

May 1, 2019

Ryan Schierman
Uranium Recovery Program Manager
Wyoming Department of Environmental Quality
Land Quality Division
200 West 17th Street
Cheyenne, WY 82002

RE: License Amendment Request for Western Nuclear Inc., Split Rock Mill Site, Source Material License WYSUA-56.

Dear Mr. Schierman:

This submittal is in response to your letter of February 14, 2019 regarding an occurrence of selenium in monitoring well WN-42A above the approved alternate concentration limit ("ACL") previously issued by the United States Nuclear Regulatory Commission ("NRC") pursuant to 10 CFR Part 40, Appendix A, Criterion 5B(5) and 5B(6), in which you requested clarification if the reported selenium occurrence was accurate and if so, what corrective actions Western Nuclear, Inc. ("WNI") will take to mitigate any potential non-compliance. As you are aware, WNI and all other uranium milling sites are required to maintain groundwater quality within the confines of Criterion 5B(5) or the Agreement State equivalent standards or Commission-approved background ("CAB") or a maximum contaminant level ("MCL"), whichever is higher, or an approved ACL. By its very definition, an ACL incorporates the long-accepted concept of as low as reasonably achievable ("ALARA") as this concept must be satisfied if any ACL is to be issued under Criterion 5B(6) evaluative factors. As will be shown below, after analysis of historical data and other recently reviewed findings, WNI asserts that compliance with applicable regulations and standards may be achieved by simply adjusting the current site-specific ACL. WNI also asserts that its analysis adequately demonstrates that the level of confidence in maintenance of the previously approved site closure period has not changed.

As we discussed on our conference call with you and your staff as well as with the United States Department of Energy ("DOE"), Office of Legacy Management (i.e., the mandatory federal custodian for 11e.(2) byproduct material under the Uranium Mill Tailings Radiation Control Act of 1978 ("UMTRCA")) on March 14, 2019, WNI has evaluated the quality assurance ("QA") metadata associated with the original analysis and found no QA failures or anomalies. Though WNI requested a re-analysis of the original sample, no portion of the sample remained for re-analysis. On February 25, 2019, WNI collected a sample and a duplicate sample from well WN-42A and provided the sample, the duplicate, and a field blank to Energy Laboratories in Casper, Wyoming. The February 2019 sampling and analysis yielded selenium results of 0.061 mg/L and 0.063 mg/L, which confirm the selenium concentration for this well as being above the approved ACL of 0.05 mg/L. As you identified in your letter, this condition is not in compliance with Criterion 5(B)(1) of 10 CFR 40 Appendix A and the Wyoming Department of Environmental Quality ("WDEQ") Agreement State program equivalent.

To address this compliance issue, WNI, holder of Wyoming Department of Environmental Quality ("WDEQ") License No. WYSUA-56 for the former Split Rock conventional uranium milling site ("Site"), previously licensed by the NRC under License No. SUA-56), hereby submits this license/permit amendment application to revise its current ACL for selenium at the previously NRC-approved point of compliance ("POC") well WN-5 in the Northwest Valley of the Site. WNI believes that the proposed amendment of the selenium ACL, approved in 2006 (Amendment 99) and previously amended in 2010 (amendment 105), is fully compliant with Section 83 of the Atomic Energy Act of 1954, as amended by UMTRCA (hereinafter the "AEA") requirements for long-term surveillance and monitoring ("LTSM") of two hundred (200) years and, *to the maximum extent practicable*, one thousand (1,000) years.

WNI believes that this recent localized occurrence of selenium in well WN-42A, above the current ACL value of 0.05 mg/L, represents a very limited and localized occurrence due to the unique site-specific circumstances of the Site, and does not indicate a broad or substantial change in groundwater selenium mass exiting the Northwest Valley or the potential for substantive increased loading of selenium to the Sweetwater River. Site water quality characterization data from 1996-1997, 20 years of subsequent monitoring data, and NRC's previously approved license amendments are addressed to support approval of the requested administrative corrective action proposed herein.

Based on the information provided in WNI's 1999 Groundwater Protection Plan ("GWPP") and further addressed below, WNI requests WDEQ amend License Conditions 74B and 74C to include a revised selenium ACL for the Northwest Valley POC well WN-5 of 0.3 mg/L.

WNI believes that approval of this license/permit amendment will result in the completion of all licensing actions necessary to proceed to final site closure and license termination with eventual transfer of all properties within the long-term surveillance boundary ("LTSB") as presented in the ACL amendment application for the Southwest Valley submitted to your office in a letter dated January 11, 2019. WNI also asserts that approval of this license/permit amendment will represent a final confirmation of the previously identified LTSB in WNI submission to WDEQ dated January 11, 2019, as the request does not, in any way, recommend changes to this LTSB since the mandatory UMTRCA site closure period would remain acceptable. Therefore, the controls on access to and use of groundwater to control potential future human exposures by the drinking water pathway are identical to those already reviewed by WDEQ under WNI's previous submittals.

BASIS FOR ADMINISTRATIVE CORRECTIVE ACTION

WNI initiated the final groundwater corrective action effort in 1990 as required by License SUA-56, Condition 74 and as outlined in the approved groundwater Corrective Action Plan ("CAP"). Groundwater was pumped from the Northwest Valley using CAP wells 4E and 5E and the Southwest Valley CAP wells WN-B and Well 9E to lined evaporation ponds. The CAP well system was designed to capture the annual pumping volume objective of 47.3 to 66 million gallons of water per year (average flow rate of 90 to 125 gallons per minute [gpm]).

With approval of ACLs granted by license amendment 99 (NRC Technical Evaluation Report, 9/28/2006; ML062910216), approval of the final closure of the CAP ponds with license amendment 100 (NRC Technical Evaluation Report, 10/26/06; ML062770452), and revision of the ACLs with license amendment 105 (NRC Technical Evaluation Report, 02/24/10; ML092800206), NRC concurred that a) active pumping was no longer reasonably practicable and corrective action measures could be terminated, b) the approved ACLs with institutional controls controlling access to groundwater provided the requisite protection of public health and safety and the environment and were ALARA, as required by Criterion 5(B)(6) and the WDEQ Agreement State program equivalent. Therefore, WNI believes that an administrative amendment is appropriate to resolve the compliance issue identified in WDEQ's letter of February 14, 2019.

TECHNICAL APPROACH

In order to support approval of the requested license/permit amendment to License SUA-56 Condition 74C, WNI herein discusses the current basis of understanding for distribution of selenium in the Northwest Valley, Sweetwater River floodplain and associated groundwater. In addition, changes in Northwest Valley and floodplain area hydrologic conditions since 1996-1997, due to reduced drainage from the reclaimed tailings impoundment, are described. Further, information regarding the Sweetwater River classification, river flow conditions, and water quality are presented. Based on the understanding of selenium distribution, the general method for estimating the loading of selenium in groundwater from the Northwest Valley to the Sweetwater River under critical low flow conditions that was used to support the 1999 and 2006 ACL application approvals has been adapted herein.

Methods for estimating the Sweetwater River critical low flow conditions include those identified in WDEQ, Water Quality Rules and Regulations, Chapter 1 (Wyoming Surface Water Quality Standards), Section 11 (Flow Conditions), which identifies that numeric water quality standards shall be enforced at all times except during periods of low flow, as determined by a) the 7Q10 (the minimum seven (7) consecutive day flow which has the probability of occurring once in ten (10) years); or b) the United States Environmental Protection Agency's ("EPA") biologically based flow method for a four (4) day, three (3) year low flow for chronic exposures (sometimes abbreviated as 4B3) and a one (1) day, three (3) year low flow for acute exposures (sometimes abbreviated as 1B3) (*Technical Guidance Manual For Performing Waste Load Allocation, Book VI, Design Conditions: Chapter 1, Stream Design Flow for Steady-State Modeling*, August 1986, US EPA); or c) other defensible scientific methods.

Since the aquatic life standards for selenium in WDEQ, Water Quality Rules and Regulations, Chapter 1, Appendix B (Water Quality Criteria, Priority Pollutants) are the lowest applicable standards, the 7Q10 flow is calculated for reference but not used in the calculation of the proposed selenium ACL, rather only the biologically based low flows are used.

The software program SWToolBox (USGS-SW-Toolbox 1.0.4) was used to calculate the river 7Q10 low flow, the biologically based 4B3 low flow for chronic exposures and the 1B3 low flow for acute exposures based on the available Sweetwater River discharge data record from the

Sweetwater Station gaging station. The selenium ACLs approved in 2010 were based solely on the 7Q10 low flow calculation.

Background selenium concentrations in the Sweetwater River also were re-assessed. Because the 1999 GWPP calculated background selenium concentration was the same as the Wyoming chronic exposure limit for aquatic life, the stream had very limited assimilative capacity to accept any additional selenium loading. However, the data set used to calculate that background river selenium value was based on a high percentage of non-detect values at a reporting limit of 0.005 mg/L. This indicated that actual river background selenium concentrations may be lower than originally estimated and that the assimilative capacity of the river may be higher than previously thought. Therefore, WNI reviewed the original raw laboratory analytical data and developed a revised river background selenium concentration.

Based on the updated calculated river low flows, the updated river background selenium concentrations, the current Northwest Valley groundwater flux that could enter the river, a simple and conservative mixing model is used to develop a conservative estimate of maximum Northwest Valley groundwater concentration that would allow for long-term protective conditions in the Sweetwater River, which is the point of potential exposure to the licensed materials.

NATURE AND EXTENT OF SELENIUM CONCENTRATIONS

Review of the data presented within the 1999 GWPP and the 20 years of monitoring data collected after the GWPP submittal determined that selenium was never an abundant constituent in the source areas, was not identified at high concentrations in the groundwater directly adjacent to the source areas, and was not identified at high concentrations throughout the vertical profile of the Northwest Valley or floodplain. Therefore, there is no evidence to indicate that there is or will be a widespread increase in selenium exiting the Northwest Valley. All available data indicate that the occurrence of selenium in floodplain well WN-42A at concentrations of approximately 0.06 mg/L is a limited and localized anomaly and does not represent a broad change of groundwater conditions of the Northwest Valley.

Sources of Selenium

Characterization data presented in the 1999 GWPP indicate that although selenium was not present in the mill processing wastes in high concentrations, it was present in concentrations that exceeded background. The principal sources of selenium to the groundwater system in the Northwest Valley were the tailings impoundments and the acid plant cooling pond, also referred to as the Northwest Valley Seepage Pond (Figure 1). Standing water in these impoundments was sampled 26 times between 1976 and 1990 and analyzed for selenium, typically, although not consistently, for both total and dissolved concentrations (Table 1). These data indicate that the maximum dissolved selenium concentration measured in the impoundments was 0.26 mg/L (S-1, 4/12/1989; maximum dissolved selenium in S-2 was 0.036 mg/L). However, the S-1 average value for dissolved selenium is 0.041 mg/L and 0.009 for S-2, indicating that, for the majority of the sampling period, the selenium concentrations were relatively low. Figure 2 illustrates the S-1 selenium values as a time-series data plot. The majority of these data show selenium in the

tailings impoundment as below 0.03 mg/L for a majority of the sampling period. Selenium data from sampling of locations S-1 and S-2 are provided in electronic format (Excel®) in Attachment A.

Data from numerous historical wells in the upper Northwest Valley provide additional evidence that selenium concentrations in source area groundwater generally were low. Figure 3 illustrates a time series plot of measured groundwater selenium concentrations adjacent to the main tailings impoundment. The wells that are most indicative of Northwest Valley source are WN-2S, WN-33D, P-1, SP-7, SP-12, TEB-1, and TEB-3 (Figure 4). Groundwater from the vicinity of wells WN-6S, WN-11HT, Well-9, Well-9R largely was captured by Southwest Valley flow (Figure 5) and would not have contributed substantially to the Northwest Valley groundwater flows during the periods of highest tailings impoundment seepage and groundwater loading. These data indicate that even in the source areas for Northwest Valley groundwater where selenium concentrations would be highest, selenium was typically less than 0.05 mg/L. Figure 6 illustrates that wells in the upper Northwest Valley also had relatively low measured selenium concentrations. Though many more wells in the upper Northwest Valley were present and sampled historically, selenium was not a routine constituent for which analysis was frequently performed and, therefore, selenium data are limited. Additional information regarding the Northwest Valley geochemistry is presented in Appendix F, Section F.5.2.3 (GW Chemistry of Northwest Valley) of the 1999 GWPP.

Extent of Selenium in the Northwest Valley and Floodplain

Groundwater selenium concentration data collected during exploratory drilling for well installation was provided in the 1999 GWPP, Appendix F, Tables F-5-2 and F-5-3 . These tables are reproduced in Attachment B. Figure 7 illustrates the location of several hydrologic cross sections. Figures 8 through 11 post the maximum measured selenium value in each boring on cross sections A-B, A-C, A-D and H-I overlain on measured uranium concentration isopleths. These figures illustrate the lack of elevated selenium concentrations in the source area, the lower Northwest Valley, and the floodplain of the Sweetwater River. These data, as well as 20 years of monitoring following the GWPP indicate that there were no measured values greater than 0.033 mg/L anywhere in Northwest Valley.

