7.0 Green River, Utah, Disposal Site

7.1 Compliance Summary

The Green River, Utah, Uranium Mill Tailings Radiation Control Act (UMTRCA) Title I Disposal Site, was inspected on March 26, 2008. The disposal cell and all associated surface water diversion and drainage structures were in excellent condition and functioning as designed. Three damaged perimeter signs were replaced. Groundwater monitoring continued for the purpose of evaluating cell performance; no constituents of concern exceeded their respective proposed alternate concentration limits (ACLs), although current standards continued to be exceeded for uranium, nitrate, and selenium. No additional maintenance needs or cause for a follow-up or contingency inspection were identified.

7.2 Compliance Requirements

Requirements for the long-term surveillance and maintenance of the Green River, Utah, Uranium Mill Tailings Radiation Control Act (UMTRCA) Title I Disposal Site are specified in the *Long-Term Surveillance Plan* [LTSP] *for the Green River, Utah, Disposal Site* (DOE/AL/62350–89, Rev. 2, U.S. Department of Energy [DOE], Albuquerque Operations Office, July 1998) and in procedures established by DOE to comply with requirements of Title 10 *Code of Federal Regulations* Part 40.27 (10 CFR 40.27). These requirements are listed in Table 7–1.

Table 7–1. License Requirements for the Green River Disposal Site

Requirement	Long-Term Surveillance Plan	This Report
Annual Inspection and Report	Section 6.0	Section 7.3.1
Follow-Up or Contingency Inspections	Section 7.0	Section 7.3.2
Routine Maintenance and Repairs	Section 8.0	Section 7.3.3
Groundwater Monitoring	Section 5.2	Section 7.3.4
Corrective Action	Section 9.0	Section 7.3.6

Institutional Controls—The 25-acre disposal site is owned by the United States of America and was accepted under the U.S. Nuclear Regulatory Commission (NRC) general license (10 CFR 40.27) in 1998. DOE is the licensee and, in accordance with the requirements for UMTRCA Title I sites, is responsible for the custody and long-term care of the site. Institutional controls at the disposal site, as defined by DOE Policy 454.1, consist of federal ownership of the property, a disposal cell perimeter security fence, warning/no-trespassing signs placed along the property boundary, and a locked gate at the entrance to the site. Verification of these institutional controls is part of the annual inspection.

Inspectors found no evidence that these institutional controls were ineffective or violated.

7.3 Compliance Review

7.3.1 Annual Inspection and Report

The site, located southeast of Green River, Utah, was inspected on March 26, 2008. Results of the inspection are described below. Features and photograph locations (PLs) mentioned in this report are shown on Figure 7–1. Numbers in the left margin of this report refer to items summarized in the "Executive Summary" table.

7.3.1.1 Specific Site-Surveillance Features

Access Road, Entrance Gate, Fence, and Signs—Access to the site is from either a paved road that leads south from Green River or a paved road that leads north from U.S. Interstate Highway 70. The access route crosses State land and U.S. Army property. Perpetual access has been granted to DOE through right-of-way agreements with both agencies.

Entrance to the site is through a locked steel gate in the stock fence along the paved road. Past this gate, a short track leads across State land to the disposal cell, which is enclosed within a chain-link security fence. The chain-link fence is set back between 50 and 250 feet from the site boundary. Two vehicle access gates are installed in this fence at the south and east corners of the fence line. A personnel gate is at the north corner of the fence line. The security fence and gates were in excellent condition.

One entrance sign and 17 perimeter signs are positioned on posts set along the unfenced site
7A boundary. Perimeter sign P12 has a bullet dent but is legible. Perimeter signs P1, P6, and P9 were replaced because they were damaged or faded. The remaining signs were in excellent condition.

Site Markers and Monuments—Two granite site markers are located on site. The concrete base of site marker SMK–1 has several cracks, but there is no need for repairs at this time. Eleven boundary monuments and three survey monuments are installed along the site perimeter. All of the monuments were in excellent condition.

Monitor Wells—Twenty-two groundwater monitor wells are present at the site. The wells were secure and in excellent condition at the time of the inspection. Groundwater monitoring is described and the results are presented in Section 7.3.4.

7.3.1.2 Transects

To ensure a thorough and efficient inspection, the site was divided into three transects: (1) the disposal cell and adjacent area inside the security fence, (2) the site perimeter between the security fence and the site boundary, and (3) the outlying area.

The area inside each transect was inspected by walking a series of traverses. Within each transect, the inspectors examined specific site-surveillance features, vegetation, and other features. Inspectors also looked for evidence of settlement, erosion, or other modifying processes.

Disposal Cell and Adjacent Area Inside the Security Fence—The 6-acre disposal cell was completed in 1989. The slopes of the disposal cell cover are armored with basalt rock. The cell cover was in excellent condition (PL–1). The riprap-filled apron trench along the base of the disposal cell on all sides was in excellent condition.

Some deep-rooted shrubs, primarily four-wing saltbush and rabbitbrush, are growing along the apron. These shrubs are beneficial because they are expected to reduce the amount of runoff water that infiltrates through the sides and bottom of the apron.

