LMS/RVT/S06093

Verification Monitoring Report for the Riverton, Wyoming, Processing Site

Update for 2009

April 2010

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1.0 Introduction

The compliance strategy for the Riverton, Wyoming, Processing Site (Riverton site) is natural flushing in conjunction with institutional controls (ICs) and continued monitoring (DOE 1998a). Monitoring during the natural flushing period is referred to as verification monitoring because the purpose of the monitoring is to verify that the natural flushing strategy is progressing as predicted, and to verify that ICs are in place and functioning as intended. Data collected during verification monitoring are reported annually in a Verification Monitoring Report. These reports have been issued annually since 2001 (DOE 2001 through DOE 2009).

The purpose of this report is to present data collected during 2009, to summarize site conditions, to evaluate monitoring data collected to date, and to provide an annual update on the progress of the natural flushing compliance strategy. Data from 2009 was generated from two routine groundwater and surface water sampling events conducted at the Riverton site during June and November.

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2.0 Site Conditions

2.1 Hydrogeology

The Riverton site is located on an alluvial terrace between the Wind River and the Little Wind River approximately 2.3 miles southwest of the town of Riverton, Wyoming (Figure 2–1). Groundwater occurs in three aquifers beneath the site: (1) surficial unconfined aquifer (surficial aquifer), (2) middle semiconfined aquifer, and (3) deeper confined aquifer (DOE 1998b). The surficial aquifer consists of approximately 20 feet (ft) of unconsolidated alluvial material, and the semiconfined and confined aquifers are composed of shales and sandstones of the upper units of the Eocene Wind River Formation, which is over 500 ft thick in the vicinity of the site. Depth to groundwater in the surficial aquifer is generally less than 10 ft below land surface. For compliance purposes, the surficial aquifer and semiconfined aquifer comprise the uppermost aquifer, which is the aquifer where compliance with groundwater standards is assessed. Groundwater in the uppermost aquifer flows to the southeast.

2.2 Water Quality

Shallow groundwater beneath and downgradient from the site was contaminated as a result of uranium processing activities from 1958 through 1963 (DOE 1998b). Constituents of potential concern (COPCs) in the groundwater beneath the Riverton site are manganese, molybdenum, sulfate, and uranium. COPCs were selected using a screening process that compared constituent concentrations with appropriate maximum concentration limits (MCLs), and evaluated potential human health risks and ecological risks. The COPCs selection process is detailed in the *Environmental Assessment of Ground Water Compliance at the Riverton, Wyoming, Uranium Mill Tailings Site* (DOE 1998c). Molybdenum and uranium were selected as indicator constituents for compliance monitoring in the *Final Ground Water Compliance Action Plan for the Riverton, Wyoming, Title I UMTRA Project Site* (GCAP) (DOE 1998a). These constituents were selected as indicator constituents because they are the most widely distributed and form significant aqueous plumes in the uppermost aquifer in the vicinity of the site. The MCLs for molybdenum and uranium are 0.10 milligrams per liter (mg/L), and 30 picocuries per liter (pCi/L), respectively.

Note: In order to provide a consistent comparison with historical data, uranium concentrations continue to be measured in mg/L; therefore, the uranium standard referenced in this report has been converted from 30 pCi/L to 0.044 mg/L (which assumes secular equilibrium of uranium isotopes) to allow direct comparison of uranium data to the standard.

2.3 Surface Remediation Activities

Uranium mill tailings and other contaminated materials were removed from the Riverton site during 1988−1989 and encapsulated at the Gas Hills East disposal site (Figure 2–1). About 1.8 million cubic yards of tailings and associated materials were removed from the site for disposal (DOE 1998b).

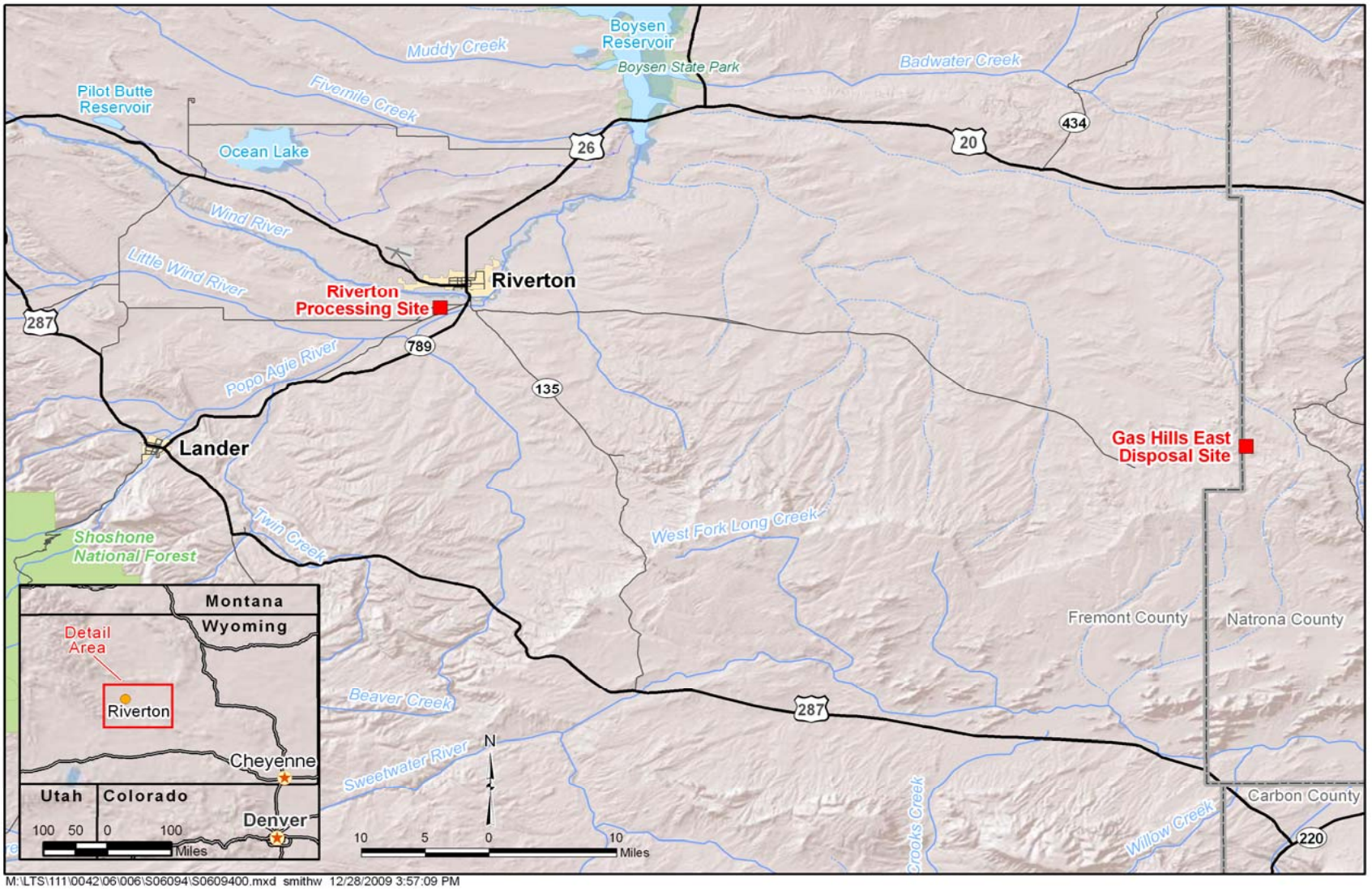

Figure 2–1. Site Location Map

2.4 Institutional Controls

To be protective of human health and the environment during the natural flushing period, ICs are required to control exposure to contaminated groundwater. An IC boundary has been established at the Riverton site (Figure 2–2), delineating the area that requires protection. The IC boundary was set to encompass the area of current groundwater contamination and a surrounding buffer zone to account for potential future plume migration.

Cooperative efforts among the U. S. Department of Energy (DOE), the Northern Arapaho and Eastern Shoshone Tribes, and the State of Wyoming continue in order to obtain viable and enforceable ICs at the Riverton site, although all components have not been finalized. ICs in place prior to 2009 include the following components:

- An alternate water supply system, funded by DOE and operated by Northern Arapaho Utility Organization, supplies potable water to residents within the ICs boundary to minimize use of groundwater.
- Warning signs installed around the oxbow lake (Figure 2–2) explaining that the contaminated water is not safe for human consumption, with instructions not to drink, fish, or swim in the lake.
- A Tribal Ordinance places restrictions on well installation, prohibits surface impoundments, authorizes access to inspect and sample new wells, and provides notification to drilling contractors with Tribal permits of the groundwater contamination within the ICs boundary. Restrictions on well installation include a minimum depth of 150 ft below ground surface (approximately 50 ft below the top of the confined aquifer) and installation of surface casing through the contaminated upper aquifer.
- DOE distributed notification of existing groundwater contamination to area drilling contractors.
- A State of Wyoming Department of Environmental Quality notification of existing groundwater contamination will be provided to persons on privately-owned land applying for a gravel pit permit within the ICs boundary.
- A Bureau of Indian Affairs-provided notification of existing groundwater contamination will be provided to persons on Tribal land applying for a surface impoundment within and adjacent to the ICs boundary.
- The State of Wyoming State Engineer's Office will inform DOE when permit applications are received for wells or surface impoundments within or adjacent to the IC boundary, provide DOE with a copy of the application for comment, and incorporate comments on the permit, if approved.

ICs finalized in 2009 included:

- An easement and covenant to restrict land use and well drilling on the former millsite property was finalized on June 29, 2009, and the former millsite was purchased by Chemtrade Refinery Services, Inc.

Other ICs that are in progress, but not finalized include:

- A Bureau of Indian Affairs-provided notification of existing groundwater contamination will be provided to all residents on Tribal land within and adjacent to the ICs boundary.
- A notification of existing groundwater contamination will be provided to fee-land property owners within the ICs boundary every 5 years.

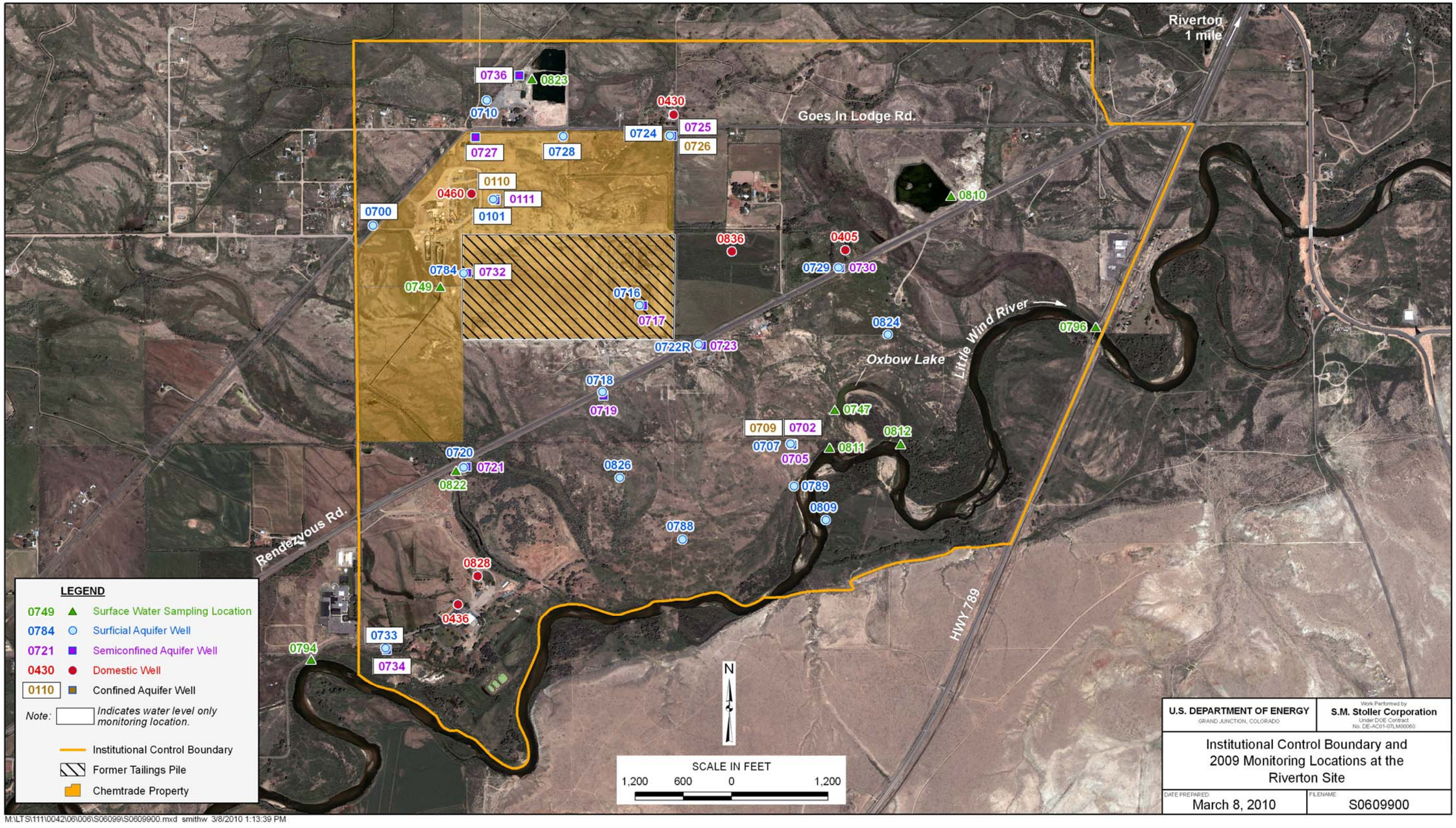

Figure 2–2. Institutional Control Boundary and 2009 Monitoring Locations at the Riverton Site

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3.0 Monitoring Program

The monitoring program for 2009 consisted of 19 monitoring wells, 6 domestic wells, and 9 surface water locations, which are listed Table 3–1 and shown on Figure 2–2. An additional domestic irrigation well (0836) was sampled in June at the request of the land owner. Water levels were measured at 15 additional monitoring wells. Sampling events were conducted in June and November. Samples were analyzed for manganese, molybdenum, sulfate, and uranium, and field measurements of temperature, pH, specific conductance, oxidation-reduction potential, and turbidity were measured at each sampling location.

Table 3–1. 2009 Sampling Network at the Riverton Site

Location ID	Description	Sampling Event	Rationale
DOE Monitoring Wells			
0705	Semiconfined aquifer	June, November	Monitor semiconfined aquifer
0707	Surficial aquifer	June, November	Monitor centroid of plume
0710	Surficial aquifer	June, November	Background location
0716	Surficial aquifer	June, November	Monitor upgradient portion of plume
0717	Semiconfined aquifer	June, November	Monitor semiconfined aquifer
0718	Surficial aquifer	June, November	Monitor lateral plume movement
0719	Semiconfined aquifer	June, November	Monitor semiconfined aquifer
0720	Surficial aquifer	June, November	Monitor lateral plume movement
0721	Semiconfined aquifer	June, November	Monitor semiconfined aquifer
0722R	Surficial aquifer	June, November	Monitor centroid of plume
0723	Semiconfined aquifer	June, November	Monitor semiconfined aquifer
0729	Surficial aquifer	June, November	Monitor lateral plume movement
0730	Semiconfined aquifer	June, November	Monitor semiconfined aquifer
0784	Surficial aquifer	June, November	Monitor lateral plume movement
0788	Surficial aquifer	June, November	Monitor lateral plume movement
0789	Surficial aquifer	June, November	Monitor centroid of plume
0809	Surficial aquifer	June, November	Monitor potential plume migration south of river
0824	Surficial aquifer	June, November	Monitor lateral plume movement
0826	Surficial aquifer	June, November	Monitor lateral plume movement
Domestic Wells			
0405	Private residence	June, November	Verify low concentrations of COPCs
0430	Private residence	June, November	Verify low concentrations of COPCs
0436	St Stephens Mission	June, November	Verify low concentrations of COPCs
0460	Chemtrade Refinery	June, November	Verify low concentrations of COPCs
0828	St Stephens Mission	June	Verify low concentrations of COPCs
0836	Private residence	June	Verify low concentrations of COPCs
Surface Water			
0747	Oxbow lake	June, November	Impacted by groundwater discharge
0749	Chemtrade discharge ditch	June, November	Effluent from acid plant
0794	Little Wind River	June, November	Upstream of predicted plume discharge
0796	Little Wind River	June, November	Downstream of predicted plume discharge
0810	Pond—former gravel pit	June, November	Potential for impact—within ICs boundary
0811	Little Wind River	June, November	Within area of predicted plume discharge
0812	Little Wind River	June, November	Within area of predicted plume discharge
0822	West side irrigation ditch	June, November	Potential for impact—within ICs boundary
0823	Pond—former gravel pit	June, November	Upgradient of plume; within ICs area

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4.0 Results of 2009 Monitoring

4.1 Groundwater

4.1.1 Groundwater Flow

Water levels were measured at the majority of wells in the monitoring network in June and November in order to verify groundwater flow direction, and to assess vertical gradients throughout the ICs area. Water level data are included in Appendix B.

Assessment of horizontal groundwater flow direction in the surficial aquifer is required to assure the monitoring network is adequate for assessing contaminant plume movement and to assure the ICs boundary provides a sufficient buffer for contaminant plume movement. As shown in Figure 4–1 and Figure 4–2, groundwater elevation contours for the surficial aquifer indicate a general flow direction to the southeast, which is consistent with historically measured flow directions and contaminant plume configurations. In addition, groundwater flow direction is consistent between the June and November monitoring events.

Vertical gradients are used to assess the direction that groundwater will flow vertically. Using the methods that have traditionally been applied to assess vertical flow, a negative gradient indicates potential for upward groundwater flow, and a positive gradient indicates potential for downward groundwater flow. Regardless of the direction indicated by gradient, vertical migration of groundwater is expected to be relatively minor because of the low vertical hydraulic conductivities of the confining layers separating aquifers. Vertical gradients calculated from June and November data are shown in Table 4–1. General observations from Table 4–1 include:

- Water levels in November were relatively high compared to June, with some November water levels higher than the respective June water level.
- Vertical gradients in the confined aquifer are upward at one location and downward at two locations.
- The well cluster adjacent to the sulfuric acid plant (0101, 0111, and 0110) indicates a downward vertical gradient in the confined aquifer, which is likely a reflection of continuous long-term pumping of the confined aquifer from the acid-plant production well.
- Vertical gradients in the semiconfined aquifer are variable, but tend to be downward near surface water features, and upward away from surface water features. Surface water is likely recharging the surficial aquifer causing a localized increase in heads in the surficial aquifer, and a resulting downward vertical gradient.

