LMS/RFO-RFN/S08175

2011 Verification Monitoring Report for the Old and New Rifle, Colorado, Processing Sites

September 2011

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Abbreviations

CDPHE	Colorado Department of Public Health and Environment
CFR	*Code of Federal Regulations*
COC	contaminant of concern
DOE	U.S. Department of Energy
ft	feet
FY	fiscal year
GCAP	Ground Water Compliance Action Plan
IC	institutional control
IFRC	Integrated Field Research Challenge
MCL	maximum concentration limit
mg/L	milligram per liter
NRC	U.S. Nuclear Regulatory Commission
RRM	residual radioactive material
SOWP	Site Observational Work Plan
UMTRCA	Uranium Mill Tailings Radiation Control Act
VMR	Verification Monitoring Report
VSP	Visual Sample Plan

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1.0 Introduction

This Verification Monitoring Report (VMR) presents and interprets groundwater monitoring data collected at the Old and New Rifle, Colorado, Title I Uranium Mill Tailings Radiation Control Act (UMTRCA) sites (Figure 1 and Figure 2). These sites are located near the City of Rifle in Garfield County of western Colorado. Detailed information for the Old and New Rifle sites and water quality data through 1998 and 1999 are in the final Site Observational Work Plans (SOWPs) (DOE 1999a and 1999b) for the sites. Groundwater monitoring has been conducted at least annually since completion of the SOWPs and reported annually in VMRs since 2006.

1.1 Compliance Strategy

Based on groundwater modeling results presented in the SOWPs, the proposed compliance strategy for both the Old and New Rifle sites is natural flushing. The compliance strategies also require continued groundwater and surface water monitoring along with institutional controls (ICs) that restrict access to contaminated groundwater (DOE 1999b, DOE 2001). Additionally, the U.S. Department of Energy (DOE) and the State of Colorado constructed an alternate domestic water supply system in 2003 to service users near and downgradient of the New Rifle site. This compliance strategy is protective of human health and the environment.

1.2 Site Status

The Old Rifle SOWP (DOE 1999a) and Ground Water Compliance Action Plan (GCAP) (DOE 2001) are complete and have received concurrence from the U.S. Nuclear Regulatory Commission (NRC) and the Colorado Department of Public Health and Environment (CDPHE). The conditions of the natural flushing compliance strategy are to maintain ICs over the site and conduct a monitoring program until concentrations of contaminants of concern (COCs) decrease to acceptable levels. The City of Rifle currently owns the Old Rifle site.

The New Rifle SOWP (DOE 1999b) was submitted to DOE and CDPHE; modeling indicated that most COCs at the site would naturally flush to Title 40, *Code of Federal Regulations* (CFR), Part 192 maximum concentration limits (MCLs) for groundwater within 100 years. An environmental assessment completed for groundwater compliance at the site proposed natural flushing for all COCs. A GCAP for the site has been drafted, but it has not yet been submitted to the regulatory agencies. The conditions of the natural flushing compliance strategy are to maintain ICs over the site and downgradient areas (Figure 3) and continue a monitoring program until concentrations of COCs decrease to acceptable levels. The City of Rifle owns the New Rifle site.

The annual verification monitoring proposed in the GCAPs for these sites is currently being implemented. This report presents the results of the fiscal year (FY) 2011 monitoring that was available at the time of report preparation.

1.3 Land and Water Use

The City of Rifle acquired the former Old Rifle processing site from the State of Colorado in 2000. The City uses the site for an operations and maintenance and recycling facility. The site

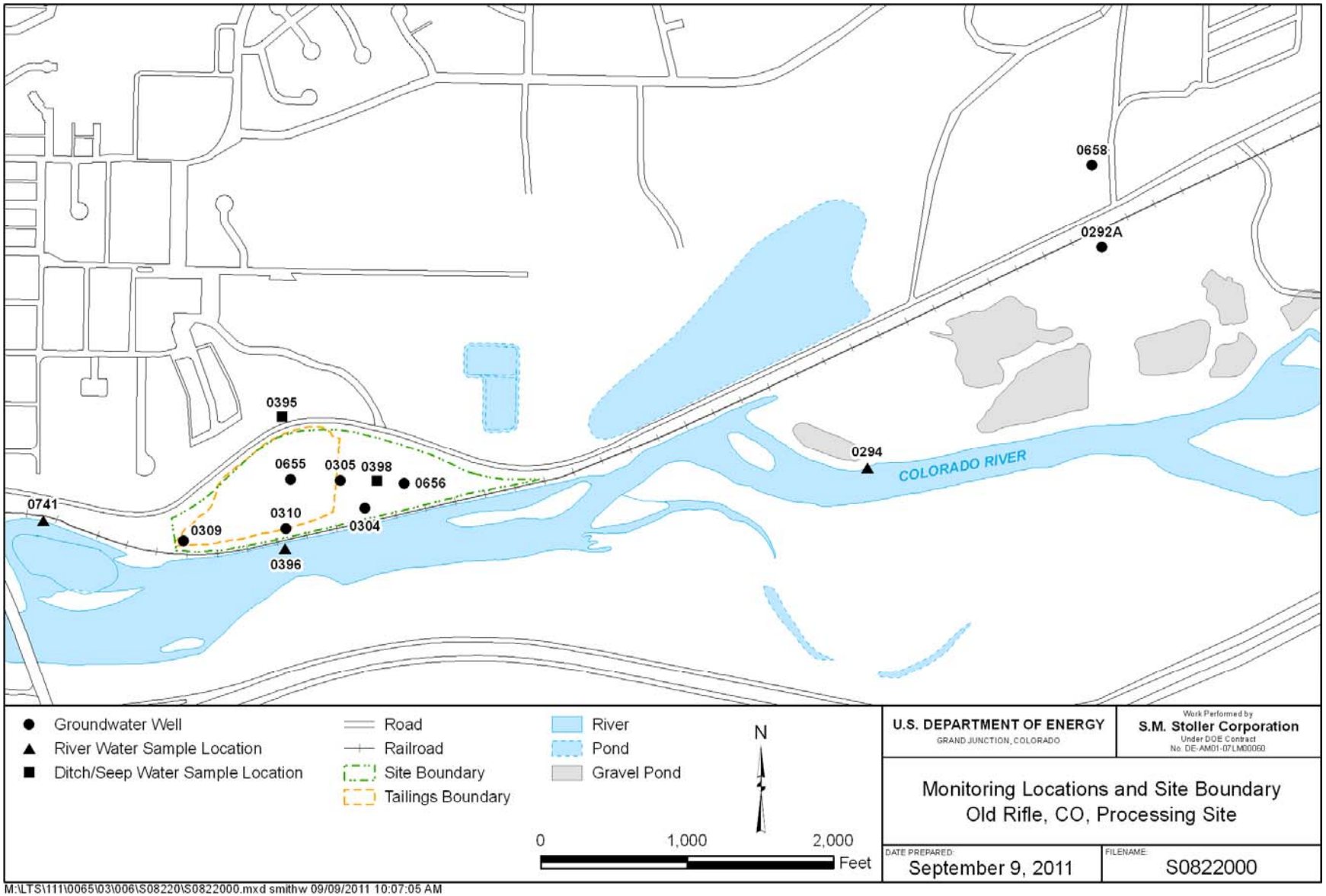

Figure 1. Monitoring Locations and Site Boundary of the Old Rifle, Colorado, Processing Site

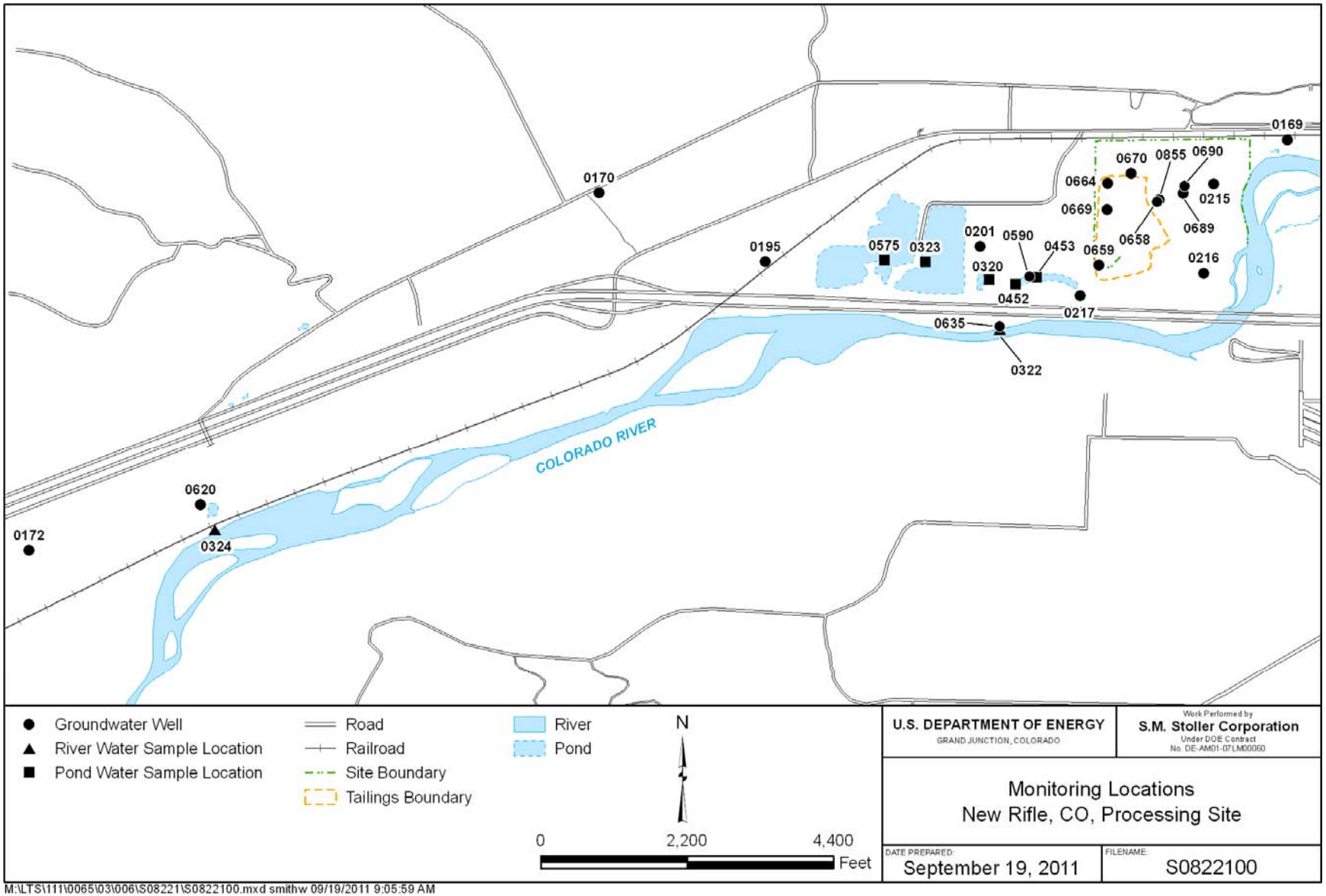

Figure 2. Monitoring Locations of the New Rifle, Colorado, Processing Site

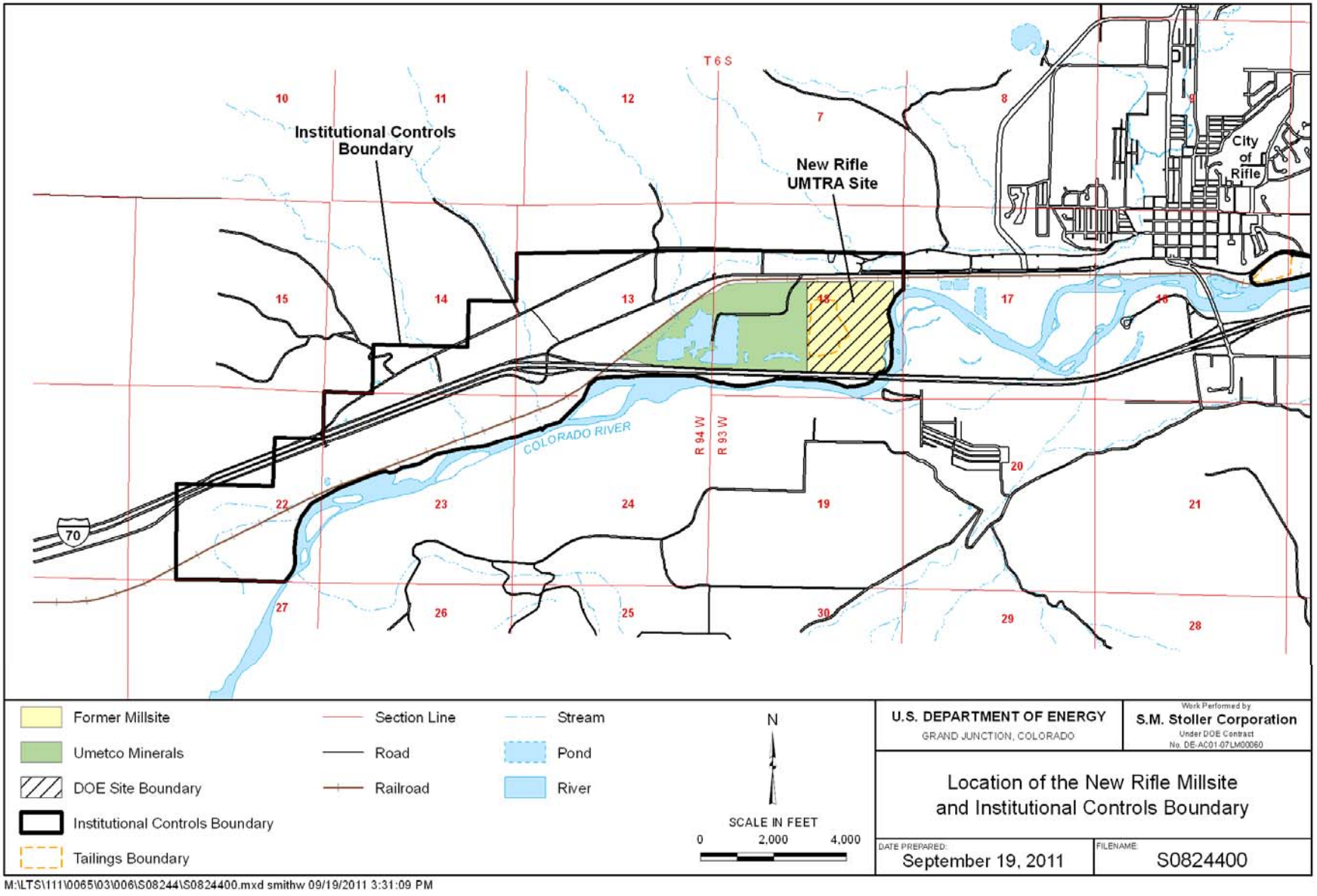

Figure 3. Location of the New Rifle Mill Site with IC Boundary

has also been established as an Integrated Field Research Challenge (IFRC) site through DOE's Office of Science. Experiments have been conducted at the Old Rifle site since 2006 to better understand the behavior of uranium in the alluvial aquifer. All groundwater contamination is contained within institutional control boundaries except for groundwater that discharges into the Colorado River.

The former New Rifle processing site was transferred from the State of Colorado to the City of Rifle in 2004. The site currently contains a wastewater treatment plant, a composting facility, and the Colorado State University experimental station for producing biofuels. Dow Chemical (which acquired Umetco Minerals Corporation) owns the adjacent downgradient property (Figure 3). Other private parties own parcels farther downgradient of the site.

Historically, domestic wells downgradient of the New Rifle site were used for drinking water. However, these wells are no longer in use, and drinking water for these locations is supplied by the City via the alternate water supply system constructed by DOE and the State. The Roaring Fork gravel pit (now owned by Dow Chemical) ceased operation in 2003, and the ponds have since filled with groundwater and equilibrated with the local water table. The banks of the ponds have been contoured and seeded. According to an agreement between Dow Chemical and the State of Colorado, use of the ponds by livestock is prohibited. No immediate plans are in place for this property.

ICs prevent improper use of the groundwater while remediation is in progress. Aside from government ownership of the former mill site properties, the quitclaim deeds for the properties state "Grantee covenants (ii) not to use groundwater from the site for any purpose, and not to construct wells or any means of exposing groundwater to the surface unless prior written approval for such use is given by the Grantor and the DOE." This restriction was recorded with the deeds, will be binding upon future landowners, and is enforceable by the State.

In 2001, the State of Colorado passed into law Senate Bill 01-145 (effective July 1, 2001), which creates enforceable covenants that can be used to place environmental restrictions on properties. Covenant ID HMCOV00001 was placed on the New Rifle Site on October 8, 2001, and prevents potable use of groundwater. Covenant ID HMCOV00006 was placed on the Old Rifle property on October 29, 2002, and prohibits drilling of alluvial aquifer wells and earthmoving activities without CDPHE approval (http://www.cdphe.state.co.us/hm/envcovenants.htm). It also requires the use of radon vent systems for any structures. A special zoning ordinance passed by the City of Rifle in 2008 sets forth procedures and restrictions governing development of these City-owned properties. Restrictions already outlined in the quitclaim deed and environmental covenants and requirements for both soil and groundwater materials handling plans were codified.

The city ordinance for the New Rifle site extends downgradient from the site to the city limit and requires that property owners obtain their potable water from the municipal water supply system. A Garfield County zoning ordinance extends from the Rifle city limit to the downgradient extent of the IC area shown in Figure 3. It gives property owners the option of obtaining potable water from the municipal water supply system or using an alternative, approved domestic water supply. In the past, DOE supplied reverse osmosis units to residents with domestic wells completed in the alluvial aquifer. Since that time, those wells were replaced with city water taps.

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2.0 Site Conditions

2.1 Hydrogeology

The Old Rifle former processing site is 0.3 mile southeast of the city of Rifle, in a floodplain on the north side of the Colorado River (Figure 1). Groundwater is unconfined in the uppermost aquifer, which consists of river alluvium and the upper weathered surface of the Tertiary Wasatch Formation. The uppermost aquifer is 5 to 25 feet (ft) thick; saturation occurs from 5 to 10 ft below ground surface. The uppermost aquifer is composed of poorly sorted sediments ranging from clay-sized material through cobbles with occasional boulders. Groundwater in the alluvial aquifer generally flows to the west-southwest. Hydraulic conductivity estimates for the alluvial aquifer range from 100 to 125 ft per day (DOE 1999a); estimates for the weathered Wasatch are about 0.02 ft per day (DOE 1999a).

Recharge to the alluvial aquifer is from subsurface inflow from north of Highway 6 & 24, an unlined irrigation return ditch that flows across the middle of the site, and precipitation. There is likely some interaction between the Colorado River and the alluvial aquifer, though the monitoring network is insufficient to fully characterize this relationship. Groundwater discharge is mainly to the Colorado River. At the Old Rifle site, alluvium pinches out against bedrock outcrops at the downgradient end of the site. The Old Rifle site has no hydrological connection to the New Rifle site.

The Old Rifle SOWP (DOE 1999a) provides additional data regarding the hydrogeology of the Old Rifle site and the site conceptual model. Results of subsequent IFRC studies have shown that the conceptual model for the site is much more complex than envisioned at the time the SOWP was completed. A recent report summarizes the results of the IFRC studies and presents a revised conceptual model for the site (DOE 2011).

The New Rifle former processing site is about 1.5 miles west of the city of Rifle and is also situated on the north floodplain of the Colorado River (Figure 2). As with the Old Rifle site, the uppermost aquifer consists of poorly sorted river alluvium and the weathered surface of the Wasatch Formation. Hydraulic conductivities for the alluvial aquifer range from 53 to 275 ft/day with an average of 114 ft/day (DOE 1999b); properties of weathered Wasatch are similar to Old Rifle. Alluvium is thickest along the western and southern portions of the site and is continuous for at least 4 miles downgradient of the site. Recharge is from ephemeral streams from the north, precipitation, and inflow from the Colorado River along the east side of the site (DOE 1999b). Groundwater discharge is primarily to the Colorado River; groundwater also discharges to other surface water features (wetland area, gravel ponds).

At one time, Roaring Fork Resources operated a gravel mine on the property adjacent to and downgradient of the New Rifle site. Water was pumped from an active on-site mining pit, where excavation was occurring, to another on-site pit for storage and infiltration. (These pits have been referred to previously as the "Roaring Fork ponds.") During Roaring Fork Resources' period of operation, the pumping affected groundwater flow downgradient of the New Rifle site, creating both a cone of depression in and a groundwater mound on the alluvial aquifer water table (DOE 1999b). Operation of the gravel mine ceased in early 2003, and natural alluvial groundwater flow conditions have been reestablished, though the effects of the ponds on

contaminant distribution persist today. Over time, and with the progression of natural flushing, these effects have become less pronounced.

2.2 Groundwater Quality

Alluvial groundwater in background locations near the Rifle sites has concentrations of selenium and uranium that are above MCLs (DOE 1995b). Sulfate levels in background locations have also been relatively high, far exceeding the secondary drinking water standard of 250 milligrams per liter (mg/L) (non-enforceable; based on aesthetic considerations). However, it has been demonstrated that site-related activities contributed to contamination of the groundwater in the uppermost aquifer beneath the Old Rifle site and beneath and downgradient of the New Rifle site.

Table 1 presents historical data for COCs in groundwater at both sites before surface remediation was completed. A comparison of historical data with benchmarks indicates that criteria were exceeded for a number of COCs. Contamination at the New Rifle site was much greater than at the Old Rifle site.

Table 1. Historical Groundwater Chemistry for Old and New Rifle Site COCs

COC (all units mg/L)	Benchmark	Old Rifle Site		New Rifle Site	
		Historical Range[a] Aug. 1990–Aug. 1994	Median[a]	Historical Range[a] Aug. 1990–Aug. 1994	Median[a]
Ammonia as NH_4[b]	NA	NA	NA	506–1,750	1,030
Arsenic	0.05[c]	NA	NA	0.97–1.3	1.1
Molybdenum	0.10[c]	NA	NA	2.3–3.7	2.9
Nitrate + Nitrite as Nitrogen	10[c]	NA	NA	124–251	177
Selenium	0.041[d]	0.007–0.085	0.072	<0.002–0.3	<0.05
Uranium	0.067[d]	1.6–2.1	1.8	0.24–0.37	0.29
Vanadium	NA	0.5–0.75	0.55	0.59–2.8	1.3

[a] Ranges and median values are from the Baseline Risk Assessment (DOE 1995a), Table 3.1 (pre-remedial action).
[b] No longer considered a COC; included to understand nitrate behavior.
[c] U.S. Environmental Protection Agency groundwater standards for sites (40 CFR 192).
[d] Maximum background value, cleanup goal.
NA = not applicable

During surface remediation, mill tailings and other residual radioactive materials (RRM) were removed. Surface remediation was completed by 1996, and tailings were stabilized in an engineered repository about 15 miles north of Rifle. RRM was removed down to and, in some cases, just below the groundwater surface. Clean gravel and soil were used to fill the excavations, and the surface was given 6 inches of topsoil and sown with seed mixtures.

Subsequent characterization completed at the New Rifle site as part of a pilot study for the removal of vanadium from the groundwater (DOE 2000) indicated that some residual soil contamination remains at that site below the water table. Analyses showed elevated concentrations of vanadium; several samples also showed residual concentrations of molybdenum, uranium, and arsenic. Most of these soils are associated with the location of a former disposal pond and, to a lesser extent, a former tailings pile. The City of Rifle recently conducted activities within and to the east of these known contaminated soils.

3.0 Monitoring Program

3.1 Monitoring Network

Table 2 lists the sampling locations that constitute the monitoring network at the Old Rifle processing site. The monitoring network consists of nine monitoring wells (six on-site wells and three background wells) and five surface water locations (Figure 1). Selenium, uranium, and vanadium are monitored at these locations. Several monitoring events were conducted at the Old Rifle site since preparation of the last VMR to augment data collected by the IFRC. Data were collected in June, July, August, September, and November of 2010 as well as June of 2011. Only 2010 data were available for this report.

Table 3 lists the monitoring requirements for the New Rifle site. The monitoring network currently consists of 16 monitoring wells at various locations and seven surface water sampling sites (Figure 2). Two new wells were recently installed in the vicinity of the biofuels experimental facility (wells RFN-0689 and -0690; Figure 2) and were sampled and analyzed for site COCs as well as herbicides in FY 2011 to determine if operation of the facility is having any effect on the groundwater (see sampling results in Appendix C). These well locations will likely be included in the monitoring network for the next several years. The three Old Rifle background wells also serve as background wells for the New Rifle site. The analytes monitored vary with the sample location. Monitoring was conducted twice for the New Rifle site in FY 2011; results from only one sampling round were available at the time of preparation of this report.

Table 2. Summary of Monitoring Requirements for the Old Rifle Site

Location	Monitoring Purpose	Analytes	Frequency
RFO-0305, RFO-0655	Center of plume[a]; west side of ditch	Selenium, uranium, vanadium	Semiannually
RFO-0656	Center of plume; east side of ditch	Selenium, uranium, vanadium	Semiannually
RFO-0304, RFO-0309, RFO-0310	Farthest downgradient location; leading edge of plume	Selenium, uranium, vanadium	Semiannually
RFO-0292A, RFO-0658, RFN-0169	Background groundwater quality; upgradient monitoring well	Selenium, uranium, vanadium	Semiannually
RFO-0395, RFO-0398	Monitor surface water recharging aquifer; seep and on-site ditch	Selenium, uranium, vanadium	Semiannually
RFO-0294 (to replace RFO-0598), RFO-0396, RFO-0741	Monitor effects of site on river; surface water; upgradient of, and adjacent to, and downgradient of site on Colorado River	Selenium, uranium, vanadium	Semiannually

[a] Based on uranium.

Table 3. Summary of Monitoring Requirements for the New Rifle Site

Location	Monitoring Purpose	Analytes	Frequency
RFN-0170, RFN-0172, RFN-0620	Monitor middle and leading edge of molybdenum, uranium, and nitrate plumes	Molybdenum, uranium, nitrate	Semiannually
RFN-0195, RFN-0201, RFN-0215, RFN-0216, RFN-0217, RFN-0590, RFN-0635, RFN-0658, RFN-0659, RFN-0664, RFN-0669, RFN-0670, RFN-0855	Monitor flushing in main body of plumes	Molybdenum, nitrate, uranium	
RFN-0320, RFN-0322, RFN-0323, RFN-0324, RFN-0452, RFN-0453, RFN-0575	Monitor surface water to determine impact of groundwater discharge to surface water and ecological receptors	Molybdenum, nitrate, uranium, vanadium	
RFN-0215, RFN-0216, RFN-0217, RFN-0590, RFN-0658, RFN-0659, RFN-0664, RFN-0669, RFN-0670, RFN-0855	Monitor flushing in main body of plumes	Vanadium	

3.2 Results of the Monitoring Program

3.2.1 Old Rifle Site

3.2.1.1 Surface Water

Results of surface water monitoring in the Colorado River (locations RFO-0294, RFO-0396, and RFO-0741) indicate that the water quality of the river adjacent to and downgradient of the Old Rifle site is indistinguishable from background water quality. This confirms the calculations included in the SOWP (DOE 1999a) demonstrating that groundwater discharged to the river would immediately undergo rapid mixing with river water. Sampling of the site ditch and upgradient seep (RFO-0398 and RFO-0395), which serve as sources of recharge to the alluvial aquifer, indicates that measurable amounts of uranium (0.0177 and 0.0267 mg/L) are present in the surface water there. Appendix C includes surface water results for FY 2011.

3.2.1.2 Groundwater

Appendix C includes groundwater monitoring results for FY 2011. Analyses were performed for a number of analytes other than the COCs during FY 2011 in the event that additional transport modeling of groundwater is determined to be necessary. Figure 4 through Figure 6 present spot plots showing the distribution of COCs in groundwater at the Old Rifle site. Appendix A presents time-concentration graphs for wells sampled at both the Old and New Rifle sites. Table 4 presents statistics for monitoring results for the Old Rifle site for two periods—(1) 1998 and 1999, shortly after the completion of surface remediation, and (2) the most recent monitoring results, from November 2010. A comparison of these two groups of data shows the progress natural flushing has made since the surface cleanup ended.

Table 4. Post-Surface-Remediation Groundwater Monitoring Results for the Old Rifle Site

COC (all units mg/L)	Benchmark	Range 1998–1999	Mean 1998–1999	Range November 2010	Mean November 2010
Selenium	0.05[a]	<0.0001–0.122	0.023	<0.001–0.0611	0.016
Uranium	0.044[b]	0.0268–0.270	0.0997	0.0197–0.212	0.117
Vanadium	0.33[c]	<0.0006–0.799	0.2337	<0.003–0.713	0.190

Data is for wells RFO-0304, RFO-0305, RFO-0309, RFO-0310, RFO-0655, and RFO-0656.
[a] U.S. Environmental Protection Agency Safe Drinking Water Act standard and approved alternate concentration limit
[b] U.S. Environmental Protection Agency UMTRCA groundwater standard (40 CFR 192)
[c] Risk-based concentration

Spot plots in Figure 4 through Figure 6 indicate that elevated uranium concentrations persist across the site, while selenium and vanadium are more localized. This is somewhat consistent with the conceptual site model, which indicated that selenium and vanadium tended to be less mobile than uranium (DOE 1999b). The limited distribution of and greater decreases in concentrations of vanadium and selenium, when compared to uranium, can likely be attributed to adsorption onto or precipitation within aquifer solids. Attenuation through immobilization rather than true flushing of the aquifer is probably the cause for decreases in these COCs.

By contrast, uranium tends to be a highly mobile constituent and was expected to easily be flushed from site groundwater in solution. The model in the SOWP predicted that flushing of uranium would achieve MCLs within a 10-year period. The fact that uranium concentrations have not decreased significantly at the site may indicate that the inventory of uranium in the aquifer system was underestimated, that groundwater is not moving through the subsurface as rapidly as previously thought, or that the behavior of uranium in aquifer materials is more complicated than expected.