Figures 12 through 15 illustrate the monitoring history for the Northwest Valley and floodplain area monitoring wells since 1996 for selenium, uranium, sulfate, and chloride. These data plots, illustrating 23 years of monitoring data, identify that all major constituents are stable or exhibit decreasing trends at or beyond the POC well WN-5. In addition, constituent concentrations in well WN-42A are generally comparable to or slightly below those in the POC well. As illustrated in Figure 16, the selenium and uranium concentrations in the POC well WN-5 have been steadily and consistently declining in much the same manner as the gradient at the Northwest Valley mouth, discussed previously. Selenium in POC well WN-5 has been at or below 0.02 mg/L for the past ten years.

SWEETWATER RIVER FLOW DATA AND LOW FLOW CALCULATIONS

Sweetwater River Water Quality Classification and Protective Standards

The Wyoming Surface Water Classification List (7/26/2013) identifies the segment of the Sweetwater River adjacent to the Site (Sweetwater River below Alkali Creek, a tributary to the North Platt River Drainage) as Class 2AB. This water class is a cold-water fishery, and is presumed to have sufficient water quality and quantity to support drinking water supplies, is protected for nongame fisheries, fish consumption, aquatic life other than fish, recreation, wildlife, industry, agriculture and scenic value uses (WDEQ Water Quality Rules and Regulations, Chapter 1, Section 4(b)(i)). WDEQ Water Quality Rules and Regulations, Chapter 1, Appendix B (Water Quality Criteria, Priority Pollutants) identifies the protective water quality standards for selenium, which are summarized in Table 2.

Sweetwater River flows below Alkali Creek

Stream gaging data for the Sweetwater River are posted by the U.S. Geological Survey (“USGS”) from the gaging station on the Sweetwater River Near Sweetwater Station, Wyoming (Station number: 06638090), which is located approximately 19 miles upstream from the Site. The next gaging station is located over 40 miles downstream near Alcova, Wyoming (Station number: 06639000). This station typically shows lower flows than the Sweetwater Station due to irrigation consumption and loosing stream reaches. Therefore, it is not been possible to estimate the amount of discharge the river gains between the Sweetwater Station flow gage and the Site. Review of the measured groundwater potentiometric surface on the south side of the Sweetwater River (Figure 17) indicates that the Sweetwater River in this reach is a gaining stream and receives groundwater from both the south side of the river near the Granite Mountain outcrops at the Site and from the north side of the river draining the Beaver Rim. Therefore, the use of the low flow values calculated from the upgradient station adds an additional, if non-quantified, amount of conservatism to the calculation of maximum allowable river loading and to the associated Northwest Valley selenium ACL.

Daily river discharge data from the Sweetwater Station are available from the USGS (https://waterdata.usgs.gov/nwis/uv?site_no=06638090) for the period October 1, 1973 through September 29, 1992 and August 14, 2014 through March 2019. There is a gap in the record from late 1992 to late 2014 where no data are reported. These river discharge data are included in electronic format (Excel®) in Attachment A. These daily data were analyzed with the USGS software program SWToolBox (USGS-SW-Toolbox 1.0.4) to calculate the 7Q10 low flow and the biologically based four day, three (3) year low flow for chronic exposures (also abbreviated as 4B3) and the one (1) day, three (3) year low for acute exposures (also abbreviated as 1B3) per Section 11(a) of WDEQ Water Quality Rules and Regulations, Chapter 1. The results of the analysis of these data indicate a 7Q10 low flow of 4.68 cubic feet per second (cfs), a chronic exposure 4B3 low flow of 8.32 cfs and an acute exposure 1B3 low flow of 5.43 cfs, as summarized in Table 3. The output from the SWToolBox run is included as Attachment C.

SWEETWATER RIVER BACKGROUND WATER QUALITY

Selenium water quality data have been collected from background Sweetwater River sampling location SW-1 (also called SWR-UG) as well as four other river locations (Figure 18) across from and downstream of the Site between 2005 and 2018. This data set consists of 17

data points from each sampling location, one to two samples per year distributed across most seasons and, where river discharge data are available, river flows that range from between 9.1 cfs and 348 cfs. Attachment A contains Sweetwater River discharge data in electronic format. The original laboratory data reported for these samples were limited by the reporting limit of 0.005 mg/L (which is the Wyoming chronic exposure selenium concentration standard for aquatic life, Table 2). Because the selenium data from all river monitoring locations from 2005 through 2018 were below the reporting limit of 0.005 mg/L, except for samples collected in April 2008 where all data are reported to be less than 0.001 mg/L, it was believed that background selenium in the river actually is below 0.005 mg/L.

Energy Laboratories and WNI identified that the raw analytical results for the surface water quality samples at the background location SW-1 and the downstream location SW-5 (also called SWR-DG) collected between 2005 and 2018 were retrievable. These raw data recorded the actual instrument analytical results, which were consistently below the reporting limit of 0.005 mg/L. These data are presented in Table 4. Raw data from Energy Laboratories in Excel® format are included in Attachment A.

The values in Table 4 indicate that the background dissolved selenium concentrations in the Sweetwater River are below 0.001 mg/L over a wide range of river discharge rates (9.1 cfs to 348 cfs). Therefore, it is conservatively assumed that the river background dissolved selenium concentration is 0.001 mg/L. This value is not based on any descriptive statistic developed from this data but is used as a conservative upper bound on that data set, which would tend to underestimate the assimilative capacity of the river to accept selenium and remain protective.

It should be noted that the dissolved selenium data for the Sweetwater River downstream sample location SW-5 (SWR-DG), presented in Table 5, indicates that there is no significant loading of selenium to the river. Of the 17 measurements, only 10 measurements could detect any difference between upgradient and downgradient selenium concentrations. Three of those 10 measurements indicated that the background was higher than the downstream location and the maximum increase between upstream and downstream selenium concentrations was 0.00029 mg/L. Accurate measurement of these small concentration differences is outside the reliable accuracy limit of the analytical method. Therefore, these data indicate that river loading of selenium over the past 13 years is indistinguishable from background and the measured river selenium concentrations are an order of magnitude lower than levels of regulatory concern. All data and analyses presented in the 1999 GWPP indicate that peak discharges from the Northwest Valley to the Sweetwater River have passed and that groundwater loading to the river will continue to progressively decrease and remain below protective levels in the future.

NORTHWEST VALLEY GROUNDWATER FLOW

Despite diligent efforts, WNI and its former contractors have not been able to locate the original MODFLOW groundwater flow modeling files for the Northwest Valley. Therefore, analytical approaches to assessing past and current groundwater flow rates and mass flux conditions from the Northwest Valley are applied.

Sections E.3.3.2 (Ground Water Flow Patterns in the NW Valley) and Section E.3.3.3 (Ground Water Flow Patterns in the River Floodplain) of Appendix E to the 1999 GWPP discuss groundwater flow patterns. In general, the 1996-1997 groundwater flow gradient down the Northwest Valley was approximately 0.010 foot/foot (“ft/ft”) to 0.016 ft/ft with a gradient of approximately 0.005 ft/ft at the mouth of the Northwest Valley. A moderate downward vertical gradient existed within the Upper Split Rock unit in this area (0.016 feet/feet at well cluster WN-35). The gradient indicates that the upper Northwest Valley is a groundwater recharge area. The flow out of the Northwest Valley, confined by outcropping ridges of granite, merges with the northeast regional flow in the floodplain alluvium.

Where the floodplain area narrows, from the mouth of the Northwest Valley to the point where the river passes through a narrow gap between granite outcrops to the east, the stratigraphic section thins to about 75 feet, north of well WN-19 as the granite basement rock rises in elevation (Figures 10 and 19). In this area, an upward vertical gradient exists between the Lower and Upper Split Rock units and between the Upper Split Rock unit and the floodplain alluvium. The horizontal gradient in the floodplain alluvium declines to about 0.001 ft/ft, and horizontal gradients in the Lower and Upper Split Rock units are very small (0.0006 ft/ft).

Table 6 presents the measured groundwater elevations in well WN-4R and the POC well WN-5 and the calculated gradients between each well between 1999 and 2018. Figure 20 illustrates the calculated gradients between these two wells, which are located 1,218 feet apart. The hydraulic gradient in 1999 was 0.0072 ft/ft while the gradient in 2018 is approximately 0.0034 ft/ft. This is due entirely to decrease in hydraulic head in the Northwest Valley as a result of declining drainage rates from the tailings impoundment, as evidenced by the 4.75 ft decrease in head in well WN-4R and essentially no change in head in the POC Well WN-5 over the same period.

The 1999 GWPP, Section 2.2.5.2 (Recent Conditions) identifies that approximately 210 gpm flowed out of the Northwest Valley in 1996. Since then the flow gradient has decreased approximately 47 percent ($0.0034 \text{ ft/ft} \div 0.0072 \text{ ft/ft}$). Groundwater flow is described analytically by Darcy's Law;

$$Q = K \times i \times A$$

where Q = volumetric flow rate (ft^3/day)
 K = hydraulic conductivity (ft/day)
 i = hydraulic gradient (ft/ft)
 A = the area perpendicular to the groundwater flow through which flow occurs (ft^2)

This equation identifies that the volumetric flow rate (Q) is directly proportional to the hydraulic gradient (i). Therefore, a 47 percent decrease in hydraulic gradient results in a 47 percent decrease in volumetric flow rate, assuming the area of flow and the hydraulic conductivity remain the same. Based on the change in gradient since that time, the current volumetric flow rate from the Northwest Valley is calculated as follows.

$$210 \text{ gpm} \times 0.47 = 99 \text{ gpm}$$

This value is consistent with the predicted 100 gpm long-term groundwater flow from the Northwest Valley per Section 4.1.2.1 of the 1999 GWPP. As illustrated in Figure 20, the gradient at the mouth of the Northwest Valley has been relatively stable for the last five years, indicating that tailings drainage has diminished to near steady-state conditions and that substantive increases to Northwest Valley groundwater flow rates will not occur in the future.

NORTHWEST VALLEY SELENIUM MASS FLUX

In the 1999 GWPP and the 2009-2010 amendment to the Site Radioactive Materials License (WYSUA-56; Amendment 105) for selenium in the Northwest Valley (Miller, 2009 - ML092800103; NRC, 2010a - ML092780275; NRC 2010b - ML092800206), several highly conservative assumptions were made to develop a protective selenium ACL. These assumptions included:

- Sweetwater River low flow conditions estimated from the Sweetwater Station gaging data, which is located 19 miles upstream over a river reach believed to be a net gaining river, are directly applicable to the Site conditions, underestimating the actual river low-flow conditions at the Site;
- all of the groundwater exiting the Northwest Valley is at the ACL concentration, which drastically overestimates the selenium mass flux from the Northwest Valley;
- the selenium exiting the Northwest Valley mixes directly with the river low-flow and is not subject to dilution, dispersion, or chemical attenuation over the more than one mile of additional groundwater flow path in the floodplain area before it enters the River, which over estimates the mass flux to the river.

For this license/permit amendment application, these highly conservative assumptions are revisited. As discussed above, all evidence indicates that the river is the regional groundwater sink, gaining flow from groundwater between the Sweetwater Station gage and the Site from both the north (Beaver Rim area) and from the south (from south Granite Mountains and Green Mountain area). Therefore, the use of the river discharge low-flow values calculated from the upgradient station adds an additional, if non-quantified amount, of conservatism to the calculation of maximum allowable river loading and the associated proposed Northwest Valley ACL.

The assumption that all of the Northwest Valley groundwater flow is at the maximum ACL concentration is inconsistent with measured data. Sulfate and uranium are present in the tailings impoundment and source areas in much higher concentrations than selenium and provide a sound basis for assessing overall contaminant distribution and areas of contaminant groundwater transport. As shown in Figure 11 and Figure 21 for cross section H-I across the mouth of the Northwest Valley, both uranium and sulfate are not uniformly distributed.

Attributing this maximum concentration to the entire flux is an overly conservative assumption, drastically overestimating the potential mass loading to the river.

To revisit this assumption and to develop a more realistic though still conservative estimate of selenium mass flux from the Northwest Valley, the following steps were performed.

1. From each cross section for uranium (Figure 11) and sulfate (Figure 21), the incremental areas for each isopleth were estimated.
2. The percent of the total cross section area for each isopleth interval was calculated (Table 7).
3. The average measured concentrations of uranium and sulfate for each isopleth area were calculated (Tables 8 and 9).
4. The relative uranium and sulfate mass flux for each isopleth interval was calculated by multiplying the average measured concentrations of uranium and sulfate for each isopleth area by the percent area of each contour (Table 7).
5. The total relative mass flux for the entire cross section was calculated by summing the relative mass flux values for all isopleth intervals (Table 7).
6. The percent mass flux for each isopleth interval was calculated by dividing the relative uranium and sulfate mass flux for each isopleth interval by the total relative mass flux for the entire cross section (Table 7).

These data (Tables 7, 8 and 9) indicate that between 50 percent and 70 percent of the mass flux is contributed by 30 percent of the Northwest Valley flow, as illustrated in Figure 22. Therefore, rather than assuming all of the Northwest Valley flow is at the ACL, it is herein more realistic to consider a different apportionment of the amount of contaminant mass exiting the valley mouth.

