LMS/RVT/S05094

Verification Monitoring Report for the Riverton, Wyoming, Processing Site

Update for 2008

May 2009

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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 2008a).

The purpose of this report is to present data collected during 2008, 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 2008 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. Groundwater in the surficial aquifer flows to the southeast. 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.

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). Uranium and molybdenum 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 uranium and molybdenum are 30 picocuries per liter (pCi/L) and 0.10 milligrams per liter (mg/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 Umetco 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.

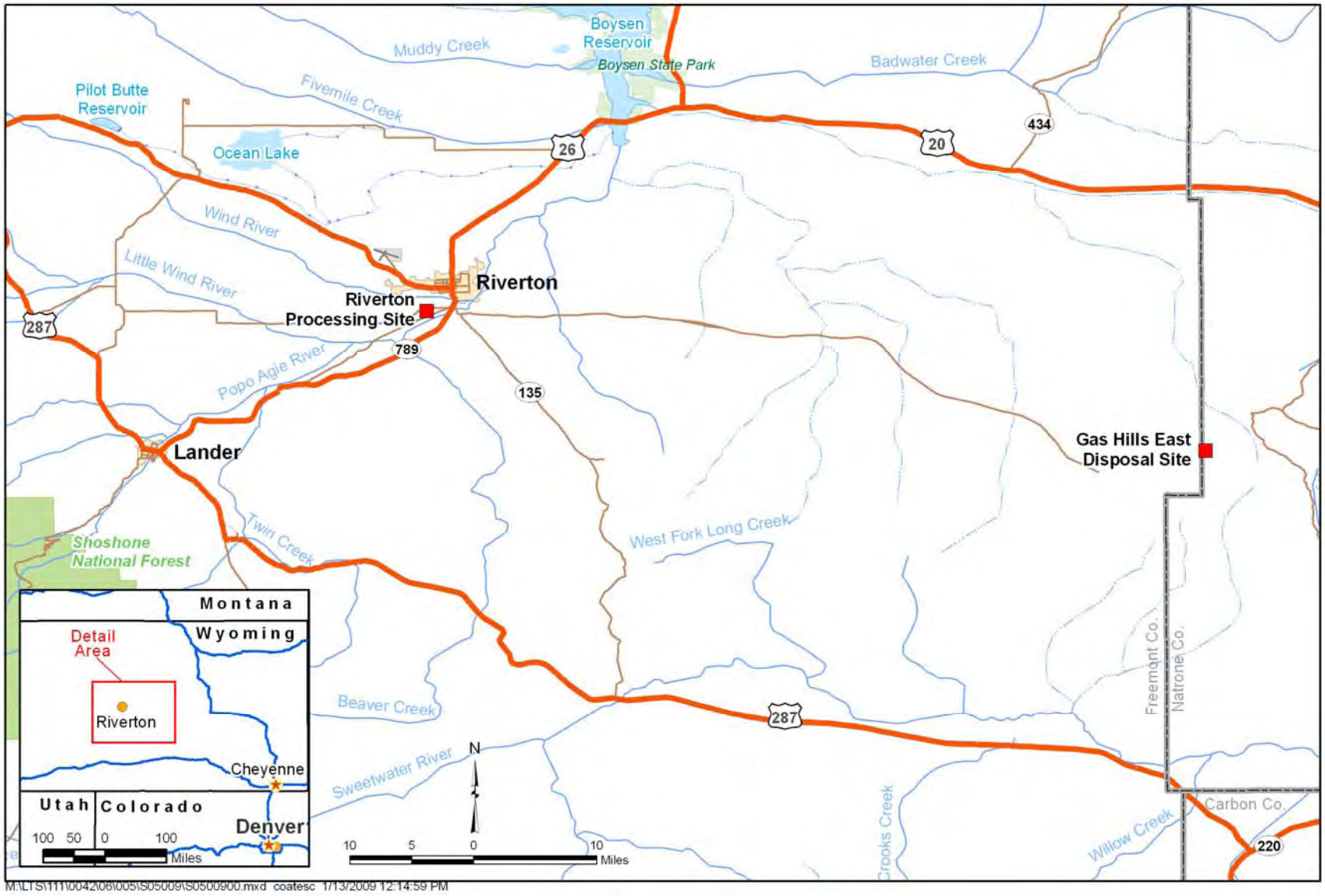

Figure 2–1. Site Location Map

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 2008 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.

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 at the time of real estate transfers of lands within and adjacent to the ICs boundary.

- A perpetual covenant title restriction will be placed on the former millsite property currently owned by the State of Wyoming (Figure 4–2), that restricts land development and well drilling.

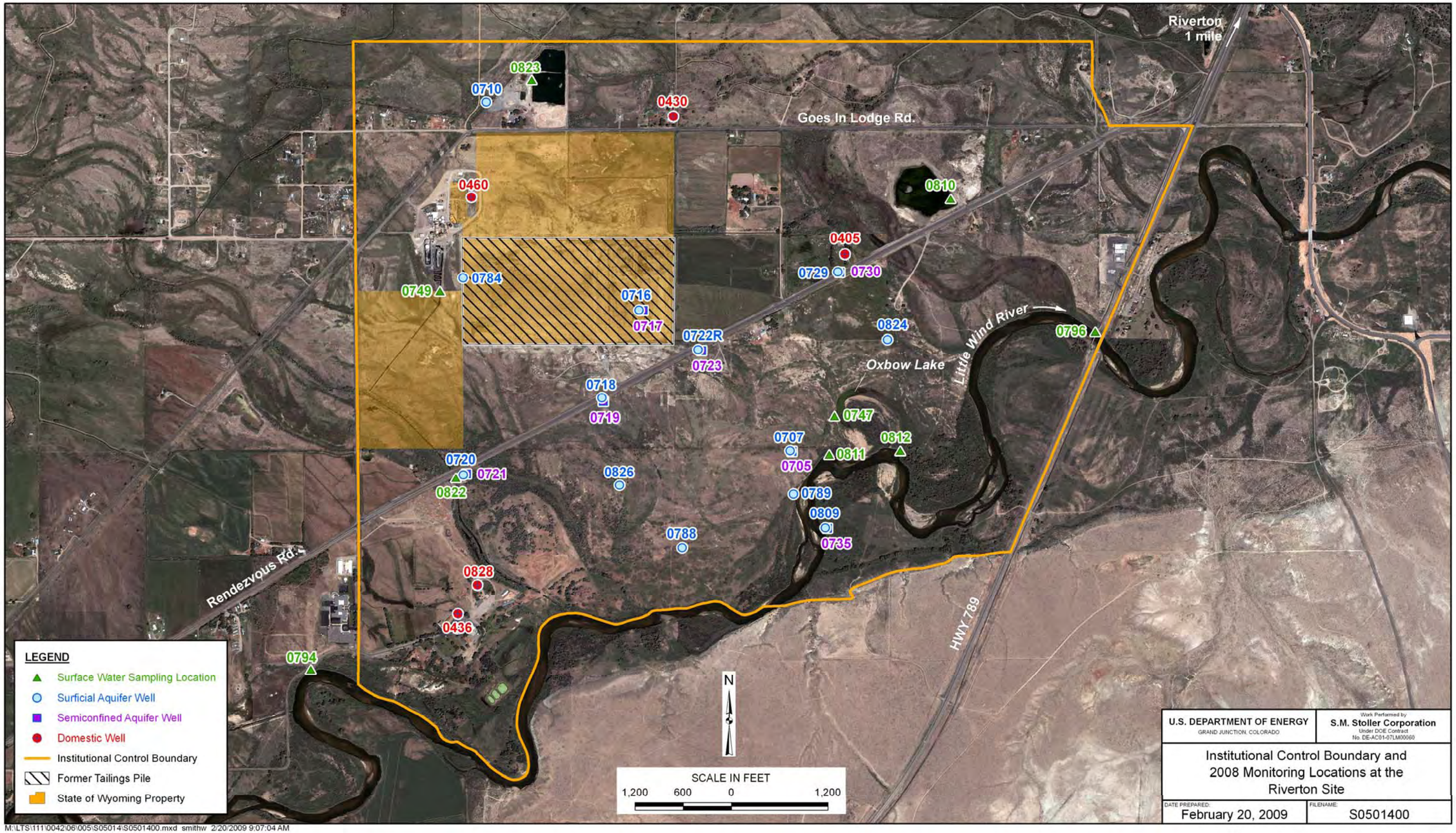

Figure 2–2. Institutional Control Boundary and 2008 Monitoring Locations at the Riverton Site

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3.0 Monitoring Program

The monitoring program for 2008 consisted of 20 monitor wells, 5 domestic wells, and 9 surface water locations, which are listed Table 3–1 and shown on Figure 2–2. Water levels were measured at 14 additional monitor 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. 2008 Sampling Network at the Riverton Site

Location ID	Description	Sampling Event	Rationale
DOE Monitor 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
0735	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, November	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 2008 Monitoring

4.1 Groundwater

4.1.1 Groundwater Quality

Results of the monitoring program to date show that concentrations of uranium and molybdenum 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 monitor wells on the lateral edge of the contaminant plumes indicate that contaminant concentrations have remained stable and below applicable MCLs, which indicates that no significant lateral migration of the plumes has occurred. An additional monitor well on the eastern edge of the plume will be installed to adequately bound the plume and provide for a more complete assessment of lateral plume migration. Time-concentration plots for uranium in wells located within contaminant plumes and wells on the lateral edge of the contaminant plumes in the surficial aquifer are shown in Figure 4–1. The distribution of uranium in the surficial aquifer, based on November 2008 sampling results, is shown on Figure 4–2. Time-concentration plots for molybdenum in wells located within contaminant plumes, and wells bordering contaminant plumes in the surficial aquifer are shown in Figure 4–3; the distribution of molybdenum in the surficial aquifer, based on November 2008 sampling results, is shown on Figure 4–4.

Concentrations of uranium and molybdenum 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 4–5).

Groundwater quality data by parameter for locations sampled during 2008 are provided in Appendix A.

4.1.2 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 4–6 and Figure 4–7, 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 are generally higher in June than in November.
- Vertical gradients in the confined aquifer are upward at two locations, as expected.
- 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.

4.2 Domestic Wells

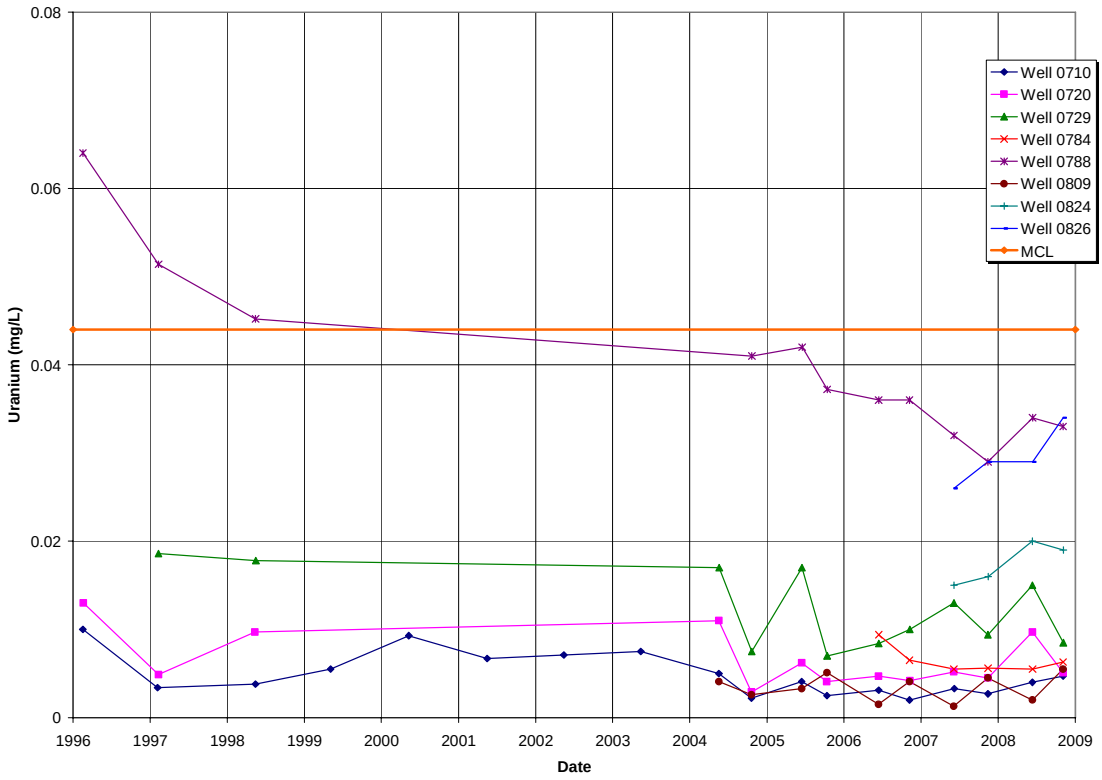
All domestic wells sampled in 2008 are completed in the confined aquifer. Results from domestic wells did not indicate any impacts from the Riverton site. Concentrations of molybdenum and uranium in samples collected from domestic wells were two to three orders of magnitude below their respective standards. Data obtained from sampling of domestic wells in 2008 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. Uranium and molybdenum concentrations measured in samples collected from river locations adjacent to and downstream of the groundwater plume (0811, 0812, and 0796), are essentially the same as the 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 4–8.

The sample collected at the ditch that carries discharge water from the Chemtrade sulfuric acid refinery (0749) had elevated concentrations of sulfate in 2008 (2,300 mg/L in November). 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 (1,100 mg/L at location 0822 in November). 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. All radium concentrations were below detection in 2008 and historically have been below detection or estimated (based on the low concentration and analytical uncertainty), which indicates no impact to water quality in the ditch.