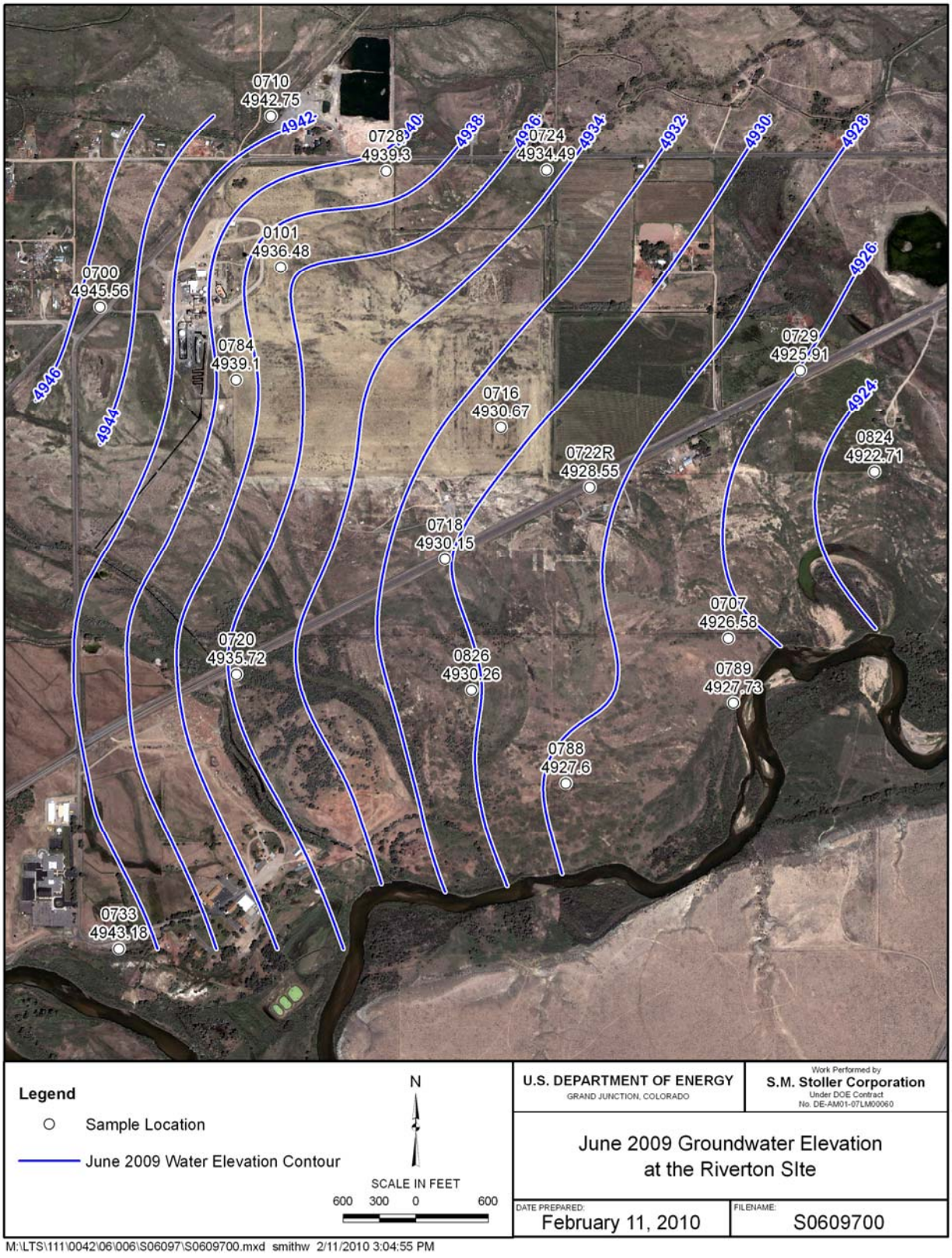


Figure 4–1. June 2009 Groundwater Elevation in the Surficial Aquifer at the Riverton Site

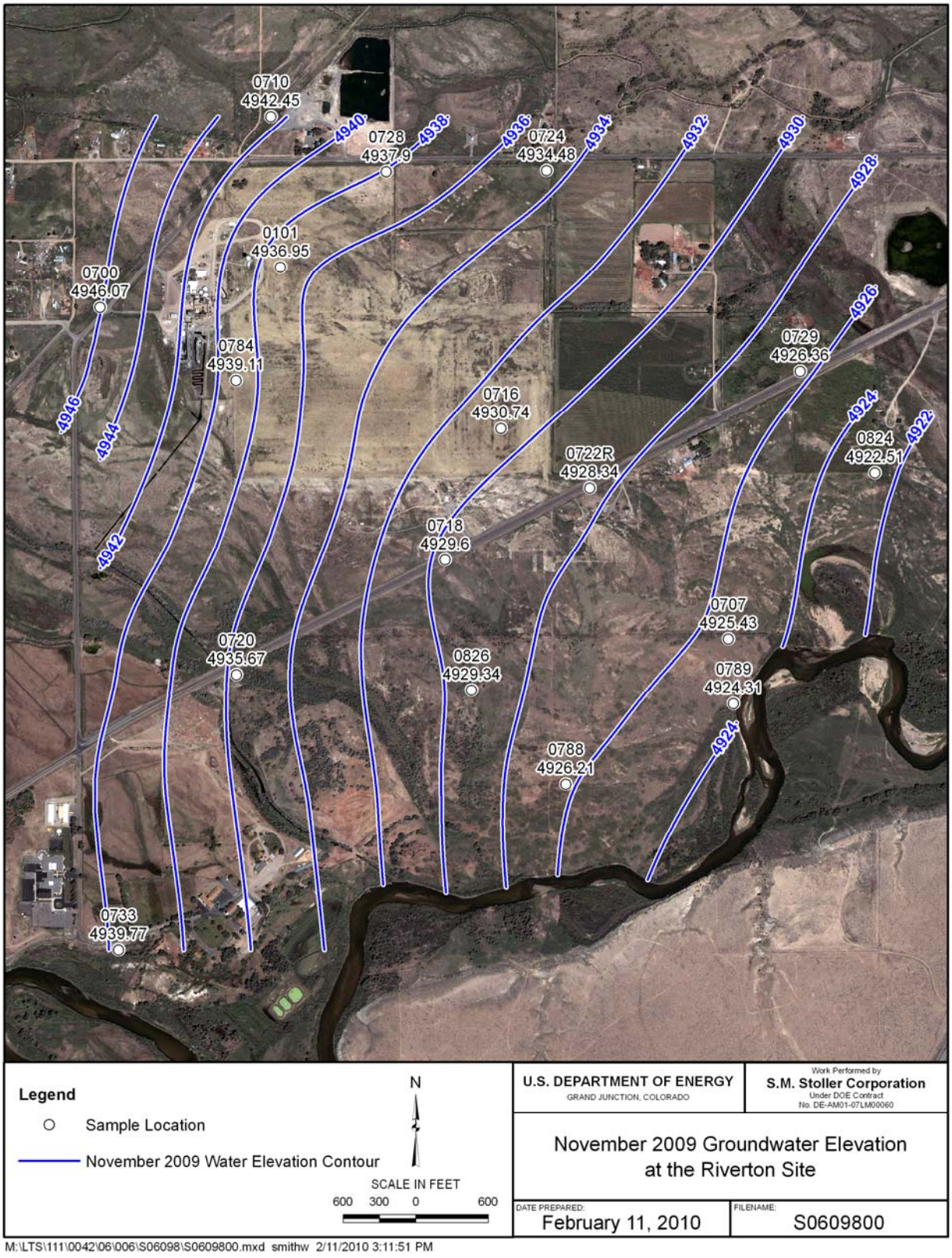


Figure 4–2. November 2009 Groundwater Elevation in the Surficial Aquifer at the Riverton Site

Table 4–1. Riverton Vertical Gradients

Well ID	Aquifer	Water Elevation June 2009	Water Elevation Nov 2009	Vertical Gradient[a] June 2009	Vertical Gradient Nov 2009
0724	Surficial	4934.49	4934.48		
0725	Semiconfined	4934.56	4934.48	-0.004	0
0726	Confined	4936.18	4935.86	-0.015	-0.012
0101	Surficial	4936.48	4936.95		
0111	Semiconfined	4937.87	4937.58	-0.052	-0.023
0110	Confined	4935.42	4935.09	0.020	0.035
0784	Surficial	4939.1	4939.11		
0732	Semiconfined	4937.34	4937.68	0.066	0.054
0716	Surficial	4930.67	4930.74		
0717	Semiconfined	4930.73	4930.78	-0.002	-0.001
0707	Surficial	4926.58	4925.43		
0705	Semiconfined	4926.39	4924.23	0.007	0.042
0709	Confined	4925.95	4921.71	0.008	0.049
0718	Surficial	4930.15	4929.60		
0719	Semiconfined	4930.49	4930.01	-0.017	-0.020
0722R	Surficial	4928.55	4928.34		
0723	Semiconfined	4928.7	4928.46	-0.005	-0.004
0720	Surficial	4935.72	4935.67		
0721	Semiconfined	4933.37	4932.86	0.065	0.078
0729	Surficial	4925.91	4926.36		
0730	Semiconfined	4925.55	4926.36	0.016	0

[a]Vertical gradient from the semiconfined aquifer is between the semiconfined aquifer and the surficial aquifer, and the vertical gradient from the confined aquifer is between the confined aquifer and the surficial aquifer. A negative value indicates an upward vertical gradient.

4.1.2 Groundwater Quality

Results of the monitoring program to date show that concentrations of molybdenum and uranium in groundwater in the surficial aquifer are still above their respective MCLs; however, concentrations are decreasing, indicating that natural flushing is occurring. Results from surficial aquifer monitoring wells on the lateral edge of the contaminant plumes indicate that contaminant concentrations have remained below applicable MCLs, which indicates that no significant lateral migration of the plumes has occurred. Once access is granted, an additional monitoring well on the eastern edge of the plume will be installed east of the oxbow lake to adequately bound the plume and provide for a more complete assessment of lateral plume migration. Time-concentration plots for molybdenum in wells located within contaminant plumes and wells on the lateral edge of the contaminant plumes in the surficial aquifer are shown in Figure 4–3 and Figure 4–4, respectively. The distribution of molybdenum in the surficial aquifer, based on November 2009 sampling results, is shown on Figure 4–5. Time-concentration plots for uranium in wells located within contaminant plumes, and wells bordering contaminant plumes in the

surficial aquifer are shown in Figure 4–6 and Figure 4–7, respectively. As shown in Figure 4–6, the uranium concentration in well 0789 is the highest in the monitoring network. This indicates that significant plume movement has occurred because this well is over 2,000 feet downgradient of the original source (tailings pile). This well will continue to be monitored as part of the long-term monitoring network. The distribution of uranium in the surficial aquifer, based on November 2009 sampling results, is shown on Figure 4–8.

Concentrations of molybdenum and uranium in groundwater in the semiconfined aquifer that underlies the surficial aquifer are still significantly below corresponding MCLs, indicating no impact from site-related contamination in this unit (Figure 4–9 and Figure 4–10).

Groundwater quality data by parameter for locations sampled during 2009 are provided in Appendix A.

4.2 Domestic Wells

All domestic wells sampled in 2009 are completed in the confined aquifer. Results from domestic wells did not indicate any impacts from the Riverton site. Concentrations of molybdenum and uranium in samples collected from domestic wells were two to three orders of magnitude below their respective standards. Data obtained from sampling of domestic wells in 2009 are provided in Appendix C.

4.3 Surface Water

Samples were collected at four locations on the Little Wind River (Figure 2–2), which flows generally from the southwest to the northeast adjacent to the site. Contaminated groundwater likely discharges to the Little Wind River, but there is no evidence that it impacts surface water quality in the river. Molybdenum and uranium concentrations measured in samples collected from river locations adjacent to and downstream of the groundwater plume (0811, 0812, and 0796), are comparable to concentrations from river samples collected upstream of the groundwater plume (0794).

Two ponds formed from groundwater discharge into former gravel pits were sampled as part of the long-term monitoring network. These ponds are primarily used for fishing and swimming. Samples collected from these ponds (locations 0810 and 0823) and the west side irrigation ditch (0822) had concentrations of uranium within the range of background uranium concentrations in groundwater (0.001 to 0.0156 mg/L), which indicates no discernible impacts from the site. Uranium concentrations over time in river and pond locations are shown in Figure 4–11.

The sample collected at the ditch that carries discharge water from the Chemtrade sulfuric acid refinery (0749) had elevated concentrations of sulfate in 2009 (1,800 mg/L in June). Sulfate concentrations have been in the 1,800 to 3,000 mg/L range since 2004. The elevated sulfate concentrations in the Chemtrade ditch water has affected sulfate concentrations farther downstream in the west side irrigation ditch (780 mg/L at location 0822 in June). Water samples from the west side irrigation ditch also have been analyzed for radium-226 and radium-228 in response to elevated concentrations of these constituents in the sediments within the ditch. Radium concentrations were either below detection or estimated values (based on the low concentration and analytical uncertainty) in 2009. Historically radium concentrations have been below detection or estimated, indicating no impact to water quality in the ditch.

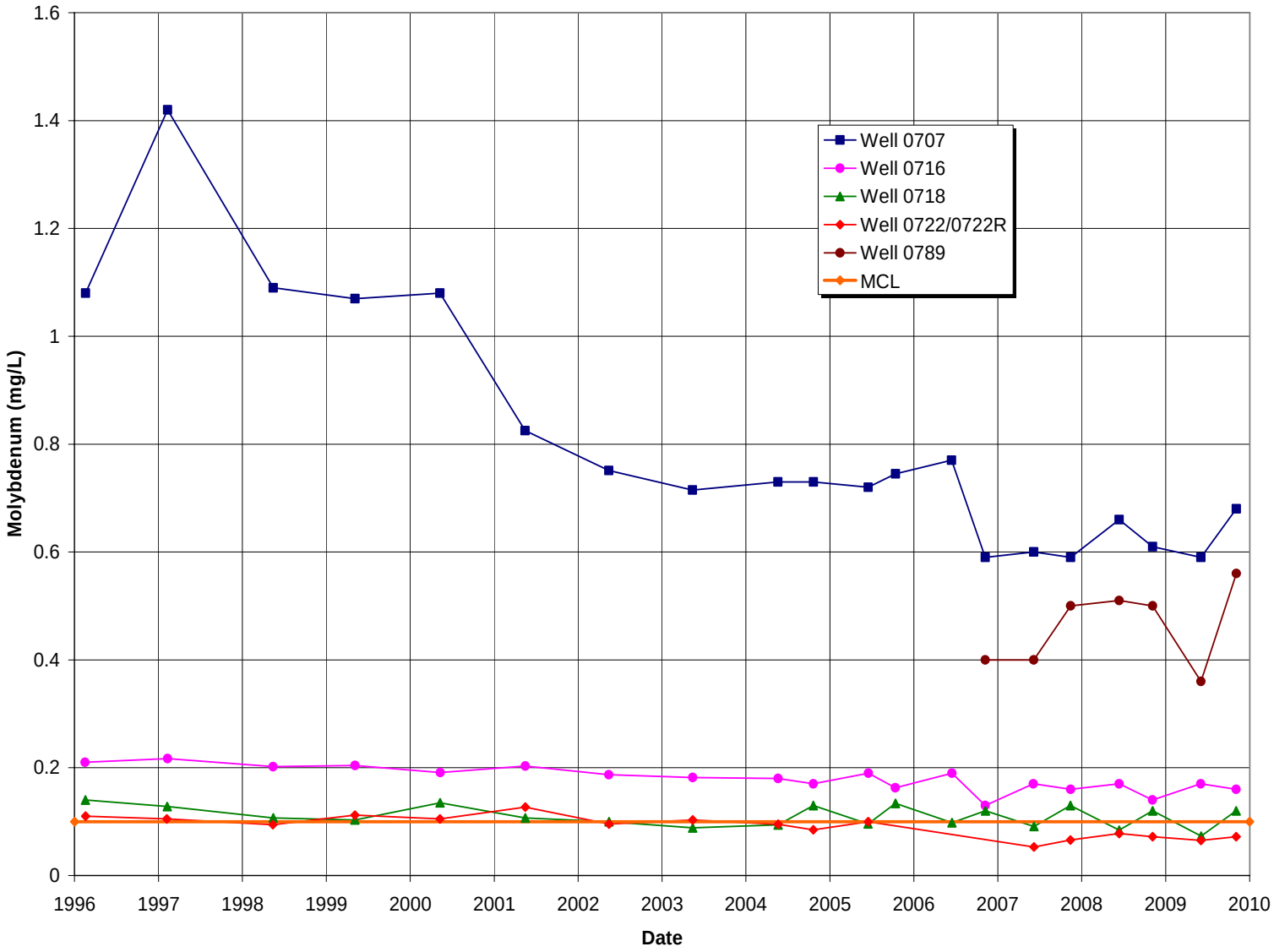
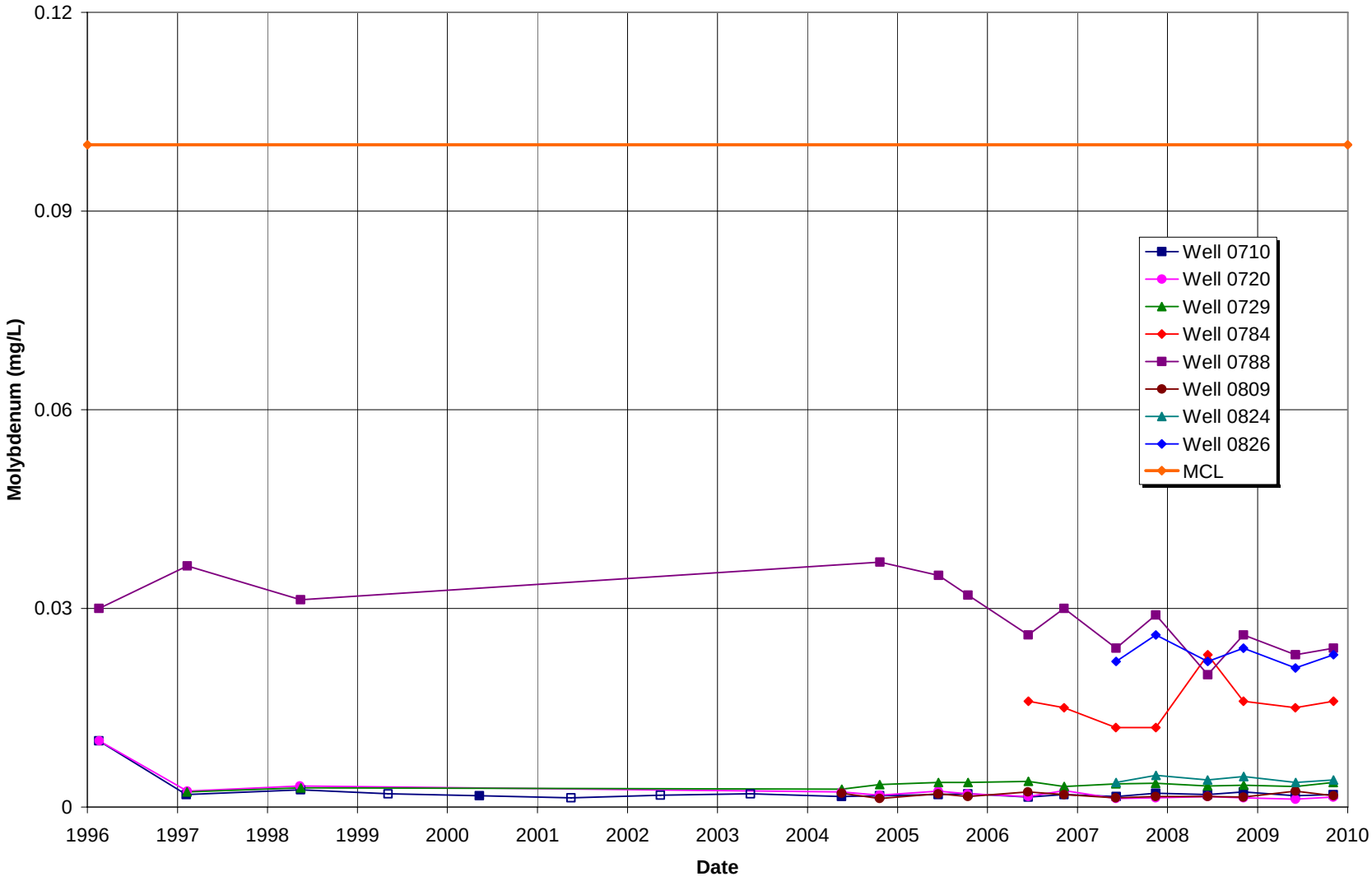


Figure 4–3. Molybdenum Concentrations in Surficial Aquifer Wells within the Contaminant Plume



Note: A hollow symbol denotes an analytical result below the detection limit.