Selenium

The selenium concentrations for all wells were below the maximum background level observed at the time (0.036 mg/L) in 2008 and 2009. In June 2010, the concentration in well RFO-0655 increased to nearly double the background level, at 0.064 mg/L. Concentrations at this location remained elevated at similar levels from June through November 2010. The average concentration for the site is below the more recent maximum background concentration of 0.041 mg/L (observed in April 2010).

Uranium

Uranium persists at the site. Uranium concentrations at most sampling locations continued to exceed the uranium MCL during FY 2011. The current average concentration of uranium is slightly higher than it was shortly after completion of surface remediation (Table 4). Time–concentration plots are ambiguous with respect to the attenuation of uranium. Portions of plots for some wells show increases, while others show decreases; plots for other wells appear to fluctuate around almost level concentrations. Uranium monitoring should continue until conclusions can be reached regarding the applicability of the natural flushing compliance strategy. At that time, a change in the monitoring approach may be called for.

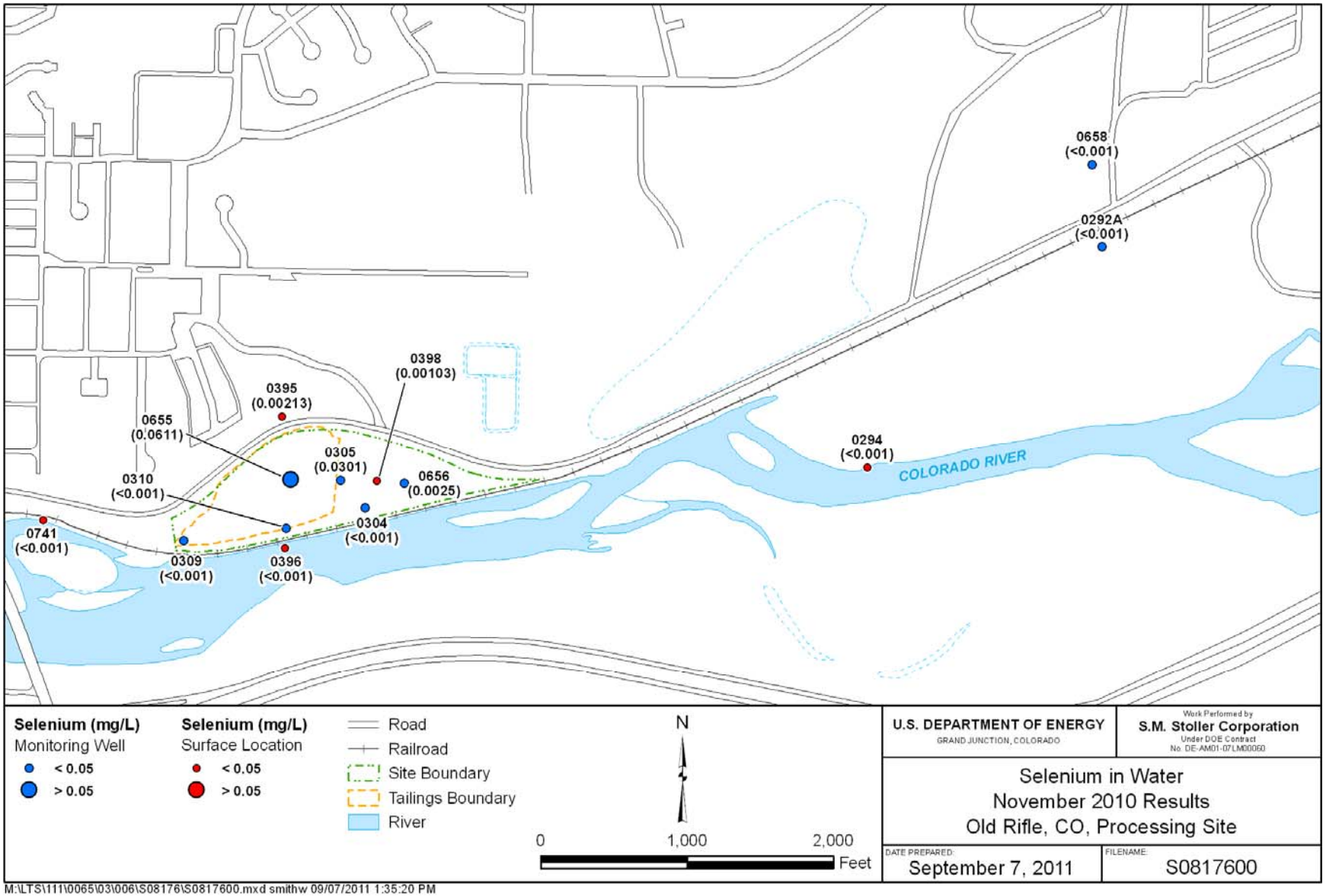

Figure 4. Selenium in Water at the Old Rifle Site

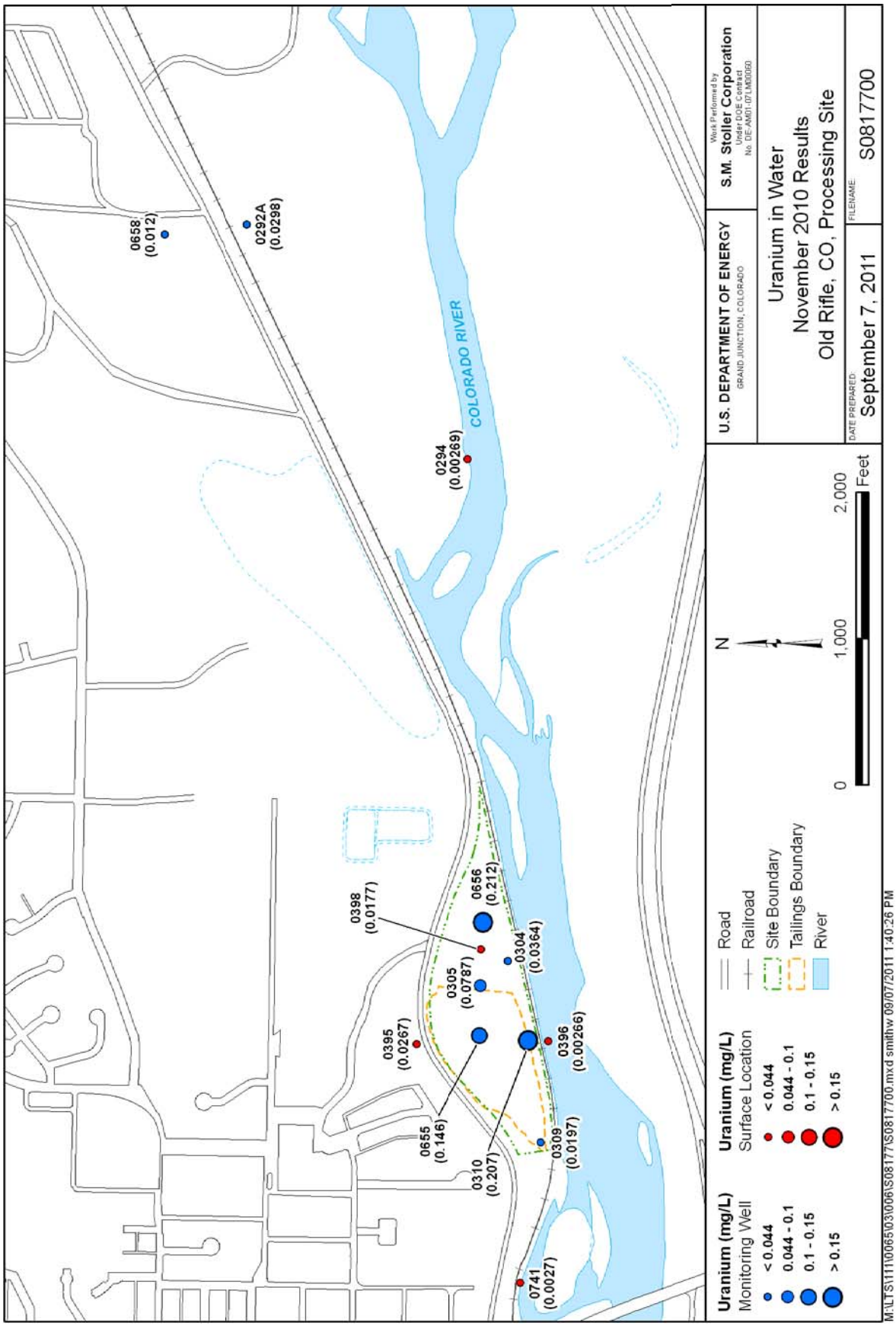

Figure 5. Uranium in Water at the Old Rifle Site

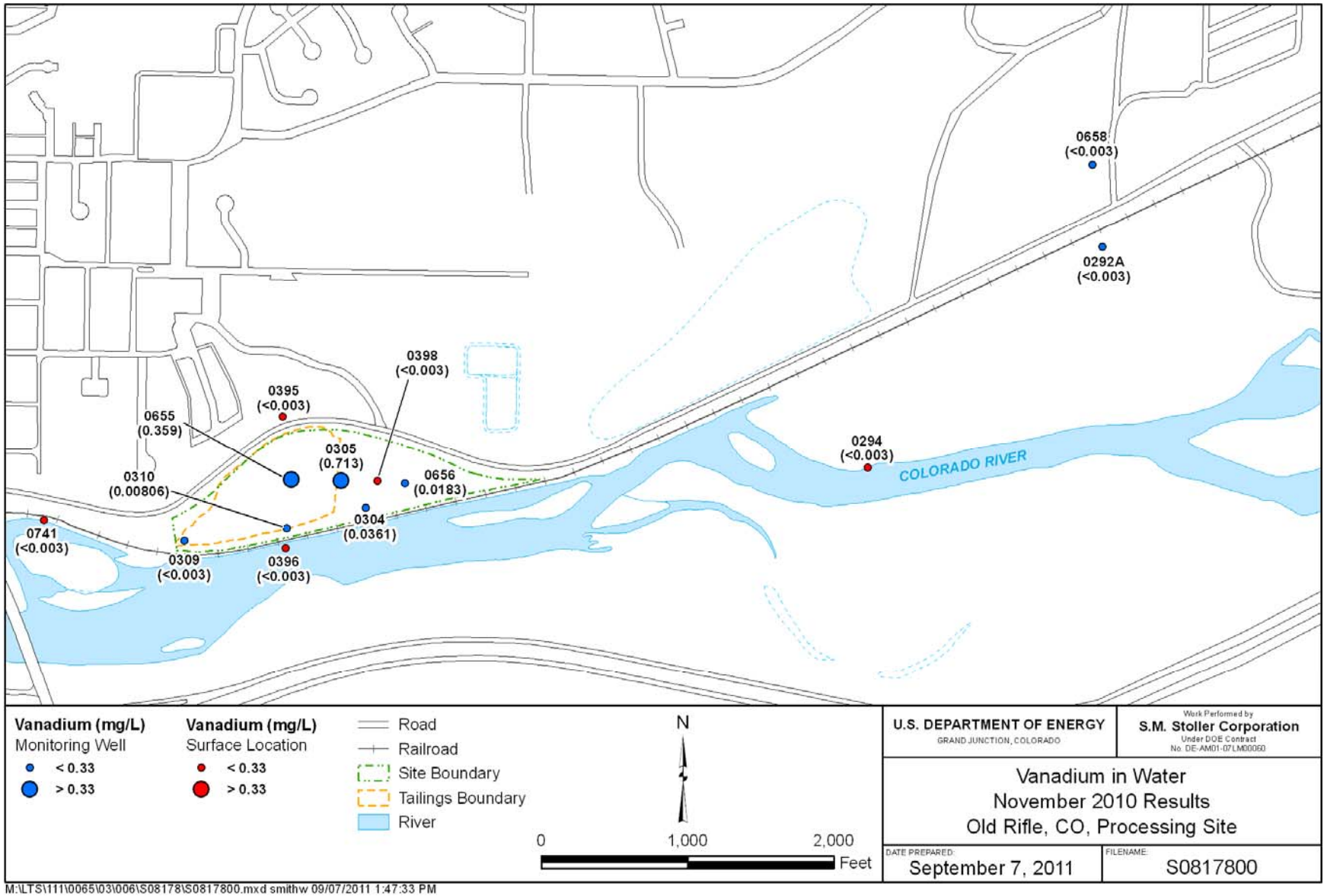

Figure 6. Vanadium in Water at the Old Rifle Site

Vanadium

Data in Table 4 indicate that currently the average concentration of vanadium in Old Rifle alluvial groundwater is below the benchmark value of 0.33 mg/L. Two locations (RFO-0305 and RFO-0655) exceeded this value in FY 2011. Vanadium in samples from well RFO-0305 has increased after a sharp decline to below the benchmark value in June 2010. Concentrations still remain below the maximum observed in 2000.

3.2.1.3 Institutional Controls Monitoring

ICs for the site were discussed in Section 1.3. In addition to groundwater monitoring at the site, the effectiveness of ICs is monitored as well. Changes in land use are noted during regular groundwater sampling events. DOE is present at the Old Rifle site for much of the field season because of the ongoing IFRC studies, especially from May until November. During FY 2011, meetings were held with CDPHE that included site tours. ICs were a discussion topic, particularly enforcement mechanisms. DOE is currently in continued discussions with CDPHE about the details of this annual IC verification process.

3.2.2 New Rifle Site

3.2.2.1 Surface Water

Appendix C includes surface water monitoring results for FY 2011. Two surface water locations at the New Rifle site (locations RFN-0322 and RFN-0324) represent Colorado River water. At the other five surface locations, samples were collected from the wetland area and former Roaring Fork gravel pond. Figure 7, Figure 9, and Figure 10 indicate that metals in the wetland/pond samples are strikingly higher than in surrounding groundwater samples. This may be due to concentration of constituents in the surface water through evaporation. On the other hand, the two river samples were very low in concentration and chemically indistinguishable (in terms of COC concentrations) from one another as well as from background, indicating no site-related chemical signature. COC concentrations in river water samples were orders of magnitude less than concentrations in samples from the adjacent wetlands. No surface water standards were exceeded in the river. Sampling results confirm the calculations performed as part of the SOWP (DOE 1999b), which indicate that discharging groundwater undergoes significant mixing with river water and that contaminants attenuate rapidly.

3.2.2.2 Groundwater

Groundwater beneath the New Rifle site was contaminated by former vanadium- and uranium-ore-processing operations that were ongoing from 1958 through 1972, from lignite ash processing from 1964 to 1967, and from vanadium processing (which did not produce tailings but may have produced milling solutions) from 1973 to 1984. Site field investigations have shown that the alluvial aquifer is the only aquifer that the former milling operations affected.

COCs previously identified in the alluvial aquifer at concentrations that exceed the 40 CFR 192 groundwater standards are arsenic, molybdenum, nitrate, selenium, and uranium. Fluoride levels have exceeded the Safe Drinking Water Act standard of 4 mg/L. Concentrations of ammonia, manganese, and vanadium have exceeded risk-based concentrations deemed acceptable for

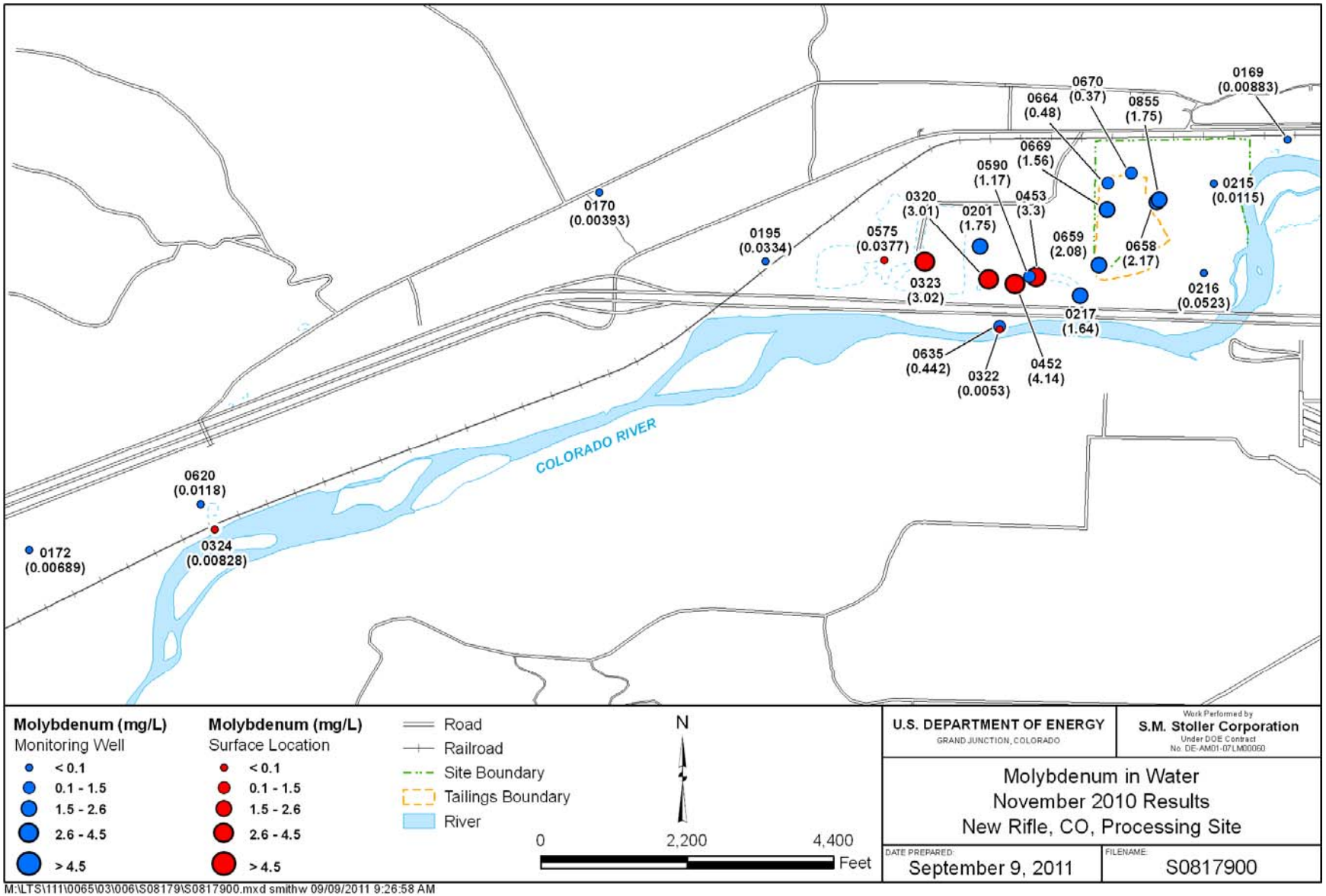

Figure 7. Molybdenum in Water at the New Rifle Site

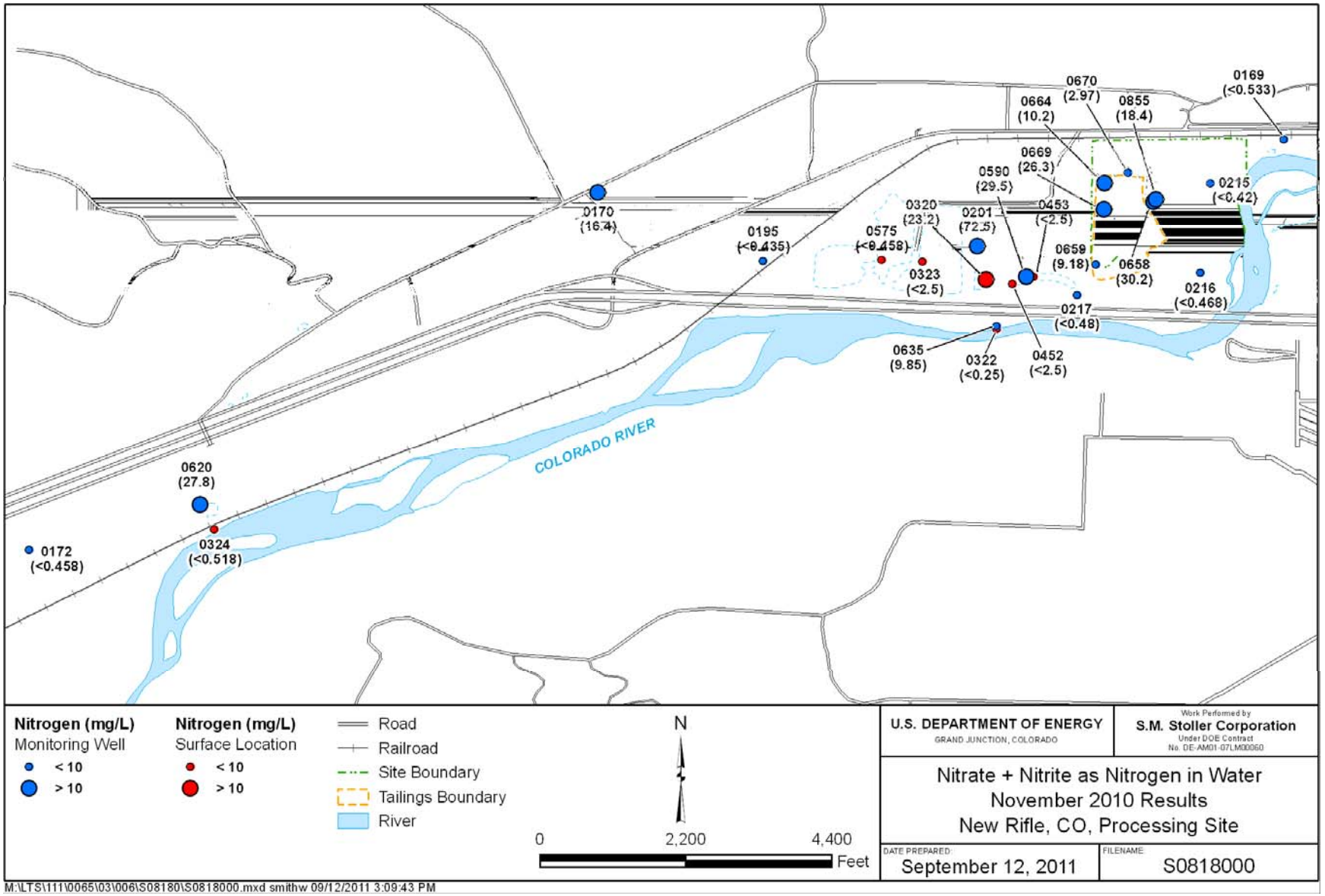

Figure 8. Nitrate + Nitrite as Nitrogen in Water at the New Rifle Site

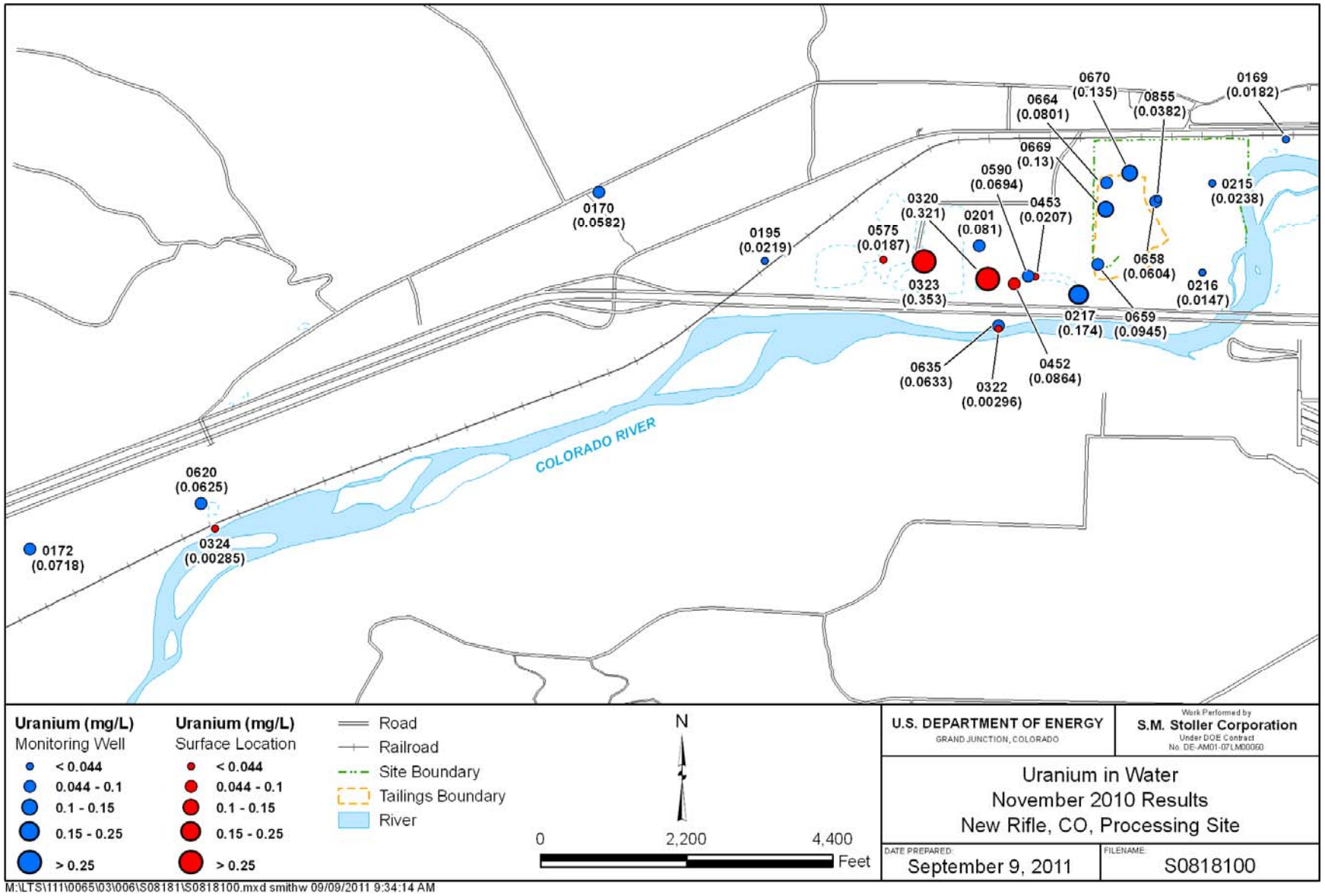

Figure 9. Uranium in Water at the New Rifle Site

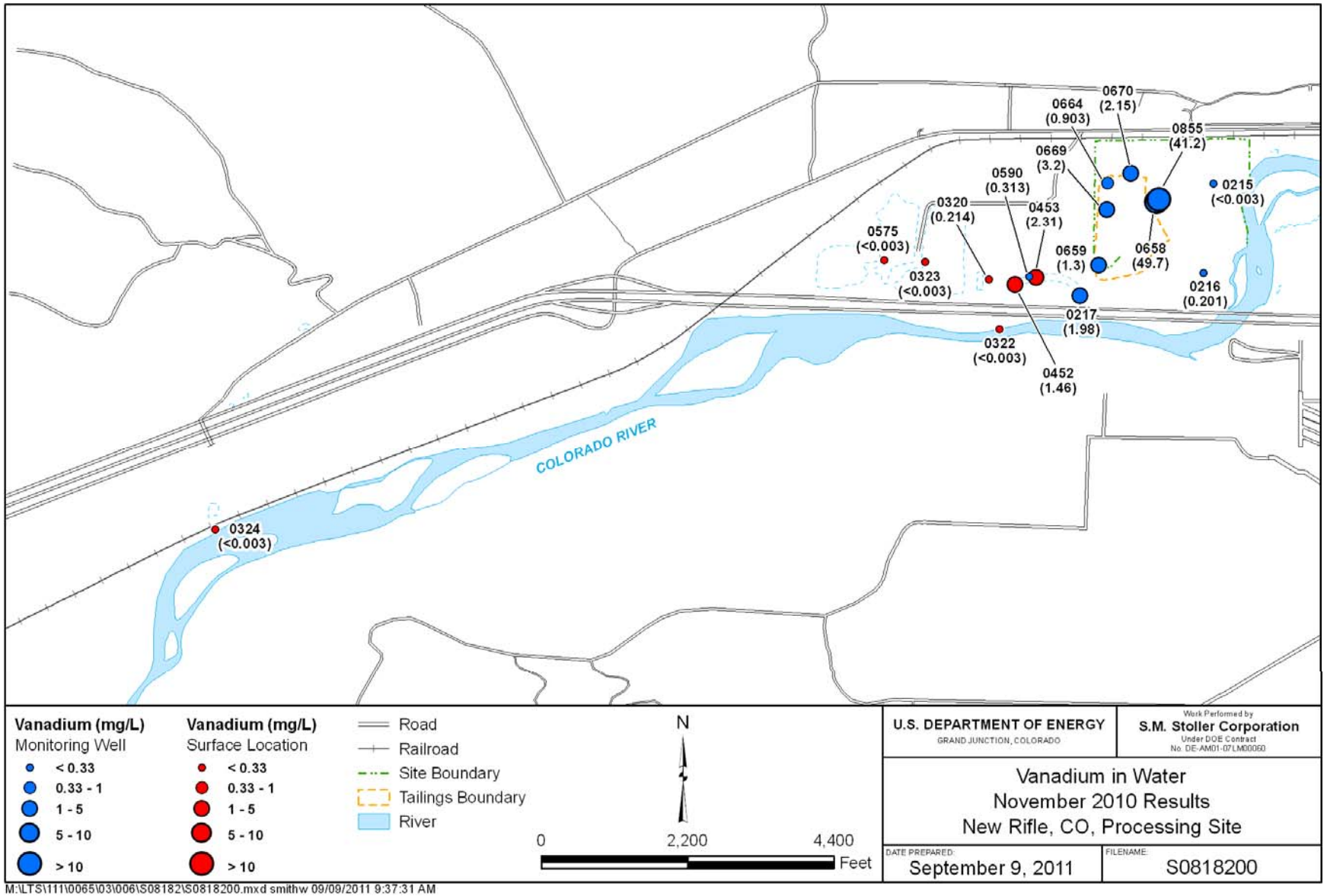

Figure 10. Vanadium in Water at the New Rifle Site

groundwater that is used for domestic purposes in a residential setting (DOE 1999). Based on discussions with CDPHE, fluoride and manganese are of little concern at the site and were eliminated from the monitoring program. Ammonia, arsenic, and selenium have declined below levels of concern for the most part, though analysis for these constituents has continued to a limited degree. Elevated concentrations of these constituents persist mainly in the vicinity of the former raffinate ponds (near wells RFN-0855 and -0658) where contaminated soil is known to exist. Manganese has been most elevated in wells near the southwestern corner of the former mill site where effluent from the pilot scale groundwater treatment system was discharged to an infiltration gallery.