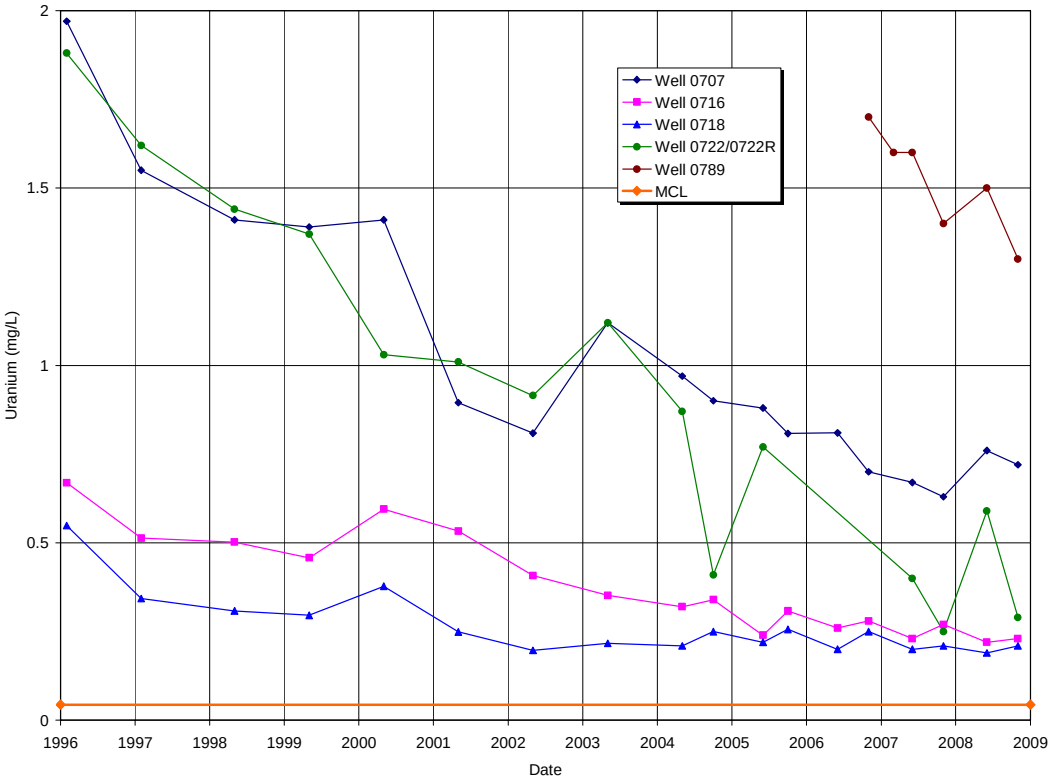


Figure 4–1. Uranium Concentrations in Surficial Aquifer Wells

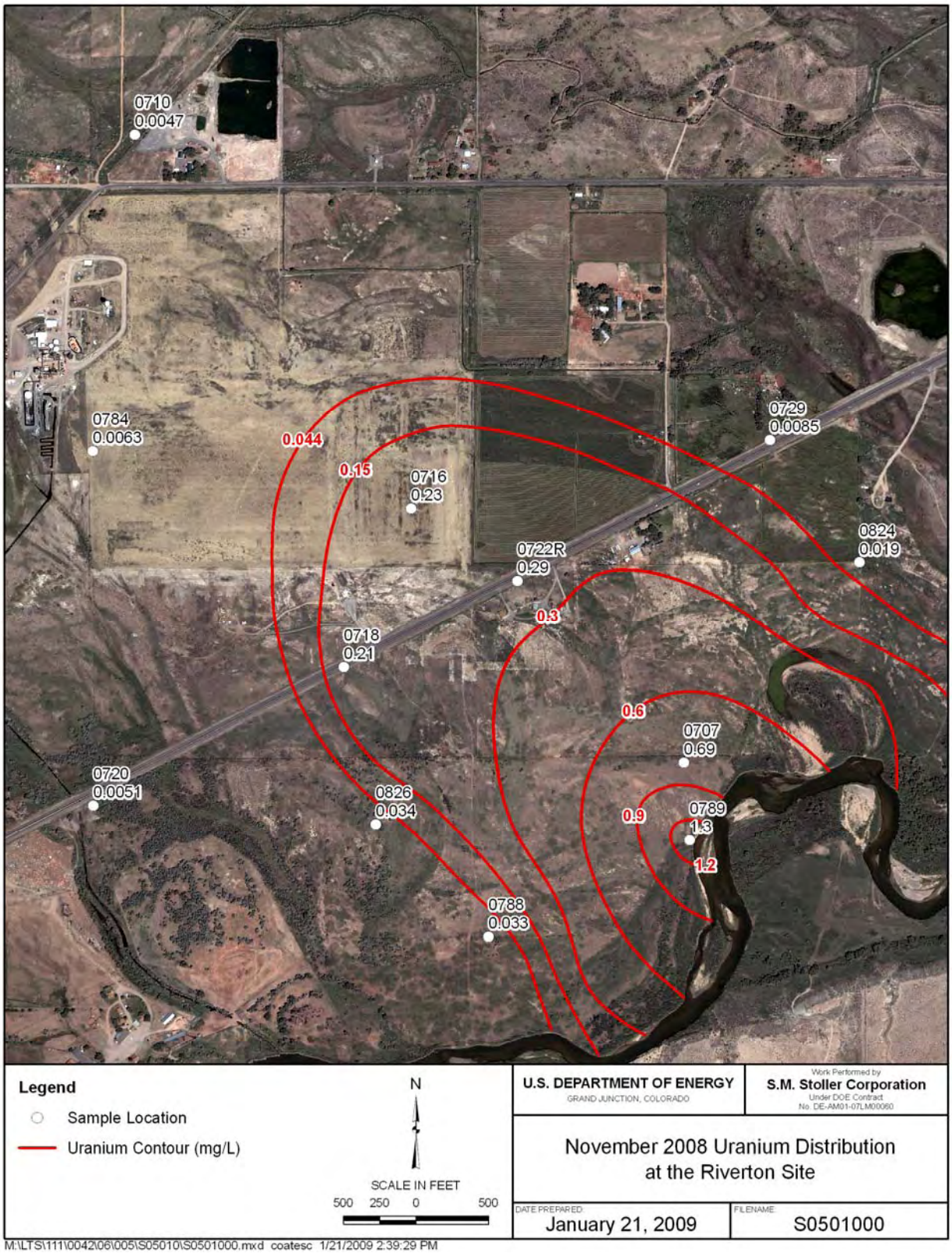
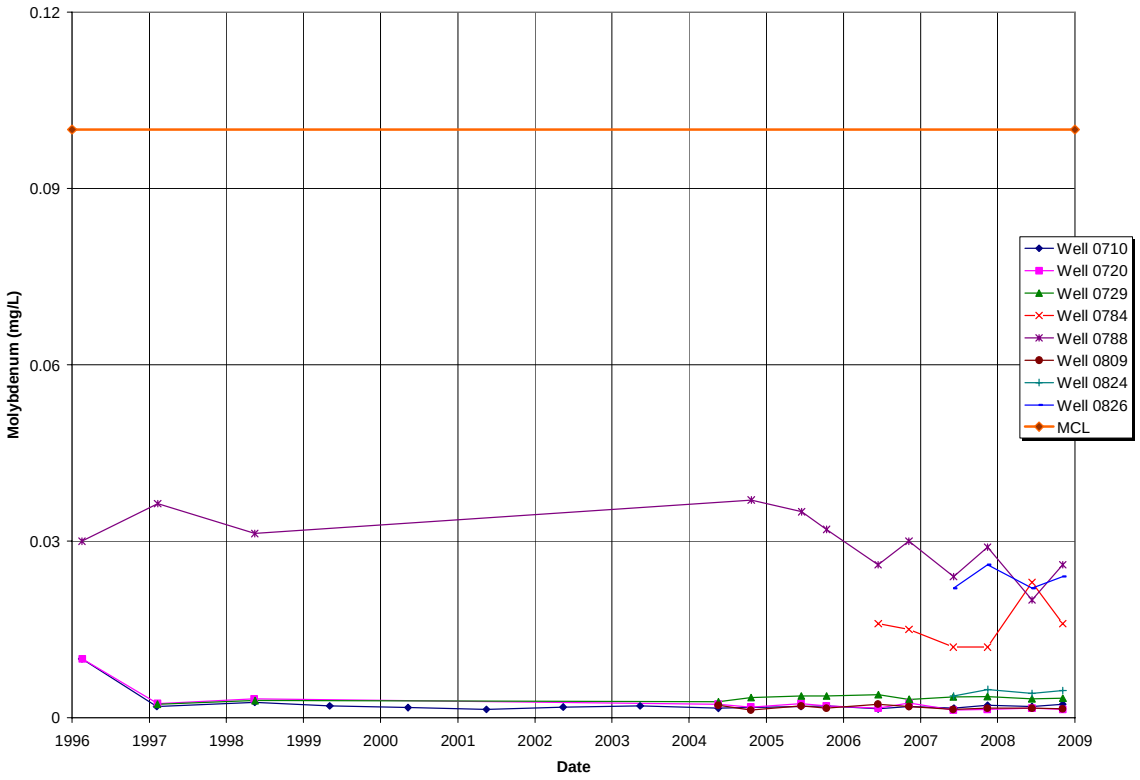


Figure 4–2. November 2008 Uranium Distribution in the Surficial Aquifer at the Riverton Site



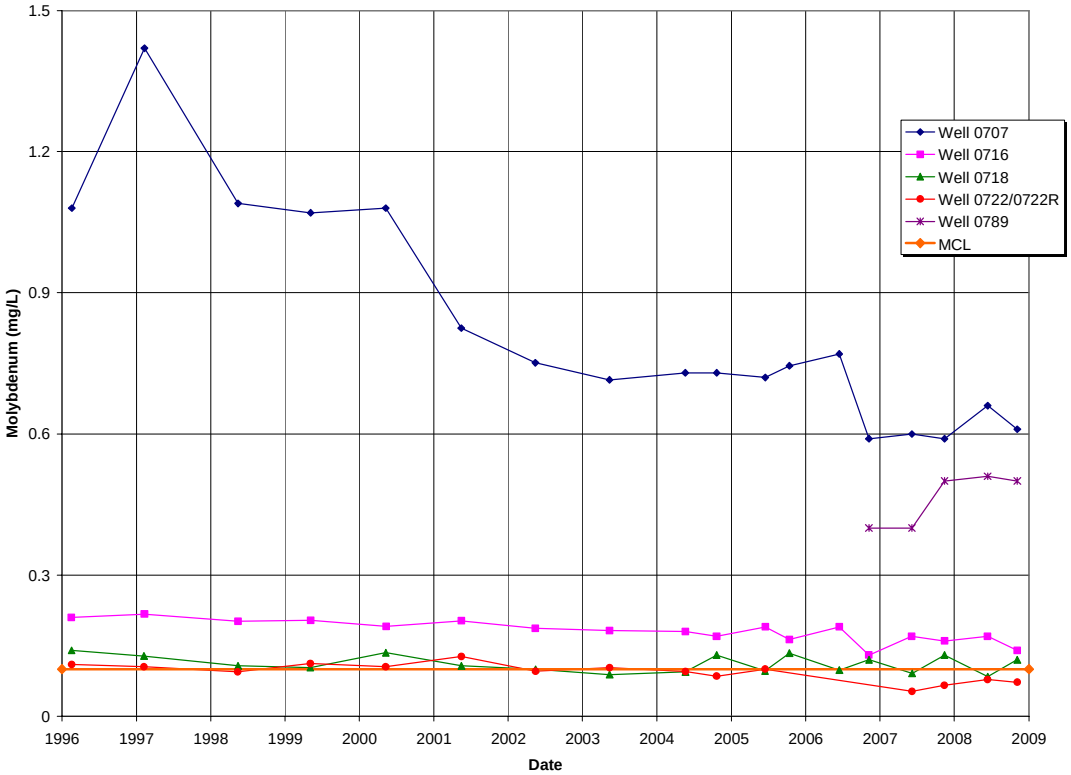


Figure 4–3. Molybdenum Concentrations in Surficial Aquifer Wells

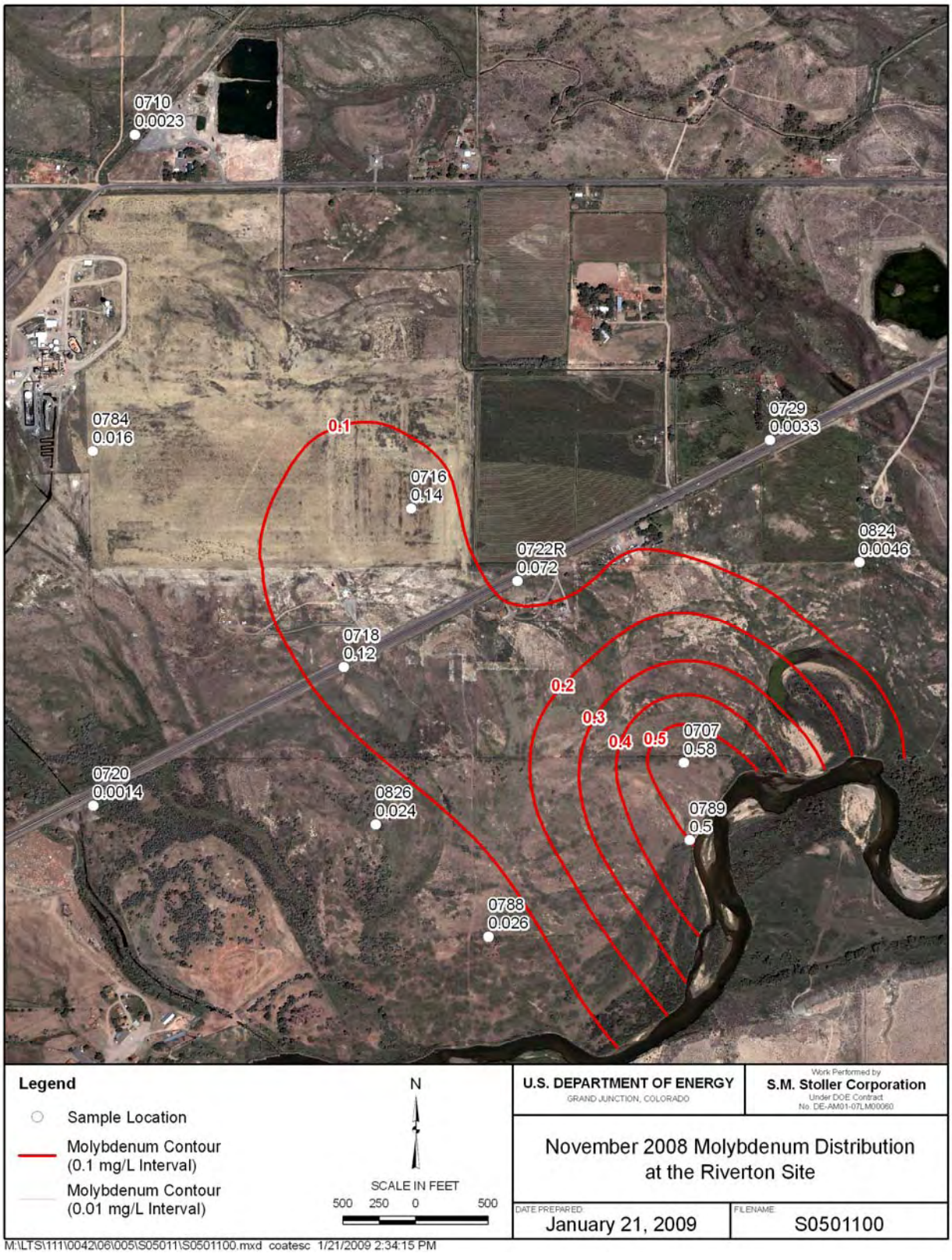
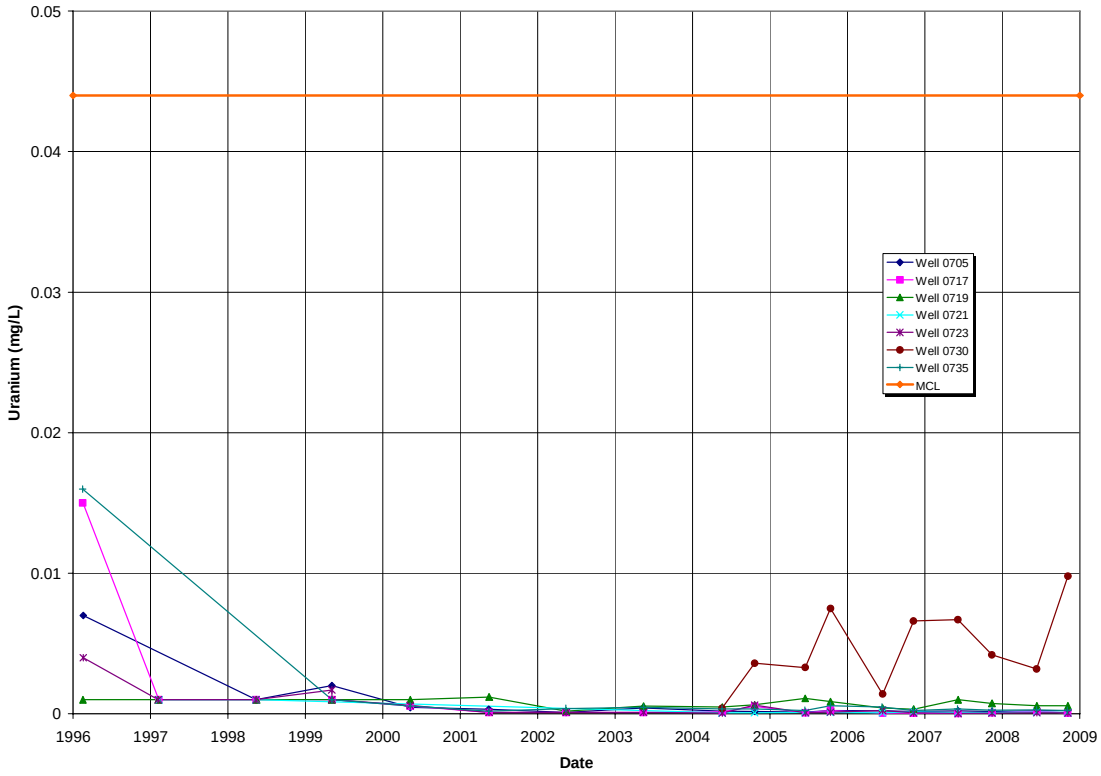


Figure 4–4. November 2008 Molybdenum Distribution in the Surficial Aquifer at the Riverton Site