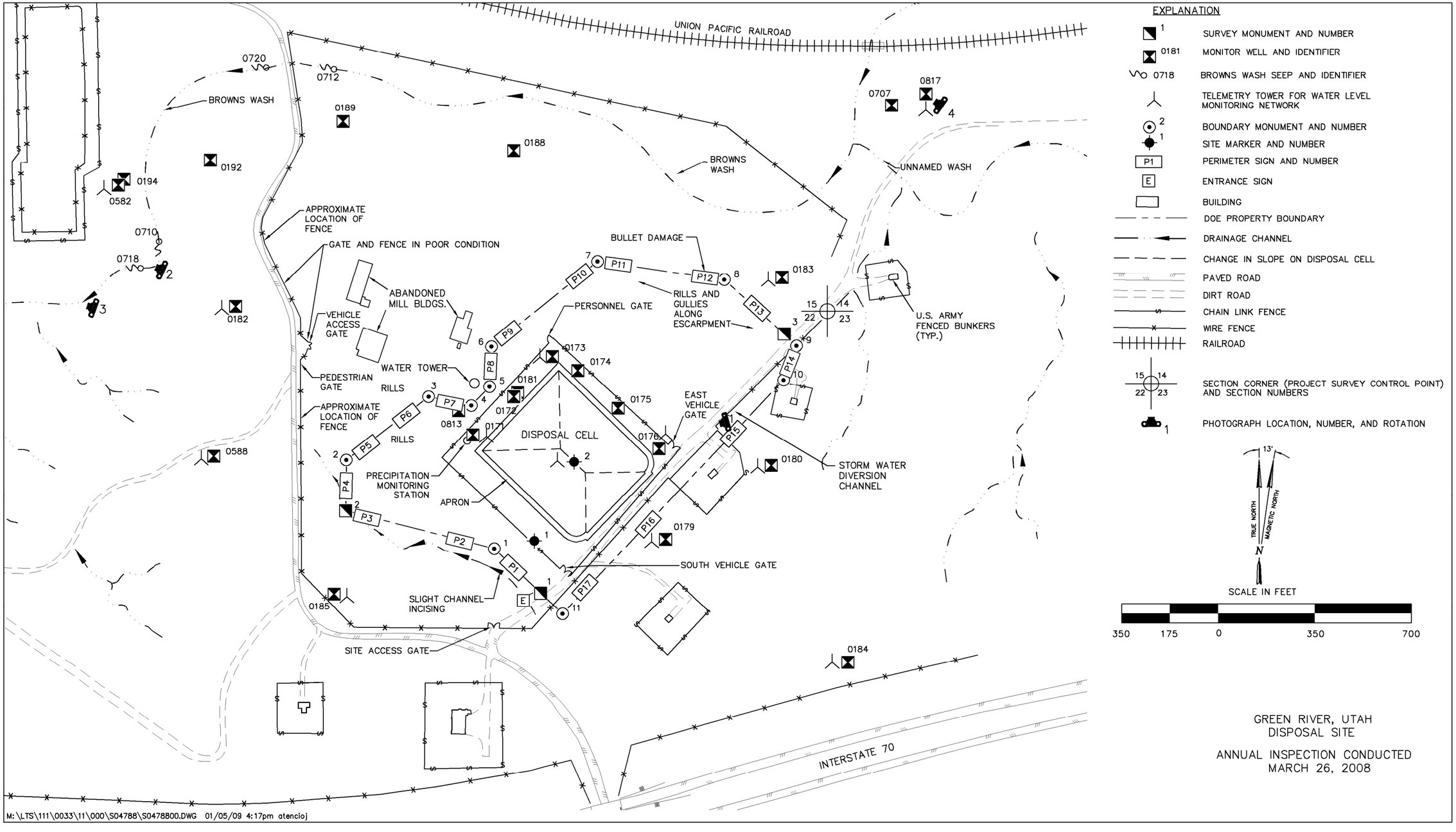

Figure 7–1. 2008 Annual Compliance Drawing for the Green River Disposal Site

This page intentionally left blank

Site Perimeter Between the Security Fence and the Site Boundary—Rills and gullies are present on the west side of the property but do not pose a threat to the integrity of the cell and currently are not impacting any site-surveillance features. Rills and gullies are also present along the escarpment northeast of the disposal cell in the area between boundary monument BM–7 and survey monument SM–3. Maximum gully depth in this area is approximately 3 feet. The rill and gully erosion poses no threat to the integrity of the disposal cell but could eventually damage perimeter signs and boundary monuments. Rills and gullies on site will continue to be monitored.

A barbed-wire stock fence on the surrounding State-owned property is in poor condition, and an access gate through the fence to abandoned mill buildings northwest of DOE property was broken off of its hinges. Tracks indicate that vehicles enter the gate and cross DOE property to access areas northeast of the site. However, there was no evidence of vandalism to site-surveillance features. Because DOE is not responsible for maintaining the barbed-wire fence and gate, trespassing onto DOE property is difficult to control. DOE will continue to monitor for evidence of vandalism at the site.

Outlying Area—The area extending outward from the site for a distance of 0.25 mile was checked for signs of erosion, development, or other disturbance that might affect site security or integrity. Areas of erosion noted during recent and previous inspections include the natural drainage southwest of the site and rills and gullies northwest of the water tower. Minor erosion continues but currently does not pose a threat to the integrity of the disposal cell or site-surveillance features.

Abandoned buildings associated with milling activities at the Green River Processing Site are located northwest and upwind of the DOE property. The buildings are in a severe state of disrepair, and debris (e.g., roofing materials, siding, trash) tends to be blown from the buildings onto DOE property. Accumulation of building materials blown onto DOE property was not significant, but it will continue to be monitored, and debris will be removed as necessary.

Browns Wash conditions were observed during the inspection. The channel bottom between the bridge and the backwater area near the confluence with the Green River was incised due to a recent runoff event. Although it is dry much of the year, minor flow was occurring in this reach of the wash due to the recent storm, and several of the scour holes contained small pools of water (PL–2); Browns Wash upstream of the bridge was dry. Some bird and animal tracks were present near a couple of pools. The incised channel appears to be capturing some of the alluvial groundwater flow, and some of the flow is likely from seeps. Browns Wash seeps have been identified as potential discharge locations for the contaminated middle sandstone unit aquifer of the Cedar Mountain Formation (the aquifer is contaminated under the disposal cell). However, the middle sandstone unit is not present under the principal seep area (seep location 0718). Although the source of the seep water at that location has not been determined, it may be derived from aquifers underlying the Cedar Mountain Formation.

The backwater area near the mouth of Browns Wash was investigated because of its potential as a fish-spawning location. Green River water had moved up the Browns Wash channel as far as surface sampling location 0847 (PL–3). In most of the backwater area, the water was less than 1 foot deep. A scour hole formed at location 0847 during the latest runoff event and contained up to 3 feet of water. Several small fish (less than 2 inches long) were observed in the small pool. At the time of a site visit in February 2008, and prior to the most recent runoff event, the Browns

Wash channel was dry, the backwater area was filled with sediment, and only a couple of inches of water were present in a much shallower scour hole at location 0847. The conditions of Browns Wash channel and the backwater area change substantially after each runoff event as sediment is either scoured or deposited along the channel bottom.

7.3.2 Follow-Up or Contingency Inspections

DOE will conduct follow-up inspections if (1) a condition is identified during the annual inspection or other site visit that requires a return to the site to evaluate the condition, or (2) DOE is notified by a citizen or outside agency that conditions at the site are substantially changed.