Figure 4–4. Molybdenum Concentrations in Surficial Aquifer Wells on the Edge of Contaminant Plume

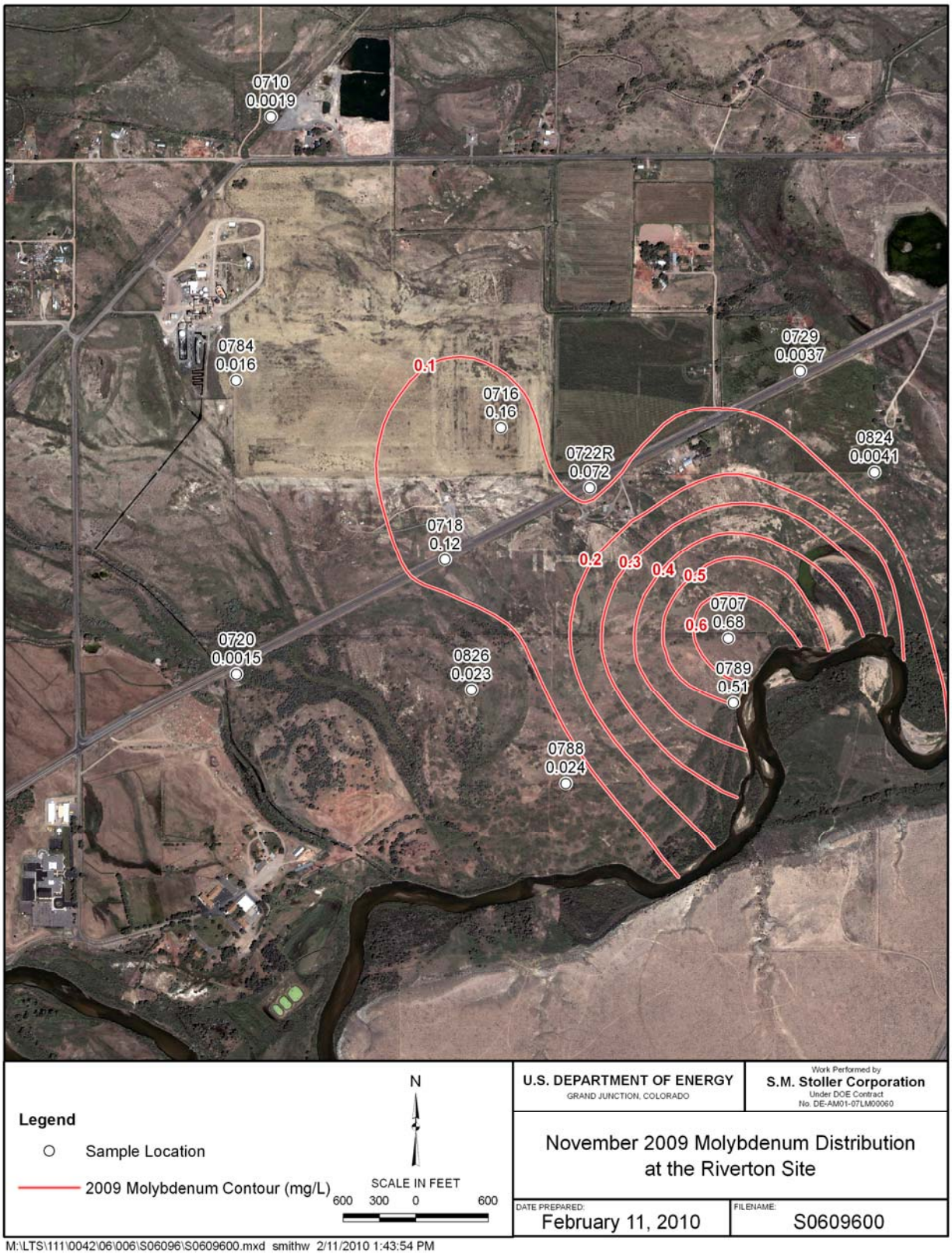


Figure 4–5. November 2009 Molybdenum Distribution in the Surficial Aquifer at the Riverton Site

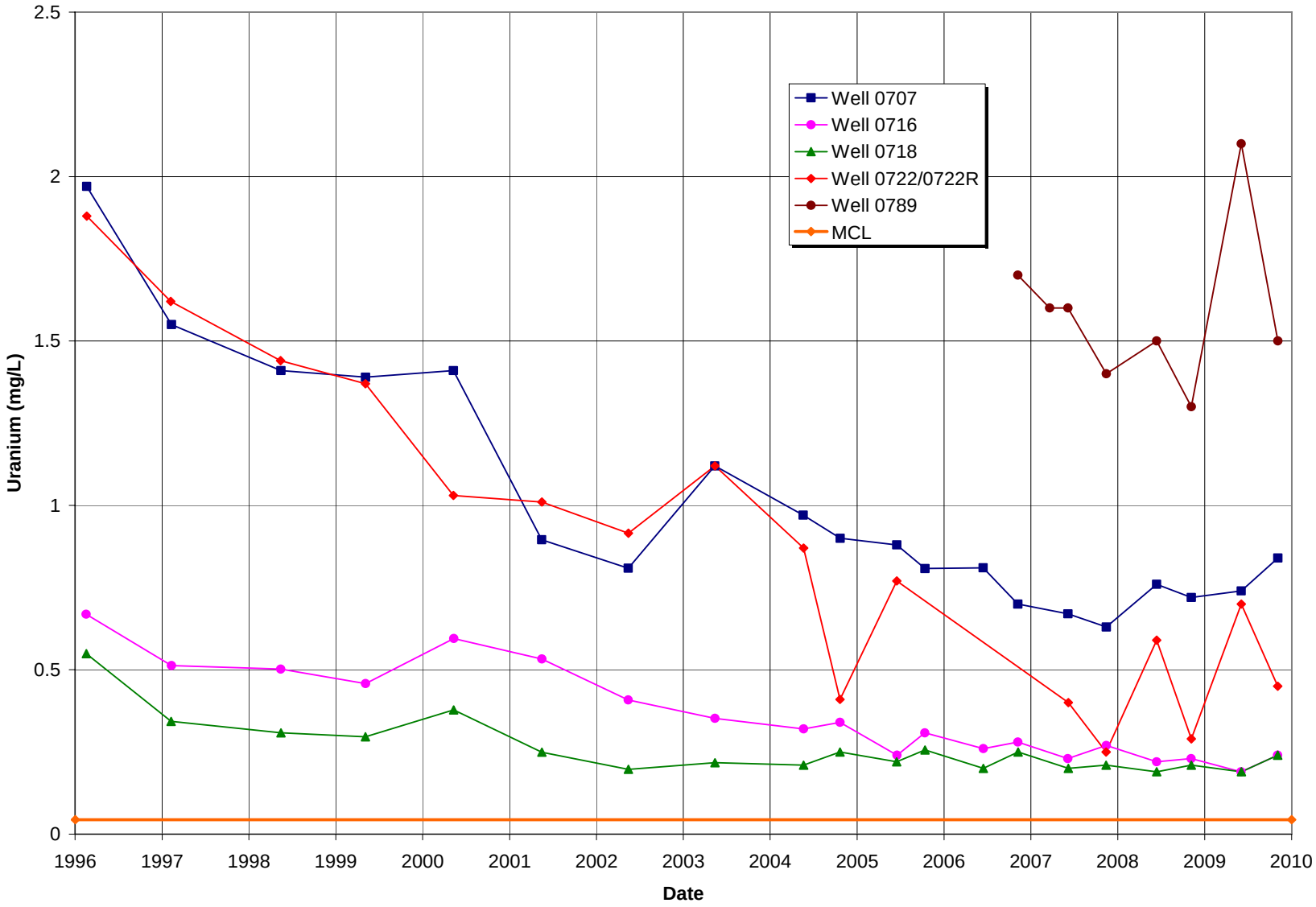


Figure 4–6. Uranium Concentrations in Surficial Aquifer Wells within the Contaminant Plume

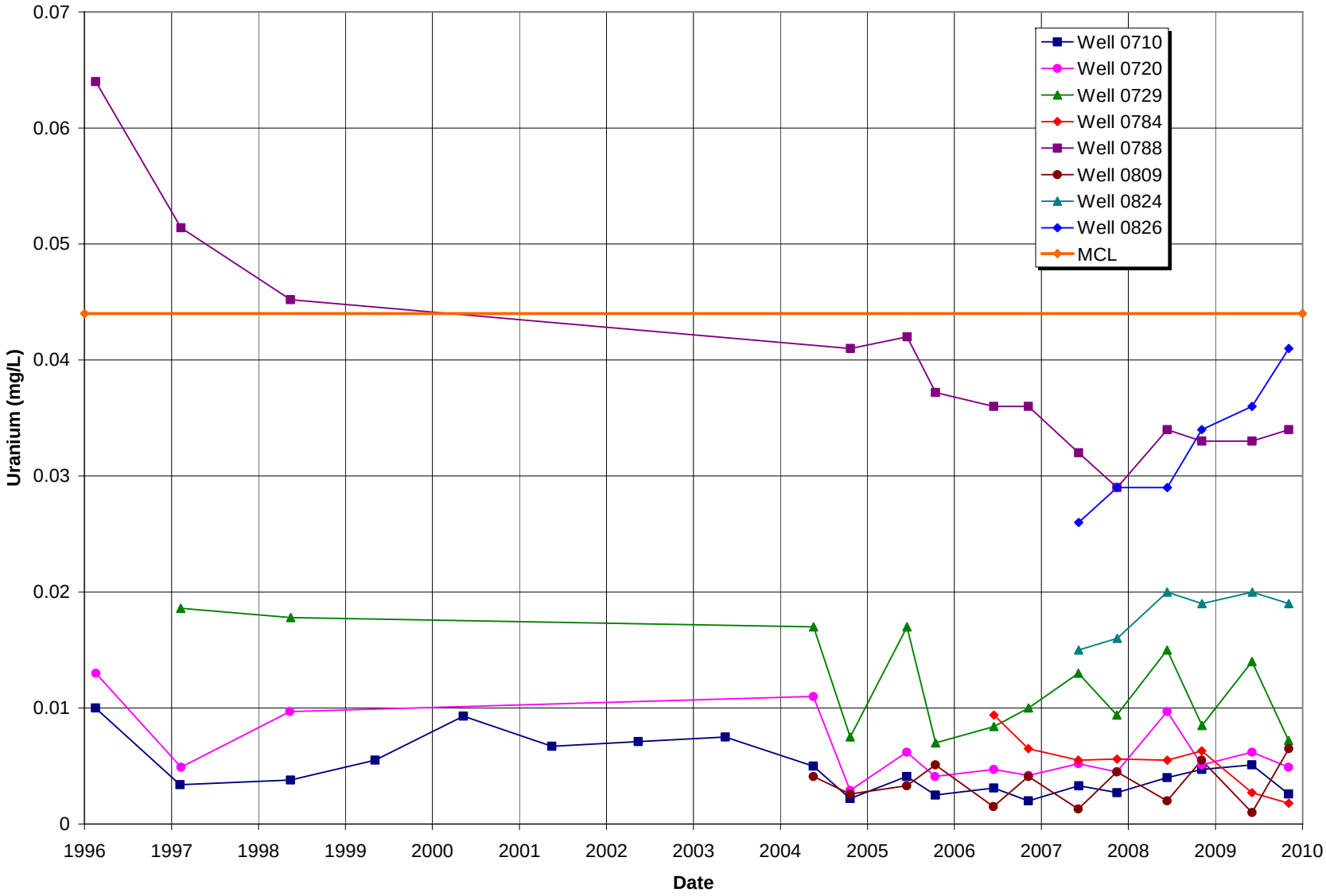


Figure 4–7. Uranium Concentrations in Surficial Aquifer Wells on the Edge of the Contaminant Plume

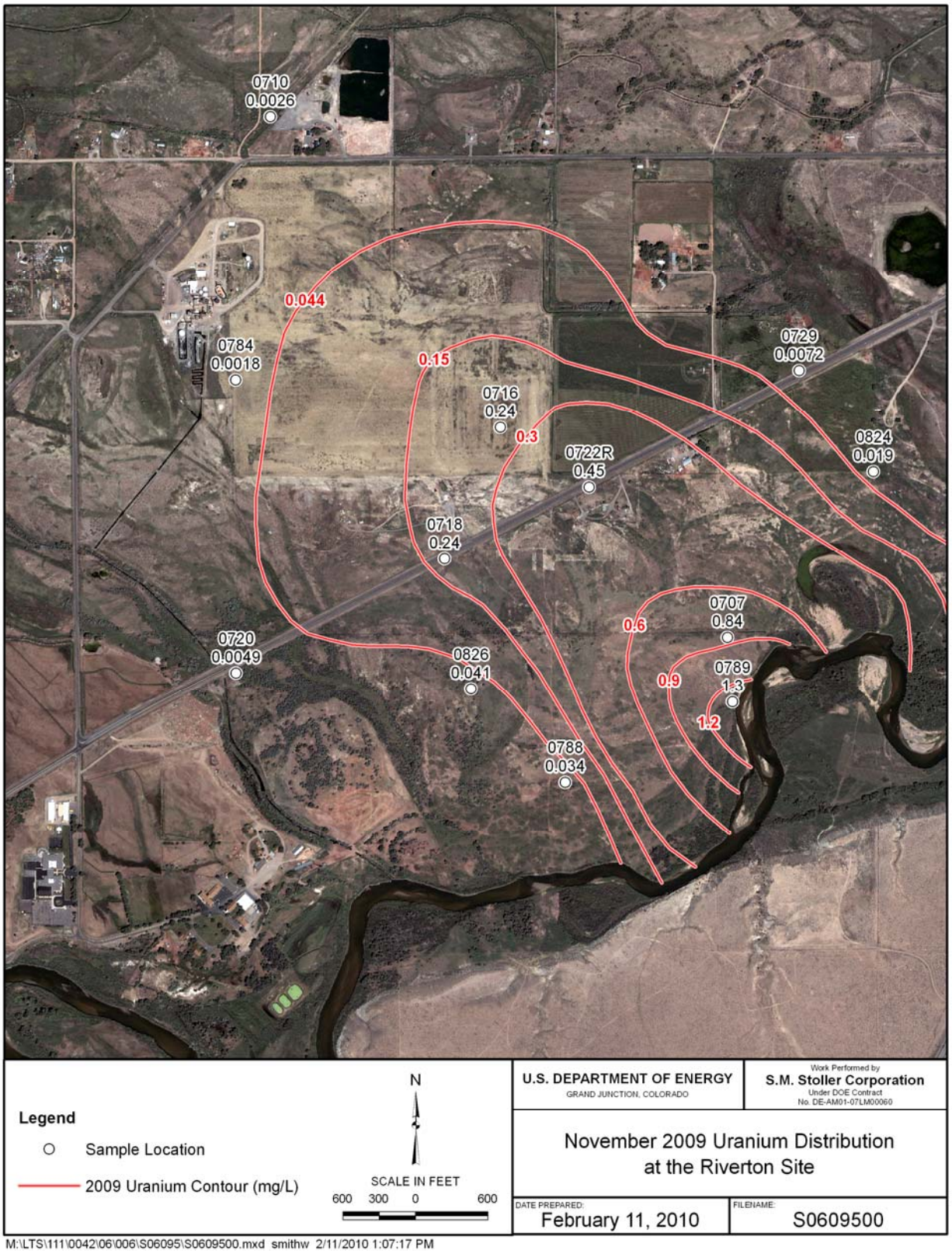
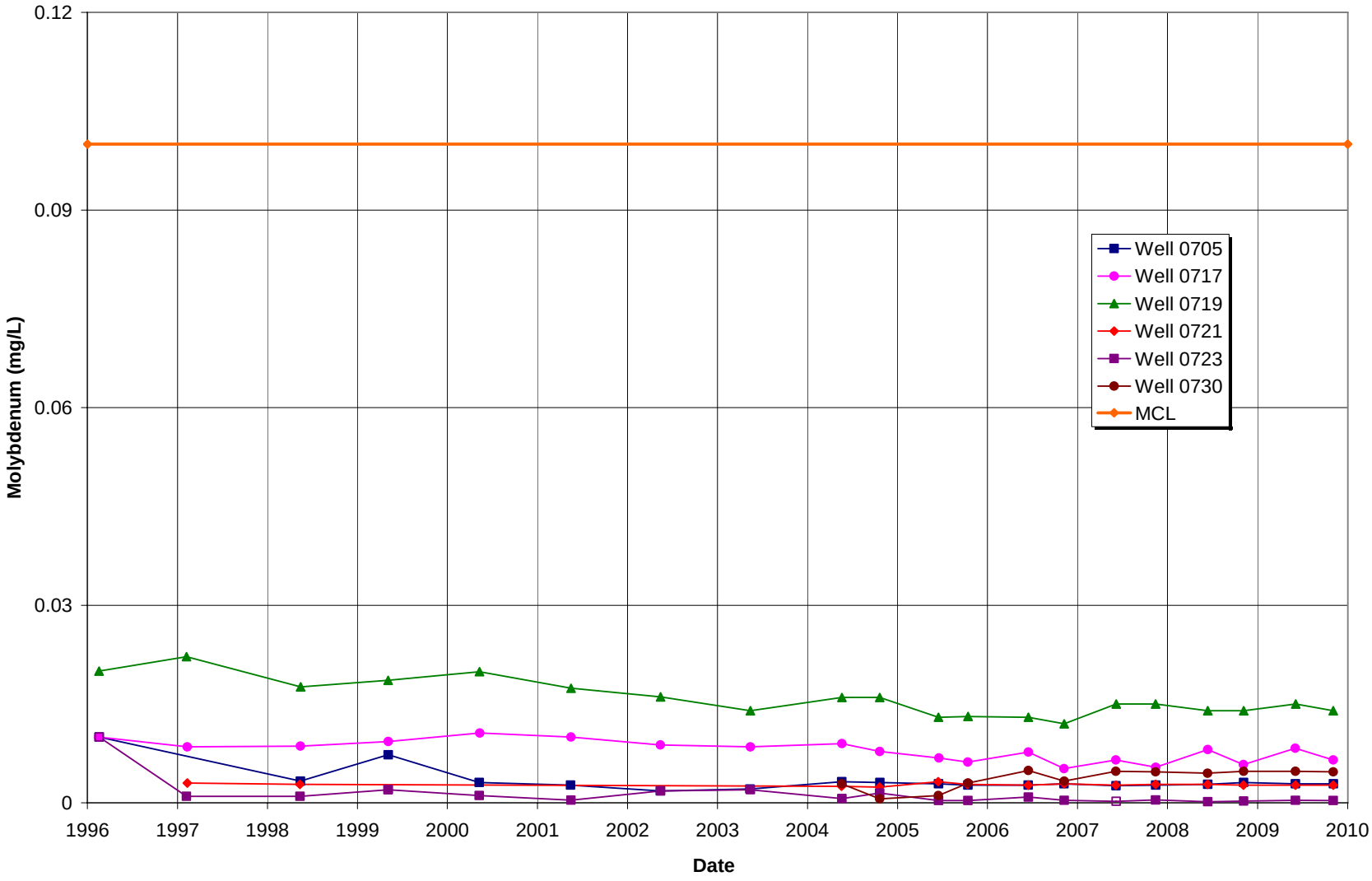
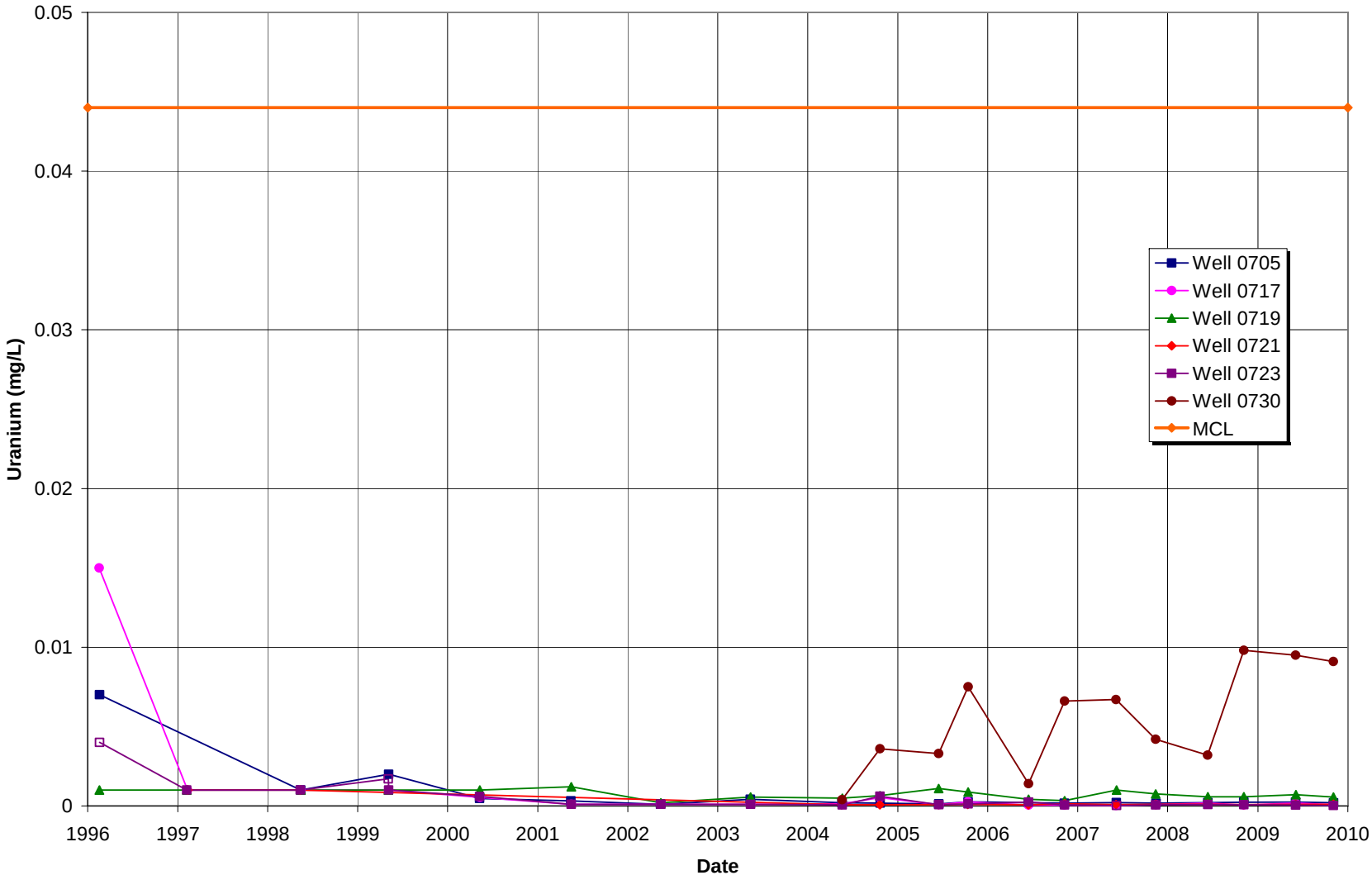


Figure 4–8. November 2009 Uranium Distribution in the Surficial Aquifer at the Riverton Site