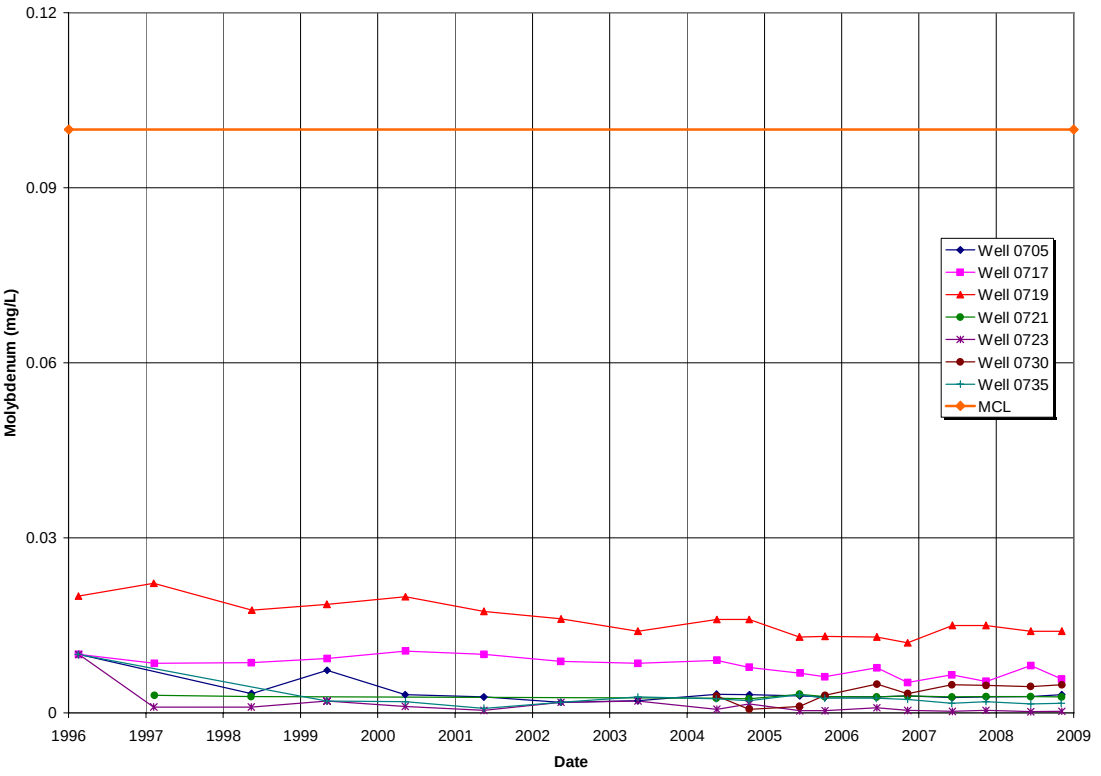


Figure 4–5. Molybdenum and Uranium Concentrations in Semiconfined Aquifer Wells

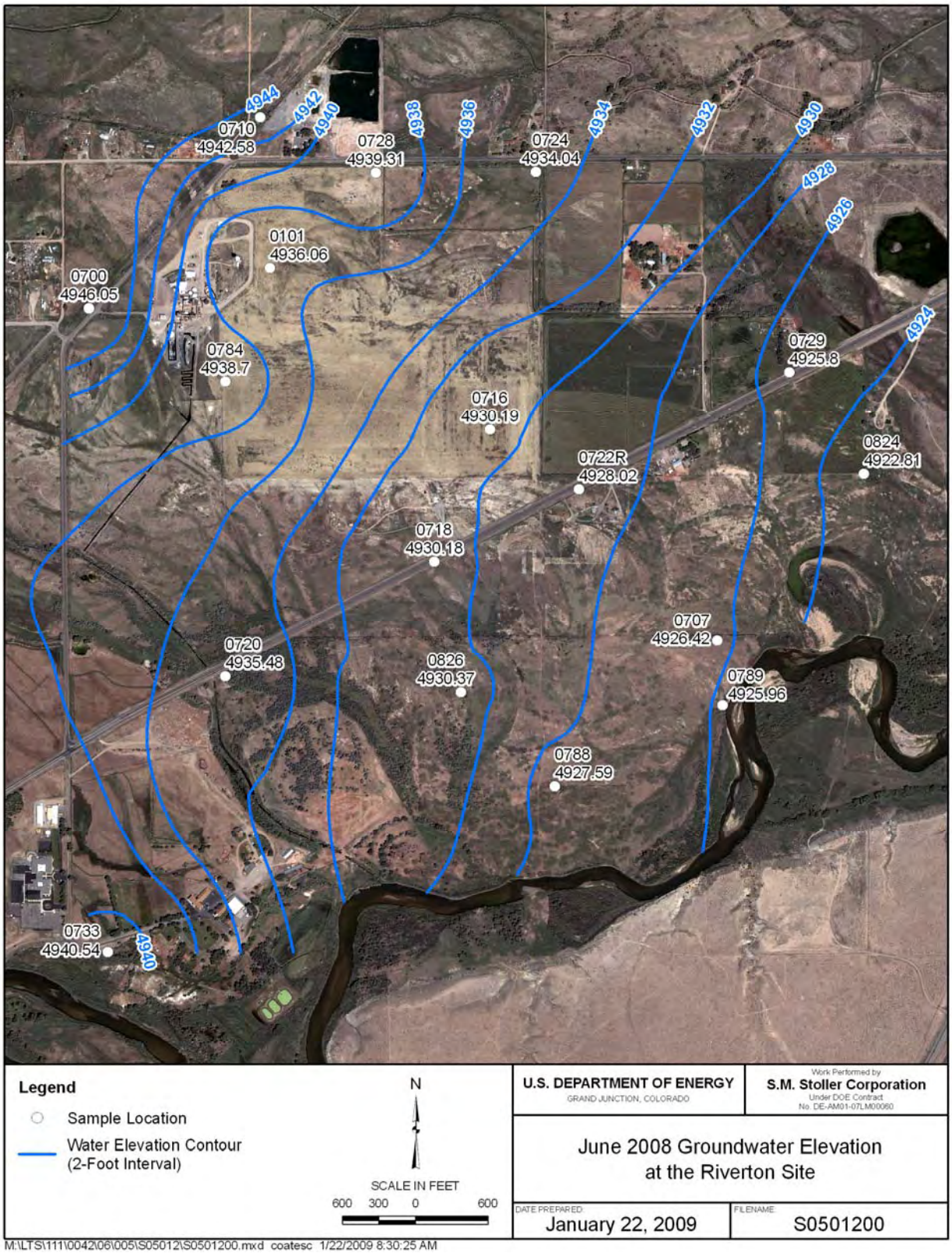


Figure 4–6. June 2008 Groundwater Elevations in the Surficial Aquifer at the Riverton Site

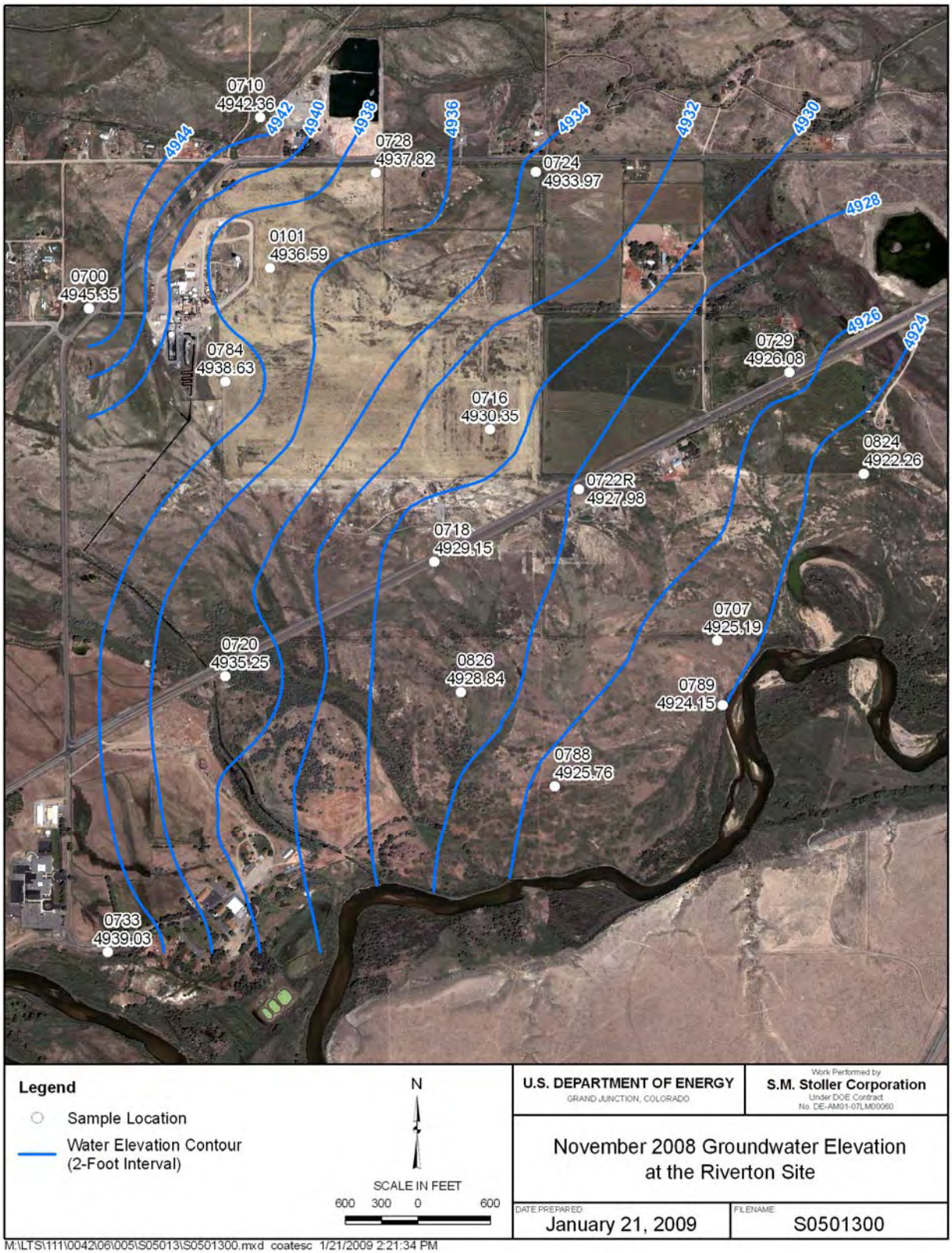


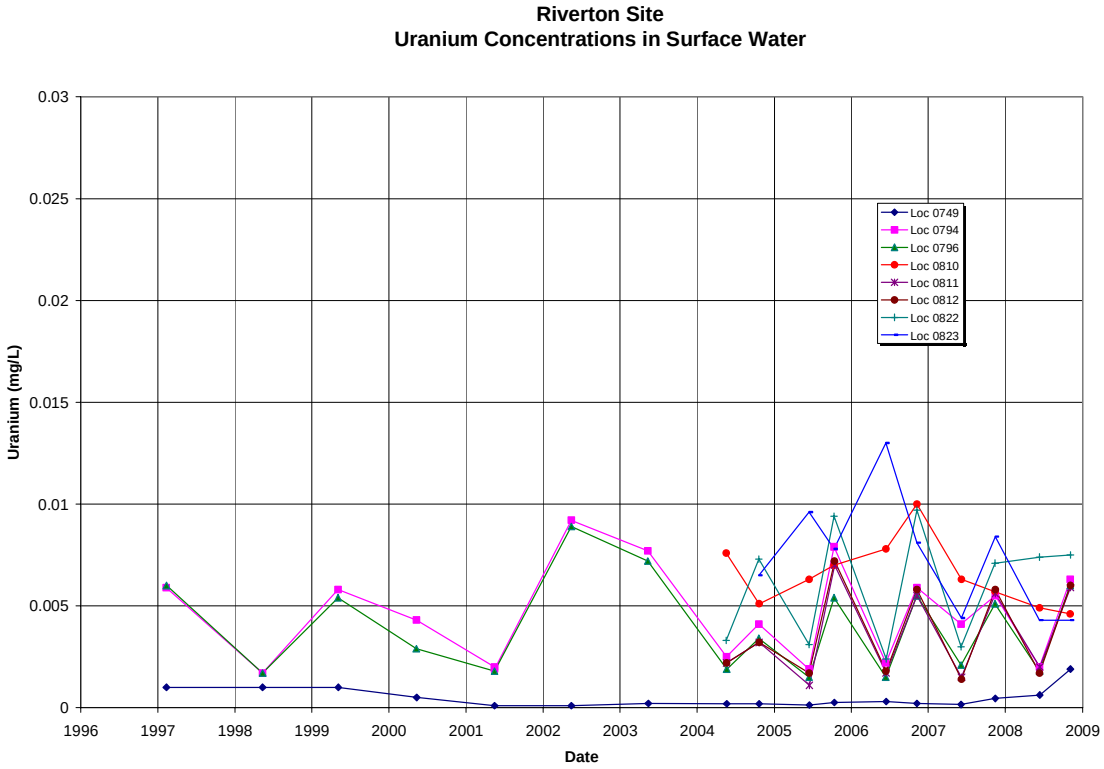
Figure 4–7. November 2008 Groundwater Elevations in the Surficial Aquifer at the Riverton Site

Table 4–1. Riverton Vertical Gradients

Well ID	Aquifer	Water Elevation June 2008	Water Elevation Nov 2008	Vertical Gradient[a] June 2008	Vertical Gradient Nov 2008
0724	Surficial	4934.04	4933.97		
0725	Semiconfined	4934.1	4933.96	-0.003	0.0006
0726	Confined	4936.04	4935.67	-0.018	-0.015
0101	Surficial	4936.06	4936.59		
0111	Semiconfined	4937.42	4937.36	-0.051	-0.029
0110	Confined	4935.28	4934.9	0.015	0.032
0784	Surficial	4938.7	4938.63		
0732	Semiconfined	4936.99	4936.95	0.064	0.064
0716	Surficial	4930.19	4930.35		
0717	Semiconfined	4930.11	4930.45	0.002	-0.003
0707	Surficial	4926.42	4925.19		
0705	Semiconfined	4925.42	4924.01	0.035	0.042
0709	Confined	No data	4927.66	-	-0.032
0718	Surficial	4930.18	4929.15		
0719	Semiconfined	4930.35	4929.56	-0.009	-0.020
0722R	Surficial	4928.02	4927.98		
0723	Semiconfined	4928.11	4928.14	-0.003	-0.005
0720	Surficial	4935.48	4935.25		
0721	Semiconfined	4933.37	4932.26	0.059	0.083
0729	Surficial	4925.8	4926.08		
0730	Semiconfined	4925.43	4925.77	0.016	0.013
0809	Surficial	4925.99	4924.24		
0735	Semiconfined	4925.86	4923.89	0.007	0.019

[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.

Concentrations of uranium have been and continue to be elevated (Figure 4–8) 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.



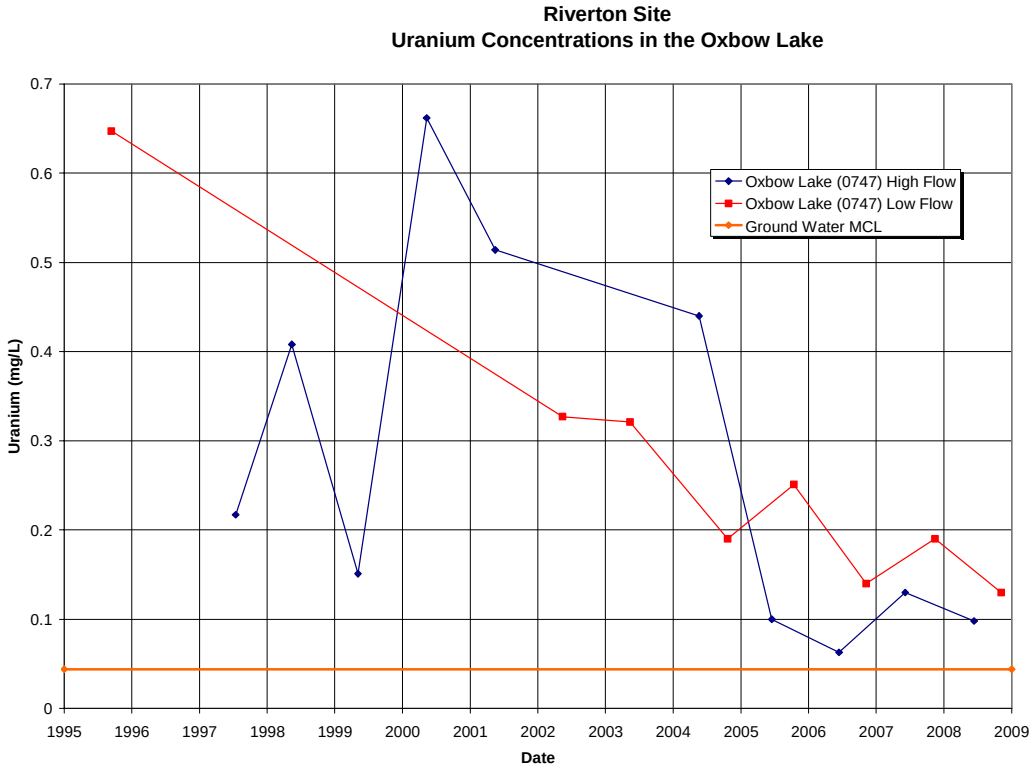


Figure 4–8. Uranium Concentrations in Surface Water

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 4–8 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 2008 sampling event, flow into the oxbow lake from the Little Wind River had occurred just prior to sampling; 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 are declining, which indicates the oxbow lake is naturally flushing along with the surficial aquifer. Surface water quality data by parameter for locations sampled during 2008 are provided in Appendix D.

5.0 Natural Flushing Assessment

Groundwater 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.

Comparison of surficial aquifer concentrations of molybdenum and uranium as predicted by probabilistic hydrogeologic modeling (DOE 1998b) with actual concentrations measured in samples from monitor well 0707 (located near the center of the contaminant plumes) is shown in Figure 5–1. To date, concentrations of molybdenum and uranium in monitor well 0707 are tracking with model predictions, which show cleanup occurring well within the 100-year time frame.