No follow-up or contingency inspections were required in 2008. The site was visited several times in 2008 to replace damaged perimeter signs and to monitor the condition of Browns Wash and its seeps.

7.3.3 Routine Maintenance and Repairs

Three damaged perimeter signs were replaced in 2008. No other maintenance or repairs were performed at the disposal site.

7.3.4 Groundwater Monitoring

7B In compliance with 40 CFR 192, Subpart A, the LTSP stipulates a cell-performance groundwater-monitoring network of four point-of-compliance (POC) wells (MW−0171, MW−0172, MW−0173, and MW−0813). Because of poor well completion characteristics, MW−0172 is no longer being sampled, and a newer well adjacent to it (MW−0181) is being monitored instead. Based on a draft Groundwater Compliance Action Plan (GCAP) (*Preliminary Final Ground Water Compliance Action Plan for the Green River, Utah, [UMTRCA Title I] Disposal Site*) and discussions with the State of Utah, DOE is monitoring MW−0176 and MW−0179 as POC wells also. Groundwater levels are monitored in the two Cedar Mountain Formation aquifers of concern (in the middle sandstone and basal sandstone units).

7C The draft GCAP includes both the disposal site and the former processing site, so it addresses compliance to Subparts A and B of 40 CFR 192. Therefore, the monitoring network includes non-POC wells completed in the Browns Wash alluvium for best-management-practice monitoring (MW−0188, MW−0189, MW−0192, and MW−0194). These wells are in, and downgradient of, an area where tailings had been stored on the alluvial plane. The low-yield groundwater in the alluvium was contaminated during processing and tailings-storage activities, and it is recommended for application of supplemental standards based on a classification of limited-use groundwater. The wells are sampled as a best management practice to track the migration of contaminants out of the alluvium. Following concurrence in the GCAP, the LTSP will be revised to incorporate the accepted groundwater compliance strategy.

The purpose of monitoring the POC wells is to evaluate the performance of the disposal cell. In accordance with the draft GCAP, groundwater samples are collected annually (beginning in June 2007) and are monitored for four target analytes—arsenic, nitrate, selenium, and uranium. Nitrate and uranium are indicator constituents, and arsenic and selenium are monitored because concentrations at some locations that exceed U.S. Environmental Protection Agency (EPA)

maximum concentration limits (MCLs) provided in 40 CFR 192, Subpart A, Table 1 and State of Utah groundwater quality standards (Rule R317–6–2, Table 1). Sulfate is no longer analyzed because there is currently no primary drinking water standard for that constituent.

Based on the evaluation of several years of analytical data and associated risk, the ACLs listed in Table 7–2 have been proposed to NRC and the State of Utah in the draft GCAP. If accepted, these proposed ACLs will be applicable to all point-of-compliance (POC) wells.

Table 7–2. Proposed ACLs for POC Wells at the Green River Disposal Site

Constituent	Standard (mg/L)	Proposed ACL (mg/L)
Arsenic	0.05[a]	5.0
Nitrate + Nitrite as Nitrogen	10 [a]	1,000
Selenium	0.05 [b]	5.0
Uranium	0.044[a]	4.4

[a] EPA maximum concentration limit (40 CFR 192, Table 1).
[b] State of Utah groundwater quality standard (Rule R317–6–2, Table 1).
Key: ACL = alternate concentration limit; mg/L = milligrams per liter; N = nitrogen

Samples were collected quarterly for 3 years beginning in 1998 with the provision that monitoring requirements would be reevaluated in 2001 to determine if contaminant levels in groundwater decreased to levels that existed prior to construction of the disposal cell. The evaluation report concluded that concentrations were within a reasonable range of compliance relative to the proposed concentration limits provided in the LTSP. However, it is understood that the presence of preexisting processing-related groundwater contamination in the vicinity of the disposal cell complicates the assessment of disposal cell performance. In addition, changes in concentration levels unrelated to disposal cell performance may occur at the site as a result of this preexisting contamination.

Quarterly monitoring of the original four POC wells continued through June 2007. Through the development of the draft GCAP, risk analyses have determined that there is no unacceptable risk to human health and the environment as a result of site-related contamination in groundwater in the vicinity of the disposal site because the groundwater is not used and the river water is unaffected by site contaminants. Therefore, DOE determined that there was no health or cost benefit associated with continuing quarterly monitoring, and therefore, annual monitoring has been implemented.

Cell-Performance Monitoring—Analytical results for the June 2008 sampling event at the proposed POC wells are provided in Table 7–3. Time-concentration plots for the period of 1998 through June 2008 for the four target analytes—arsenic, nitrate, selenium, and uranium—are shown on Figures 7−2 through 7−5.

Table 7–3. Analytical Results for POC Wells at the Green River Disposal Site

Monitor Well	Arsenic (mg/L)		Nitrate[a] (mg/L)		Selenium (mg/L)		Uranium (mg/L)	
	ACL	Sample Result	ACL	Sample Result	ACL	Sample Result	ACL	Sample Result
0171	5.0	0.0013	1,000	48	5.0	0.19	4.4	0.13
0173	5.0	0.0016	1,000	260	5.0	0.16	4.4	0.020
0176	5.0	0.00040	1,000	91	5.0	0.78	4.4	0.0025
0179	5.0	0.00058	1,000	20	5.0	0.20	4.4	0.21
0181	5.0	0.0028	1,000	120	5.0	0.015	4.4	0.016
0813	5.0	0.073	1,000	ND	5.0	0.00061	4.4	0.017

[a] Nitrate = nitrate plus nitrite as nitrogen
Key: ACL = proposed alternate concentration limit; mg/L = milligrams per liter; ND = not detected

Arsenic concentrations in groundwater remain below the EPA MCL of 0.05 mg/L in all POC wells except MW−0813, and considerably below the proposed ACL of 5.0 mg/L in all POC wells. In well MW−0813, levels have exceeded the MCL since completion of the cell in 1998 as shown on Figure 7–2 but are substantially below the proposed ACL. The results for this well indicate that arsenic concentrations are trending downward in the last few years.

