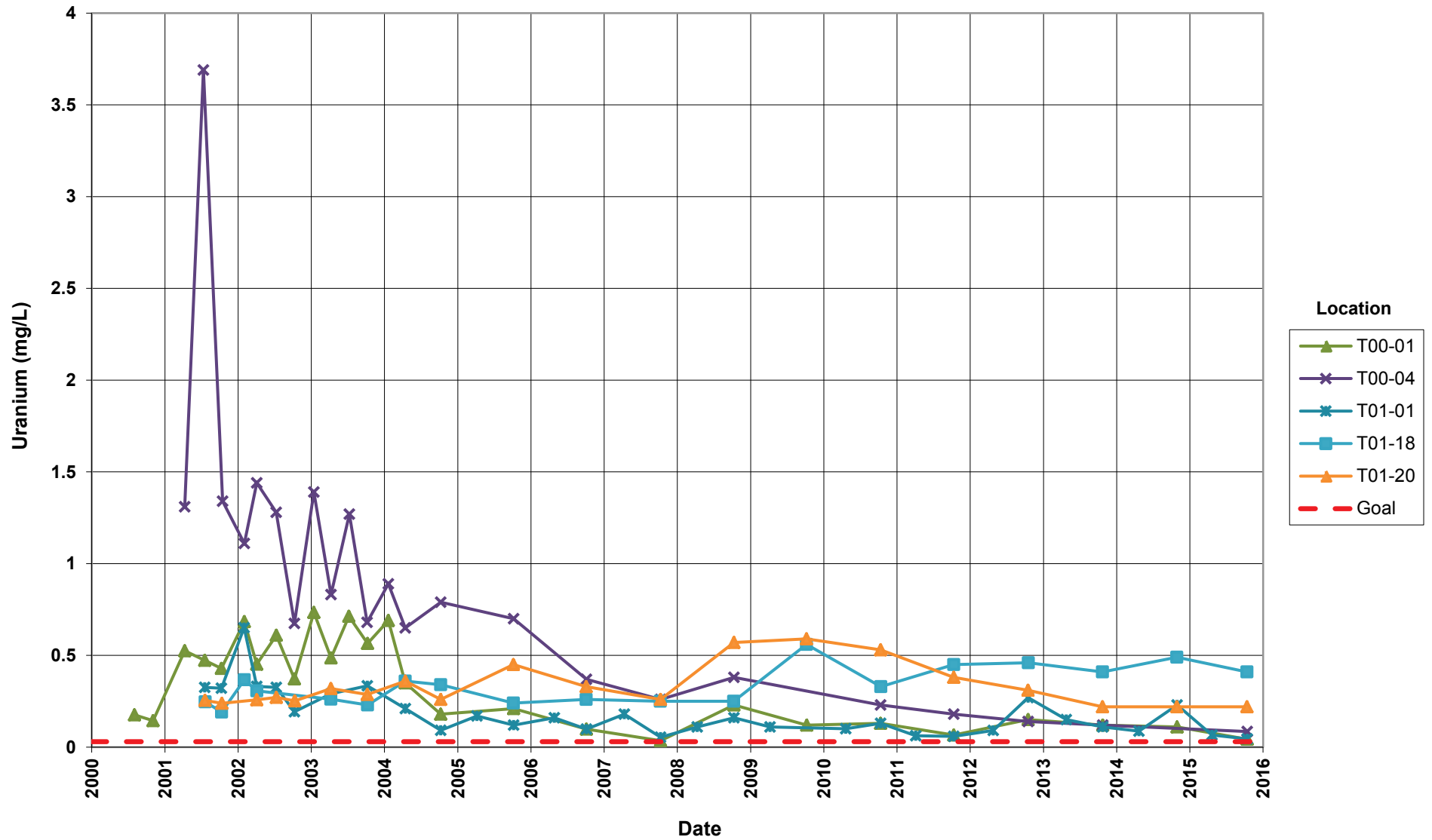
Monticello Disposal & Process Sites
Downgradient Wells
Selenium Concentration
Remediation Goal = 0.05 mg/L



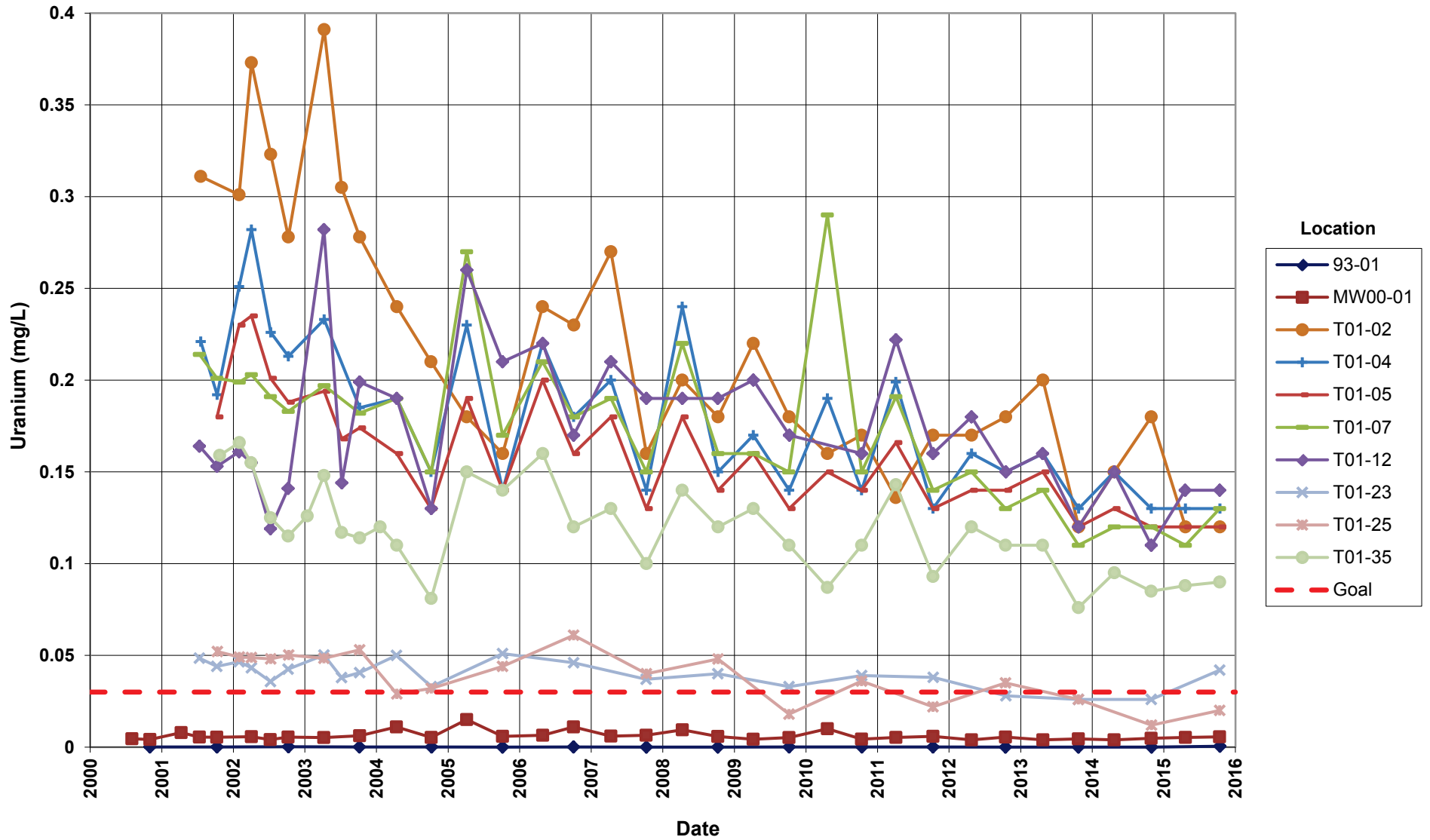
Monticello Disposal & Process Sites
Downgradient PRB Wells
Selenium Concentration
Remediation Goal = 0.05 mg/L



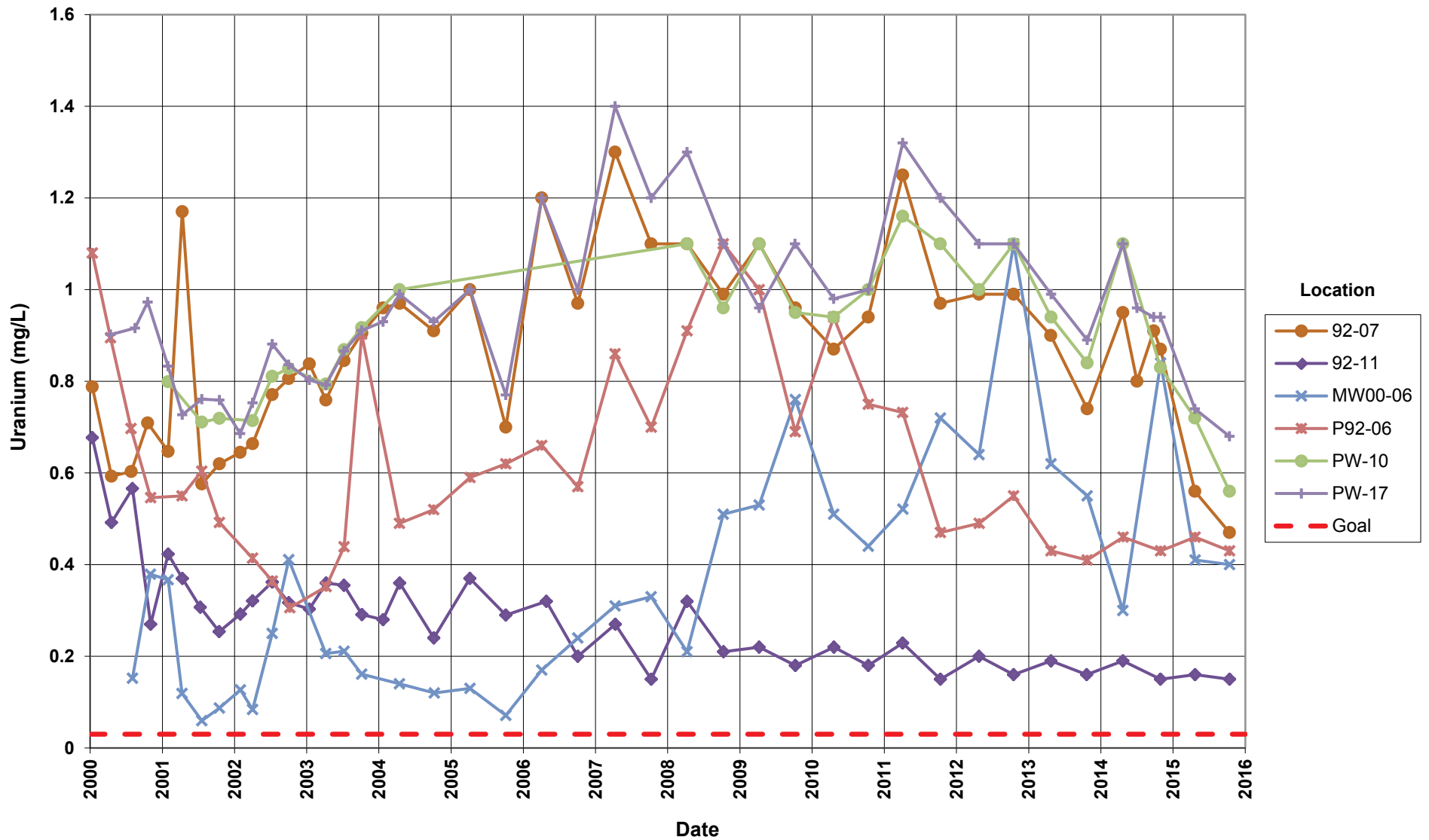
Monticello Disposal & Process Sites
Former Mill Site Wells
Uranium Concentration
Remediation Goal = 0.03 mg/L