Most of the following discussion focuses on the more widespread or persistent COCs—molybdenum, nitrate, uranium, and vanadium. Appendix C includes groundwater monitoring results for FY 2010. The most conspicuous feature in time-concentration plots of groundwater monitoring data for the last several years is a pronounced spike in concentrations of molybdenum, selenium, and vanadium in samples collected from well RFN-0855 (see graphs in Appendix A-2). Concentrations of vanadium in samples from this well were more than an order of magnitude higher than other wells. This was attributed to mobilization of contaminants due to dewatering and excavation activities being conducted by the City of Rifle in association with construction of the city's wastewater treatment facility. In 2010, concentrations of molybdenum and vanadium in well RFN-0855 decreased significantly; vanadium concentrations in samples from well RFN-0658 exceeded those of RFN-0855 for the last two rounds of sampling. Other on-site wells have displayed recent sharp increases of certain constituents (e.g., uranium in RFN-0216 and -0670). However, the time-concentration plots for most wells show variability within a narrower concentration range. Uranium concentrations for wells RFN-201, -217, -590, and -0635 vary mostly between 0.05 and 0.15 mg/L. While some plots appear to shown an overall declining trend (e.g., molybdenum for RFN-0590), others appear to be on the rise (e.g., uranium for RFN-0217). Figure 7 through Figure 10 present spot plots showing the distribution of COCs monitored in New Rifle alluvial groundwater and surface water. In general, the contaminant plumes for the less mobile COCs (such as vanadium) are restricted in areal extent and are still concentrated around the former mill site. Plumes for constituents that are more mobile (nitrate, molybdenum, and uranium) are more extensive. To evaluate the progress of natural flushing at the New Rifle site, monitoring wells were assigned to one of three groupings—on site, adjacent to site, and downgradient—for the purposes of computing statistics for analytical results.

On-site wells are those within the site boundary. As noted, residual soil contamination does exist at the New Rifle site below the water table. This contamination is most likely to affect groundwater in direct contact with those soils (i.e., on-site wells) by serving as a persistent source of contamination to groundwater. Although on-site wells are all grouped together for the purpose of computing groundwater statistics and comparing the results to historical trends, three subgroups of on-site wells were recognized in previous verification monitoring reports based on patterns of time-concentration plots for the wells (Appendix A includes time-concentration plots). These patterns were interpreted as being related to the wells' location and proximity to former source areas as discussed below.

Wells RFN-0169, RFN-0215, and RFN-216 are adjacent to the Colorado River and upgradient of the main source of site groundwater contamination—the former raffinate ponds and tailings pile. Concentrations of most COCs in these wells are generally low and have had limited variability

over the past 10 years. A notable exception is well RFN-216, which, in 2008, showed spikes in molybdenum, uranium, and vanadium concentrations that remained elevated in 2009 but subsequently declined. Groundwater concentrations is this area were likely influenced by the groundwater pumping that the City of Rifle conducted during the construction of infrastructure for the wastewater treatment plant.

Locations RFN-0658, RFN-0659, and RFN-0855, are in the footprint of the former raffinate ponds and tailings pile. Soil sampling conducted during the pilot study for vanadium at the site indicated that residual contamination exists in these areas and may have local influence on groundwater quality. These locations are characterized by time-concentration plots with the highest concentrations of most COCs and the greatest degree of variability over time. For the most part, these wells exhibit no clear trends. Adsorption/desorption reactions between groundwater and soils probably occur in this area, and groundwater concentrations are likely sensitive to fluctuations in the water table. As noted above, due to the City's activities, concentrations for a number of COCs in well RFN-0855 increased sharply (for example, vanadium increased from 14 mg/L in 2007, before dewatering began, to 1,600 mg/L in 2009), but declined again in 2010 to levels below that of well RFN-0658. Future monitoring results will be evaluated to determine whether this contaminant "slug" affects concentrations in downgradient wells.

The remaining on-site wells—RFN-0669, RFN-0664, and RFN-0670—are outside of the residual contamination area. Trends shown in time-concentration plots for these locations are more similar to those for off-site locations. They show some variability but are typically decreasing (with some exceptions) for COCs with concentrations above benchmarks. Results from biofuels facility wells RFN-0689 and -0690 were consistent with nearby wells; no herbicides were detected.

Contamination in off-site wells is attributed solely to the downgradient migration of dissolved contaminants in groundwater and not from direct contact with a primary residual source. The wells downgradient of the New Rifle site were split into two groups according to their location relative to the Roaring Fork gravel ponds. As described previously, the ponds affected groundwater flow direction during pumping operations, thus hydraulically separating those two groups of wells to some extent. Additionally, activities associated with wetland construction were more likely to influence the water quality of the wells adjacent to the site than that of the wells farther downgradient. These differences have lessened over time. Table 5 and Table 6 provide statistics for the three main groups of wells. Table 5 provides water quality benchmarks, for comparison. The historical data provided in Table 1 are based on the combined results of data from wells on and adjacent to the site. Appendix A includes time-concentration plots for molybdenum, nitrate, uranium, and vanadium in the New Rifle wells.

During 2011, DOE has been working with CDPHE and the State of Colorado Oil & Gas Conversation Commission to perform special monitoring in wells RFN-0172 and -0620. Williams Production RMT Company (Williams) has gas wells in clusters FWT 33-22 and FWT 342-22 located near RFN-0172 and -0620, respectively. BTEX was found to be slightly elevated in RFN-0172. According to the Williams representative, this was due to petroleum residue in the mud pit, which has since undergone remediation to alleviate the problem. In Williams' well cluster, FWT 342-22, methane was leaking up along the well annulus into the surrounding groundwater. To date, no evidence of this methane has been found in nearby RFN-0620. DOE

will continue to conduct special monitoring in these two wells to test for changes in metals chemistry that could be caused by the influence of organics associated with the gas drilling.

Table 5. Mean Concentrations in Groundwater—1998–1999 and November 2010 for the New Rifle Site

Contaminant (all units mg/L)	Benchmark	On Site[a]		Adjacent to Site[b]		Downgradient[c]	
		1998–1999 mean	June 2010 mean	1998–1999 mean	Nov. 2010 mean	1998–1999 mean	Nov. 2010 mean
Molybdenum	0.1[d]	2.498	1.059	1.928	1.251	0.037	0.014
Nitrate + Nitrite as Nitrogen	10[d]	13.8	12.267	51.9	28.083	16.6	11.27
Uranium	0.067[e]	0.1012	0.072	0.097	0.097	0.0744	0.0536
Vanadium	NA	5.68	12.332	0.037	1.147	<0.0001	NA

[a] Includes wells RFN-0215, RFN-216, RFN-0658, RFN-0659, RFN-0664, RFN-0669, RFN-0670, and RFN-0855 (not all wells were sampled for all analytes).
[b] Includes wells RFN-0201, RFN-0217, RFN-0590, and RFN-0635 (only wells RFN-0217 and RFN-0590 were sampled for vanadium).
[c] Includes wells RFN-0170, RFN-0172, RFN-0195, and RFN-620.
[d] U.S. Environmental Protection Agency UMTRCA groundwater standard (40 CFR 192).
[e] Maximum background value, cleanup goal.
NA = not applicable

Table 6. Range of Concentrations in Groundwater—1998–1999 and November 2010 for the New Rifle Site

Contaminant (all units mg/L)	On Site[a]		Adjacent to Site[b]		Downgradient[c]	
	1998–1999 range	Nov. 2010 range	1998–1999 range	Nov. 2010 range	1998–1999 range)	Nov. 2010 range)
Molybdenum	0.0237–6.84	0.012–2.17	0.61–3.15	0.44–1.75	0.0041–0.231	0.00393–0.0334
Nitrate + Nitrite as Nitrogen	<0.003–83.1	0.42–30.2	0.089–188	0.48–72.5	0.012–85.2	0.435–27.8
Uranium	0.0103–0.284	0.0147–0.135	0.0837–0.120	0.0633–0.174	0.050–0.177	0.0219–0.0718
Vanadium	<0.001–25.3	<0.003–49.7	<0.001–2.69	0.313–1.98	0.00065–0.0018	NA

[a] Includes wells RFN-0215, RFN-0216, RFN-0658, RFN-0659, RFN-0664, RFN-0669, RFN-0670, and RFN-0855 (not all wells were sampled for all analytes).
[b] Includes wells RFN-0201, RFN-0217, RFN-0590, and RFN-0635 (only wells RFN-0217 and RFN-0590 were sampled for vanadium).
[c] Includes wells RFN-0170, RFN-0172, RFN-0195, and RFN-0620.
NA = not applicable

DOE also installed wells RFN-689 and -690 to monitor for possible traces of pesticides or herbicides that may be used on biodiesel plants being grown in an experimental plot southwest of the Rifle Waste Water Treatment Facility. This work is sponsored by the Colorado State University, Western Colorado Research Center in Fruita, Colorado. Groundwater samples were collected before the planting began and analyses were performed for a suite of organic constituents. This supplied a background data set for the site. Additional analyses will be conducted periodically to ensure that no additional organic constituents are introduced into the groundwater from the experimental plot.

Molybdenum

Molybdenum has been one of the most widespread site COCs due to its high mobility. It remains elevated in on-site wells. Well RFN-0855 spiked at an all-time high observation of 18 mg/L in 2009, but the concentration decreased significantly in November 2010 to 1.75 mg/L. Mean concentrations for all groups of wells have declined over time. Molybdenum in the portion of the plume downgradient of the former gravel ponds appears to have dissipated. However, the relatively high concentrations recently observed on site suggest that molybdenum may move downgradient and recontaminate these areas.

Nitrate

The highest concentrations of nitrate are immediately downgradient of the site, though the standard is exceeded as far downgradient as location RFN-0620. The source of much of the nitrate is likely the degradation of ammonia. Trends (or lack thereof) probably depend more on ammonia behavior than on natural flushing processes. Despite some increases of nitrate in individual wells because of ammonia degradation (e.g., RFN-0590), mean concentrations for all well groups have declined over time. It appears that—with declines in ammonia to low levels—nitrate's behavior has become less erratic, and its concentrations are leveling out.

Uranium

Uranium persists throughout the plume. The standard is exceeded as far downgradient as well RFN-0172. However, all locations downgradient of the former gravel ponds are below the maximum background concentration of 0.067 mg/L and it is not clear whether uranium in these downgradient areas is site-related or ambient contamination. Time-concentration plots for a number of the wells show no well-defined trend (e.g., 0659, 0590, 0669) but fluctuate over a fairly narrow concentration range. Mean concentrations in wells adjacent to the site are the same as they were more than 10 years ago. This distribution may reflect the disturbance caused by operation of the gravel ponds.

Vanadium

In 2009, vanadium spiked to the highest concentration ever observed in well RFN-0855 (1,600 mg/L) in association with the City of Rifle's construction work. The concentration in RFN-0855 dropped back to 41 mg/L in November 2010; the vanadium concentration in adjacent well RFN-0658 was 50 mg/L. Elevated concentrations are observed only on site and immediately downgradient of the site, as has been the case in past years.

3.2.2.3 Institutional Controls Monitoring

During regular groundwater sampling events, changes in land use at and downgradient of the New Rifle site was observed. During FY 2011, DOE was in communication with property owners and various users of City owned property regarding potential construction, etc. These discussions included meetings with the City of Rifle, Williams, the Western Colorado Research Center, and composting operation personnel regarding impacts that their activities may have on the site groundwater geochemistry.

DOE continues to discuss a more formal shared IC monitoring methodology with CDPHE.

3.2.3 Mann-Kendall Test for Trend

Another method of data evaluation is the nonparametric Mann-Kendall test for trend (Gilbert 1987). The test does not require any particular data distribution and will accommodate missing values and data reported as less than the detection limit. Essentially, it analyzes a series of data by subtracting the values of data collected earlier from those of later data. The method results in a test statistic that is a positive or negative (indicating an increasing or decreasing trend) and is used to estimate the probability that the trend is real. Appendix D-1 of the New Rifle GCAP (DOE 2006) describes the Mann-Kendall test for trend.

As a preliminary analysis, several wells from the New Rifle site were selected for application of the Mann-Kendall test based on their locations with respect to the uranium and molybdenum plumes. The test was applied to uranium and molybdenum concentrations because these COCs are the most widespread and the most mobile. Additionally, they are not affected by geochemical transformation processes, as are ammonia and nitrate. Wells RFN-0664 and RFN-0669 are from two on-site locations near the original plume source areas (raffinate ponds and tailings piles). Well RFN-0201 is immediately downgradient of the site and upgradient of the Roaring Fork ponds; well RFN-0195 is immediately downgradient of the ponds. Appendix B includes the results of applying the Mann-Kendall test statistic to uranium and molybdenum values for these wells.

On-site wells RFN-0664 and RFN-0669 show strongly decreasing trends (at the 95 percent confidence level) for both uranium and molybdenum. Likewise, well RFN-0201 shows a decrease in molybdenum (95 percent confidence level). Downgradient well RFN-0195 shows a strong decrease in uranium (95 percent confidence level) and a lesser downward trend (90 percent confidence level) in molybdenum. These results strongly support the conclusions that natural flushing for these two COCs is progressing at these locations and that the main portions of the uranium and molybdenum plumes are moving off site into the adjacent downgradient area.

4.0 Results and Conclusions

Concentrations of selenium and vanadium at the Old Rifle site continue to decrease. Uranium concentrations do not display any consistent trends and have not declined as the modeling results in the SOWP predicted. The modeling results indicated that uranium would meet its groundwater standard sitewide within 10 years; this has not been achieved. The vanadium benchmark is currently exceeded at two wells; one well exceeds the selenium benchmark (although all wells declined below this level in the recent past). Selenium and vanadium compliance goals have been met based on the sitewide averages. Time-concentrations plots in Appendix A–1 indicate that these two COCs have been relatively stable in Old Rifle wells for the last few years of monitoring.

As expected with natural flushing, contaminant plumes for a number of COCs associated with the New Rifle site have been decreasing in general and moving downgradient over time. The only significant COCs in terms of concentration and distribution are molybdenum, nitrate, uranium, and vanadium. The highest concentrations over the last few years of nitrate and uranium were found downgradient of the site. Nitrate concentrations, which had been increasing in response to ammonia degradation, now appear to be declining. The uranium standard was exceeded over the entire plume length, although it is not clear if all contamination is site-related; concentrations appear to be nearly constant in some wells. The highest concentrations of molybdenum and vanadium were still found on site. Significant fluctuations in molybdenum, vanadium, and uranium were noted in several on-site wells over the last few sampling rounds, due to dewatering activities conducted on the eastern part of the site by the City of Rifle. These fluctuations may have begun to stabilize with cessation of the dewatering.

With the number of variables that can affect the distribution of contaminants in the alluvial aquifer at New Rifle, it is probably too early to determine the effectiveness of natural flushing at the site. However, data collected for the site indicate that some COCs are flushing, even if trends do not exactly match predictions. Generally speaking, groundwater contamination is decreasing. Some individual wells may display increasing concentrations for certain COCs, but this is to be expected as the plume centers migrate downgradient away from the site. On the basis of combined spatial and temporal data, plume centers for nitrate and uranium appear to have already moved off site, but remain within the IC boundary, and continue to dissipate downgradient. Highest concentrations of molybdenum are both on-site and immediately upgradient of the former gravel ponds. The portions of the molybdenum and uranium plumes downgradient of the former gravel ponds seem to have dissipated; however, elevated upgradient concentrations could eventually recontaminate these areas as they move downgradient. Arsenic and selenium have little mobility and will probably remain confined to site groundwater. Vanadium, also relatively immobile, has migrated off site, but only to a very limited degree.

Neither the Old Rifle site's nor the New Rifle site's groundwater discharge is affecting surface water quality of the Colorado River. ICs are effectively preventing inappropriate use of groundwater. Presently, the selected compliance strategies at both sites appear to be adequately protective. However, because the natural flushing of uranium in ground water at the Old Rifle Processing Site is not decreasing as modeling predicted, a revised Ground Water Compliance Action Plan (GCAP), in consultation with the Colorado Department of Public Health and Environment, is being prepared. Additionally, because some COCs at the New Rifle Processing Site are consistently appearing in concentrations above MCLs in downgradient gravel pit ponds, the GCAP for New Rifle will be re-evaluated in the near future.

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5.0 References

40 CFR 192. "Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings," *Code of Federal Regulations,* July 1, 2007.

DOE (U.S. Department of Energy), 1995a. *Baseline Risk Assessment of Ground Water Contamination at the Uranium Mill Tailings Site Near Rifle, Colorado*, DOE/AL/62350-179, Rev. 1, August.

DOE (U.S. Department of Energy), 1995b. *Private Well/Spring Position Paper, Rifle, Colorado Sites*, DOE/AL/62350-190, Rev. 0, May.

DOE (U.S. Department of Energy), 1999a. *Final Site Observational Work Plan for the Old Rifle, Colorado, UMTRA Project Site*, GJO-99-214-TAR, March.

DOE (U.S. Department of Energy), 1999b. *Final Site Observational Work Plan for the New Rifle, Colorado, UMTRA Project Site*, GJO-99-112-TAR, Rev. 1, November.

DOE (U.S. Department of Energy), 2000. *Draft Work Plan for Vanadium Pilot Study, New Rifle UMTRA Site, Rifle, Colorado*, GWRFL10.6.4, July.

DOE (U.S. Department of Energy), 2001. *Ground Water Compliance Action Plan for the Old Rifle, Colorado, UMTRA Project Site*, GJO-2000-177-TAR, December.

DOE (U.S. Department of Energy), 2006. *Draft Ground Water Compliance Action Plan for the New Rifle, Colorado, Processing Site*, DOE-LM/GJ1211-2006, December.

DOE (U.S. Department of Energy), 2011. *Review of the Natural Flushing Groundwater Remedy at the Old Rifle Legacy Management Site, Rifle, Colorado,* Draft, LMS/RFO/S07263, July.

Gilbert, R.O., 1987. *Statistical Methods for Environmental Pollution Monitoring,* Van Nostrand Reinhold Company, New York.

Hollander, M., and D.A. Wolfe, 1973. *Nonparametric Statistical Methods*, Wiley, New York.

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Appendix A−1

Time-Concentration Plots for Wells at the Old Rifle Site

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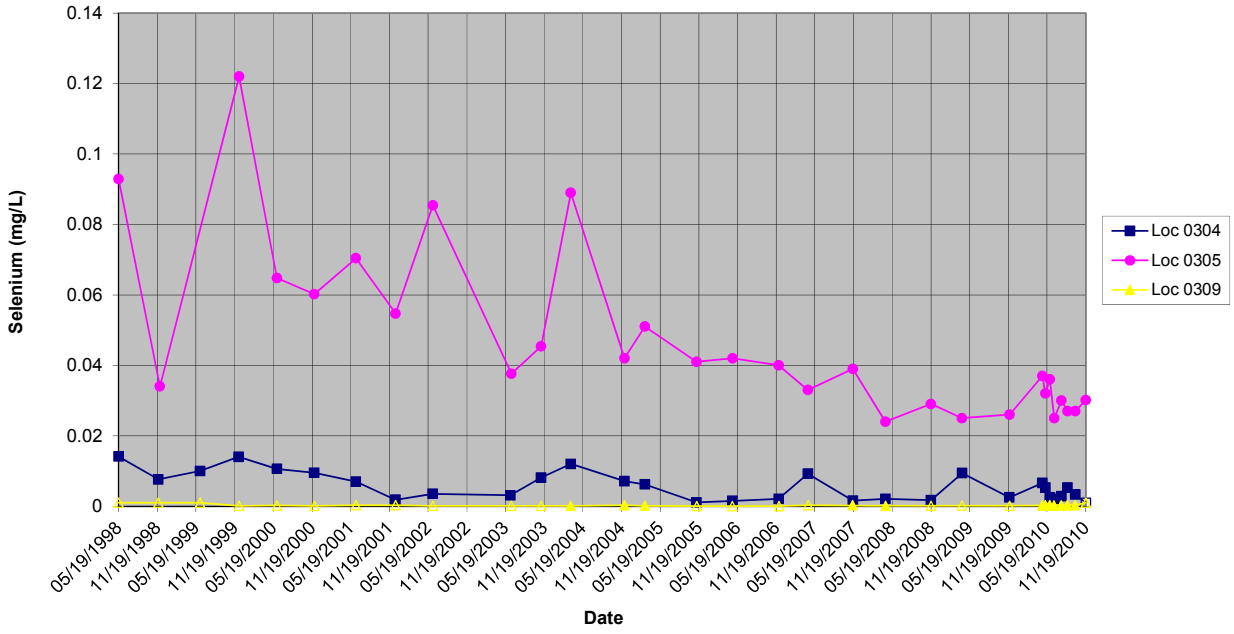
Rifle Old Processing Site (RFO01)

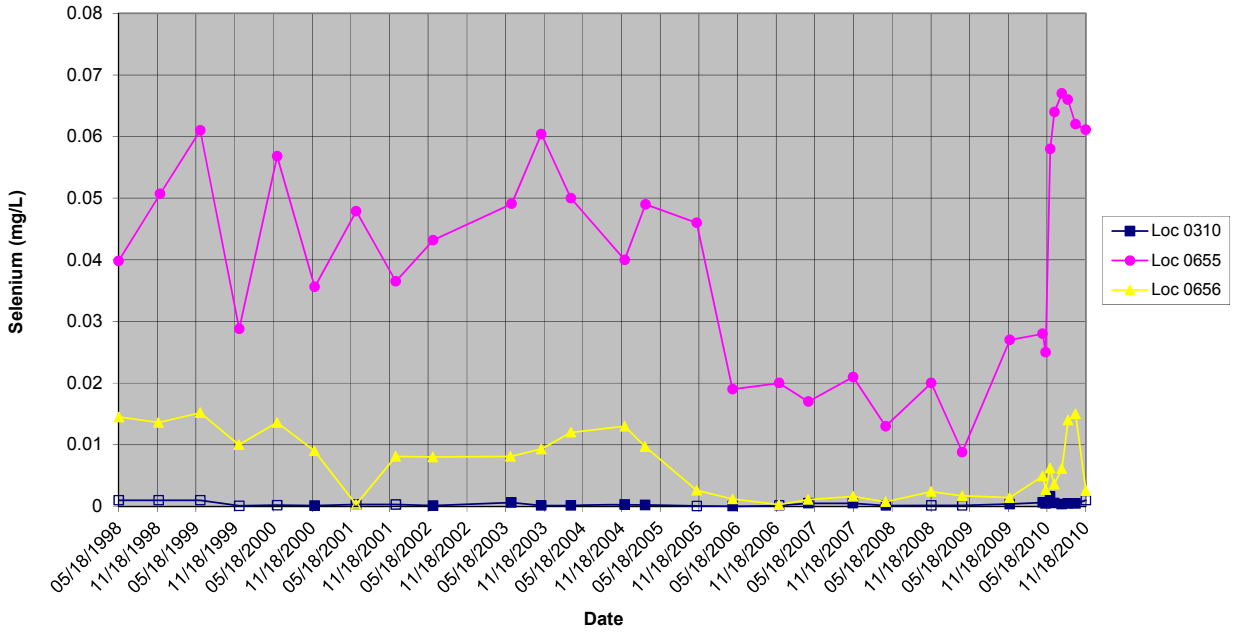
Selenium Concentration



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

Rifle Old Processing Site (RFO01)

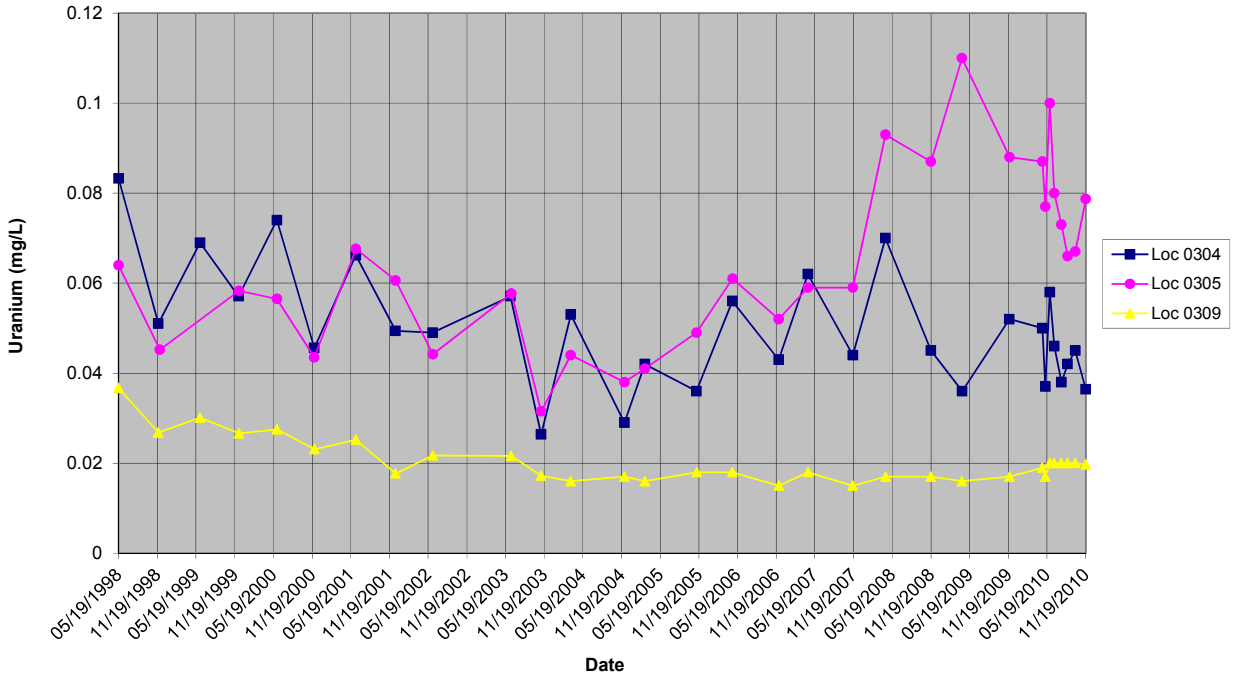
Selenium Concentration



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

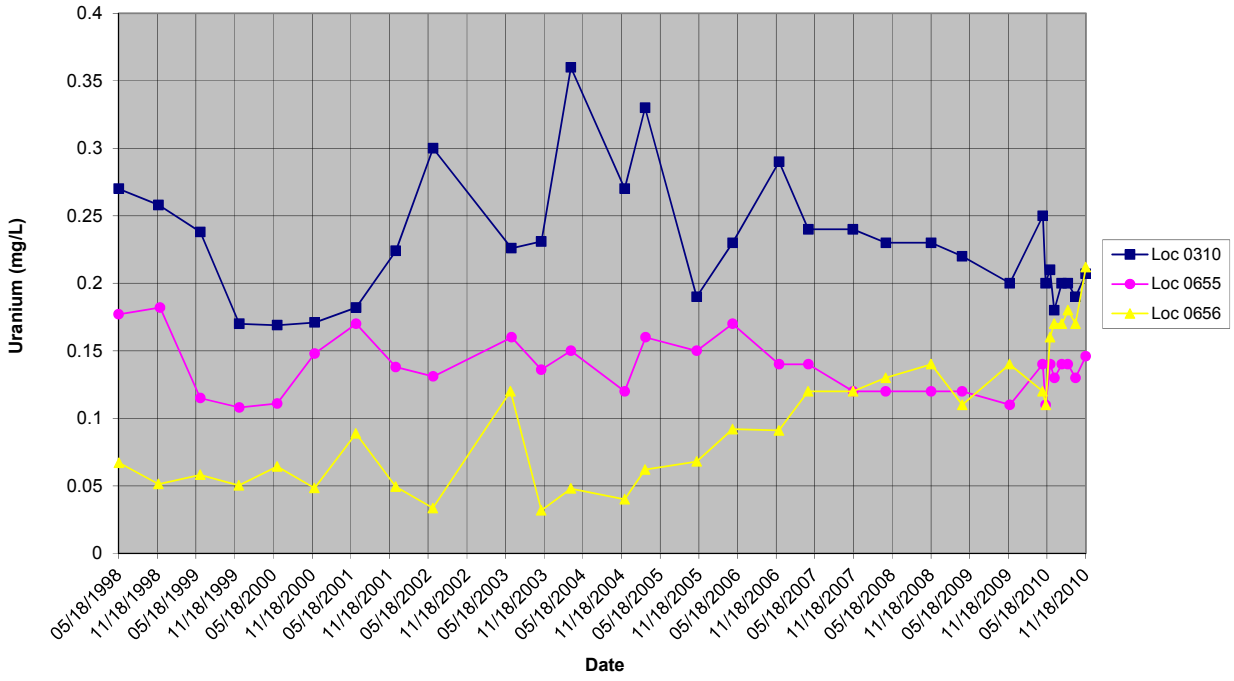
Rifle Old Processing Site (RFO01)