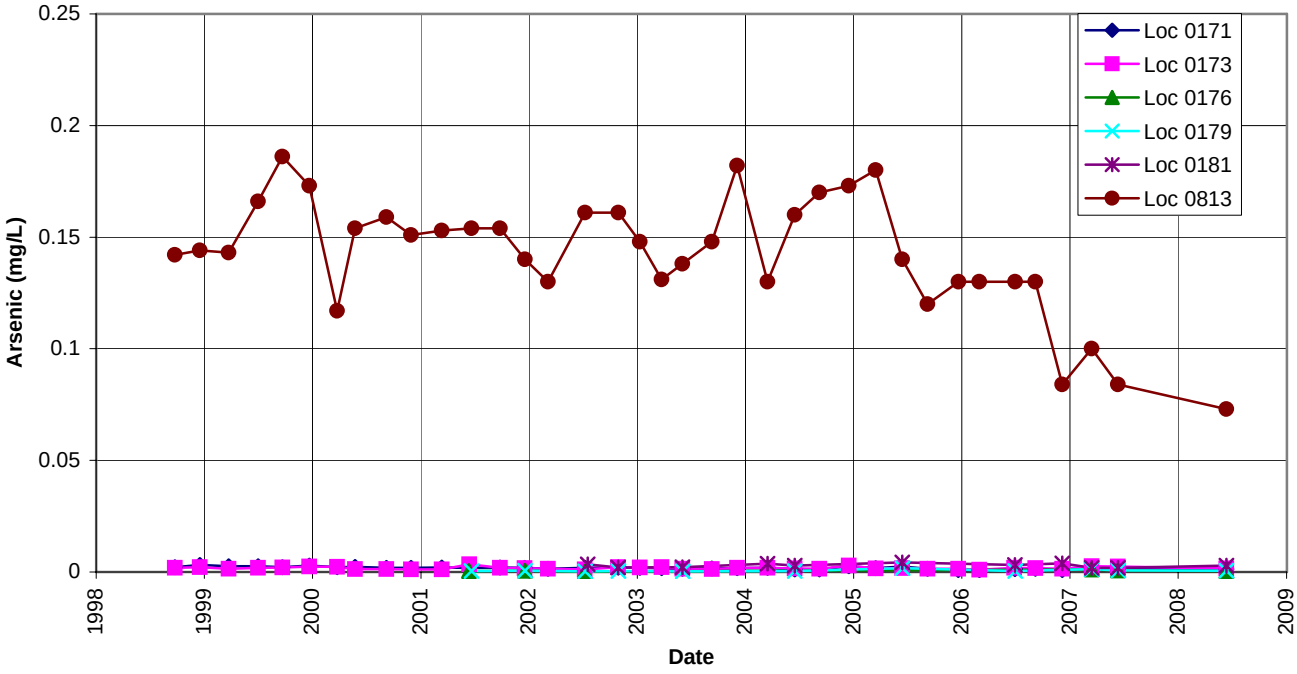

Figure 7–2. Time-Concentration Plots of Arsenic in Groundwater at the Green River Disposal Site

Nitrate concentrations have been measured as nitrate plus nitrite as nitrogen since early 2004 (prior to that time, nitrate was measured as NO_3). Concentrations have continued above the EPA MCL of 10 mg/L in all POC wells except MW−0813, but they are considerably below the proposed ACL of 1,000 mg/L in all wells; values for MW−0813 continue to be reported below the laboratory detection limit (Figure 7–3). An overall downward trend of nitrate concentrations has been occurring in well MW−0173.

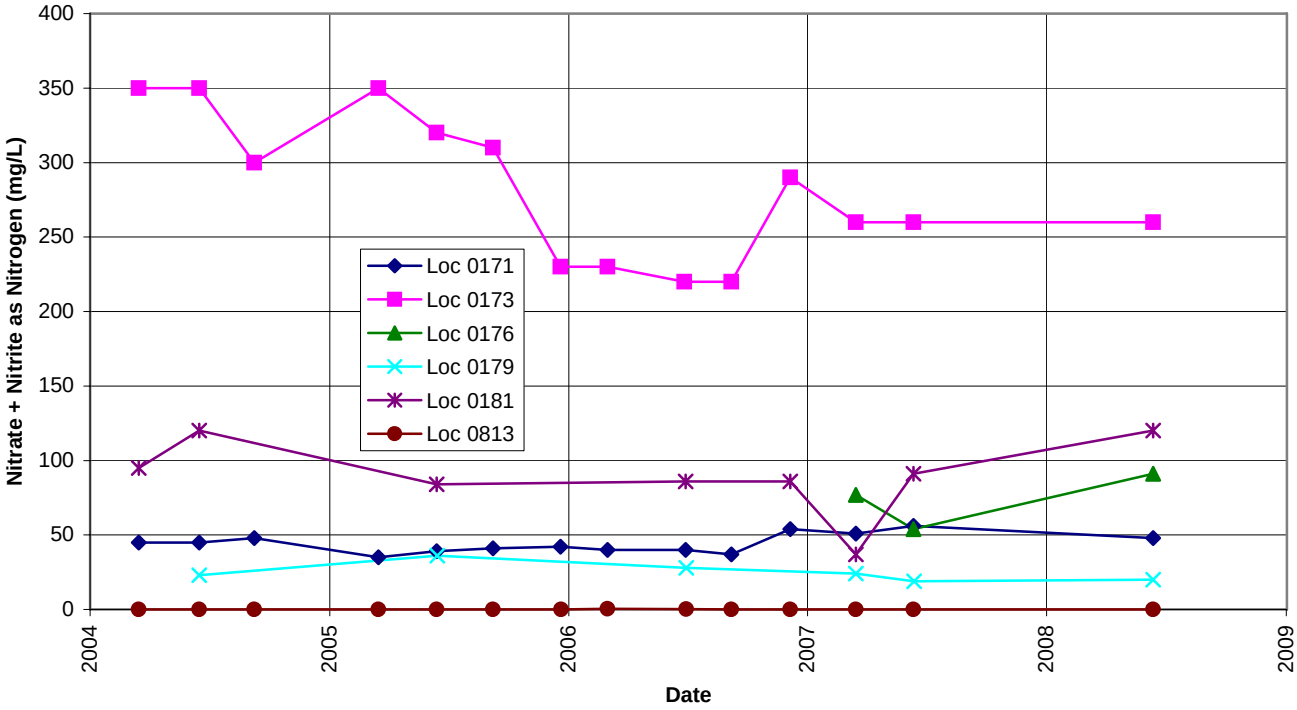

Figure 7–3. Time-Concentration Plots of Nitrate in Groundwater at the Green River Disposal Site

Except for well MW−0813, which remains near the laboratory detection limit, selenium concentrations in groundwater continued above the Utah groundwater standard of 0.05 mg/L but below the proposed ACL of 5.0 mg/L in well MW−0176 (Figure 7–4). Selenium concentrations have been decreasing in well MW−0179 for the past 2 years; otherwise, no trends are apparent in the POC wells.