As discussed above in the section titled *Nature and Extent of Selenium Concentrations, Extent of Selenium in the Northwest Valley and Floodplain*, the selenium and uranium concentrations in the POC well WN-5 have been steadily and consistently declining in much the same manner as the gradient at the Northwest Valley, discussed previously. Selenium concentrations in POC well WN-5 have been relatively stable and at or below 0.02 mg/L for the past ten years. These data support with a high degree of confidence that selenium in groundwater exiting the Northwest Valley will remain at or below conditions protective of public health, safety and the environment in the future and that these calculations of maximum potential future mass fluxes remain highly conservative relative to observed conditions.

PROTECTIVE STANDARDS

Due to the accepted durable and enforceable institutional controls for access to groundwater preventing human consumption between the tailings impoundment and the Sweetwater River, which were developed and proposed by WNI and approved by NRC in the 1990s and 2000s, the sole potential point of exposure is the Sweetwater River, to which the Site groundwater ultimately discharges. The Sweetwater River below the junction of Alkali Creek, which is west of Sweetwater Station (19 miles upstream of the Site), is classified as 2AB (Wyoming Surface Water Classification List, 7/26/2013). WDEQ, Water Quality Rules and Regulations, Section 4(b)(i) describes Class 2AB surface waters as:

- known to support game fish populations or spawning and nursery areas at least seasonally;
- permanent and seasonal cold water game fisheries;
- designated as cold water game fishery;
- presumed to have sufficient water quality and quantity to support drinking water supplies; and
- protected for nongame fisheries, fish consumption, aquatic life other than fish, recreation; wildlife, industry, agriculture and scenic value uses.

The water quality standards for priority pollutants presented in Appendix B to WDEQ, Water Quality Rules and Regulations, Chapter 1 identify the following for selenium (Table 2):

- Protection of Aquatic Life - $\mu\text{g/L}$ (mg/L)
 - Acute: 19.92 (0.02 mg/L) dissolved metal
 - Chronic: 4.61 (0.005 mg/L) dissolved metal
- Human Health Consumption
 - Fish and Drinking Water: 50 (0.05 mg/L)
 - Fish: 4,200 (4.2 mg/L)

Therefore, the chronic aquatic life standard is the lowest criteria that must be met in the river. Demonstrating that river water quality can be maintained at or below this level during the appropriate river low flow conditions ensures the protection of public health, safety and the environment for all uses and receptors.

CALCULATION OF ALTERNATIVE ACLs

The approach to calculating the selenium ACL in 2009, approved in 2010, is applied for this application. In this approach, a simple mixing model is used where the selenium mass in the Northwest Valley flow is added directly to the river low flow conditions with no attenuation or dilution. The model design is stated below:

$$\begin{aligned} & \text{river selenium background (mg/L)} \times \text{river low flow (L/day, acute or chronic)} \\ & + \text{Northwest Valley selenium ACL (mg/L)} \times \text{Northwest Valley flow (L/day)} \\ & = \text{selenium mass per day in the river} \end{aligned}$$

Then the river concentration after loading from the Northwest Valley with no attenuation or dilution from the floodplain area is

$$= \text{selenium mass per day in the river (mg/day)} \div (\text{river low flow [L/day, acute or chronic]} + \text{Northwest Valley flow [L/day]})$$

Solving for the Northwest Valley selenium concentration and assuming the river concentration is at the aquatic life chronic protective standard, the lowest applicable standard at the point of

exposure, an upper bound on the selenium concentration exiting from the Northwest Valley, can be determined.

The following equation was used:

$$D = \frac{([A \times B] + [E \times C])}{B+C} \quad (\text{Equation 1})$$

Where

A = River background selenium concentration (mg/L)

B = River low flow, either 4B3 for acute exposure or 1B3 for chronic exposure

C = Northwest Valley groundwater flow rate (L/day)

D = river concentration after loading from the Northwest Valley (mg/L)

E = Concentration of selenium existing the Northwest Valley (mg/L)

The condition where D is at or just below the aquatic life chronic exposure protective standard is the maximum allowable selenium concentration from the Northwest Valley.

However, based on assessment of contaminant mass distribution leaving the Northwest Valley using the cross sections of groundwater flow, presented above, between 50 percent and 70 percent of contaminant mass are from only 30 percent of the valley flow. Therefore, an alternate mass flux model scenario is proposed, which still provides a conservative ACL value for protection in the Sweetwater River and for maintenance of the previously accepted UMTRCA site closure period.

The alternate mass flux model scenario is based on the assumption that 30 percent of the flow (which represents 50 percent to 70 percent of the contaminant mass) from the Northwest Valley is at the selenium ACL and the remaining 70 percent of the Northwest Valley flow is 0.08 mg/L, a concentrations that is four times the highest measured selenium value at the POC well WN-5 in the past ten years and more than the highest value observed in the Northwest Valley outside the area directly adjacent to the tailings impoundment. This apportionment of concentration and flow is described by modification of Equation 1, as follows:

$$D = \frac{([A \times B] + [[E \times [0.3 \times C]] + [0.08 \times [0.7 \times C]]])}{B+C} \quad (\text{Equation 2})$$

Equation 1 and Equation 2 are used with the input values developed in the preceding sections, as follows:

- River selenium background concentration = 0.001 mg/L
- River low flow
 - Acute 1B3 = 13,283,941 L/day (5.43 cfs)
 - Chronic 4B3 = 20,354,032 L/day (8.32 cfs)
- Current Northwest Valley groundwater flow rate = 545,098 L/day (100 gpm)

- Northwest Valley groundwater selenium concentrations
 - Scenario 1: All Northwest Valley groundwater flow at the ACL
 - Scenario 2: 30 percent of Northwest Valley groundwater flow at the ACL, 70 percent at 0.08 mg/L

Table 10 summarizes the input values used, as developed above, and the maximum ACL that maintains the river selenium concentration at just below the aquatic life chronic exposure protective standard of 0.005 mg/L and well below the aquatic life acute exposure protective standard of 0.02 mg/L.

This analysis indicates that a selenium ACL of 0.3 mg/L will maintain protective conditions for all potential receptors at the point of exposure during river low flow conditions. This value is lower than the calculated maximum allowable selenium concentration (0.32 mg/L) and is based on multiple elements of conservatism, including the following:

- River low flow calculations are based on data from a station almost 20 miles upstream over what is believed to be a stream reach that is gaining flow from groundwater recharge, thereby underestimating actual river low flow rates and the river assimilative capacity.
- River background concentrations of selenium are lower than assumed, thereby further underestimating the assimilative capacity of the river to receive more selenium and remain protective.
- The maximum Northwest Valley groundwater selenium concentration measured at the POC well WN-5 over the last 10 years is 0.02 mg/L, while the assumed proportion of groundwater not at the ACL (70%) is assumed to be 0.08 mg/L, higher than currently observed at well WN-42A (0.06 mg/L), four times the highest measured selenium value at the POC well WN-5 in the past 10 years (0.02 mg/L) and more than twice the highest value observed in the 1996-1997 sampling of the Northwest Valley outside the area directly adjacent to the tailings impoundments (0.033 mg/L), thereby overestimating the selenium mass leaving the Northwest Valley and entering the river.
- The simplified model takes no credit for contaminant sorption or attenuation over essentially one mile of groundwater transport before reaching the river, thereby overestimating the rate at which mass is entering the river.

SUMMARY AND CONCLUSIONS

As clearly demonstrated by the extensive site characterization presented in the 1999 GWPP and nearly 20 years of subsequent monitoring data, groundwater flux from the Northwest Valley has essentially reached a steady state condition. Similarly, groundwater contaminant concentrations at the Northwest Valley mouth have declined in a steady and consistent manner to near steady state conditions. Further, maximum contaminant loading to the river passed over 20 years ago (1999 GWPP, Section 4.1.2.1) and future loading will become progressively less with time. Surface water monitoring in the river since 2005 indicates that selenium loading is

negligible and river selenium concentrations both upstream and downstream of the Site are consistently below 0.001 mg/L, which is one-fifth the aquatic life chronic exposure standard. The extensive characterization and recent monitoring data have indicated that high concentrations of selenium were never widespread or persistent in the tailings solution or in the groundwater adjacent to the tailings impoundment at the head of the Northwest Valley groundwater flow system. The data from the POC well WN-5 indicates that no elevated selenium concentrations are present at the Northwest Valley mouth and none are expected in the future given the declining amounts of tailings seepage evidenced by the decrease in flow gradient.

Therefore, there is no evidence to indicate that the slightly elevated selenium groundwater concentrations observed in the floodplain well WN-42A (0.061 mg/L to 0.063 mg/L) are in any way representative of a large or widespread increase in selenium in groundwater flowing from the Northwest Valley that could potentially load the river. Rather, all evidence indicates this is a very limited and isolated occurrence of selenium in groundwater. Consequently, the calculation of the proposed selenium ACL of 0.03 mg/L for the Northwest Valley represents a protective value and provides the requisite reasonable assurance of long-term protection of public health and safety and the environment. This administrative action to amend License Conditions 74A and 74B addresses the fundamental regulatory issue, which is the original selenium ACL 0.05 mg/L was based on an overly conservative set of assumptions that have created a condition inconsistent with the requirements in Criterion 5B(1) of 10 CFR 40 Appendix B, even though site conditions have been, remain, and will remain protective.

PROPOSED AMENDED LICENSE LANGUAGE

The proposed amended license language for condition 74 is as follows:

74. The licensee shall implement a compliance monitoring program containing the following:

A. *(no change proposed)*

B. Comply with the following ground-water protection standards at point of compliance Wells 5 and 21:

aluminum = 37 mg/L, antimony = 0.006 mg/L, arsenic = 0.05 mg/L, beryllium = 0.01 mg/L, cadmium = 0.01 mg/L, fluoride = 4 mg/L, lead = 0.05 mg/L, nickel = 0.05 mg/L, Selenium = 0.05 mg/L, thallium = 0.002 mg/L, and thorium-230 = 0.95 pCi/L.

C. Comply with the following alternate concentration limits in the northwest valley at point of compliance Well 5, with background being recognized in Well 15:

ammonia = 0.61 mg/L, manganese = 225 mg/L, molybdenum = 0.66 mg/L, nitrate = 317 mg/L, radium-226 and -228 = 7.2 pCi/L, selenium = 0.3 mg/L, and natural uranium = 4.8 mg/L.

Comply with the following alternate concentration limits in the southwest valley at point of compliance Well 21, with background being recognized in Well 15:

ammonia = 0.84 mg/L, manganese = 35 mg/L, molybdenum = 0.22 mg/L, nitrate = 70.7 mg/L, radium-226 and -228 = 19.9 pCi/L, and natural uranium = 3.4 mg/L.

[Applicable Amendments: 92, 99, 100, 102, 105, 111]

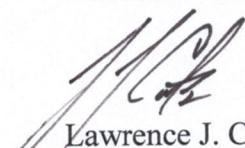
This amendment request does not in any way affect the proposed LTSB submitted to WDEQ in a letter dated January 11, 2019. Therefore, the controls on access to and use of groundwater to control potential future human exposures through the drinking water pathway within the LTSB are identical to those already reviewed by WDEQ under WNI's previous submittals. All appropriate documentation regarding these additional lands, their title, legal description, and all legally enforceable land use restrictions and controls will be provided by WNI.

FUTURE ACTIONS

Based on the sections above, WNI requests WDEQ amend License Condition 74B to include a revised selenium ACL for the Northwest Valley POC well WN-5 of 0.3 mg/L. WNI asserts that approval of this license amendment will effectively bring the site preparation process for site closure and license termination to a close. All previously licensed site milling facilities, including the tailings impoundment and other associated impoundments have been fully reclaimed in accordance with NRC requirements. All property requirements have been deemed acceptable by the Commission and/or NRC Staff in multiple approvals and the addition of the aforementioned properties to the LTSB does not pose any additional legal or procedural issues that would require more extensive analysis. Therefore, the LTSB as currently proposed by WNI, upon approval of this license/permit amendment and absent any other required amendments should be maintained as it satisfies the UMTRCA based closure standard described above.

Given these circumstances, WNI believes that the license termination process may continue such that expeditious completion of the Completion Review Report by the State of Wyoming while this license amendment is subject to public comment is warranted. WNI believes this conservative analysis using site-specific data supports the requested license amendment and addresses NRC's other concerns regarding compliance with 10 CFR 40 Appendix A, Criterion 5B(l) and regarding the appropriateness of the LTSB given ongoing groundwater monitoring data in the Northwest Valley and Sweetwater River floodplain. WNI also plans to submit a copy of this license amendment request to DOE for its concurrent review to assist in the process of commencing negotiations over the future actions identified above. WNI appreciates WDEQ Staff efforts in this matter and is looking forward to completing this license amendment so that final site closure and license termination may be achieved as soon as practicable, as well as commencing discussions with DOE and U.S. Army Corps of Engineers.

Please feel free to contact me if you have any questions regarding this submittal.