Uranium Concentration



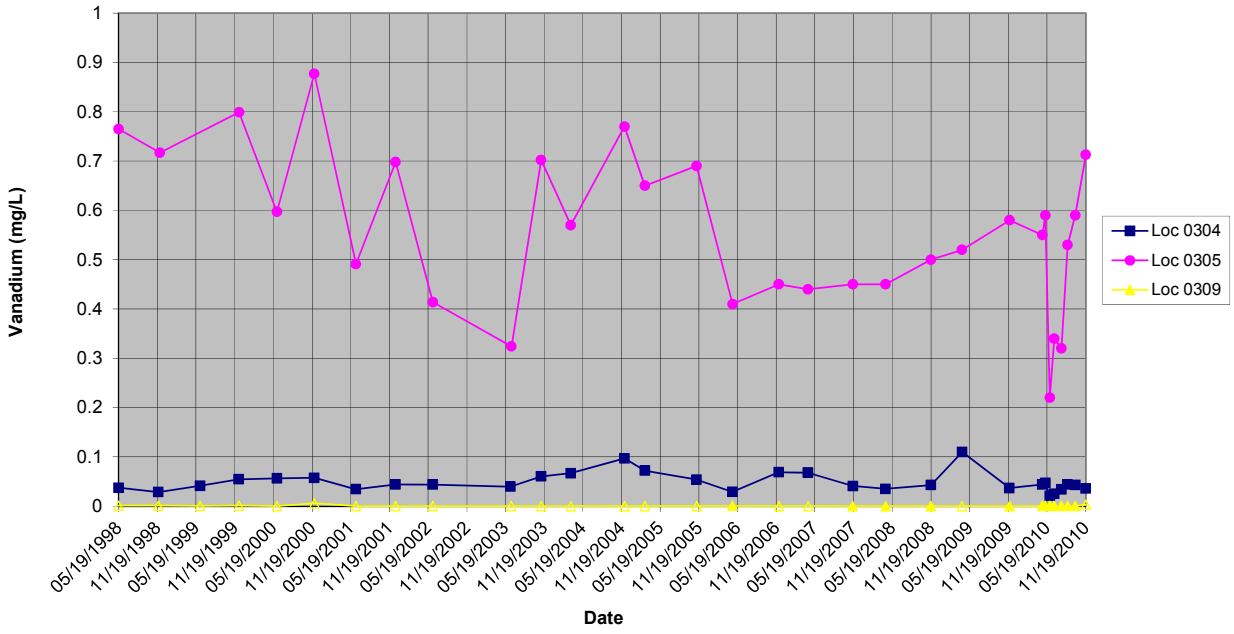
Rifle Old Processing Site (RFO01)

Uranium Concentration



Rifle Old Processing Site (RFO01)

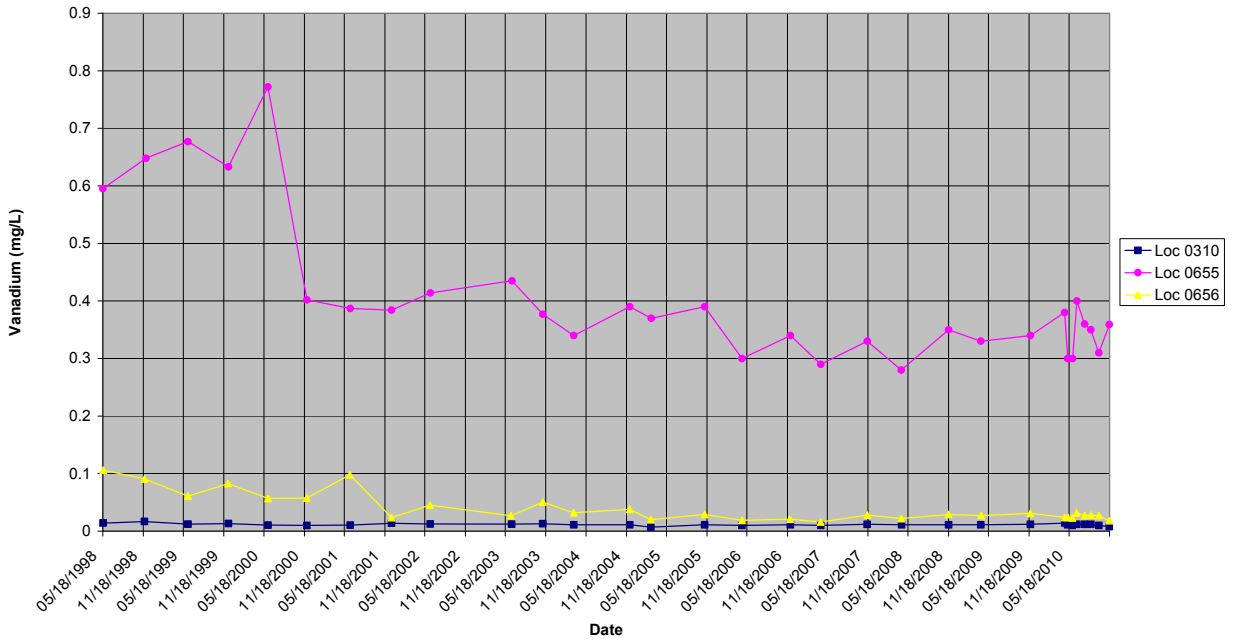
Vanadium Concentration



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

Rifle Old Processing Site (RFO01)

Vanadium Concentration



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Appendix A−2

Time-Concentration Plots for Wells at the New Rifle Site

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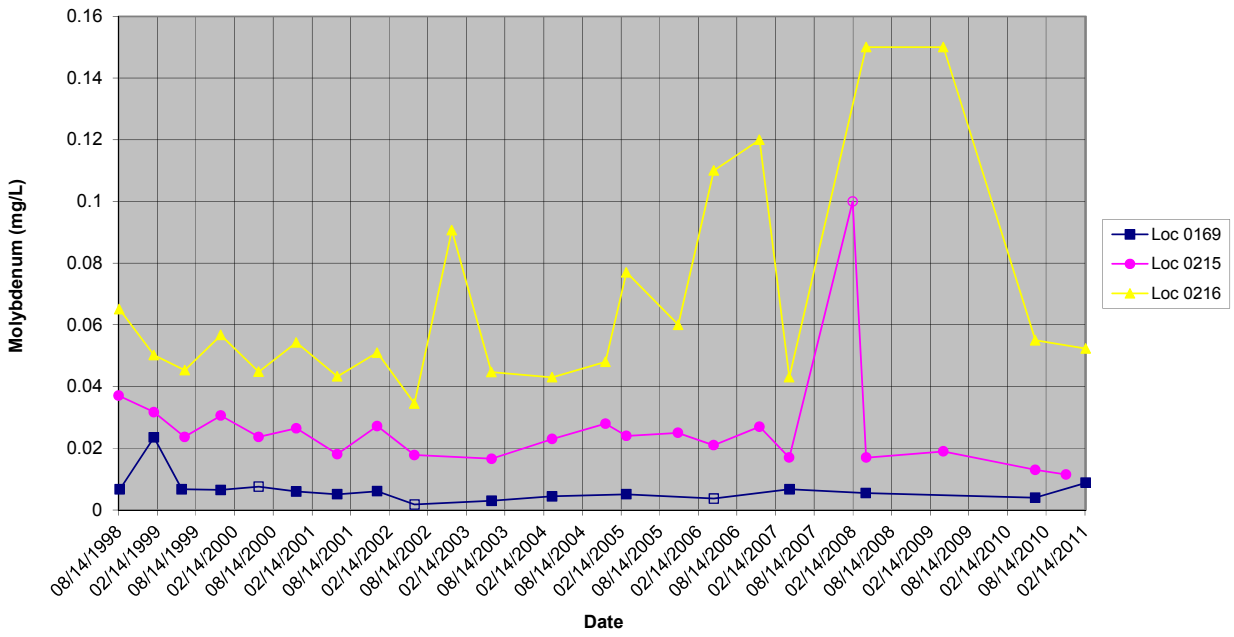
Rifle New Processing Site (RFN01)

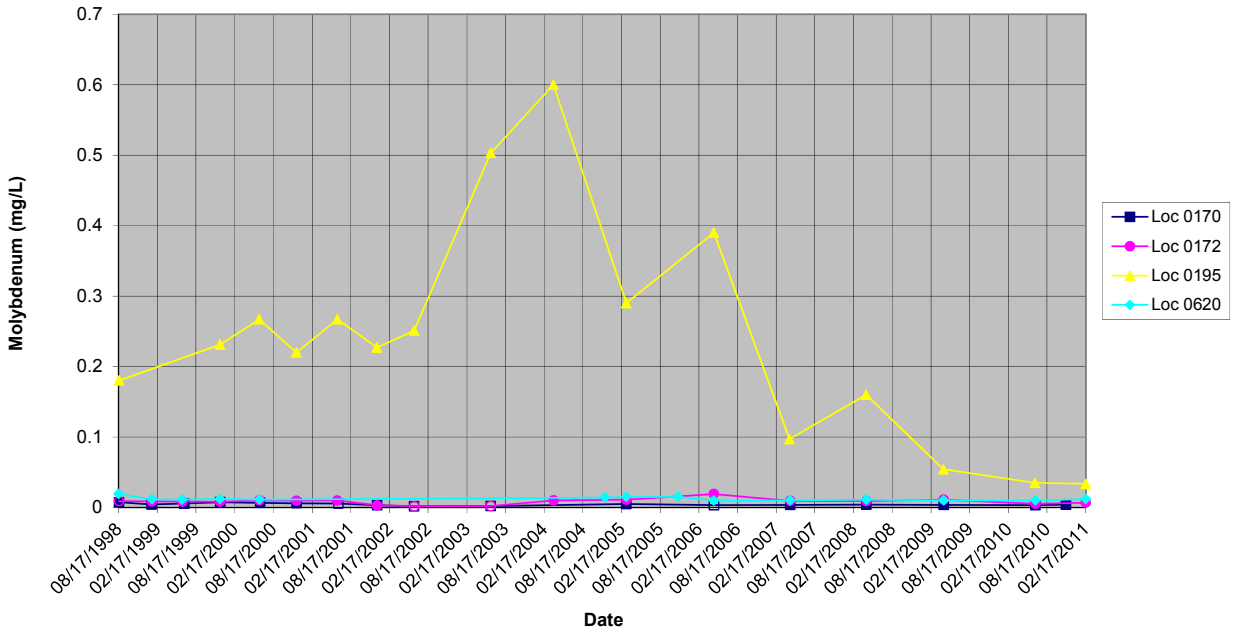
Molybdenum Concentration



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

Rifle New Processing Site (RFN01)

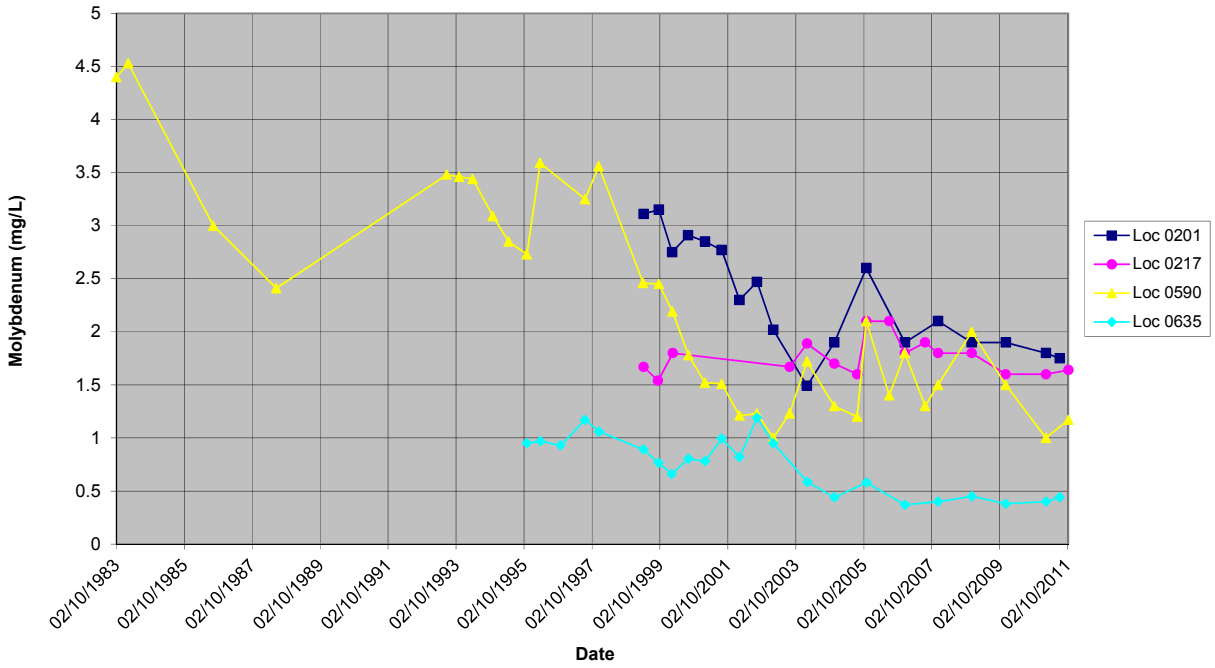
Molybdenum Concentration



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

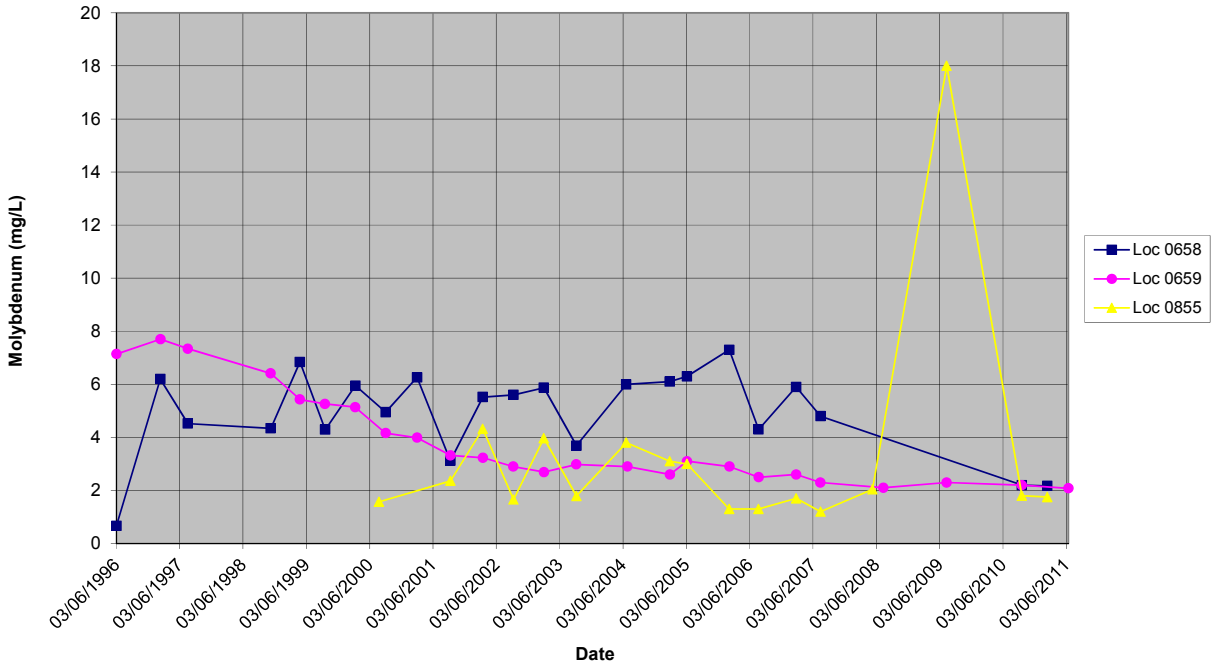
Rifle New Processing Site (RFN01)

Molybdenum Concentration



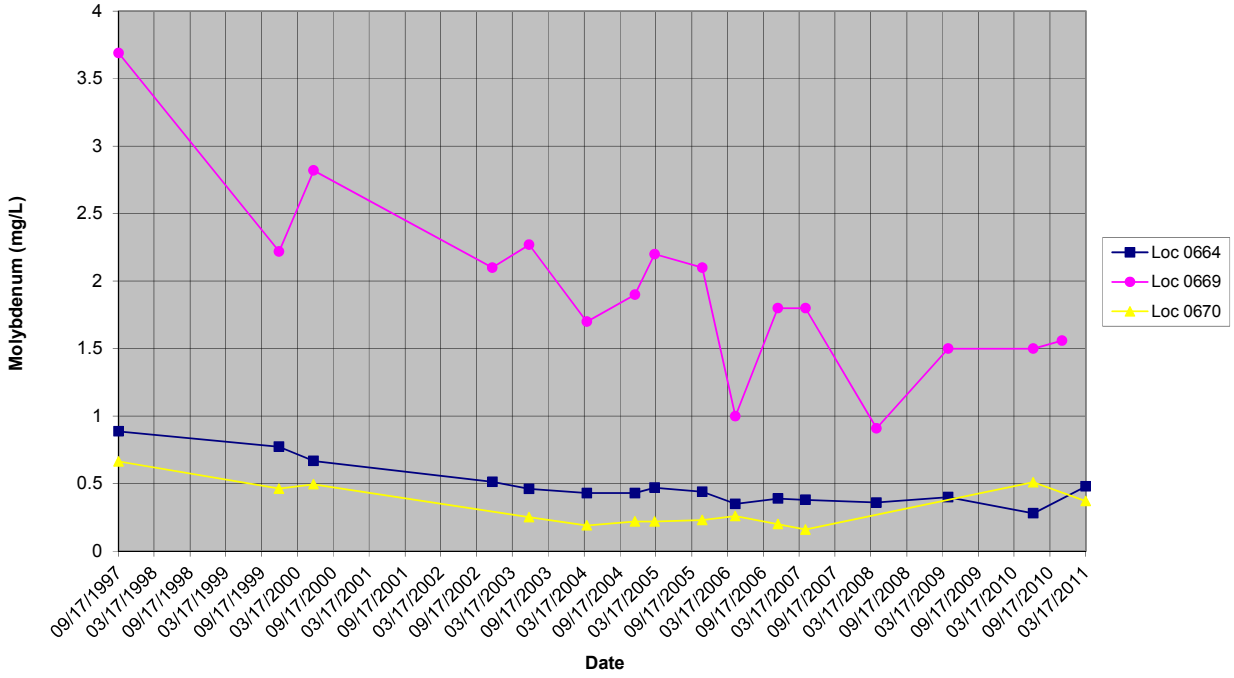
Rifle New Processing Site (RFN01)

Molybdenum Concentration



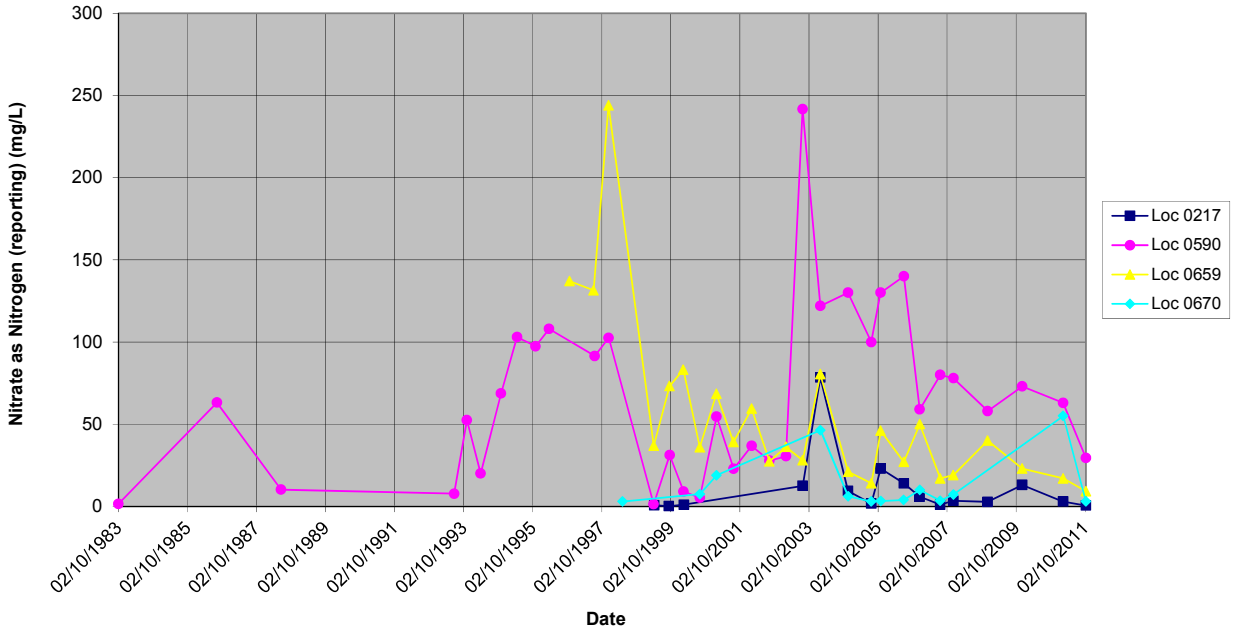
Rifle New Processing Site (RFN01)

Molybdenum Concentration



Rifle New Processing Site (RFN01)

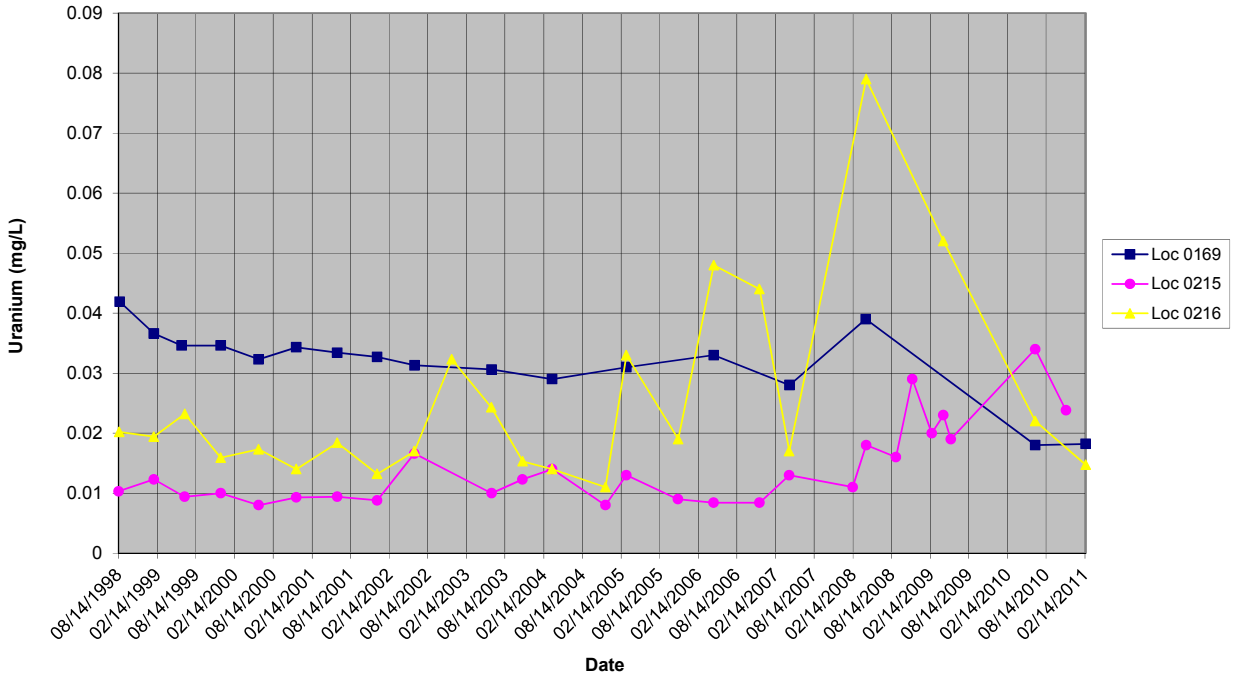
Nitrate as Nitrogen (reporting) Concentration



[1] All nitrate results have been converted to nitrate-as-nitrogen to facilitate comparison.

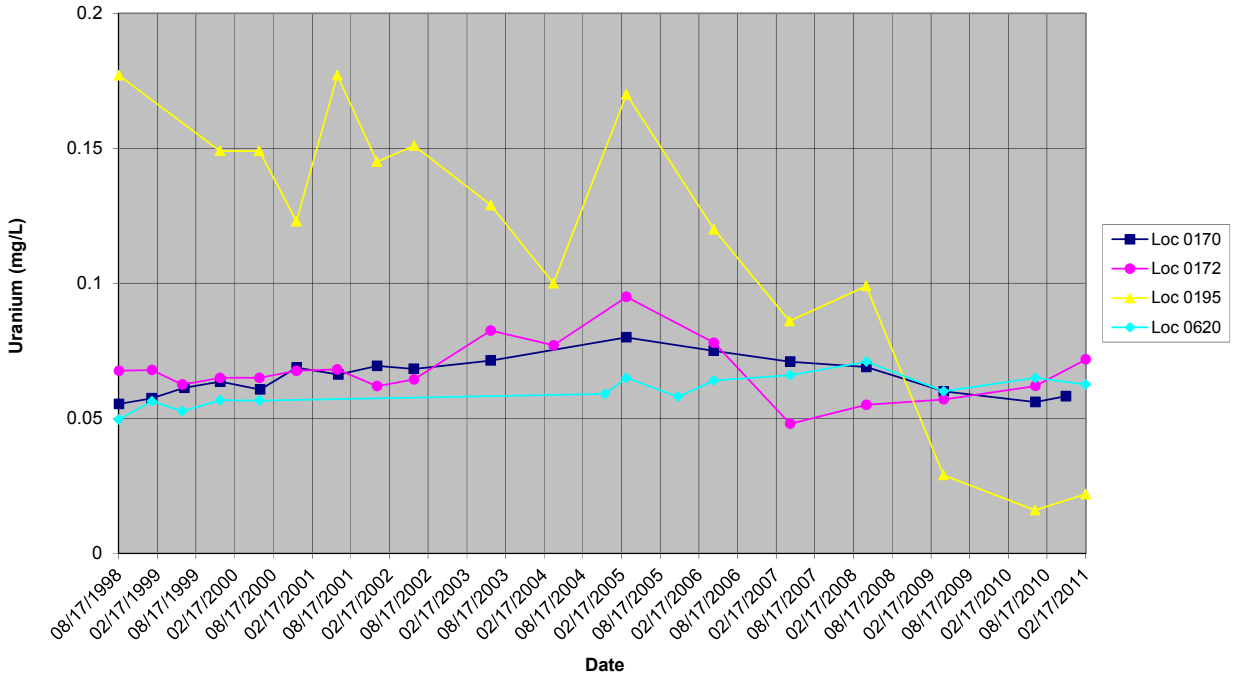
Rifle New Processing Site (RFN01)

Uranium Concentration



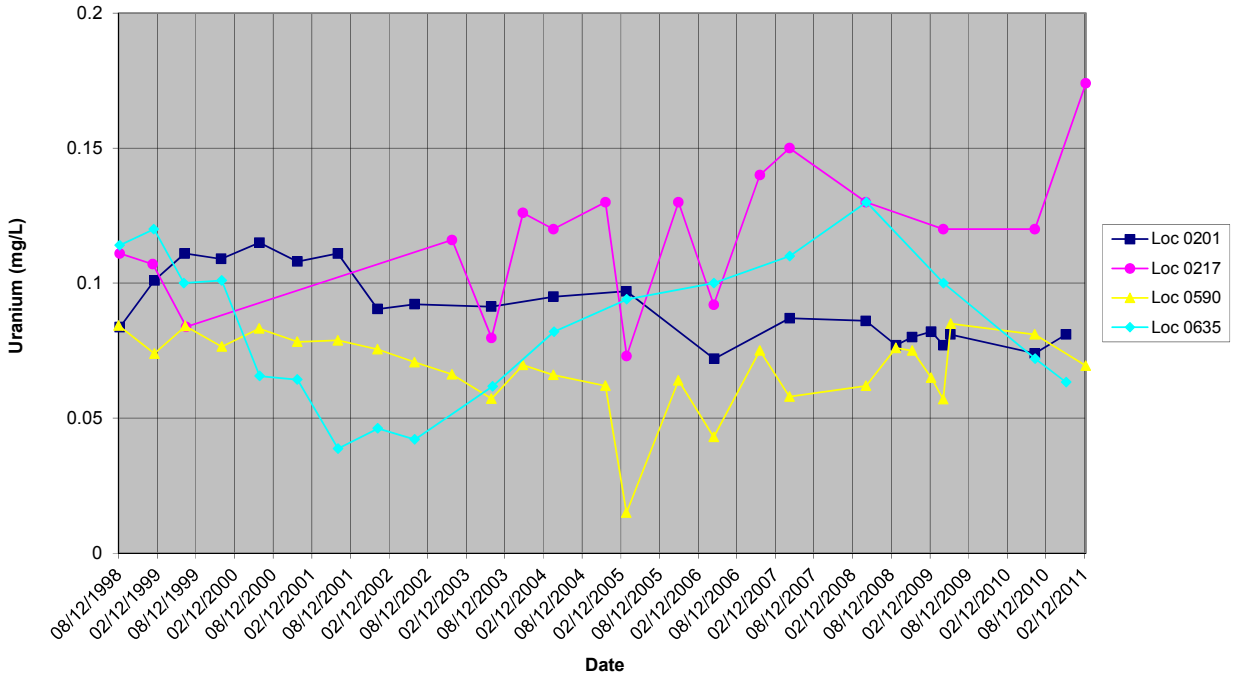
Rifle New Processing Site (RFN01)