Uranium concentrations in groundwater remain below the EPA MCL of 0.044 mg/L in all POC wells except MW−0171 and MW−0179, and considerably below the proposed ACL of 4.4 mg/L in all POC wells. Concentrations of uranium continue to remain essentially constant in wells MW−0173, MW−0176, MW−0181, and MW−0813. The highest uranium concentrations continue to occur at well MW−0179 (0.21 mg/L), which is upgradient of the disposal cell. The reason for the elevated concentration of uranium in well MW−0179 has not been determined but may be due to natural causes. At well MW−0171, concentrations exceed the MCL and continue to exhibit an overall upward trend (Figure 7–5). Because uranium is the only constituent of concern in well MW−0171 that has indicated an upward trend, no conclusions regarding the cause of the trend have been reached at this time.

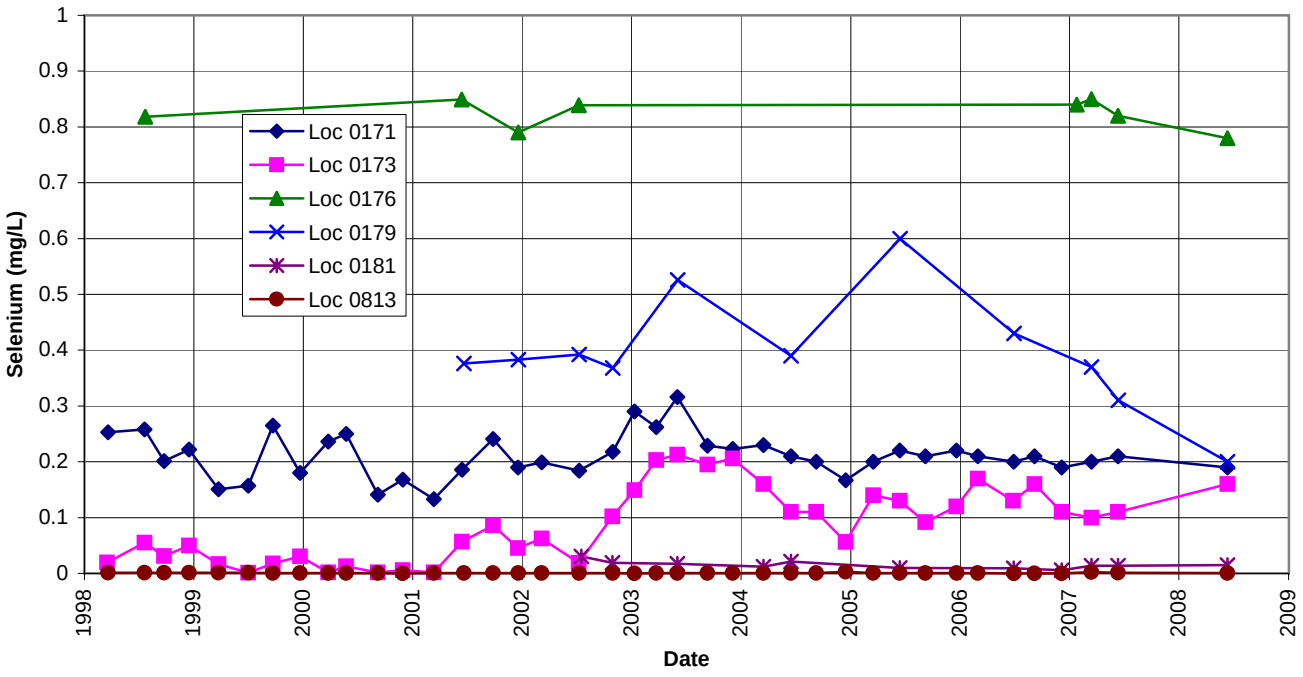

Figure 7–4. Time-Concentration Plot of Selenium in Groundwater at the Green River Disposal Site