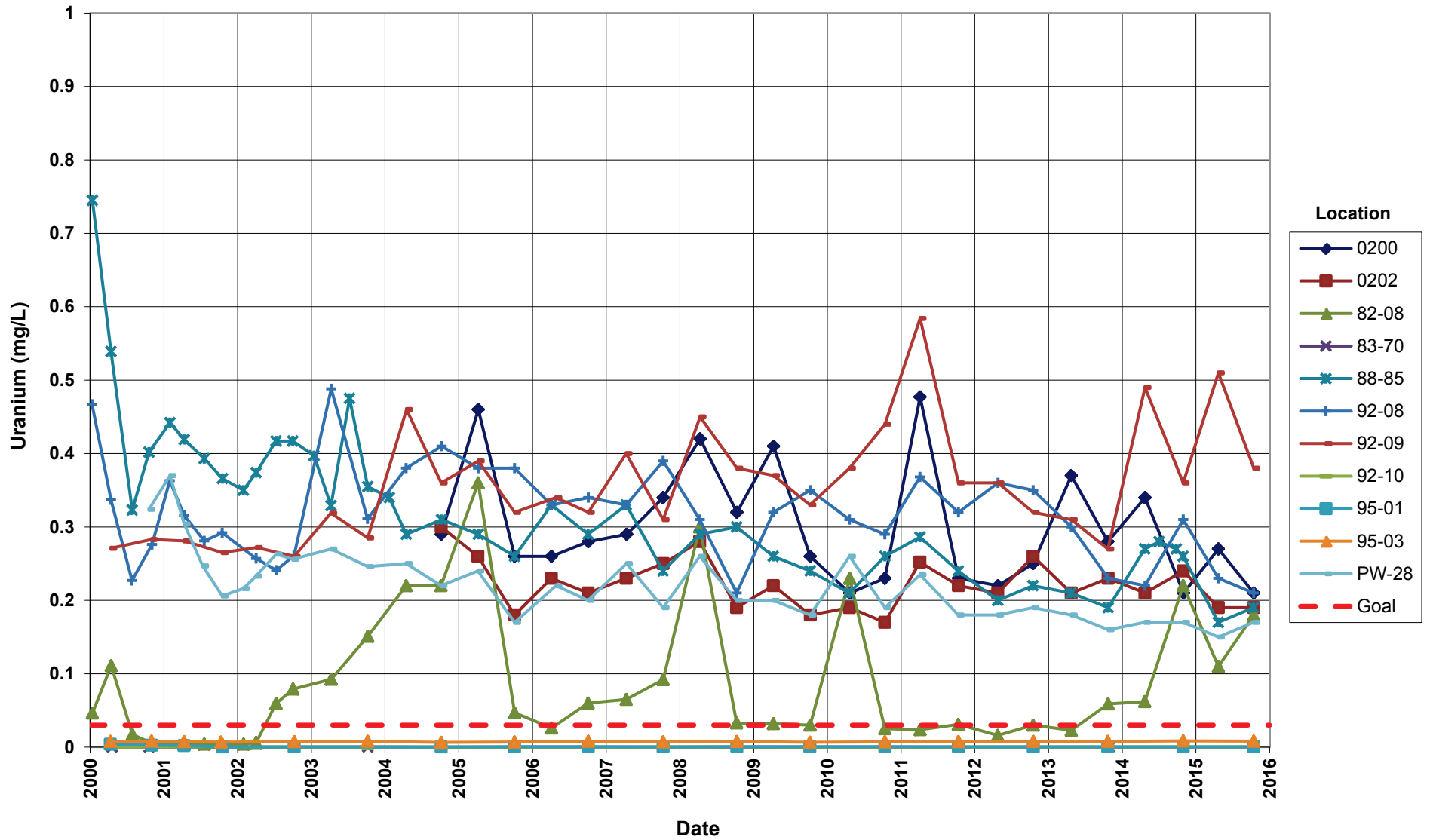
**Monticello Disposal & Process Sites
Former Mill Site Wells
Uranium Concentration
Remediation Goal = 0.03 mg/L**



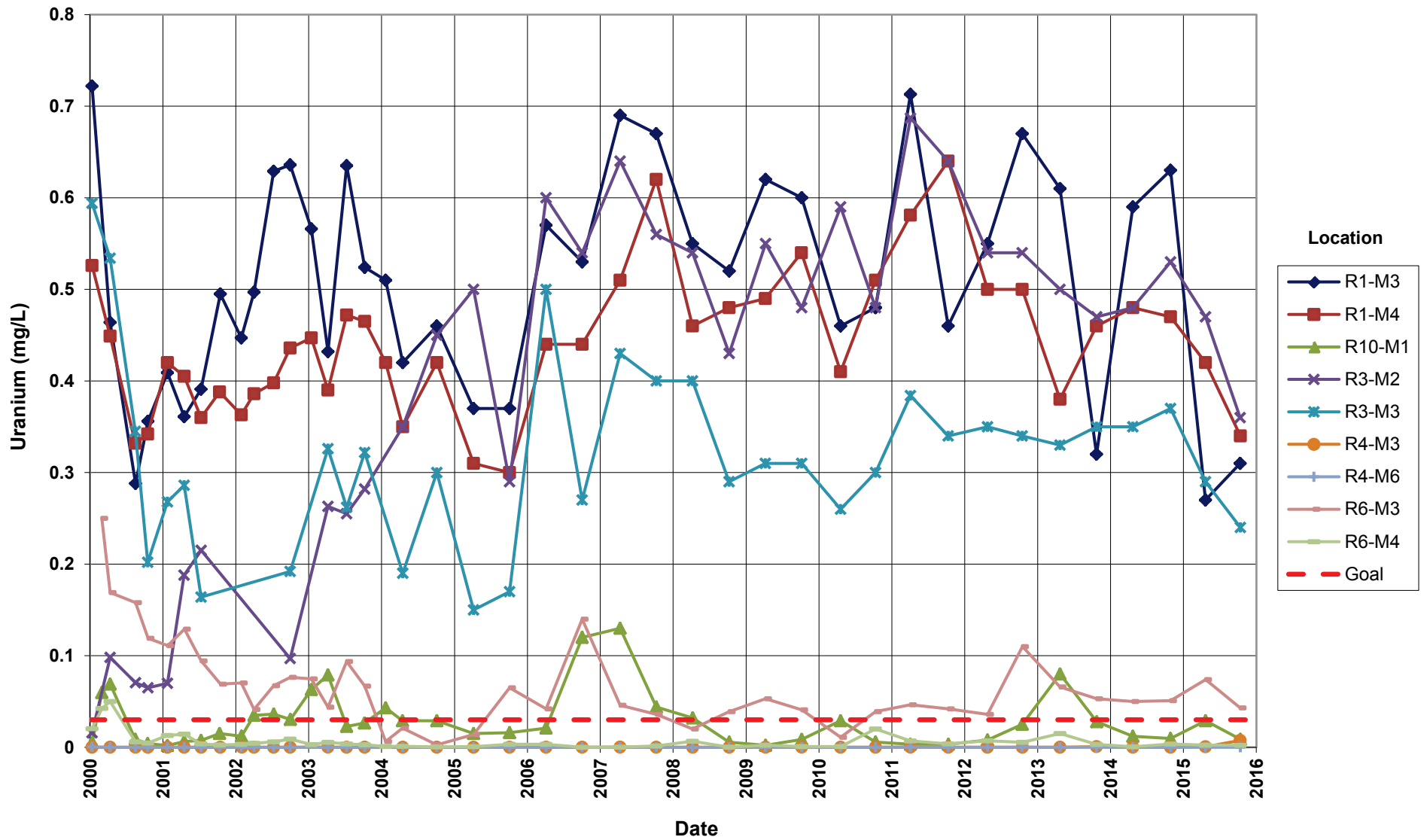
Monticello Disposal & Process Sites
Downgradient Wells
Uranium Concentration
Remediation Goal = 0.03 mg/L



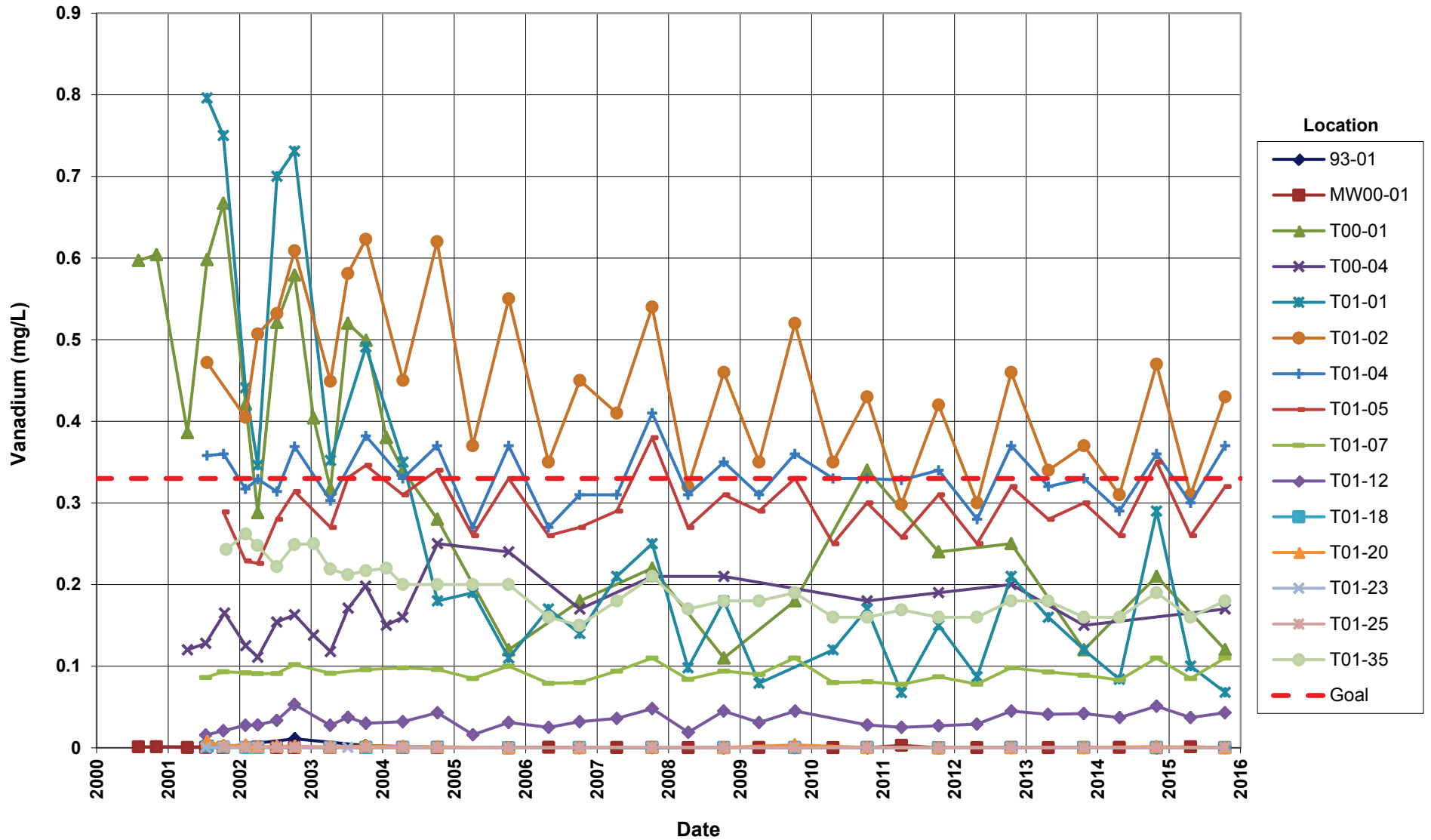
Monticello Disposal & Process Sites
Downgradient Wells
Uranium Concentration
Remediation Goal = 0.03 mg/L



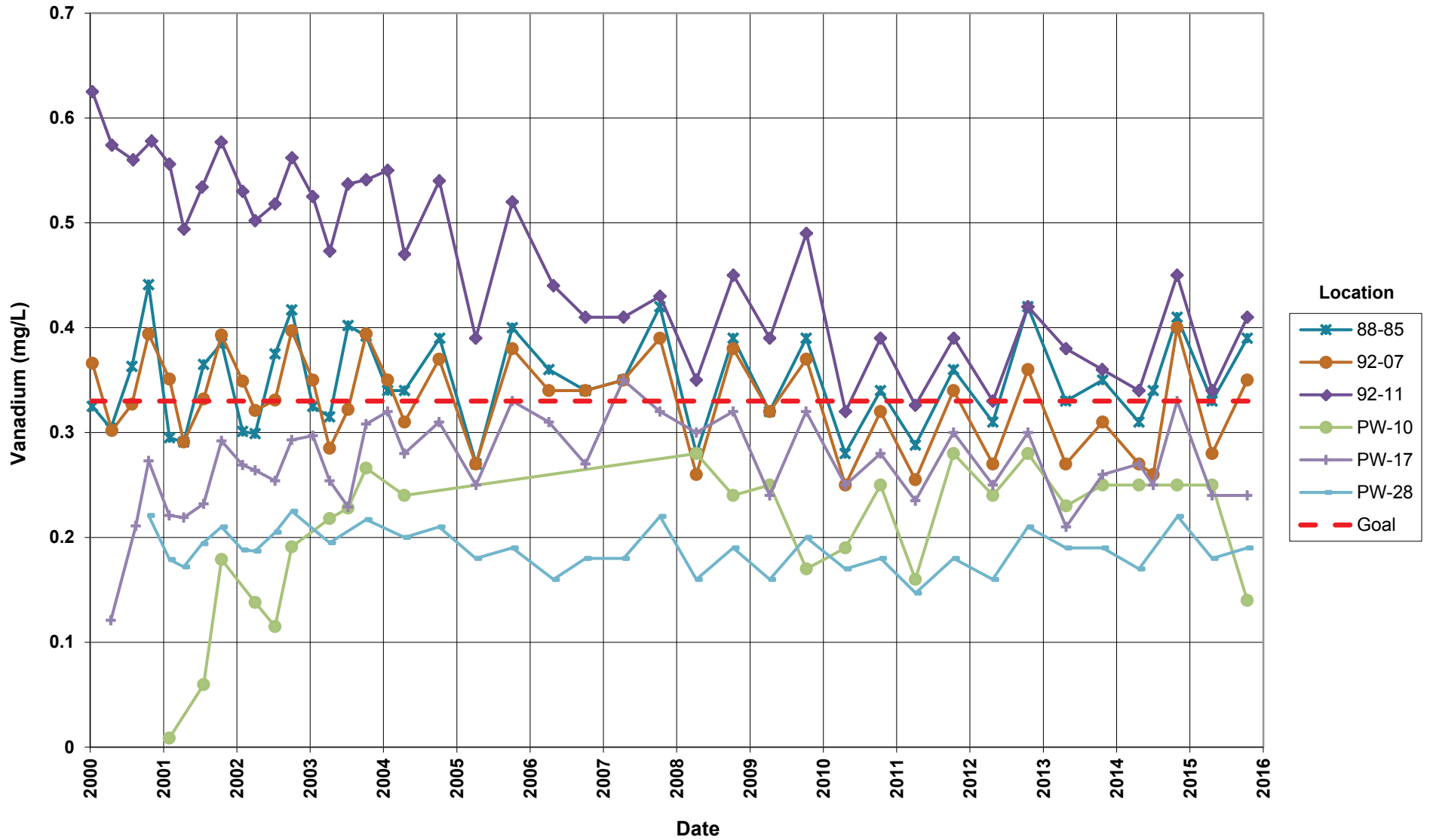
Monticello Disposal & Process Sites
Downgradient PRB Wells
Uranium Concentration
Remediation Goal = 0.03 mg/L