Uranium Concentration



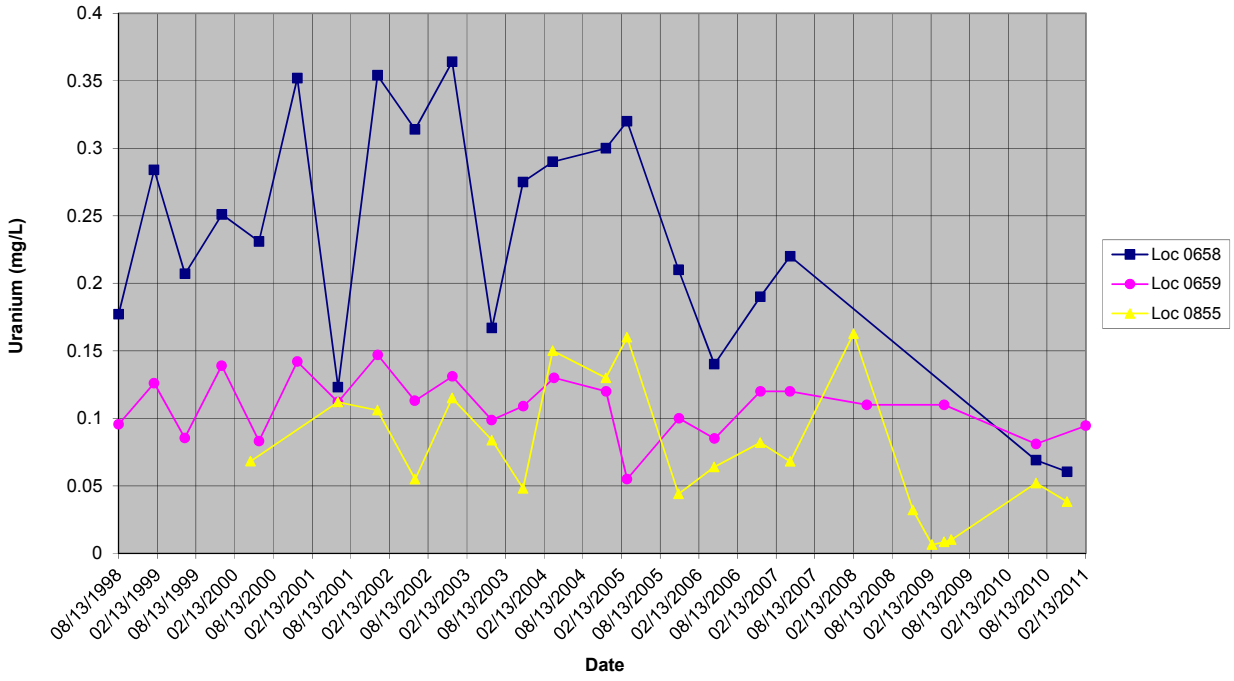
Rifle New Processing Site (RFN01)

Uranium Concentration



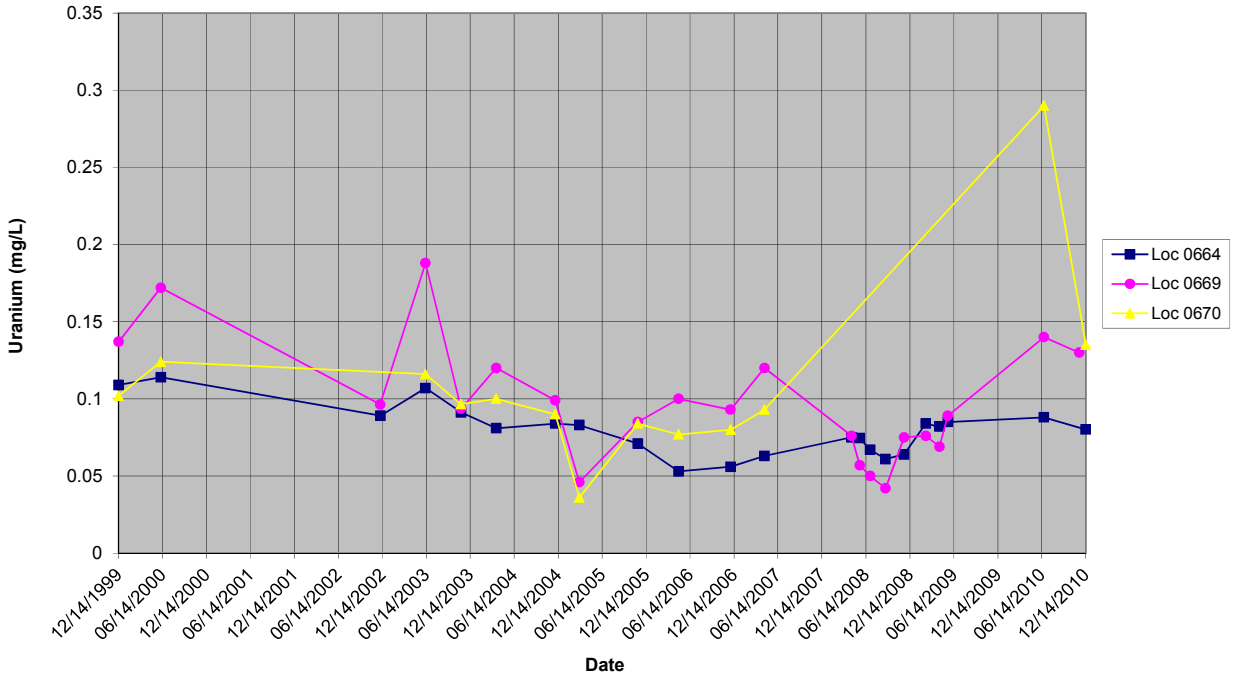
Rifle New Processing Site (RFN01)

Uranium Concentration



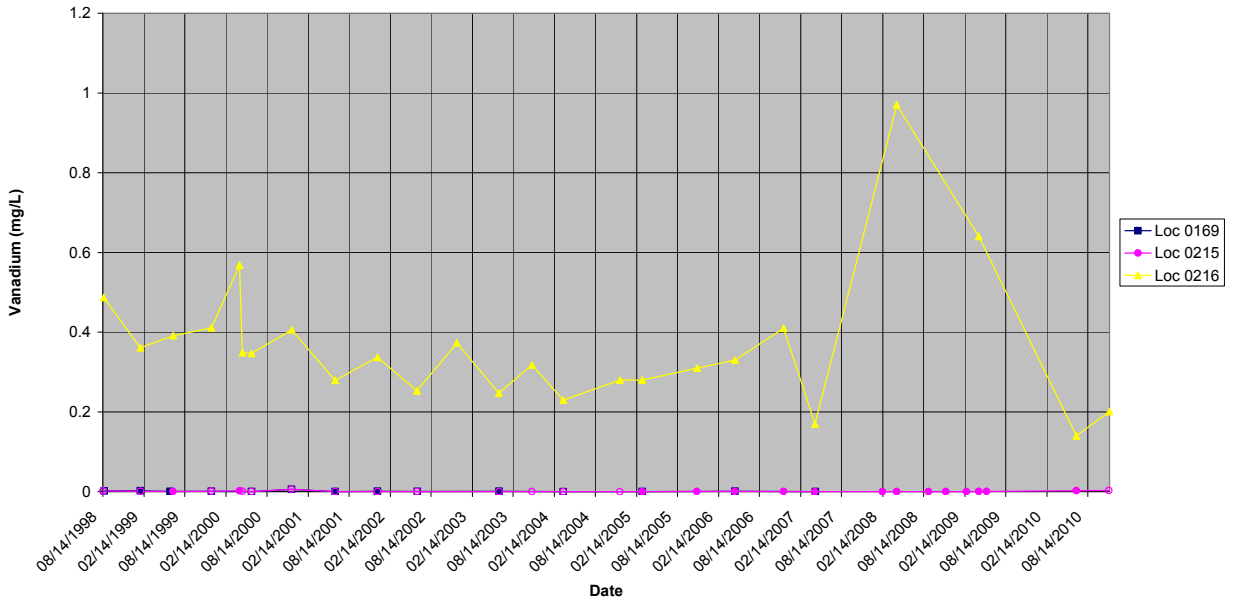
Rifle New Processing Site (RFN01)

Uranium Concentration



Rifle New Processing Site (RFN01)

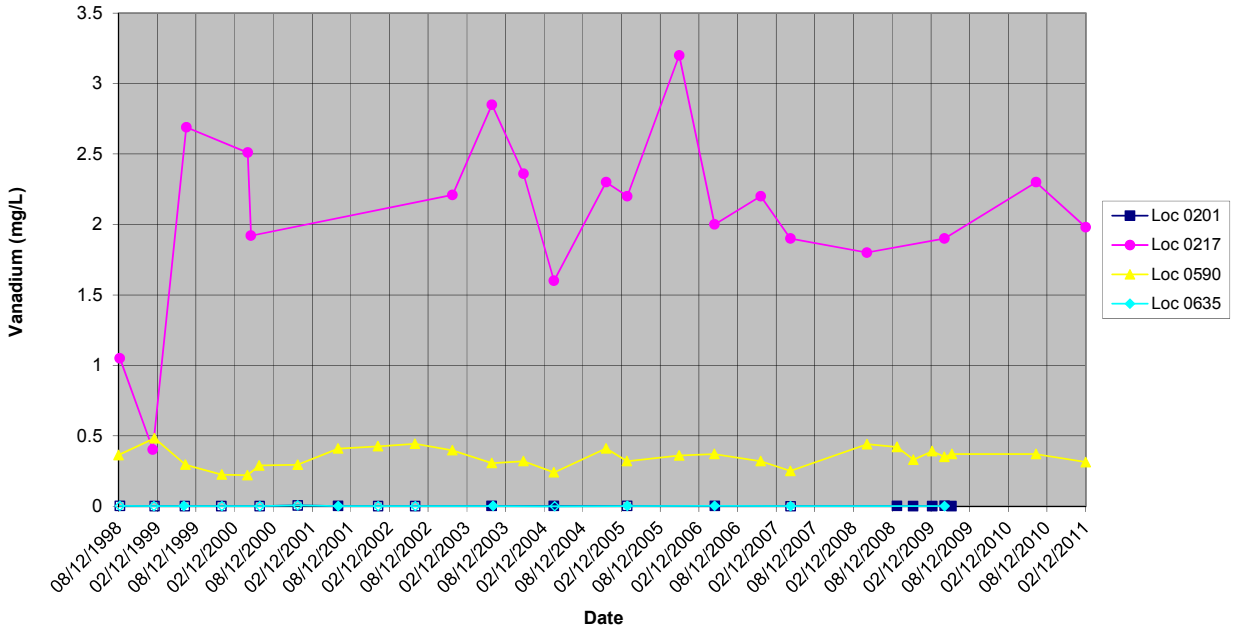
Vanadium Concentration



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

Rifle New Processing Site (RFN01)

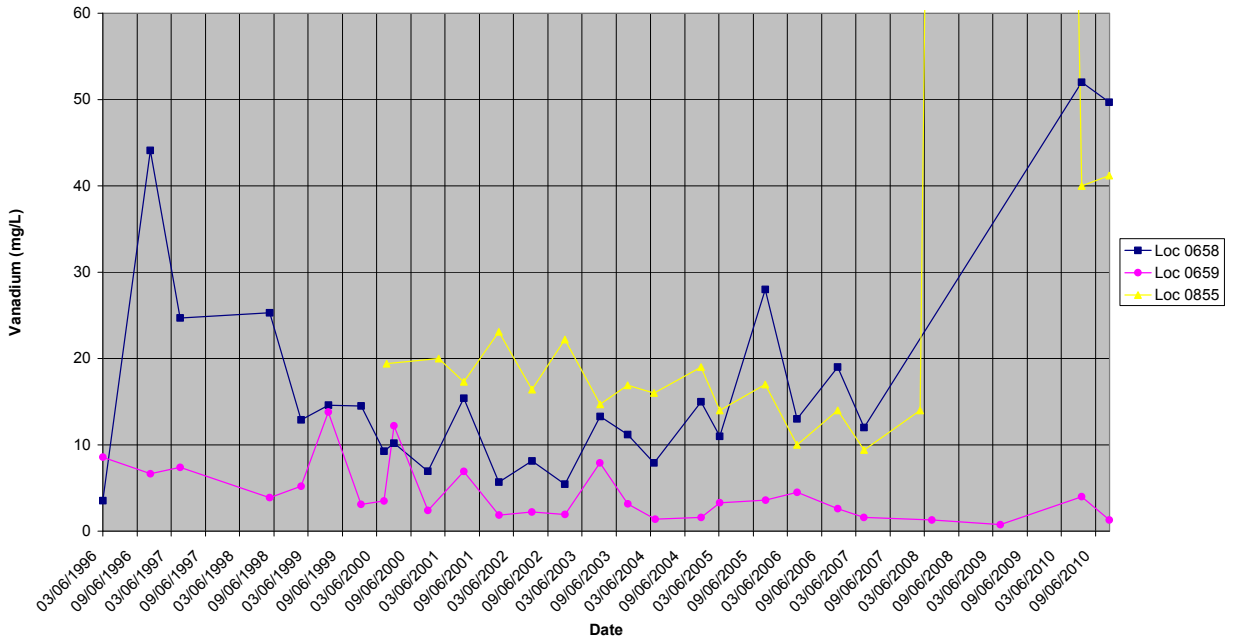
Vanadium Concentration

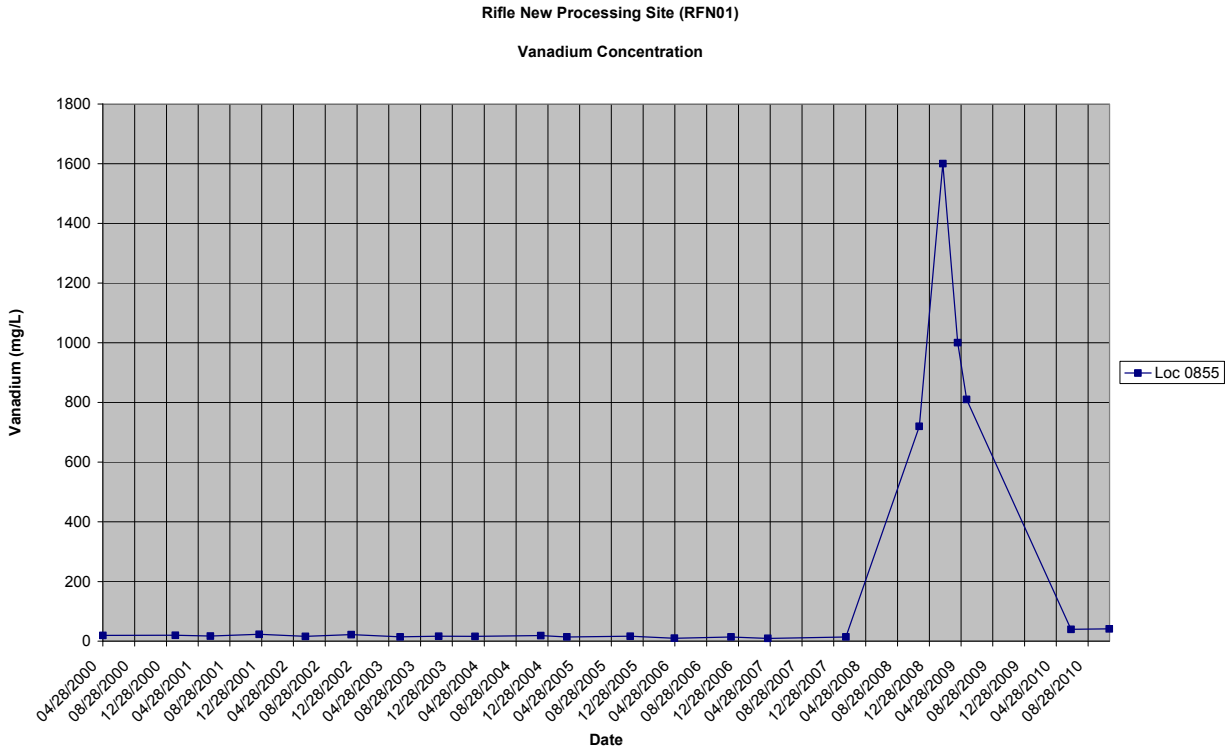


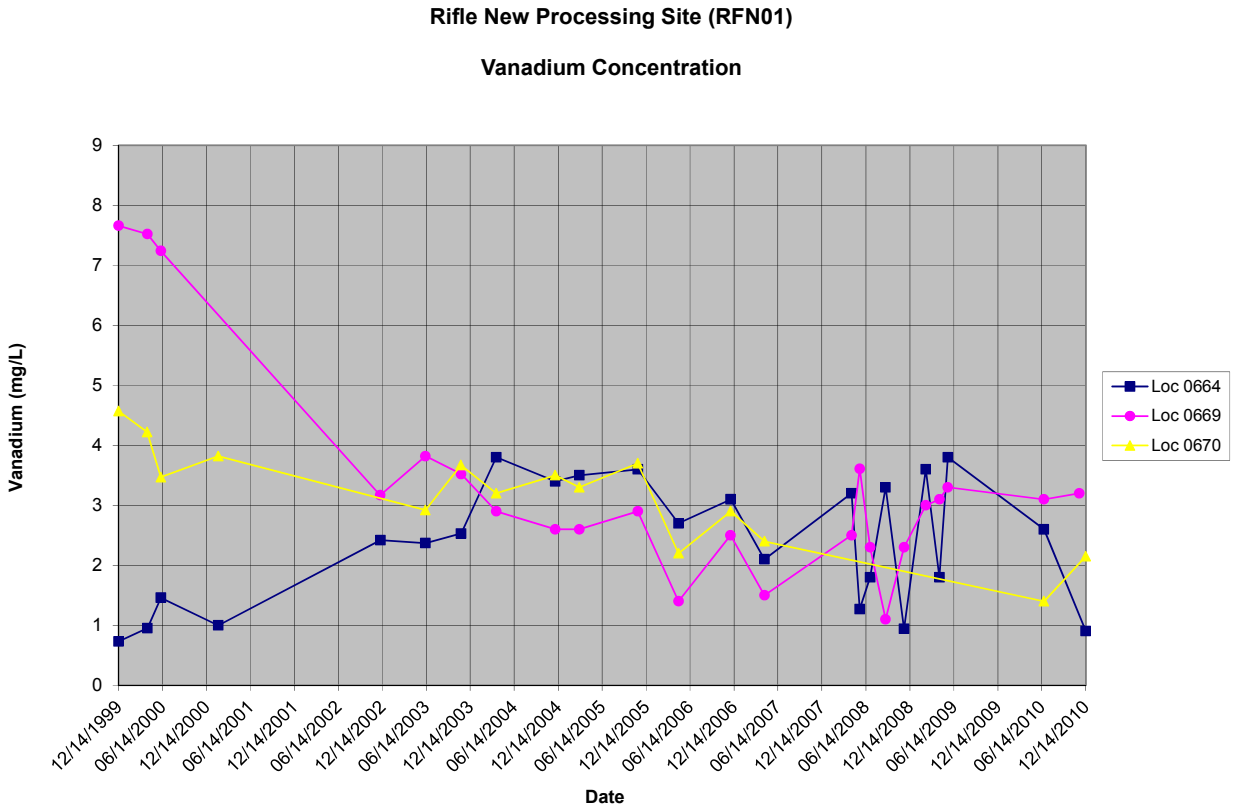
Note: A hollow symbol denotes an analytical result below the detection limit.

Rifle New Processing Site (RFN01)

Vanadium Concentration




Rifle New Processing Site (RFN01)
Vanadium Concentration
Vanadium (mg/L)
1800
1600
1400
1200
1000
800
600
400
200
0
04/28/2000
08/28/2000
12/28/2000
04/28/2001
08/28/2001
12/28/2001
04/28/2002
08/28/2002
12/28/2002
04/28/2003
08/28/2003
12/28/2003
04/28/2004
08/28/2004
12/28/2004
04/28/2005
08/28/2005
12/28/2005
04/28/2006
08/28/2006
12/28/2006
04/28/2007
08/28/2007
12/28/2007
04/28/2008
08/28/2008
12/28/2008
04/28/2009
08/28/2009
12/28/2009
04/28/2010
08/28/2010
Date
Loc 0855


Rifle New Processing Site (RFN01)
Vanadium Concentration
Vanadium (mg/L)
9
8
7
6
5
4
3
2
1
0
12/14/1999
06/14/2000
12/14/2000
06/14/2001
12/14/2001
06/14/2002
12/14/2002
06/14/2003
12/14/2003
06/14/2004
12/14/2004
06/14/2005
12/14/2005
06/14/2006
12/14/2006
06/14/2007
12/14/2007
06/14/2008
12/14/2008
06/14/2009
12/14/2009
06/14/2010
12/14/2010
Date
Loc 0664
Loc 0669
Loc 0670

Appendix B

Application of the Mann-Kendall Test to the New Rifle Monitoring Data

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The Visual Sample Plan (VSP) computer module used for the trend analysis is the nonparametric Mann-Kendall test for trend (Gilbert 1987). In this procedure, missing values are allowed, and the data need not conform to any particular distribution. In this Mann-Kendall test, only the relative magnitudes of the data, rather than the measured values, are used.

A one-tailed test is used because it is desired to test the null hypothesis, H_O, of no trend against the alternative hypothesis, H_A, of a downward trend. If no trend is detected, then it is desired to test the null hypothesis, H_O, of no trend against the alternative hypothesis, H_A, of an upward trend.

Alpha (α) is often called the level of significance. It is also referred to as a Type I error. For α = .05, this would be a 5 percent probability of rejecting the null hypothesis when the null hypothesis is true (i.e., there is a 5 percent probability of concluding there is a trend when no trend is present). In table format, the Type I and Type II errors can be expressed as shown in Table B−1.

Table B−1. Type I and Type II Errors

	Hypothesis Is Correct	**Hypothesis Is Incorrect**
Hypothesis is accepted	Correct decision	Type II error (β)
Hypothesis is rejected	Type I error (α)	Correct decision

Table A18 in Gilbert (1987) gives probability values only for *n* less than or equal to 10. An extension of this table up to *n* = 40 is given in Table A.21 in Hollander and Wolfe (1973) and has been incorporated into the VSP.

The VSP module was used to analyze monitoring data collected from four wells at the New Rifle site. Results are based on data collected since surface remediation was completed in 1998. Data for both uranium and molybdenum were used in the analysis. Table B−2 summarizes the results. Based on this analysis there is strong evidence that uranium and molybdenum levels are declining at the selected well locations.

Table B−2. Summary of Mann-Kendall Test Results for Selected Wells at the New Rifle Site

Location	**Uranium Trend**	**Alpha**	**Molybdenum Trend**	**Alpha**
RFN-0195	Down	5%	Down	10%
RFN-0201	Down	5%	Down	5%
RFN-0664	Down	5%	Down	5%
RFN-0669	Down	5%	Down	5%

References:

Gilbert, R.O., 1987. *Statistical Methods for Environmental Pollution Monitoring*, Van Nostrand Reinhold Company, New York.

Hollander, M., and D.A. Wolfe, 1973. *Nonparametric Statistical Methods*, Wiley, New York.

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Appendix C

Groundwater and Surface Water Monitoring Results for FY 2011

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SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3)	mg/L	0294	09/29/2010	N001	117			#	-	-
	mg/L	0294	11/16/2010	N001	152			#	-	-
	mg/L	0395	09/29/2010	N001	338			#	-	-
	mg/L	0395	11/16/2010	N001	300			#	-	-
	mg/L	0396	09/30/2010	N001	129			#	-	-
	mg/L	0396	11/17/2010	N001	125			#	-	-
	mg/L	0398	09/29/2010	N001	232			#	-	-
	mg/L	0398	11/17/2010	N001	246			#	-	-
	mg/L	0741	09/29/2010	N001	111			#	-	-
	mg/L	0741	11/17/2010	N001	124			#	-	-
Aluminum	mg/L	0294	09/29/2010	N001	0.018	B	U	#	0.015	-
	mg/L	0395	09/29/2010	N001	0.015	U		#	0.015	-
	mg/L	0396	09/30/2010	N001	0.050	B	U	#	0.015	-
	mg/L	0398	09/29/2010	N001	0.019	B	U	#	0.015	-
	mg/L	0741	09/29/2010	N001	0.054	B	U	#	0.015	-
Ammonia Total as N	mg/L	0294	09/29/2010	N001	0.1	U	J	#	0.1	-
	mg/L	0395	09/29/2010	N001	0.1	U	J	#	0.1	-
	mg/L	0396	09/30/2010	N001	0.1	U	J	#	0.1	-
	mg/L	0398	09/29/2010	N001	0.1	U	J	#	0.1	-
	mg/L	0741	09/29/2010	N001	0.1	U	J	#	0.1	-
Arsenic	mg/L	0294	09/29/2010	N001	0.0005			#	1.5E-05	-
	mg/L	0395	09/29/2010	N001	0.0003			#	1.5E-05	-
	mg/L	0396	09/30/2010	N001	0.0004			#	1.5E-05	-
	mg/L	0398	09/29/2010	N001	0.0007			#	1.5E-05	-
	mg/L	0741	09/29/2010	N001	0.0004			#	1.5E-05	-
Barium	mg/L	0294	09/29/2010	N001	0.057			#	0.00019	-
	mg/L	0395	09/29/2010	N001	0.022		J	#	0.00019	-
	mg/L	0396	09/30/2010	N001	0.059			#	0.00019	-
	mg/L	0398	09/29/2010	N001	0.043		J	#	0.00019	-
	mg/L	0741	09/29/2010	N001	0.057			#	0.00019	-
Boron	mg/L	0294	09/29/2010	N001	0.028			#	0.0031	-
	mg/L	0395	09/29/2010	N001	0.250			#	0.0031	-
	mg/L	0396	09/30/2010	N001	0.028			#	0.0031	-
	mg/L	0398	09/29/2010	N001	0.096			#	0.0031	-
	mg/L	0741	09/29/2010	N001	0.026			#	0.0031	-
Bromide	mg/L	0294	09/29/2010	N001	0.2	U		#	0.2	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT		UN-CERTAINTY
Bromide	mg/L	0395	09/29/2010	N001	0.2	U		#	0.2		-
	mg/L	0396	09/30/2010	N001	0.2	U		#	0.2		-
	mg/L	0398	09/29/2010	N001	0.2	U		#	0.2		-
	mg/L	0741	09/29/2010	N001	0.2	U		#	0.2		-
Calcium	mg/L	0294	09/29/2010	N001	65.000			#	0.012		-
	mg/L	0395	09/29/2010	N001	140.000			#	0.012		-
	mg/L	0396	09/30/2010	N001	65.000			#	0.012		-
	mg/L	0398	09/29/2010	N001	120.000			#	0.012		-
	mg/L	0741	09/29/2010	N001	63.000			#	0.012		-
Chloride	mg/L	0294	09/29/2010	N001	180			#	2		-
	mg/L	0395	09/29/2010	N001	66			#	2		-
	mg/L	0396	09/30/2010	N001	180			#	2		-
	mg/L	0398	09/29/2010	N001	120			#	2		-
	mg/L	0741	09/29/2010	N001	180			#	4		-
Dissolved Organic Carbon	mg/L	0294	09/29/2010	N001	2			#	1		-
	mg/L	0395	09/29/2010	N001	2.2			#	1		-
	mg/L	0396	09/30/2010	N001	2			#	1		-
	mg/L	0398	09/29/2010	N001	1.6			#	1		-
	mg/L	0741	09/29/2010	N001	2.1			#	1		-
Dissolved Oxygen	mg/L	0294	09/29/2010	N001	8.59			#	-		-
	mg/L	0294	11/16/2010	N001	10.27			#	-		-
	mg/L	0395	11/16/2010	N001	9.67			#	-		-
	mg/L	0396	11/17/2010	N001	11.57			#	-		-
	mg/L	0398	11/17/2010	N001	9.91			#	-		-
	mg/L	0741	09/29/2010	N001	8.40			#	-		-
	mg/L	0741	11/17/2010	N001	10.96			#	-		-
Field Ferrous Iron	mg/L	0294	11/16/2010	N001	0.07			#	-		-
	mg/L	0395	11/16/2010	N001	0.02			#	-		-
	mg/L	0396	11/17/2010	N001	0.05			#	-		-
	mg/L	0398	11/17/2010	N001	0.02			#	-		-
	mg/L	0741	11/17/2010	N001	0.01			#	-		-
Iron	mg/L	0294	09/29/2010	N001	0.055	B	U	#	0.0049		-
	mg/L	0395	09/29/2010	N001	0.0088	B	U	#	0.0049		-
	mg/L	0396	09/30/2010	N001	0.079	B	U	#	0.0049		-
	mg/L	0398	09/29/2010	N001	0.026	B	U	#	0.0049		-
	mg/L	0741	09/29/2010	N001	0.076	B	U	#	0.0049		-
Magnesium	mg/L	0294	09/29/2010	N001	12.000			#	0.013		-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Magnesium	mg/L	0395	09/29/2010	N001	100.000			#	0.013	-
	mg/L	0396	09/30/2010	N001	13.000			#	0.013	-
	mg/L	0398	09/29/2010	N001	45.000			#	0.013	-
	mg/L	0741	09/29/2010	N001	13.000			#	0.013	-
Manganese	mg/L	0294	09/29/2010	N001	0.0095			#	0.00011	-
	mg/L	0395	09/29/2010	N001	0.0027	B		#	0.00011	-
	mg/L	0396	09/30/2010	N001	0.012			#	0.00011	-
	mg/L	0398	09/29/2010	N001	0.0049	B		#	0.00011	-
	mg/L	0741	09/29/2010	N001	0.011			#	0.00011	-
Molybdenum	mg/L	0294	09/29/2010	N001	0.0068			#	3.2E-05	-
	mg/L	0395	09/29/2010	N001	0.0086			#	3.2E-05	-
	mg/L	0396	09/30/2010	N001	0.0067			#	3.2E-05	-
	mg/L	0398	09/29/2010	N001	0.0072			#	3.2E-05	-
	mg/L	0741	09/29/2010	N001	0.0066			#	3.2E-05	-
Nitrate + Nitrite as Nitrogen	mg/L	0294	09/29/2010	N001	0.01	U		#	0.01	-
	mg/L	0395	09/29/2010	N001	0.85			#	0.01	-
	mg/L	0396	09/30/2010	N001	0.01	U		#	0.01	-
	mg/L	0398	09/29/2010	N001	0.22			#	0.01	-
	mg/L	0741	09/29/2010	N001	0.01	U		#	0.01	-
Oxidation Reduction Potential	mV	0294	09/29/2010	N001	132.0			#	-	-
	mV	0294	11/16/2010	N001	27			#	-	-
	mV	0395	09/29/2010	N001	142.1			#	-	-
	mV	0395	11/16/2010	N001	32			#	-	-
	mV	0396	09/30/2010	N001	-27.9			#	-	-
	mV	0396	11/17/2010	N001	-4			#	-	-
	mV	0398	09/29/2010	N001	150.8			#	-	-
	mV	0398	11/17/2010	N001	-29			#	-	-
	mV	0741	09/29/2010	N001	142.8			#	-	-
	mV	0741	11/17/2010	N001	-26			#	-	-
pH	s.u.	0294	09/29/2010	N001	8.61			#	-	-
	s.u.	0294	11/16/2010	N001	8.14			#	-	-
	s.u.	0395	09/29/2010	N001	7.64			#	-	-
	s.u.	0395	11/16/2010	N001	7.71			#	-	-
	s.u.	0396	09/30/2010	N001	8.18			#	-	-
	s.u.	0396	11/17/2010	N001	8.00			#	-	-
	s.u.	0398	09/29/2010	N001	8.10			#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0398	11/17/2010	N001	7.88			#	-	-
	s.u.	0741	09/29/2010	N001	8.71			#	-	-
	s.u.	0741	11/17/2010	N001	7.93			#	-	-
Potassium	mg/L	0294	09/29/2010	N001	4.200		J	#	0.11	-
	mg/L	0395	09/29/2010	N001	3.500		J	#	0.11	-
	mg/L	0396	09/30/2010	N001	4.500		J	#	0.11	-
	mg/L	0398	09/29/2010	N001	4.000		J	#	0.11	-
	mg/L	0741	09/29/2010	N001	4.400		J	#	0.11	-
Selenium	mg/L	0294	09/29/2010	N001	0.0005			#	3.2E-05	-
	mg/L	0294	11/16/2010	N001	0.0010	UN		#	0.001	-
	mg/L	0395	09/29/2010	N001	0.0084			#	3.2E-05	-
	mg/L	0395	11/16/2010	N001	0.0021	BN		#	0.001	-
	mg/L	0396	09/30/2010	N001	0.0004			#	3.2E-05	-
	mg/L	0396	11/17/2010	N001	0.0010	UN		#	0.001	-
	mg/L	0398	09/29/2010	N001	0.0016			#	3.2E-05	-
	mg/L	0398	11/17/2010	N001	0.0010	BN		#	0.001	-
	mg/L	0741	09/29/2010	N001	0.0005			#	3.2E-05	-
	mg/L	0741	11/17/2010	N001	0.0010	UN		#	0.001	-
Silica	mg/L	0294	09/29/2010	N001	5.700			#	0.0095	-
	mg/L	0395	09/29/2010	N001	22.000			#	0.0095	-
	mg/L	0396	09/30/2010	N001	5.900			#	0.0095	-
	mg/L	0398	09/29/2010	N001	18.000			#	0.0095	-
	mg/L	0741	09/29/2010	N001	5.800			#	0.0095	-
Silicon	mg/L	0294	09/29/2010	N001	2.700			#	0.0044	-
	mg/L	0395	09/29/2010	N001	10.000			#	0.0044	-
	mg/L	0396	09/30/2010	N001	2.700			#	0.0044	-
	mg/L	0398	09/29/2010	N001	8.600			#	0.0044	-
	mg/L	0741	09/29/2010	N001	2.700			#	0.0044	-
Sodium	mg/L	0294	09/29/2010	N001	97.000			#	0.0066	-
	mg/L	0395	09/29/2010	N001	77.000			#	0.0066	-
	mg/L	0396	09/30/2010	N001	100.000			#	0.0066	-
	mg/L	0398	09/29/2010	N001	88.000			#	0.0066	-
	mg/L	0741	09/29/2010	N001	100.000			#	0.0066	-
Specific Conductance	umhos/cm	0294	09/29/2010	N001	1039			#	-	-
	umhos/cm	0294	11/16/2010	N001	1188			#	-	-
	umhos/cm	0395	09/29/2010	N001	1545			#	-	-
	umhos/cm	0395	11/16/2010	N001	1146			#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0396	09/30/2010	N001	931			#	-	-
	umhos/cm	0396	11/17/2010	N001	1299			#	-	-
	umhos/cm	0398	09/29/2010	N001	1285			#	-	-
	umhos/cm	0398	11/17/2010	N001	1536			#	-	-
	umhos/cm	0741	09/29/2010	N001	996			#	-	-
	umhos/cm	0741	11/17/2010	N001	1187			#	-	-
Strontium	mg/L	0294	09/29/2010	N001	0.510			#	7.8E-05	-
	mg/L	0395	09/29/2010	N001	2.500			#	7.8E-05	-
	mg/L	0396	09/30/2010	N001	0.550			#	7.8E-05	-
	mg/L	0398	09/29/2010	N001	1.700			#	7.8E-05	-
	mg/L	0741	09/29/2010	N001	0.550			#	7.8E-05	-
Sulfate	mg/L	0294	09/29/2010	N001	110			#	5	-
	mg/L	0395	09/29/2010	N001	500			#	5	-
	mg/L	0396	09/30/2010	N001	110			#	5	-
	mg/L	0398	09/29/2010	N001	300			#	5	-
	mg/L	0741	09/29/2010	N001	110			#	10	-
Sulfide	mg/L	0294	09/29/2010	N001	2	U		#	2	-
	mg/L	0395	09/29/2010	N001	2	U		#	2	-
	mg/L	0396	09/30/2010	N001	2	U		#	2	-
	mg/L	0398	09/29/2010	N001	2	U		#	2	-
	mg/L	0741	09/29/2010	N001	2	U		#	2	-
Temperature	C	0294	09/29/2010	N001	19.72			#	-	-
	C	0294	11/16/2010	N001	4.68			#	-	-
	C	0395	09/29/2010	N001	20.61			#	-	-
	C	0395	11/16/2010	N001	7.91			#	-	-
	C	0396	09/30/2010	N001	18.00			#	-	-
	C	0396	11/17/2010	N001	5.60			#	-	-
	C	0398	09/29/2010	N001	17.99			#	-	-
	C	0398	11/17/2010	N001	10.60			#	-	-
	C	0741	09/29/2010	N001	19.08			#	-	-
	C	0741	11/17/2010	N001	10.82			#	-	-
Turbidity	NTU	0294	09/29/2010	N001	7.37			#	-	-
	NTU	0294	11/16/2010	N001	3.18			#	-	-
	NTU	0395	09/29/2010	N001	7.55			#	-	-
	NTU	0395	11/16/2010	N001	3.47			#	-	-
	NTU	0396	09/30/2010	N001	6.37			#	-	-
	NTU	0396	11/17/2010	N001	4.07			#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT		UN-CERTAINTY
Turbidity	NTU	0398	09/29/2010	N001	4.22				#	-	-
	NTU	0398	11/17/2010	N001	1.73				#	-	-
	NTU	0741	09/29/2010	N001	6.25				#	-	-
	NTU	0741	11/17/2010	N001	3.49				#	-	-
Uranium	mg/L	0294	09/29/2010	N001	0.0019				#	2.9E-06	-
	mg/L	0294	11/16/2010	N001	0.0026				#	0.00005	-
	mg/L	0395	09/29/2010	N001	0.039				#	2.9E-06	-
	mg/L	0395	11/16/2010	N001	0.0267				#	0.00005	-
	mg/L	0396	09/30/2010	N001	0.0021				#	2.9E-06	-
	mg/L	0396	11/17/2010	N001	0.0026				#	0.00005	-
	mg/L	0398	09/29/2010	N001	0.012				#	2.9E-06	-
	mg/L	0398	11/17/2010	N001	0.0177				#	0.00005	-
	mg/L	0741	09/29/2010	N001	0.002				#	2.9E-06	-
	mg/L	0741	11/17/2010	N001	0.0027				#	0.00005	-
Vanadium	mg/L	0294	09/29/2010	N001	0.0008				#	1.5E-05	-
	mg/L	0294	11/16/2010	N001	0.0030	U			#	0.003	-
	mg/L	0395	09/29/2010	N001	0.0021				#	1.5E-05	-
	mg/L	0395	11/16/2010	N001	0.0030	U			#	0.003	-
	mg/L	0396	09/30/2010	N001	0.0011				#	1.5E-05	-
	mg/L	0396	11/17/2010	N001	0.0030	U			#	0.003	-
	mg/L	0398	09/29/2010	N001	0.0033				#	1.5E-05	-
	mg/L	0398	11/17/2010	N001	0.0030	U			#	0.003	-
	mg/L	0741	09/29/2010	N001	0.0008				#	1.5E-05	-
	mg/L	0741	11/17/2010	N001	0.0030	U			#	0.003	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:38 pm