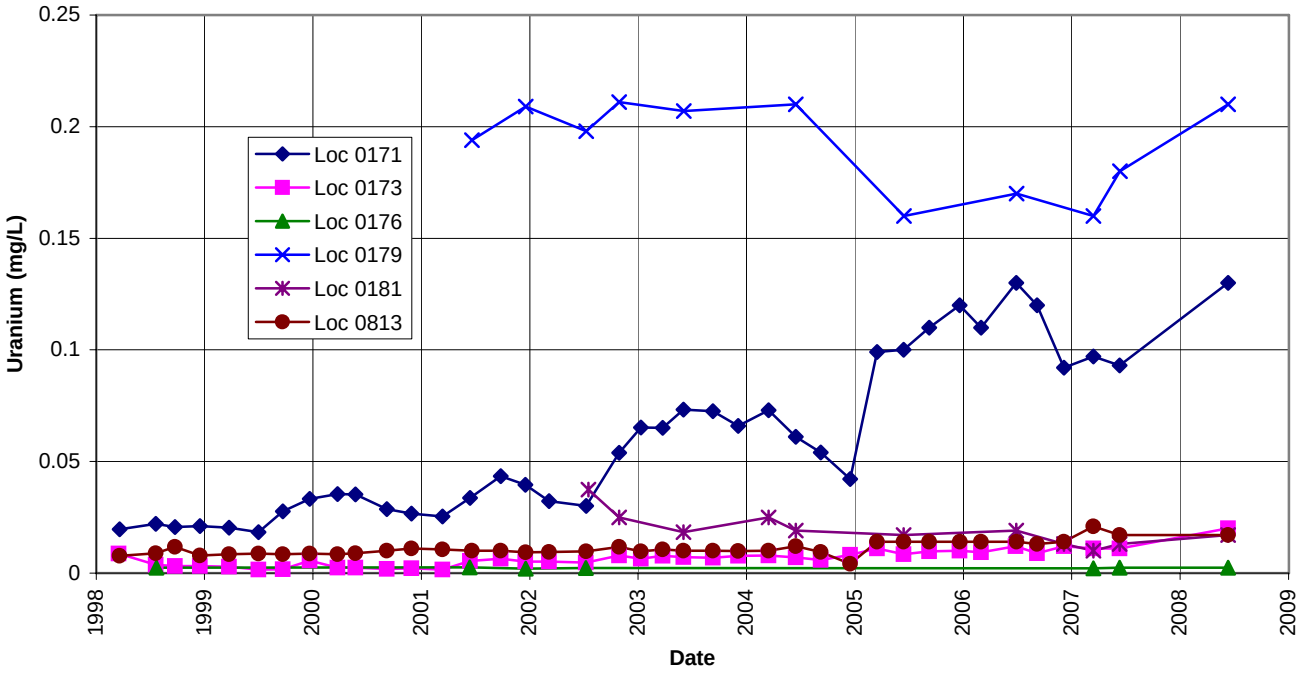

Figure 7–5.Time-Concentration Plot of Uranium in Groundwater at the Green River Disposal Site

Groundwater Level Monitoring—Groundwater levels in several monitor wells adjacent to the disposal cell have been measured manually since 1991, and continuously with down-hole dataloggers since 1999. Dataloggers are currently present in 13 wells, and a telemetry system was installed in 2007 to transmit the continuous water-level monitoring data to the DOE Grand Junction Office (PL–4). The purpose of continuous monitoring is to confirm the persistence of the upward hydraulic gradient in the two Cedar Mountain Formation aquifers, to evaluate flow directions in the aquifers in the vicinity of the disposal cell, and to determine if the flows vary seasonally or are influenced by groundwater mounding under the disposal cell.

7D

Water-level hydrographs of the POC wells, completed in the middle sandstone aquifer, indicate that an overall decrease in the groundwater elevation of approximately 3 feet occurred from 1998 through 2004, followed by an increase of approximately 8 feet since then (Figure 7–6). This rapid increase in groundwater elevation, which appears to be leveling off, may be the result of local and regional aquifer recharge through fractures in the Cedar Mountain Formation and nearby outcrops located southeast of the site, as numerous heavy rainfall events have occurred at the site since 2004. Erroneous manual measurements, likely due to equipment problems, occurred on several occasions (continuous measurements indicated essentially no change at those times); these measurements are not shown on Figure 7–6.

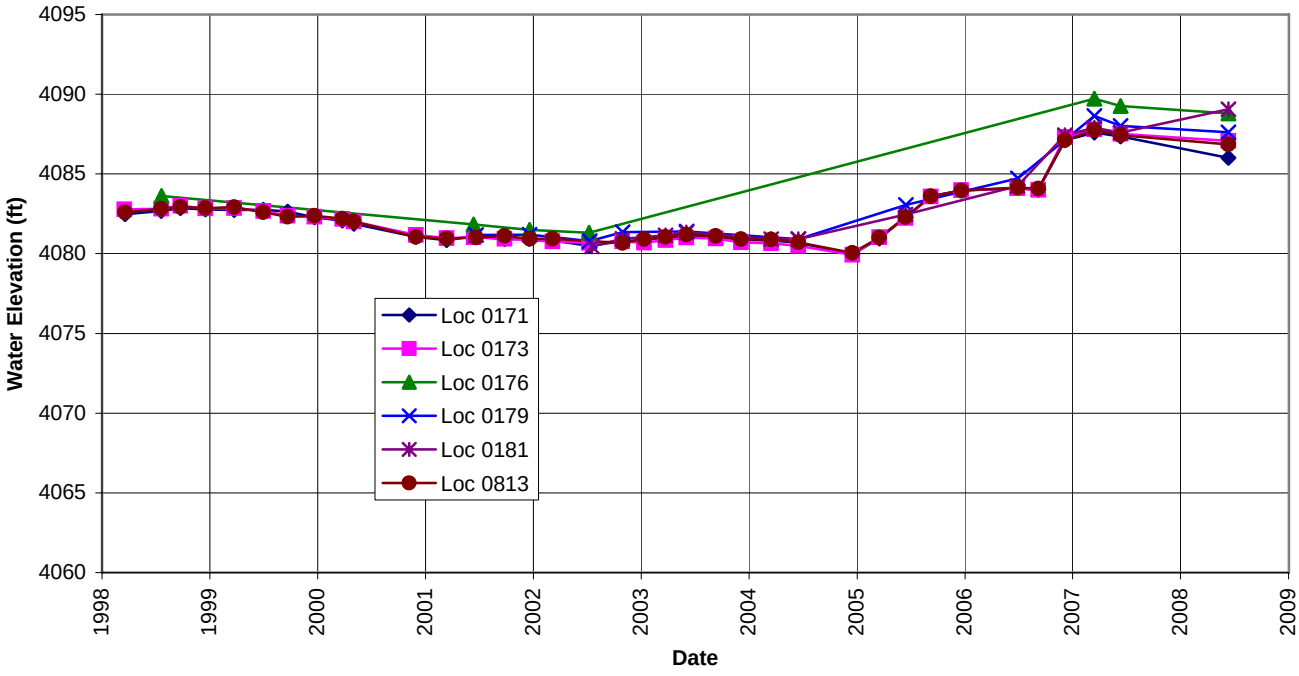

Figure 7–6. Groundwater Elevations at the Green River Disposal Site

Quarterly water-level measurements for both Cedar Mountain Formation aquifers, obtained from continuous monitoring data collected in 2007 and 2008, are provided in Table 7–4 and Table 7−5. The measurements and estimated potentiometric surfaces for these aquifers as of September 1, 2008, are plotted on Figure 7–7 and Figure 7–8. The estimated potentiometric surface for the middle sandstone aquifer (Figure 7–7) indicates a general west-northwest flow direction from the cell. Figure 7–8 indicates a west-southwest flow direction from the cell in the basal sandstone aquifer. Monitor well MW−0817, completed in the middle sandstone unit, and

well MW−0582, completed in the basal sandstone unit, are both adjacent to Browns Wash and are both flowing (artesian) wells. The wells are capped, and elevations are recorded according to shut-in pressure.