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Lou Miller (Worthington-Miller Environmental Inc.)
Toby Wright (Wright Environmental Services, Inc.)
File

TABLES

Table 1 Tailings (S-1) and Acid Plant Cooling Pond (S-2) Selenium Concentrations (1976-1990)

Location Name	Date	Total Se (mg/L)	Dissolved Se (mg/L)
S-1	11/15/1976	0.001	
S-1	7/15/1977		0.178
S-1	7/15/1977	0.172	
S-1	3/12/1981		0.112
S-1	6/9/1981		0.057
S-1	8/25/1981		<0.001
S-1	8/25/1981	0.176	
S-1	10/6/1981	0.14	
S-1	10/6/1981		0.138
S-1	1/14/1982		0.021
S-1	1/14/1982	0.023	
S-1	5/25/1982		0.029
S-1	5/25/1982	0.045	
S-1	7/26/1982	0.021	
S-1	7/26/1982		0.02
S-1	11/8/1982		0.029
S-1	11/8/1982	0.033	
S-1	2/4/1983		<0.001
S-1	2/4/1983	<0.001	
S-1	4/8/1983	0.016	
S-1	4/8/1983		0.014
S-1	7/27/1983		<0.001
S-1	7/27/1983	<0.001	
S-1	10/25/1983	0.001	
S-1	10/25/1983		<0.001
S-1	1/6/1984		<0.001
S-1	1/6/1984	0.001	
S-1	4/17/1984		0.011
S-1	4/17/1984	0.102	
S-1	7/3/1984		0.001
S-1	7/3/1984	0.002	
S-1	10/2/1984		<0.001
S-1	10/2/1984	<0.001	
S-1	1/17/1985		<0.001
S-1	1/17/1985		<0.001
S-1	4/9/1985		0.001
S-1	4/9/1985	0.001	
S-1	7/10/1986		0.002
S-1	7/10/1986	0.003	
S-1	7/10/1987		0.002
S-1	7/10/1987	0.004	
S-1	7/18/1988		0.021
S-1	7/18/1988	0.021	
S-1	10/19/1988		0.028
S-1	4/12/1989		0.26
S-1	10/11/1989		0.095
Maximum		0.176	0.260
Average		0.036	0.041
StDev		0.058	0.066

Location Name	Date	Total Se (mg/L)	Dissolved Se (mg/L)
S-2	10/1/1976		0.005
S-2	7/15/1977	0.019	
S-2	7/15/1977		0.025
S-2	8/25/1981	0.022	
S-2	8/25/1981		<0.001
S-2	10/6/1981	<0.001	
S-2	10/6/1981		<0.001
S-2	1/4/1982	<0.001	
S-2	1/4/1982		<0.001
S-2	5/25/1982	<0.001	
S-2	5/25/1982		<0.001
S-2	7/12/1982	<0.001	
S-2	7/12/1982		<0.001
S-2	11/8/1982	<0.001	
S-2	11/8/1982		<0.001
S-2	2/4/1983	<0.001	
S-2	2/4/1983		<0.001
S-2	4/8/1983	0.008	
S-2	4/8/1983		0.008
S-2	7/27/1983	0.004	
S-2	7/27/1983		0.012
S-2	10/25/1983	0.013	
S-2	1/6/1984		0.001
S-2	1/6/1984	0.13	
S-2	4/17/1984	0.006	
S-2	4/17/1984		<0.001
S-2	7/9/1984	0.008	
S-2	7/9/1984		0.006
S-2	10/2/1984	<0.001	
S-2	10/2/1984		<0.001
S-2	1/17/1985		<0.001
S-2	1/17/1985	<0.001	
S-2	4/9/1985		0.002
S-2	4/9/1985	0.002	
S-2	7/10/1986	0.003	
S-2	7/10/1986		0.002
S-2	7/10/1987	0.008	
S-2	7/10/1987		0.008
S-2	7/18/1988	0.021	
S-2	7/18/1988		0.021
S-2	10/18/1988		0.025
S-2	4/11/1989		0.035
S-2	10/11/1989		0.036
S-2	3/28/1990		0.017
S-2	7/18/1990		0.021
Maximum		0.130	0.036
Average		0.013	0.009
StDev		0.029	0.011

Table 2 Selenium Surface Water Quality Standards^a

Priority Pollutant	Aquatic Life		Human Health Consumption of	
	Acute ($\mu\text{g}/\text{L}$)	Chronic ($\mu\text{g}/\text{L}$)	Fish and Drinking Water ¹ ($\mu\text{g}/\text{L}$)	Fish ²
Selenium (total)	20 ³	5 ³	50 ⁴	4,200
Selenium (dissolved)	19.92	4.61	50 ⁴	4,200

^a Wyoming Water Quality Rules and Regulation, Chapter 1, Appendix B

¹ These values are based on EPA Section 304(a) criteria recommendations assuming consumption of 2 liters of water and 17.5 grams of aquatic organisms per day.

² EPA Section 304(a) human health criteria recommendation assuming consumption of contaminated aquatic organisms at a rate of 17.5 grams per day.

³ This value is expressed in terms of total recoverable metal in the water column. It is scientifically acceptable to use a conversion factor (0.996 for the acute and 0.922 for the chronic) to convert this number to a value that is expressed in terms of a dissolved metal. Using these conversion factors, the aquatic life acute value for selenium is 19.92 $\mu\text{g}/\text{L}$ as a dissolved metal and the aquatic life chronic value for selenium is 4.61 $\mu\text{g}/\text{L}$ as a dissolved metal.

⁴ Criterion is based on an EPA drinking water standard (maximum contaminant level or MCL)

Table 3 Summary of Calculated Low Flow Discharge Rates (Sweetwater Station)

Low Flow Event	Discharge (cfs)
7Q10	4.68
1 Day, 3 Year Biologically Based Low Flow (1B3, Acute)	5.43
4 Day, 3 Year Biologically Based Low Flow (4B3, Chronic)	8.32

Table 4 Dissolved Selenium; Sweetwater River Background Sampling Location (SW-1 / SWR-UG)

Collection Date	Raw Value	Result	Unit	Qualifier	MDL	River Flow (cfs)
9/21/2005	0.000268	0	mg/L	NULL	0.00040377	No Record
9/25/2006	0.000232	0	mg/L	NULL	0.00040377	No Record
10/30/2007	0.0003501	0	mg/L	NULL	0.00040377	No Record
5/24/2010	0.0002088	0.0002088	mg/L	J	4.79E-05	No Record
9/7/2010	0.0006733	0.0006733	mg/L	J	0.0002331	No Record
4/25/2011	0.0004101	0.0004101	mg/L	J	0.0002331	No Record
9/30/2011	0.0000068	0	mg/L	NULL	0.0005063	No Record
4/4/2012	-0.0000337	0	mg/L	NULL	0.000248	No Record
9/17/2012	0.0009703	0.0009703	mg/L	J	0.0005063	No Record
1/4/2013	0.0003794	0.0003794	mg/L	J	0.000248	No Record
9/22/2013	0.0002545	0.0002545	mg/L	J	7.46E-05	No Record
10/1/2014	0.0000101	0	mg/L	NULL	0.000248	64.5
10/6/2015	0.0004417	0.0004417	mg/L	J	2.97E-05	50.8
5/28/2016	0.0004696	0	mg/L	NULL	0.0006572	348
10/11/2016	0.0004743	0	mg/L	NULL	0.0006572	49.4
9/6/2017	-0.0004395	0	mg/L	NULL	0.0003602	44.1
8/28/2018	0.0002247	0	mg/L	NULL	0.00033	9.2

Null qualifier identifies reported value is less than MDL

SW-1 / SWR-UG	
Min	0.0002088
Max	0.0009703
Mean	0.00044449
Stdev (σ)	0.00019727
Mean+2 σ	0.00083902
Count	17
Detects	7
% Non-Detect	59%

Statistics developed using MDL value if Raw Value is less than MDL

Table 5 Dissolved Selenium; Sweetwater River Down Stream Sampling Location (SW-5 / SWR-DG)

Collection Date	RawVal	Result	Units	Qualifiers	MDL	River Flow (cfs)
9/21/2005	0.000582	0.000582	mg/L	J	0.00040377	No Record
9/25/2006	0.000347	0	mg/L	NULL	0.00040377	No Record
10/30/2007	0.0002762	0	mg/L	NULL	0.00040377	No Record
5/24/2010	0.0002417	0.0002417	mg/L	J	4.79E-05	No Record
9/7/2010	0.0008527	0.0008527	mg/L	J	0.0002331	No Record
4/25/2011	0.0005395	0.0005395	mg/L	J	0.0002331	No Record
9/30/2011	-0.0002087	0	mg/L	NULL	0.0005063	No Record
4/4/2012	-0.0000407	0	mg/L	NULL	0.000248	No Record
9/17/2012	0.0007813	0.0007813	mg/L	J	0.0005063	No Record
1/4/2013	0.0005695	0.0005695	mg/L	J	0.000248	No Record
9/22/2013	0.0003591	0.0003591	mg/L	J	7.46E-05	No Record
10/1/2014	0.0001694	0	mg/L	NULL	0.000248	64.5
10/6/2015	0.0003226	0.0003226	mg/L	J	2.97E-05	50.8
5/28/2016	0.000269	0	mg/L	NULL	0.0006572	348
10/11/2016	0.0001479	0.0001479	mg/L	J	2.97E-05	49.4
9/6/2017	-0.0004873	0	mg/L	NULL	0.0003602	44.1
8/29/2018	0.0006217	0.0006217	mg/L	J	0.000304	9.2

Null qualifier identifies reported value is less than MDL

SWR-DG	
Min	0.0001479
Max	0.0008527
Avg	0.00046148
Stdev (σ)	0.0001997
Mean+2 σ	0.00086088
Count	17
Detects	10
% Non-Detect	41%

Statistics developed using MDL value if raw value is less than MDL

Table 6 Gradient Calculations for Mouth of Northwest Valley

WELL-4R			WELL-5		
Date	Elevation (ft amsl)	Annual Avg. Elevation (ft amsl)	Date	Elevation (ft amsl)	Annual Avg. Elevation (ft amsl)
7/19/1999	6290.05		7/19/1999	6281.33	
2/18/2002	6287.70		2/19/2002	6280.69	
5/28/2002	6284.93	6286.32	5/28/2002	6282.93	6281.81
2/11/2003	6287.22		2/11/2003	6280.72	
5/12/2003	6284.50		5/12/2003	6281.82	
8/11/2003	6287.47	6286.40	8/11/2003	6280.31	6280.95
8/16/2004	6287.65		8/16/2004	6281.20	
11/15/2004	6287.26	6287.46	11/15/2004	6281.09	6281.15
2/24/2005	6287.02		2/24/2005	6281.01	
5/9/2005	6287.17		5/9/2005	6282.45	
9/19/2005	6286.55	6286.91	9/19/2005	6282.21	6281.89
4/5/2006	6286.30		4/5/2006	6281.00	
9/25/2006	6286.30	6286.30	9/25/2006	6281.00	6281.00
4/18/2007	6286.45		4/18/2007	6281.60	
10/30/2007	6285.96	6286.21	10/30/2007	6280.77	6281.19
4/21/2008	6286.20		4/21/2008	6281.75	
9/18/2008	6286.50	6286.35	9/18/2008	6281.05	6281.40
5/12/2009	6286.32		5/12/2009	6282.40	
9/29/2009	6286.28	6286.30	9/29/2009	6280.92	6281.66
5/25/2010	6286.80		5/25/2010	6284.75	
9/8/2010	6287.50	6287.15	9/8/2010	6281.45	6283.10
4/27/2011	6285.70		4/27/2011	6284.85	
10/2/2011	6286.00	6285.85	10/2/2011	6280.70	6282.78
4/5/2012	6285.40		4/5/2012	6281.80	
9/19/2012	6285.10	6285.25	9/19/2012	6279.95	6280.88
1/5/2013	6284.65		1/5/2013	6280.25	
5/2/2013	6284.70		5/2/2013	6281.05	
9/23/2013	6284.50	6284.62	9/23/2013	6279.75	6280.35
5/1/2014	6284.70		5/1/2014	6281.20	
10/2/2014	6284.75	6284.73	10/2/2014	6280.40	6280.80
5/4/2015	6284.80		5/4/2015	6281.25	
10/7/2015	6285.60	6285.20	10/7/2015	6280.55	6280.90
5/29/2016	6286.55		5/29/2016	6284.25	
10/12/2016	6285.95	6286.25	10/12/2016	6280.95	6282.60
05/11/17	6285.95		05/11/17	6282.6	
09/07/17	6285.9	6285.93	09/07/17	6281.05	6281.83
05/09/18	6285.3		05/09/18	6281.65	
08/29/18	6285.3	6285.30	08/29/18	6280.7	6281.18

amsl = above mean sea level

Table 7 Calculation of Percent Area of Groundwater Flow and Contaminant Mass Flux for each Isopleth

Isopleth (mg/L)	¹ Unat mg/L	² Area (sq. ft.)	Incremental Area		³ Relative Mass Flux	⁴ % Total Mass Flux
			(sq. ft.)	%		
Total		489,580	489,580	100.0	1.07	100
4.0	5.97	56,380	56,379	11.5	0.69	64.2
2.0	2.47	202,930	146,550	29.9	0.74	69.1
1.0	1.57	258,560	55,630	11.4	0.18	16.6
0.5	0.70	323,610	65,050	13.3	0.09	8.7
0.1	0.25	410,820	87,210	17.8	0.04	4.1
<0.1	0.10	489,580	78,760	16.1	0.02	1.5

	¹ SO ₄ mg/L	² Area (sq. ft.)	Incremental Area		³ Relative Mass Flux	⁴ % Total Mass Flux
			(sq. ft.)	%		
Total		95,660	95,660	100	1224.58	100
2,000	2,115	34,070	34,070	36	753.12	61.5
1,000	1,631	50,160	16,090	17	274.29	22.4
500	687	71,580	21,420	22	153.76	12.6
100	333	79,080	7,500	8	26.08	2.1
<100	100	95,660	16,580	17	17.33	1.4