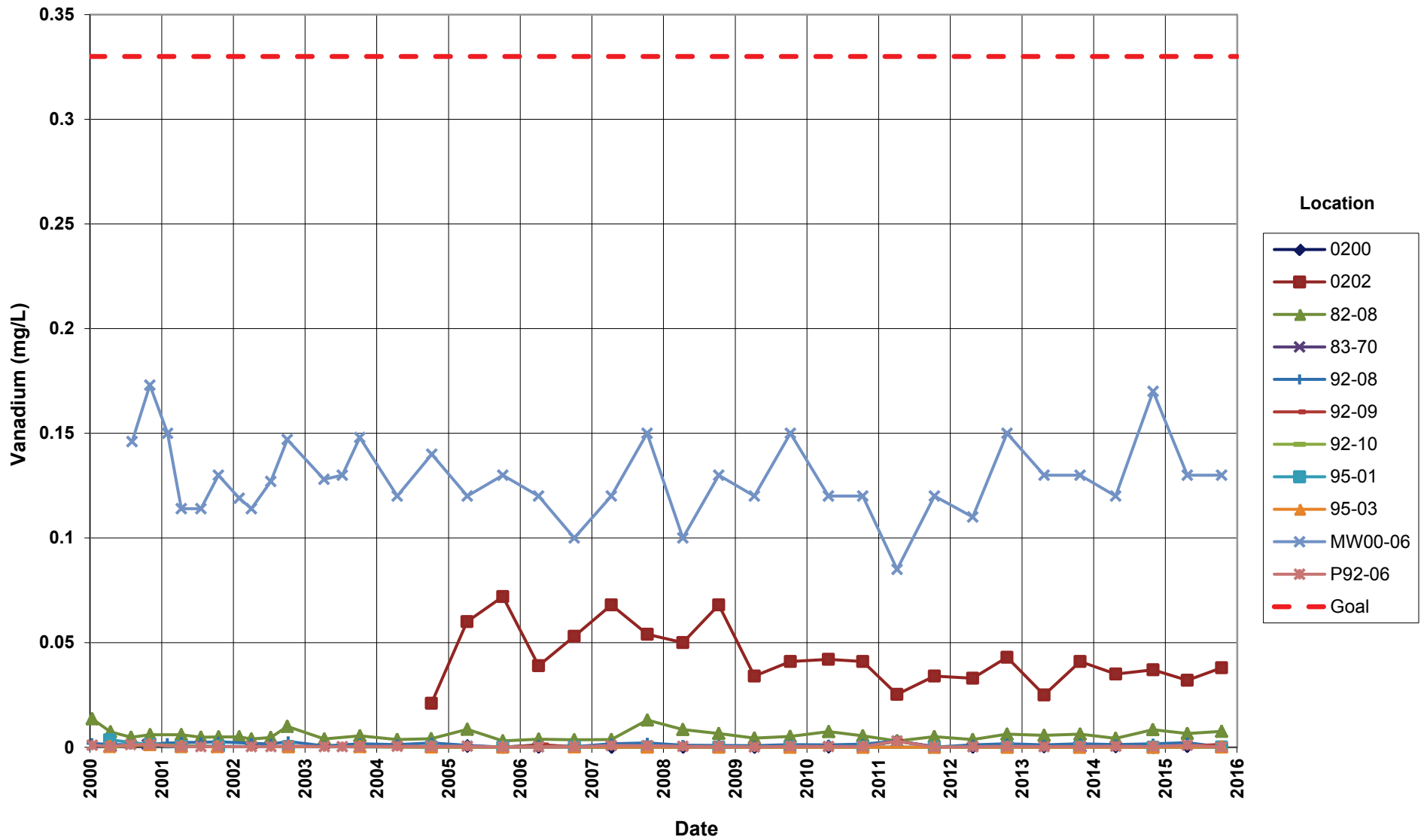
**Monticello Disposal & Process Sites
Former Mill Site Wells
Vanadium Concentration
Remediation Goal = 0.33 mg/L**



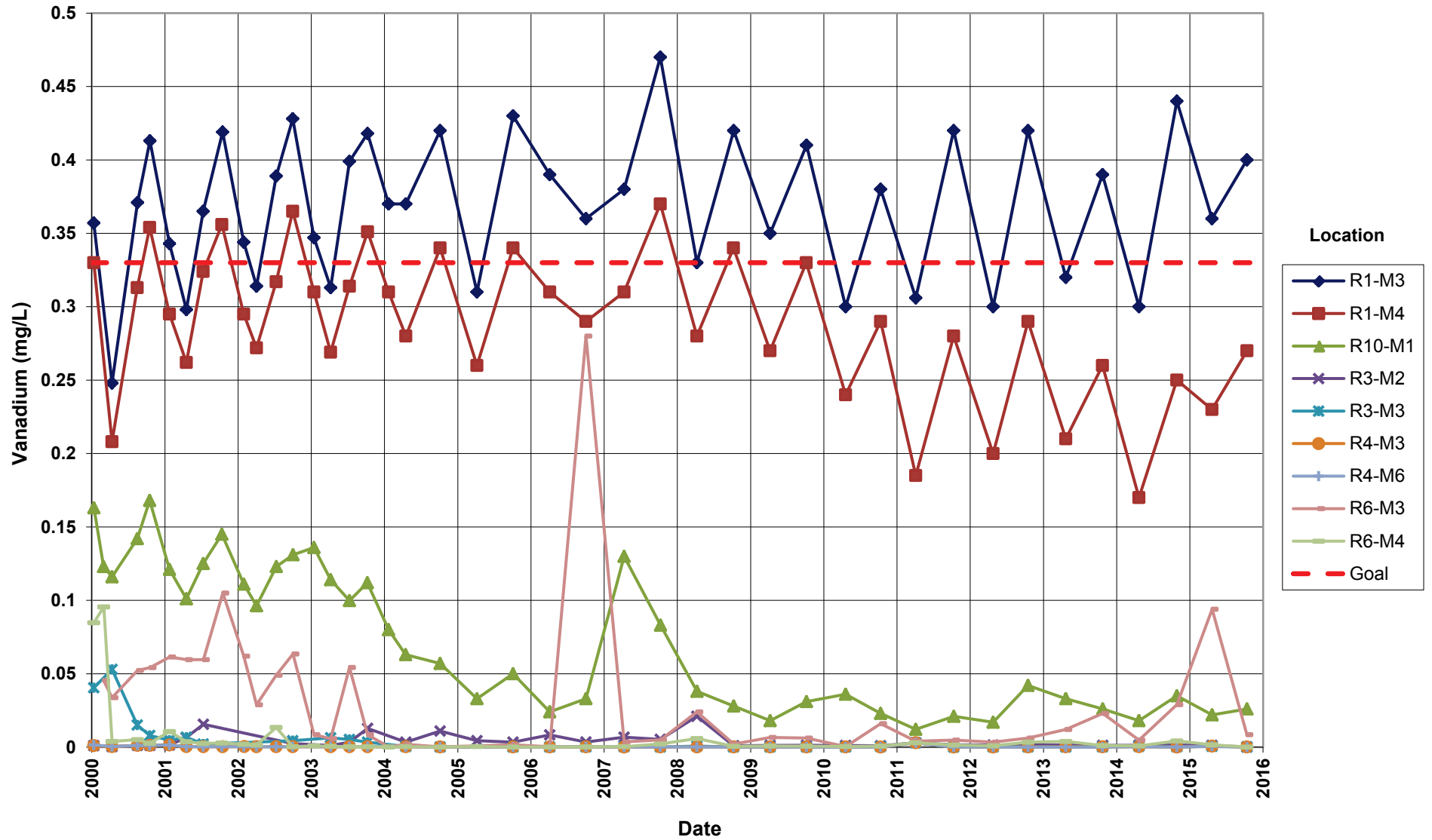
Monticello Disposal & Process Sites
Downgradient Wells
Vanadium Concentration
Remediation Goal = 0.33 mg/L



**Monticello Disposal & Process Sites
Downgradient Wells
Vanadium Concentration
Remediation Goal = 0.33 mg/L**



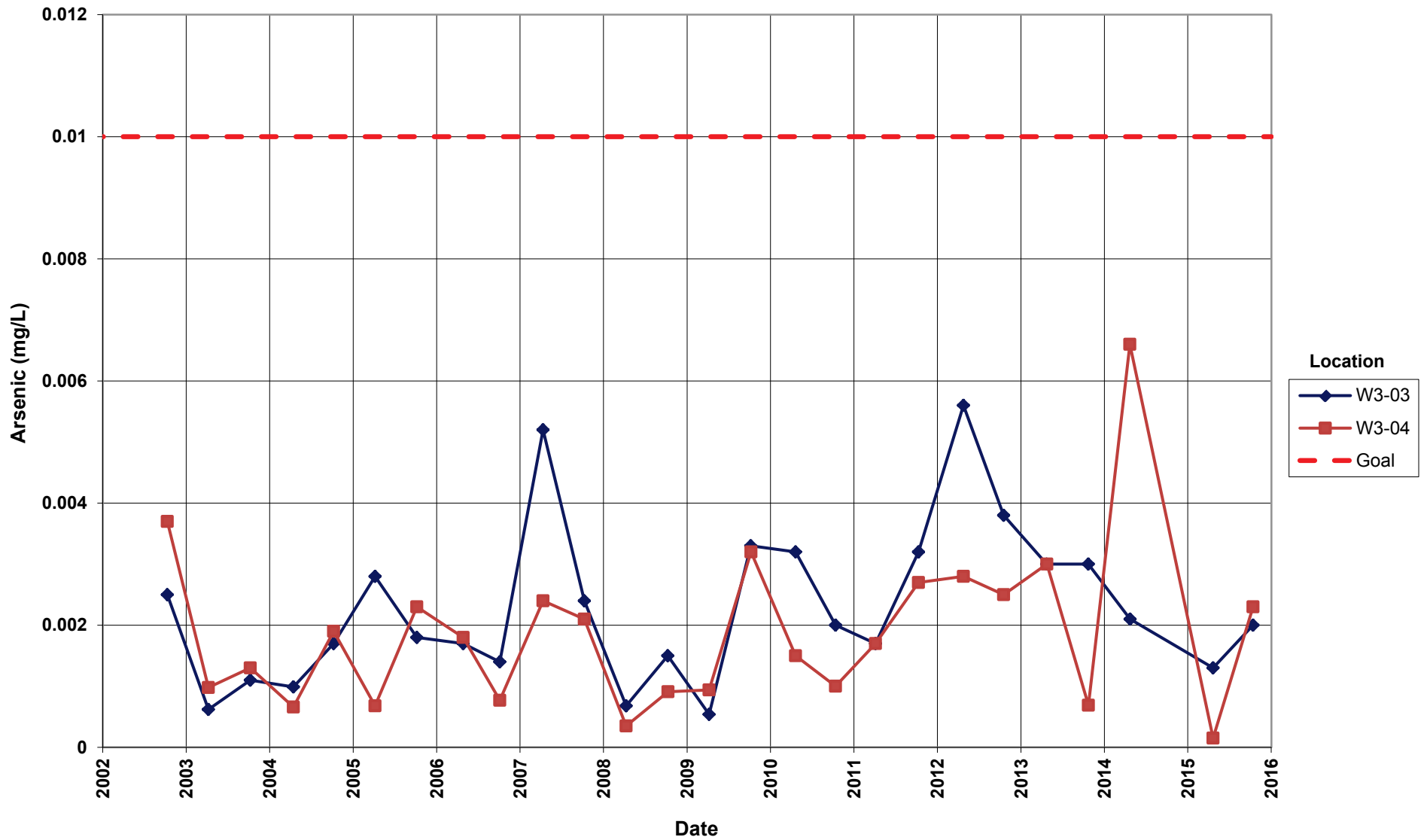
**Monticello Disposal & Process Sites
Downgradient PRB Wells
Vanadium Concentration
Remediation Goal = 0.33 mg/L**