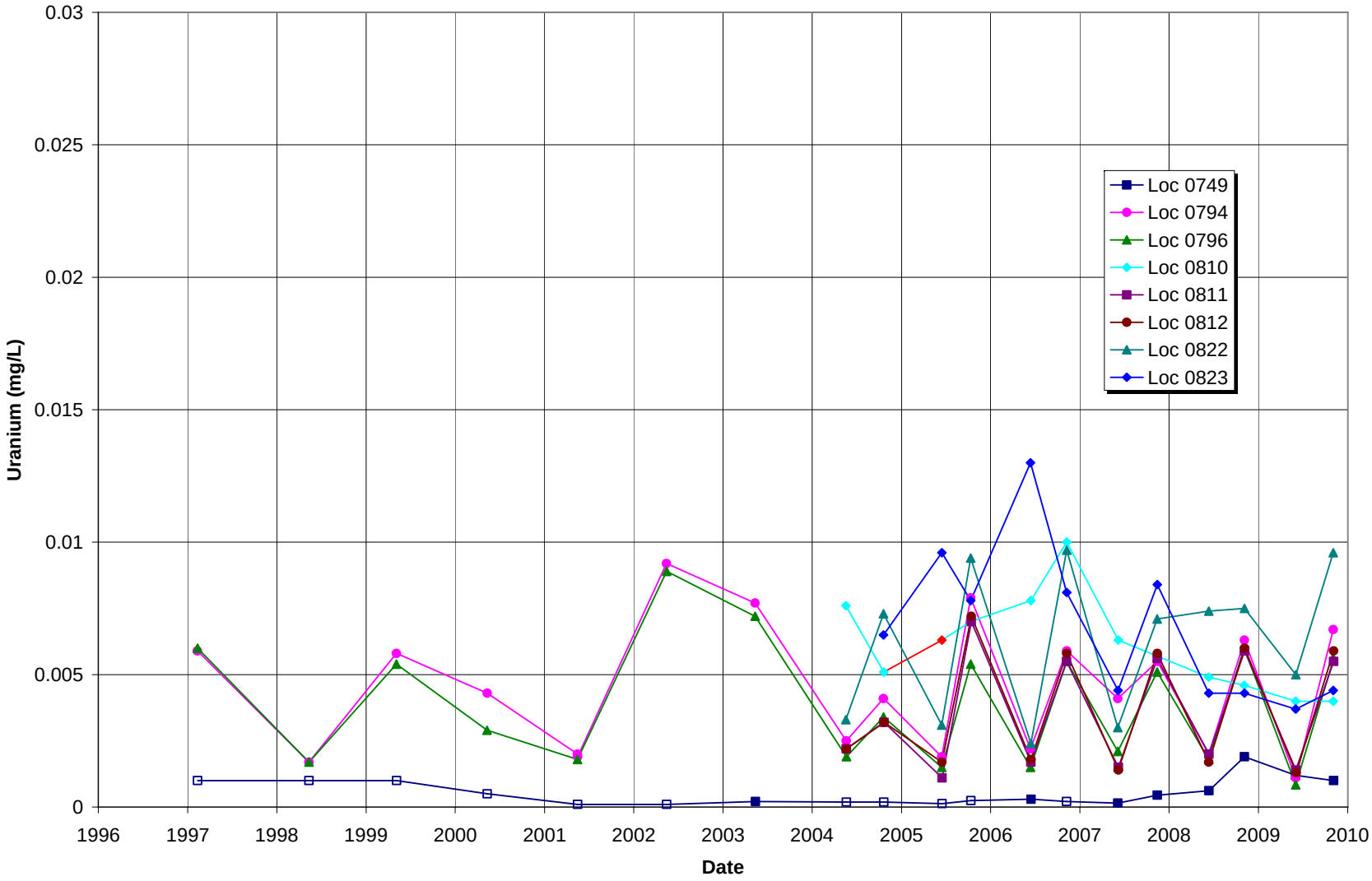
Note: A hollow symbol denotes an analytical result below the detection limit.

Figure 4–9. Molybdenum Concentrations in Semiconfined Aquifer Wells



Note: A hollow symbol denotes an analytical result below the detection limit.

Figure 4–10. Uranium Concentrations in Semiconfined Aquifer Wells



Note: A hollow symbol denotes an analytical result below the detection limit.

Figure 4–11. Uranium Concentrations in Pond and River Locations

Concentrations of uranium continue to be elevated, but observed trends are declining (Figure 4–12) in surface water in the oxbow lake (location 0747), which was formed by a shift in the river path in 1994. Hydraulic and water quality data indicate that the oxbow lake is fed by the discharge of contaminated groundwater; therefore, elevated concentrations are expected, but should decline as the surficial aquifer flushes.

Concentrations of uranium in the oxbow lake have been variable over time. This variability is attributed to surface inflow to the lake from the Little Wind River during high river stage, which causes a dilution of uranium concentrations. Figure 4–12 splits sampling events into high-flow and low-flow events, with the high-flow events reflecting the potential for river inflow diluting uranium concentrations in the oxbow lake, and the low-flow events reflecting a low potential for river inflow diluting uranium concentrations in the oxbow lake. In the June 2009 sampling event, the Little Wind River was at flood stage and flowing through the oxbow lake; therefore, analyte concentrations in the sample collected from the oxbow lake were comparable to samples collected from river locations. No flow from the river to the lake was indicated in November. As shown in the low-flow graph, uranium concentrations in the oxbow lake have declined significantly over time, which indicates the oxbow lake is naturally flushing along with the surficial aquifer. Surface water quality data by parameter for locations sampled during 2009 are provided in Appendix D.

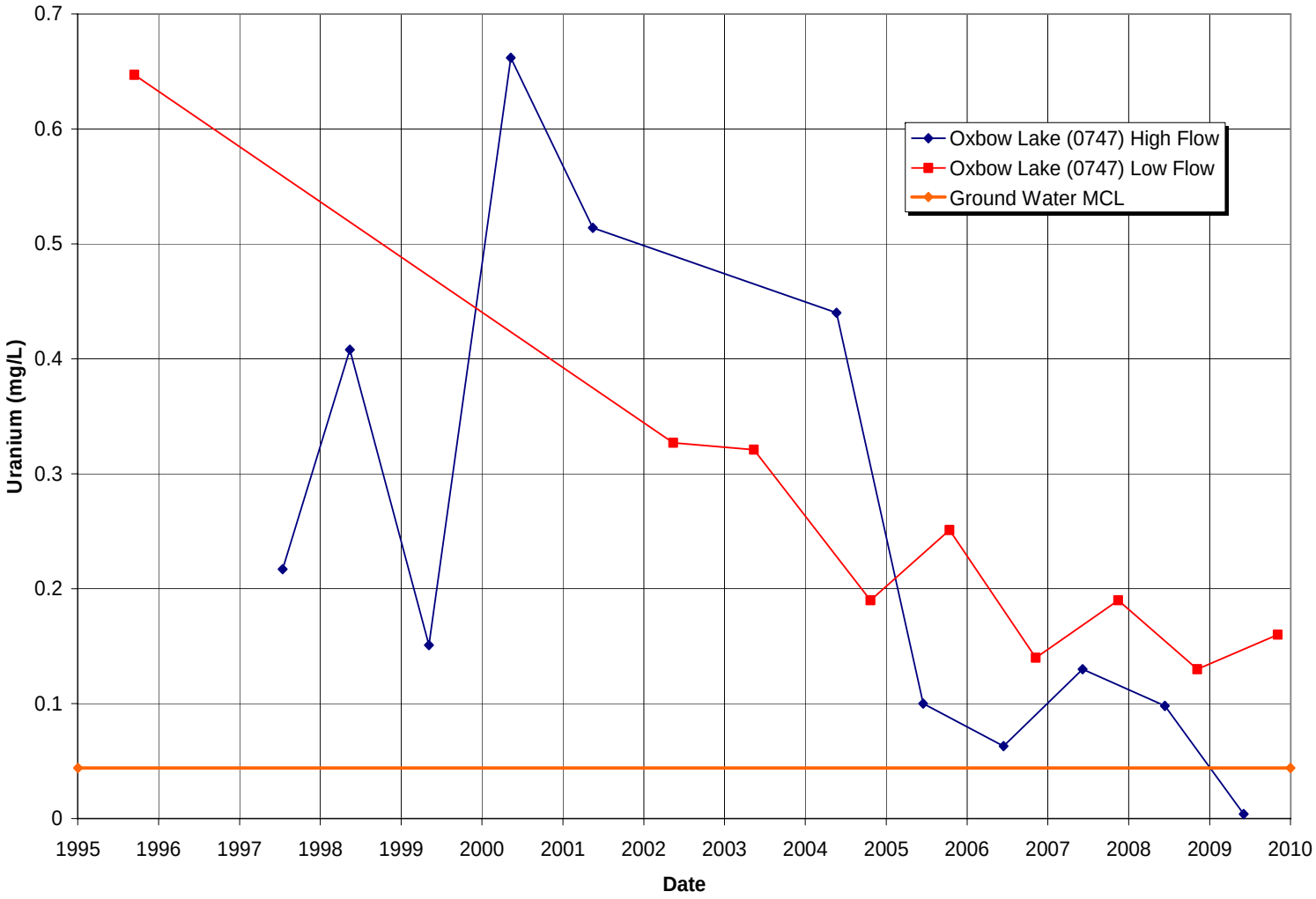


Figure 4–12. Uranium Concentrations in the Oxbow Lake

5.0 Natural Flushing Assessment

Groundwater numerical modeling has predicted that the alluvial aquifer will naturally flush contaminants to levels below applicable standards within the 100-year regulatory timeframe, which started with the approval of the GCAP in 1998. To assess the progress of natural flushing, comparison to hydrogeologic modeling predictions, trend analysis, and other quantitative techniques are applied to temporal plots of concentrations at individual locations. In addition, temporal plots of mean concentrations of molybdenum and uranium were produced to support the assessment.

Comparison of surficial aquifer concentrations of molybdenum and uranium as predicted by probabilistic hydrogeologic modeling (DOE 1998b) with actual concentrations measured in samples from monitoring well 0707 (located near the center of the contaminant plumes) are shown in Figure 5–1 and Figure 5–2. To date, concentrations of molybdenum in monitoring well 0707 are tracking with model predictions. However, recent concentrations of uranium in monitoring well 0707 are tracking higher than model predictions.

Trend analysis using the Mann-Kendall test (Gilbert 1987) was performed to assess the temporal behavior of uranium concentrations. Uranium was selected as an indicator parameter because: (1) it is widespread throughout the surficial aquifer; (2) its concentration exceeded the standard in numerous wells in the monitoring network during 2008; (3) historical concentrations are up to two orders of magnitude above the standard; and (4) it was one of the constituents whose transport was modeled in previous investigations (DOE 1998b). The Mann-Kendall test determines if an upward trend, downward trend, or no trend exists. As shown in Table 5–1, the five locations that have recent uranium concentrations above the groundwater MCL and that have at least 8 historical data points, show downward trends.

Table 5–1. Assessment of Uranium Concentration Trends and Flushing Times at the Riverton Site

Location ID	Trend[a]	N[b]	Curve Type	Curve Correlation (r^c)	Estimated Completion (Years)
0707	Downward	14	Exponential	0.917	160
0716	Downward	14	Exponential	0.950	37
0718	Downward	14	Logarithmic	0.912	160
0722/0722R[d]	Downward	13	Exponential	0.914	26
0747 (Oxbow)[e]	Downward	8	Logarithmic	0.882	19

[a]Data collected from 1996 to 2009; when more than one data point was available in a year, the low-flow sampling event data was used; duplicate data were not used.
[b]N=number of observations.
[c]r=Correlation coefficient – a value of 1 represents a perfect correlation.
[d]Well 0722R replaced damaged well 0722 and is offset adjacent to 0722. Well 0722 was destroyed in 2006.
[e]Only low-flow sampling event data was used.

To further assess the progress of natural flushing and estimate the pace with which it is occurring, additional data analysis was conducted. Curve–fitting techniques in the Microsoft Excel computer software package were used to approximate actual uranium concentration data (Figure 5–3 through Figure 5–7). Each resulting curve was then extrapolated to the point where it intercepts the uranium groundwater MCL, and the corresponding time provides an estimate of flushing time. Comparison of uranium concentrations in the oxbow lake to the groundwater MCL for uranium does not imply a compliance standard for the oxbow lake; rather, it is useful

for assessing the progress of natural flushing of the alluvial aquifer. As shown in Table 5–1, the number of years estimated to achieve compliance with the uranium standard ranges from 19 to 160. Although 160 years is longer than the 100-year regulatory limit and 19 years may underestimate flushing time, estimates will likely change as more data are collected. Correlation coefficients resulting from the curves fit to each location's data are listed in Table 5–1. These coefficients estimate how well the fitted curves match the data, with a perfect correlation equaling 1.