Note:

¹Sulfate and uranium concentrations allocated to each Isopleth were calculated from measured data presented in Figures 11 and 21

² Areas were estimated from Figures 11 and 21 using Arc GIS

³ Relative Mass Flux is % Area x sulfate or uranium concentration in mg/L

⁴ % Total Mass Flux is individual relative mass flux for each isopleth divided by the sum of all relative mass flux values

Table 8 Calculation of Average Dissolved Uranium Groundwater Concentrations in Lower Northwest Valley

Measured Uranium Concentrations (mg/L)					
4 mg/L Isopleth	2 mg/L Isopleth	1 mg/L Isopleth	0.5 mg/L Isopleth	0.1 mg/L Isopleth	<0.1 mg/L Isopleth
9.328	2.536	1.306	0.954	0.225	0.056
5.867	2.361	1.828	0.844	0.077	
6.385	2.223	1.57	0.699	0.476	
6.613	2.221		0.674	0.488	
4.747	2.469		0.621	0.286	
4.395	2.19		0.753	0.248	
4.208	2.456		0.561	0.277	
6.189	2.344		0.691	0.177	
5.97	2.392		0.67	0.078	
	2.229		0.511	0.126	
	2.123		0.70	0.25	
	2.24				
	2.462				
	2.293				
	3.656				
	3.375				
	2.47				

Based on data shown in Figure 11, From Fig 18, 1999 GWPP

Table 9 Calculation of Average Sulfate Groundwater Concentrations in Lower Northwest Valley

Measured Sulfate Concentration (mg/L)				
2,000 mg/L Isopleth	1,000 mg/L Isopleth	500 mg/L Isopleth	100 mg/L Isopleth	<100 mg/L Isopleth
2090	1810	511	359	100
2025	1820	549	311	
2040	1783	1000	328	
2170	1110	687	333	
2010	1,631			
2040				
2035				
2070				
2107				
2180				
2504				
2037				
2138				
2158				
2,115				

Based on data shown in Figure 21, From Fig G-3-10, 1999 GWPP

Table 10 Calculation of Threshold ACL that Maintains Sweetwater River Selenium Concentrations Below the Aquatic Life Chronic Exposure Standard

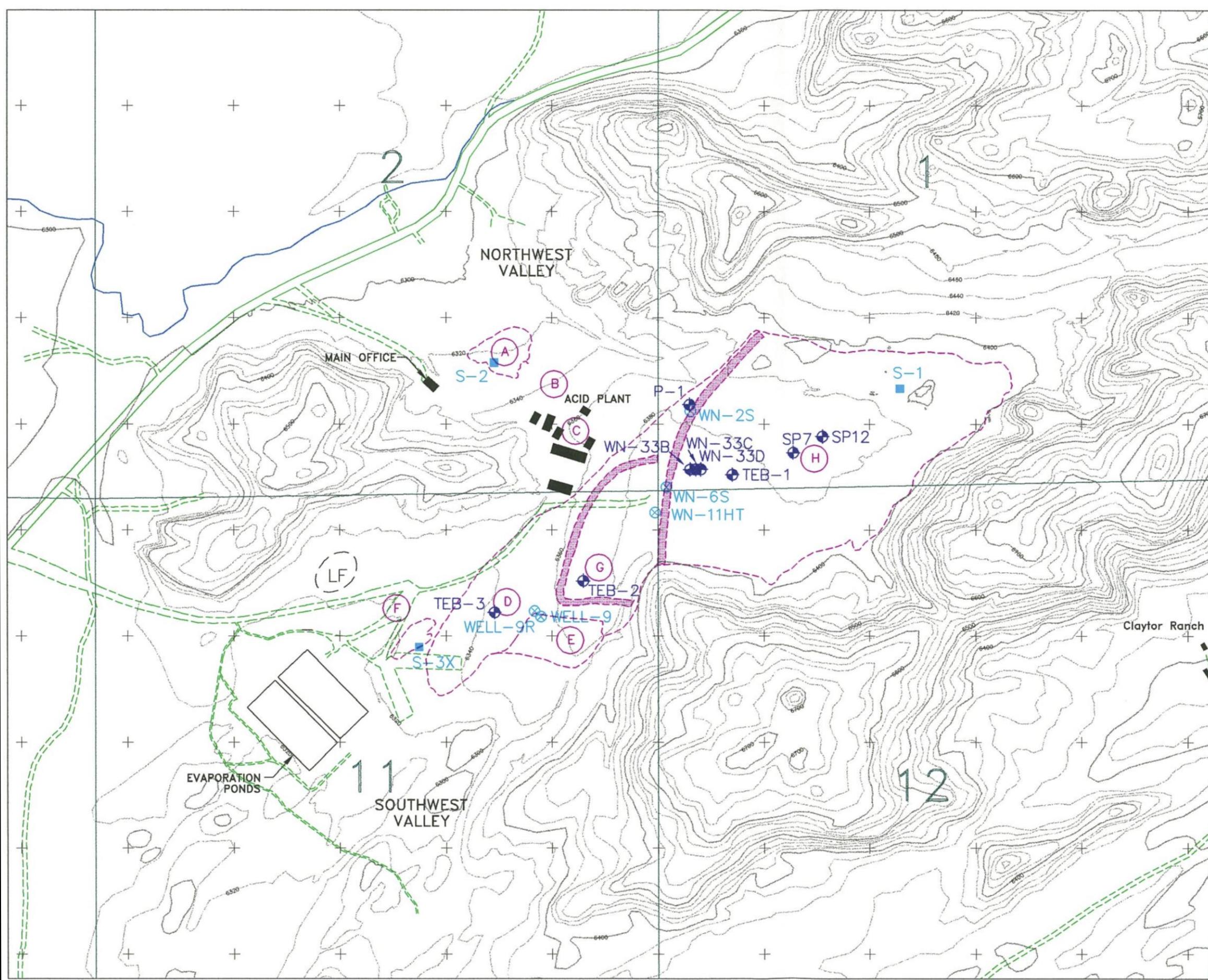
	(mg/L)	INPUT	
River Background Selenium Concentration	0.001	A	
Selenium Aquatic Life Standard for Chronic Exposure	0.005		
Selenium Aquatic Life Standard for Acute Exposure	0.02		
Mixing Model Flows			
	(cfs)	(gpm)	(L/day)
River Biologically Based 1 Day, 3 year Low Flow (1B3 - Acute)	5.43	2437	13,283,941
River Biologically Based 4 Day, 3 year Low Flow (4B3 - Chronic)	8.32	3734	20,354,032
Northwest Valley Groundwater Flow Rate	0.22	100	545,098
OUPUT			
	D ¹	E	
	River Concentrations with NW Valley Groundwater at ACL Values (mg/L)	ACL (mg/L)	
³ Same as above except 30% NWV Flow at Full ACL, 70% at 0.08 mg/L	0.0049	0.32	
	0.0198	1.41	
		Chronic (4B3) Acute (1B3)	

EQUATIONS USED TO CALCULATE "D"

$$D = ([A \times B] + [E \times C]) / (B + C) \text{ (Original Equation, Miller, 2009)}$$

$$^1D = ([A \times B] + [(E \times 0.3 \times C) + (0.08 \times 0.7 \times C)]) / (B + C)$$

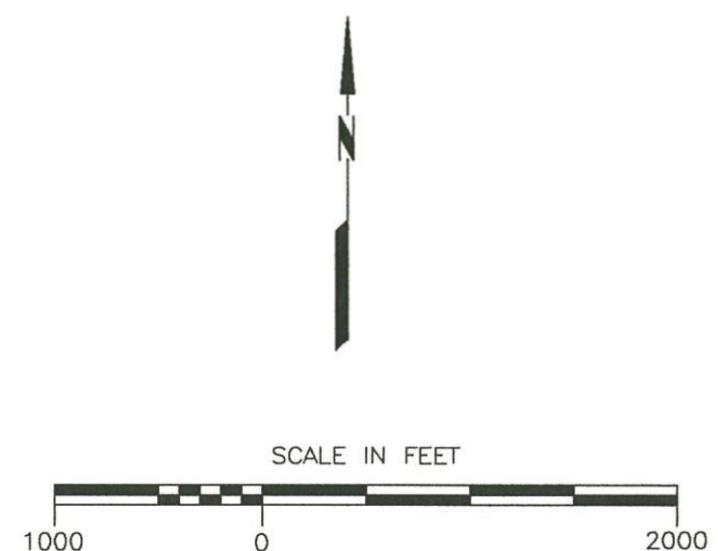
FIGURES



LEGEND

- ◆ 1996 SAMPLING LOCATIONS
- HISTORICAL GROUND WATER SAMPLING LOCATIONS
- HISTORICAL SURFACE WATER SAMPLING LOCATIONS
- (A) NORTHWEST VALLEY SEEPAGE POND
- (B) ORE PAD
- (C) SPLIT ROCK MILL COMPLEX
- (D) ALTERNATE TAILING IMPOUNDMENT
- (E) WASTE TRENCH AREA
- (F) SEWAGE LAGOON
- (G) OLD TAILING IMPOUNDMENT
- (H) MAIN TAILING IMPOUNDMENT
- (LF) APPROXIMATE LOCATION OF SANITARY LANDFILL

1988 FACILITIES DELINEATION
(SOURCE: WNI, 1987, REVISION #1 TO
SPLIT ROCK MILL SITE RECLAMATION
PLAN, FIG A-1)



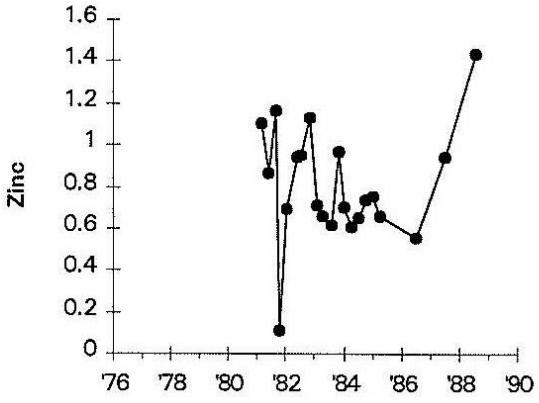
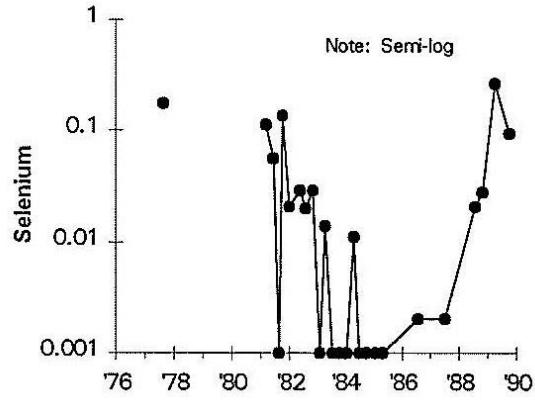
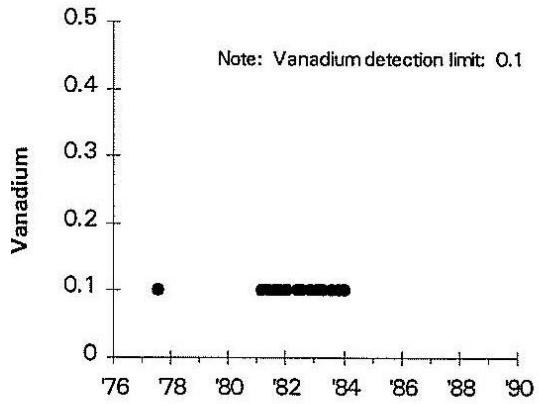
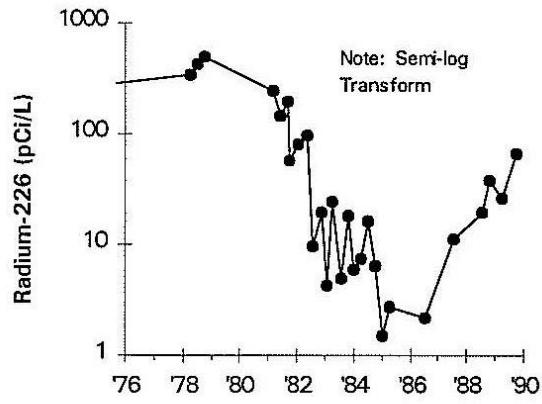
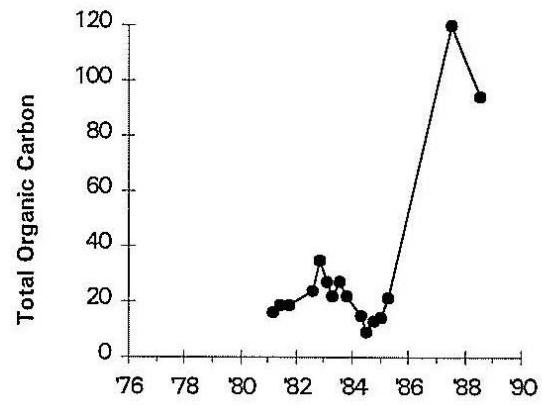
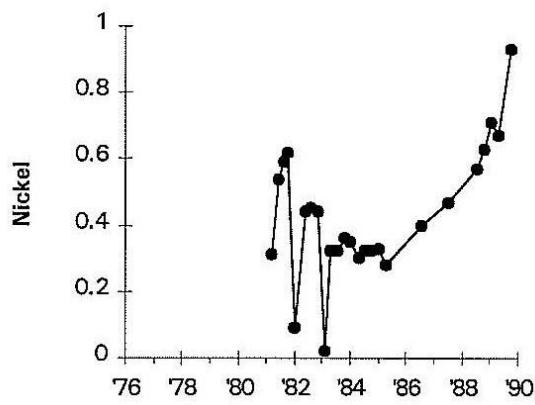
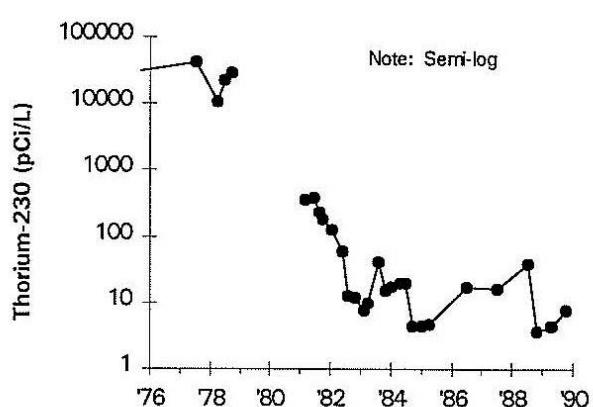
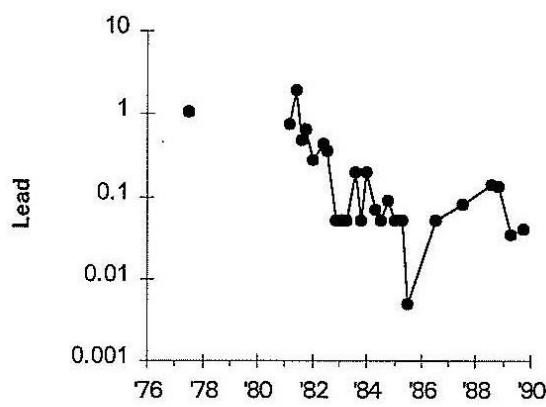
Western Nuclear, Inc. Split Rock Site