Water-level data indicate that the middle sandstone unit directly beneath the disposal cell is saturated (water-level elevations are above the top of the unit), and measurements in monitor well MW−0817 have always demonstrated an upward hydraulic gradient at its location. Measurements in all of the basal sandstone aquifer wells have always indicated a strong upward hydraulic gradient in that aquifer. Therefore, contaminants in the middle sandstone aquifer are unlikely to migrate downward into the uncontaminated basal sandstone aquifer.

Table 7–4. Groundwater Elevations in the Middle Sandstone Aquifer at the Green River Disposal Site

Monitor Well	Groundwater Elevation[a]			
	12/1/07	3/1/08	6/1/08	9/1/08
0171	4,087.10	4,086.95	4,086.87	4,086.63
0173	4,087.15	4,086.92	4,086.85	4,086.65
0176	4,089.24	4,088.85	4,088.74	4,088.55
0179	4,088.04	4,087.71	4,087.68	4,087.57
0183	4,089.18	4,088.62	4,088.62	4,088.51
0813	4,087.18	4,087.01	4,086.96	4,086.72
0817[b]	4,088.56	4,088.78	4,088.90	4,089.02

[a]Elevations recorded at noon by continuous-monitoring dataloggers.
[b]Flowing well; elevation recorded by datalogger according to well shut-in pressure.

Table 7–5. Groundwater Elevations in the Basal Sandstone Aquifer at the Green River Disposal Site

Monitor Well	Groundwater Elevation[a]			
	12/1/07	3/1/08	6/1/08	9/1/08
0182	4,085.21	4,085.15	4,085.27	4,085.43
0184	4,085.80	4,085.78	4,085.91	4,086.07
0185	4,085.11	4,084.95	4,084.96	4,085.18
0582[b]	4,083.75	4,083.65	4,083.60	4,083.78
0588	4,084.83	4,084.72	4,084.70	4,084.85

[a]Elevations recorded at noon by continuous-monitoring dataloggers.
[b]Flowing well; elevation recorded by datalogger according to well shut-in pressure.

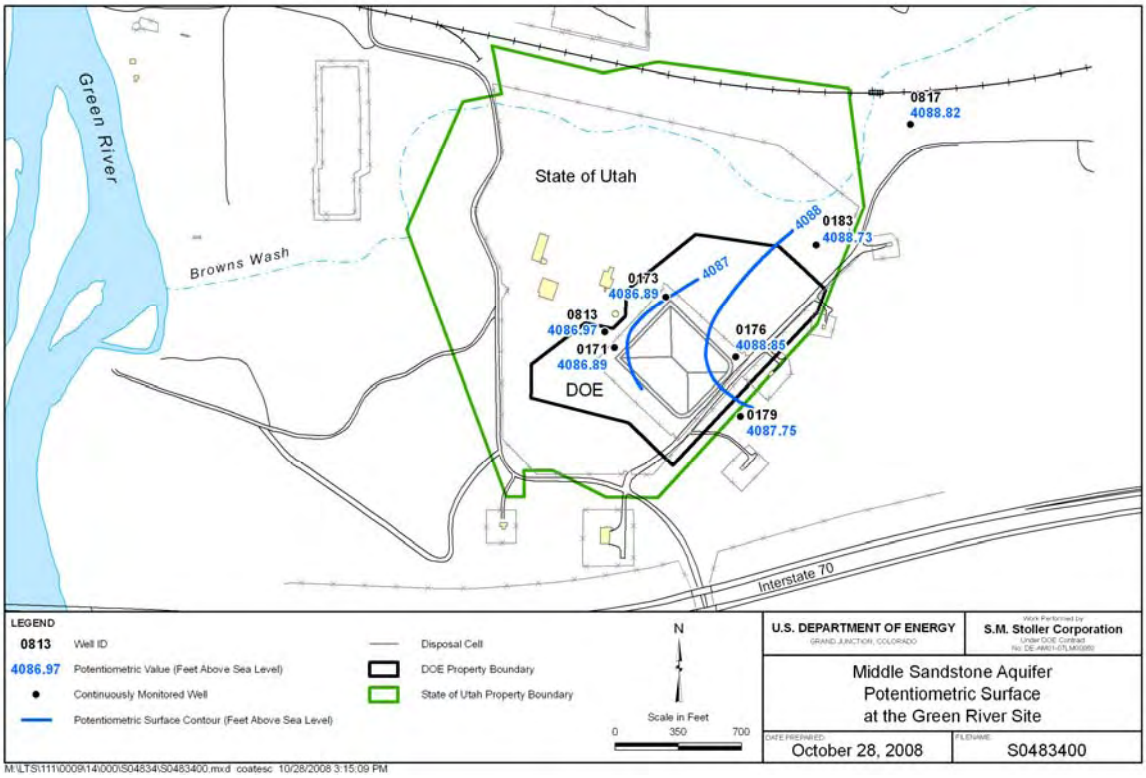

Figure 7–7. Potentiometric Surface of the Middle Sandstone Aquifer at the Green River Disposal Site (9/1/08 Measurements)