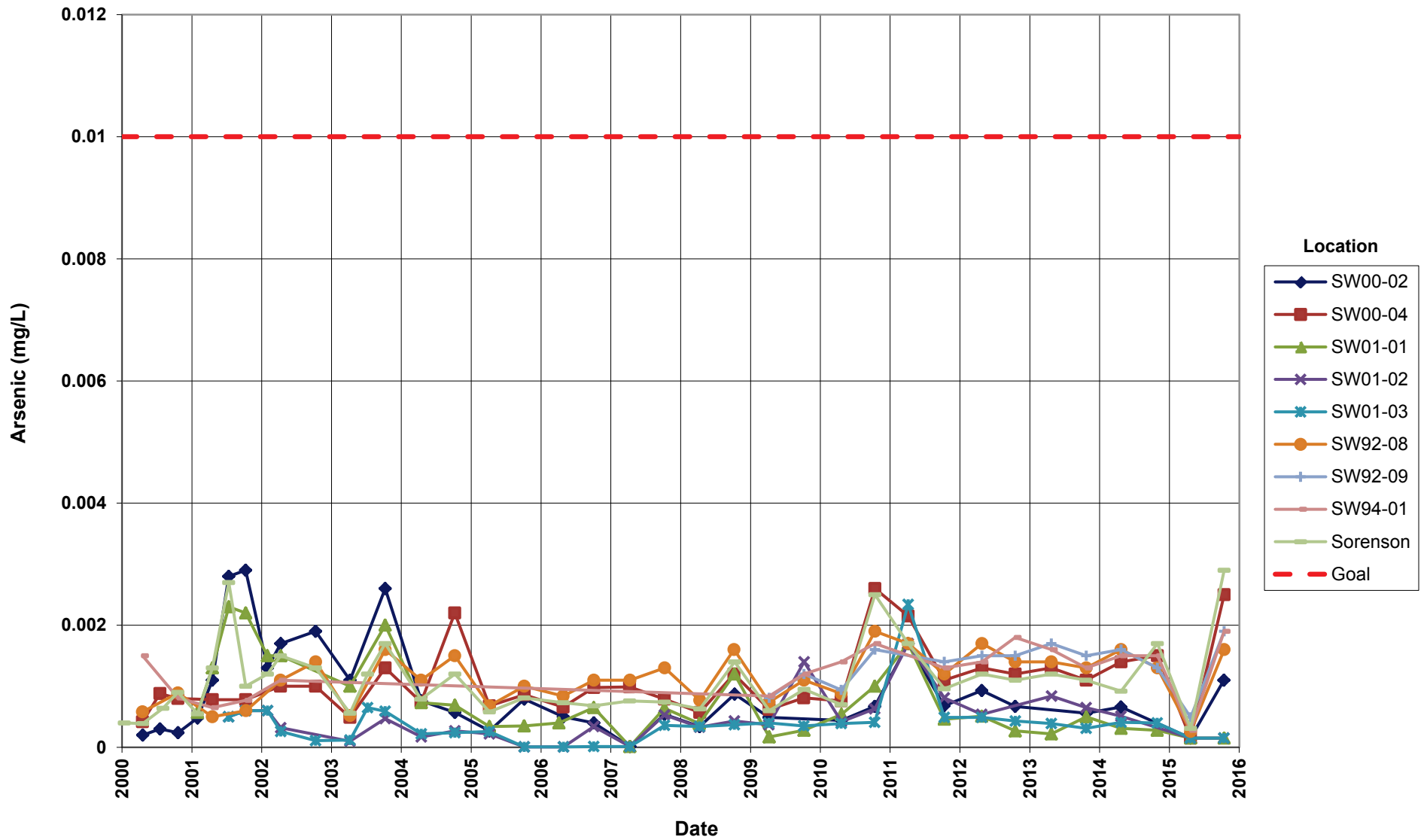
Time-Concentration Graphs Surface Water

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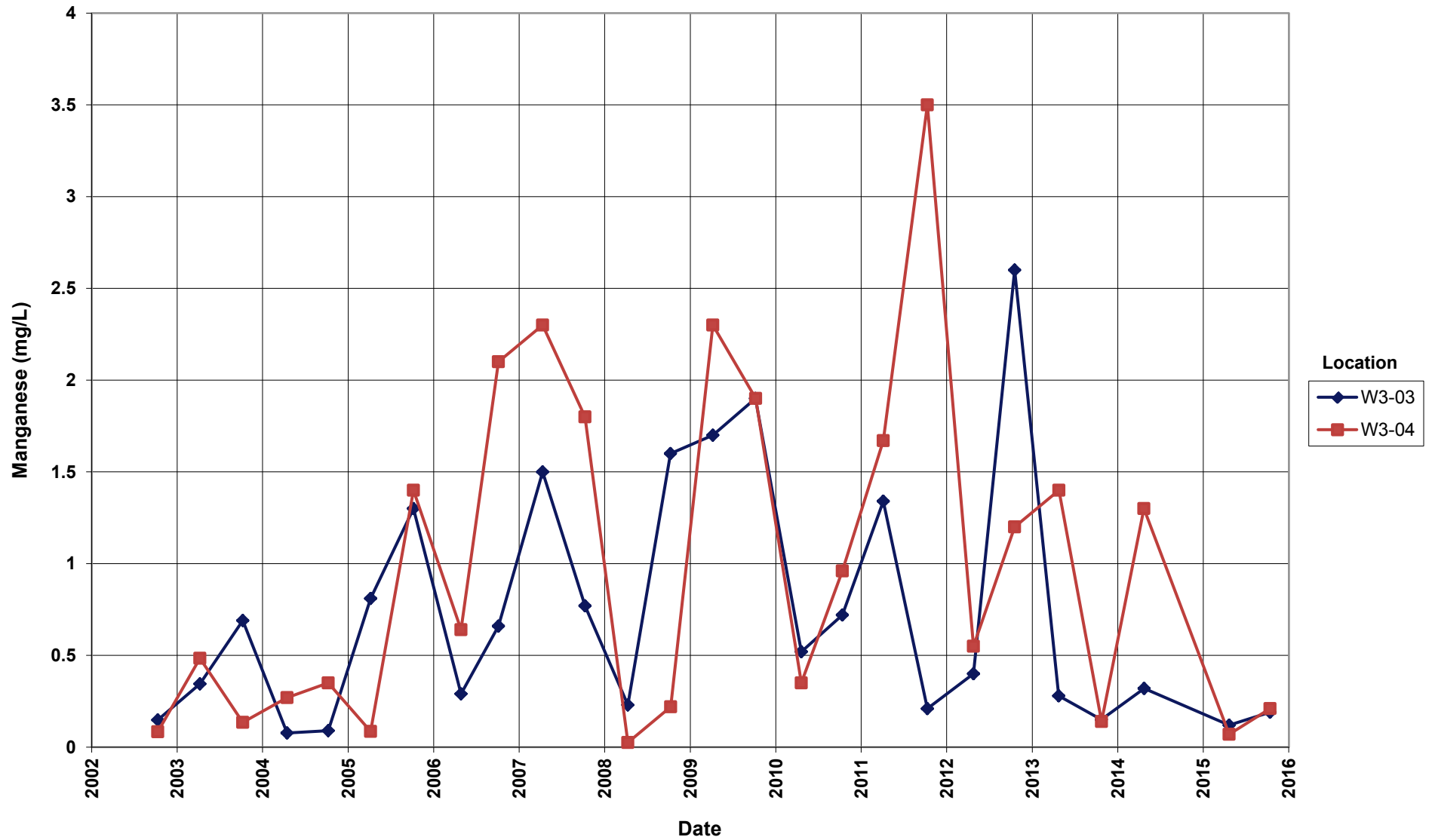
Monticello Disposal & Process Sites
Former Mill Site Seeps and Wetlands
Arsenic Concentration
Remediation Goal = 0.01 mg/L



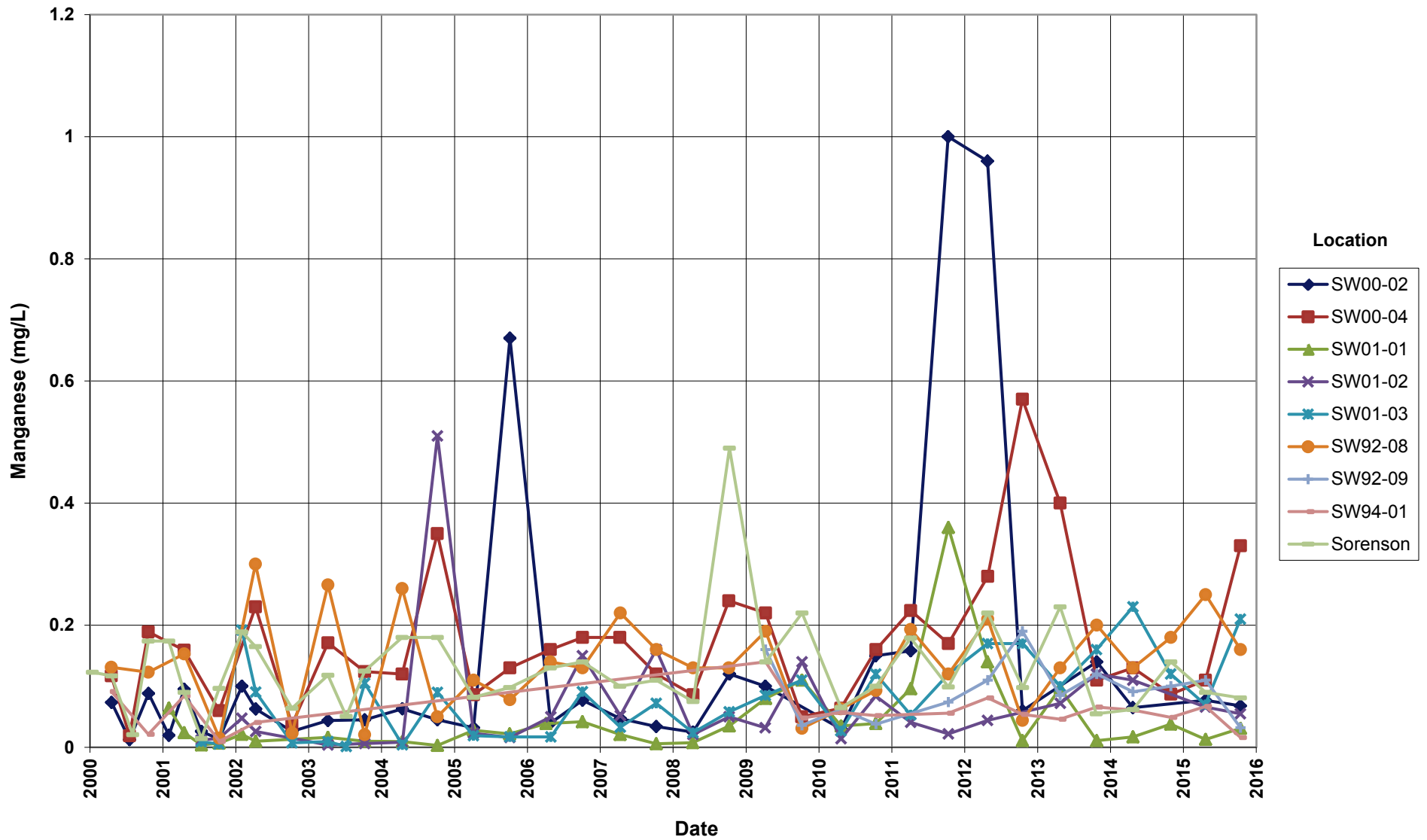
Monticello Disposal & Process Sites
Montezuma Creek Locations
Arsenic Concentration
Remediation Goal = 0.01 mg/L



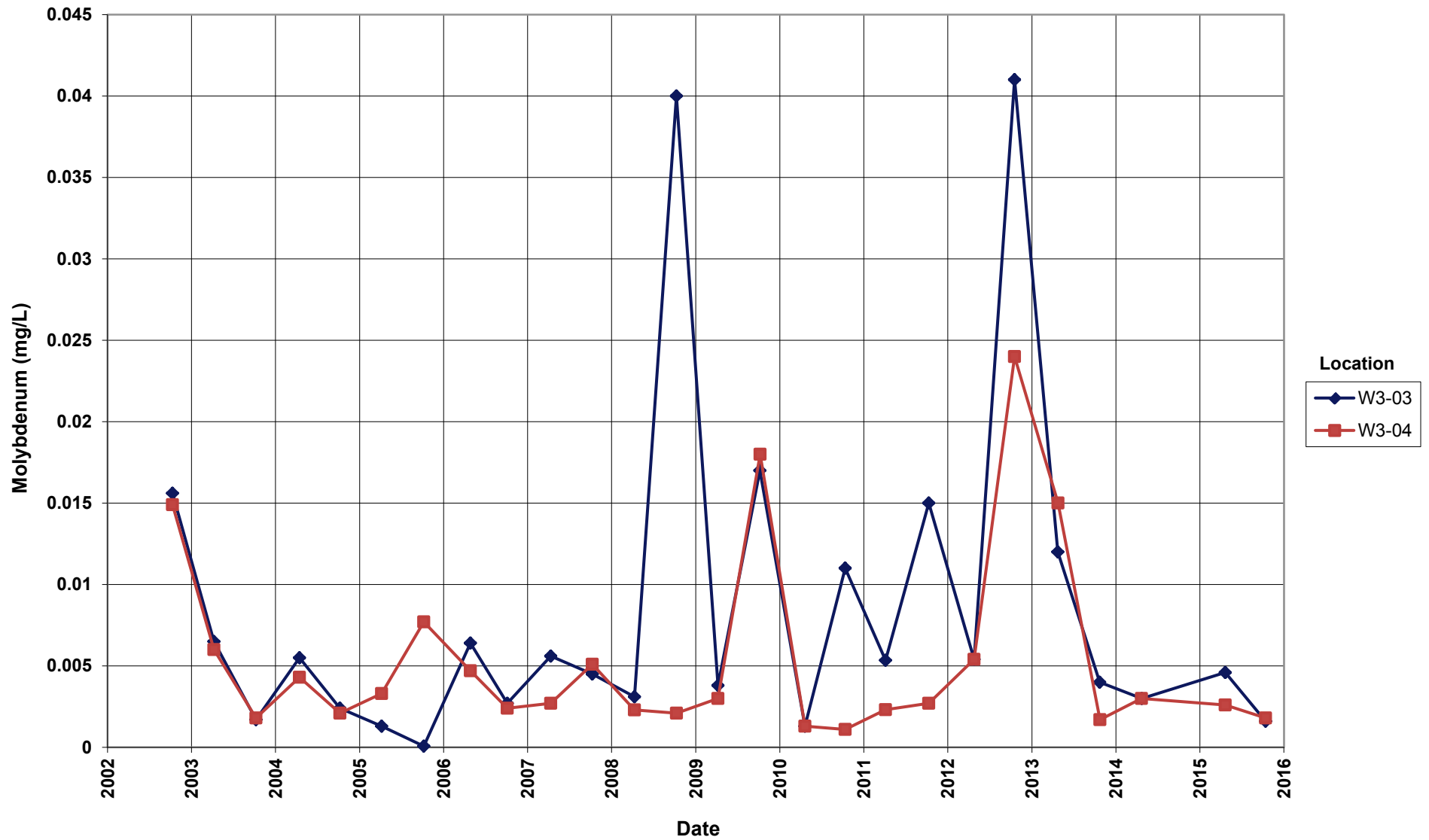
Monticello Disposal & Process Sites
Former Mill Site Seeps and Wetlands
Manganese Concentration