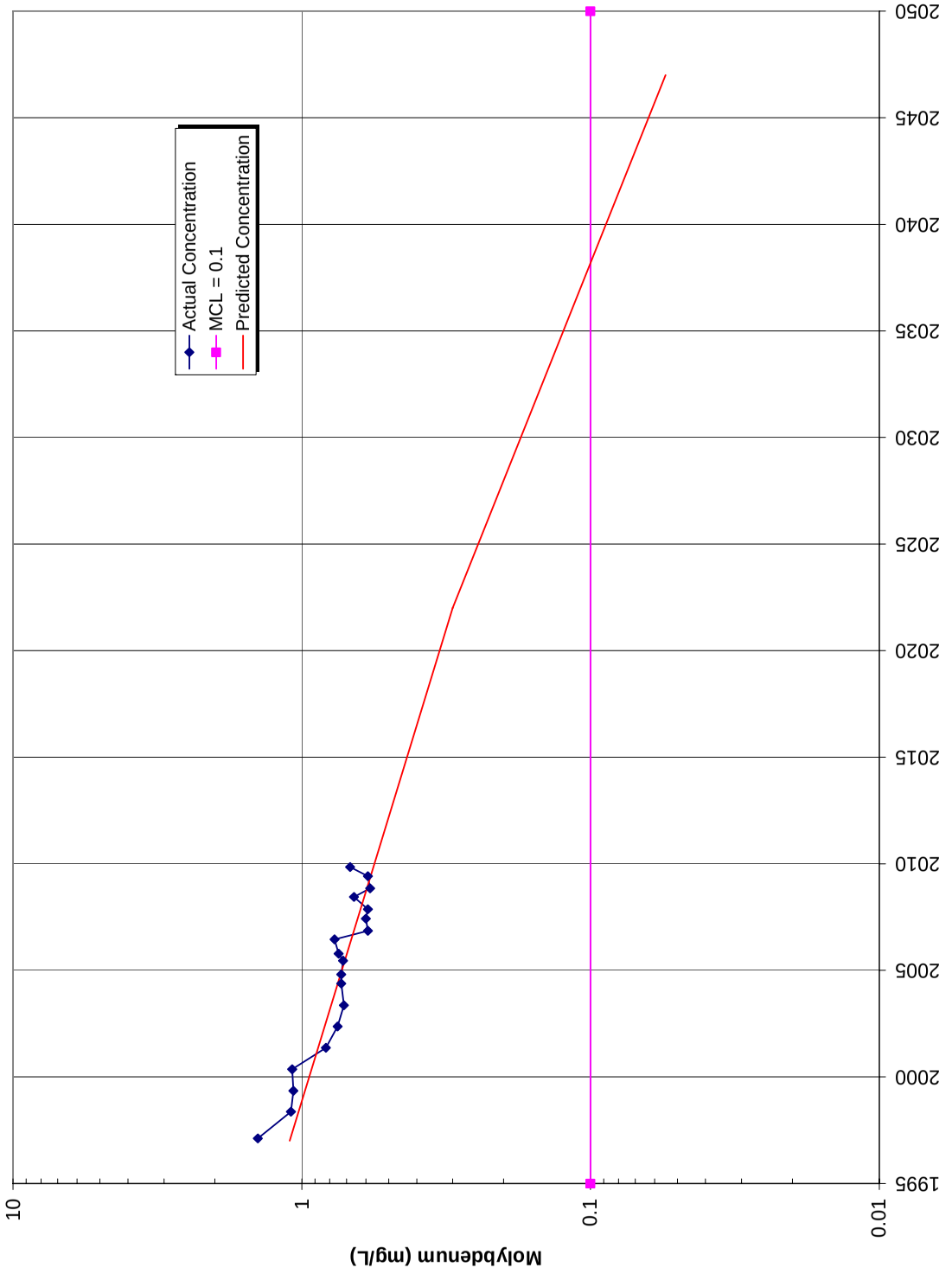


Figure 5–1. Predicted and Actual Molybdenum Concentrations in Well 0707

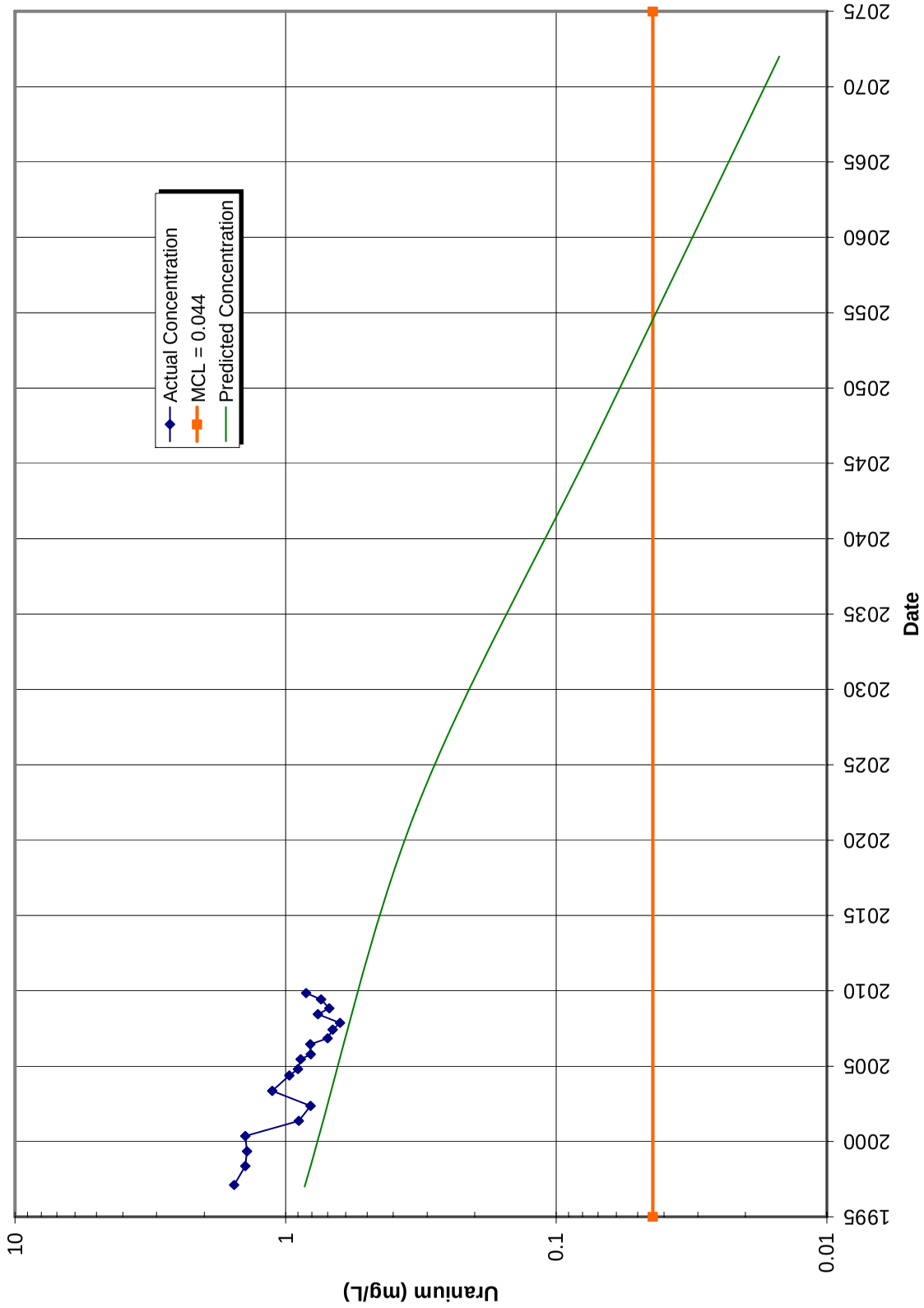


Figure 5–2. Predicted and Actual Uranium Concentrations in Well 0707

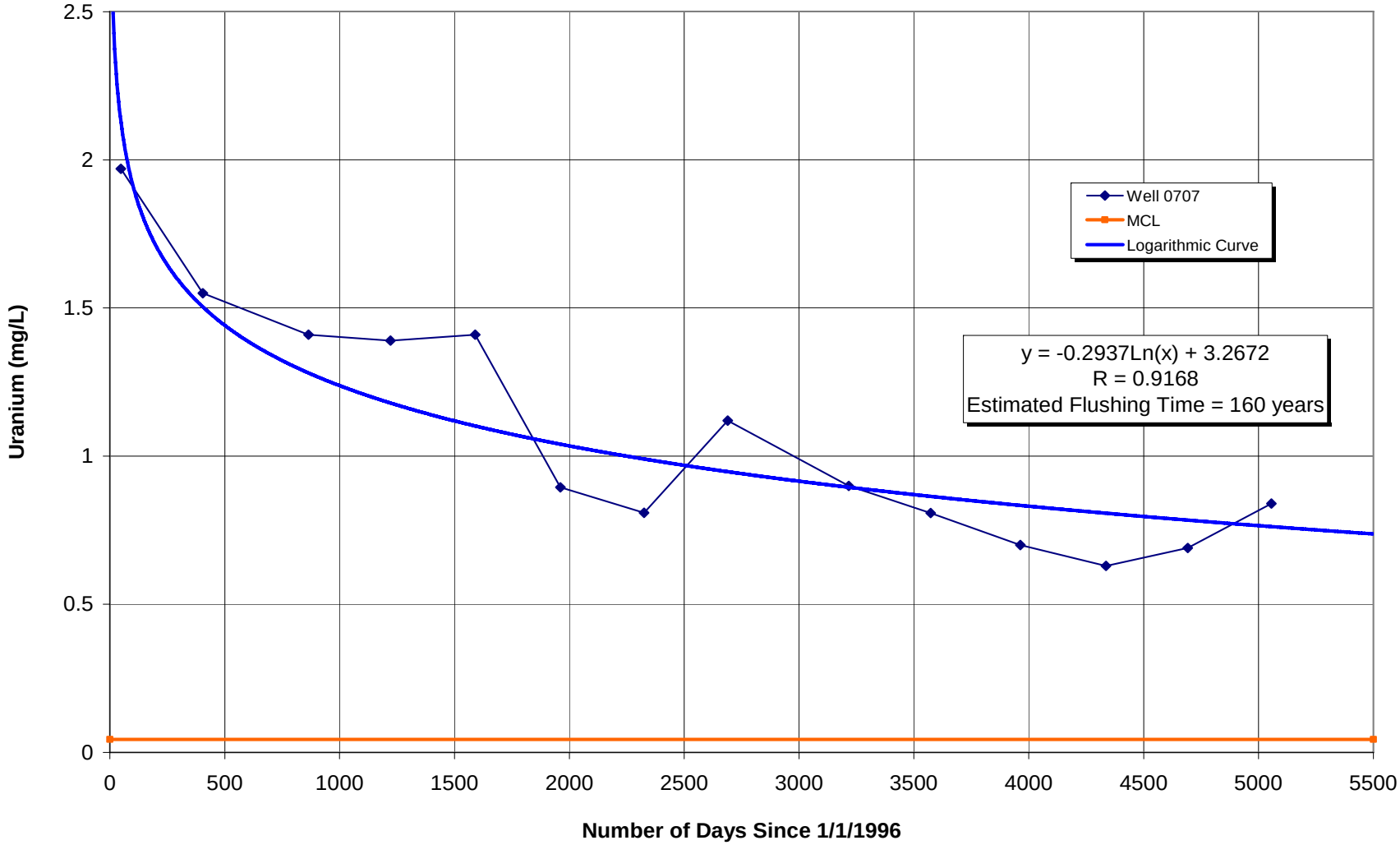


Figure 5–3. Estimated Flushing Time in Surficial Aquifer Well 0707

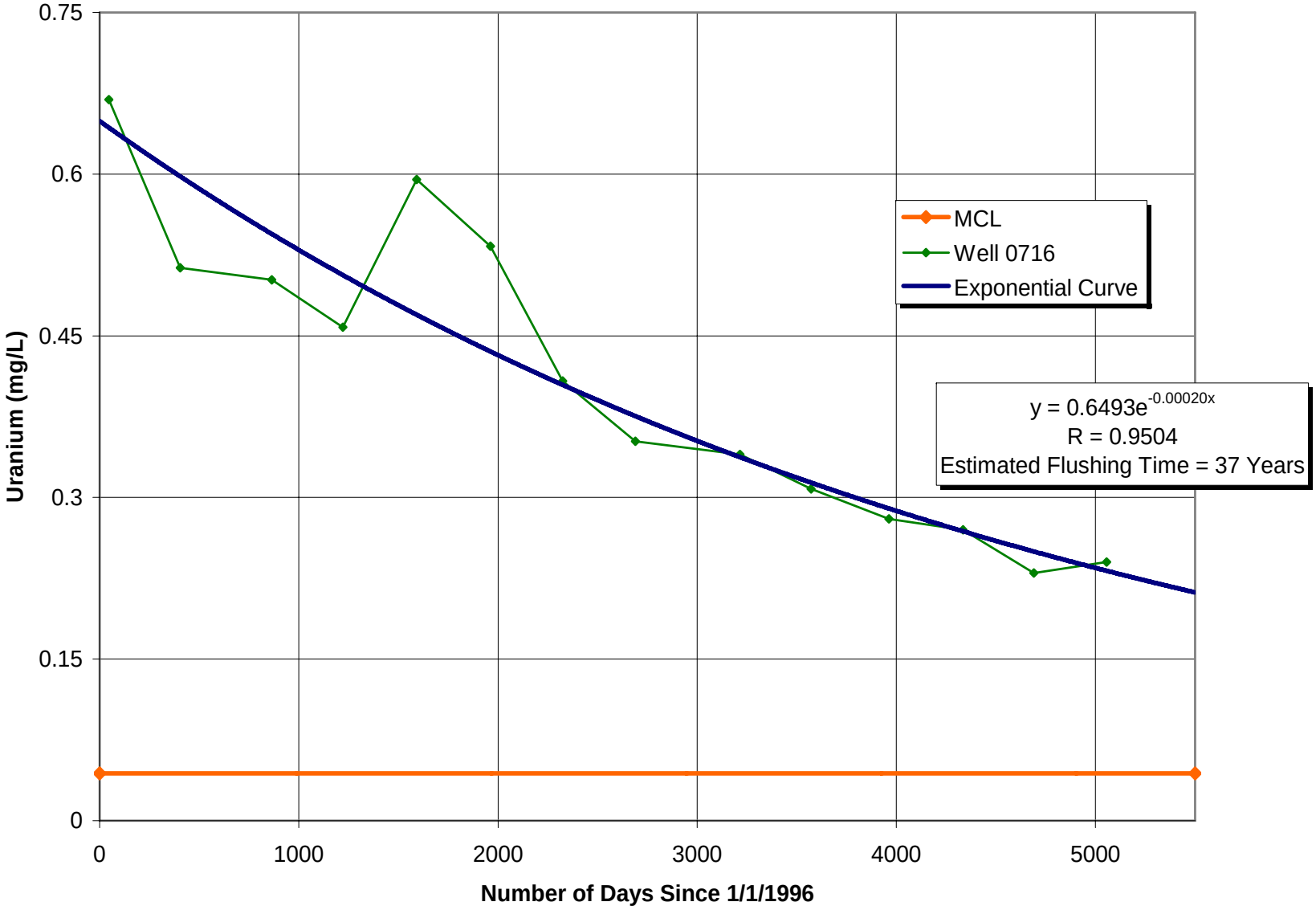


Figure 5–4. Estimated Flushing Time in Surficial Aquifer Well 0716

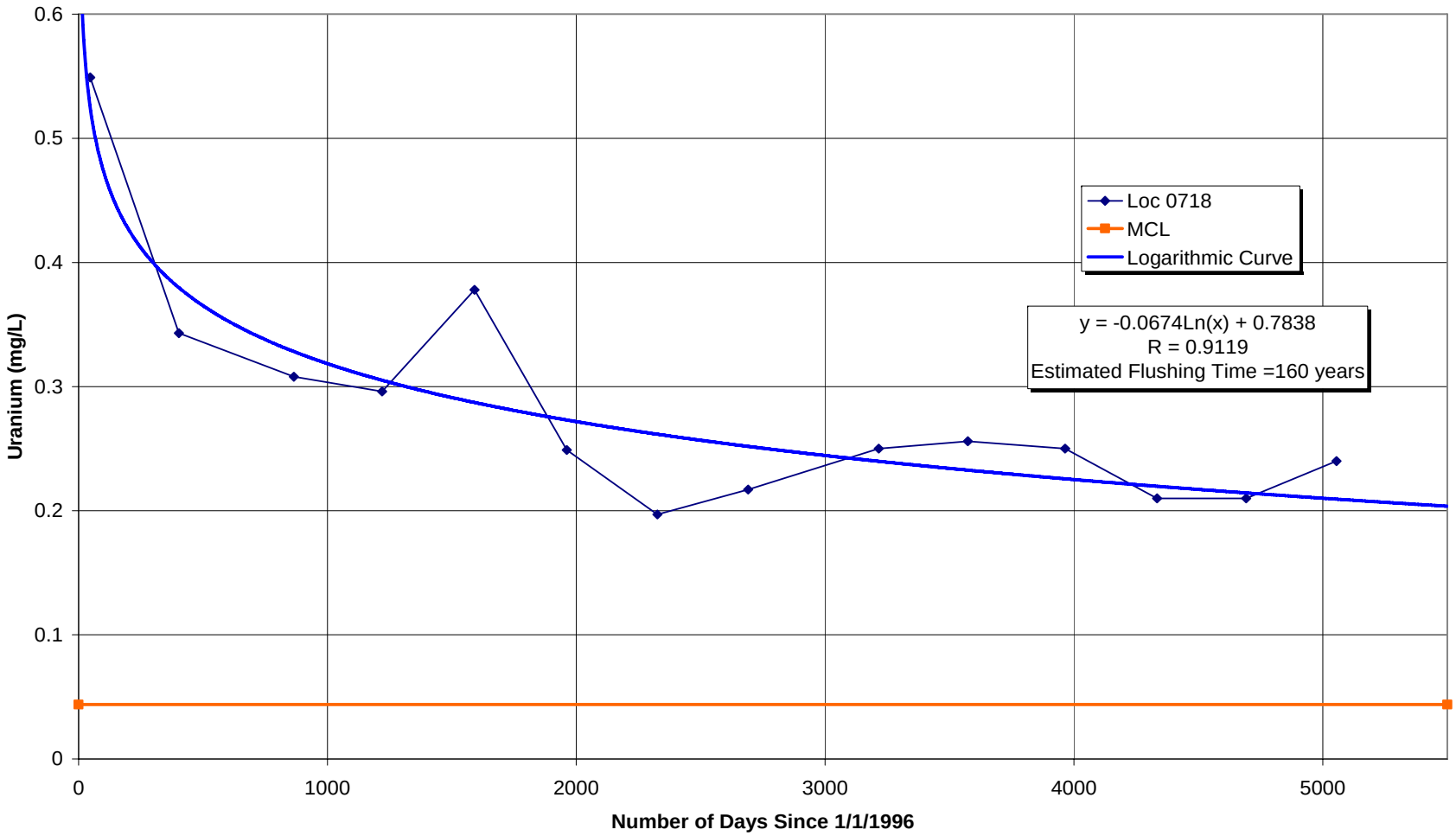


Figure 5–5. Estimated Flushing Time in Surficial Aquifer Wells 0718

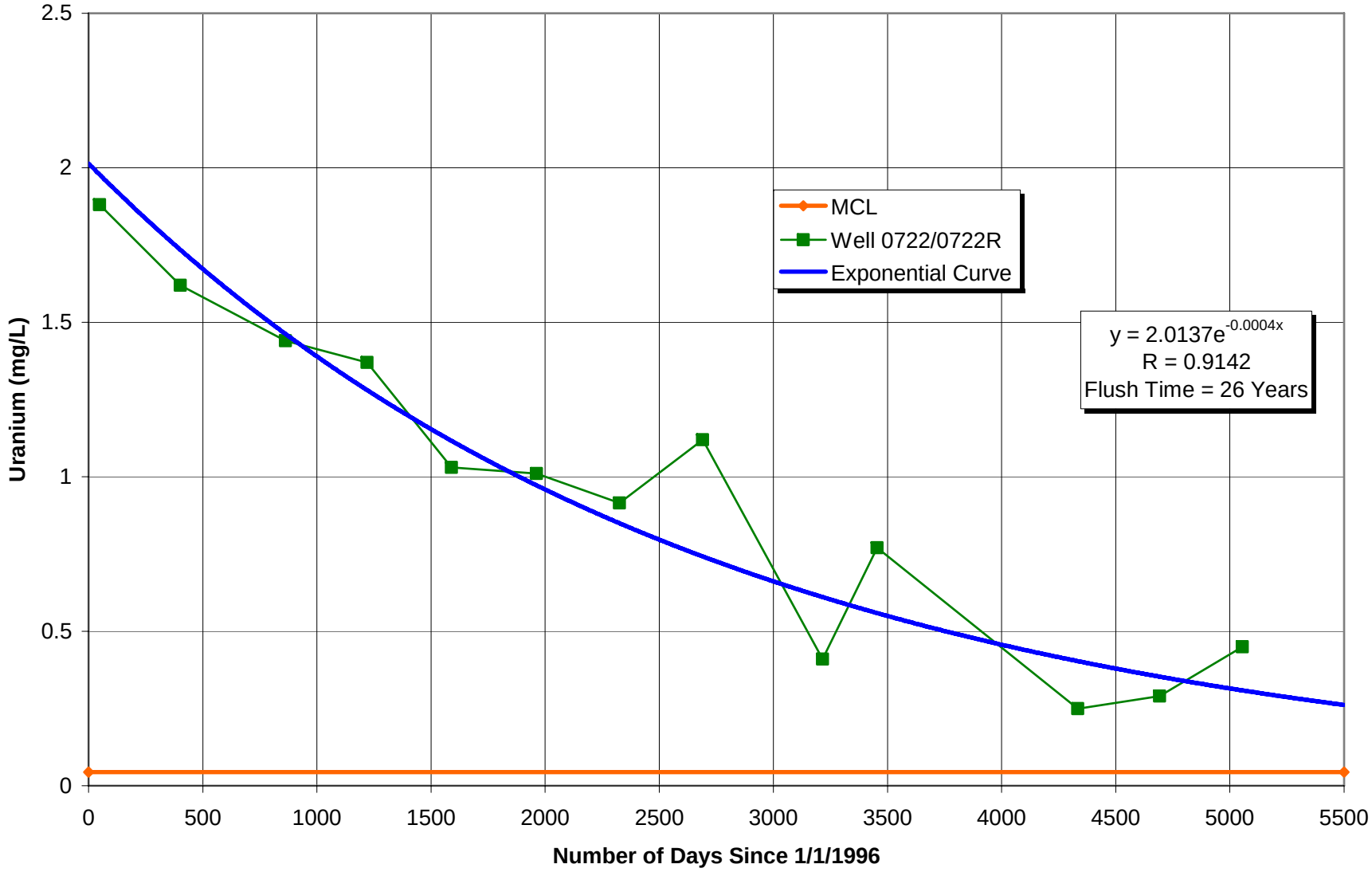


Figure 5–6. Estimated Flushing Time in Surficial Aquifer Wells 0722/0722R

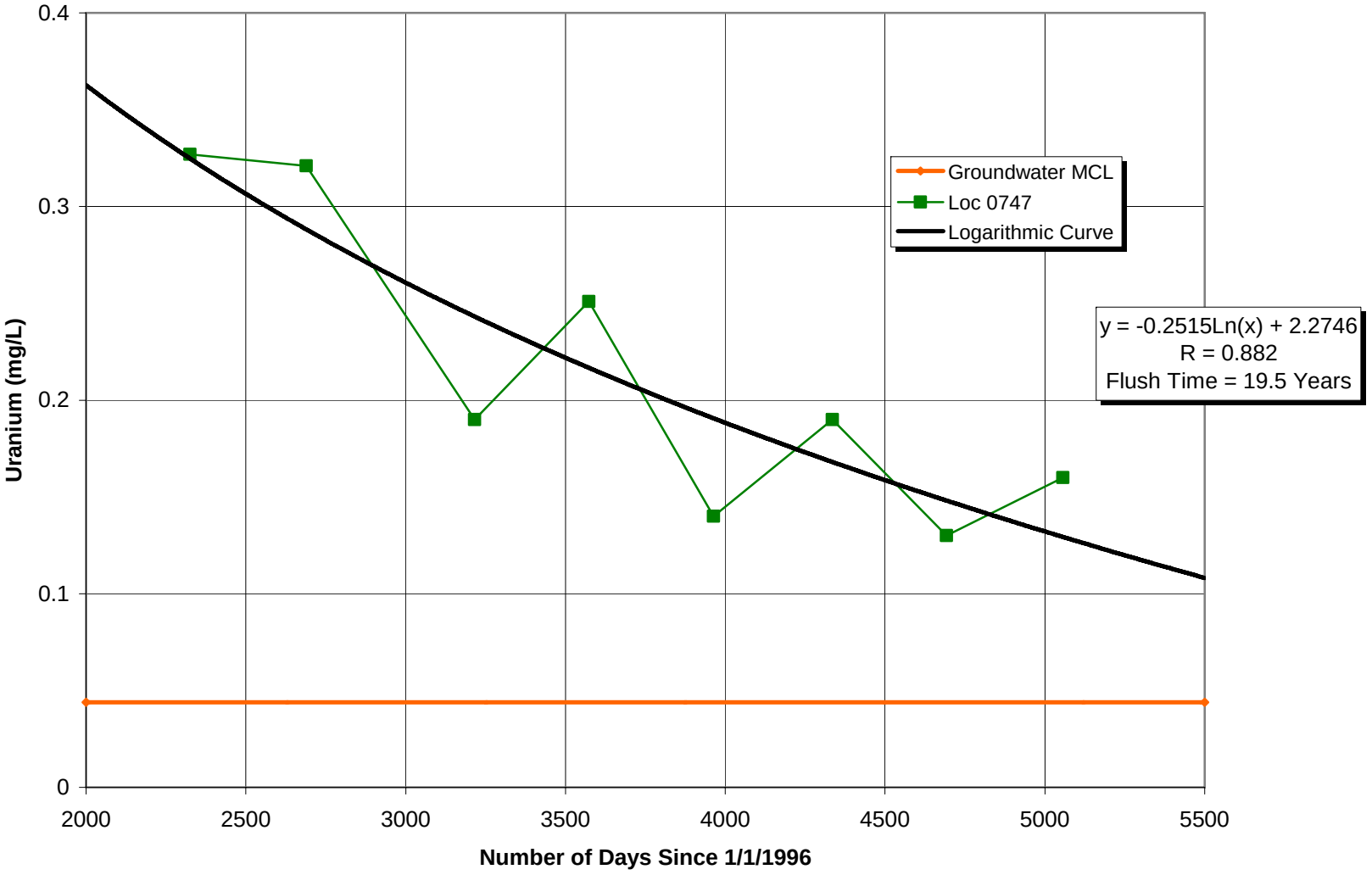


Figure 5–7. Estimated Flushing Time at the Oxbow Lake

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6.0 Conclusions

Uranium and molybdenum are the indicator constituents for compliance monitoring at the Riverton site (DOE 1998a). While concentrations of both uranium and molybdenum in groundwater in the surficial aquifer are still above their respective MCLs, levels are generally decreasing, indicating that natural flushing is occurring in the aquifer. Uranium concentrations in wells above the standard show a downward statistical trend, and curve extrapolation of uranium concentrations project a variable flushing time from 19 to 160 years. Predictions of flushing time have varied in the past and will likely continue to vary as more data are collected. Surface water in the oxbow lake adjacent to the Little Wind River continues to be impacted as it is fed by discharge of shallow groundwater from contaminant plumes; however, concentrations have declined significantly over time.

Verification monitoring of groundwater and surface water from designated locations will continue on a semiannual basis, and the long-term monitoring program for the site will be specified in the *Long Term Maintenance Plan for the Riverton, Wyoming, Processing Site* (in progress).