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

RECORDS: SELECTED FROM USEE800 WHERE site_code='RFO01' AND location_code in('0294','0395','0396','0398','0741') AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED >= #9/1/2010#

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

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
+	Correlation coefficient for MSA < 0.995.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: Analyte also found in method blank.
C	Pesticide result confirmed by GC-MS.
D	Analyte determined in diluted sample.
E	Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H	Holding time expired, value suspect.
I	Increased detection limit due to required dilution.
J	Estimated
M	GFAA duplicate injection precision not met.
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC).
P	> 25% difference in detected pesticide or Aroclor 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.

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3)	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	470		F	#	-	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	402		F	#	-	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	464		F	#	-	-
	mg/L	0292A	WL	11/16/2010	N001	10.50 - 20.50	464		F	#	-	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	294		F	#	-	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	296		F	#	-	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	335		F	#	-	-
	mg/L	0304	WL	11/17/2010	N001	13.20 - 18.20	281		F	#	-	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	367		F	#	-	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	260		F	#	-	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	369		F	#	-	-
	mg/L	0305	WL	11/17/2010	N001	13.76 - 18.76	360		F	#	-	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	380		F	#	-	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	396		F	#	-	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	402		F	#	-	-
	mg/L	0309	WL	11/17/2010	N001	16.93 - 21.93	348		F	#	-	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	430		F	#	-	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	520		F	#	-	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	489		F	#	-	-
	mg/L	0310	WL	11/17/2010	N001	17.93 - 22.93	440		F	#	-	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	489		F	#	-	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	472		F	#	-	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	465		F	#	-	-
	mg/L	0655	WL	11/17/2010	N001	13.60 - 23.60	440		F	#	-	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	428		F	#	-	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	394		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3)	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	381		F	#	-	-
	mg/L	0656	WL	11/17/2010	N001	6.35 - 21.35	360		F	#	-	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	422		F	#	-	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	444		F	#	-	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	436		F	#	-	-
	mg/L	0658	WL	11/16/2010	N001	2.30 - 17.30	454		F	#	-	-
Aluminum	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.072	B	UF	#	0.015	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.015	U	F	#	0.015	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.015	U	F	#	0.015	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.076	B	UF	#	0.015	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.077	B	UF	#	0.015	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.015	U	F	#	0.015	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.015	U	F	#	0.015	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.082	B	UF	#	0.015	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.015	U	F	#	0.015	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.016	B	UF	#	0.015	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.073	B	UF	#	0.015	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.015	U	F	#	0.015	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.016	B	UF	#	0.015	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.075	B	UF	#	0.015	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.058	B	UF	#	0.015	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.015	U	F	#	0.015	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.082	B	UF	#	0.015	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.015	U	F	#	0.015	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.019	B	UF	#	0.015	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.085	B	UF	#	0.015	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Aluminum	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.015	U	F	#	0.015	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.016	B	UF	#	0.015	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.077	B	UF	#	0.015	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.017	B	UF	#	0.015	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.018	B	UF	#	0.015	-
Ammonia Total as N	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.41	N	FJ	#	0.1	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.43	N	FJ	#	0.1	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.47	N	FJ	#	0.1	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	2.8		FJ	#	0.1	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	2.7		FJ	#	0.1	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	2.4		F	#	0.1	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	2.3		FJ	#	0.1	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	2.2		FJ	#	0.1	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	1.2		F	#	0.1	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	1.2		FJ	#	0.1	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.17		FJ	#	0.1	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.21		F	#	0.1	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.24		FJ	#	0.1	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	1.4		FJ	#	0.1	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	1.8		F	#	0.1	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	1.4		FJ	#	0.1	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.1	U	FJ	#	0.1	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.1	U	F	#	0.1	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.1	U	FJ	#	0.1	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.1	U	FJ	#	0.1	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.1	U	F	#	0.1	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Ammonia Total as N	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.1	U	FJ	#	0.1	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.21		FJ	#	0.1	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.1	U	F	#	0.1	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.1	UN	FJ	#	0.1	-
Arsenic	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.001		F	#	1.5E-05	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.00085		F	#	1.5E-05	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.00063		F	#	1.5E-05	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.0022		F	#	1.5E-05	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.0022		F	#	1.5E-05	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.0023		F	#	1.5E-05	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.0028		F	#	1.5E-05	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.0025		F	#	7.4E-05	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.0038		F	#	0.00015	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.0044		F	#	0.00015	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.00066		F	#	1.5E-05	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.00069		F	#	1.5E-05	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.0007		F	#	1.5E-05	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.005		F	#	7.4E-05	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.0057		F	#	7.4E-05	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.0056		F	#	1.5E-05	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.0077		F	#	0.00003	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.0074		F	#	7.4E-05	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.0065		F	#	0.00015	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.00067		F	#	7.4E-05	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.0006		F	#	7.4E-05	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.00064		F	#	7.4E-05	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Arsenic	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.00077		F	#	1.5E-05	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.00083		F	#	1.5E-05	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.001	E	F	#	1.5E-05	-
Barium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.032		F	#	0.00019	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.036		F	#	0.00019	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.034		F	#	0.00019	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.036		F	#	0.00019	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.035		F	#	0.00019	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.045		F	#	0.00019	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.048		F	#	0.00019	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.051		F	#	0.00019	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.052		F	#	0.00019	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.045		F	#	0.00019	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.022		F	#	0.00019	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.024		F	#	0.00019	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.025		F	#	0.00019	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.052		F	#	0.00019	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.052		F	#	0.00019	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.046		F	#	0.00019	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.045		F	#	0.00019	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.045		F	#	0.00019	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.047		F	#	0.00019	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.056		F	#	0.00019	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.057		F	#	0.00019	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.054		F	#	0.00019	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.020		F	#	0.00019	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Barium	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.023		F	#	0.00019	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.023		F	#	0.00019	-
Boron	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.310		F	#	0.0031	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.310		F	#	0.0031	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.310		F	#	0.0031	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.160		F	#	0.0031	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.160		F	#	0.0031	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.190		F	#	0.0031	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.190		F	#	0.0031	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.180		F	#	0.0031	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.200		F	#	0.0031	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.200		F	#	0.0031	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.340		F	#	0.0031	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.330		F	#	0.0031	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.350		F	#	0.0031	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.350		F	#	0.0031	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.360		F	#	0.0031	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.380		F	#	0.0031	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.440		F	#	0.0031	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.440		F	#	0.0031	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.460		F	#	0.0031	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.210		F	#	0.0031	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.220		F	#	0.0031	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.220		F	#	0.0031	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.200		F	#	0.0031	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.210		F	#	0.0031	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Boron	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.240		F	#	0.0031	-
Bromide	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.2	U	F	#	0.2	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.2		F	#	0.2	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.4	U	F	#	0.4	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.3		F	#	0.2	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.4	U	F	#	0.4	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.38		F	#	0.2	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.4	U	F	#	0.4	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.42		F	#	0.4	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.31		F	#	0.2	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.4	U	F	#	0.4	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.4	U	F	#	0.4	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.3		F	#	0.2	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.4	U	F	#	0.4	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	1.6		F	#	0.4	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	1.6		F	#	0.4	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.87		F	#	0.4	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.93		F	#	0.4	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.77		F	#	0.4	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.83		F	#	0.4	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.65		F	#	0.4	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.64		F	#	0.2	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.57		F	#	0.4	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.2	U	F	#	0.2	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.2	U	F	#	0.2	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.4	U	F	#	0.4	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Calcium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	130.000		F	#	0.012	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	150.000		F	#	0.012	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	150.000		F	#	0.012	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	170.000		F	#	0.012	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	170.000		F	#	0.012	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	200.000		F	#	0.012	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	250.000		F	#	0.012	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	230.000		F	#	0.012	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	200.000		F	#	0.012	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	160.000		F	#	0.012	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	190.000		F	#	0.012	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	190.000		F	#	0.012	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	200.000		F	#	0.012	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	300.000		F	#	0.012	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	290.000		F	#	0.012	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	270.000		F	#	0.012	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	250.000		F	#	0.012	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	230.000		F	#	0.012	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	230.000		F	#	0.012	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	190.000		F	#	0.012	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	180.000		F	#	0.012	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	170.000		F	#	0.012	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	140.000		F	#	0.012	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	150.000		F	#	0.012	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	160.000		F	#	0.012	-
Chloride	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	91		F	#	4	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Chloride	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	68		F	#	4	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	52		F	#	4	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	170		F	#	4	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	170		F	#	4	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	250		F	#	4	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	390		F	#	4	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	130		F	#	4	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	260		F	#	4	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	180		F	#	4	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	130		F	#	4	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	140		F	#	4	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	140		F	#	4	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	230		F	#	4	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	220		F	#	4	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	200		F	#	4	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	180		F	#	4	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	180		F	#	4	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	190		F	#	4	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	220		F	#	4	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	230		F	#	4	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	230		F	#	4	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	19		F	#	0.2	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	19		F	#	0.2	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	33		F	#	0.4	-
Dissolved Organic Carbon	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	3.3		F	#	1	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	3.6		F	#	1	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Dissolved Organic Carbon	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	3		F	#	1	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	2.4		F	#	1	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	2.4		F	#	1	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	2.5		F	#	1	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	2		F	#	1	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	2.1		F	#	1	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	2.6		F	#	1	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	2.1		F	#	1	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	2.1		F	#	1	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	2.6		F	#	1	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	2.2		F	#	1	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	4		F	#	1	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	4.2		F	#	1	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	4		F	#	1	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	3.7		F	#	1	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	3.3		F	#	1	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	3.5		F	#	1	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	2.2		F	#	1	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	2.4		F	#	1	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	2.2		F	#	1	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	3.2		F	#	1	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	3.4		F	#	1	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	3.8		F	#	1	-
Dissolved Oxygen	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	4.79		F	#	-	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	1.40		F	#	-	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	1.56		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Dissolved Oxygen	mg/L	0292A	WL	11/16/2010	N001	10.50 - 20.50	1.81		F	#	-	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	1.73		F	#	-	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	1.46		F	#	-	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	2.38		F	#	-	-
	mg/L	0304	WL	11/17/2010	N001	13.20 - 18.20	1.37		F	#	-	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	4.95		F	#	-	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.81		F	#	-	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	3.68		F	#	-	-
	mg/L	0305	WL	11/17/2010	N001	13.76 - 18.76	0.67		F	#	-	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	4.66		F	#	-	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	2.63		F	#	-	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	3.78		F	#	-	-
	mg/L	0309	WL	11/17/2010	N001	16.93 - 21.93	1.56		F	#	-	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	2.31		F	#	-	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	3.82		F	#	-	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.41		F	#	-	-
	mg/L	0310	WL	11/17/2010	N001	17.93 - 22.93	1.10		F	#	-	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	3.16		F	#	-	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.46		F	#	-	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	1.54		F	#	-	-
	mg/L	0655	WL	11/17/2010	N001	13.60 - 23.60	1.14		F	#	-	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	7.6		F	#	-	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	1.87		F	#	-	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	1.78		F	#	-	-
	mg/L	0656	WL	11/17/2010	N001	6.35 - 21.35	0.83		F	#	-	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	6.14		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Dissolved Oxygen	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.77		F	#	-	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	2.69		F	#	-	-
	mg/L	0658	WL	11/16/2010	N001	2.30 - 17.30	0.74		F	#	-	-
Field Ferrous Iron	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.09		F	#	-	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0		F	#	-	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.09		F	#	-	-
	mg/L	0292A	WL	11/16/2010	N001	10.50 - 20.50	0.10		F	#	-	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.33		F	#	-	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.11		F	#	-	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.26		F	#	-	-
	mg/L	0304	WL	11/17/2010	N001	13.20 - 18.20	0.31		F	#	-	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.09		F	#	-	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.08		F	#	-	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.07		F	#	-	-
	mg/L	0305	WL	11/17/2010	N001	13.76 - 18.76	0.03		F	#	-	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.44		F	#	-	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.44		F	#	-	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.42		F	#	-	-
	mg/L	0309	WL	11/17/2010	N001	16.93 - 21.93	0.48		F	#	-	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	1.0		F	#	-	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.88		F	#	-	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.88		F	#	-	-
	mg/L	0310	WL	11/17/2010	N001	17.93 - 22.93	0.70		F	#	-	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.04		F	#	-	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0		F	#	-	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.08		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Field Ferrous Iron	mg/L	0655	WL	11/17/2010	N001	13.60 - 23.60	0.02		F	#	-	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0		F	#	-	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.15		F	#	-	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0		F	#	-	-
	mg/L	0656	WL	11/17/2010	N001	6.35 - 21.35	0.03		F	#	-	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0		F	#	-	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.36		F	#	-	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.03		F	#	-	-
	mg/L	0658	WL	11/16/2010	N001	2.30 - 17.30	0.01		F	#	-	-
Iron	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.270		F	#	0.0049	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.290		F	#	0.0049	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.120		UF	#	0.0049	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.260		F	#	0.0049	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.250		F	#	0.0049	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.290		F	#	0.0049	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.410		F	#	0.0049	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.0049	U	F	#	0.0049	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.0067	B	UF	#	0.0049	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.012	B	UF	#	0.0049	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.430		F	#	0.0049	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.420		F	#	0.0049	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.470		F	#	0.0049	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.920		F	#	0.0049	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	1.100		F	#	0.0049	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.810		F	#	0.0049	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.0092	B	FJ	#	0.0049	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Iron	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.0049	U	F	#	0.0049	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.012	B	UF	#	0.0049	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.013	B	UF	#	0.0049	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.0049	U	F	#	0.0049	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.0062	B	UF	#	0.0049	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.059	B	F	#	0.0049	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.059	B	F	#	0.0049	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.023	B	UF	#	0.0049	-
Magnesium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	78.000		F	#	0.013	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	88.000		F	#	0.013	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	88.000		F	#	0.013	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	69.000		F	#	0.013	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	68.000		F	#	0.013	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	82.000		F	#	0.013	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	98.000		F	#	0.013	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	91.000		F	#	0.013	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	82.000		F	#	0.013	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	68.000		F	#	0.013	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	120.000		F	#	0.013	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	130.000		F	#	0.013	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	130.000		F	#	0.013	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	140.000		F	#	0.013	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	140.000		F	#	0.013	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	130.000		F	#	0.013	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	150.000		F	#	0.013	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	150.000		F	#	0.013	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Magnesium	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	150.000		F	#	0.013	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	87.000		F	#	0.013	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	87.000		F	#	0.013	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	85.000		F	#	0.013	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	82.000		F	#	0.013	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	85.000		F	#	0.013	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	89.000		F	#	0.013	-
Manganese	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.660		F	#	0.00011	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.780		F	#	0.00011	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.800		F	#	0.00011	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.460		F	#	0.00011	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.460		F	#	0.00011	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.540		F	#	0.00011	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.630		F	#	0.00011	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.540		F	#	0.00011	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.360		F	#	0.00011	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.280		F	#	0.00011	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.640		F	#	0.00011	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.670		F	#	0.00011	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.700		F	#	0.00011	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	1.700		F	#	0.00011	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	1.700		F	#	0.00011	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	1.600		F	#	0.00011	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	1.100		F	#	0.00011	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	1.100		F	#	0.00011	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	1.100		F	#	0.00011	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.140		F	#	0.00011	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.110		F	#	0.00011	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.092		F	#	0.00011	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.490		F	#	0.00011	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.600		F	#	0.00011	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.690		F	#	0.00011	-
Molybdenum	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.012		F	#	3.2E-05	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.013		F	#	3.2E-05	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.013		F	#	3.2E-05	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.0098		F	#	3.2E-05	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.0097		F	#	3.2E-05	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.0092		F	#	3.2E-05	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.0087		F	#	3.2E-05	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.011		F	#	0.00016	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.012		F	#	0.00032	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.014		F	#	0.00032	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.008		F	#	3.2E-05	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.0078		F	#	3.2E-05	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.0077		F	#	3.2E-05	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.030		F	#	0.00016	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.030		F	#	0.00016	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.032		F	#	3.2E-05	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.011		F	#	6.4E-05	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.012		F	#	0.00016	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.012		F	#	0.00032	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.012		F	#	0.00016	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.014		F	#	0.00016	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.014		F	#	0.00016	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.0093		F	#	3.2E-05	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.0093		F	#	3.2E-05	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.0094		F	#	3.2E-05	-
Nitrate + Nitrite as Nitrogen	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.043		F	#	0.01	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.01	U	F	#	0.01	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.01	U	F	#	0.01	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.01	U	F	#	0.01	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.012		F	#	0.01	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.01	U	F	#	0.01	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.01	U	F	#	0.01	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.01	U	F	#	0.01	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.01	U	F	#	0.01	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.01	U	F	#	0.01	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.01	U	F	#	0.01	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.01	U	F	#	0.01	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.01	U	F	#	0.01	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.01	U	F	#	0.01	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.01	U	F	#	0.01	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.01	U	F	#	0.01	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	1.8		F	#	0.01	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	2		F	#	0.01	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	2.2		F	#	0.02	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.16		F	#	0.01	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.37		F	#	0.01	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Nitrate + Nitrite as Nitrogen	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.42		F	#	0.01	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.049		F	#	0.01	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.01	U	F	#	0.01	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.011		F	#	0.01	-
Oxidation Reduction Potential	mV	0292A	WL	07/28/2010	N001	10.50 - 20.50	-232.3		F	#	-	-
	mV	0292A	WL	08/26/2010	N001	10.50 - 20.50	-81.7		F	#	-	-
	mV	0292A	WL	09/30/2010	N001	10.50 - 20.50	39.9		F	#	-	-
	mV	0292A	WL	11/16/2010	N001	10.50 - 20.50	4		F	#	-	-
	mV	0304	WL	07/27/2010	N001	13.20 - 18.20	-188.7		F	#	-	-
	mV	0304	WL	08/25/2010	N001	13.20 - 18.20	-8.2		F	#	-	-
	mV	0304	WL	09/30/2010	N001	13.20 - 18.20	-33.6		F	#	-	-
	mV	0304	WL	11/17/2010	N001	13.20 - 18.20	17		F	#	-	-
	mV	0305	WL	07/27/2010	N001	13.76 - 18.76	-237.4		F	#	-	-
	mV	0305	WL	08/25/2010	N001	13.76 - 18.76	-2.1		F	#	-	-
	mV	0305	WL	09/30/2010	N001	13.76 - 18.76	-10.5		F	#	-	-
	mV	0305	WL	11/17/2010	N001	13.76 - 18.76	38		F	#	-	-
	mV	0309	WL	07/27/2010	N001	16.93 - 21.93	-179.2		F	#	-	-
	mV	0309	WL	08/25/2010	N001	16.93 - 21.93	-6.8		F	#	-	-
	mV	0309	WL	09/30/2010	N001	16.93 - 21.93	19.4		F	#	-	-
	mV	0309	WL	11/17/2010	N001	16.93 - 21.93	-25		F	#	-	-
	mV	0310	WL	07/27/2010	N001	17.93 - 22.93	-195.7		F	#	-	-
	mV	0310	WL	08/25/2010	N001	17.93 - 22.93	-26.9		F	#	-	-
	mV	0310	WL	09/30/2010	N001	17.93 - 22.93	-9.6		F	#	-	-
	mV	0310	WL	11/17/2010	N001	17.93 - 22.93	5		F	#	-	-
	mV	0655	WL	07/28/2010	N001	13.60 - 23.60	-223.3		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potential	mV	0655	WL	08/25/2010	N001	13.60 - 23.60	2.3		F	#	-	-
	mV	0655	WL	09/30/2010	N001	13.60 - 23.60	80.6		F	#	-	-
	mV	0655	WL	11/17/2010	N001	13.60 - 23.60	-11		F	#	-	-
	mV	0656	WL	07/28/2010	N001	6.35 - 21.35	-227.2		F	#	-	-
	mV	0656	WL	08/26/2010	N001	6.35 - 21.35	-108.9		F	#	-	-
	mV	0656	WL	09/30/2010	N001	6.35 - 21.35	78.8		F	#	-	-
	mV	0656	WL	11/17/2010	N001	6.35 - 21.35	-25		F	#	-	-
	mV	0658	WL	07/28/2010	N001	2.30 - 17.30	-205.8		F	#	-	-
	mV	0658	WL	08/26/2010	N001	2.30 - 17.30	-108.7		F	#	-	-
	mV	0658	WL	09/30/2010	N001	2.30 - 17.30	32.4		F	#	-	-
	mV	0658	WL	11/16/2010	N001	2.30 - 17.30	-11		F	#	-	-
pH	s.u.	0292A	WL	07/28/2010	N001	10.50 - 20.50	6.88		F	#	-	-
	s.u.	0292A	WL	08/26/2010	N001	10.50 - 20.50	6.86		F	#	-	-
	s.u.	0292A	WL	09/30/2010	N001	10.50 - 20.50	6.93		F	#	-	-
	s.u.	0292A	WL	11/16/2010	N001	10.50 - 20.50	6.96		F	#	-	-
	s.u.	0304	WL	07/27/2010	N001	13.20 - 18.20	7.00		F	#	-	-
	s.u.	0304	WL	08/25/2010	N001	13.20 - 18.20	6.91		F	#	-	-
	s.u.	0304	WL	09/30/2010	N001	13.20 - 18.20	6.95		F	#	-	-
	s.u.	0304	WL	11/17/2010	N001	13.20 - 18.20	7.03		F	#	-	-
	s.u.	0305	WL	07/27/2010	N001	13.76 - 18.76	7.05		F	#	-	-
	s.u.	0305	WL	08/25/2010	N001	13.76 - 18.76	7.04		F	#	-	-
	s.u.	0305	WL	09/30/2010	N001	13.76 - 18.76	7.12		F	#	-	-
	s.u.	0305	WL	11/17/2010	N001	13.76 - 18.76	7.11		F	#	-	-
	s.u.	0309	WL	07/27/2010	N001	16.93 - 21.93	6.94		F	#	-	-
	s.u.	0309	WL	08/25/2010	N001	16.93 - 21.93	6.86		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0309	WL	09/30/2010	N001	16.93 - 21.93	6.97		F	#	-	-
	s.u.	0309	WL	11/17/2010	N001	16.93 - 21.93	6.94		F	#	-	-
	s.u.	0310	WL	07/27/2010	N001	17.93 - 22.93	6.95		F	#	-	-
	s.u.	0310	WL	08/25/2010	N001	17.93 - 22.93	6.88		F	#	-	-
	s.u.	0310	WL	09/30/2010	N001	17.93 - 22.93	6.96		F	#	-	-
	s.u.	0310	WL	11/17/2010	N001	17.93 - 22.93	7.01		F	#	-	-
	s.u.	0655	WL	07/28/2010	N001	13.60 - 23.60	6.82		F	#	-	-
	s.u.	0655	WL	08/25/2010	N001	13.60 - 23.60	6.80		F	#	-	-
	s.u.	0655	WL	09/30/2010	N001	13.60 - 23.60	6.90		F	#	-	-
	s.u.	0655	WL	11/17/2010	N001	13.60 - 23.60	6.85		F	#	-	-
	s.u.	0656	WL	07/28/2010	N001	6.35 - 21.35	6.91		F	#	-	-
	s.u.	0656	WL	08/26/2010	N001	6.35 - 21.35	6.84		F	#	-	-
	s.u.	0656	WL	09/30/2010	N001	6.35 - 21.35	6.90		F	#	-	-
	s.u.	0656	WL	11/17/2010	N001	6.35 - 21.35	6.91		F	#	-	-
	s.u.	0658	WL	07/28/2010	N001	2.30 - 17.30	7.02		F	#	-	-
	s.u.	0658	WL	08/26/2010	N001	2.30 - 17.30	6.89		F	#	-	-
	s.u.	0658	WL	09/30/2010	N001	2.30 - 17.30	6.93		F	#	-	-
	s.u.	0658	WL	11/16/2010	N001	2.30 - 17.30	6.81		F	#	-	-
Potassium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	7.200	EN	FJ	#	0.11	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	7.800	EN	FJ	#	0.11	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	7.700	EN	FJ	#	0.11	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	6.600		FJ	#	0.11	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	6.500		FJ	#	0.11	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	7.700		FJ	#	0.11	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	8.100		FJ	#	0.11	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	10.000		FJ	#	0.11	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Potassium	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	9.500		FJ	#	0.11	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	8.700		FJ	#	0.11	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	8.600		FJ	#	0.11	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	9.200		FJ	#	0.11	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	9.800		FJ	#	0.11	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	13.000		FJ	#	0.11	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	13.000		FJ	#	0.11	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	13.000		FJ	#	0.11	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	12.000		FJ	#	0.11	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	12.000		FJ	#	0.11	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	13.000		FJ	#	0.11	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	10.000		FJ	#	0.11	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	11.000		FJ	#	0.11	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	11.000		FJ	#	0.11	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	3.100		FJ	#	0.11	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	3.500		FJ	#	0.11	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	4.200		FJ	#	0.11	-
Selenium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.00056		F	#	3.2E-05	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.00043		F	#	3.2E-05	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.00046		F	#	3.2E-05	-
	mg/L	0292A	WL	11/16/2010	N001	10.50 - 20.50	0.00100	UN	F	#	0.001	-
	mg/L	0292A	WL	11/16/2010	N002	10.50 - 20.50	0.00100	UN	F	#	0.001	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.0027		F	#	3.2E-05	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.0028		F	#	3.2E-05	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.0053		F	#	3.2E-05	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.0033		F	#	3.2E-05	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	SAMPLE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	QUALIFIERS: DATA	QUALIFIERS: QA	DETECTION LIMIT	UN-CERTAINTY
Selenium	mg/L	0304	WL	11/17/2010	N001	13.20 - 18.20	0.00100	UN	F	#	0.001	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.030		F	#	0.00016	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.027		F	#	0.00032	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.027		F	#	0.00032	-
	mg/L	0305	WL	11/17/2010	N001	13.76 - 18.76	0.0301	N	F	#	0.001	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.00022		F	#	3.2E-05	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.00026		F	#	3.2E-05	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.00026		F	#	3.2E-05	-
	mg/L	0309	WL	11/17/2010	N001	16.93 - 21.93	0.00100	UN	F	#	0.001	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.00036	B	F	#	0.00016	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.00048		F	#	6.5E-05	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.00046		F	#	3.2E-05	-
	mg/L	0310	WL	11/17/2010	N001	17.93 - 22.93	0.00100	UN	F	#	0.001	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.067		F	#	6.5E-05	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.066		F	#	0.00016	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.062		F	#	0.00032	-
	mg/L	0655	WL	11/17/2010	N001	13.60 - 23.60	0.0611	N	F	#	0.001	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.0061		F	#	0.00016	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.014		F	#	0.00016	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.015		F	#	0.00016	-
	mg/L	0656	WL	11/17/2010	N001	6.35 - 21.35	0.0025	BN	F	#	0.001	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.0026		F	#	3.2E-05	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.0012		F	#	3.2E-05	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.001		F	#	3.2E-05	-
	mg/L	0658	WL	11/16/2010	N001	2.30 - 17.30	0.00100	UN	F	#	0.001	-
Silica	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	23.000		F	#	0.0095	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Silica	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	24.000		F	#	0.0095	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	24.000		F	#	0.0095	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	22.000		F	#	0.0095	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	22.000		F	#	0.0095	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	24.000		F	#	0.0095	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	24.000		F	#	0.0095	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	20.000		F	#	0.0095	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	22.000		F	#	0.0095	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	21.000		F	#	0.0095	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	15.000		F	#	0.0095	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	16.000		F	#	0.0095	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	16.000		F	#	0.0095	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	22.000		F	#	0.0095	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	24.000		F	#	0.0095	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	24.000		F	#	0.0095	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	20.000		F	#	0.0095	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	21.000		F	#	0.0095	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	21.000		F	#	0.0095	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	20.000		F	#	0.0095	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	20.000		F	#	0.0095	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	20.000		F	#	0.0095	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	24.000		F	#	0.0095	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	27.000		F	#	0.0095	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	29.000		F	#	0.0095	-
Silicon	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	11.000		F	#	0.0044	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	11.000		F	#	0.0044	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Silicon	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	11.000		F	#	0.0044	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	10.000		F	#	0.0044	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	10.000		F	#	0.0044	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	11.000		F	#	0.0044	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	11.000		F	#	0.0044	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	9.500		F	#	0.0044	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	10.000		F	#	0.0044	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	10.000		F	#	0.0044	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	7.200		F	#	0.0044	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	7.500		F	#	0.0044	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	7.500		F	#	0.0044	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	11.000		F	#	0.0044	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	11.000		F	#	0.0044	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	11.000		F	#	0.0044	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	9.500		F	#	0.0044	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	9.700		F	#	0.0044	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	9.700		F	#	0.0044	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	9.300		F	#	0.0044	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	9.400		F	#	0.0044	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	9.100		F	#	0.0044	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	11.000		F	#	0.0044	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	12.000		F	#	0.0044	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	13.000		F	#	0.0044	-
Sodium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	230.000		F	#	0.033	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	250.000		F	#	0.0066	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	220.000		F	#	0.033	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sodium	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	120.000		F	#	0.0066	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	120.000		F	#	0.0066	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	130.000		F	#	0.0066	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	140.000		F	#	0.0066	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	170.000		F	#	0.0066	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	170.000		F	#	0.0066	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	150.000		F	#	0.0066	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	190.000		F	#	0.0066	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	200.000		F	#	0.0066	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	210.000		F	#	0.0066	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	240.000		F	#	0.0066	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	240.000		F	#	0.0066	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	240.000	-	F	#	0.0066	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	230.000		F	#	0.0066	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	230.000		F	#	0.0066	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	240.000		F	#	0.0066	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	200.000		F	#	0.0066	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	190.000		F	#	0.0066	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	190.000		F	#	0.0066	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	63.000		F	#	0.0066	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	64.000		F	#	0.0066	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	77.000		F	#	0.0066	-
Specific Conductance	umhos/cm	0292A	WL	07/28/2010	N001	10.50 - 20.50	2160		F	#	-	-
	umhos/cm	0292A	WL	08/26/2010	N001	10.50 - 20.50	2184		F	#	-	-
	umhos/cm	0292A	WL	09/30/2010	N001	10.50 - 20.50	2151		F	#	-	-
	umhos/cm	0292A	WL	11/16/2010	N001	10.50 - 20.50	2052		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0304	WL	07/27/2010	N001	13.20 - 18.20	1795		F	#	-	-
	umhos/cm	0304	WL	08/25/2010	N001	13.20 - 18.20	2074		F	#	-	-
	umhos/cm	0304	WL	09/30/2010	N001	13.20 - 18.20	2519		F	#	-	-
	umhos/cm	0304	WL	11/17/2010	N001	13.20 - 18.20	1919		F	#	-	-
	umhos/cm	0305	WL	07/27/2010	N001	13.76 - 18.76	2371		F	#	-	-
	umhos/cm	0305	WL	08/25/2010	N001	13.76 - 18.76	2168		F	#	-	-
	umhos/cm	0305	WL	09/30/2010	N001	13.76 - 18.76	1895		F	#	-	-
	umhos/cm	0305	WL	11/17/2010	N001	13.76 - 18.76	1907		F	#	-	-
	umhos/cm	0309	WL	07/27/2010	N001	16.93 - 21.93	2358		F	#	-	-
	umhos/cm	0309	WL	08/25/2010	N001	16.93 - 21.93	2379		F	#	-	-
	umhos/cm	0309	WL	09/30/2010	N001	16.93 - 21.93	2540		F	#	-	-
	umhos/cm	0309	WL	11/17/2010	N001	16.93 - 21.93	2429		F	#	-	-
	umhos/cm	0310	WL	07/27/2010	N001	17.93 - 22.93	3055		F	#	-	-
	umhos/cm	0310	WL	08/25/2010	N001	17.93 - 22.93	2932		F	#	-	-
	umhos/cm	0310	WL	09/30/2010	N001	17.93 - 22.93	2852		F	#	-	-
	umhos/cm	0310	WL	11/17/2010	N001	17.93 - 22.93	2875		F	#	-	-
	umhos/cm	0655	WL	07/28/2010	N001	13.60 - 23.60	2861		F	#	-	-
	umhos/cm	0655	WL	08/25/2010	N001	13.60 - 23.60	2731		F	#	-	-
	umhos/cm	0655	WL	09/30/2010	N001	13.60 - 23.60	2858		F	#	-	-
	umhos/cm	0655	WL	11/17/2010	N001	13.60 - 23.60	2801		F	#	-	-
	umhos/cm	0656	WL	07/28/2010	N001	6.35 - 21.35	2228		F	#	-	-
	umhos/cm	0656	WL	08/26/2010	N001	6.35 - 21.35	2190		F	#	-	-
	umhos/cm	0656	WL	09/30/2010	N001	6.35 - 21.35	2218		F	#	-	-
	umhos/cm	0656	WL	11/17/2010	N001	6.35 - 21.35	2198		F	#	-	-
	umhos/cm	0658	WL	07/28/2010	N001	2.30 - 17.30	1421		F	#	-	-
	umhos/cm	0658	WL	08/26/2010	N001	2.30 - 17.30	1374		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0658	WL	09/30/2010	N001	2.30 - 17.30	1539		F	#	-	-
	umhos/cm	0658	WL	11/16/2010	N001	2.30 - 17.30	1617		F	#	-	-
Strontium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	1.900		F	#	7.8E-05	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	2.100		F	#	7.8E-05	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	2.100		F	#	7.8E-05	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	2.500		F	#	7.8E-05	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	2.500		F	#	7.8E-05	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	3.000		F	#	7.8E-05	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	3.400		F	#	7.8E-05	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	3.100		F	#	7.8E-05	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	2.900		F	#	7.8E-05	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	2.400		F	#	7.8E-05	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	3.200		F	#	7.8E-05	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	3.300		F	#	7.8E-05	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	3.400		F	#	7.8E-05	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	3.700		F	#	7.8E-05	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	3.700		F	#	7.8E-05	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	3.400		F	#	7.8E-05	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	4.100		F	#	7.8E-05	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	4.000		F	#	7.8E-05	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	4.100		F	#	7.8E-05	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	3.200		F	#	7.8E-05	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	3.200		F	#	7.8E-05	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	3.100		F	#	7.8E-05	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	1.900		F	#	7.8E-05	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	2.000		F	#	7.8E-05	-