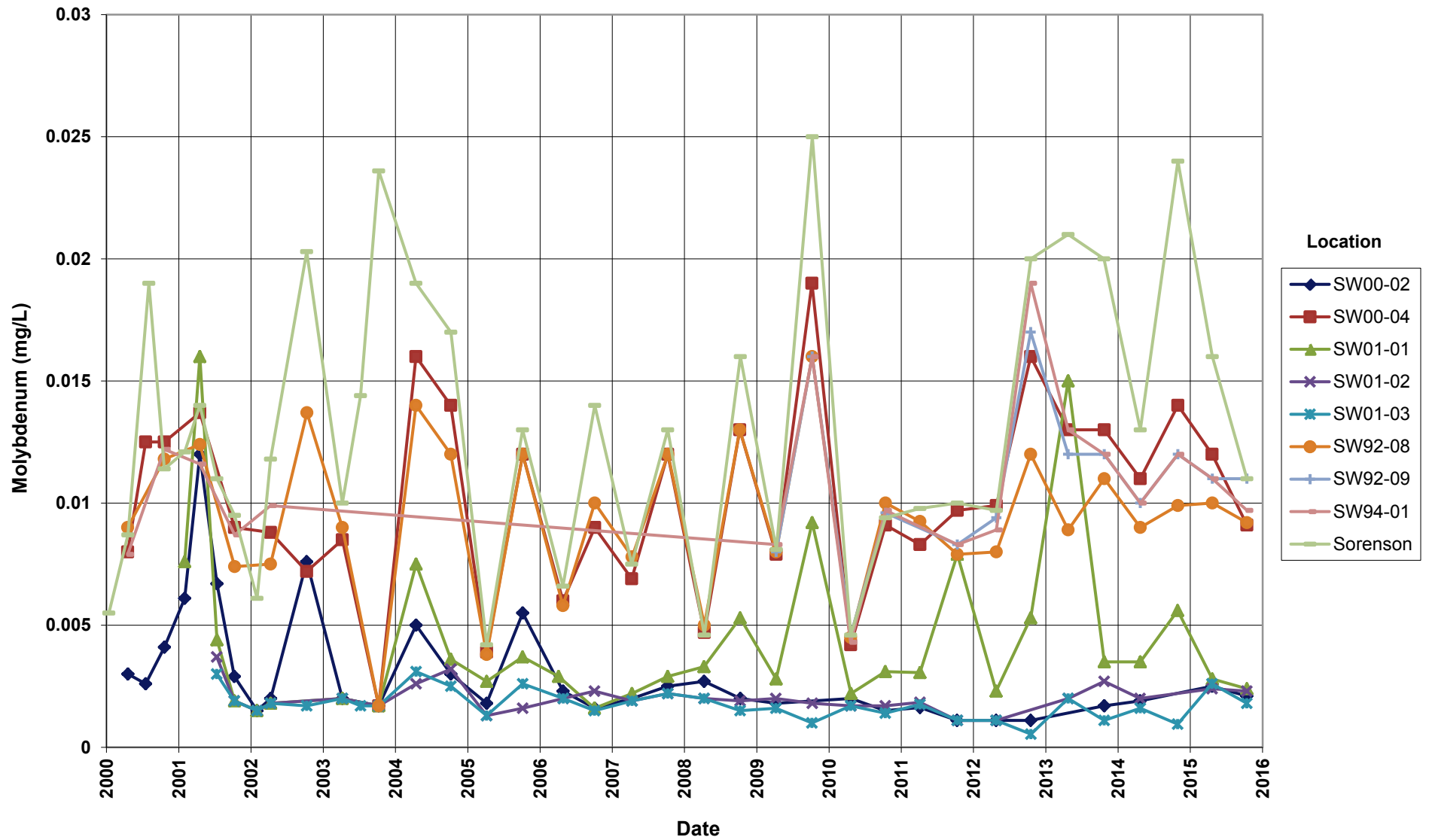
Monticello Disposal & Process Sites
Montezuma Creek Locations
Manganese Concentration



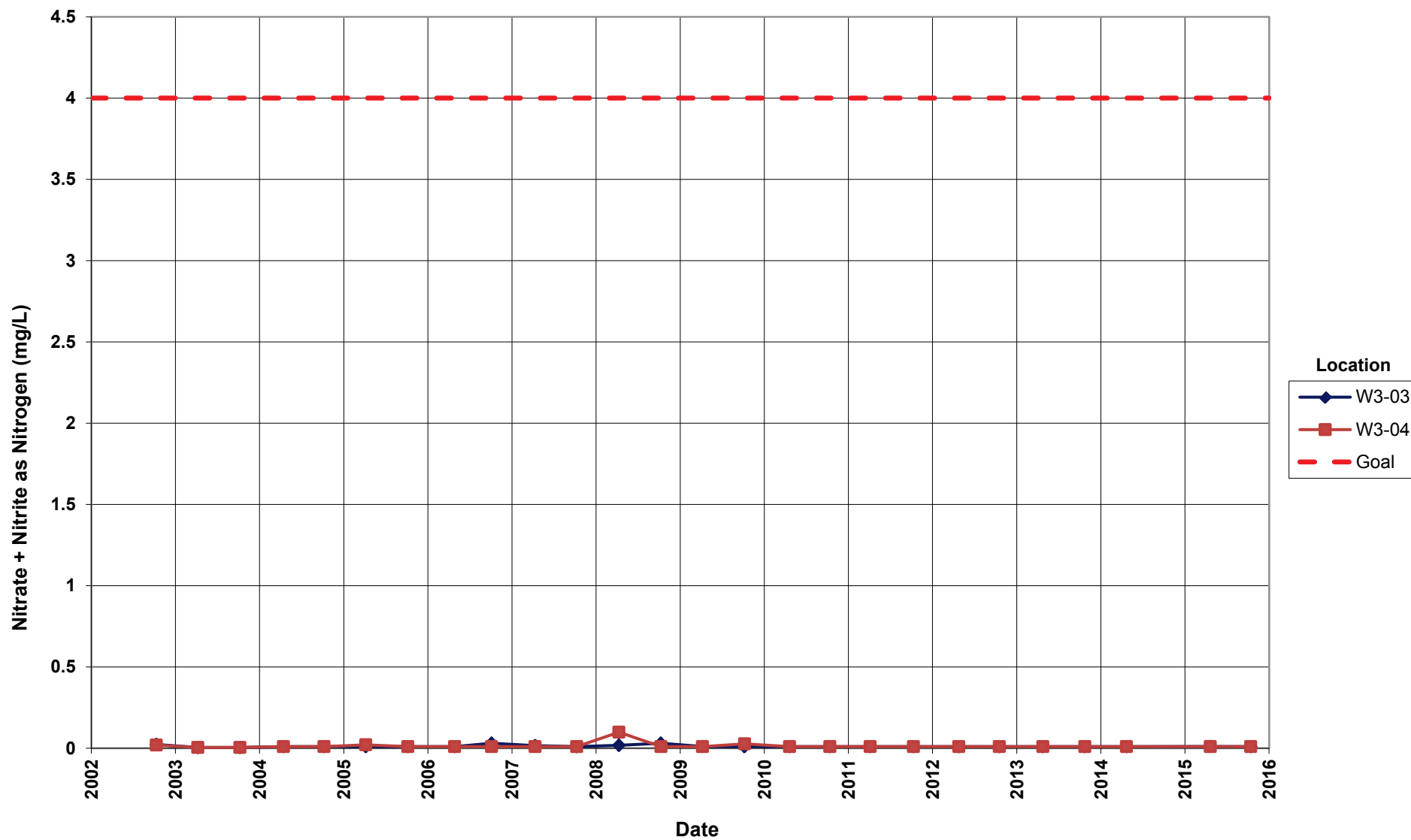
Monticello Disposal & Process Sites
Former Mill Site Seeps and Wetlands
Molybdenum Concentration



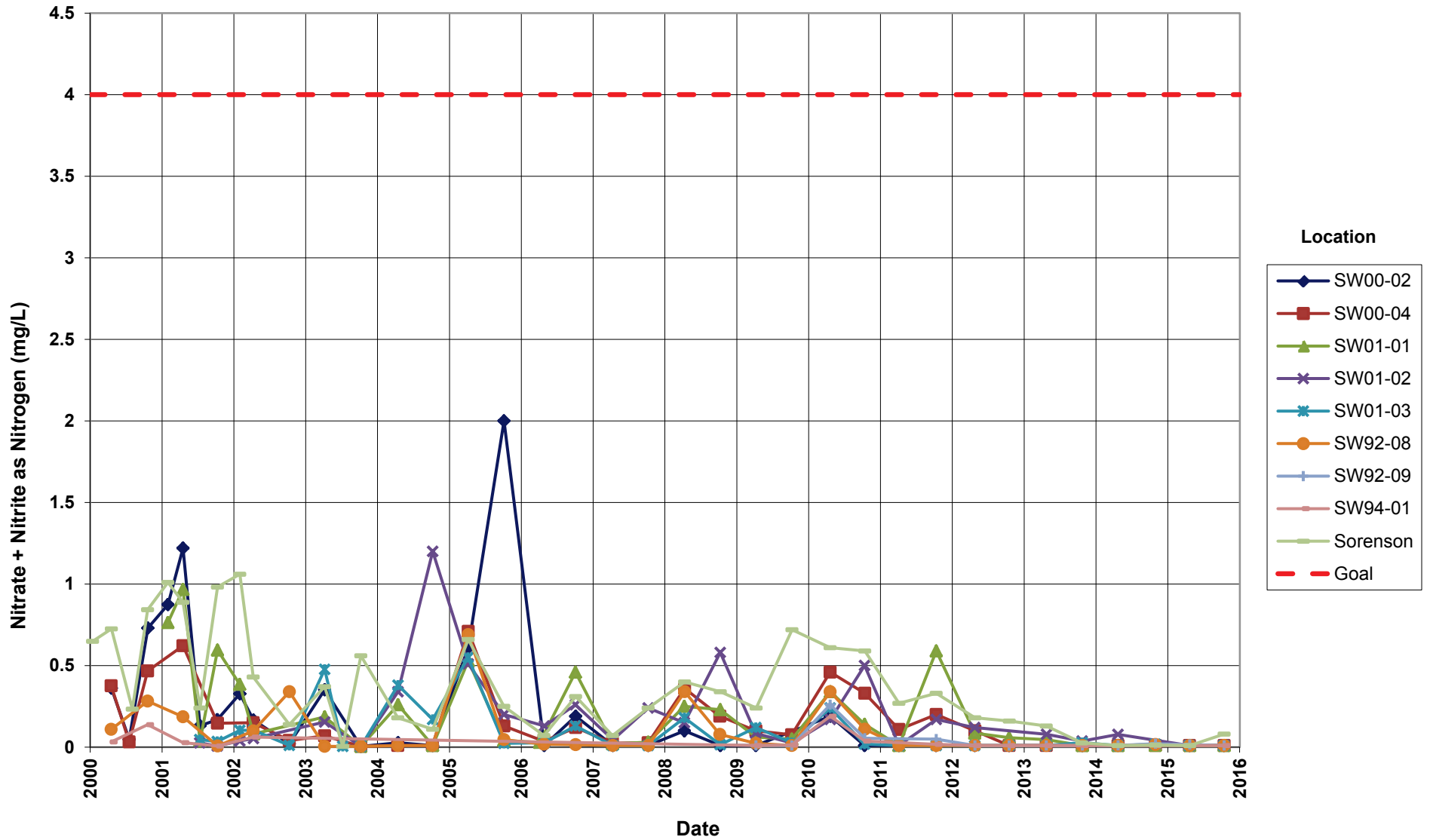
Monticello Disposal & Process Sites
Montezuma Creek Locations
Molybdenum Concentration