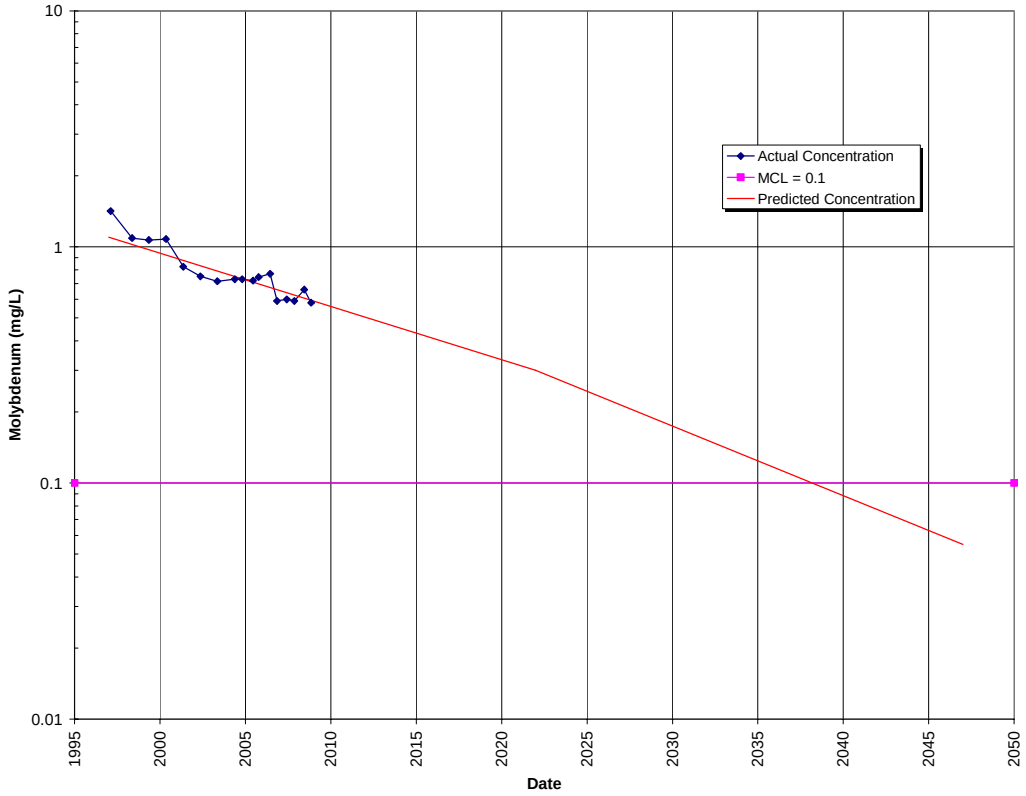
Trend analysis using the Mann-Kendall test (Gilbert 1987) was performed to assess the temporal behavior of uranium concentrations. Uranium was selected as an indicator parameter because: (1) it is widespread throughout the surficial aquifer; (2) its concentration exceeded the standard in numerous wells 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 7 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	13	Exponential	0.934	50.5
0716	Downward	13	Exponential	0.942	36.9
0718	Downward	13	Logarithmic	0.916	141.8
0722/0722R[d]	Downward	12	Exponential	0.916	26.7
0747 (Oxbow)[e]	Downward	8	Logarithmic	0.892	17.8

[a]Data collected from 1996 to 2008; 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 5–2 through Figure 5–4). 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. As shown in Table 5–1, the number of years estimated to achieve compliance with the uranium standard ranges from 18 to 142. Although 142 years is longer than the 100-year regulatory limit, estimates will likely change as more data are collected. Comparison of uranium



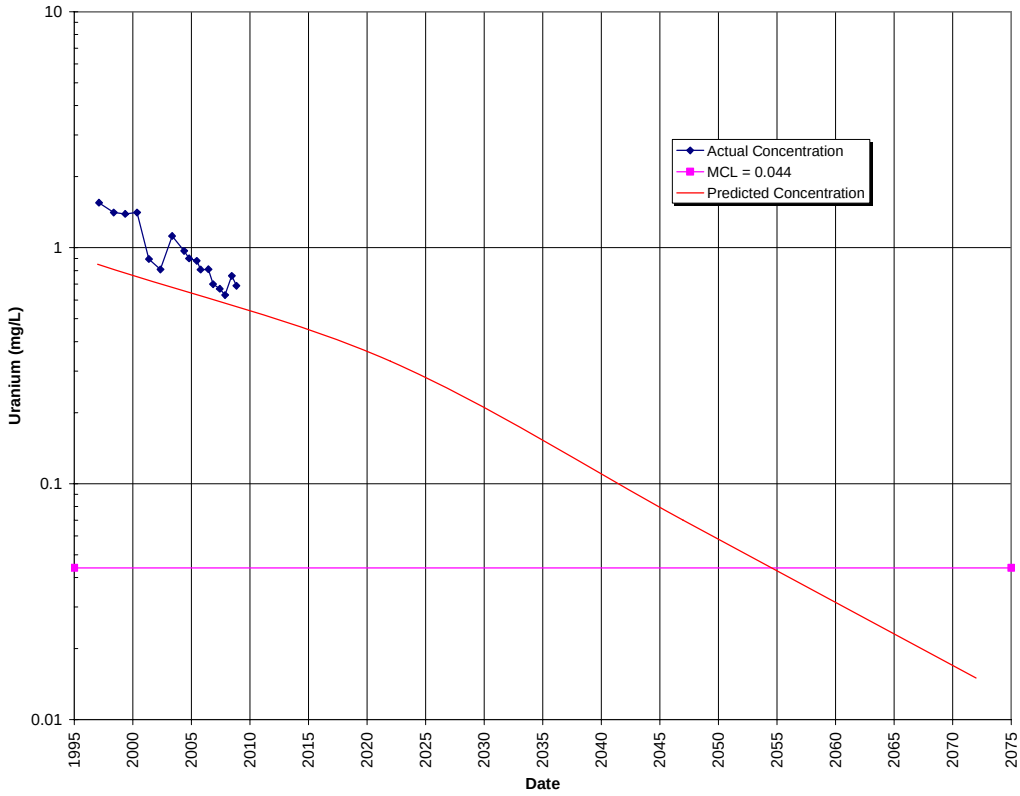
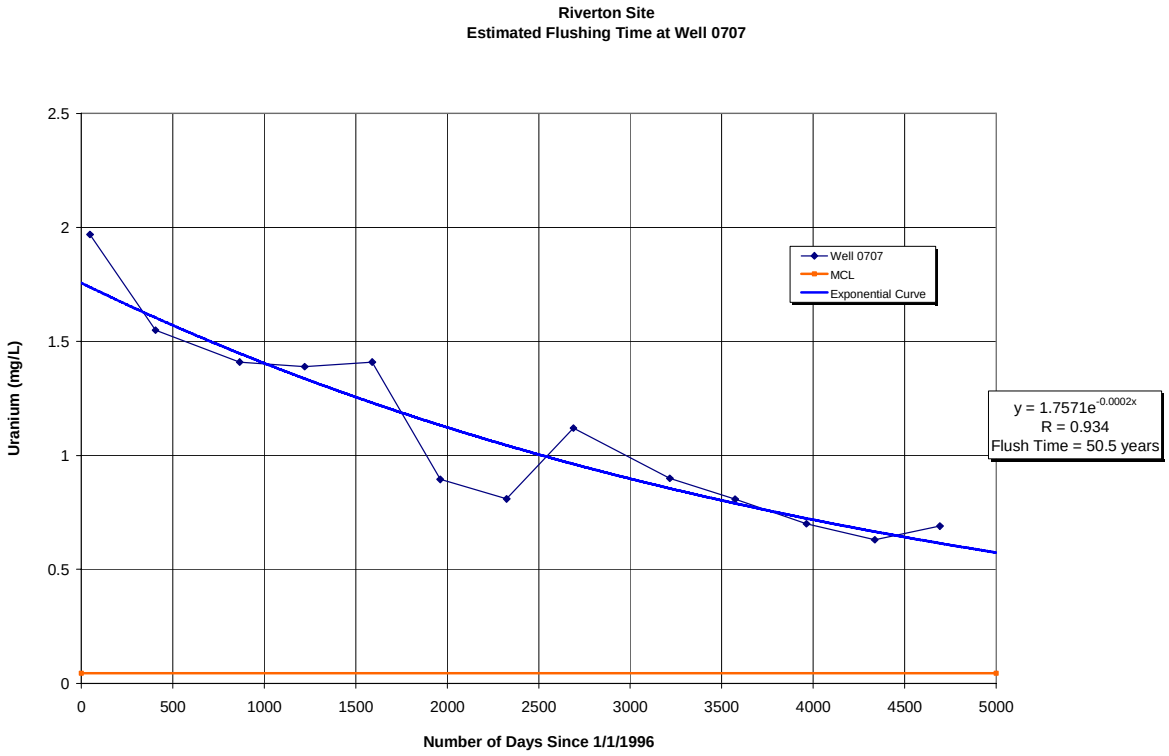


Figure 5–1. Predicted and Actual Contaminant Concentrations in Well 0707



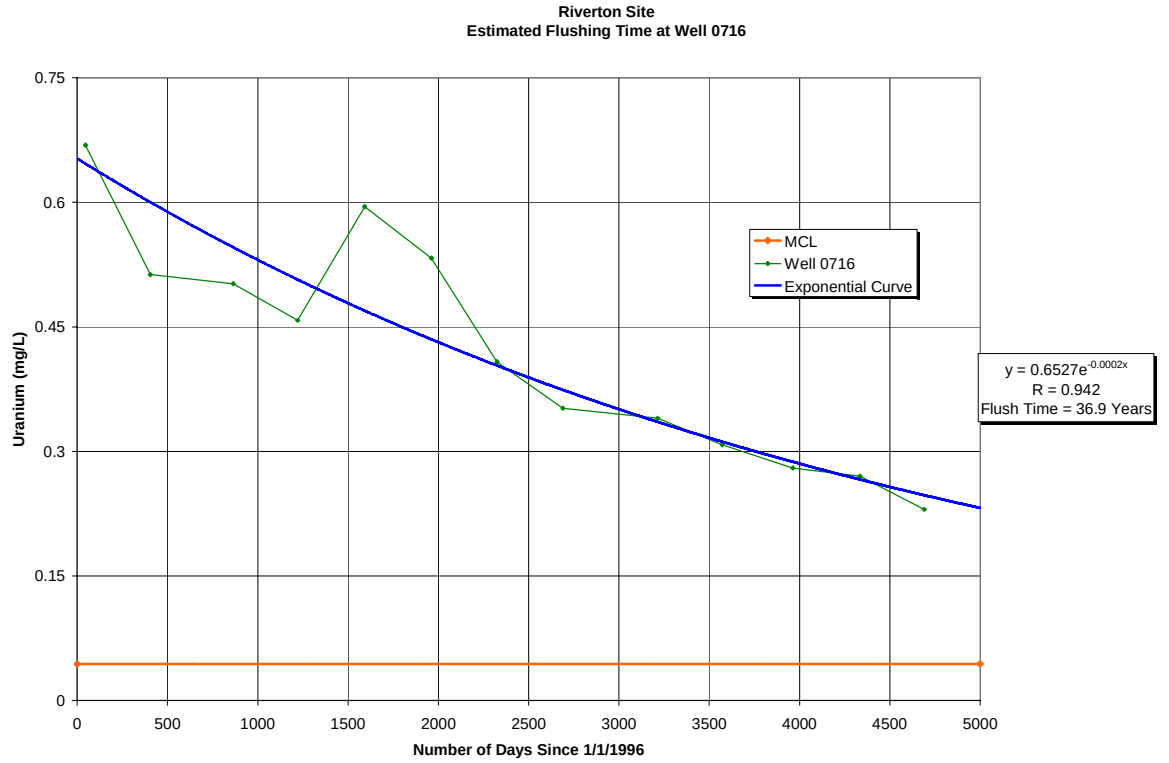
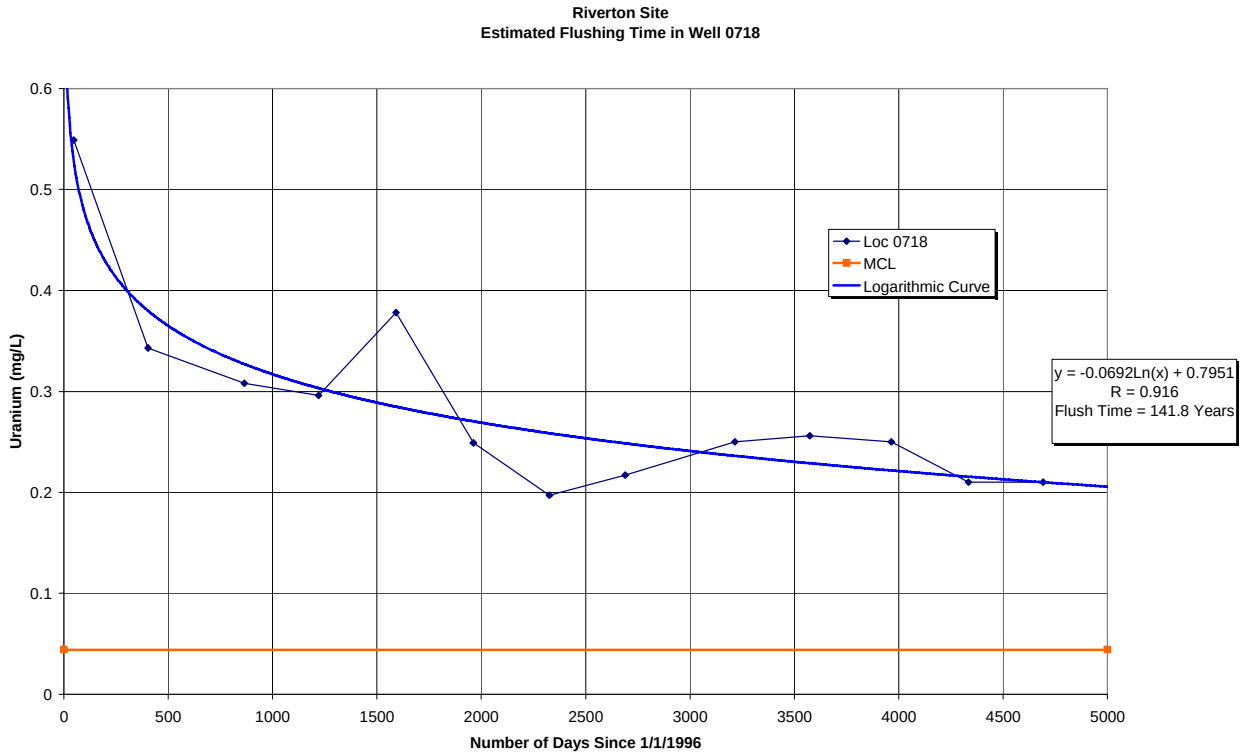