Figure 1
Process Areas and Sampling Locations

PROJECT: ACL Application

DATE: March 2019

FILE:



Western Nuclear, Inc. Split Rock Site

Figure 2
Time Series for Ra-226, Th-230, and Trace
Constituents in Tailings Pond S-1 (mg/L)

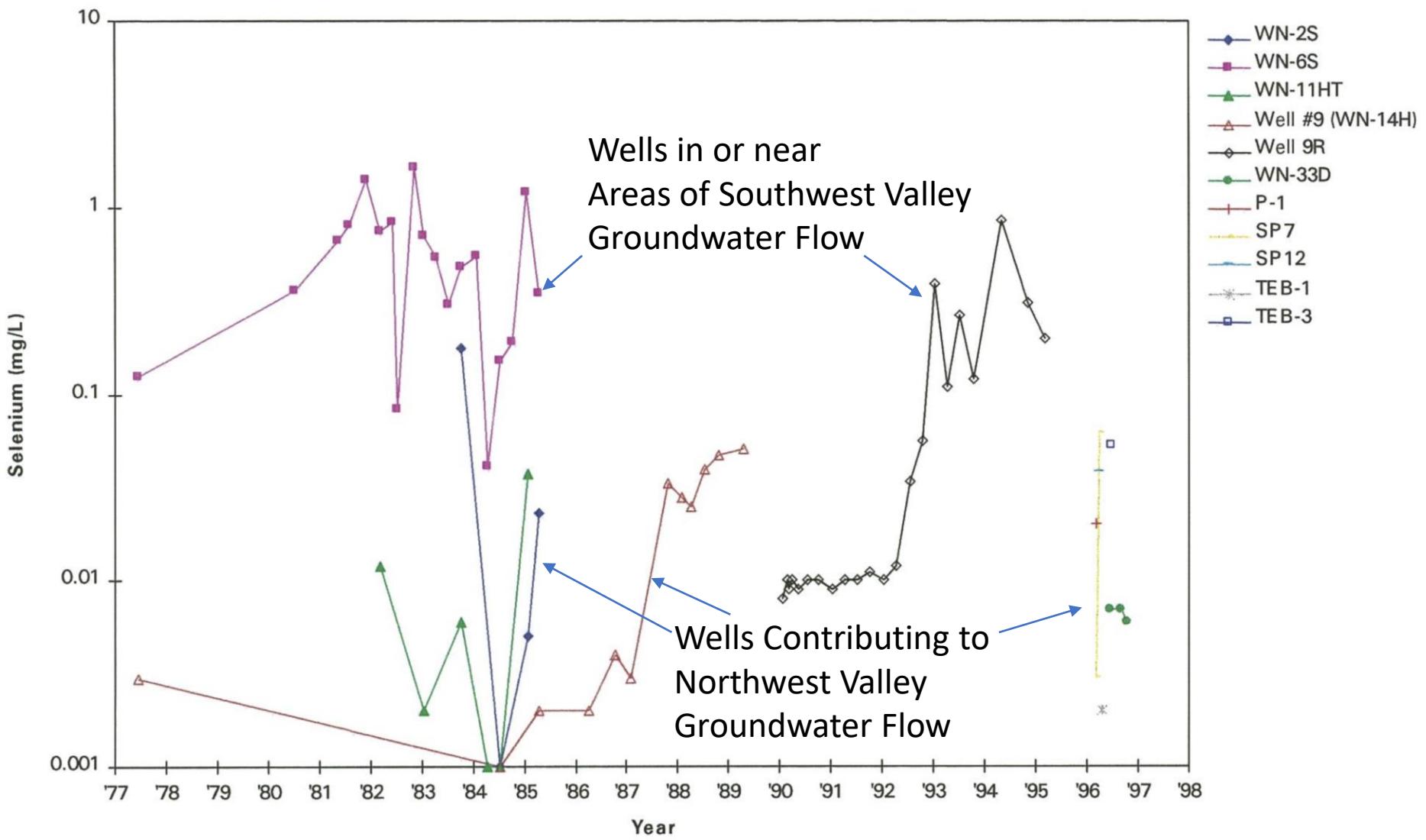
Source: SMI, 1999; Fig F-4-26

PROJECT: ACL Application

DATE: April 2019

FILE:





Western Nuclear, Inc. Split Rock Site

Figure 3
Selenium Concentrations in Tailings Area Wells

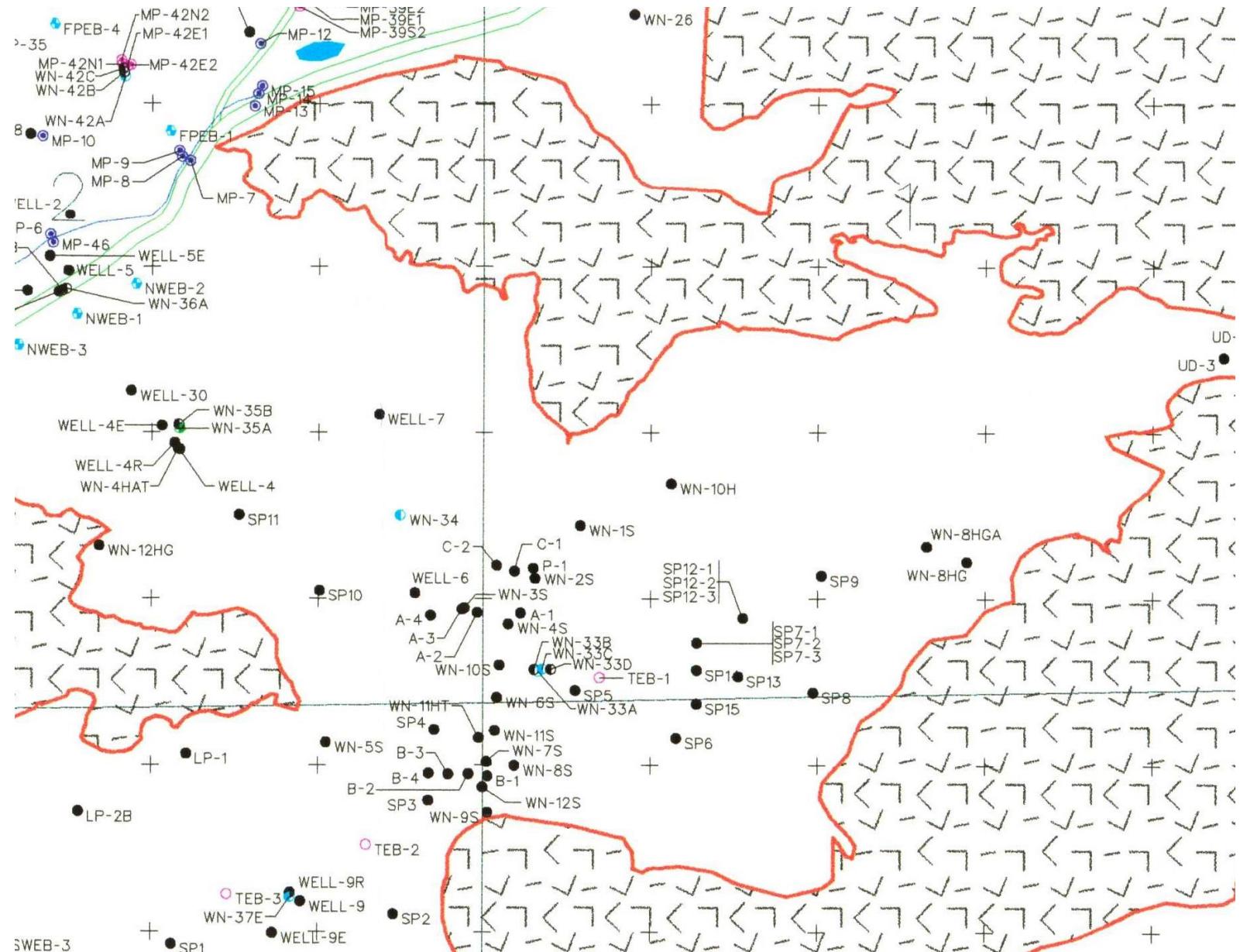
Source: SMI, 1999; Fig F-4-66

PROJECT: ACL Application

DATE: April 2019

FILE:





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Figure 4
Tailings Impoundment and Northwest Valley Well
and Sampling Locations

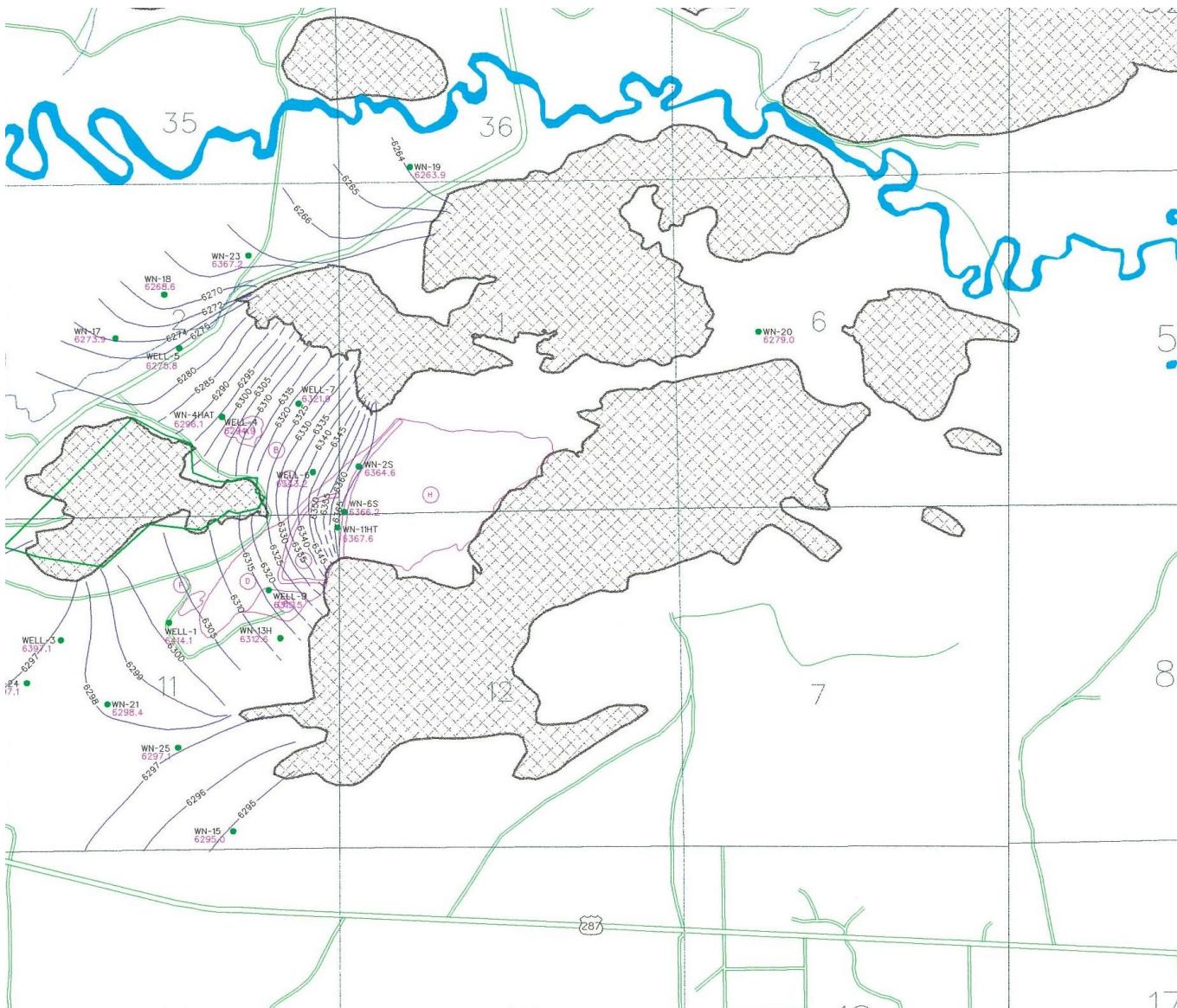
Source: SMI, 1999; Plate A-8-1

PROJECT: ACL Application

DATE: April 2019

FILE:





FORMER SITE FEATURES

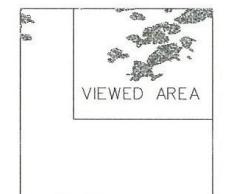
- (A) NORTHWEST VALLEY SEEPAGE POND
- (B) ORE PAD
- (C) SPLIT ROCK MILL COMPLEX
- (D) ALTERNATE TAILING IMPOUNDMENT
- (E) WASTE TRENCH AREA
- (F) SEWAGE LAGOON
- (G) OLD TAILING IMPOUNDMENT
- (H) MAIN TAILING IMPOUNDMENT

1987 FACILITIES DELINEATION
(SOURCE: WNI, 1987, REVISION #1 TO SPLIT
ROCK SITE RECLAMATION PLAN, FIG A-1)

LEGEND

- WATER TABLE CONTOURS
- WELL NAME & WATER TABLE ELEVATION
- GRANITE OUTCROP AREA

NOTE: ONLY DATA FROM JULY/AUGUST 1986 ARE SHOWN



MODEL BOUNDARY

SCALE IN FEET

2000 0 4000

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Figure 5
Measured Water Table Contours (July / August, 1986)

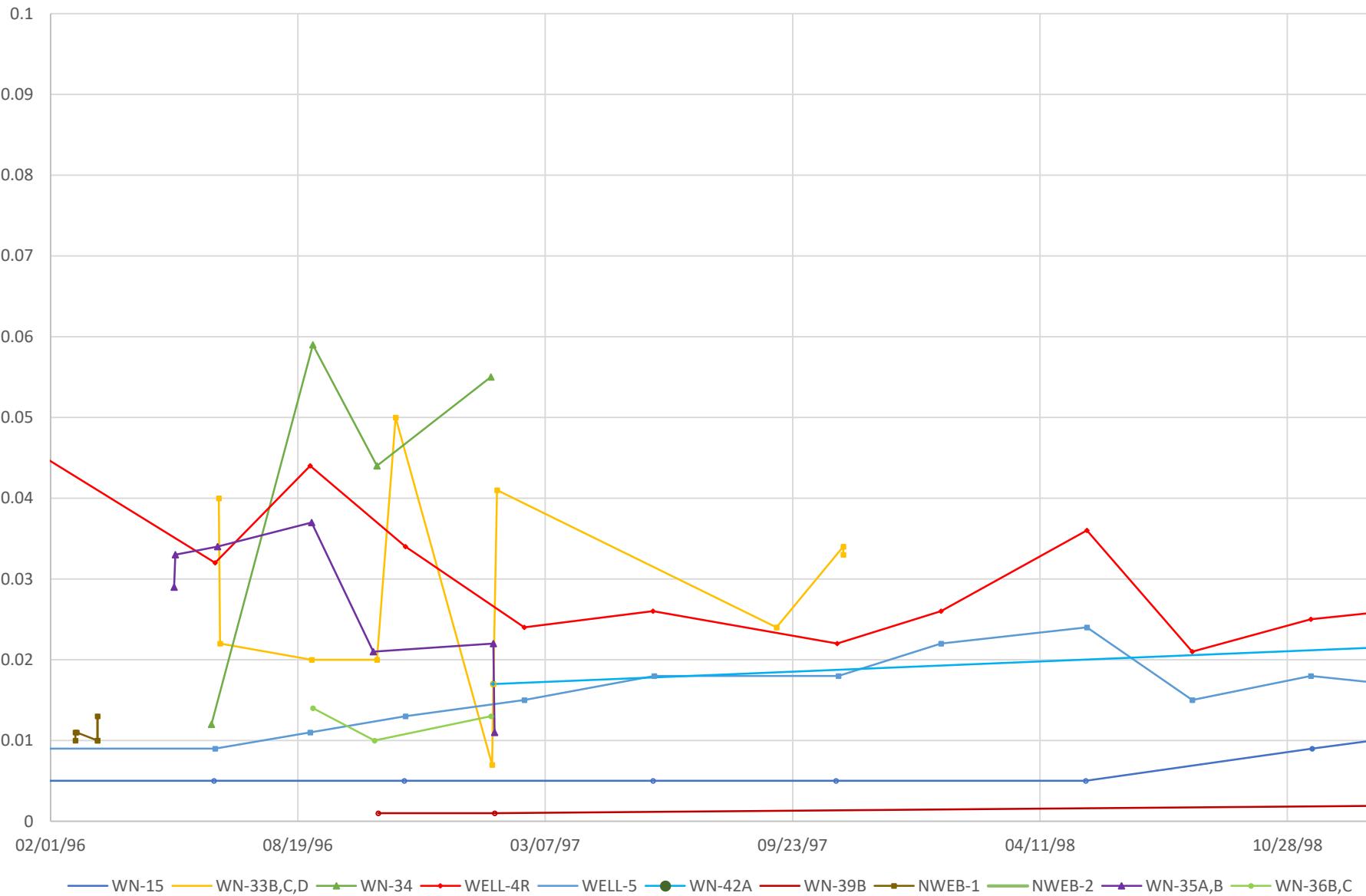
Source: SMI, 1999; Fig E-4-13

PROJECT: ACL Application

DATE: April 2019

FILE:





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Figure 6
Selenium Concentrations in North West Valley Wells

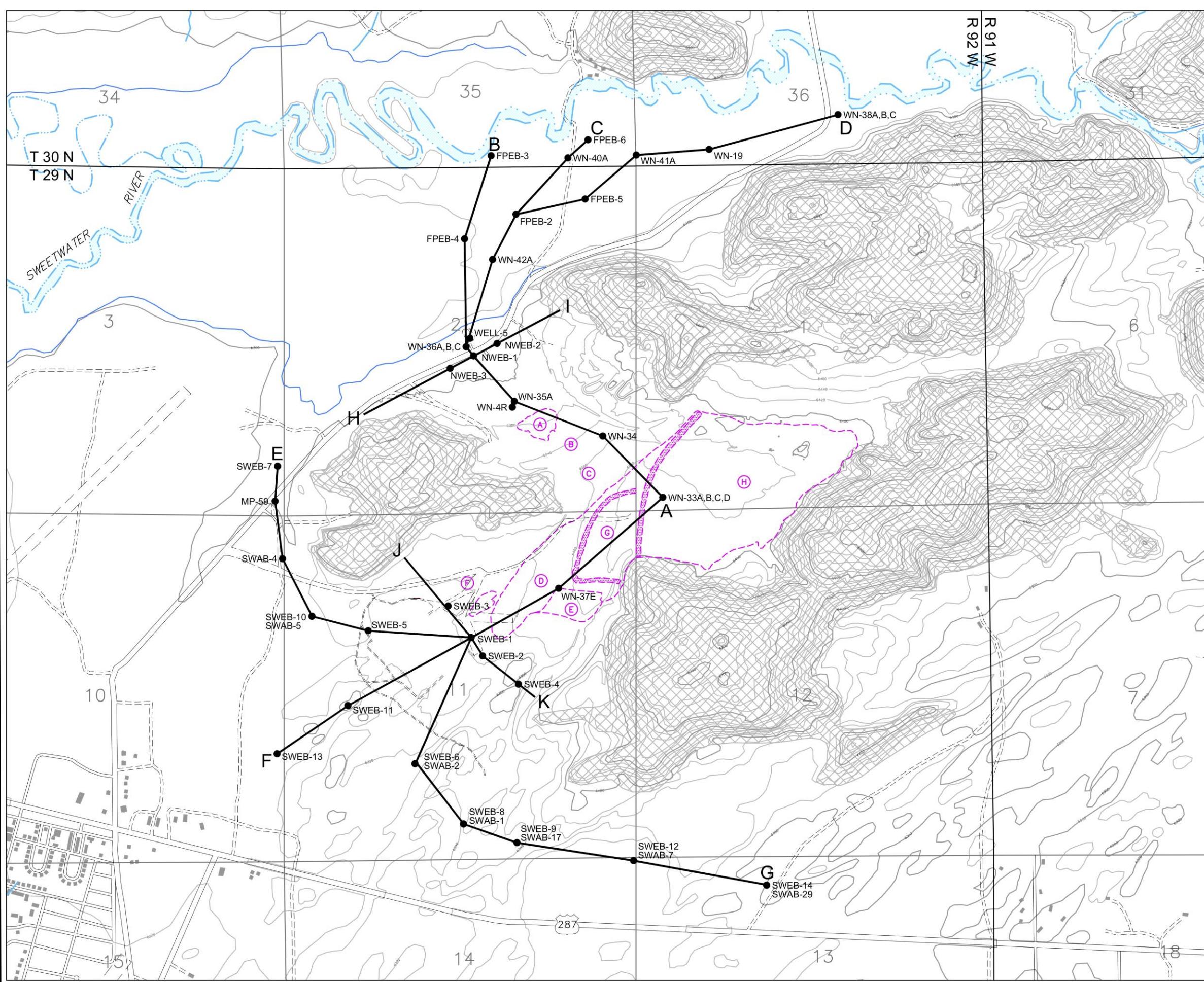
Source: SMI, 1999; Table F-5-2

PROJECT: ACL Application

DATE: April 2019

FILE:





FORMER SITE FEATURES

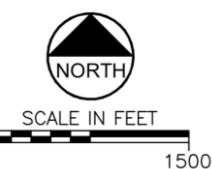
- (A) NORTHWEST VALLEY SEEPAGE POND
- (B) ORE PAD
- (C) SPLIT ROCK MILL COMPLEX
- (D) ALTERNATE TAILING IMPOUNDMENT
- (E) WASTE TRENCH AREA
- (F) SEWAGE LAGOON
- (G) OLD TAILING IMPOUNDMENT
- (H) MAIN TAILING IMPOUNDMENT