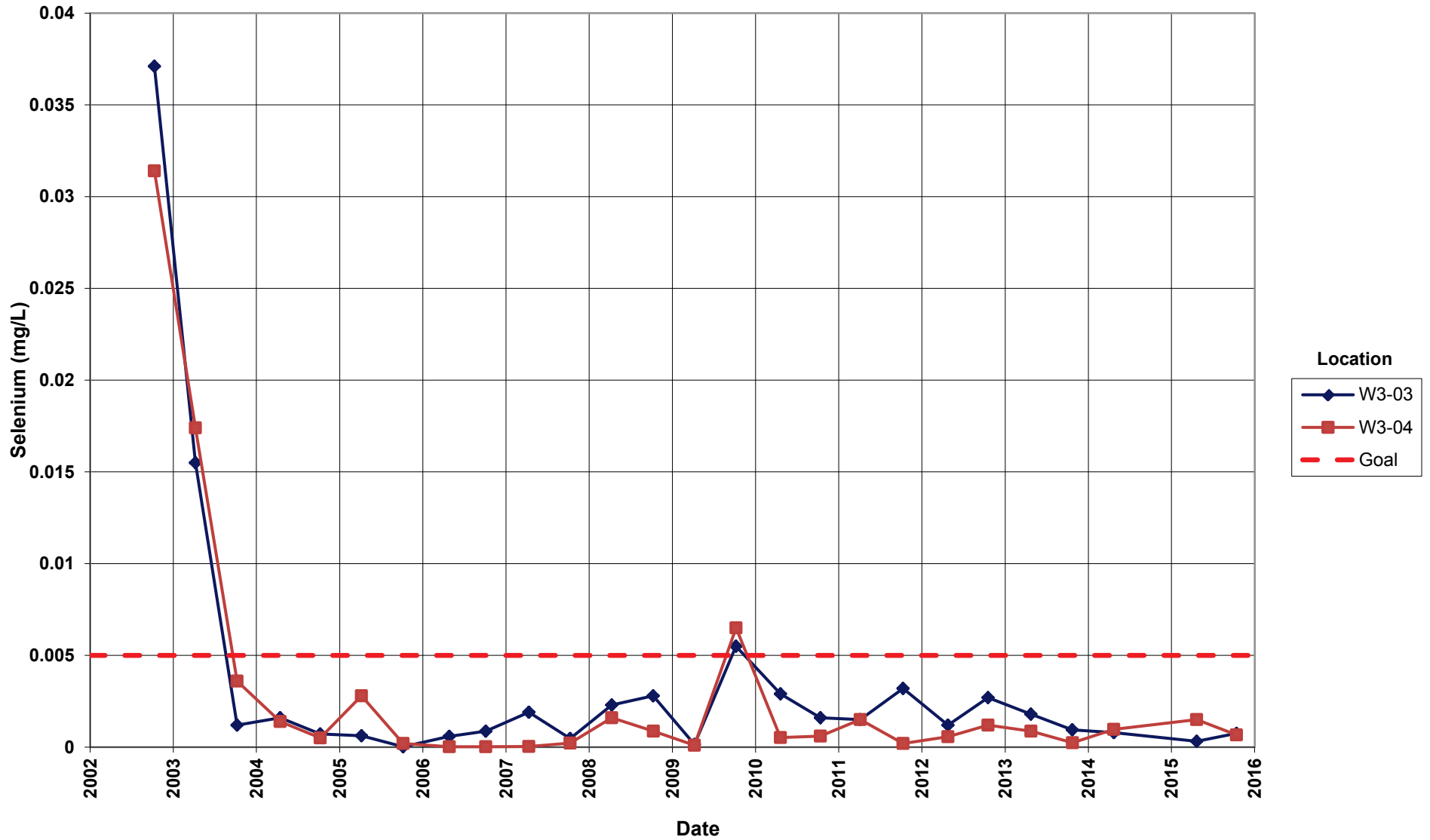
Monticello Disposal & Process Sites
Former Mill Site Seeps and Wetlands
Nitrate + Nitrite as Nitrogen Concentration
Remediation Goal = 4 mg/L



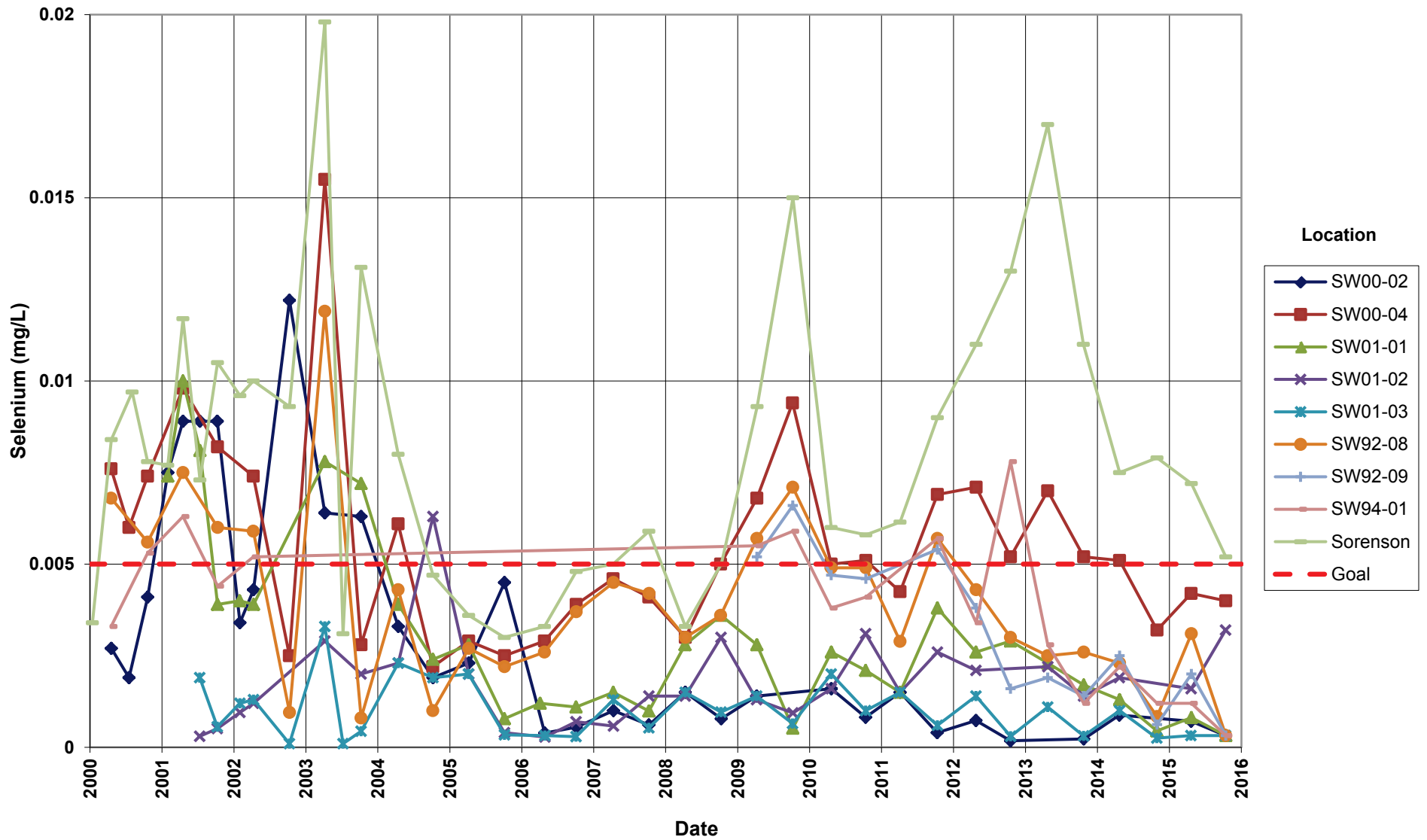
**Monticello Disposal & Process Sites
Montezuma Creek Locations
Nitrate + Nitrite as Nitrogen Concentration
Remediation Goal = 4 mg/L**



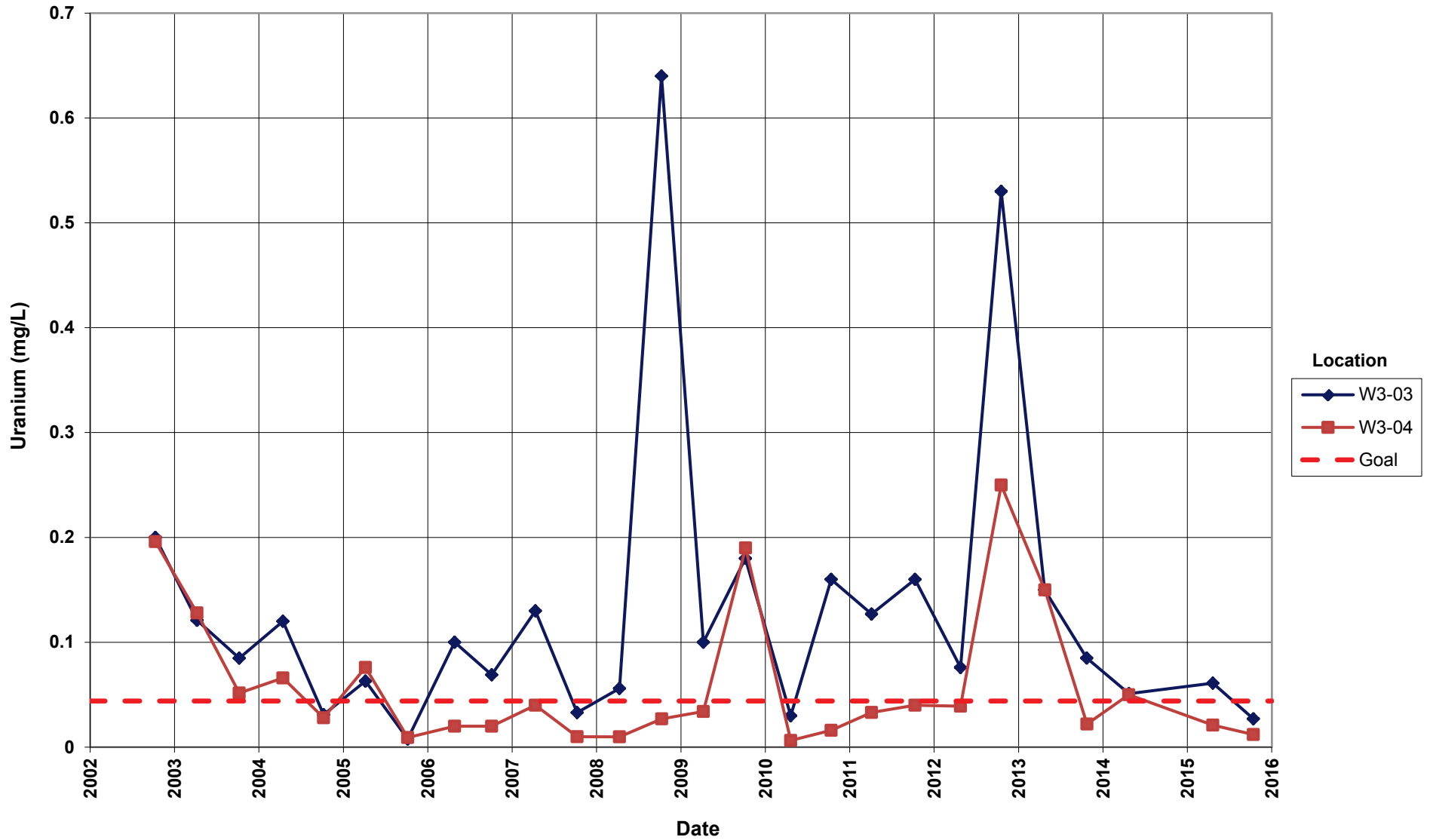
Monticello Disposal & Process Sites
Former Mill Site Seeps and Wetlands
Selenium Concentration
Remediation Goal = 0.005 mg/L