Figure 5–2. Estimated Flushing Time in Surficial Aquifer Wells 0707 and 0716



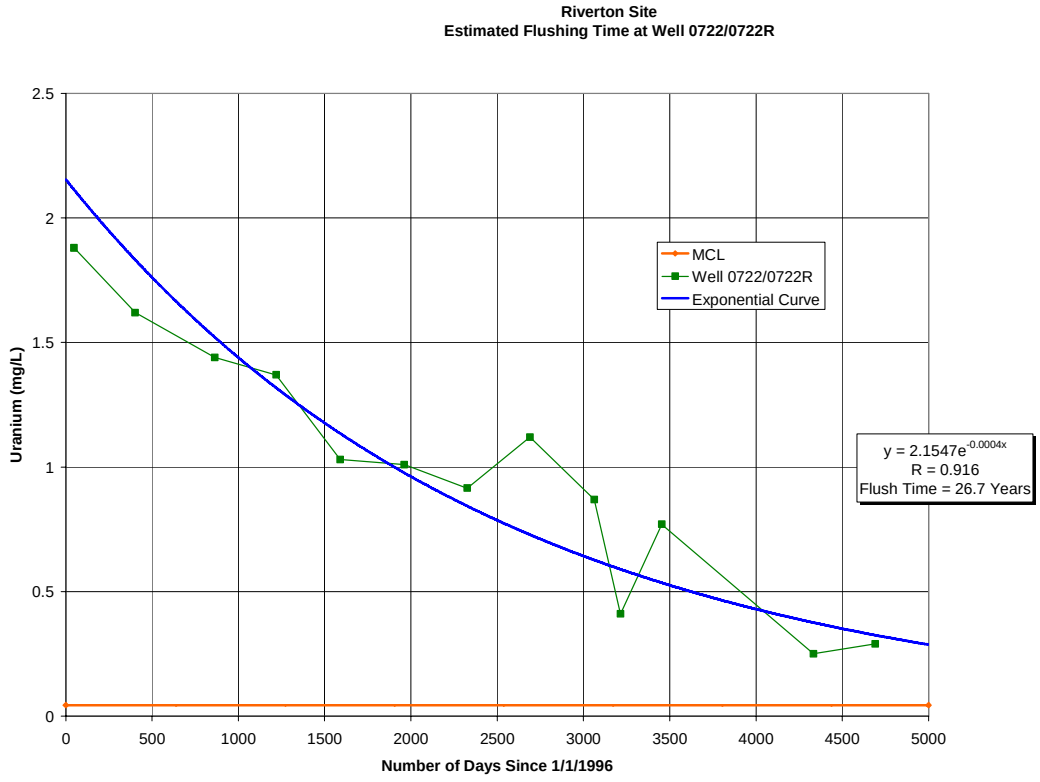


Figure 5–3. Estimated Flushing Time in Surficial Aquifer Wells 0718 and 0722

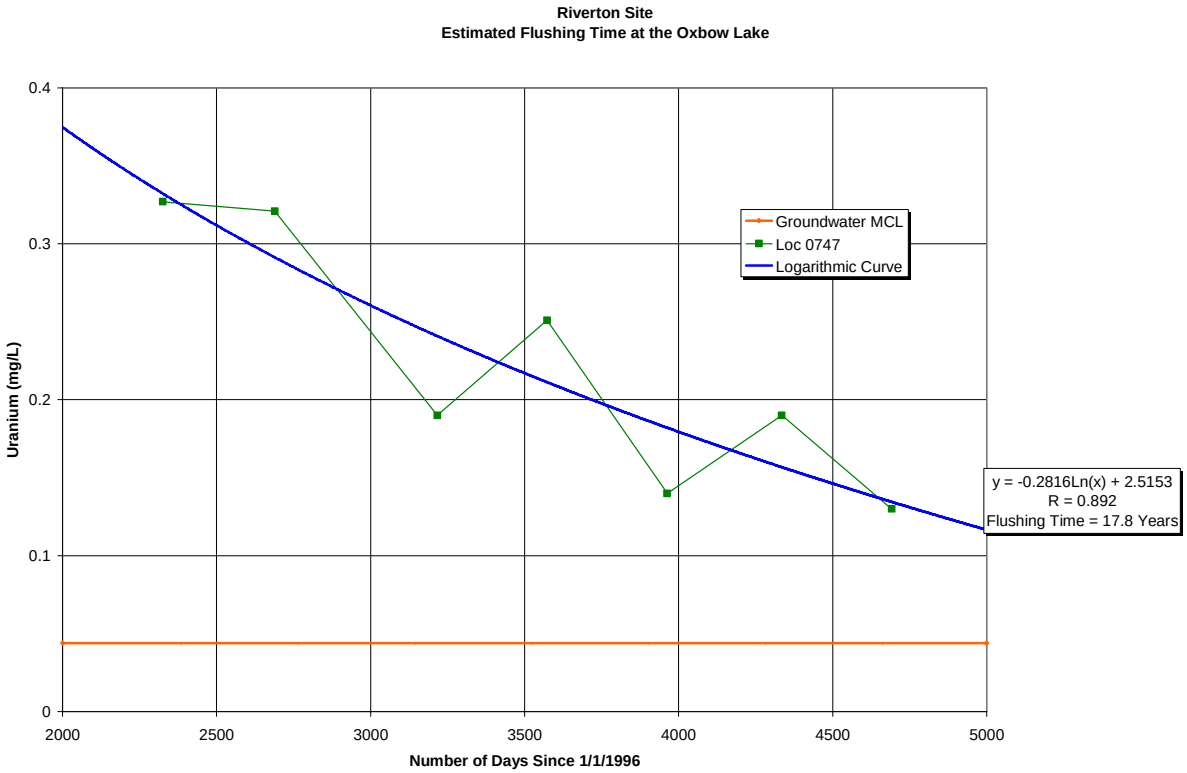


Figure 5–4. Estimated Flushing Time at the Oxbow Lake

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. 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.

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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 and comparable to modeling predictions, 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 flushing time for most wells in less than 60 years. Data from one well projects a flushing time of more than 100 years. 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 continue to decrease.