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Strontium	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	2.100		F	#	7.8E-05	-
Sulfate	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	630		F	#	10	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	750		F	#	10	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	720		F	#	10	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	460		F	#	10	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	460		F	#	10	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	550		F	#	10	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	520		F	#	10	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	840		F	#	10	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	530		F	#	10	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	450		F	#	10	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	830		F	#	10	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	900		F	#	10	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	970		F	#	10	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	1100		F	#	10	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	1100		F	#	10	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	940		F	#	10	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	1000		F	#	10	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	1000		F	#	10	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	1000		F	#	10	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	570		F	#	10	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	590		F	#	10	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	570		F	#	10	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	390		F	#	10	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	380		F	#	5	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	430		F	#	10	-

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Sulfide	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	2	U	F	#	2	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	2	U	F	#	2	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	2	U	F	#	2	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	2	U	F	#	2	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	2	U	F	#	2	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	2	U	F	#	2	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	2	U	F	#	2	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	2	U	F	#	2	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	2	U	F	#	2	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	2	U	F	#	2	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	2	U	F	#	2	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	2	U	F	#	2	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	2	U	F	#	2	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	2	U	F	#	2	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	2	U	F	#	2	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	2	U	F	#	2	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	2	U	F	#	2	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	2	U	F	#	2	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	2	U	F	#	2	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	2	U	F	#	2	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	2	U	F	#	2	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	2	U	F	#	2	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	2	U	F	#	2	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	2	U	F	#	2	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	2	U	F	#	2	-
Temperature	C	0292A	WL	07/28/2010	N001	10.50 - 20.50	14.69		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Temperature	C	0292A	WL	08/26/2010	N001	10.50 - 20.50	16.25		F	#	-	-
	C	0292A	WL	09/30/2010	N001	10.50 - 20.50	15.95		F	#	-	-
	C	0292A	WL	11/16/2010	N001	10.50 - 20.50	13.93		F	#	-	-
	C	0304	WL	07/27/2010	N001	13.20 - 18.20	14.6		F	#	-	-
	C	0304	WL	08/25/2010	N001	13.20 - 18.20	16.19		F	#	-	-
	C	0304	WL	09/30/2010	N001	13.20 - 18.20	16.79		F	#	-	-
	C	0304	WL	11/17/2010	N001	13.20 - 18.20	14.15		F	#	-	-
	C	0305	WL	07/27/2010	N001	13.76 - 18.76	14.70		F	#	-	-
	C	0305	WL	08/25/2010	N001	13.76 - 18.76	15.56		F	#	-	-
	C	0305	WL	09/30/2010	N001	13.76 - 18.76	17.08		F	#	-	-
	C	0305	WL	11/17/2010	N001	13.76 - 18.76	14.01		F	#	-	-
	C	0309	WL	07/27/2010	N001	16.93 - 21.93	16.21		F	#	-	-
	C	0309	WL	08/25/2010	N001	16.93 - 21.93	16.50		F	#	-	-
	C	0309	WL	09/30/2010	N001	16.93 - 21.93	15.80		F	#	-	-
	C	0309	WL	11/17/2010	N001	16.93 - 21.93	14.81		F	#	-	-
	C	0310	WL	07/27/2010	N001	17.93 - 22.93	13.92		F	#	-	-
	C	0310	WL	08/25/2010	N001	17.93 - 22.93	16.38		F	#	-	-
	C	0310	WL	09/30/2010	N001	17.93 - 22.93	14.75		F	#	-	-
	C	0310	WL	11/17/2010	N001	17.93 - 22.93	14.45		F	#	-	-
	C	0655	WL	07/28/2010	N001	13.60 - 23.60	14.01		F	#	-	-
	C	0655	WL	08/25/2010	N001	13.60 - 23.60	14.23		F	#	-	-
	C	0655	WL	09/30/2010	N001	13.60 - 23.60	14.60		F	#	-	-
	C	0655	WL	11/17/2010	N001	13.60 - 23.60	14.39		F	#	-	-
	C	0656	WL	07/28/2010	N001	6.35 - 21.35	16.97		F	#	-	-
	C	0656	WL	08/26/2010	N001	6.35 - 21.35	20.06		F	#	-	-
	C	0656	WL	09/30/2010	N001	6.35 - 21.35	19.55		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Temperature	C	0656	WL	11/17/2010	N001	6.35 - 21.35	16.76		F	#	-	-
	C	0658	WL	07/28/2010	N001	2.30 - 17.30	14.20		F	#	-	-
	C	0658	WL	08/26/2010	N001	2.30 - 17.30	13.09		F	#	-	-
	C	0658	WL	09/30/2010	N001	2.30 - 17.30	13.99		F	#	-	-
	C	0658	WL	11/16/2010	N001	2.30 - 17.30	10.89		F	#	-	-
Tritium	pCi/L	0655	WL	08/26/2010	N001	13.60 - 23.60	17.4		J	#	1.81	± 3.23
Turbidity	NTU	0292A	WL	07/28/2010	N001	10.50 - 20.50	6.86		F	#	-	-
	NTU	0292A	WL	08/26/2010	N001	10.50 - 20.50	4.37		F	#	-	-
	NTU	0292A	WL	09/30/2010	N001	10.50 - 20.50	4.46		F	#	-	-
	NTU	0292A	WL	11/16/2010	N001	10.50 - 20.50	2.74		F	#	-	-
	NTU	0304	WL	07/27/2010	N001	13.20 - 18.20	1.65		F	#	-	-
	NTU	0304	WL	08/25/2010	N001	13.20 - 18.20	2.83		F	#	-	-
	NTU	0304	WL	09/30/2010	N001	13.20 - 18.20	4.11		F	#	-	-
	NTU	0304	WL	11/17/2010	N001	13.20 - 18.20	1.92		F	#	-	-
	NTU	0305	WL	07/27/2010	N001	13.76 - 18.76	1.39		F	#	-	-
	NTU	0305	WL	08/25/2010	N001	13.76 - 18.76	1.45		F	#	-	-
	NTU	0305	WL	09/30/2010	N001	13.76 - 18.76	3.87		F	#	-	-
	NTU	0305	WL	11/17/2010	N001	13.76 - 18.76	0.94		F	#	-	-
	NTU	0309	WL	07/27/2010	N001	16.93 - 21.93	1.16		F	#	-	-
	NTU	0309	WL	08/25/2010	N001	16.93 - 21.93	1.3		F	#	-	-
	NTU	0309	WL	09/30/2010	N001	16.93 - 21.93	2.95		F	#	-	-
	NTU	0309	WL	11/17/2010	N001	16.93 - 21.93	1.34		F	#	-	-
	NTU	0310	WL	07/27/2010	N001	17.93 - 22.93	1.90		F	#	-	-
	NTU	0310	WL	08/25/2010	N001	17.93 - 22.93	3.77		F	#	-	-
	NTU	0310	WL	09/30/2010	N001	17.93 - 22.93	3.67		F	#	-	-
	NTU	0310	WL	11/17/2010	N001	17.93 - 22.93	2.96		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0655	WL	07/28/2010	N001	13.60 - 23.60	2.03		F	#	-	-
	NTU	0655	WL	08/25/2010	N001	13.60 - 23.60	1.71		F	#	-	-
	NTU	0655	WL	09/30/2010	N001	13.60 - 23.60	2.22		F	#	-	-
	NTU	0655	WL	11/17/2010	N001	13.60 - 23.60	2.07		F	#	-	-
	NTU	0656	WL	07/28/2010	N001	6.35 - 21.35	1.75		F	#	-	-
	NTU	0656	WL	08/26/2010	N001	6.35 - 21.35	0.90		F	#	-	-
	NTU	0656	WL	09/30/2010	N001	6.35 - 21.35	2.43		F	#	-	-
	NTU	0656	WL	11/17/2010	N001	6.35 - 21.35	1.04		F	#	-	-
	NTU	0658	WL	07/28/2010	N001	2.30 - 17.30	1.27		F	#	-	-
	NTU	0658	WL	08/26/2010	N001	2.30 - 17.30	1.90		F	#	-	-
	NTU	0658	WL	09/30/2010	N001	2.30 - 17.30	1.60		F	#	-	-
	NTU	0658	WL	11/16/2010	N001	2.30 - 17.30	0.90		F	#	-	-
Uranium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.027		F	#	2.9E-06	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.029		F	#	2.9E-06	-
	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.029		F	#	2.9E-06	-
	mg/L	0292A	WL	11/16/2010	N001	10.50 - 20.50	0.0298		F	#	0.00005	-
	mg/L	0292A	WL	11/16/2010	N002	10.50 - 20.50	0.0295		F	#	0.00005	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.038		F	#	2.9E-06	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.036		F	#	2.9E-06	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.042		F	#	2.9E-06	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.045		F	#	2.9E-06	-
	mg/L	0304	WL	11/17/2010	N001	13.20 - 18.20	0.0364		F	#	0.00005	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.073		F	#	1.5E-05	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.066		F	#	2.9E-05	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.067		F	#	2.9E-05	-
	mg/L	0305	WL	11/17/2010	N001	13.76 - 18.76	0.0787		F	#	0.00005	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.020		F	#	2.9E-06	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.020		F	#	2.9E-06	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.020		F	#	2.9E-06	-
	mg/L	0309	WL	11/17/2010	N001	16.93 - 21.93	0.0197		F	#	0.00005	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.200		F	#	1.5E-05	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.200		F	#	1.5E-05	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.190		F	#	2.9E-06	-
	mg/L	0310	WL	11/17/2010	N001	17.93 - 22.93	0.207		F	#	0.00025	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.140		F	#	5.8E-06	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.140		F	#	1.5E-05	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.130		F	#	2.9E-05	-
	mg/L	0655	WL	11/17/2010	N001	13.60 - 23.60	0.146		F	#	0.00025	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.170		F	#	1.5E-05	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.180		F	#	1.5E-05	-
	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.170		F	#	1.5E-05	-
	mg/L	0656	WL	11/17/2010	N001	6.35 - 21.35	0.212		F	#	0.00025	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.013		F	#	2.9E-06	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.012		F	#	2.9E-06	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.013		F	#	2.9E-06	-
	mg/L	0658	WL	11/16/2010	N001	2.30 - 17.30	0.012		F	#	0.00005	-
Uranium-234	pCi/L	0655	WL	08/25/2010	N001	13.60 - 23.60	59.1		F	#	0.32	± 9.94
Uranium-235	pCi/L	0655	WL	08/25/2010	N001	13.60 - 23.60	2.08		F	#	0.34	± 0.76
Uranium-238	pCi/L	0655	WL	08/25/2010	N001	13.60 - 23.60	52.6		F	#	0.29	± 8.91
Vanadium	mg/L	0292A	WL	07/28/2010	N001	10.50 - 20.50	0.00052		F	#	1.5E-05	-
	mg/L	0292A	WL	08/26/2010	N001	10.50 - 20.50	0.00049		F	#	1.5E-05	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Vanadium	mg/L	0292A	WL	09/30/2010	N001	10.50 - 20.50	0.00037		F	#	1.5E-05	-
	mg/L	0292A	WL	11/16/2010	N001	10.50 - 20.50	0.00300	U	F	#	0.003	-
	mg/L	0292A	WL	11/16/2010	N002	10.50 - 20.50	0.00300	U	F	#	0.003	-
	mg/L	0304	WL	07/27/2010	N001	13.20 - 18.20	0.033		F	#	1.5E-05	-
	mg/L	0304	WL	07/27/2010	N002	13.20 - 18.20	0.034		F	#	1.5E-05	-
	mg/L	0304	WL	08/25/2010	N001	13.20 - 18.20	0.044		F	#	1.5E-05	-
	mg/L	0304	WL	09/30/2010	N001	13.20 - 18.20	0.043		F	#	1.5E-05	-
	mg/L	0304	WL	11/17/2010	N001	13.20 - 18.20	0.0361		JF	#	0.003	-
	mg/L	0305	WL	07/27/2010	N001	13.76 - 18.76	0.320		F	#	7.6E-05	-
	mg/L	0305	WL	08/25/2010	N001	13.76 - 18.76	0.530		F	#	0.00015	-
	mg/L	0305	WL	09/30/2010	N001	13.76 - 18.76	0.590		F	#	0.00015	-
	mg/L	0305	WL	11/17/2010	N001	13.76 - 18.76	0.713		F	#	0.03	-
	mg/L	0309	WL	07/27/2010	N001	16.93 - 21.93	0.0004		F	#	1.5E-05	-
	mg/L	0309	WL	08/25/2010	N001	16.93 - 21.93	0.00038		F	#	1.5E-05	-
	mg/L	0309	WL	09/30/2010	N001	16.93 - 21.93	0.00046		F	#	1.5E-05	-
	mg/L	0309	WL	11/17/2010	N001	16.93 - 21.93	0.00300	U	F	#	0.003	-
	mg/L	0310	WL	07/27/2010	N001	17.93 - 22.93	0.012		F	#	7.6E-05	-
	mg/L	0310	WL	08/25/2010	N001	17.93 - 22.93	0.012		F	#	7.6E-05	-
	mg/L	0310	WL	09/30/2010	N001	17.93 - 22.93	0.010		F	#	1.5E-05	-
	mg/L	0310	WL	11/17/2010	N001	17.93 - 22.93	0.00806	B	JF	#	0.003	-
	mg/L	0655	WL	07/28/2010	N001	13.60 - 23.60	0.360		F	#	0.00003	-
	mg/L	0655	WL	08/25/2010	N001	13.60 - 23.60	0.350		F	#	7.6E-05	-
	mg/L	0655	WL	09/30/2010	N001	13.60 - 23.60	0.310		F	#	0.00015	-
	mg/L	0655	WL	11/17/2010	N001	13.60 - 23.60	0.359		F	#	0.015	-
	mg/L	0656	WL	07/28/2010	N001	6.35 - 21.35	0.027		F	#	7.6E-05	-
	mg/L	0656	WL	08/26/2010	N001	6.35 - 21.35	0.028		F	#	7.6E-05	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	SAMPLE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	QUALIFIERS: DATA	QUALIFIERS: QA	DETECTION LIMIT	UN-CERTAINTY
Vanadium	mg/L	0656	WL	09/30/2010	N001	6.35 - 21.35	0.027		F	#	7.6E-05	-
	mg/L	0656	WL	11/17/2010	N001	6.35 - 21.35	0.0183		F	#	0.003	-
	mg/L	0658	WL	07/28/2010	N001	2.30 - 17.30	0.0011		F	#	1.5E-05	-
	mg/L	0658	WL	08/26/2010	N001	2.30 - 17.30	0.00098		F	#	1.5E-05	-
	mg/L	0658	WL	09/30/2010	N001	2.30 - 17.30	0.00089	E	F	#	1.5E-05	-
	mg/L	0658	WL	11/16/2010	N001	2.30 - 17.30	0.00300	U	F	#	0.003	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFO01, Rifle Old Processing Site
REPORT DATE: 9/8/2011 12:43 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY

RECORDS: SELECTED FROM USEE200 WHERE site_code='RFO01' AND location_code in('0292A','0304','0305','0309','0310','0655','0656','0658') AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED >= #7/1/2010#

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

LOCATION TYPES: WL WELL

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 Aroclor 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.