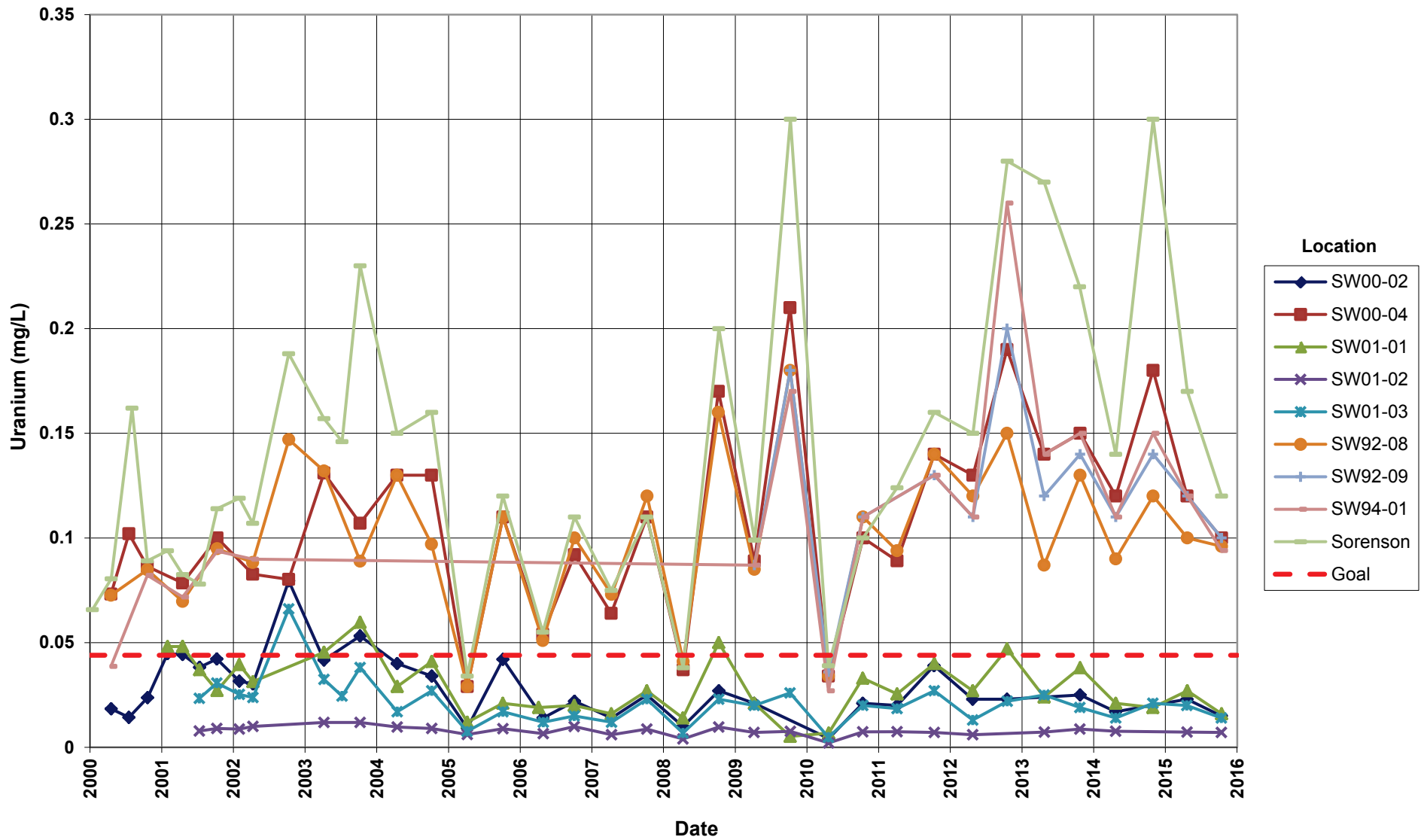
Monticello Disposal & Process Sites
Montezuma Creek Locations
Selenium Concentration
Remediation Goal = 0.005 mg/L



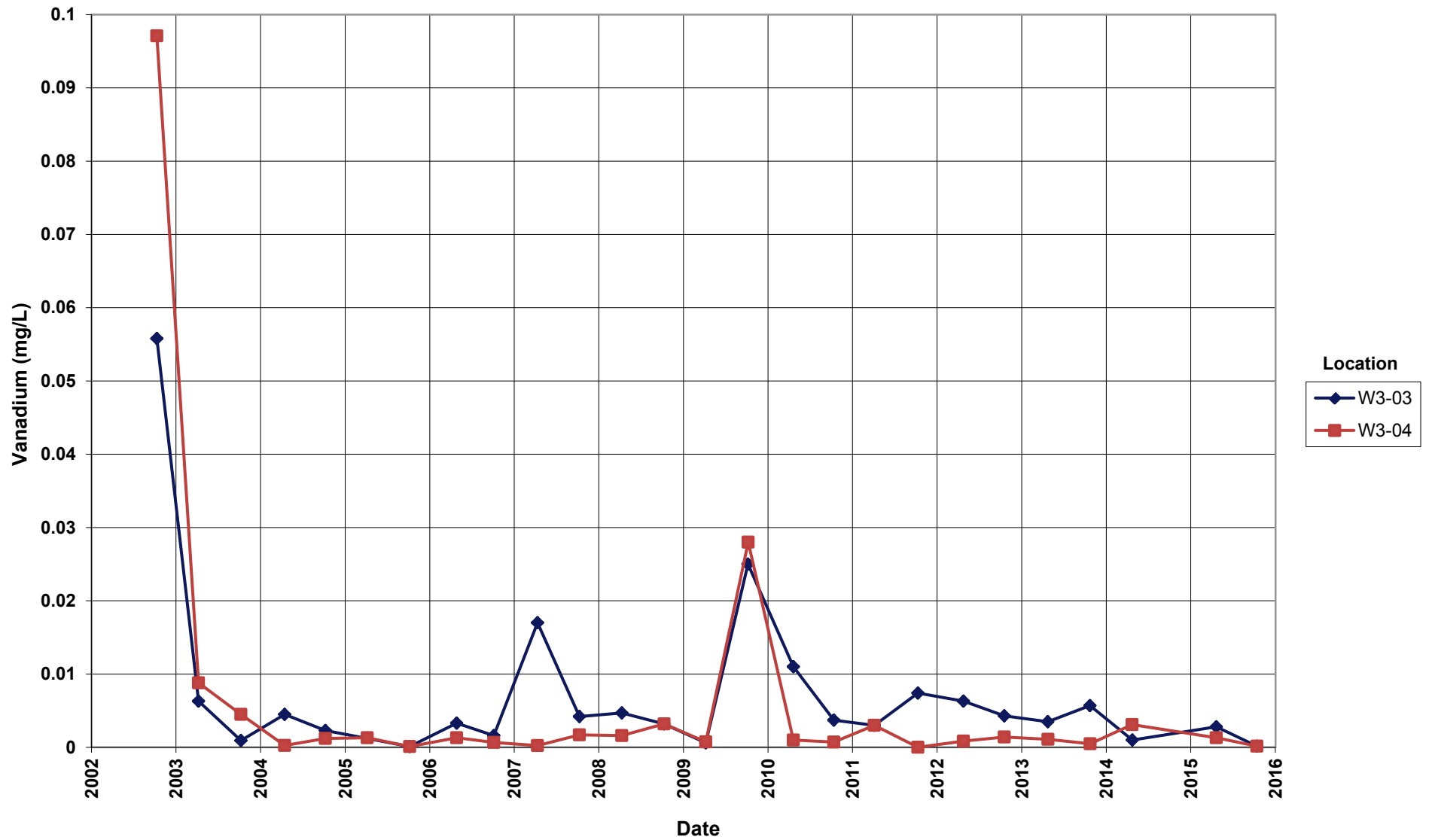
Monticello Disposal & Process Sites
Former Mill Site Seeps and Wetlands
Uranium Concentration
Remediation Goal = 0.044 mg/L



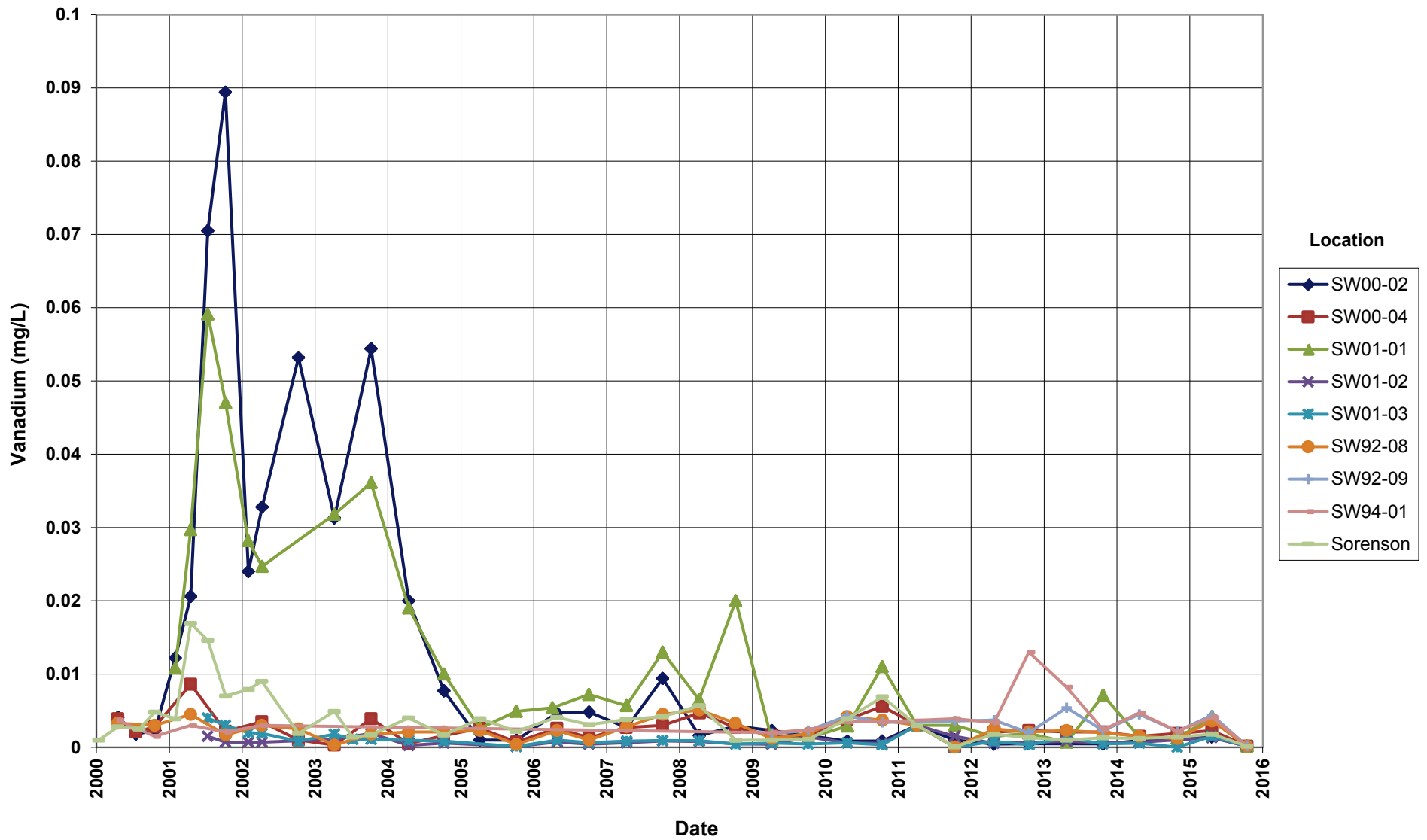
**Monticello Disposal & Process Sites
Montezuma Creek Locations
Uranium Concentration
Remediation Goal = 0.044 mg/L**



Monticello Disposal & Process Sites
Former Mill Site Seeps and Wetlands
Vanadium Concentration



Monticello Disposal & Process Sites
Montezuma Creek Locations
Vanadium Concentration



Attachment 3
Sampling and Analysis Work Order

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Stoller Newport News Nuclear

September 3, 2015

Task Assignment 104
Control Number 15-0773

U.S. Department of Energy
Office of Legacy Management
ATTN: Jason Nguyen
Site Manager
2597 Legacy Way
Grand Junction, CO 81503

SUBJECT: Contract No. DE-LM0000415, Stoller Newport News Nuclear, Inc. (SN3),
a wholly owned subsidiary of Huntington Ingalls Industries, Inc.
Task Assignment 104 LTS&M - Nevada Offsites and Monticello
October 2015 Environmental Sampling at the Monticello, Utah, Site

REFERENCE: Task Assignment 104, 3-104-1-06-502, Monticello, Utah, Site

Dear Mr. Nguyen:

The purpose of this letter is to inform you of the upcoming Operable Unit III semi-annual sampling event at the Monticello, Utah, site. Enclosed are the map and tables specifying sample locations and analytes for monitoring at the site. Water quality data will be collected at this site as part of the routine environmental sampling currently scheduled to begin the week of October 5, 2015.

The following lists show the monitoring wells and surface locations scheduled for sampling during this event.

MONITORING WELLS

Former Mill Site Wells

93-01	T00-04	T01-02	T01-05	T01-12	T01-18	T01-20	T01-25
MW00-01	T01-01	T01-04	T01-07	T01-13	T01-19	T01-23	T01-35
T00-01							

Downgradient Wells

82-08	92-07	92-10	95-01	0200	MW00-06	P92-06	PW-17
83-70	92-08	92-11	95-03	0202	MW00-07	PW-10	PW-28
88-85	92-09						

PRB Wells

R1-M3	R3-M2	R3-M3	R4-M3	R4-M6	R6-M3	R6-M4	R10-M1
R1-M4							

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SURFACE LOCATIONS

Former Millsite Seeps and Wetlands

Seep 1 Seep 2 Seep 3 Seep 5 Seep 6 W3-03 W3-04

Surface Water Locations

SW00-01 SW00-04 SW01-01 SW01-02 SW01-03 SW92-08 SW92-09 Sorensen
SW00-02 SW94-01

Unless the new sampling approach is resolved with the regulators before the start of this sampling event, all samples will be collected as directed in the *Monticello Mill Tailings Site Operable Unit III Post-Record of Decision Monitoring Plan*. Private landowners will be notified of planned fieldwork on their property before the sampling occurs.

Please contact me at (970) 248-6579 or Tim Bartlett at (970) 248-7741 if you have any questions.