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: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3	mg/L	0705	WL	06/12/2008	N001	SE	D	77		FQ	#	-	-
	mg/L	0707	WL	06/12/2008	N001	SF	D	305		F	#	-	-
	mg/L	0710	WL	06/11/2008	N001	SF	U	200		F	#	-	-
	mg/L	0716	WL	06/12/2008	N001	SF	O	281		F	#	-	-
	mg/L	0717	WL	06/12/2008	N001	SE	O	239		F	#	-	-
	mg/L	0718	WL	06/12/2008	N001	SF	D	384		F	#	-	-
	mg/L	0719	WL	06/12/2008	N001	SE	D	94		FQ	#	-	-
	mg/L	0720	WL	06/11/2008	N001	SF	C	231		F	#	-	-
	mg/L	0721	WL	06/11/2008	N001	SE	C	93		F	#	-	-
	mg/L	0722R	WL	06/12/2008	N001	SF		310		F	#	-	-
	mg/L	0723	WL	06/12/2008	N001	SE	D	388		F	#	-	-
	mg/L	0729	WL	06/11/2008	N001	SF	D	357		F	#	-	-
	mg/L	0730	WL	06/11/2008	N001	SE	D	345		F	#	-	-
	mg/L	0735	WL	06/11/2008	N001	SE	D	156		F	#	-	-
	mg/L	0784	WL	06/12/2008	N001	SF	U	242		F	#	-	-
	mg/L	0788	WL	06/12/2008	N001	SF	C	404		F	#	-	-
	mg/L	0789	WL	06/12/2008	N001	SF	D	313		F	#	-	-
	mg/L	0809	WL	06/11/2008	N001	SF		113		F	#	-	-
	mg/L	0824	WL	06/11/2008	N001	SF		340		F	#	-	-
	mg/L	0826	WL	06/12/2008	N001	SF		349		F	#	-	-
Manganese	mg/L	0705	WL	06/12/2008	N001	SE	D	0.0062		FQ	#	0.00013	-
	mg/L	0705	WL	11/05/2008	N001	SE	D	0.0083		FQ	#	0.00014	-
	mg/L	0707	WL	06/12/2008	N001	SF	D	0.950		F	#	0.00013	-
	mg/L	0707	WL	11/05/2008	N001	SF	D	0.970		F	#	0.00014	-
	mg/L	0707	WL	11/05/2008	N002	SF	D	0.990		F	#	0.00014	-
	mg/L	0710	WL	06/11/2008	N001	SF	U	0.018		F	#	0.00013	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0710	WL	11/04/2008	N001	SF	U	0.0015	B	F	#	0.00014	-
	mg/L	0716	WL	06/12/2008	N001	SF	O	0.200		F	#	0.00013	-
	mg/L	0716	WL	06/12/2008	N002	SF	O	0.210		F	#	0.00013	-
	mg/L	0716	WL	11/04/2008	N001	SF	O	0.280		F	#	0.00014	-
	mg/L	0716	WL	11/04/2008	N002	SF	O	0.290		F	#	0.00014	-
	mg/L	0717	WL	06/12/2008	N001	SE	O	0.017		F	#	0.00013	-
	mg/L	0717	WL	11/04/2008	N001	SE	O	0.190		F	#	0.00014	-
	mg/L	0718	WL	06/12/2008	N001	SF	D	0.930		F	#	0.00013	-
	mg/L	0718	WL	11/05/2008	N001	SF	D	0.940		F	#	0.00014	-
	mg/L	0719	WL	06/12/2008	N001	SE	D	0.017		FQ	#	0.00013	-
	mg/L	0719	WL	11/05/2008	N001	SE	D	0.180		FQ	#	0.00014	-
	mg/L	0720	WL	06/11/2008	N001	SF	C	0.130		F	#	0.00013	-
	mg/L	0720	WL	11/04/2008	N001	SF	C	0.00029	B	F	#	0.00014	-
	mg/L	0721	WL	06/11/2008	N001	SE	C	0.0052		F	#	0.00013	-
	mg/L	0721	WL	11/04/2008	N001	SE	C	0.003	B	F	#	0.00014	-
	mg/L	0722R	WL	06/12/2008	N001	SF		0.0051		F	#	0.00013	-
	mg/L	0722R	WL	11/05/2008	N001	SF		0.00014	U	FJ	#	0.00014	-
	mg/L	0723	WL	06/12/2008	N001	SE	D	0.520		F	#	0.00013	-
	mg/L	0723	WL	11/05/2008	N001	SE	D	0.440		F	#	0.00014	-
	mg/L	0729	WL	06/11/2008	N001	SF	D	0.071		F	#	0.00013	-
	mg/L	0729	WL	11/05/2008	N001	SF	D	0.0028	B	F	#	0.00014	-
	mg/L	0730	WL	06/11/2008	N001	SE	D	0.120		F	#	0.00013	-
	mg/L	0730	WL	11/05/2008	N001	SE	D	0.047		F	#	0.00014	-
	mg/L	0735	WL	06/11/2008	N001	SE	D	0.022		F	#	0.00013	-
	mg/L	0735	WL	11/03/2008	N001	SE	D	0.170		F	#	0.00014	-
	mg/L	0784	WL	06/12/2008	N001	SF	U	0.540		F	#	0.00013	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0784	WL	11/04/2008	N001	SF	U	0.390		F	#	0.00014	-
	mg/L	0788	WL	06/12/2008	N001	SF	C	0.015		F	#	0.00013	-
	mg/L	0788	WL	11/04/2008	N001	SF	C	0.0022	B	F	#	0.00014	-
	mg/L	0789	WL	06/12/2008	N001	SF	D	0.150		F	#	0.00013	-
	mg/L	0789	WL	11/05/2008	N001	SF	D	0.360		F	#	0.00014	-
	mg/L	0809	WL	06/11/2008	N001	SF		0.810		F	#	0.00013	-
	mg/L	0809	WL	11/03/2008	N001	SF		0.810		F	#	0.00014	-
	mg/L	0824	WL	06/11/2008	N001	SF		0.007		F	#	0.00013	-
	mg/L	0824	WL	11/05/2008	N001	SF		0.0039	B	F	#	0.00014	-
	mg/L	0826	WL	06/12/2008	N001	SF		0.530		F	#	0.00013	-
	mg/L	0826	WL	11/04/2008	N001	SF		0.500		F	#	0.00014	-
Molybdenum	mg/L	0705	WL	06/12/2008	N001	SE	D	0.0028		FQ	#	0.001	-
	mg/L	0705	WL	11/05/2008	N001	SE	D	0.0031		FQ	#	4.5E-05	-
	mg/L	0707	WL	06/12/2008	N001	SF	D	0.660		F	#	0.02	-
	mg/L	0707	WL	11/05/2008	N001	SF	D	0.580		F	#	0.0009	-
	mg/L	0707	WL	11/05/2008	N002	SF	D	0.610		F	#	0.0009	-
	mg/L	0710	WL	06/11/2008	N001	SF	U	0.0019		F	#	0.001	-
	mg/L	0710	WL	11/04/2008	N001	SF	U	0.0023	E	F	#	4.5E-05	-
	mg/L	0716	WL	06/12/2008	N001	SF	O	0.170		F	#	0.01	-
	mg/L	0716	WL	06/12/2008	N002	SF	O	0.170		F	#	0.01	-
	mg/L	0716	WL	11/04/2008	N001	SF	O	0.140		F	#	0.00045	-
	mg/L	0716	WL	11/04/2008	N002	SF	O	0.140		F	#	0.00045	-
	mg/L	0717	WL	06/12/2008	N001	SE	O	0.0081		F	#	0.001	-
	mg/L	0717	WL	11/04/2008	N001	SE	O	0.0058		F	#	4.5E-05	-
	mg/L	0718	WL	06/12/2008	N001	SF	D	0.084		F	#	0.005	-
	mg/L	0718	WL	11/05/2008	N001	SF	D	0.120		F	#	0.00023	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	SAMPLE: ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	QUALIFIERS: DATA	QUALIFIERS: QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0719	WL	06/12/2008	N001	SE	D	0.014		FQ	#	0.001	-
	mg/L	0719	WL	11/05/2008	N001	SE	D	0.014		FQ	#	4.5E-05	-
	mg/L	0720	WL	06/11/2008	N001	SF	C	0.0016		F	#	0.001	-
	mg/L	0720	WL	11/04/2008	N001	SF	C	0.0014		F	#	4.5E-05	-
	mg/L	0721	WL	06/11/2008	N001	SE	C	0.0028		F	#	0.001	-
	mg/L	0721	WL	11/04/2008	N001	SE	C	0.0027		F	#	4.5E-05	-
	mg/L	0722R	WL	06/12/2008	N001	SF		0.078		F	#	0.02	-
	mg/L	0722R	WL	11/05/2008	N001	SF		0.072		F	#	0.00023	-
	mg/L	0723	WL	06/12/2008	N001	SE	D	0.00018	B	UF	#	0.001	-
	mg/L	0723	WL	11/05/2008	N001	SE	D	0.00026	B	UF	#	4.5E-05	-
	mg/L	0729	WL	06/11/2008	N001	SF	D	0.0032		F	#	0.001	-
	mg/L	0729	WL	11/05/2008	N001	SF	D	0.0033		F	#	4.5E-05	-
	mg/L	0730	WL	06/11/2008	N001	SE	D	0.0045		F	#	0.001	-
	mg/L	0730	WL	11/05/2008	N001	SE	D	0.0048		F	#	4.5E-05	-
	mg/L	0735	WL	06/11/2008	N001	SE	D	0.0015		F	#	0.001	-
	mg/L	0735	WL	11/03/2008	N001	SE	D	0.0016		F	#	4.5E-05	-
	mg/L	0784	WL	06/12/2008	N001	SF	U	0.023		F	#	0.001	-
	mg/L	0784	WL	11/04/2008	N001	SF	U	0.016		F	#	4.5E-05	-
	mg/L	0788	WL	06/12/2008	N001	SF	C	0.020		F	#	0.001	-
	mg/L	0788	WL	11/04/2008	N001	SF	C	0.026		F	#	4.5E-05	-
	mg/L	0789	WL	06/12/2008	N001	SF	D	0.510		F	#	0.01	-
	mg/L	0789	WL	11/05/2008	N001	SF	D	0.500		F	#	0.0023	-
	mg/L	0809	WL	06/11/2008	N001	SF		0.0016		F	#	0.001	-
	mg/L	0809	WL	11/03/2008	N001	SF		0.0015		F	#	4.5E-05	-
	mg/L	0824	WL	06/11/2008	N001	SF		0.0041		F	#	0.001	-
	mg/L	0824	WL	11/05/2008	N001	SF		0.0046		F	#	4.5E-05	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0826	WL	06/12/2008	N001	SF		0.022		F	#	0.001	-
	mg/L	0826	WL	11/04/2008	N001	SF		0.024		F	#	4.5E-05	-
Oxidation Reduction Potent	mV	0705	WL	06/12/2008	N001	SE	D	30		FQ	#	-	-
	mV	0705	WL	11/05/2008	N001	SE	D	201		FQ	#	-	-
	mV	0707	WL	06/12/2008	N001	SF	D	40		F	#	-	-
	mV	0707	WL	11/05/2008	N001	SF	D	191		F	#	-	-
	mV	0710	WL	06/11/2008	N001	SF	U	76		F	#	-	-
	mV	0710	WL	11/04/2008	N001	SF	U	235		F	#	-	-
	mV	0716	WL	06/12/2008	N001	SF	O	64		F	#	-	-
	mV	0716	WL	11/04/2008	N001	SF	O	55		F	#	-	-
	mV	0717	WL	06/12/2008	N001	SE	O	64		F	#	-	-
	mV	0717	WL	11/04/2008	N001	SE	O	-9		F	#	-	-
	mV	0718	WL	06/12/2008	N001	SF	D	21		F	#	-	-
	mV	0718	WL	11/05/2008	N001	SF	D	271		F	#	-	-
	mV	0719	WL	06/12/2008	N001	SE	D	-8		FQ	#	-	-
	mV	0719	WL	11/05/2008	N001	SE	D	227		FQ	#	-	-
	mV	0720	WL	06/11/2008	N001	SF	C	58		F	#	-	-
	mV	0720	WL	11/04/2008	N001	SF	C	253		F	#	-	-
	mV	0721	WL	06/11/2008	N001	SE	C	35		F	#	-	-
	mV	0721	WL	11/04/2008	N001	SE	C	154		F	#	-	-
	mV	0722R	WL	06/12/2008	N001	SF		25		F	#	-	-
	mV	0722R	WL	11/05/2008	N001	SF		231		F	#	-	-
	mV	0723	WL	06/12/2008	N001	SE	D	-16		F	#	-	-
	mV	0723	WL	11/05/2008	N001	SE	D	104		F	#	-	-
	mV	0729	WL	06/11/2008	N001	SF	D	123		F	#	-	-
	mV	0729	WL	11/05/2008	N001	SF	D	231		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potent	mV	0730	WL	06/11/2008	N001	SE	D	20		F	#	-	-
	mV	0730	WL	11/05/2008	N001	SE	D	88		F	#	-	-
	mV	0735	WL	06/11/2008	N001	SE	D	104		F	#	-	-
	mV	0735	WL	11/03/2008	N001	SE	D	145		F	#	-	-
	mV	0784	WL	06/12/2008	N001	SF	U	6		F	#	-	-
	mV	0784	WL	11/04/2008	N001	SF	U	85		F	#	-	-
	mV	0788	WL	06/12/2008	N001	SF	C	48		F	#	-	-
	mV	0788	WL	11/04/2008	N001	SF	C	89		F	#	-	-
	mV	0789	WL	06/12/2008	N001	SF	D	65		F	#	-	-
	mV	0789	WL	11/05/2008	N001	SF	D	196		F	#	-	-
	mV	0809	WL	06/11/2008	N001	SF		42		F	#	-	-
	mV	0809	WL	11/03/2008	N001	SF		46		F	#	-	-
	mV	0824	WL	06/11/2008	N001	SF		88		F	#	-	-
	mV	0824	WL	11/05/2008	N001	SF		236		F	#	-	-
	mV	0826	WL	06/12/2008	N001	SF		-0.3		F	#	-	-
	mV	0826	WL	11/04/2008	N001	SF		82		F	#	-	-
pH	s.u.	0705	WL	06/12/2008	N001	SE	D	8.39		FQ	#	-	-
	s.u.	0705	WL	11/05/2008	N001	SE	D	7.07		FQ	#	-	-
	s.u.	0707	WL	06/12/2008	N001	SF	D	7.05		F	#	-	-
	s.u.	0707	WL	11/05/2008	N001	SF	D	6.89		F	#	-	-
	s.u.	0710	WL	06/11/2008	N001	SF	U	7.58		F	#	-	-
	s.u.	0710	WL	11/04/2008	N001	SF	U	7.56		F	#	-	-
	s.u.	0716	WL	06/12/2008	N001	SF	O	7.25		F	#	-	-
	s.u.	0716	WL	11/04/2008	N001	SF	O	7.13		F	#	-	-
	s.u.	0717	WL	06/12/2008	N001	SE	O	7.68		F	#	-	-
	s.u.	0717	WL	11/04/2008	N001	SE	O	7.37		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0718	WL	06/12/2008	N001	SF	D	7.18		F	#	-	-
	s.u.	0718	WL	11/05/2008	N001	SF	D	7.16		F	#	-	-
	s.u.	0719	WL	06/12/2008	N001	SE	D	7.82		FQ	#	-	-
	s.u.	0719	WL	11/05/2008	N001	SE	D	7.90		FQ	#	-	-
	s.u.	0720	WL	06/11/2008	N001	SF	C	7.29		F	#	-	-
	s.u.	0720	WL	11/04/2008	N001	SF	C	7.29		F	#	-	-
	s.u.	0721	WL	06/11/2008	N001	SE	C	8.89		F	#	-	-
	s.u.	0721	WL	11/04/2008	N001	SE	C	8.70		F	#	-	-
	s.u.	0722R	WL	06/12/2008	N001	SF		6.95		F	#	-	-
	s.u.	0722R	WL	11/05/2008	N001	SF		7.04		F	#	-	-
	s.u.	0723	WL	06/12/2008	N001	SE	D	7.11		F	#	-	-
	s.u.	0723	WL	11/05/2008	N001	SE	D	7.11		F	#	-	-
	s.u.	0729	WL	06/11/2008	N001	SF	D	7.29		F	#	-	-
	s.u.	0729	WL	11/05/2008	N001	SF	D	7.04		F	#	-	-
	s.u.	0730	WL	06/11/2008	N001	SE	D	7.60		F	#	-	-
	s.u.	0730	WL	11/05/2008	N001	SE	D	7.41		F	#	-	-
	s.u.	0735	WL	06/11/2008	N001	SE	D	7.70		F	#	-	-
	s.u.	0735	WL	11/03/2008	N001	SE	D	7.42		F	#	-	-
	s.u.	0784	WL	06/12/2008	N001	SF	U	8.09		F	#	-	-
	s.u.	0784	WL	11/04/2008	N001	SF	U	7.97		F	#	-	-
	s.u.	0788	WL	06/12/2008	N001	SF	C	7.38		F	#	-	-
	s.u.	0788	WL	11/04/2008	N001	SF	C	7.43		F	#	-	-
	s.u.	0789	WL	06/12/2008	N001	SF	D	7.20		F	#	-	-
	s.u.	0789	WL	11/05/2008	N001	SF	D	7.12		F	#	-	-
	s.u.	0809	WL	06/11/2008	N001	SF		7.64		F	#	-	-
	s.u.	0809	WL	11/03/2008	N001	SF		7.43		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	SAMPLE: ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	QUALIFIERS: DATA	QUALIFIERS: QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0824	WL	06/11/2008	N001	SF		7.31		F	#	-	-
	s.u.	0824	WL	11/05/2008	N001	SF		7.31		F	#	-	-
	s.u.	0826	WL	06/12/2008	N001	SF		7.48		F	#	-	-
	s.u.	0826	WL	11/04/2008	N001	SF		7.39		F	#	-	-
Specific Conductance	umhos/cm	0705	WL	06/12/2008	N001	SE	D	1199		FQ	#	-	-
	umhos/cm	0705	WL	11/05/2008	N001	SE	D	1338		FQ	#	-	-
	umhos/cm	0707	WL	06/12/2008	N001	SF	D	3231		F	#	-	-
	umhos/cm	0707	WL	11/05/2008	N001	SF	D	3502		F	#	-	-
	umhos/cm	0710	WL	06/11/2008	N001	SF	U	594		F	#	-	-
	umhos/cm	0710	WL	11/04/2008	N001	SF	U	510		F	#	-	-
	umhos/cm	0716	WL	06/12/2008	N001	SF	O	1151		F	#	-	-
	umhos/cm	0716	WL	11/04/2008	N001	SF	O	1160		F	#	-	-
	umhos/cm	0717	WL	06/12/2008	N001	SE	O	1874		F	#	-	-
	umhos/cm	0717	WL	11/04/2008	N001	SE	O	1981		F	#	-	-
	umhos/cm	0718	WL	06/12/2008	N001	SF	D	3344		F	#	-	-
	umhos/cm	0718	WL	11/05/2008	N001	SF	D	3809		F	#	-	-
	umhos/cm	0719	WL	06/12/2008	N001	SE	D	1144		FQ	#	-	-
	umhos/cm	0719	WL	11/05/2008	N001	SE	D	1242		FQ	#	-	-
	umhos/cm	0720	WL	06/11/2008	N001	SF	C	1719		F	#	-	-
	umhos/cm	0720	WL	11/04/2008	N001	SF	C	729		F	#	-	-
	umhos/cm	0721	WL	06/11/2008	N001	SE	C	874		F	#	-	-
	umhos/cm	0721	WL	11/04/2008	N001	SE	C	893		F	#	-	-
	umhos/cm	0722R	WL	06/12/2008	N001	SF		1821		F	#	-	-
	umhos/cm	0722R	WL	11/05/2008	N001	SF		1043		F	#	-	-
	umhos/cm	0723	WL	06/12/2008	N001	SE	D	3830		F	#	-	-
	umhos/cm	0723	WL	11/05/2008	N001	SE	D	3799		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0729	WL	06/11/2008	N001	SF	D	901		F	#	-	-
	umhos/cm	0729	WL	11/05/2008	N001	SF	D	782		F	#	-	-
	umhos/cm	0730	WL	06/11/2008	N001	SE	D	982		F	#	-	-
	umhos/cm	0730	WL	11/05/2008	N001	SE	D	949		F	#	-	-
	umhos/cm	0735	WL	06/11/2008	N001	SE	D	1418		F	#	-	-
	umhos/cm	0735	WL	11/03/2008	N001	SE	D	1529		F	#	-	-
	umhos/cm	0784	WL	06/12/2008	N001	SF	U	4983		F	#	-	-
	umhos/cm	0784	WL	11/04/2008	N001	SF	U	6270		F	#	-	-
	umhos/cm	0788	WL	06/12/2008	N001	SF	C	2228		F	#	-	-
	umhos/cm	0788	WL	11/04/2008	N001	SF	C	1783		F	#	-	-
	umhos/cm	0789	WL	06/12/2008	N001	SF	D	6570		F	#	-	-
	umhos/cm	0789	WL	11/05/2008	N001	SF	D	6310		F	#	-	-
	umhos/cm	0809	WL	06/11/2008	N001	SF		626		F	#	-	-
	umhos/cm	0809	WL	11/03/2008	N001	SF		877		F	#	-	-
	umhos/cm	0824	WL	06/11/2008	N001	SF		862		F	#	-	-
	umhos/cm	0824	WL	11/05/2008	N001	SF		900		F	#	-	-
	umhos/cm	0826	WL	06/12/2008	N001	SF		1298		F	#	-	-
	umhos/cm	0826	WL	11/04/2008	N001	SF		1529		F	#	-	-
Sulfate	mg/L	0705	WL	06/12/2008	N001	SE	D	440		FQ	#	5	-
	mg/L	0705	WL	11/05/2008	N001	SE	D	430		FQ	#	10	-
	mg/L	0707	WL	06/12/2008	N001	SF	D	1800		F	#	10	-
	mg/L	0707	WL	11/05/2008	N001	SF	D	1900		F	#	25	-
	mg/L	0707	WL	11/05/2008	N002	SF	D	2000		F	#	25	-
	mg/L	0710	WL	06/11/2008	N001	SF	U	100		F	#	2.5	-
	mg/L	0710	WL	11/04/2008	N001	SF	U	82		F	#	2.5	-
	mg/L	0716	WL	06/12/2008	N001	SF	O	330		F	#	5	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0716	WL	06/12/2008	N002	SF	O	320		F	#	5	-
	mg/L	0716	WL	11/04/2008	N001	SF	O	340		F	#	5	-
	mg/L	0716	WL	11/04/2008	N002	SF	O	350		F	#	5	-
	mg/L	0717	WL	06/12/2008	N001	SE	O	710		F	#	10	-
	mg/L	0717	WL	11/04/2008	N001	SE	O	750		F	#	10	-
	mg/L	0718	WL	06/12/2008	N001	SF	D	1600		F	#	10	-
	mg/L	0718	WL	11/05/2008	N001	SF	D	1800		F	#	25	-
	mg/L	0719	WL	06/12/2008	N001	SE	D	420		FQ	#	5	-
	mg/L	0719	WL	11/05/2008	N001	SE	D	440		FQ	#	5	-
	mg/L	0720	WL	06/11/2008	N001	SF	C	760		F	#	5	-
	mg/L	0720	WL	11/04/2008	N001	SF	C	160		F	#	2.5	-
	mg/L	0721	WL	06/11/2008	N001	SE	C	290		F	#	2.5	-
	mg/L	0721	WL	11/04/2008	N001	SE	C	300		F	#	2.5	-
	mg/L	0722R	WL	06/12/2008	N001	SF		810		F	#	5	-
	mg/L	0722R	WL	11/05/2008	N001	SF		280		F	#	5	-
	mg/L	0723	WL	06/12/2008	N001	SE	D	1900		F	#	10	-
	mg/L	0723	WL	11/05/2008	N001	SE	D	2000		F	#	25	-
	mg/L	0729	WL	06/11/2008	N001	SF	D	140		F	#	2.5	-
	mg/L	0729	WL	11/05/2008	N001	SF	D	110		F	#	2.5	-
	mg/L	0730	WL	06/11/2008	N001	SE	D	190		F	#	5	-
	mg/L	0730	WL	11/05/2008	N001	SE	D	180		F	#	2.5	-
	mg/L	0735	WL	06/11/2008	N001	SE	D	550		F	#	5	-
	mg/L	0735	WL	11/03/2008	N001	SE	D	630		F	#	10	-
	mg/L	0784	WL	06/12/2008	N001	SF	U	2400		F	#	25	-
	mg/L	0784	WL	11/04/2008	N001	SF	U	3400		F	#	25	-
	mg/L	0788	WL	06/12/2008	N001	SF	C	880		F	#	10	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0788	WL	11/04/2008	N001	SF	C	610		F	#	10	-
	mg/L	0789	WL	06/12/2008	N001	SF	D	4000		F	#	25	-
	mg/L	0789	WL	11/05/2008	N001	SF	D	4000		F	#	25	-
	mg/L	0809	WL	06/11/2008	N001	SF		210		F	#	2.5	-
	mg/L	0809	WL	11/03/2008	N001	SF		300		F	#	2.5	-
	mg/L	0824	WL	06/11/2008	N001	SF		140		F	#	2.5	-
	mg/L	0824	WL	11/05/2008	N001	SF		150		F	#	2.5	-
	mg/L	0826	WL	06/12/2008	N001	SF		340		F	#	5	-
	mg/L	0826	WL	11/04/2008	N001	SF		470		F	#	10	-
Temperature	C	0705	WL	06/12/2008	N001	SE	D	11.08		FQ	#	-	-
	C	0705	WL	11/05/2008	N001	SE	D	9.49		FQ	#	-	-
	C	0707	WL	06/12/2008	N001	SF	D	10.06		F	#	-	-
	C	0707	WL	11/05/2008	N001	SF	D	10.63		F	#	-	-
	C	0710	WL	06/11/2008	N001	SF	U	8.87		F	#	-	-
	C	0710	WL	11/04/2008	N001	SF	U	12.68		F	#	-	-
	C	0716	WL	06/12/2008	N001	SF	O	10.07		F	#	-	-
	C	0716	WL	11/04/2008	N001	SF	O	12.32		F	#	-	-
	C	0717	WL	06/12/2008	N001	SE	O	10.38		F	#	-	-
	C	0717	WL	11/04/2008	N001	SE	O	11.24		F	#	-	-
	C	0718	WL	06/12/2008	N001	SF	D	10.49		F	#	-	-
	C	0718	WL	11/05/2008	N001	SF	D	13.91		F	#	-	-
	C	0719	WL	06/12/2008	N001	SE	D	11.25		FQ	#	-	-
	C	0719	WL	11/05/2008	N001	SE	D	11.82		FQ	#	-	-
	C	0720	WL	06/11/2008	N001	SF	C	8.75		F	#	-	-
	C	0720	WL	11/04/2008	N001	SF	C	12.51		F	#	-	-
	C	0721	WL	06/11/2008	N001	SE	C	10.28		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Temperature	C	0721	WL	11/04/2008	N001	SE	C	11.39		F	#	-	-
	C	0722R	WL	06/12/2008	N001	SF		11.09		F	#	-	-
	C	0722R	WL	11/05/2008	N001	SF		14.07		F	#	-	-
	C	0723	WL	06/12/2008	N001	SE	D	11.93		F	#	-	-
	C	0723	WL	11/05/2008	N001	SE	D	11.07		F	#	-	-
	C	0729	WL	06/11/2008	N001	SF	D	10.38		F	#	-	-
	C	0729	WL	11/05/2008	N001	SF	D	13.70		F	#	-	-
	C	0730	WL	06/11/2008	N001	SE	D	11.51		F	#	-	-
	C	0730	WL	11/05/2008	N001	SE	D	12.10		F	#	-	-
	C	0735	WL	06/11/2008	N001	SE	D	9.75		F	#	-	-
	C	0735	WL	11/03/2008	N001	SE	D	11.46		F	#	-	-
	C	0784	WL	06/12/2008	N001	SF	U	11.72		F	#	-	-
	C	0784	WL	11/04/2008	N001	SF	U	12.85		F	#	-	-
	C	0788	WL	06/12/2008	N001	SF	C	9.38		F	#	-	-
	C	0788	WL	11/04/2008	N001	SF	C	10.76		F	#	-	-
	C	0789	WL	06/12/2008	N001	SF	D	9.69		F	#	-	-
	C	0789	WL	11/05/2008	N001	SF	D	10.78		F	#	-	-
	C	0809	WL	06/11/2008	N001	SF		9.52		F	#	-	-
	C	0809	WL	11/03/2008	N001	SF		12.62		F	#	-	-
	C	0824	WL	06/11/2008	N001	SF		9.45		F	#	-	-
	C	0824	WL	11/05/2008	N001	SF		11.79		F	#	-	-
	C	0826	WL	06/12/2008	N001	SF		8.97		F	#	-	-
	C	0826	WL	11/04/2008	N001	SF		10.78		F	#	-	-
Turbidity	NTU	0705	WL	06/12/2008	N001	SE	D	2.59		FQ	#	-	-
	NTU	0705	WL	11/05/2008	N001	SE	D	3.20		FQ	#	-	-
	NTU	0707	WL	06/12/2008	N001	SF	D	1.93		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0707	WL	11/05/2008	N001	SF	D	1.10		F	#	-	-
	NTU	0710	WL	06/11/2008	N001	SF	U	2.67		F	#	-	-
	NTU	0710	WL	11/04/2008	N001	SF	U	0.65		F	#	-	-
	NTU	0716	WL	06/12/2008	N001	SF	O	1.36		F	#	-	-
	NTU	0716	WL	11/04/2008	N001	SF	O	1.56		F	#	-	-
	NTU	0717	WL	06/12/2008	N001	SE	O	1.95		F	#	-	-
	NTU	0717	WL	11/04/2008	N001	SE	O	1.36		F	#	-	-
	NTU	0718	WL	06/12/2008	N001	SF	D	2.86		F	#	-	-
	NTU	0718	WL	11/05/2008	N001	SF	D	1.71		F	#	-	-
	NTU	0719	WL	06/12/2008	N001	SE	D	8.41		FQ	#	-	-
	NTU	0719	WL	11/05/2008	N001	SE	D	6.17		FQ	#	-	-
	NTU	0720	WL	06/11/2008	N001	SF	C	2.12		F	#	-	-
	NTU	0720	WL	11/04/2008	N001	SF	C	0.96		F	#	-	-
	NTU	0721	WL	06/11/2008	N001	SE	C	2.44		F	#	-	-
	NTU	0721	WL	11/04/2008	N001	SE	C	5.01		F	#	-	-
	NTU	0722R	WL	06/12/2008	N001	SF		1.01		F	#	-	-
	NTU	0722R	WL	11/05/2008	N001	SF		0.93		F	#	-	-
	NTU	0723	WL	06/12/2008	N001	SE	D	1.18		F	#	-	-
	NTU	0723	WL	11/05/2008	N001	SE	D	0.80		F	#	-	-
	NTU	0729	WL	06/11/2008	N001	SF	D	6.22		F	#	-	-
	NTU	0729	WL	11/05/2008	N001	SF	D	1.40		F	#	-	-
	NTU	0730	WL	06/11/2008	N001	SE	D	5.96		F	#	-	-
	NTU	0730	WL	11/05/2008	N001	SE	D	4.01		F	#	-	-
	NTU	0735	WL	06/11/2008	N001	SE	D	3.06		F	#	-	-
	NTU	0735	WL	11/03/2008	N001	SE	D	1.15		F	#	-	-
	NTU	0784	WL	06/12/2008	N001	SF	U	7.50		F	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0784	WL	11/04/2008	N001	SF	U	2.51		F	#	-	-
	NTU	0788	WL	06/12/2008	N001	SF	C	2.15		F	#	-	-
	NTU	0788	WL	11/04/2008	N001	SF	C	1.81		F	#	-	-
	NTU	0789	WL	06/12/2008	N001	SF	D	3.02		F	#	-	-
	NTU	0789	WL	11/05/2008	N001	SF	D	2.12		F	#	-	-
	NTU	0809	WL	06/11/2008	N001	SF		0.33		F	#	-	-
	NTU	0809	WL	11/03/2008	N001	SF		0.52		F	#	-	-
	NTU	0824	WL	06/11/2008	N001	SF		3.66		F	#	-	-
	NTU	0824	WL	11/05/2008	N001	SF		3.23		F	#	-	-
	NTU	0826	WL	06/12/2008	N001	SF		1.65		F	#	-	-
	NTU	0826	WL	11/04/2008	N001	SF		1.64		F	#	-	-
Uranium	mg/L	0705	WL	06/12/2008	N001	SE	D	0.00021		FQ	#	0.0001	-
	mg/L	0705	WL	11/05/2008	N001	SE	D	0.00023		FQ	#	3.6E-06	-
	mg/L	0707	WL	06/12/2008	N001	SF	D	0.760		F	#	0.002	-
	mg/L	0707	WL	11/05/2008	N001	SF	D	0.690		F	#	7.2E-05	-
	mg/L	0707	WL	11/05/2008	N002	SF	D	0.720		F	#	7.2E-05	-
	mg/L	0710	WL	06/11/2008	N001	SF	U	0.004		F	#	0.0001	-
	mg/L	0710	WL	11/04/2008	N001	SF	U	0.0047		F	#	3.6E-06	-
	mg/L	0716	WL	06/12/2008	N001	SF	O	0.220		F	#	0.001	-
	mg/L	0716	WL	06/12/2008	N002	SF	O	0.210		F	#	0.001	-
	mg/L	0716	WL	11/04/2008	N001	SF	O	0.230		F	#	3.6E-05	-
	mg/L	0716	WL	11/04/2008	N002	SF	O	0.230		F	#	3.6E-05	-
	mg/L	0717	WL	06/12/2008	N001	SE	O	0.00018		F	#	0.0001	-
	mg/L	0717	WL	11/04/2008	N001	SE	O	0.00004	B	UF	#	3.6E-06	-
	mg/L	0718	WL	06/12/2008	N001	SF	D	0.190		F	#	0.0005	-
	mg/L	0718	WL	11/05/2008	N001	SF	D	0.210		F	#	1.8E-05	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0719	WL	06/12/2008	N001	SE	D	0.00057		FQ	#	0.0001	-
	mg/L	0719	WL	11/05/2008	N001	SE	D	0.00057		FQ	#	3.6E-06	-
	mg/L	0720	WL	06/11/2008	N001	SF	C	0.0097		F	#	0.0001	-
	mg/L	0720	WL	11/04/2008	N001	SF	C	0.0051		F	#	3.6E-06	-
	mg/L	0721	WL	06/11/2008	N001	SE	C	0.00011		UF	#	0.0001	-
	mg/L	0721	WL	11/04/2008	N001	SE	C	0.00008	B	UF	#	3.6E-06	-
	mg/L	0722R	WL	06/12/2008	N001	SF		0.590		F	#	0.002	-
	mg/L	0722R	WL	11/05/2008	N001	SF		0.290		F	#	1.8E-05	-
	mg/L	0723	WL	06/12/2008	N001	SE	D	0.00008	B	UF	#	0.0001	-
	mg/L	0723	WL	11/05/2008	N001	SE	D	0.00006	B	UF	#	3.6E-06	-
	mg/L	0729	WL	06/11/2008	N001	SF	D	0.015		F	#	0.0001	-
	mg/L	0729	WL	11/05/2008	N001	SF	D	0.0085		F	#	3.6E-06	-
	mg/L	0730	WL	06/11/2008	N001	SE	D	0.0032		F	#	0.0001	-
	mg/L	0730	WL	11/05/2008	N001	SE	D	0.0098		F	#	3.6E-06	-
	mg/L	0735	WL	06/11/2008	N001	SE	D	0.00028		F	#	0.0001	-
	mg/L	0735	WL	11/03/2008	N001	SE	D	0.00025		F	#	3.6E-06	-
	mg/L	0784	WL	06/12/2008	N001	SF	U	0.0055		F	#	0.0001	-
	mg/L	0784	WL	11/04/2008	N001	SF	U	0.0063		F	#	3.6E-06	-
	mg/L	0788	WL	06/12/2008	N001	SF	C	0.034		F	#	0.0001	-
	mg/L	0788	WL	11/04/2008	N001	SF	C	0.033		F	#	3.6E-06	-
	mg/L	0789	WL	06/12/2008	N001	SF	D	1.500		F	#	0.005	-
	mg/L	0789	WL	11/05/2008	N001	SF	D	1.300		F	#	0.00018	-
	mg/L	0809	WL	06/11/2008	N001	SF		0.002		F	#	0.0001	-
	mg/L	0809	WL	11/03/2008	N001	SF		0.0055		F	#	3.6E-06	-
	mg/L	0824	WL	06/11/2008	N001	SF		0.020		F	#	0.0001	-
	mg/L	0824	WL	11/05/2008	N001	SF		0.019		F	#	3.6E-06	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0826	WL	06/12/2008	N001	SF		0.029		F	#	0.0001	-
	mg/L	0826	WL	11/04/2008	N001	SF		0.034		F	#	3.6E-06	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:50 am