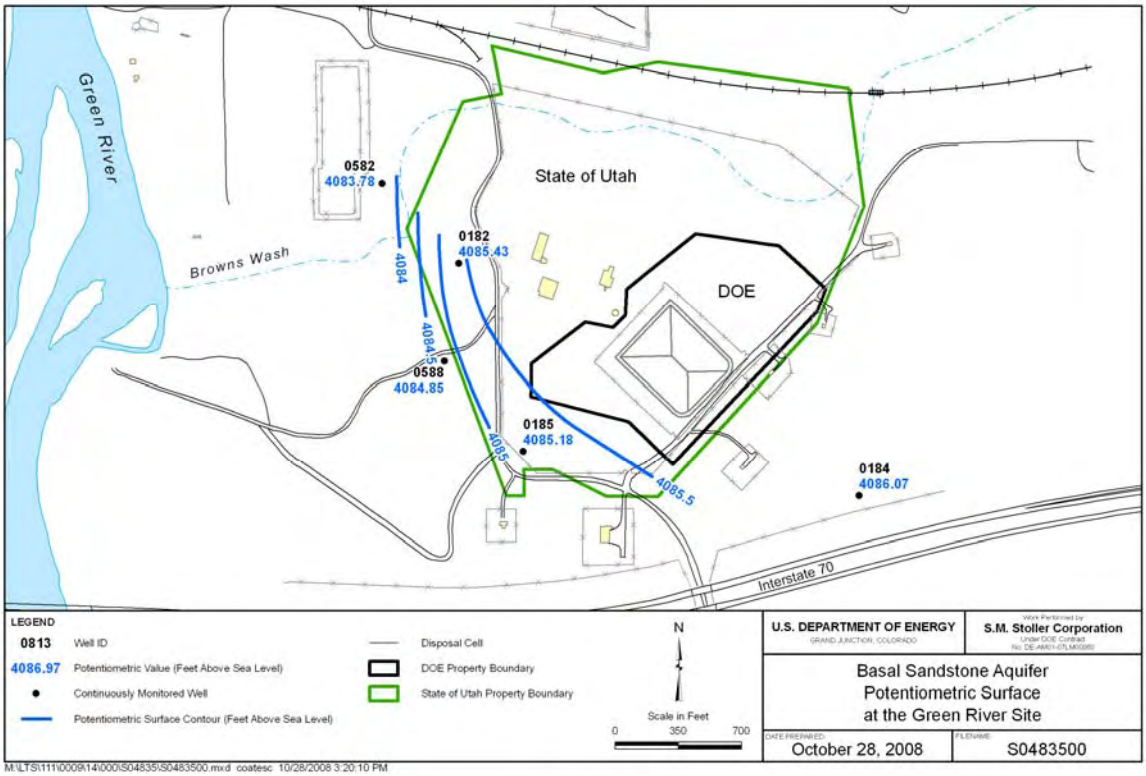

Figure 7–8. Potentiometric Surface of the Basal Sandstone Aquifer at the Green River Disposal Site (9/1/08 Measurements)

Browns Wash Alluvial Well Monitoring—Analytical results for the June 2008 sampling event at the wells completed in the Browns Wash alluvium are provided in Table 7–6. Because of the application of supplemental standards, ACLs do not apply to the alluvial groundwater. Contaminants are expected to eventually flush out of the alluvium as the groundwater slowly migrates toward the Green River alluvial aquifer and the Green River. Monitor well MW−0194 is farthest downgradient of the former tailings storage area on the alluvial plane and the closest well to the Green River alluvial aquifer.

Concentrations of arsenic, nitrate, and uranium have been steady in wells MW−0188 and MW−0192, but variable in wells MW−0189 and MW−0194. The highest uranium concentration (7.1 mg/L) was reported in well MW−0189, an increase from 0.36 mg/L in 2007. Well MW−0189 also reported the highest nitrate concentration (810 mg/L), an increase from 91 mg/L in 2007. Selenium concentrations have been increasing in well MW−0192 but remain steady in the other wells.

Table 7–6. Analytical Results for the Browns Wash Alluvial Wells at the Green River Disposal Site

Monitor Well	Arsenic (mg/L)	Nitrate[a] (mg/L)	Selenium (mg/L)	Uranium (mg/L)
0188	0.00022	15	0.016	0.1
0189	0.0021	810	0.034	7.1
0192	0.00022	160	0.097	0.6
0194	0.00045	81	0.031	0.39

[a]Nitrate = nitrate plus nitrite as nitrogen
Key: mg/L = milligrams per liter

7.3.5 Surface Water Monitoring

According to the site conceptual model, the ultimate POE for the groundwater in the middle sandstone unit of the Cedar Mountain Formation is the Green River via seepage through vertical fractures in the overlying formations. If this occurs, the locations of potential risk have been considered to be in a backwater area at the mouth of Browns Wash and the Green River itself.
7E Risk analyses have determined, however, that there are no unacceptable risks to potential receptors (human or ecological) at these locations. As a best management practice, DOE monitors the surface water at these two locations to verify that any contaminated groundwater would not adversely affect ecological receptors near the confluence of Browns Wash and the Green River. Proposed surface water standards, in accordance with Utah Rule R317–2, Table 2.14.2, are provided in Table 7–7.

Table 7–7. Proposed Surface Water Standards for the Browns Wash and Green River Sampling Locations

Constituent	Surface Water Standard (mg/L)
Ammonia as nitrogen	About 0.5 to 1.0 (pH and temperature dependent)
Arsenic	0.340 (1-hour) 0.150 (4-day)
Nitrate + nitrite as nitrogen	4
Selenium	0.0184 (1-hour) 0.0046 (4-day)
Uranium	No standard

Key: mg/L = milligrams per liter; N = nitrogen

A location in the Green River immediately downstream of the mouth of Browns Wash (SW−0846) and a location in the backwater area of Browns Wash (SW–0847) are sampled annually. Analytical results for the June 2008 sampling event are provided in Table 7–8. To date, no surface water sample results have exceeded the standards, and there is no indication that the surface water quality at these locations has been degraded by disposal site contamination.

Table 7–8. Analytical Results for the Surface Water Locations at the Green River Disposal Site

Location	Ammonia as Nitrogen (mg/L)	Arsenic (mg/L)	Nitrate[a] (mg/L)	Selenium (mg/L)	Uranium (mg/L)
0846 (Green River)	ND (<0.1 mg/L)	0.0046	0.11	0.00058	0.0028
0847 (Backwater)	ND (<0.1 mg/L)	0.0025	0.50	0.00060	0.0030

[a]Nitrate = nitrate plus nitrite as nitrogen
Key: mg/L = milligrams per liter; N = nitrogen; ND = not detected

7.3.6 Corrective Action

Corrective action is taken to correct out-of-compliance or hazardous conditions that create a potential health and safety problem or that may affect the integrity of the disposal cell or compliance with 40 CFR 192.

No corrective action was required in 2008.

7.3.7 Photographs

Table 7–9. Photographs Taken at the Green River Disposal Site

Photograph Location Number	Azimuth	Description
PL–1	255	Disposal cell viewed from the east.
PL–2	295	Main outcrop area in Browns Wash at seep location 0718; pools and flowing water in the channel.
PL–3	290	Browns Wash backwater area and surface sample location 0847.
PL–4	305	Telemetry tower and enclosure at well MW–0817.

GRN 3/2008. PL–1. Disposal cell viewed from the east.

GRN 3/2008. PL–2. Main outcrop area in Browns Wash at seep location 0718; pools and flowing water in the channel.

GRN 3/208. PL–3. Browns Wash backwater area and surface sample location 0847.

GRN 3/2008. PL–4. Telemetry tower and enclosure at well MW–0817.

This page intentionally left blank