Sincerely,



Ann Houska
Site Manager

AH/lcg/bkb

Enclosures (3)

cc: (electronic)

Christina Pennal, DOE
Timothy Bartlett, SN3
Steve Donovan, SN3
Lauren Goodknight, SN3
Ann Houska, SN3
Diana Osborne, SN3
EDD Delivery
rc-grand.junction
File: MNT 400.02

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Constituent Sampling Breakdown

Site	Monticello				Required Detection Limit (mg/L)	Analytical Method	Line Item Code
Analyte	Groundwater	PRB Wells	Surface Water	Seeps			
Approx. No. Samples/yr	57	18	20	14			
Field Measurements							
Alkalinity	X	X	X	X			
Dissolved Oxygen	88-89, 92-07, and 92-11 only	X					
Redox Potential	88-89, 92-07, and 92-11 only	X					
pH	X	X	X	X			
Specific Conductance	X	X	X	X			
Turbidity	X	X					
Temperature	X	X	X	X			
Laboratory Measurements							
Aluminum							
Ammonia as N (NH3-N)							
Arsenic	X	X	X	X	0.0001	SW-846 6020	LMM-02
Calcium	X	X	X	X	5	SW-846 6010	LMM-01
Chloride	X	X	X	X	0.5	SW-846 9056	WCH-A-039
Chromium							
Fluoride	X	X	X	X	0.5	SW-846 9056	MIS-A-040
Gross Alpha							
Gross Beta							
Iron	X	X	X	X	0.05	SW-846 6020	LMM-02
Lead							
Magnesium	X	X	X	X	5	SW-846 6010	LMM-01
Manganese	X	X	X	X	0.005	SW-846 6010	LMM-01
Molybdenum	X	X	X	X	0.003	SW-846 6020	LMM-02
Nickel							
Nickel-63							
Nitrate + Nitrite as N (NO3+NO2)-N	X	X	X	X	0.05	EPA 353.1	WCH-A-022
Potassium	X	X	X	X	1	SW-846 6010	LMM-01
Radium-226							
Radium-228							
Selenium	X	X	X	X	0.0001	SW-846 6020	LMM-02
Silica							
Sodium	X	X	X	X	1	SW-846 6010	LMM-01
Strontium							
Sulfate	X	X	X	X	0.5	SW-846 9056	MIS-A-044
Sulfide							
Total Dissolved Solids	T01-01, T01-12, 88-89, 82-08, and MW00-06 only		SW01-02, SW00-02, SW01-01, and Sorenson only	Seep 2 only	10	SM2540 C	WCH-A-033
Total Organic Carbon							
Uranium	X	X	X	X	0.0001	SW-846 6020	LMM-02
Vanadium	X	X	X	X	0.0003	SW-846 6020	LMM-02
Zinc							
Total No. of Analytes	16	15	16	16			

Note: All private well samples are to be unfiltered. The total number of analytes does not include field parameters.

**Sampling Frequencies for Locations at
Monticello, Utah**

Location ID	Quarterly	Semi-annually	Annually	Every 5 Years	Not Sampled	Notes
North Off-Site Wells						
31NE93-205				X ^a		Water Level (WL) Semi-annually
95-07				X ^a		WL Semi-annually
Former Millsite Wells						
93-01			X			WL Semi-annually
MW00-01		X				WL Semi-annually
MW00-02					X	WL Semi-annually
MW00-03					X	WL Semi-annually
T00-01			X			WL Semi-annually
T00-02					X	WL Semi-annually
T00-03					X	WL Semi-annually
T00-04			X			WL Semi-annually
T00-05					X	WL Semi-annually
T00-06					X	WL Semi-annually
T00-07					X	WL Semi-annually
T01-01		X				
T01-02		X				
T01-04		X				
T01-05		X				
T01-06					X	WL Semi-annually
T01-07		X				
T01-08					X	WL Semi-annually
T01-09					X	WL Semi-annually
T01-10					X	WL Semi-annually
T01-12		X				
T01-13			X			WL Semi-annually
T01-18			X			WL Semi-annually
T01-19		X				
T01-20			X			WL Semi-annually
T01-23			X			WL Semi-annually
T01-24					X	WL Semi-annually
T01-25			X			WL Semi-annually
T01-26					X	WL Semi-annually
T01-27					X	WL Semi-annually
T01-28					X	WL Semi-annually
T01-35		X				
Downgradient Wells						
82-08		X				
83-70			X			WL Semi-annually

**Sampling Frequencies for Locations at
Monticello, Utah**

Location ID	Quarterly	Semi-annually	Annually	Every 5 Years	Not Sampled	Notes
Downgradient Wells (continued)						
88-85		X				Datalogger
92-07		X				
92-08		X				
92-09		X				
92-10			X			WL Semi-annually
92-11		X				
92-12					X	WL Semi-annually
95-01			X			WL Semi-annually
95-02					X	WL Semi-annually
95-03			X			WL Semi-annually
95-04					X	WL Semi-annually
95-06				X ^a		WL Semi-annually
95-08					X	WL Semi-annually
0200		X				
0202		X				
MW00-06		X				
MW00-07			X			WL Semi-annually
P92-02					X	WL Semi-annually
P92-06		X				
PW-10		X				WL Semi-annually
PW-14					X	WL Semi-annually
PW-16					X	WL Semi-annually
PW99-16					X	WL Semi-annually
PW-17		X				
PW-18					X	WL Semi-annually
PW-20					X	WL Semi-annually
PW-22					X	WL Semi-annually
PW-23					X	WL Semi-annually
PW-28		X				
PRB Wells						
R1-M1					X	WL Semi-annually
R1-M2					X	WL Semi-annually
R1-M3		X				
R1-M4		X				
R1-M5					X	WL Semi-annually
R1-M6					X	WL Semi-annually
R2-M1					X	WL Semi-annually
R2-M2					X	WL Semi-annually
R2-M3					X	WL Semi-annually
PRB Wells						
R2-M4					X	WL Semi-annually

**Sampling Frequencies for Locations at
Monticello, Utah**

Location ID	Quarterly	Semi- annually	Annually	Every 5 Years	Not Sampled	Notes
R2-M5					X	WL Semi-annually
R2-M6					X	WL Semi-annually
R2-M7					X	WL Semi-annually
R2-M8					X	WL Semi-annually
R2-M9					X	WL Semi-annually
R2-M10					X	WL Semi-annually
R3-M1					X	WL Semi-annually
R3-M2		X				
R3-M3		X				
R3-M4					X	WL Semi-annually
R4-M1					X	WL Semi-annually
R4-M2					X	WL Semi-annually
R4-M3		X				
R4-M4					X	WL Semi-annually
R4-M5					X	WL Semi-annually
R4-M6		X				
R4-M7					X	WL Semi-annually
R4-M8					X	WL Semi-annually
R5-M1					X	WL Semi-annually
R5-M2					X	WL Semi-annually
R5-M3					X	WL Semi-annually
R5-M4					X	WL Semi-annually
R5-M5					X	WL Semi-annually
R5-M6					X	WL Semi-annually
R5-M7					X	WL Semi-annually
R5-M8					X	WL Semi-annually
R5-M9					X	WL Semi-annually
R5-M10					X	WL Semi-annually
R6-M1					X	WL Semi-annually
R6-M2					X	WL Semi-annually
R6-M3		X				
T1-D					X	WL Semi-annually
T1-S					X	WL Semi-annually
T2-D					X	WL Semi-annually
T2-S					X	WL Semi-annually
T3-D					X	WL Semi-annually
T3-S					X	WL Semi-annually

**Sampling Frequencies for Locations at
Monticello, Utah**

Location ID	Quarterly	Semi-annually	Annually	Every 5 Years	Not Sampled	Notes
PRB Wells						
T4-D					X	WL Semi-annually
T4-S					X	WL Semi-annually
T5-D					X	WL Semi-annually
T5-S					X	WL Semi-annually
T6-D					X	WL Semi-annually
T6-S					X	WL Semi-annually
T7-D					X	WL Semi-annually
R6-M4		X				
R6-M5					X	WL Semi-annually
R6-M6					X	WL Semi-annually
R7-M1					X	WL Semi-annually
R7-M2					X	WL Semi-annually
R8-M1					X	WL Semi-annually
R9-M1					X	WL Semi-annually
R10-M1		X				
R11-M1					X	WL Semi-annually
TW-01					X	WL Semi-annually
TW-02					X	WL Semi-annually
TW-03					X	WL Semi-annually
TW-04					X	WL Semi-annually
TW-05					X	WL Semi-annually
TW-06					X	WL Semi-annually
TW-07					X	WL Semi-annually
TW-08					X	WL Semi-annually
TW-09					X	WL Semi-annually
TW-10					X	WL Semi-annually
TW-11					X	WL Semi-annually
TW-12					X	WL Semi-annually
TW-13					X	WL Semi-annually
TW-14					X	WL Semi-annually
Former Millsite Seeps and Wetland (W3) Locations						
Seep 1		X				
Seep 2		X				
Seep 3		X				
Seep 5		X				
Seep 6		X				
W3-03		X				
W3-04		X				

Sampling Frequencies for Locations at Monticello, Utah

Location ID	Quarterly	Semi-annually	Annually	Every 5 Years	Not Sampled	Notes
Surface Water Locations (stream flow is measured semi-annually at each SW location)						
SW00-01		X				
SW00-02		X				
SW01-02		X				
SW01-03		X				
SW01-01		X				
Sorenson		X				
SW00-04		X				
SW92-08		X				
SW92-09		X				
SW94-01		X				

Semi-annual sampling occurs in April and October

Annual sampling occurs in October

^a 5-year sample frequency next in October 2016.

Attachment 4

Trip Report

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Memorandum

DATE: December 15, 2015
TO: Ann Houska
FROM: David Atkinson
SUBJECT: Sampling Trip Report

Site: Monticello, Utah, Site

Dates of Sampling Event: October 12-14, 2015.

Team Members: Jeff Price, David Atkinson, Samantha Tigar, and Eric Szabelski.

Number of Locations Sampled: Water samples for metals (including cations), anions, nitrate + nitrite as N, and total dissolved solids (at selected locations) were collected from 52 of 61 planned locations as summarized in the following table. Samples were collected as specified in the *Monticello Mill Tailings Site Operable Unit III Post-Record of Decision Monitoring Plan* (Post-ROD).

Location Category	Locations That Were Sampled	Planned Locations
Former Mill Site Wells	15	17
Down gradient Wells	17	18
Down gradient PeRT Wells	9	9
Former Millsite Seeps and Wetlands	2	7
Surface Water Locations	9	10

Locations Not Sampled/Reason: Monitoring well locations T01-13, T01-19, and MW00-07 were not sampled because they were dry or did not meet the water-level recovery criteria in the Post-ROD. In addition surface sample location MNT01-SW00-01 and all Seep locations were dry.

Location Specific Information: Monitoring well locations T01-18, T01-20, and R6-M3 were sampled but had reduced volume because the wells did not produce enough water. Location MW00-01 was missing an inner cap and needs to be re-labeled. Location 0202 was purged dry and allowed to recover prior to sampling. Wells R4-M3 and R6-M3 were purged dry at 1 liter; samples collected from purge water.

The following table presents stream flow measurements recorded at Monticello Creek surface water locations:

Location ID	Stream Flow Measured? (Yes/No/Reason)	Date
Sorenson	Yes	10/14/2015
SW00-01	No/Dry	10/14/2015
SW00-02	Yes/Rocky and Overgrown	10/14/2015
SW00-04	Yes	10/14/2015
SW01-01	Yes	10/14/2015
SW01-02	Yes	10/14/2015
SW01-03	Yes	10/14/2015
SW92-08	Yes	10/14/2015
SW92-09	Yes	10/14/2015
SW94-01	Yes	10/14/2015

Quality Control Sample Cross Reference: The following table shows the false identifications assigned to the quality control samples.

False ID	Sample Date	Ticket Number	True ID	QC Sample Type
2918	10/13/2015	NLV 670	W3-04	Duplicate
2583	10/14/2015	NLV 666	82-08	Duplicate
2477	10/14/2015	NLV 675	92-09	Duplicate
2586	10/14/2015	NLV 667	92-10	Duplicate
2800	10/14/2015	NLV 779	Sorenson	RINST/EQ BLANK

Report Identification Number (RIN) Assigned: All samples were assigned to RIN 15107423. Field data sheets can be found in [\\crow\SMS\15107423\FieldData](#) in the FieldData folder.

Sample Shipment: Samples were shipped from Grand Junction to ALS Laboratory Group on October 19, 2015.

Water Level Measurements: Water levels were measured in all sampled wells, all wells that were purged dry and not sampled, and in 92 additional wells for a total of 136 water levels. Duplicate water levels were measured at a ratio of 1:20 duplicates per locations; 8 duplicate water levels were measured out of a total of 139 locations (sample and water-level only locations).

Well Inspection Summary: N/A

Field Variance: None.

Equipment: Wells were sampled with either a peristaltic pump and dedicated tubing or a dedicated bladder pump. Surface water locations were sampled either by using a peristaltic pump and non-dedicated tubing or by container immersion. An equipment blank was collected after decontamination of the non-dedicated tubing. All other equipment was dedicated or disposable.

Stakeholder/Regulatory: Nothing to note.

Institutional Controls:

Fences, Gates, and Locks: All gates were in good condition.

Signs: N/A

Trespassing/Site Disturbances: None observed.

Site Issues: None.

Disposal Cell/Drainage Structure Integrity: N/A

Vegetation/Noxious Weed Concerns: None observed.

Maintenance Requirements: None.

Safety Issues: None.

Access Issues: Montezuma Canyon down-gradient surface water locations (SW92-08, SW92-09, and SW04-01) can be accessed by road (ATV or SUV) from the south side of the canyon through Johnny Johnson's property. Johnny Johnson needs to be added to the list of landowners to contact prior to sampling.

Corrective Action Required/Taken: N/A

cc: (electronic)
Jason Nguyen, DOE
Tim Bartlett, Stoller
Steve Donovan, Stoller
Ann Houska, Stoller
Sarah Morris, Stoller
EDD Delivery
re-grand.junction
File: MNT 0045.20(A)

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