PARAMETER	UNITS	LOCATION ID	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','0735','0784','0788','0789','0809','0824','0826') AND quality_assurance = TRUE AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%N%' AND data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #1/1/2008# and #12/30/2008#

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

LOCATION TYPES: WL WELL

ZONES OF COMPLETION:

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: 1/16/2009 10:37 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	06/12/2008	10:01	10.52	4936.06	
		4946.58	11/04/2008	17:08	9.99	4936.59	
0110	O	4944.35	06/13/2008	09:33	9.07	4935.28	
		4944.35	11/04/2008	17:03	9.45	4934.90	
0111	O	4946.87	06/12/2008	10:00	9.45	4937.42	
		4946.87	11/04/2008	17:09	9.51	4937.36	
0700	U	4951.38	06/11/2008	14:52	5.33	4946.05	
		4951.38	11/04/2008	12:18	6.03	4945.35	
0702	D	4931.00	11/05/2008	15:19	6.69	4924.31	
0705	D	4930.80	06/12/2008		5.38	4925.42	
		4930.80	11/05/2008	12:47	6.79	4924.01	
0707	D	4931.00	06/12/2008		4.58	4926.42	
		4931.00	11/05/2008	13:10	5.81	4925.19	
0709	D	4930.70	11/04/2008	17:16	3.04	4927.66	
0710	U	4947.90	06/11/2008		5.32	4942.58	
		4947.90	11/04/2008	10:50	5.54	4942.36	
0716	O	4939.12	06/12/2008		8.93	4930.19	
		4939.12	11/04/2008	13:55	8.77	4930.35	
0717	O	4938.80	06/12/2008		8.69	4930.11	
		4938.80	11/04/2008	13:35	8.35	4930.45	
0718	D	4937.60	06/12/2008		7.42	4930.18	
		4937.60	11/05/2008	15:00	8.45	4929.15	
0719	D	4937.55	06/12/2008		7.20	4930.35	
		4937.55	11/05/2008	15:30	7.99	4929.56	
0720	C	4940.46	06/11/2008		4.98	4935.48	
		4940.46	11/04/2008	09:20	5.21	4935.25	
0721	C	4940.47	06/11/2008		7.10	4933.37	
		4940.47	11/04/2008	09:40	8.21	4932.26	
0722R		4937.06	06/12/2008		9.04	4928.02	
		4937.06	11/05/2008	16:10	9.08	4927.98	
0723	D	4936.01	06/12/2008		7.90	4928.11	
		4936.01	11/05/2008	16:35	7.87	4928.14	
0724	U	4941.36	06/11/2008	17:17	7.32	4934.04	

STATIC WATER LEVELS (USEE700) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:37 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	11/04/2008	13:19	7.39	4933.97	
0725	U	4941.66	06/11/2008	17:18	7.56	4934.10	
		4941.66	11/04/2008	13:27	7.70	4933.96	
0726	U	4942.00	06/11/2008	17:19	5.96	4936.04	
		4942.00	11/04/2008	13:28	6.33	4935.67	
0727	U	4951.69	06/11/2008	15:55	8.69	4943.00	
		4951.69	11/04/2008	14:51	10.14	4941.55	
0728	U	4946.01	06/12/2008	08:29	6.70	4939.31	
		4946.01	11/04/2008	13:29	8.19	4937.82	
0729	D	4932.75	06/11/2008		6.95	4925.80	
		4932.75	11/05/2008	08:05	6.67	4926.08	
0730	D	4933.08	06/11/2008		7.65	4925.43	
		4933.08	11/05/2008	08:45	7.31	4925.77	
0732	U	4945.07	06/12/2008	09:52	8.08	4936.99	
		4945.07	11/04/2008	17:10	8.12	4936.95	
0733	U	4946.76	06/11/2008	10:36	6.22	4940.54	
		4946.76	11/04/2008	09:57	7.73	4939.03	
0734	U	4946.08	06/11/2008	10:38	7.24	4938.84	
		4946.08	11/04/2008	10:00	8.69	4937.39	
0735	D	4934.16	06/11/2008		8.30	4925.86	
		4934.16	11/03/2008	15:45	10.27	4923.89	
0736	U	4946.00	06/11/2008	16:38	7.16	4938.84	
		4946.00	11/04/2008	12:20	6.35	4939.65	
0784	U	4945.45	06/12/2008		6.75	4938.70	
		4945.45	11/04/2008	15:35	6.82	4938.63	
0788	C	4935.09	06/12/2008		7.50	4927.59	
		4935.09	11/04/2008	16:55	9.33	4925.76	
0789	D	4933.66	06/12/2008		7.70	4925.96	
		4933.66	11/05/2008	11:05	9.51	4924.15	
0809		4932.09	06/11/2008		6.10	4925.99	
		4932.09	11/03/2008	16:15	7.85	4924.24	
0824		4928.27	06/11/2008		5.46	4922.81	
		4928.27	11/05/2008	10:15	6.01	4922.26	

STATIC WATER LEVELS (USEE700) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:37 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	06/12/2008		6.61	4930.37	
		4936.98	11/04/2008	16:25	8.14	4928.84	

RECORDS: SELECTED FROM USEE700 WHERE site_code='RVT01' AND LOG_DATE between #1/1/2008# and #12/30/2008#

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: 1/16/2009 10:47 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3	mg/L	0405	WL	06/11/2008	N001	NR	N	136			#	-	-
	mg/L	0430	WL	06/11/2008	N001	NR	N	164			#	-	-
	mg/L	0436	WL	06/11/2008	N001	NR	N	156			#	-	-
	mg/L	0460	WL	06/11/2008	N001	NR	N	169			#	-	-
	mg/L	0828	WL	06/11/2008	N001		O	164			#	-	-
Manganese	mg/L	0405	WL	06/11/2008	N001	NR	N	0.0021	B		#	0.00013	-
	mg/L	0405	WL	11/05/2008	N001	NR	N	0.0021	B		#	0.00014	-
	mg/L	0430	WL	06/11/2008	N001	NR	N	0.0086			#	0.00013	-
	mg/L	0430	WL	11/04/2008	N001	NR	N	0.0047	B		#	0.00014	-
	mg/L	0436	WL	06/11/2008	N001	NR	N	0.012			#	0.00013	-
	mg/L	0436	WL	11/04/2008	N001	NR	N	0.00047	B		#	0.00014	-
	mg/L	0460	WL	06/11/2008	N001	NR	N	0.0015	B		#	0.00013	-
	mg/L	0460	WL	11/04/2008	N001	NR	N	0.00014	U	J	#	0.00014	-
	mg/L	0828	WL	06/11/2008	N001		O	0.0044	B		#	0.00013	-
	mg/L	0828	WL	11/04/2008	N001		O	0.016			#	0.00014	-
Molybdenum	mg/L	0405	WL	06/11/2008	N001	NR	N	0.0029	E		#	0.001	-
	mg/L	0405	WL	11/05/2008	N001	NR	N	0.0048			#	4.5E-05	-
	mg/L	0430	WL	06/11/2008	N001	NR	N	0.0025			#	0.001	-
	mg/L	0430	WL	11/04/2008	N001	NR	N	0.0023			#	4.5E-05	-
	mg/L	0436	WL	06/11/2008	N001	NR	N	0.004			#	0.001	-
	mg/L	0436	WL	11/04/2008	N001	NR	N	0.003			#	4.5E-05	-
	mg/L	0460	WL	06/11/2008	N001	NR	N	0.003			#	0.001	-
	mg/L	0460	WL	11/04/2008	N001	NR	N	0.0028			#	4.5E-05	-
	mg/L	0828	WL	06/11/2008	N001		O	0.0038			#	0.001	-
	mg/L	0828	WL	11/04/2008	N001		O	0.003			#	4.5E-05	-
Oxidation Reduction Potent	mV	0405	WL	06/11/2008	N001	NR	N	119			#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:47 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potent	mV	0405	WL	11/05/2008	N001	NR	N	168			#	-	-
	mV	0430	WL	06/11/2008	N001	NR	N	76			#	-	-
	mV	0430	WL	11/04/2008	N001	NR	N	271			#	-	-
	mV	0436	WL	06/11/2008	N001	NR	N	76			#	-	-
	mV	0436	WL	11/04/2008	N001	NR	N	239			#	-	-
	mV	0460	WL	06/11/2008	N001	NR	N	69.6			#	-	-
	mV	0460	WL	11/04/2008	N001	NR	N	143			#	-	-
	mV	0828	WL	06/11/2008	N001		O	68			#	-	-
	mV	0828	WL	11/04/2008	N001		O	236			#	-	-
pH	s.u.	0405	WL	06/11/2008	N001	NR	N	8.87			#	-	-
	s.u.	0405	WL	11/05/2008	N001	NR	N	8.61			#	-	-
	s.u.	0430	WL	06/11/2008	N001	NR	N	8.99			#	-	-
	s.u.	0430	WL	11/04/2008	N001	NR	N	8.78			#	-	-
	s.u.	0436	WL	06/11/2008	N001	NR	N	8.77			#	-	-
	s.u.	0436	WL	11/04/2008	N001	NR	N	8.53			#	-	-
	s.u.	0460	WL	06/11/2008	N001	NR	N	8.07			#	-	-
	s.u.	0460	WL	11/04/2008	N001	NR	N	8.70			#	-	-
	s.u.	0828	WL	06/11/2008	N001		O	8.88			#	-	-
	s.u.	0828	WL	11/04/2008	N001		O	8.75			#	-	-
Specific Conductance	umhos/cm	0405	WL	06/11/2008	N001	NR	N	899			#	-	-
	umhos/cm	0405	WL	11/05/2008	N001	NR	N	979			#	-	-
	umhos/cm	0430	WL	06/11/2008	N001	NR	N	748			#	-	-
	umhos/cm	0430	WL	11/04/2008	N001	NR	N	763			#	-	-
	umhos/cm	0436	WL	06/11/2008	N001	NR	N	857			#	-	-
	umhos/cm	0436	WL	11/04/2008	N001	NR	N	766			#	-	-
	umhos/cm	0460	WL	06/11/2008	N001	NR	N	701			#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:47 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0460	WL	11/04/2008	N001	NR	N	727			#	-	-
	umhos/cm	0828	WL	06/11/2008	N001		O	840			#	-	-
	umhos/cm	0828	WL	11/04/2008	N001		O	763			#	-	-
Sulfate	mg/L	0405	WL	06/11/2008	N001	NR	N	280			#	2.5	-
	mg/L	0405	WL	11/05/2008	N001	NR	N	390			#	5	-
	mg/L	0430	WL	06/11/2008	N001	NR	N	180			#	2.5	-
	mg/L	0430	WL	11/04/2008	N001	NR	N	210			#	2.5	-
	mg/L	0436	WL	06/11/2008	N001	NR	N	230			#	2.5	-
	mg/L	0436	WL	11/04/2008	N001	NR	N	200			#	2.5	-
	mg/L	0460	WL	06/11/2008	N001	NR	N	160			#	2.5	-
	mg/L	0460	WL	11/04/2008	N001	NR	N	170			#	2.5	-
	mg/L	0828	WL	06/11/2008	N001		O	230			#	2.5	-
	mg/L	0828	WL	11/04/2008	N001		O	200			#	2.5	-
Temperature	C	0405	WL	06/11/2008	N001	NR	N	12.27			#	-	-
	C	0405	WL	11/05/2008	N001	NR	N	11.03			#	-	-
	C	0430	WL	06/11/2008	N001	NR	N	11.38			#	-	-
	C	0430	WL	11/04/2008	N001	NR	N	11.72			#	-	-
	C	0436	WL	06/11/2008	N001	NR	N	27.49			#	-	-
	C	0436	WL	11/04/2008	N001	NR	N	14.27			#	-	-
	C	0460	WL	06/11/2008	N001	NR	N	17.79			#	-	-
	C	0460	WL	11/04/2008	N001	NR	N	21.40			#	-	-
	C	0828	WL	06/11/2008	N001		O	13.98			#	-	-
	C	0828	WL	11/04/2008	N001		O	12.34			#	-	-
Turbidity	NTU	0405	WL	06/11/2008	N001	NR	N	1.07			#	-	-
	NTU	0405	WL	11/05/2008	N001	NR	N	3.73			#	-	-
	NTU	0430	WL	06/11/2008	N001	NR	N	3.93			#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:47 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE: DATE	ID	ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0430	WL	11/04/2008	N001	NR	N	2.92			#	-	-
	NTU	0436	WL	06/11/2008	N001	NR	N	1.90			#	-	-
	NTU	0436	WL	11/04/2008	N001	NR	N	6.50			#	-	-
	NTU	0460	WL	06/11/2008	N001	NR	N	2.34			#	-	-
	NTU	0460	WL	11/04/2008	N001	NR	N	1.85			#	-	-
	NTU	0828	WL	06/11/2008	N001		O	3.17			#	-	-
	NTU	0828	WL	11/04/2008	N001		O	6.24			#	-	-
Uranium	mg/L	0405	WL	06/11/2008	N001	NR	N	0.00008	B	U	#	0.0001	-
	mg/L	0405	WL	11/05/2008	N001	NR	N	0.00002	B	U	#	3.6E-06	-
	mg/L	0430	WL	06/11/2008	N001	NR	N	0.00006	B	U	#	0.0001	-
	mg/L	0430	WL	11/04/2008	N001	NR	N	0.00003	B	U	#	3.6E-06	-
	mg/L	0436	WL	06/11/2008	N001	NR	N	0.00014			#	0.0001	-
	mg/L	0436	WL	11/04/2008	N001	NR	N	0.00005	B	U	#	3.6E-06	-
	mg/L	0460	WL	06/11/2008	N001	NR	N	0.00006	B	U	#	0.0001	-
	mg/L	0460	WL	11/04/2008	N001	NR	N	0.00005	B	U	#	3.6E-06	-
	mg/L	0828	WL	06/11/2008	N001		O	0.00022		U	#	0.0001	-
	mg/L	0828	WL	11/04/2008	N001		O	0.00006	B	U	#	3.6E-06	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:47 am