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7.0 References

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Appendix A

Groundwater Quality Data

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CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0705	WL	06/03/2009	N001	SE	D	0.0095		FQ	#	0.00012	-
	mg/L	0705	WL	11/04/2009	N001	SE	D	0.019		F	#	6.7E-05	-
	mg/L	0707	WL	06/03/2009	N001	SF	D	0.950		F	#	0.00012	-
	mg/L	0707	WL	11/04/2009	N001	SF	D	0.900		F	#	6.7E-05	-
	mg/L	0710	WL	06/02/2009	N001	SF	U	0.029		F	#	0.00012	-
	mg/L	0710	WL	11/03/2009	N001	SF	U	0.014		F	#	6.7E-05	-
	mg/L	0716	WL	06/02/2009	N001	SF	O	0.340		F	#	0.00012	-
	mg/L	0716	WL	06/02/2009	N002	SF	O	0.360		F	#	0.00012	-
	mg/L	0716	WL	11/03/2009	N001	SF	O	0.210		F	#	6.7E-05	-
	mg/L	0717	WL	06/02/2009	N001	SE	O	0.260		F	#	0.00012	-
	mg/L	0717	WL	11/03/2009	N001	SE	O	0.190		F	#	6.7E-05	-
	mg/L	0718	WL	06/04/2009	N001	SF	D	0.370		F	#	0.00012	-
	mg/L	0718	WL	11/03/2009	N001	SF	D	0.930		F	#	6.7E-05	-
	mg/L	0719	WL	06/04/2009	N001	SE	D	0.0022	B	UFQ	#	0.00012	-
	mg/L	0719	WL	11/03/2009	N001	SE	D	0.061		FQ	#	6.7E-05	-
	mg/L	0720	WL	06/03/2009	N001	SF	C	0.0067		F	#	0.00012	-
	mg/L	0720	WL	11/03/2009	N001	SF	C	0.0077		F	#	6.7E-05	-
	mg/L	0721	WL	06/03/2009	N001	SE	C	0.0045	B	F	#	0.00012	-
	mg/L	0721	WL	11/03/2009	N001	SE	C	0.0034	B	F	#	6.7E-05	-
	mg/L	0722R	WL	06/03/2009	N001	SF		0.0031	B	F	#	0.00012	-
	mg/L	0722R	WL	11/03/2009	N001	SF		0.00013	B	JF	#	6.7E-05	-
	mg/L	0723	WL	06/03/2009	N001	SE	D	0.570		F	#	0.00012	-
	mg/L	0723	WL	11/03/2009	N001	SE	D	0.460		F	#	6.7E-05	-
	mg/L	0729	WL	06/03/2009	N001	SF	D	0.0039	B	F	#	0.00012	-
	mg/L	0729	WL	11/03/2009	N001	SF	D	0.0011	B	JF	#	6.7E-05	-
	mg/L	0730	WL	06/03/2009	N001	SE	D	0.100		F	#	0.00012	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0730	WL	11/03/2009	N001	SE	D	0.046		FQ	#	6.7E-05	-
	mg/L	0784	WL	06/02/2009	N001	SF	U	0.260		F	#	0.00012	-
	mg/L	0784	WL	11/04/2009	N001	SF	U	0.300		F	#	6.7E-05	-
	mg/L	0788	WL	06/03/2009	N001	SF	C	0.029		F	#	0.00012	-
	mg/L	0788	WL	11/04/2009	N001	SF	C	0.0077		F	#	6.7E-05	-
	mg/L	0789	WL	06/03/2009	N001	SF	D	0.033		F	#	0.00012	-
	mg/L	0789	WL	06/03/2009	N002	SF	D	0.031		F	#	0.00012	-
	mg/L	0789	WL	11/04/2009	N001	SF	D	0.220		F	#	6.7E-05	-
	mg/L	0789	WL	11/04/2009	N002	SF	D	0.230		F	#	6.7E-05	-
	mg/L	0809	WL	06/03/2009	N001	SF		0.800		F	#	0.00012	-
	mg/L	0809	WL	11/04/2009	N001	SF		0.730		F	#	6.7E-05	-
	mg/L	0824	WL	06/04/2009	N001	SF		0.0021	B	F	#	0.00012	-
	mg/L	0824	WL	11/04/2009	N001	SF		0.0015	B	JF	#	6.7E-05	-
	mg/L	0826	WL	06/03/2009	N001	SF		0.570		F	#	0.00012	-
	mg/L	0826	WL	11/04/2009	N001	SF		0.710		F	#	6.7E-05	-
Molybdenum	mg/L	0705	WL	06/03/2009	N001	SE	D	0.0029		FQ	#	0.00007	-
	mg/L	0705	WL	11/04/2009	N001	SE	D	0.0029		F	#	8.5E-05	-
	mg/L	0707	WL	06/03/2009	N001	SF	D	0.590		F	#	0.0014	-
	mg/L	0707	WL	11/04/2009	N001	SF	D	0.680		F	#	0.0017	-
	mg/L	0710	WL	06/02/2009	N001	SF	U	0.0017		F	#	0.00007	-
	mg/L	0710	WL	11/03/2009	N001	SF	U	0.0019		F	#	8.5E-05	-
	mg/L	0716	WL	06/02/2009	N001	SF	O	0.170		F	#	0.00035	-
	mg/L	0716	WL	06/02/2009	N002	SF	O	0.160		F	#	0.00035	-
	mg/L	0716	WL	11/03/2009	N001	SF	O	0.160		F	#	0.00085	-
	mg/L	0717	WL	06/02/2009	N001	SE	O	0.0083		F	#	0.00007	-
	mg/L	0717	WL	11/03/2009	N001	SE	O	0.0065		F	#	8.5E-05	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0718	WL	06/04/2009	N001	SF	D	0.073		F	#	0.00035	-
	mg/L	0718	WL	11/03/2009	N001	SF	D	0.120		F	#	0.00085	-
	mg/L	0719	WL	06/04/2009	N001	SE	D	0.015		FQ	#	0.00007	-
	mg/L	0719	WL	11/03/2009	N001	SE	D	0.014		FQ	#	8.5E-05	-
	mg/L	0720	WL	06/03/2009	N001	SF	C	0.0012		UF	#	0.00007	-
	mg/L	0720	WL	11/03/2009	N001	SF	C	0.0015		F	#	8.5E-05	-
	mg/L	0721	WL	06/03/2009	N001	SE	C	0.0027		F	#	0.00007	-
	mg/L	0721	WL	11/03/2009	N001	SE	C	0.0027		F	#	8.5E-05	-
	mg/L	0722R	WL	06/03/2009	N001	SF		0.065		F	#	0.00014	-
	mg/L	0722R	WL	11/03/2009	N001	SF		0.072		F	#	0.0017	-
	mg/L	0723	WL	06/03/2009	N001	SE	D	0.00038	B	UF	#	0.00007	-
	mg/L	0723	WL	11/03/2009	N001	SE	D	0.00035	B	UF	#	8.5E-05	-
	mg/L	0729	WL	06/03/2009	N001	SF	D	0.0031		F	#	0.00007	-
	mg/L	0729	WL	11/03/2009	N001	SF	D	0.0037		F	#	8.5E-05	-
	mg/L	0730	WL	06/03/2009	N001	SE	D	0.0048		F	#	0.00007	-
	mg/L	0730	WL	11/03/2009	N001	SE	D	0.0047		FQ	#	8.5E-05	-
	mg/L	0784	WL	06/02/2009	N001	SF	U	0.015		F	#	0.00007	-
	mg/L	0784	WL	11/04/2009	N001	SF	U	0.016		F	#	8.5E-05	-
	mg/L	0788	WL	06/03/2009	N001	SF	C	0.023		F	#	0.00007	-
	mg/L	0788	WL	11/04/2009	N001	SF	C	0.024		F	#	8.5E-05	-
	mg/L	0789	WL	06/03/2009	N001	SF	D	0.360		F	#	0.0014	-
	mg/L	0789	WL	06/03/2009	N002	SF	D	0.340		F	#	0.0014	-
	mg/L	0789	WL	11/04/2009	N001	SF	D	0.510		F	#	0.0043	-
	mg/L	0789	WL	11/04/2009	N002	SF	D	0.560		F	#	0.0043	-
	mg/L	0809	WL	06/03/2009	N001	SF		0.0024		F	#	0.00007	-
	mg/L	0809	WL	11/04/2009	N001	SF		0.0017		F	#	8.5E-05	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0824	WL	06/04/2009	N001	SF		0.0037		F	#	0.00007	-
	mg/L	0824	WL	11/04/2009	N001	SF		0.0041		F	#	8.5E-05	-
	mg/L	0826	WL	06/03/2009	N001	SF		0.021		F	#	0.00007	-
	mg/L	0826	WL	11/04/2009	N001	SF		0.023		F	#	8.5E-05	-
Oxidation Reduction Potential	mV	0705	WL	06/03/2009	N001	SE	D	90.5		FQ	#	-	-
	mV	0705	WL	11/04/2009	N001	SE	D	-22.9		F	#	-	-
	mV	0707	WL	06/03/2009	N001	SF	D	108.7		F	#	-	-
	mV	0707	WL	11/04/2009	N001	SF	D	42.5		F	#	-	-
	mV	0710	WL	06/02/2009	N001	SF	U	152.9		F	#	-	-
	mV	0710	WL	11/03/2009	N001	SF	U	17.1		F	#	-	-
	mV	0716	WL	06/02/2009	N001	SF	O	45.0		F	#	-	-
	mV	0716	WL	11/03/2009	N001	SF	O	84.5		F	#	-	-
	mV	0717	WL	06/02/2009	N001	SE	O	44.1		F	#	-	-
	mV	0717	WL	11/03/2009	N001	SE	O	-83.8		F	#	-	-
	mV	0718	WL	06/04/2009	N001	SF	D	186.5		F	#	-	-
	mV	0718	WL	11/03/2009	N001	SF	D	89.9		F	#	-	-
	mV	0719	WL	06/04/2009	N001	SE	D	158.3		FQ	#	-	-
	mV	0719	WL	11/03/2009	N001	SE	D	1.9		FQ	#	-	-
	mV	0720	WL	06/03/2009	N001	SF	C	36.6		F	#	-	-
	mV	0720	WL	11/03/2009	N001	SF	C	-124.6		F	#	-	-
	mV	0721	WL	06/03/2009	N001	SE	C	-8.0		F	#	-	-
	mV	0721	WL	11/03/2009	N001	SE	C	-37.6		F	#	-	-
	mV	0722R	WL	06/03/2009	N001	SF		22.6		F	#	-	-
	mV	0722R	WL	11/03/2009	N001	SF		29.6		F	#	-	-
	mV	0723	WL	06/03/2009	N001	SE	D	-6.4		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potential	mV	0723	WL	11/03/2009	N001	SE	D	-35.9		F	#	-	-
	mV	0729	WL	06/03/2009	N001	SF	D	49.2		F	#	-	-
	mV	0729	WL	11/03/2009	N001	SF	D	175.3		F	#	-	-
	mV	0730	WL	06/03/2009	N001	SE	D	16.8		F	#	-	-
	mV	0730	WL	11/03/2009	N001	SE	D	97		FQ	#	-	-
	mV	0784	WL	06/02/2009	N001	SF	U	-30.6		F	#	-	-
	mV	0784	WL	11/04/2009	N001	SF	U	-29.2		F	#	-	-
	mV	0788	WL	06/03/2009	N001	SF	C	102.8		F	#	-	-
	mV	0788	WL	11/04/2009	N001	SF	C	36.2		F	#	-	-
	mV	0789	WL	06/03/2009	N001	SF	D	143.8		F	#	-	-
	mV	0789	WL	11/04/2009	N001	SF	D	-2.4		F	#	-	-
	mV	0809	WL	06/03/2009	N001	SF		28.4		F	#	-	-
	mV	0809	WL	11/04/2009	N001	SF		-23.0		F	#	-	-
	mV	0824	WL	06/04/2009	N001	SF		183.0		F	#	-	-
	mV	0824	WL	11/04/2009	N001	SF		69.7		F	#	-	-
	mV	0826	WL	06/03/2009	N001	SF		27.6		F	#	-	-
	mV	0826	WL	11/04/2009	N001	SF		-4.1		F	#	-	-
pH	s.u.	0705	WL	06/03/2009	N001	SE	D	8.36		FQ	#	-	-
	s.u.	0705	WL	11/04/2009	N001	SE	D	8.48		F	#	-	-
	s.u.	0707	WL	06/03/2009	N001	SF	D	7.06		F	#	-	-
	s.u.	0707	WL	11/04/2009	N001	SF	D	7.04		F	#	-	-
	s.u.	0710	WL	06/02/2009	N001	SF	U	7.60		F	#	-	-
	s.u.	0710	WL	11/03/2009	N001	SF	U	7.50		F	#	-	-
	s.u.	0716	WL	06/02/2009	N001	SF	O	7.34		F	#	-	-
	s.u.	0716	WL	11/03/2009	N001	SF	O	7.21		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0717	WL	06/02/2009	N001	SE	O	7.77		F	#	-	-
	s.u.	0717	WL	11/03/2009	N001	SE	O	7.77		F	#	-	-
	s.u.	0718	WL	06/04/2009	N001	SF	D	7.21		F	#	-	-
	s.u.	0718	WL	11/03/2009	N001	SF	D	7.10		F	#	-	-
	s.u.	0719	WL	06/04/2009	N001	SE	D	7.73		FQ	#	-	-
	s.u.	0719	WL	11/03/2009	N001	SE	D	7.8		FQ	#	-	-
	s.u.	0720	WL	06/03/2009	N001	SF	C	7.32		F	#	-	-
	s.u.	0720	WL	11/03/2009	N001	SF	C	7.33		F	#	-	-
	s.u.	0721	WL	06/03/2009	N001	SE	C	8.94		F	#	-	-
	s.u.	0721	WL	11/03/2009	N001	SE	C	8.82		F	#	-	-
	s.u.	0722R	WL	06/03/2009	N001	SF		6.98		F	#	-	-
	s.u.	0722R	WL	11/03/2009	N001	SF		7.0		F	#	-	-
	s.u.	0723	WL	06/03/2009	N001	SE	D	7.11		F	#	-	-
	s.u.	0723	WL	11/03/2009	N001	SE	D	7.13		F	#	-	-
	s.u.	0729	WL	06/03/2009	N001	SF	D	7.29		F	#	-	-
	s.u.	0729	WL	11/03/2009	N001	SF	D	7.20		F	#	-	-
	s.u.	0730	WL	06/03/2009	N001	SE	D	7.55		F	#	-	-
	s.u.	0730	WL	11/03/2009	N001	SE	D	7.4		FQ	#	-	-
	s.u.	0784	WL	06/02/2009	N001	SF	U	8.09		F	#	-	-
	s.u.	0784	WL	11/04/2009	N001	SF	U	8.08		F	#	-	-
	s.u.	0788	WL	06/03/2009	N001	SF	C	7.40		F	#	-	-
	s.u.	0788	WL	11/04/2009	N001	SF	C	7.42		F	#	-	-
	s.u.	0789	WL	06/03/2009	N001	SF	D	7.37		F	#	-	-
	s.u.	0789	WL	11/04/2009	N001	SF	D	7.11		F	#	-	-
	s.u.	0809	WL	06/03/2009	N001	SF		7.77		F	#	-	-
	s.u.	0809	WL	11/04/2009	N001	SF		7.65		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0824	WL	06/04/2009	N001	SF		7.35		F	#	-	-
	s.u.	0824	WL	11/04/2009	N001	SF		7.27		F	#	-	-
	s.u.	0826	WL	06/03/2009	N001	SF		7.39		F	#	-	-
	s.u.	0826	WL	11/04/2009	N001	SF		7.30		F	#	-	-
Specific Conductance	umhos/cm	0705	WL	06/03/2009	N001	SE	D	1175		FQ	#	-	-
	umhos/cm	0705	WL	11/04/2009	N001	SE	D	1235		F	#	-	-
	umhos/cm	0707	WL	06/03/2009	N001	SF	D	3469		F	#	-	-
	umhos/cm	0707	WL	11/04/2009	N001	SF	D	3651		F	#	-	-
	umhos/cm	0710	WL	06/02/2009	N001	SF	U	677		F	#	-	-
	umhos/cm	0710	WL	11/03/2009	N001	SF	U	492		F	#	-	-
	umhos/cm	0716	WL	06/02/2009	N001	SF	O	1116		F	#	-	-
	umhos/cm	0716	WL	11/03/2009	N001	SF	O	1214		F	#	-	-
	umhos/cm	0717	WL	06/02/2009	N001	SE	O	1877		F	#	-	-
	umhos/cm	0717	WL	11/03/2009	N001	SE	O	1979		F	#	-	-
	umhos/cm	0718	WL	06/04/2009	N001	SF	D	3443		F	#	-	-
	umhos/cm	0718	WL	11/03/2009	N001	SF	D	4479		F	#	-	-
	umhos/cm	0719	WL	06/04/2009	N001	SE	D	1165		FQ	#	-	-
	umhos/cm	0719	WL	11/03/2009	N001	SE	D	1163		FQ	#	-	-
	umhos/cm	0720	WL	06/03/2009	N001	SF	C	808		F	#	-	-
	umhos/cm	0720	WL	11/03/2009	N001	SF	C	735		F	#	-	-
	umhos/cm	0721	WL	06/03/2009	N001	SE	C	862		F	#	-	-
	umhos/cm	0721	WL	11/03/2009	N001	SE	C	907		F	#	-	-
	umhos/cm	0722R	WL	06/03/2009	N001	SF		1874		F	#	-	-
	umhos/cm	0722R	WL	11/03/2009	N001	SF		1511		F	#	-	-
	umhos/cm	0723	WL	06/03/2009	N001	SE	D	3900		F	#	-	-
	umhos/cm	0723	WL	11/03/2009	N001	SE	D	3892		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0729	WL	06/03/2009	N001	SF	D	840		F	#	-	-
	umhos/cm	0729	WL	11/03/2009	N001	SF	D	719		F	#	-	-
	umhos/cm	0730	WL	06/03/2009	N001	SE	D	953		F	#	-	-
	umhos/cm	0730	WL	11/03/2009	N001	SE	D	970		FQ	#	-	-
	umhos/cm	0784	WL	06/02/2009	N001	SF	U	5034		F	#	-	-
	umhos/cm	0784	WL	11/04/2009	N001	SF	U	4588		F	#	-	-
	umhos/cm	0788	WL	06/03/2009	N001	SF	C	1901		F	#	-	-
	umhos/cm	0788	WL	11/04/2009	N001	SF	C	1913		F	#	-	-
	umhos/cm	0789	WL	06/03/2009	N001	SF	D	7981		F	#	-	-
	umhos/cm	0789	WL	11/04/2009	N001	SF	D	6574		F	#	-	-
	umhos/cm	0809	WL	06/03/2009	N001	SF		697		F	#	-	-
	umhos/cm	0809	WL	11/04/2009	N001	SF		885		F	#	-	-
	umhos/cm	0824	WL	06/04/2009	N001	SF		910		F	#	-	-
	umhos/cm	0824	WL	11/04/2009	N001	SF		938		F	#	-	-
	umhos/cm	0826	WL	06/03/2009	N001	SF		1516		F	#	-	-
	umhos/cm	0826	WL	11/04/2009	N001	SF		1814		F	#	-	-
Sulfate	mg/L	0705	WL	06/03/2009	N001	SE	D	420		FQ	#	5	-
	mg/L	0705	WL	11/04/2009	N001	SE	D	440		F	#	5	-
	mg/L	0707	WL	06/03/2009	N001	SF	D	1800		F	#	25	-
	mg/L	0707	WL	11/04/2009	N001	SF	D	1900		F	#	25	-
	mg/L	0710	WL	06/02/2009	N001	SF	U	130		F	#	5	-
	mg/L	0710	WL	11/03/2009	N001	SF	U	79		F	#	0.5	-
	mg/L	0716	WL	06/02/2009	N001	SF	O	290		F	#	5	-
	mg/L	0716	WL	06/02/2009	N002	SF	O	300		F	#	5	-
	mg/L	0716	WL	11/03/2009	N001	SF	O	350		F	#	5	-
	mg/L	0717	WL	06/02/2009	N001	SE	O	700		F	#	10	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0717	WL	11/03/2009	N001	SE	O	740		F	#	10	-
	mg/L	0718	WL	06/04/2009	N001	SF	D	1500		F	#	25	-
	mg/L	0718	WL	11/03/2009	N001	SF	D	2200		F	#	25	-
	mg/L	0719	WL	06/04/2009	N001	SE	D	430		FQ	#	5	-
	mg/L	0719	WL	11/03/2009	N001	SE	D	440		FQ	#	5	-
	mg/L	0720	WL	06/03/2009	N001	SF	C	180		F	#	5	-
	mg/L	0720	WL	11/03/2009	N001	SF	C	170		F	#	2.5	-
	mg/L	0721	WL	06/03/2009	N001	SE	C	270		F	#	5	-
	mg/L	0721	WL	11/03/2009	N001	SE	C	300		F	#	2.5	-
	mg/L	0722R	WL	06/03/2009	N001	SF		870		F	#	10	-
	mg/L	0722R	WL	11/03/2009	N001	SF		610		F	#	5	-
	mg/L	0723	WL	06/03/2009	N001	SE	D	1900		F	#	25	-
	mg/L	0723	WL	11/03/2009	N001	SE	D	1900		F	#	25	-
	mg/L	0729	WL	06/03/2009	N001	SF	D	120		F	#	5	-
	mg/L	0729	WL	11/03/2009	N001	SF	D	94		F	#	2.5	-
	mg/L	0730	WL	06/03/2009	N001	SE	D	170		F	#	5	-
	mg/L	0730	WL	11/03/2009	N001	SE	D	170		FQ	#	2.5	-
	mg/L	0784	WL	06/02/2009	N001	SF	U	2500		F	#	25	-
	mg/L	0784	WL	11/04/2009	N001	SF	U	2300		F	#	25	-
	mg/L	0788	WL	06/03/2009	N001	SF	C	660		F	#	10	-
	mg/L	0788	WL	11/04/2009	N001	SF	C	630		F	#	10	-
	mg/L	0789	WL	06/03/2009	N001	SF	D	4500		F	#	50	-
	mg/L	0789	WL	06/03/2009	N002	SF	D	4700		F	#	50	-
	mg/L	0789	WL	11/04/2009	N001	SF	D	3900		F	#	25	-
	mg/L	0789	WL	11/04/2009	N002	SF	D	3900		F	#	25	-
	mg/L	0809	WL	06/03/2009	N001	SF		270		F	#	5	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0809	WL	11/04/2009	N001	SF		290		F	#	2.5	-
	mg/L	0824	WL	06/04/2009	N001	SF		160		F	#	5	-
	mg/L	0824	WL	11/04/2009	N001	SF		150		F	#	2.5	-
	mg/L	0826	WL	06/03/2009	N001	SF		460		F	#	10	-
	mg/L	0826	WL	11/04/2009	N001	SF		580		F	#	10	-
Temperature	C	0705	WL	06/03/2009	N001	SE	D	10.16		FQ	#	-	-
	C	0705	WL	11/04/2009	N001	SE	D	9.97		F	#	-	-
	C	0707	WL	06/03/2009	N001	SF	D	9.38		F	#	-	-
	C	0707	WL	11/04/2009	N001	SF	D	10.08		F	#	-	-
	C	0710	WL	06/02/2009	N001	SF	U	7.35		F	#	-	-
	C	0710	WL	11/03/2009	N001	SF	U	13.02		F	#	-	-
	C	0716	WL	06/02/2009	N001	SF	O	8.74		F	#	-	-
	C	0716	WL	11/03/2009	N001	SF	O	11.42		F	#	-	-
	C	0717	WL	06/02/2009	N001	SE	O	9.41		F	#	-	-
	C	0717	WL	11/03/2009	N001	SE	O	10.23		F	#	-	-
	C	0718	WL	06/04/2009	N001	SF	D	9.51		F	#	-	-
	C	0718	WL	11/03/2009	N001	SF	D	13.8		F	#	-	-
	C	0719	WL	06/04/2009	N001	SE	D	11.99		FQ	#	-	-
	C	0719	WL	11/03/2009	N001	SE	D	11.0		FQ	#	-	-
	C	0720	WL	06/03/2009	N001	SF	C	8.48		F	#	-	-
	C	0720	WL	11/03/2009	N001	SF	C	12.41		F	#	-	-
	C	0721	WL	06/03/2009	N001	SE	C	10.47		F	#	-	-
	C	0721	WL	11/03/2009	N001	SE	C	11.67		F	#	-	-
	C	0722R	WL	06/03/2009	N001	SF		9.84		F	#	-	-
	C	0722R	WL	11/03/2009	N001	SF		14.3		F	#	-	-
	C	0723	WL	06/03/2009	N001	SE	D	11.08		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Temperature	C	0723	WL	11/03/2009	N001	SE	D	12.62		F	#	-	-
	C	0729	WL	06/03/2009	N001	SF	D	8.96		F	#	-	-
	C	0729	WL	11/03/2009	N001	SF	D	11.83		F	#	-	-
	C	0730	WL	06/03/2009	N001	SE	D	10.50		F	#	-	-
	C	0730	WL	11/03/2009	N001	SE	D	10.72		FQ	#	-	-
	C	0784	WL	06/02/2009	N001	SF	U	11.31		F	#	-	-
	C	0784	WL	11/04/2009	N001	SF	U	13.11		F	#	-	-
	C	0788	WL	06/03/2009	N001	SF	C	9.72		F	#	-	-
	C	0788	WL	11/04/2009	N001	SF	C	11.49		F	#	-	-
	C	0789	WL	06/03/2009	N001	SF	D	10.26		F	#	-	-
	C	0789	WL	11/04/2009	N001	SF	D	11.14		F	#	-	-
	C	0809	WL	06/03/2009	N001	SF		11.38		F	#	-	-
	C	0809	WL	11/04/2009	N001	SF		11.80		F	#	-	-
	C	0824	WL	06/04/2009	N001	SF		8.45		F	#	-	-
	C	0824	WL	11/04/2009	N001	SF		11.36		F	#	-	-
	C	0826	WL	06/03/2009	N001	SF		9.08		F	#	-	-
	C	0826	WL	11/04/2009	N001	SF		11.09		F	#	-	-
Turbidity	NTU	0705	WL	06/03/2009	N001	SE	D	3.82		FQ	#	-	-
	NTU	0705	WL	11/04/2009	N001	SE	D	1.95		F	#	-	-
	NTU	0707	WL	06/03/2009	N001	SF	D	2.99		F	#	-	-
	NTU	0707	WL	11/04/2009	N001	SF	D	0.89		F	#	-	-
	NTU	0710	WL	06/02/2009	N001	SF	U	6.77		F	#	-	-
	NTU	0710	WL	11/03/2009	N001	SF	U	4.16		F	#	-	-
	NTU	0716	WL	06/02/2009	N001	SF	O	8.73		F	#	-	-
	NTU	0716	WL	11/03/2009	N001	SF	O	4.7		F	#	-	-
	NTU	0717	WL	06/02/2009	N001	SE	O	6.22		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0717	WL	11/03/2009	N001	SE	O	2.67		F	#	-	-
	NTU	0718	WL	06/04/2009	N001	SF	D	3.72		F	#	-	-
	NTU	0718	WL	11/03/2009	N001	SF	D	3.7		F	#	-	-
	NTU	0719	WL	06/04/2009	N001	SE	D	5.39		FQ	#	-	-
	NTU	0719	WL	11/03/2009	N001	SE	D	4.56		FQ	#	-	-
	NTU	0720	WL	06/03/2009	N001	SF	C	9.23		F	#	-	-
	NTU	0720	WL	11/03/2009	N001	SF	C	2.3		F	#	-	-
	NTU	0721	WL	06/03/2009	N001	SE	C	4.27		F	#	-	-
	NTU	0721	WL	11/03/2009	N001	SE	C	2.3		F	#	-	-
	NTU	0722R	WL	06/03/2009	N001	SF		3.16		F	#	-	-
	NTU	0722R	WL	11/03/2009	N001	SF		2.0		F	#	-	-
	NTU	0723	WL	06/03/2009	N001	SE	D	6.11		F	#	-	-
	NTU	0723	WL	11/03/2009	N001	SE	D	2.2		F	#	-	-
	NTU	0729	WL	06/03/2009	N001	SF	D	4.11		F	#	-	-
	NTU	0729	WL	11/03/2009	N001	SF	D	2.9		F	#	-	-
	NTU	0730	WL	06/03/2009	N001	SE	D	9.72		F	#	-	-
	NTU	0730	WL	11/03/2009	N001	SE	D	6.2		FQ	#	-	-
	NTU	0784	WL	06/02/2009	N001	SF	U	4.58		F	#	-	-
	NTU	0784	WL	11/04/2009	N001	SF	U	4.68		F	#	-	-
	NTU	0788	WL	06/03/2009	N001	SF	C	3.12		F	#	-	-
	NTU	0788	WL	11/04/2009	N001	SF	C	7.2		F	#	-	-
	NTU	0789	WL	06/03/2009	N001	SF	D	2.08		F	#	-	-
	NTU	0789	WL	11/04/2009	N001	SF	D	1.19		F	#	-	-
	NTU	0809	WL	06/03/2009	N001	SF		0.72		F	#	-	-
	NTU	0809	WL	11/04/2009	N001	SF		1.43		F	#	-	-
	NTU	0824	WL	06/04/2009	N001	SF		1.17		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0824	WL	11/04/2009	N001	SF		1.59		F	#	-	-
	NTU	0826	WL	06/03/2009	N001	SF		1.83		F	#	-	-
	NTU	0826	WL	11/04/2009	N001	SF		1.81		F	#	-	-
Uranium	mg/L	0705	WL	06/03/2009	N001	SE	D	0.00024		FQ	#	4.5E-06	-
	mg/L	0705	WL	11/04/2009	N001	SE	D	0.00019		F	#	2.4E-06	-
	mg/L	0707	WL	06/03/2009	N001	SF	D	0.740		F	#	0.00009	-
	mg/L	0707	WL	11/04/2009	N001	SF	D	0.840		F	#	4.9E-05	-
	mg/L	0710	WL	06/02/2009	N001	SF	U	0.0051		F	#	4.5E-06	-
	mg/L	0710	WL	11/03/2009	N001	SF	U	0.0026		F	#	2.4E-06	-
	mg/L	0716	WL	06/02/2009	N001	SF	O	0.190		F	#	2.2E-05	-
	mg/L	0716	WL	06/02/2009	N002	SF	O	0.190		F	#	2.2E-05	-
	mg/L	0716	WL	11/03/2009	N001	SF	O	0.240		F	#	2.4E-05	-
	mg/L	0717	WL	06/02/2009	N001	SE	O	0.00018		F	#	4.5E-06	-
	mg/L	0717	WL	11/03/2009	N001	SE	O	0.00007	B	UF	#	2.4E-06	-
	mg/L	0718	WL	06/04/2009	N001	SF	D	0.190		F	#	4.5E-05	-
	mg/L	0718	WL	11/03/2009	N001	SF	D	0.240		F	#	2.4E-05	-
	mg/L	0719	WL	06/04/2009	N001	SE	D	0.0007		FQ	#	4.5E-06	-
	mg/L	0719	WL	11/03/2009	N001	SE	D	0.00056		FQ	#	2.4E-06	-
	mg/L	0720	WL	06/03/2009	N001	SF	C	0.0062		F	#	4.5E-06	-
	mg/L	0720	WL	11/03/2009	N001	SF	C	0.0049		F	#	2.4E-06	-
	mg/L	0721	WL	06/03/2009	N001	SE	C	0.00009	B	UF	#	4.5E-06	-
	mg/L	0721	WL	11/03/2009	N001	SE	C	0.00009	B	F	#	2.4E-06	-
	mg/L	0722R	WL	06/03/2009	N001	SF		0.700		F	#	0.00009	-
	mg/L	0722R	WL	11/03/2009	N001	SF		0.450		F	#	4.9E-05	-
	mg/L	0723	WL	06/03/2009	N001	SE	D	0.00005	B	UF	#	4.5E-06	-
	mg/L	0723	WL	11/03/2009	N001	SE	D	0.00002	B	UF	#	2.4E-06	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0729	WL	06/03/2009	N001	SF	D	0.014		F	#	4.5E-06	-
	mg/L	0729	WL	11/03/2009	N001	SF	D	0.0072		F	#	2.4E-06	-
	mg/L	0730	WL	06/03/2009	N001	SE	D	0.0095		F	#	4.5E-06	-
	mg/L	0730	WL	11/03/2009	N001	SE	D	0.0091		FQ	#	2.4E-06	-
	mg/L	0784	WL	06/02/2009	N001	SF	U	0.0027		F	#	4.5E-06	-
	mg/L	0784	WL	11/04/2009	N001	SF	U	0.0018		F	#	2.4E-06	-
	mg/L	0788	WL	06/03/2009	N001	SF	C	0.033		F	#	4.5E-06	-
	mg/L	0788	WL	11/04/2009	N001	SF	C	0.034		F	#	2.4E-06	-
	mg/L	0789	WL	06/03/2009	N001	SF	D	2.100		F	#	0.00009	-
	mg/L	0789	WL	06/03/2009	N002	SF	D	2.100		F	#	0.00009	-
	mg/L	0789	WL	11/04/2009	N001	SF	D	1.300		F	#	0.00012	-
	mg/L	0789	WL	11/04/2009	N002	SF	D	1.500		F	#	0.00012	-
	mg/L	0809	WL	06/03/2009	N001	SF		0.001		F	#	4.5E-06	-
	mg/L	0809	WL	11/04/2009	N001	SF		0.0065		F	#	2.4E-06	-
	mg/L	0824	WL	06/04/2009	N001	SF		0.020		F	#	4.5E-06	-
	mg/L	0824	WL	11/04/2009	N001	SF		0.019		F	#	2.4E-06	-
	mg/L	0826	WL	06/03/2009	N001	SF		0.036		F	#	4.5E-06	-
	mg/L	0826	WL	11/04/2009	N001	SF		0.041		F	#	2.4E-06	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:59 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY