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3)	mg/L	0320	11/18/2010	N001	115				#	- -
	mg/L	0322	11/17/2010	N001	140				#	- -
	mg/L	0323	11/16/2010	N001	172				#	- -
	mg/L	0324	11/17/2010	N001	130				#	- -
	mg/L	0452	11/18/2010	N001	140				#	- -
	mg/L	0453	11/18/2010	N001	60				#	- -
	mg/L	0575	11/16/2010	N001	200				#	- -
Ammonia Total as N	mg/L	0320	11/18/2010	N001	11.2				#	0.16 -
	mg/L	0322	11/17/2010	N001	0.124				#	0.016 -
	mg/L	0323	11/16/2010	N001	23.5				#	0.4 -
	mg/L	0324	11/17/2010	N001	0.237				#	0.016 -
	mg/L	0452	11/18/2010	N001	18.3				#	0.4 -
	mg/L	0452	11/18/2010	N002	16.9				#	0.16 -
	mg/L	0453	11/18/2010	N001	31.3				#	0.4 -
	mg/L	0453	11/18/2010	N002	30.6				#	0.4 -
	mg/L	0575	11/16/2010	N001	0.321				#	0.016 -
Arsenic	mg/L	0320	11/18/2010	N001	0.0032	B			#	0.0016 -
	mg/L	0322	11/17/2010	N001	0.0016	U			#	0.0016 -
	mg/L	0323	11/16/2010	N001	0.0016	U			#	0.0016 -
	mg/L	0324	11/17/2010	N001	0.0016	U			#	0.0016 -
	mg/L	0452	11/18/2010	N001	0.0226				#	0.0016 -
	mg/L	0452	11/18/2010	N002	0.0245				#	0.0016 -
	mg/L	0453	11/18/2010	N001	0.0323				#	0.0016 -
	mg/L	0453	11/18/2010	N002	0.0357				#	0.0016 -
	mg/L	0575	11/16/2010	N001	0.0016	U			#	0.0016 -
Molybdenum	mg/L	0320	11/18/2010	N001	3.010				#	0.00084 -
	mg/L	0322	11/17/2010	N001	0.0053				#	0.00017 -
	mg/L	0323	11/16/2010	N001	3.020				#	0.00084 -
	mg/L	0324	11/17/2010	N001	0.0082				#	0.00017 -
	mg/L	0452	11/18/2010	N001	4.140				#	0.00334 -
	mg/L	0452	11/18/2010	N002	4.190				#	0.0167 -
	mg/L	0453	11/18/2010	N001	3.300				#	0.00835 -
	mg/L	0453	11/18/2010	N002	3.280				#	0.00835 -
	mg/L	0575	11/16/2010	N001	0.0377				#	0.00017 -
Nitrate + Nitrite as Nitrogen	mg/L	0320	11/18/2010	N001	23.2				#	0.25 -
	mg/L	0322	11/17/2010	N001	0.250	U			#	0.25 -
	mg/L	0324	11/17/2010	N001	0.518	J		U	#	0.25 -

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT		UN-CERTAINTY
Nitrate + Nitrite as Nitrogen	mg/L	0452	11/18/2010	N002	62.5			#	2.5		-
	mg/L	0453	11/18/2010	N002	28.0			#	2.5		-
	mg/L	0575	11/16/2010	N001	0.458	J	U	#	0.25		-
Oxidation Reduction Potential	mV	0320	11/18/2010	N001	210			#	-		-
	mV	0322	11/17/2010	N001	-90			#	-		-
	mV	0323	11/16/2010	N001	13			#	-		-
	mV	0324	11/17/2010	N001	160			#	-		-
	mV	0452	11/18/2010	N001	195			#	-		-
	mV	0453	11/18/2010	N001	215			#	-		-
	mV	0575	11/16/2010	N001	-27			#	-		-
pH	s.u.	0320	11/18/2010	N001	7.02			#	-		-
	s.u.	0322	11/17/2010	N001	8.46			#	-		-
	s.u.	0323	11/16/2010	N001	7.88			#	-		-
	s.u.	0324	11/17/2010	N001	8.20			#	-		-
	s.u.	0452	11/18/2010	N001	7.56			#	-		-
	s.u.	0453	11/18/2010	N001	7.07			#	-		-
	s.u.	0575	11/16/2010	N001	8.28			#	-		-
Selenium	mg/L	0320	11/18/2010	N001	0.0318	N	J	#	0.001		-
	mg/L	0322	11/17/2010	N001	0.0010	UN		#	0.001		-
	mg/L	0323	11/16/2010	N001	0.0095	N		#	0.001		-
	mg/L	0324	11/17/2010	N001	0.0010	UN		#	0.001		-
	mg/L	0452	11/18/2010	N001	0.0695	N		#	0.001		-
	mg/L	0452	11/18/2010	N002	0.0599	N		#	0.001		-
	mg/L	0453	11/18/2010	N001	0.0827	N		#	0.001		-
	mg/L	0453	11/18/2010	N002	0.0793	N		#	0.001		-
	mg/L	0575	11/16/2010	N001	0.0010	UN		#	0.001		-
Specific Conductance	umhos/cm	0320	11/18/2010	N001	9900			#	-		-
	umhos/cm	0322	11/17/2010	N001	1260			#	-		-
	umhos/cm	0323	11/16/2010	N001	9664			#	-		-
	umhos/cm	0324	11/17/2010	N001	1270			#	-		-
	umhos/cm	0452	11/18/2010	N001	7470			#	-		-
	umhos/cm	0453	11/18/2010	N001	5065			#	-		-
	umhos/cm	0575	11/16/2010	N001	1700			#	-		-
Temperature	C	0320	11/18/2010	N001	5.0			#	-		-
	C	0322	11/17/2010	N001	6.34			#	-		-
	C	0323	11/16/2010	N001	7.07			#	-		-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:38 pm

PARAMETER	UNITS	LOCATION CODE	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Temperature	C	0324	11/17/2010	N001	5.4			#	-	-
	C	0452	11/18/2010	N001	4.2			#	-	-
	C	0453	11/18/2010	N001	2.9			#	-	-
	C	0575	11/16/2010	N001	7.77			#	-	-
Turbidity	NTU	0320	11/18/2010	N001	5.20			#	-	-
	NTU	0322	11/17/2010	N001	9.20			#	-	-
	NTU	0323	11/16/2010	N001	1.77			#	-	-
	NTU	0324	11/17/2010	N001	4.51			#	-	-
	NTU	0452	11/18/2010	N001	9.85			#	-	-
	NTU	0453	11/18/2010	N001	2.60			#	-	-
	NTU	0575	11/16/2010	N001	3.76			#	-	-
Uranium	mg/L	0320	11/18/2010	N001	0.321			#	0.00025	-
	mg/L	0322	11/17/2010	N001	0.0029			#	0.00005	-
	mg/L	0323	11/16/2010	N001	0.353			#	0.00025	-
	mg/L	0324	11/17/2010	N001	0.0028			#	0.00005	-
	mg/L	0452	11/18/2010	N001	0.0864			#	0.00005	-
	mg/L	0452	11/18/2010	N002	0.0949			#	0.00005	-
	mg/L	0453	11/18/2010	N001	0.0207			#	0.00005	-
	mg/L	0453	11/18/2010	N002	0.0208			#	0.00005	-
	mg/L	0575	11/16/2010	N001	0.0187			#	0.00005	-
Vanadium	mg/L	0320	11/18/2010	N001	0.214			#	0.015	-
	mg/L	0322	11/17/2010	N001	0.0030	U		#	0.003	-
	mg/L	0323	11/16/2010	N001	0.0030	U		#	0.003	-
	mg/L	0324	11/17/2010	N001	0.0030	U		#	0.003	-
	mg/L	0452	11/18/2010	N001	1.460			#	0.06	-
	mg/L	0452	11/18/2010	N002	1.420			#	0.06	-
	mg/L	0453	11/18/2010	N001	2.310			#	0.15	-
	mg/L	0453	11/18/2010	N002	2.400			#	0.15	-
	mg/L	0575	11/16/2010	N001	0.0030	U		#	0.003	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:38 pm

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

RECORDS: SELECTED FROM USEE800 WHERE site_code='RFN01' AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED >= #9/1/2010#

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

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
+	Correlation coefficient for MSA < 0.995.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: Analyte also found in method blank.
C	Pesticide result confirmed by GC-MS.
D	Analyte determined in diluted sample.
E	Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H	Holding time expired, value suspect.
I	Increased detection limit due to required dilution.
J	Estimated
M	GFAA duplicate injection precision not met.
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC).
P	> 25% difference in detected pesticide or Aroclor 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.

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
2,4,5-T	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0783	U	FQ	#	0.0783	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0783	U	FQ	#	0.0783	-
2,4,5-TP (Silvex)	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0783	U	FQ	#	0.0783	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0783	U	FQ	#	0.0783	-
2,4-D	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0783	U	FQ	#	0.0783	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0783	U	FQ	#	0.0783	-
2,4-DB	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0783	U	FQ	#	0.0783	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0783	U	FQ	#	0.0783	-
4,4'-DDD	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00943	U	FQ	#	0.00943	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00943	U	FQ	#	0.00943	-
4,4'-DDE	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
4,4'-DDT	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00943	U	FQ	#	0.00943	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00943	U	FQ	#	0.00943	-
Aldrin	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
Alkalinity, Total (As CaCO3)	mg/L	0169	WL	11/18/2010	N001	3.13 - 18.13	418		F	#	-	-
	mg/L	0170	WL	11/16/2010	N001	92.23 - 112.23	506		F	#	-	-
	mg/L	0172	WL	11/17/2010	N001	6.98 - 31.98	770		F	#	-	-
	mg/L	0195	WL	11/17/2010	N001	5.29 - 25.29	565		F	#	-	-
	mg/L	0201	WL	11/16/2010	N001	7.35 - 22.35	244		F	#	-	-
	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	278		F	#	-	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	200		F	#	-	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	215		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity, Total (As CaCO3)	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	330		F	#	-	-
	mg/L	0620	WL	11/17/2010	N001	6.70 - 10.70	525		F	#	-	-
	mg/L	0635	WL	11/17/2010	N001	12.00 - 17.00	260		F	#	-	-
	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	290		F	#	-	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	190		F	#	-	-
	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	440		F	#	-	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	330		FQ	#	-	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	350		FQ	#	-	-
	mg/L	0689	WL	11/18/2010	N001	4.50 - 9.38	320		FQ	#	-	-
	mg/L	0690	WL	11/18/2010	N001	4.61 - 9.49	420		FQ	#	-	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	250		F	#	-	-
alpha-BHC	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
Ammonia Total as N	mg/L	0169	WL	11/18/2010	N001	3.13 - 18.13	0.078	J	F	#	0.016	-
	mg/L	0170	WL	11/16/2010	N001	92.23 - 112.23	0.321		F	#	0.016	-
	mg/L	0172	WL	11/17/2010	N001	6.98 - 31.98	0.016	U	F	#	0.016	-
	mg/L	0195	WL	11/17/2010	N001	5.29 - 25.29	0.309		F	#	0.016	-
	mg/L	0201	WL	11/16/2010	N001	7.35 - 22.35	82.0		F	#	0.8	-
	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	0.556		F	#	0.016	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	5.23		F	#	0.08	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	45.9		F	#	0.4	-
	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	171		F	#	1.6	-
	mg/L	0620	WL	11/17/2010	N001	6.70 - 10.70	0.931		F	#	0.016	-
	mg/L	0635	WL	11/17/2010	N001	12.00 - 17.00	84.6		F	#	0.8	-
	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	57.6		F	#	0.8	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	32.3		F	#	0.4	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Ammonia Total as N	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	17.5		F	#	0.4	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	101		FQ	#	1.6	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	7.49		FQ	#	0.16	-
	mg/L	0689	WL	11/18/2010	0001	4.50 - 9.38	4.66		FQ	#	0.08	-
	mg/L	0690	WL	11/18/2010	0001	4.61 - 9.49	0.498		FQ	#	0.016	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	37.0		F	#	0.8	-
Arsenic	mg/L	0169	WL	11/18/2010	N001	3.13 - 18.13	0.00160	U	F	#	0.0016	-
	mg/L	0170	WL	11/16/2010	N001	92.23 - 112.23	0.00160	U	F	#	0.0016	-
	mg/L	0172	WL	11/17/2010	N001	6.98 - 31.98	0.00567		F	#	0.0016	-
	mg/L	0195	WL	11/17/2010	N001	5.29 - 25.29	0.00160	U	F	#	0.0016	-
	mg/L	0201	WL	11/16/2010	N001	7.35 - 22.35	0.00160	U	F	#	0.0016	-
	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	0.00160	U	F	#	0.0016	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	0.0341		F	#	0.0016	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	0.00160	U	F	#	0.0016	-
	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	0.00396	B	F	#	0.0016	-
	mg/L	0620	WL	11/17/2010	N001	6.70 - 10.70	0.00160	U	F	#	0.0016	-
	mg/L	0635	WL	11/17/2010	N001	12.00 - 17.00	0.00160	U	F	#	0.0016	-
	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	0.151		F	#	0.0016	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	0.0179		F	#	0.0016	-
	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	0.00160	U	F	#	0.0016	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	0.00754		FQ	#	0.0016	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	0.0175		FQ	#	0.0016	-
	mg/L	0689	WL	11/18/2010	0001	4.50 - 9.38	0.0126		FQ	#	0.0016	-
	mg/L	0690	WL	11/18/2010	0001	4.61 - 9.49	0.00257	B	FQ	#	0.0016	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	0.814		F	#	0.0016	-
beta-BHC	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00566	U	FQ	#	0.00566	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
beta-BHC	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00566	U	FQ	#	0.00566	-
Chlordane	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0722	U	FQ	#	0.0722	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0722	U	FQ	#	0.0722	-
Dalapon	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	1.18	U	FQ	#	1.18	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	1.18	U	FQ	#	1.18	-
delta-BHC	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
Dicamba	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0783	U	FQ	#	0.0783	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0783	U	FQ	#	0.0783	-
Dichlorprop	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0783	U	FQ	#	0.0783	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0783	U	FQ	#	0.0783	-
Dieldrin	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00943	U	FQ	#	0.00943	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00943	U	FQ	#	0.00943	-
Dinoseb	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0783	U	FQ	#	0.0783	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0783	U	FQ	#	0.0783	-
Endosulfan I	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
Endosulfan II	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00943	U	FQ	#	0.00943	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00943	U	FQ	#	0.00943	-
Endosulfan sulfate	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00943	U	FQ	#	0.00943	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00943	U	FQ	#	0.00943	-
Endrin	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00943	U	FQ	#	0.00943	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00943	U	FQ	#	0.00943	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	SAMPLE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	QUALIFIERS: DATA	QUALIFIERS: QA	DETECTION LIMIT	UN-CERTAINTY
Endrin aldehyde	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
gamma-BHC (Lindane)	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
Heptachlor	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
Heptachlor epoxide	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.00472	U	FQ	#	0.00472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.00472	U	FQ	#	0.00472	-
MCPA	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	10.4	U	FQ	#	10.4	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	10.4	U	FQ	#	10.4	-
MCPP	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	9.43	U	FQ	#	9.43	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	9.43	U	FQ	#	9.43	-
Methoxychlor	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.0472	U	FQ	#	0.0472	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.0472	U	FQ	#	0.0472	-
Molybdenum	mg/L	0169	WL	11/18/2010	N001	3.13 - 18.13	0.00883		F	#	0.00017	-
	mg/L	0170	WL	11/16/2010	N001	92.23 - 112.23	0.00393		F	#	0.00017	-
	mg/L	0172	WL	11/17/2010	N001	6.98 - 31.98	0.00689		F	#	0.00017	-
	mg/L	0195	WL	11/17/2010	N001	5.29 - 25.29	0.0334		F	#	0.00017	-
	mg/L	0201	WL	11/16/2010	N001	7.35 - 22.35	1.750		F	#	0.00835	-
	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	0.0115		F	#	0.00017	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	0.0523		F	#	0.00017	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	1.640		F	#	0.00334	-
	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	1.170		F	#	0.00334	-
	mg/L	0620	WL	11/17/2010	N001	6.70 - 10.70	0.0118		F	#	0.00017	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	SAMPLE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	QUALIFIERS: DATA	QUALIFIERS: QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0635	WL	11/17/2010	N001	12.00 - 17.00	0.442		F	#	0.00017	-
	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	2.170		F	#	0.00835	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	2.080		F	#	0.00835	-
	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	0.480		F	#	0.00017	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	1.560		FQ	#	0.00835	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	0.370		FQ	#	0.00017	-
	mg/L	0689	WL	11/18/2010	0001	4.50 - 9.38	0.334		FQ	#	0.00017	-
	mg/L	0690	WL	11/18/2010	0001	4.61 - 9.49	0.338		FQ	#	0.00017	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	1.750		F	#	0.00418	-
Nitrate + Nitrite as Nitrogen	mg/L	0169	WL	11/18/2010	N001	3.13 - 18.13	0.533	J	UF	#	0.25	-
	mg/L	0170	WL	11/16/2010	N001	92.23 - 112.23	16.4		F	#	0.25	-
	mg/L	0172	WL	11/17/2010	N001	6.98 - 31.98	0.458	J	UF	#	0.25	-
	mg/L	0195	WL	11/17/2010	N001	5.29 - 25.29	0.435	J	UF	#	0.25	-
	mg/L	0201	WL	11/16/2010	N001	7.35 - 22.35	72.5		F	#	0.5	-
	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	0.420	J	UF	#	0.25	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	0.468	J	UF	#	0.25	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	0.480	J	UF	#	0.25	-
	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	29.5		F	#	0.25	-
	mg/L	0620	WL	11/17/2010	N001	6.70 - 10.70	27.8		F	#	0.25	-
	mg/L	0635	WL	11/17/2010	N001	12.00 - 17.00	9.85		F	#	0.5	-
	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	30.2		F	#	0.5	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	9.18		F	#	0.25	-
	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	10.2		F	#	0.25	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	26.3		FQ	#	0.25	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	2.97		FQ	#	0.5	-
	mg/L	0689	WL	11/18/2010	0001	4.50 - 9.38	20.3		FQ	#	2.5	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Nitrate + Nitrite as Nitrogen	mg/L	0690	WL	11/18/2010	0001	4.61 - 9.49	26.5		FQ	#	2.5	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	18.4		F	#	0.25	-
Oxidation Reduction Potential	mV	0169	WL	11/18/2010	N001	3.13 - 18.13	-41.9		F	#	-	-
	mV	0170	WL	11/16/2010	N001	92.23 - 112.23	-11		F	#	-	-
	mV	0172	WL	11/17/2010	N001	6.98 - 31.98	-115		F	#	-	-
	mV	0195	WL	11/17/2010	N001	5.29 - 25.29	-170		F	#	-	-
	mV	0201	WL	11/16/2010	N001	7.35 - 22.35	6		F	#	-	-
	mV	0215	WL	11/16/2010	N001	6.84 - 21.84	-13		F	#	-	-
	mV	0216	WL	11/18/2010	N001	5.50 - 20.50	40		F	#	-	-
	mV	0217	WL	11/18/2010	N001	7.40 - 22.40	230		F	#	-	-
	mV	0590	WL	11/18/2010	N001	5.21 - 19.21	215		F	#	-	-
	mV	0620	WL	11/17/2010	N001	6.70 - 10.70	209		F	#	-	-
	mV	0635	WL	11/17/2010	N001	12.00 - 17.00	-95		F	#	-	-
	mV	0658	WL	11/17/2010	N001	0.50 - 5.50	104		F	#	-	-
	mV	0659	WL	11/18/2010	N001	0.50 - 10.50	215		F	#	-	-
	mV	0664	WL	11/18/2010	N001	7.70 - 14.70	95		F	#	-	-
	mV	0669	WL	11/17/2010	N001	4.00 - 10.60	55		FQ	#	-	-
	mV	0670	WL	11/18/2010	N001	5.20 - 12.20	-4.0		FQ	#	-	-
	mV	0689	WL	11/18/2010	N001	4.50 - 9.38	12		FQ	#	-	-
	mV	0690	WL	11/18/2010	N001	4.61 - 9.49	0.7		FQ	#	-	-
	mV	0855	WL	11/17/2010	N001	6.00 - 11.00	100		F	#	-	-
pH	s.u.	0169	WL	11/18/2010	N001	3.13 - 18.13	6.87		F	#	-	-
	s.u.	0170	WL	11/16/2010	N001	92.23 - 112.23	6.84		F	#	-	-
	s.u.	0172	WL	11/17/2010	N001	6.98 - 31.98	6.93		F	#	-	-
	s.u.	0195	WL	11/17/2010	N001	5.29 - 25.29	6.93		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0201	WL	11/16/2010	N001	7.35 - 22.35	6.74		F	#	-	-
	s.u.	0215	WL	11/16/2010	N001	6.84 - 21.84	7.13		F	#	-	-
	s.u.	0216	WL	11/18/2010	N001	5.50 - 20.50	7.46		F	#	-	-
	s.u.	0217	WL	11/18/2010	N001	7.40 - 22.40	6.79		F	#	-	-
	s.u.	0590	WL	11/18/2010	N001	5.21 - 19.21	6.67		F	#	-	-
	s.u.	0620	WL	11/17/2010	N001	6.70 - 10.70	7.20		F	#	-	-
	s.u.	0635	WL	11/17/2010	N001	12.00 - 17.00	6.84		F	#	-	-
	s.u.	0658	WL	11/17/2010	N001	0.50 - 5.50	6.68		F	#	-	-
	s.u.	0659	WL	11/18/2010	N001	0.50 - 10.50	7.00		F	#	-	-
	s.u.	0664	WL	11/18/2010	N001	7.70 - 14.70	6.71		F	#	-	-
	s.u.	0669	WL	11/17/2010	N001	4.00 - 10.60	6.81		FQ	#	-	-
	s.u.	0670	WL	11/18/2010	N001	5.20 - 12.20	6.81		FQ	#	-	-
	s.u.	0689	WL	11/18/2010	N001	4.50 - 9.38	6.92		FQ	#	-	-
	s.u.	0690	WL	11/18/2010	N001	4.61 - 9.49	7.18		FQ	#	-	-
	s.u.	0855	WL	11/17/2010	N001	6.00 - 11.00	6.54		F	#	-	-
Selenium	mg/L	0169	WL	11/18/2010	N001	3.13 - 18.13	0.00100	UN	F	#	0.001	-
	mg/L	0170	WL	11/16/2010	N001	92.23 - 112.23	0.0101	N	F	#	0.001	-
	mg/L	0172	WL	11/17/2010	N001	6.98 - 31.98	0.00500	UN	F	#	0.005	-
	mg/L	0195	WL	11/17/2010	N001	5.29 - 25.29	0.00100	UN	F	#	0.001	-
	mg/L	0201	WL	11/16/2010	N001	7.35 - 22.35	0.055	N	F	#	0.001	-
	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	0.00100	UN	F	#	0.001	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	0.00100	UN	F	#	0.001	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	0.211	N	F	#	0.001	-
	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	0.0375	N	F	#	0.001	-
	mg/L	0620	WL	11/17/2010	N001	6.70 - 10.70	0.0237	N	F	#	0.001	-
	mg/L	0635	WL	11/17/2010	N001	12.00 - 17.00	0.00100	UN	F	#	0.001	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Selenium	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	1.430	N	F	#	0.05	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	0.0566	N	F	#	0.001	-
	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	0.0786	N	F	#	0.001	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	0.0145	N	FQ	#	0.001	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	0.599	N	FQ	#	0.02	-
	mg/L	0689	WL	11/18/2010	0001	4.50 - 9.38	0.858	N	FQ	#	0.005	-
	mg/L	0690	WL	11/18/2010	0001	4.61 - 9.49	0.245	N	FQ	#	0.001	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	1.580	N	F	#	0.025	-
Specific Conductance	umhos/cm	0169	WL	11/18/2010	N001	3.13 - 18.13	1983		F	#	-	-
	umhos/cm	0170	WL	11/16/2010	N001	92.23 - 112.23	3408		F	#	-	-
	umhos/cm	0172	WL	11/17/2010	N001	6.98 - 31.98	19100		F	#	-	-
	umhos/cm	0195	WL	11/17/2010	N001	5.29 - 25.29	1780		F	#	-	-
	umhos/cm	0201	WL	11/16/2010	N001	7.35 - 22.35	4537		F	#	-	-
	umhos/cm	0215	WL	11/16/2010	N001	6.84 - 21.84	1620		F	#	-	-
	umhos/cm	0216	WL	11/18/2010	N001	5.50 - 20.50	855		F	#	-	-
	umhos/cm	0217	WL	11/18/2010	N001	7.40 - 22.40	3545		F	#	-	-
	umhos/cm	0590	WL	11/18/2010	N001	5.21 - 19.21	6100		F	#	-	-
	umhos/cm	0620	WL	11/17/2010	N001	6.70 - 10.70	7200		F	#	-	-
	umhos/cm	0635	WL	11/17/2010	N001	12.00 - 17.00	3400		F	#	-	-
	umhos/cm	0658	WL	11/17/2010	N001	0.50 - 5.50	3125		F	#	-	-
	umhos/cm	0659	WL	11/18/2010	N001	0.50 - 10.50	3600		F	#	-	-
	umhos/cm	0664	WL	11/18/2010	N001	7.70 - 14.70	2800		F	#	-	-
	umhos/cm	0669	WL	11/17/2010	N001	4.00 - 10.60	3915		FQ	#	-	-
	umhos/cm	0670	WL	11/18/2010	N001	5.20 - 12.20	2513		FQ	#	-	-
	umhos/cm	0689	WL	11/18/2010	N001	4.50 - 9.38	2462		FQ	#	-	-
	umhos/cm	0690	WL	11/18/2010	N001	4.61 - 9.49	2677		FQ	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0855	WL	11/17/2010	N001	6.00 - 11.00	3025		JF	#	-	-
Temperature	C	0169	WL	11/18/2010	N001	3.13 - 18.13	15.12		F	#	-	-
	C	0170	WL	11/16/2010	N001	92.23 - 112.23	13.64		F	#	-	-
	C	0172	WL	11/17/2010	N001	6.98 - 31.98	13.8		F	#	-	-
	C	0195	WL	11/17/2010	N001	5.29 - 25.29	13.4		F	#	-	-
	C	0201	WL	11/16/2010	N001	7.35 - 22.35	13.36		F	#	-	-
	C	0215	WL	11/16/2010	N001	6.84 - 21.84	13.55		F	#	-	-
	C	0216	WL	11/18/2010	N001	5.50 - 20.50	13.7		F	#	-	-
	C	0217	WL	11/18/2010	N001	7.40 - 22.40	11.2		F	#	-	-
	C	0590	WL	11/18/2010	N001	5.21 - 19.21	11.4		F	#	-	-
	C	0620	WL	11/17/2010	N001	6.70 - 10.70	13.0		F	#	-	-
	C	0635	WL	11/17/2010	N001	12.00 - 17.00	12.4		F	#	-	-
	C	0658	WL	11/17/2010	N001	0.50 - 5.50	13.9		F	#	-	-
	C	0659	WL	11/18/2010	N001	0.50 - 10.50	12.4		F	#	-	-
	C	0664	WL	11/18/2010	N001	7.70 - 14.70	13.8		F	#	-	-
	C	0669	WL	11/17/2010	N001	4.00 - 10.60	13.5		FQ	#	-	-
	C	0670	WL	11/18/2010	N001	5.20 - 12.20	13.18		FQ	#	-	-
	C	0689	WL	11/18/2010	N001	4.50 - 9.38	13.15		FQ	#	-	-
	C	0690	WL	11/18/2010	N001	4.61 - 9.49	12.88		FQ	#	-	-
	C	0855	WL	11/17/2010	N001	6.00 - 11.00	14.5		F	#	-	-
Toxaphene	ug/L	0689	WL	11/18/2010	N001	4.50 - 9.38	0.142	U	FQ	#	0.142	-
	ug/L	0690	WL	11/18/2010	N001	4.61 - 9.49	0.142	U	FQ	#	0.142	-
Turbidity	NTU	0169	WL	11/18/2010	N001	3.13 - 18.13	1.75		F	#	-	-
	NTU	0170	WL	11/16/2010	N001	92.23 - 112.23	0.91		F	#	-	-
	NTU	0172	WL	11/17/2010	N001	6.98 - 31.98	5.01		F	#	-	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0195	WL	11/17/2010	N001	5.29 - 25.29	6.53		F	#	-	-
	NTU	0201	WL	11/16/2010	N001	7.35 - 22.35	1.34		F	#	-	-
	NTU	0215	WL	11/16/2010	N001	6.84 - 21.84	0.59		F	#	-	-
	NTU	0216	WL	11/18/2010	N001	5.50 - 20.50	2.33		F	#	-	-
	NTU	0217	WL	11/18/2010	N001	7.40 - 22.40	1.37		F	#	-	-
	NTU	0590	WL	11/18/2010	N001	5.21 - 19.21	1.79		F	#	-	-
	NTU	0620	WL	11/17/2010	N001	6.70 - 10.70	3.52		F	#	-	-
	NTU	0635	WL	11/17/2010	N001	12.00 - 17.00	3.26		F	#	-	-
	NTU	0658	WL	11/17/2010	N001	0.50 - 5.50	8.15		F	#	-	-
	NTU	0659	WL	11/18/2010	N001	0.50 - 10.50	2.59		F	#	-	-
	NTU	0664	WL	11/18/2010	N001	7.70 - 14.70	8.09		F	#	-	-
	NTU	0669	WL	11/17/2010	N001	4.00 - 10.60	1000		FQ	#	-	-
	NTU	0670	WL	11/18/2010	N001	5.20 - 12.20	5.20		FQ	#	-	-
	NTU	0689	WL	11/18/2010	N001	4.50 - 9.38	220		FQ	#	-	-
	NTU	0690	WL	11/18/2010	N001	4.61 - 9.49	73.5		FQ	#	-	-
	NTU	0855	WL	11/17/2010	N001	6.00 - 11.00	2.62		F	#	-	-
Uranium	mg/L	0169	WL	11/18/2010	N001	3.13 - 18.13	0.0182		F	#	0.00005	-
	mg/L	0170	WL	11/16/2010	N001	92.23 - 112.23	0.0582		F	#	0.00005	-
	mg/L	0172	WL	11/17/2010	N001	6.98 - 31.98	0.0718		F	#	0.00005	-
	mg/L	0195	WL	11/17/2010	N001	5.29 - 25.29	0.0219		F	#	0.00005	-
	mg/L	0201	WL	11/16/2010	N001	7.35 - 22.35	0.081		F	#	0.00005	-
	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	0.0238		F	#	0.00005	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	0.0147		F	#	0.00005	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	0.174		F	#	0.00025	-
	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	0.0694		F	#	0.00005	-
	mg/L	0620	WL	11/17/2010	N001	6.70 - 10.70	0.0625		F	#	0.00005	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0635	WL	11/17/2010	N001	12.00 - 17.00	0.0633		F	#	0.00005	-
	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	0.0604		F	#	0.00005	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	0.0945		F	#	0.00005	-
	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	0.0801		F	#	0.00005	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	0.130		FQ	#	0.00025	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	0.135		FQ	#	0.00025	-
	mg/L	0689	WL	11/18/2010	0001	4.50 - 9.38	0.0577		FQ	#	0.00005	-
	mg/L	0690	WL	11/18/2010	0001	4.61 - 9.49	0.0517		FQ	#	0.00005	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	0.0382		F	#	0.00005	-
Vanadium	mg/L	0215	WL	11/16/2010	N001	6.84 - 21.84	0.00300	U	F	#	0.003	-
	mg/L	0216	WL	11/18/2010	N001	5.50 - 20.50	0.201		F	#	0.015	-
	mg/L	0217	WL	11/18/2010	N001	7.40 - 22.40	1.980		F	#	0.06	-
	mg/L	0590	WL	11/18/2010	N001	5.21 - 19.21	0.313		F	#	0.015	-
	mg/L	0658	WL	11/17/2010	N001	0.50 - 5.50	49.700		F	#	3	-
	mg/L	0659	WL	11/18/2010	N001	0.50 - 10.50	1.300		F	#	0.06	-
	mg/L	0664	WL	11/18/2010	N001	7.70 - 14.70	0.903		F	#	0.075	-
	mg/L	0669	WL	11/17/2010	0001	4.00 - 10.60	3.200		FQ	#	0.15	-
	mg/L	0670	WL	11/18/2010	N001	5.20 - 12.20	2.150		FQ	#	0.15	-
	mg/L	0855	WL	11/17/2010	N001	6.00 - 11.00	41.200		F	#	1.5	-

GROUNDWATER QUALITY DATA BY PARAMETER WITH DEPTH (USEE200) FOR SITE RFN01, Rifle New Processing Site
REPORT DATE: 9/8/2011 12:27 pm

PARAMETER	UNITS	LOCATION CODE	LOCATION TYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB	DATA	QA	DETECTION LIMIT	UN-CERTAINTY

RECORDS: SELECTED FROM USEE200 WHERE site_code='RFN01' AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED >= #9/1/2010#

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

LOCATION TYPES: WL WELL

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 Aroclor 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.