PARAMETER	UNITS	LOCATION ID	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') AND quality_assurance = TRUE AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%N%' AND data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #1/1/2008# and #12/30/2008#

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

LOCATION TYPES: WL WELL

ZONES OF COMPLETION:

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: 1/16/2009 10:37 am

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3	mg/L	0747	06/12/2008	0001	240			#	-	-
	mg/L	0749	06/12/2008	0001	183			#	-	-
	mg/L	0794	06/11/2008	0001	85			#	-	-
	mg/L	0796	06/11/2008	0001	114			#	-	-
	mg/L	0810	06/11/2008	N001	383			#	-	-
	mg/L	0811	06/12/2008	0001	94			#	-	-
	mg/L	0812	06/11/2008	0001	82			#	-	-
	mg/L	0822	06/11/2008	N001	218			#	-	-
	mg/L	0823	06/11/2008	N001	134			#	-	-
Manganese	mg/L	0747	06/12/2008	0001	0.240			#	0.00013	-
	mg/L	0747	11/05/2008	0001	0.510			#	0.00014	-
	mg/L	0749	06/12/2008	0001	0.036			#	0.00013	-
	mg/L	0749	11/04/2008	N001	0.095			#	0.00014	-
	mg/L	0794	06/11/2008	0001	0.011			#	0.00013	-
	mg/L	0794	11/04/2008	0001	0.021	E		#	0.00014	-
	mg/L	0796	06/11/2008	0001	0.016			#	0.00013	-
	mg/L	0796	11/03/2008	0001	0.020			#	0.00014	-
	mg/L	0810	06/11/2008	N001	0.024			#	0.00013	-
	mg/L	0810	06/11/2008	N002	0.028			#	0.00013	-
	mg/L	0810	11/03/2008	N001	0.095			#	0.00014	-
	mg/L	0811	06/12/2008	0001	0.200			#	0.00013	-
	mg/L	0811	11/05/2008	N001	0.025			#	0.00014	-
	mg/L	0812	06/11/2008	0001	0.0097			#	0.00013	-
	mg/L	0812	11/05/2008	N001	0.031			#	0.00014	-
	mg/L	0822	06/11/2008	N001	0.014			#	0.00013	-
	mg/L	0822	11/04/2008	0001	0.100			#	0.00014	-
	mg/L	0823	06/11/2008	N001	0.063			#	0.00013	-
	mg/L	0823	11/04/2008	0001	0.0077			#	0.00014	-
Molybdenum	mg/L	0747	06/12/2008	0001	0.010			#	0.002	-
	mg/L	0747	11/05/2008	0001	0.013			#	0.00009	-
	mg/L	0749	06/12/2008	0001	0.0072			#	0.001	-
	mg/L	0749	11/04/2008	N001	0.023			#	4.5E-05	-
	mg/L	0794	06/11/2008	0001	0.0006	B	U	#	0.001	-
	mg/L	0794	11/04/2008	0001	0.0014			#	4.5E-05	-
	mg/L	0796	06/11/2008	0001	0.0007	B		#	0.001	-
	mg/L	0796	11/03/2008	0001	0.0016			#	4.5E-05	-
	mg/L	0810	06/11/2008	N001	0.0011			#	0.001	-
	mg/L	0810	06/11/2008	N002	0.0012			#	0.001	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:37 am

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0810	11/03/2008	N001	0.0018			#	4.5E-05	-
	mg/L	0811	06/12/2008	0001	0.0011			#	0.001	-
	mg/L	0811	11/05/2008	N001	0.0015			#	4.5E-05	-
	mg/L	0812	06/11/2008	0001	0.0006	B		#	0.001	-
	mg/L	0812	11/05/2008	N001	0.0015			#	4.5E-05	-
	mg/L	0822	06/11/2008	N001	0.0037			#	0.001	-
	mg/L	0822	11/04/2008	0001	0.0062			#	4.5E-05	-
	mg/L	0823	06/11/2008	N001	0.0026			#	0.001	-
	mg/L	0823	11/04/2008	0001	0.0033			#	4.5E-05	-
Oxidation Reduction Potent	mV	0747	06/12/2008	N001	7.7			#	-	-
	mV	0747	11/05/2008	N001	200			#	-	-
	mV	0749	06/12/2008	N001	166			#	-	-
	mV	0749	11/04/2008	N001	133			#	-	-
	mV	0794	06/11/2008	N001	58			#	-	-
	mV	0794	11/04/2008	N001	217			#	-	-
	mV	0796	06/11/2008	N001	91			#	-	-
	mV	0796	11/03/2008	N001	194			#	-	-
	mV	0810	06/11/2008	N001	136			#	-	-
	mV	0810	11/03/2008	N001	150			#	-	-
	mV	0811	06/12/2008	N001	23			#	-	-
	mV	0811	11/05/2008	N001	218			#	-	-
	mV	0812	06/11/2008	N001	78			#	-	-
	mV	0812	11/05/2008	N001	202			#	-	-
	mV	0822	06/11/2008	N001	57			#	-	-
	mV	0822	11/04/2008	N001	198			#	-	-
	mV	0823	06/11/2008	N001	77			#	-	-
	mV	0823	11/04/2008	N001	228			#	-	-
pH	s.u.	0747	06/12/2008	N001	7.39			#	-	-
	s.u.	0747	11/05/2008	N001	7.73			#	-	-
	s.u.	0749	06/12/2008	N001	7.34			#	-	-
	s.u.	0749	11/04/2008	N001	7.97			#	-	-
	s.u.	0794	06/11/2008	N001	8.14			#	-	-
	s.u.	0794	11/04/2008	N001	7.37			#	-	-
	s.u.	0796	06/11/2008	N001	7.71			#	-	-
	s.u.	0796	11/03/2008	N001	7.42			#	-	-
	s.u.	0810	06/11/2008	N001	8.96			#	-	-
	s.u.	0810	11/03/2008	N001	8.72			#	-	-
	s.u.	0811	06/12/2008	N001	7.86			#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:37 am

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0811	11/05/2008	N001	8.20			#	-	-
	s.u.	0812	06/11/2008	N001	8.16			#	-	-
	s.u.	0812	11/05/2008	N001	8.26			#	-	-
	s.u.	0822	06/11/2008	N001	8.47			#	-	-
	s.u.	0822	11/04/2008	N001	7.88			#	-	-
	s.u.	0823	06/11/2008	N001	9.10			#	-	-
	s.u.	0823	11/04/2008	N001	8.47			#	-	-
Radium-226	pCi/L	0822	06/11/2008	N001	0.19	U		#	0.19	± 0.12
	pCi/L	0822	11/04/2008	0001	0.315		U	#	0.15	± 0.19
Radium-228	pCi/L	0822	06/11/2008	N001	0.77	U		#	0.77	± 0.41
	pCi/L	0822	11/04/2008	0001	0.63	U		#	0.63	± 0.39
Specific Conductance	umhos/cm	0747	06/12/2008	N001	894			#	-	-
	umhos/cm	0747	11/05/2008	N001	1315			#	-	-
	umhos/cm	0749	06/12/2008	N001	3528			#	-	-
	umhos/cm	0749	11/04/2008	N001	3753			#	-	-
	umhos/cm	0794	06/11/2008	N001	321			#	-	-
	umhos/cm	0794	11/04/2008	N001	858			#	-	-
	umhos/cm	0796	06/11/2008	N001	318			#	-	-
	umhos/cm	0796	11/03/2008	N001	884			#	-	-
	umhos/cm	0810	06/11/2008	N001	1117			#	-	-
	umhos/cm	0810	11/03/2008	N001	1250			#	-	-
	umhos/cm	0811	06/12/2008	N001	334			#	-	-
	umhos/cm	0811	11/05/2008	N001	823			#	-	-
	umhos/cm	0812	06/11/2008	N001	298			#	-	-
	umhos/cm	0812	11/05/2008	N001	804			#	-	-
	umhos/cm	0822	06/11/2008	N001	2131			#	-	-
	umhos/cm	0822	11/04/2008	N001	2137			#	-	-
	umhos/cm	0823	06/11/2008	N001	1139			#	-	-
	umhos/cm	0823	11/04/2008	N001	1153			#	-	-
Sulfate	mg/L	0747	06/12/2008	0001	230			#	2.5	-
	mg/L	0747	11/05/2008	0001	370			#	10	-
	mg/L	0749	06/12/2008	0001	1800			#	10	-
	mg/L	0749	11/04/2008	N001	2300			#	25	-
	mg/L	0794	06/11/2008	0001	78			#	0.5	-
	mg/L	0794	11/04/2008	0001	290			#	2.5	-
	mg/L	0796	06/11/2008	0001	74			#	0.5	-
	mg/L	0796	11/03/2008	0001	300			#	2.5	-
	mg/L	0810	06/11/2008	N001	240			#	5	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:37 am

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0810	06/11/2008	N002	250			#	5	-
	mg/L	0810	11/03/2008	N001	290			#	10	-
	mg/L	0811	06/12/2008	0001	71			#	0.5	-
	mg/L	0811	11/05/2008	N001	280			#	2.5	-
	mg/L	0812	06/11/2008	0001	69			#	0.5	-
	mg/L	0812	11/05/2008	N001	290			#	2.5	-
	mg/L	0822	06/11/2008	N001	960			#	10	-
	mg/L	0822	11/04/2008	0001	1100			#	10	-
	mg/L	0823	06/11/2008	N001	370			#	5	-
	mg/L	0823	11/04/2008	0001	380			#	5	-
Temperature	C	0747	06/12/2008	N001	16.34			#	-	-
	C	0747	11/05/2008	N001	8.02			#	-	-
	C	0749	06/12/2008	N001	20.75			#	-	-
	C	0749	11/04/2008	N001	18.15			#	-	-
	C	0794	06/11/2008	N001	11.11			#	-	-
	C	0794	11/04/2008	N001	5.97			#	-	-
	C	0796	06/11/2008	N001	10.94			#	-	-
	C	0796	11/03/2008	N001	9.89			#	-	-
	C	0810	06/11/2008	N001	15.38			#	-	-
	C	0810	11/03/2008	N001	10.02			#	-	-
	C	0811	06/12/2008	N001	14.76			#	-	-
	C	0811	11/05/2008	N001	5.47			#	-	-
	C	0812	06/11/2008	N001	13.28			#	-	-
	C	0812	11/05/2008	N001	4.24			#	-	-
	C	0822	06/11/2008	N001	13.42			#	-	-
	C	0822	11/04/2008	N001	9.45			#	-	-
	C	0823	06/11/2008	N001	15.95			#	-	-
	C	0823	11/04/2008	N001	8.85			#	-	-
Turbidity	NTU	0747	06/12/2008	N001	60.7			#	-	-
	NTU	0747	11/05/2008	N001	67.2			#	-	-
	NTU	0749	06/12/2008	N001	15.7			#	-	-
	NTU	0749	11/04/2008	N001	9.80			#	-	-
	NTU	0794	06/11/2008	N001	68.3			#	-	-
	NTU	0794	11/04/2008	N001	12.9			#	-	-
	NTU	0796	06/11/2008	N001	82.8			#	-	-
	NTU	0796	11/03/2008	N001	10.9			#	-	-
	NTU	0810	06/11/2008	N001	1.23			#	-	-
	NTU	0810	11/03/2008	N001	4.04			#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:37 am

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0811	06/12/2008	N001	111			#	-	-
	NTU	0811	11/05/2008	N001	7.92			#	-	-
	NTU	0812	06/11/2008	N001	60.7			#	-	-
	NTU	0812	11/05/2008	N001	7.86			#	-	-
	NTU	0822	06/11/2008	N001	2.00			#	-	-
	NTU	0822	11/04/2008	N001	29.2			#	-	-
	NTU	0823	06/11/2008	N001	4.47			#	-	-
	NTU	0823	11/04/2008	N001	11.6			#	-	-
Uranium	mg/L	0747	06/12/2008	0001	0.098			#	0.0002	-
	mg/L	0747	11/05/2008	0001	0.130			#	7.2E-06	-
	mg/L	0749	06/12/2008	0001	0.0006			#	0.0001	-
	mg/L	0749	11/04/2008	N001	0.0019			#	3.6E-06	-
	mg/L	0794	06/11/2008	0001	0.002			#	0.0001	-
	mg/L	0794	11/04/2008	0001	0.0063			#	3.6E-06	-
	mg/L	0796	06/11/2008	0001	0.0018			#	0.0001	-
	mg/L	0796	11/03/2008	0001	0.006			#	3.6E-06	-
	mg/L	0810	06/11/2008	N001	0.0049			#	0.0001	-
	mg/L	0810	06/11/2008	N002	0.0049			#	0.0001	-
	mg/L	0810	11/03/2008	N001	0.0046			#	3.6E-06	-
	mg/L	0811	06/12/2008	0001	0.002			#	0.0001	-
	mg/L	0811	11/05/2008	N001	0.0059			#	3.6E-06	-
	mg/L	0812	06/11/2008	0001	0.0017			#	0.0001	-
	mg/L	0812	11/05/2008	N001	0.006			#	3.6E-06	-
	mg/L	0822	06/11/2008	N001	0.0074			#	0.0001	-
	mg/L	0822	11/04/2008	0001	0.0075			#	3.6E-06	-
	mg/L	0823	06/11/2008	N001	0.0043			#	0.0001	-
	mg/L	0823	11/04/2008	0001	0.0043			#	3.6E-06	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site
REPORT DATE: 1/16/2009 10:37 am

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

RECORDS: SELECTED FROM USEE800 WHERE site_code='RVT01' AND quality_assurance = TRUE AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%N%' AND data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #1/1/2008# and #12/30/2008#

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). 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.