RECORDS: SELECTED FROM USEE200 WHERE site_code='RVT01' AND location_code in('0705','0707','0710','0716','0717','0718','0719','0720','0721','0722R','0723','0729','0730','0784','0788','0789','0809','0824','0826') AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #1/1/2009# and #12/31/2009#

SAMPLE ID CODES: 000X = Filtered sample. N00X = Unfiltered sample. X = replicate number.

LOCATION TYPES: WL WELL

ZONES OF COMPLETION: a zone of completion with a "-" is cross-screened and, therefore, has two zones of completion (1st zone - 2nd zone).

SE SEMICONFINED SANDSTONE SF SURFICIAL

FLOW CODES: C CROSS GRADIENT D DOWN GRADIENT O ON-SITE U UPGRADIENT

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
+	Correlation coefficient for MSA < 0.995.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: 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
M	GFAA duplicate injection precision not met.
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC).
P	> 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
S	Result determined by method of standard addition (MSA).
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Y	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Z	Laboratory defined (USEPA CLP organic) 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.	N	Presumptive evidence that analyte is present. The analyte is "tentatively identified".	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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Appendix B

Water Level Data

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STATIC WATER LEVELS (USEE700) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/3/2010 11:37 am

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	WATER ELEVATION (FT)	WATER LEVEL FLAG
			DATE	TIME			
0101	O	4946.58	06/02/2009	05:01	10.10	4936.48	
		4946.58	11/04/2009	15:58	9.63	4936.95	
0110	O	4944.35	06/02/2009	05:33	8.93	4935.42	
		4944.35	11/04/2009	16:07	9.26	4935.09	
0111	O	4946.87	06/02/2009	05:32	9.00	4937.87	
		4946.87	11/04/2009	16:08	9.29	4937.58	
0700	U	4951.38	06/01/2009	19:56	5.82	4945.56	
		4951.38	11/03/2009	14:00	5.31	4946.07	
0702	D	4931.00	06/03/2009	02:50	4.60	4926.40	
		4931.00	11/04/2009	10:35	6.44	4924.56	
0705	D	4930.80	06/03/2009	15:25	4.41	4926.39	
		4930.80	11/04/2009	11:20	6.57	4924.23	
0707	D	4931.00	06/03/2009	15:10	4.42	4926.58	
		4931.00	11/04/2009	10:55	5.57	4925.43	
0709	D	4930.70	06/02/2009	05:39	4.75	4925.95	
		4930.70	11/04/2009	10:34	8.99	4921.71	
0710	U	4947.90	06/02/2009	15:10	5.15	4942.75	
		4947.90	11/03/2009	14:50	5.45	4942.45	
0716	O	4939.12	06/02/2009	16:10	8.45	4930.67	
		4939.12	11/03/2009	16:15	8.38	4930.74	
0717	O	4938.80	06/02/2009	15:50	8.07	4930.73	
		4938.80	11/03/2009	16:35	8.02	4930.78	
0718	D	4937.60	06/04/2009	10:00	7.45	4930.15	
		4937.60	11/03/2009	09:50	8.00	4929.60	
0719	D	4937.55	06/04/2009	10:45	7.06	4930.49	
		4937.55	11/03/2009	09:30	7.54	4930.01	
0720	C	4940.46	06/03/2009	10:20	4.74	4935.72	
		4940.46	11/03/2009	11:30	4.79	4935.67	
0721	C	4940.47	06/03/2009	10:40	7.10	4933.37	
		4940.47	11/03/2009	11:07	7.61	4932.86	
0722R		4937.06	06/03/2009	09:50	8.51	4928.55	
		4937.06	11/03/2009	10:45	8.72	4928.34	
0723	D	4936.01	06/03/2009	09:30	7.31	4928.70	
		4936.01	11/03/2009	10:25	7.55	4928.46	

STATIC WATER LEVELS (USEE700) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/3/2010 11:37 am

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	WATER ELEVATION (FT)	WATER LEVEL FLAG
			DATE	TIME			
0724	U	4941.36	06/01/2009	22:24	6.87	4934.49	
		4941.36	11/03/2009	15:25	6.88	4934.48	
0725	U	4941.66	06/01/2009	22:21	7.10	4934.56	
		4941.66	11/03/2009	16:56	7.18	4934.48	
0726	U	4942.00	06/01/2009	22:08	5.82	4936.18	
		4942.00	11/03/2009	16:57	6.14	4935.86	
0727	U	4951.69	06/02/2009	05:35	9.35	4942.34	
		4951.69	11/04/2009	16:08	9.93	4941.76	
0728	U	4946.01	06/02/2009	02:33	6.71	4939.30	
		4946.01	11/04/2009	16:11	8.11	4937.90	
0729	D	4932.75	06/03/2009	08:55	6.84	4925.91	
		4932.75	11/03/2009	09:00	6.39	4926.36	
0730	D	4933.08	06/03/2009	08:20	7.53	4925.55	
		4933.08	11/03/2009	09:05	6.72	4926.36	
0732	U	4945.07	06/02/2009	03:25	7.73	4937.34	
		4945.07	11/04/2009	10:36	7.39	4937.68	
0733	U	4946.76	06/01/2009	19:50	3.58	4943.18	
		4946.76	11/03/2009	13:57	6.99	4939.77	
0734	U	4946.08	06/01/2009	19:53	5.14	4940.94	
		4946.08	11/03/2009	14:00	8.06	4938.02	
0736	U	4946.00	06/01/2009	22:26	6.81	4939.19	
		4946.00	11/03/2009	14:37	6.49	4939.51	
0784	U	4945.45	06/02/2009	17:20	6.35	4939.10	
		4945.45	11/04/2009	15:55	6.34	4939.11	
0788	C	4935.09	06/03/2009	15:55	7.49	4927.60	
		4935.09	11/04/2009	12:40	8.88	4926.21	
0789	D	4933.66	06/03/2009	14:35	5.93	4927.73	
		4933.66	11/04/2009	10:10	9.35	4924.31	
0809		4932.09	06/03/2009	17:15	4.34	4927.75	
		4932.09	11/04/2009	14:10	7.82	4924.27	
0824		4928.27	06/04/2009	08:35	5.56	4922.71	
		4928.27	11/04/2009	15:10	5.76	4922.51	
0826		4936.98	06/03/2009	12:00	6.72	4930.26	

STATIC WATER LEVELS (USEE700) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/3/2010 11:37 am

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	WATER ELEVATION (FT)	WATER LEVEL FLAG
			DATE	TIME			
0826		4936.98	11/04/2009	13:00	7.64	4929.34	

RECORDS: SELECTED FROM USEE700 WHERE site_code='RVT01' AND LOG_DATE between #1/1/2009# and #12/31/2009#

FLOW CODES: C CROSS GRADIENT D DOWN GRADIENT O ON-SITE
U UPGRADIENT

WATER LEVEL FLAGS:

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Appendix C

Domestic Well Data

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CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:35 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0405	WL	06/02/2009	N001	NR	N	0.0028	B		#	0.00012	-
	mg/L	0405	WL	11/03/2009	N001	NR	N	0.0036	B		#	6.7E-05	-
	mg/L	0430	WL	06/01/2009	N001	NR	N	0.0056			#	0.00012	-
	mg/L	0430	WL	11/03/2009	N001	NR	N	0.0076	E		#	6.7E-05	-
	mg/L	0436	WL	06/02/2009	N001	NR	N	0.0023	B	U	#	0.00012	-
	mg/L	0436	WL	11/03/2009	N001	NR	N	0.0023	B	J	#	6.7E-05	-
	mg/L	0460	WL	06/02/2009	N001	NR	N	0.0017	B	U	#	0.00012	-
	mg/L	0460	WL	11/03/2009	N001	NR	N	0.00088	B	J	#	6.7E-05	-
	mg/L	0828	WL	06/02/2009	N001		O	0.0031	B		#	0.00012	-
	mg/L	0836	WL	06/02/2009	N001			0.0059			#	0.00012	-
Molybdenum	mg/L	0405	WL	06/02/2009	N001	NR	N	0.0033			#	0.00007	-
	mg/L	0405	WL	11/03/2009	N001	NR	N	0.0044			#	8.5E-05	-
	mg/L	0430	WL	06/01/2009	N001	NR	N	0.0026			#	0.00007	-
	mg/L	0430	WL	11/03/2009	N001	NR	N	0.0025		U	#	8.5E-05	-
	mg/L	0436	WL	06/02/2009	N001	NR	N	0.0032			#	0.00007	-
	mg/L	0436	WL	11/03/2009	N001	NR	N	0.0033			#	8.5E-05	-
	mg/L	0460	WL	06/02/2009	N001	NR	N	0.003			#	0.00007	-
	mg/L	0460	WL	11/03/2009	N001	NR	N	0.0029			#	8.5E-05	-
	mg/L	0828	WL	06/02/2009	N001		O	0.0031			#	0.00007	-
	mg/L	0836	WL	06/02/2009	N001			0.0024			#	0.00007	-
Oxidation Reduction Potential	mV	0405	WL	06/02/2009	N001	NR	N	141.6			#	-	-
	mV	0405	WL	11/03/2009	N001	NR	N	16.0			#	-	-
	mV	0430	WL	06/01/2009	N001	NR	N	243			#	-	-
	mV	0430	WL	11/03/2009	N001	NR	N	65.9			#	-	-
	mV	0436	WL	06/02/2009	N001	NR	N	216.6			#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:35 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potential	mV	0436	WL	11/03/2009	N001	NR	N	51.9	#	-	-
	mV	0460	WL	06/02/2009	N001	NR	N	191.4	#	-	-
	mV	0460	WL	11/03/2009	N001	NR	N	54.4	#	-	-
	mV	0828	WL	06/02/2009	N001		O	229.7	#	-	-
	mV	0836	WL	06/02/2009	N001			112.0	#	-	-
pH	s.u.	0405	WL	06/02/2009	N001	NR	N	8.87	#	-	-
	s.u.	0405	WL	11/03/2009	N001	NR	N	8.80	#	-	-
	s.u.	0430	WL	06/01/2009	N001	NR	N	8.43	#	-	-
	s.u.	0430	WL	11/03/2009	N001	NR	N	8.78	#	-	-
	s.u.	0436	WL	06/02/2009	N001	NR	N	8.92	#	-	-
	s.u.	0436	WL	11/03/2009	N001	NR	N	8.87	#	-	-
	s.u.	0460	WL	06/02/2009	N001	NR	N	8.86	#	-	-
	s.u.	0460	WL	11/03/2009	N001	NR	N	8.82	#	-	-
	s.u.	0828	WL	06/02/2009	N001		O	8.84	#	-	-
	s.u.	0836	WL	06/02/2009	N001			9.55	#	-	-
Specific Conductance	umhos/cm	0405	WL	06/02/2009	N001	NR	N	892	#	-	-
	umhos/cm	0405	WL	11/03/2009	N001	NR	N	987	#	-	-
	umhos/cm	0430	WL	06/01/2009	N001	NR	N	729	#	-	-
	umhos/cm	0430	WL	11/03/2009	N001	NR	N	772	#	-	-
	umhos/cm	0436	WL	06/02/2009	N001	NR	N	738	#	-	-
	umhos/cm	0436	WL	11/03/2009	N001	NR	N	767	#	-	-
	umhos/cm	0460	WL	06/02/2009	N001	NR	N	682	#	-	-
	umhos/cm	0460	WL	11/03/2009	N001	NR	N	743	#	-	-
	umhos/cm	0828	WL	06/02/2009	N001		O	737	#	-	-
	umhos/cm	0836	WL	06/02/2009	N001			785	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:35 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0405	WL	06/02/2009	N001	NR	N	270	#	5	-
	mg/L	0405	WL	11/03/2009	N001	NR	N	360	#	2.5	-
	mg/L	0430	WL	06/01/2009	N001	NR	N	180	#	5	-
	mg/L	0430	WL	11/03/2009	N001	NR	N	190	#	2.5	-
	mg/L	0436	WL	06/02/2009	N001	NR	N	190	#	5	-
	mg/L	0436	WL	11/03/2009	N001	NR	N	190	#	2.5	-
	mg/L	0460	WL	06/02/2009	N001	NR	N	150	#	5	-
	mg/L	0460	WL	11/03/2009	N001	NR	N	170	#	2.5	-
	mg/L	0828	WL	06/02/2009	N001		O	190	#	5	-
	mg/L	0836	WL	06/02/2009	N001			200	#	5	-
Temperature	C	0405	WL	06/02/2009	N001	NR	N	14.03	#	-	-
	C	0405	WL	11/03/2009	N001	NR	N	11.68	#	-	-
	C	0430	WL	06/01/2009	N001	NR	N	10.90	#	-	-
	C	0430	WL	11/03/2009	N001	NR	N	15.78	#	-	-
	C	0436	WL	06/02/2009	N001	NR	N	18.02	#	-	-
	C	0436	WL	11/03/2009	N001	NR	N	14.83	#	-	-
	C	0460	WL	06/02/2009	N001	NR	N	14.58	#	-	-
	C	0460	WL	11/03/2009	N001	NR	N	28.87	#	-	-
	C	0828	WL	06/02/2009	N001		O	13.58	#	-	-
	C	0836	WL	06/02/2009	N001			9.32	#	-	-
Turbidity	NTU	0405	WL	06/02/2009	N001	NR	N	4.26	#	-	-
	NTU	0405	WL	11/03/2009	N001	NR	N	5.54	#	-	-
	NTU	0430	WL	06/01/2009	N001	NR	N	3.01	#	-	-
	NTU	0430	WL	11/03/2009	N001	NR	N	5.40	#	-	-
	NTU	0436	WL	06/02/2009	N001	NR	N	3.16	#	-	-
	NTU	0436	WL	11/03/2009	N001	NR	N	2.61	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:35 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0460	WL	06/02/2009	N001	NR	N	3.03			#	-	-
	NTU	0460	WL	11/03/2009	N001	NR	N	7.18			#	-	-
	NTU	0828	WL	06/02/2009	N001		O	3.25			#	-	-
	NTU	0836	WL	06/02/2009	N001			20.7			#	-	-
Uranium	mg/L	0405	WL	06/02/2009	N001	NR	N	0.00011			#	4.5E-06	-
	mg/L	0405	WL	11/03/2009	N001	NR	N	0.00002	B	U	#	2.4E-06	-
	mg/L	0430	WL	06/01/2009	N001	NR	N	0.00006	B	U	#	4.5E-06	-
	mg/L	0430	WL	11/03/2009	N001	NR	N	0.00004	B	U	#	2.4E-06	-
	mg/L	0436	WL	06/02/2009	N001	NR	N	0.00007	B	U	#	4.5E-06	-
	mg/L	0436	WL	11/03/2009	N001	NR	N	0.00008	B		#	2.4E-06	-
	mg/L	0460	WL	06/02/2009	N001	NR	N	0.00006	B	U	#	4.5E-06	-
	mg/L	0460	WL	11/03/2009	N001	NR	N	0.00006	B	U	#	2.4E-06	-
	mg/L	0828	WL	06/02/2009	N001		O	0.00016			#	4.5E-06	-
	mg/L	0836	WL	06/02/2009	N001			0.00003	B	U	#	4.5E-06	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:35 am

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY

RECORDS: SELECTED FROM USEE200 WHERE site_code='RVT01' AND location_code in('0405','0430','0436','0460','0828','0836') AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #1/1/2009# and #12/31/2009#

SAMPLE ID CODES: 000X = Filtered sample. N00X = Unfiltered sample. X = replicate number.

LOCATION TYPES: WL WELL

ZONES OF COMPLETION: a zone of completion with a "-" is cross-screened and, therefore, has two zones of completion (1st zone - 2nd zone).

NR NO RECOVERY OF DATA FOR CLASSIFYING

FLOW CODES: N UNKNOWN O ON-SITE

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
+	Correlation coefficient for MSA < 0.995.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: 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
M	GFAA duplicate injection precision not met.
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC).
P	> 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
S	Result determined by method of standard addition (MSA).
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Y	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Z	Laboratory defined (USEPA CLP organic) 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.	N	Presumptive evidence that analyte is present. The analyte is "tentatively identified".	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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Appendix D

Surface Water Quality Data

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SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:40 am

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT		UN-CERTAINTY
Manganese	mg/L	0747	06/03/2009	0001	0.077				#	0.00012	-
	mg/L	0747	11/04/2009	0001	0.330				#	6.7E-05	-
	mg/L	0747	11/04/2009	0002	0.310				#	6.7E-05	-
	mg/L	0749	06/02/2009	0001	0.064				#	0.00012	-
	mg/L	0749	11/04/2009	N001	0.045				#	6.7E-05	-
	mg/L	0794	06/02/2009	0001	0.0097				#	0.00012	-
	mg/L	0794	11/03/2009	0001	0.025				#	6.7E-05	-
	mg/L	0796	06/02/2009	0001	0.0082				#	0.00012	-
	mg/L	0796	11/04/2009	0001	0.023				#	6.7E-05	-
	mg/L	0810	06/02/2009	N001	0.036				#	0.00012	-
	mg/L	0810	11/03/2009	N001	0.047				#	6.7E-05	-
	mg/L	0811	06/03/2009	0001	0.0093				#	0.00012	-
	mg/L	0811	11/04/2009	0001	0.024				#	6.7E-05	-
	mg/L	0812	06/04/2009	0001	0.010				#	0.00012	-
	mg/L	0812	11/04/2009	0001	0.024				#	6.7E-05	-
	mg/L	0822	06/03/2009	0001	0.019				#	0.00012	-
	mg/L	0822	11/03/2009	0001	0.150				#	6.7E-05	-
	mg/L	0823	06/02/2009	N001	0.068				#	0.00012	-
	mg/L	0823	11/03/2009	N001	0.0072				#	6.7E-05	-
Molybdenum	mg/L	0747	06/03/2009	0001	0.001			U	#	0.00007	-
	mg/L	0747	11/04/2009	0001	0.013				#	8.5E-05	-
	mg/L	0747	11/04/2009	0002	0.014				#	0.00017	-
	mg/L	0749	06/02/2009	0001	0.0089				#	0.00007	-
	mg/L	0749	11/04/2009	N001	0.007				#	8.5E-05	-
	mg/L	0794	06/02/2009	0001	0.0007	B		U	#	0.00007	-
	mg/L	0794	11/03/2009	0001	0.0014				#	8.5E-05	-
	mg/L	0796	06/02/2009	0001	0.0006	B		U	#	0.00007	-
	mg/L	0796	11/04/2009	0001	0.0014				#	8.5E-05	-
	mg/L	0810	06/02/2009	N001	0.001			U	#	0.00007	-
	mg/L	0810	11/03/2009	N001	0.0012				#	8.5E-05	-
	mg/L	0811	06/03/2009	0001	0.0006	B		U	#	0.00007	-
	mg/L	0811	11/04/2009	0001	0.0014				#	8.5E-05	-
	mg/L	0812	06/04/2009	0001	0.0006	B		U	#	0.00007	-
	mg/L	0812	11/04/2009	0001	0.0014				#	8.5E-05	-
	mg/L	0822	06/03/2009	0001	0.0035				#	0.00007	-
	mg/L	0822	11/03/2009	0001	0.0044				#	8.5E-05	-
	mg/L	0823	06/02/2009	N001	0.0024				#	0.00007	-
	mg/L	0823	11/03/2009	N001	0.0023				#	8.5E-05	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:40 am

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT		UN-CERTAINTY
Oxidation Reduction Potential	mV	0747	06/03/2009	N001	89.2				#	-	-
	mV	0747	11/04/2009	N001	44.5				#	-	-
	mV	0749	06/02/2009	N001	111.3				#	-	-
	mV	0749	11/04/2009	N001	86.6				#	-	-
	mV	0794	06/02/2009	N001	186				#	-	-
	mV	0794	11/03/2009	N001	20.5				#	-	-
	mV	0796	06/02/2009	N001	152.2				#	-	-
	mV	0796	11/04/2009	N001	17.2				#	-	-
	mV	0810	06/02/2009	N001	145.9				#	-	-
	mV	0810	11/03/2009	N001	213.6				#	-	-
	mV	0811	06/03/2009	N001	115.9				#	-	-
	mV	0811	11/04/2009	N001	170.6				#	-	-
	mV	0812	06/04/2009	N001	116.1				#	-	-
	mV	0812	11/04/2009	N001	38.6				#	-	-
	mV	0822	06/03/2009	N001	12.7				#	-	-
	mV	0822	11/03/2009	N001	-12.8				#	-	-
	mV	0823	06/02/2009	N001	139.8				#	-	-
	mV	0823	11/03/2009	N001	55.1				#	-	-
pH	s.u.	0747	06/03/2009	N001	8.06				#	-	-
	s.u.	0747	11/04/2009	N001	7.78				#	-	-
	s.u.	0749	06/02/2009	N001	7.42				#	-	-
	s.u.	0749	11/04/2009	N001	7.43				#	-	-
	s.u.	0794	06/02/2009	N001	8.18				#	-	-
	s.u.	0794	11/03/2009	N001	8.43				#	-	-
	s.u.	0796	06/02/2009	N001	8.89				#	-	-
	s.u.	0796	11/04/2009	N001	8.57				#	-	-
	s.u.	0810	06/02/2009	N001	9.50				#	-	-
	s.u.	0810	11/03/2009	N001	9.15				#	-	-
	s.u.	0811	06/03/2009	N001	8.45				#	-	-
	s.u.	0811	11/04/2009	N001	8.01				#	-	-
	s.u.	0812	06/04/2009	N001	7.50				#	-	-
	s.u.	0812	11/04/2009	N001	8.55				#	-	-
	s.u.	0822	06/03/2009	N001	8.37				#	-	-
	s.u.	0822	11/03/2009	N001	7.55				#	-	-
	s.u.	0823	06/02/2009	N001	9.38				#	-	-
	s.u.	0823	11/03/2009	N001	9.43				#	-	-
Radium-226	pCi/L	0822	06/03/2009	0001	0.18	U			#	0.18	± 0.13

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:40 am

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT		UN-CERTAINTY
Radium-226	pCi/L	0822	11/03/2009	0001	0.303		J		#	0.17	± 0.19
Radium-228	pCi/L	0822	06/03/2009	0001	0.63	U			#	0.63	± 0.39
	pCi/L	0822	11/03/2009	0001	0.60	U	J		#	0.6	± 0.36
Specific Conductance	umhos/cm	0747	06/03/2009	N001	275				#	-	-
	umhos/cm	0747	11/04/2009	N001	1353				#	-	-
	umhos/cm	0749	06/02/2009	N001	3258				#	-	-
	umhos/cm	0749	11/04/2009	N001	2703				#	-	-
	umhos/cm	0794	06/02/2009	N001	209				#	-	-
	umhos/cm	0794	11/03/2009	N001	810				#	-	-
	umhos/cm	0796	06/02/2009	N001	190				#	-	-
	umhos/cm	0796	11/04/2009	N001	827				#	-	-
	umhos/cm	0810	06/02/2009	N001	1090				#	-	-
	umhos/cm	0810	11/03/2009	N001	1249				#	-	-
	umhos/cm	0811	06/03/2009	N001	280				#	-	-
	umhos/cm	0811	11/04/2009	N001	801				#	-	-
	umhos/cm	0812	06/04/2009	N001	250				#	-	-
	umhos/cm	0812	11/04/2009	N001	800				#	-	-
	umhos/cm	0822	06/03/2009	N001	1780				#	-	-
	umhos/cm	0822	11/03/2009	N001	1871				#	-	-
	umhos/cm	0823	06/02/2009	N001	1113				#	-	-
	umhos/cm	0823	11/03/2009	N001	777				#	-	-
Sulfate	mg/L	0747	06/03/2009	0001	50				#	0.5	-
	mg/L	0747	11/04/2009	0001	440				#	5	-
	mg/L	0747	11/04/2009	0002	430				#	5	-
	mg/L	0749	06/02/2009	0001	1800				#	25	-
	mg/L	0749	11/04/2009	N001	1500				#	10	-
	mg/L	0794	06/02/2009	0001	38				#	0.5	-
	mg/L	0794	11/03/2009	0001	250				#	2.5	-
	mg/L	0796	06/02/2009	0001	39				#	0.5	-
	mg/L	0796	11/04/2009	0001	250				#	2.5	-
	mg/L	0810	06/02/2009	N001	250				#	5	-
	mg/L	0810	11/03/2009	N001	270				#	5	-
	mg/L	0811	06/03/2009	0001	75				#	0.5	-
	mg/L	0811	11/04/2009	0001	250				#	2.5	-
	mg/L	0812	06/04/2009	0001	63				#	0.5	-
	mg/L	0812	11/04/2009	0001	250				#	2.5	-
	mg/L	0822	06/03/2009	0001	780				#	10	-
	mg/L	0822	11/03/2009	0001	780				#	10	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:40 am

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0823	06/02/2009	N001	360			#	5	-
	mg/L	0823	11/03/2009	N001	230			#	2.5	-
Temperature	C	0747	06/03/2009	N001	14.48			#	-	-
	C	0747	11/04/2009	N001	9.73			#	-	-
	C	0749	06/02/2009	N001	18.91			#	-	-
	C	0749	11/04/2009	N001	21.27			#	-	-
	C	0794	06/02/2009	N001	10.13			#	-	-
	C	0794	11/03/2009	N001	7.9			#	-	-
	C	0796	06/02/2009	N001	9.94			#	-	-
	C	0796	11/04/2009	N001	7.37			#	-	-
	C	0810	06/02/2009	N001	15.04			#	-	-
	C	0810	11/03/2009	N001	5.11			#	-	-
	C	0811	06/03/2009	N001	12.96			#	-	-
	C	0811	11/04/2009	N001	4.07			#	-	-
	C	0812	06/04/2009	N001	11.57			#	-	-
	C	0812	11/04/2009	N001	6.65			#	-	-
	C	0822	06/03/2009	N001	14.32			#	-	-
	C	0822	11/03/2009	N001	9.03			#	-	-
	C	0823	06/02/2009	N001	15.43			#	-	-
	C	0823	11/03/2009	N001	7.77			#	-	-
Turbidity	NTU	0747	06/03/2009	N001	112			#	-	-
	NTU	0747	11/04/2009	N001	43.4			#	-	-
	NTU	0749	06/02/2009	N001	13.7			#	-	-
	NTU	0749	11/04/2009	N001	7.96			#	-	-
	NTU	0794	06/02/2009	N001	68.0			#	-	-
	NTU	0794	11/03/2009	N001	62			#	-	-
	NTU	0796	06/02/2009	N001	77.8			#	-	-
	NTU	0796	11/04/2009	N001	32.8			#	-	-
	NTU	0810	06/02/2009	N001	7.15			#	-	-
	NTU	0810	11/03/2009	N001	5.9			#	-	-
	NTU	0811	06/03/2009	N001	103			#	-	-
	NTU	0811	11/04/2009	N001	82.1			#	-	-
	NTU	0812	06/04/2009	N001	66.1			#	-	-
	NTU	0812	11/04/2009	N001	34.6			#	-	-
	NTU	0822	06/03/2009	N001	15.1			#	-	-
	NTU	0822	11/03/2009	N001	162			#	-	-
	NTU	0823	06/02/2009	N001	5.43			#	-	-
	NTU	0823	11/03/2009	N001	7.01			#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:40 am

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0747	06/03/2009	0001	0.004			#	4.5E-06	-
	mg/L	0747	11/04/2009	0001	0.160			#	1.2E-05	-
	mg/L	0747	11/04/2009	0002	0.160			#	4.9E-06	-
	mg/L	0749	06/02/2009	0001	0.0012			#	4.5E-06	-
	mg/L	0749	11/04/2009	N001	0.001			#	2.4E-06	-
	mg/L	0794	06/02/2009	0001	0.0011			#	4.5E-06	-
	mg/L	0794	11/03/2009	0001	0.0067			#	2.4E-06	-
	mg/L	0796	06/02/2009	0001	0.0008			#	4.5E-06	-
	mg/L	0796	11/04/2009	0001	0.0056			#	2.4E-06	-
	mg/L	0810	06/02/2009	N001	0.004			#	4.5E-06	-
	mg/L	0810	11/03/2009	N001	0.004			#	2.4E-06	-
	mg/L	0811	06/03/2009	0001	0.0014			#	4.5E-06	-
	mg/L	0811	11/04/2009	0001	0.0055			#	2.4E-06	-
	mg/L	0812	06/04/2009	0001	0.0013			#	4.5E-06	-
	mg/L	0812	11/04/2009	0001	0.0059			#	2.4E-06	-
	mg/L	0822	06/03/2009	0001	0.005			#	4.5E-06	-
	mg/L	0822	11/03/2009	0001	0.0096			#	2.4E-06	-
	mg/L	0823	06/02/2009	N001	0.0037			#	4.5E-06	-
	mg/L	0823	11/03/2009	N001	0.0044			#	2.4E-06	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 3/4/2010 11:40 am

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY

RECORDS: SELECTED FROM USEE800 WHERE site_code='RVT01' AND location_code in('0747','0749','0794','0796','0810','0811','0812','0822','0823') AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #1/1/2009# and #12/31/2009#

SAMPLE ID CODES: 000X = Filtered sample. N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
+	Correlation coefficient for MSA < 0.995.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: 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
M	GFAA duplicate injection precision not met.
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC).
P	> 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
S	Result determined by method of standard addition (MSA).
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Y	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Z	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

DATA QUALIFIERS:

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

QA QUALIFIER: # = validated according to Quality Assurance guidelines.