1977 FACILITIES DELINEATION
(SOURCE: D'APPOLONIA, 1980. RESPONSE TO
WDEQ/LAND QUALITY QUESTIONS, FIG-2-8A)

LEGEND

- GENERAL EXTENT OF GRANITE
- CROSS SECTION LOCATION
- MONITORING WELL OR EXPLORATORY BORING LOCATION

Source: SMI, 1999, Figure 14



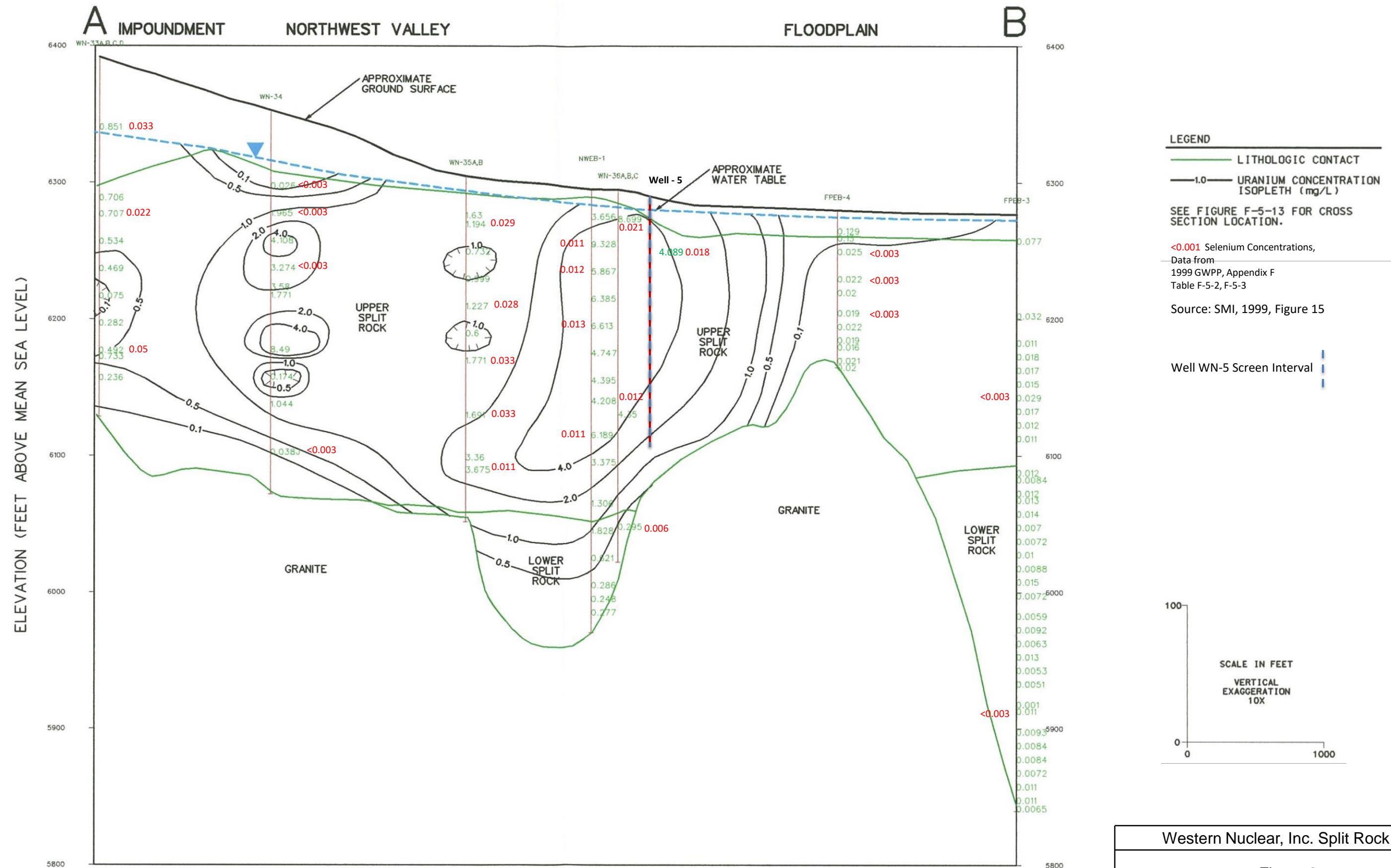
Western Nuclear, Inc. Split Rock Site

Figure 7
Cross Section Locations

PROJECT: ACL Application

DATE: March 2019

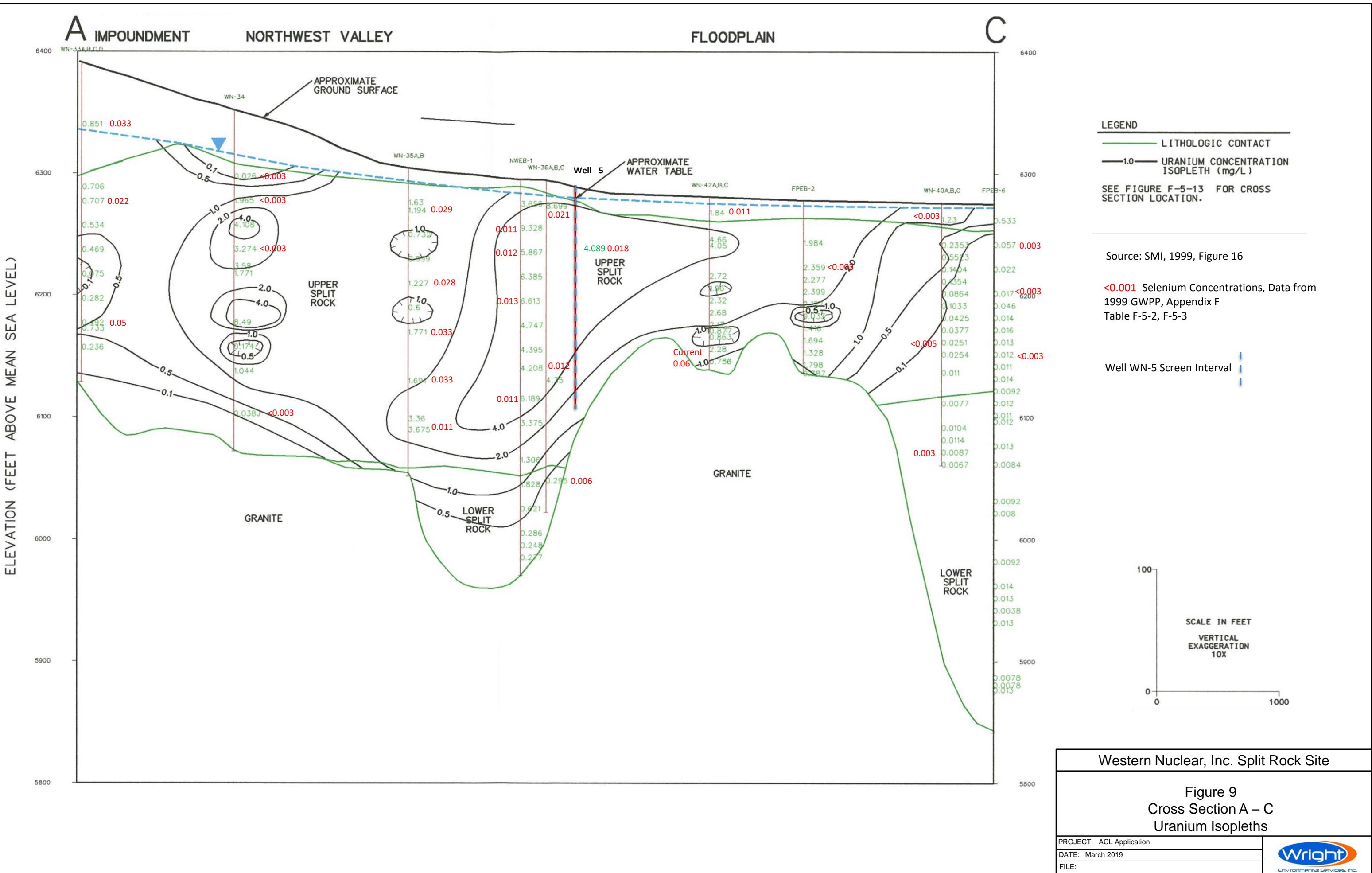
FILE:

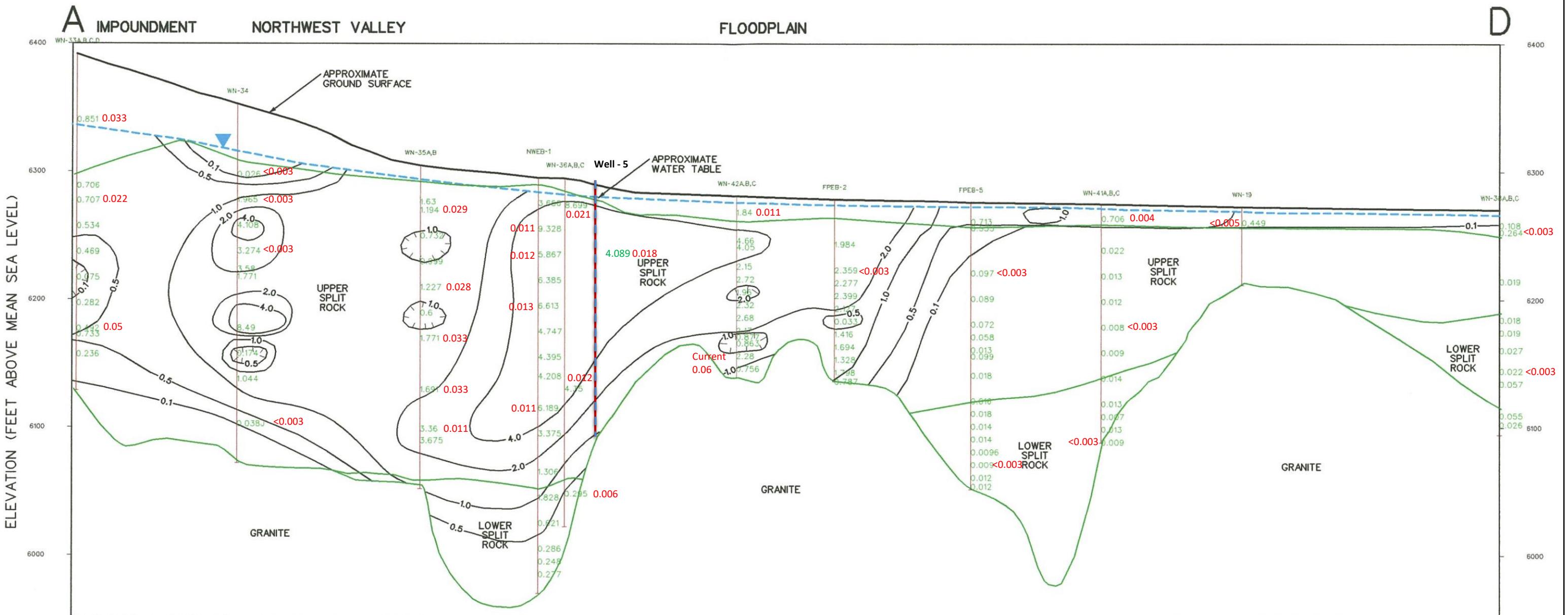


Source: SMI, 1999

PROJECT: ACL Application
DATE: March 2019
FILE:

Wright
Environmental Services, Inc.





LEGEND
 — LITHOLOGIC CONTACT
 — 1.0 — URANIUM CONCENTRATION
 ISOPLETH (mg/L)
 SEE FIGURE F-5-13 FOR CROSS
 SECTION LOCATION.

Well WN-5 Screen Interval

SCALE IN FEET
 VERTICAL EXAGGERATION
 10X

0 100 1000

<0.001 Selenium Concentrations, Data from
 1999 GWPP, Appendix F
 Table F-5-2, F-5-3

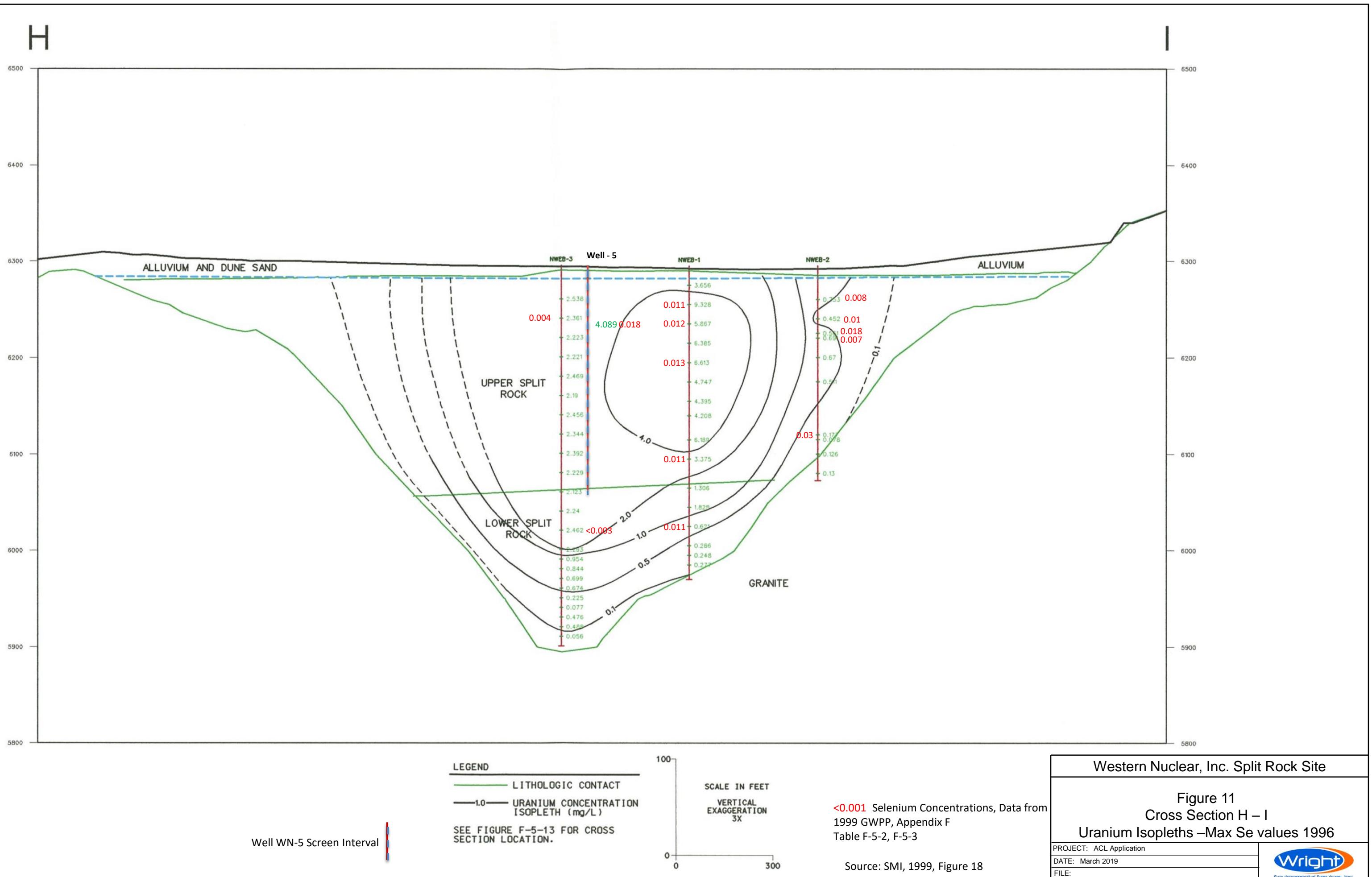
Source: SMI, 1999, Figure 17

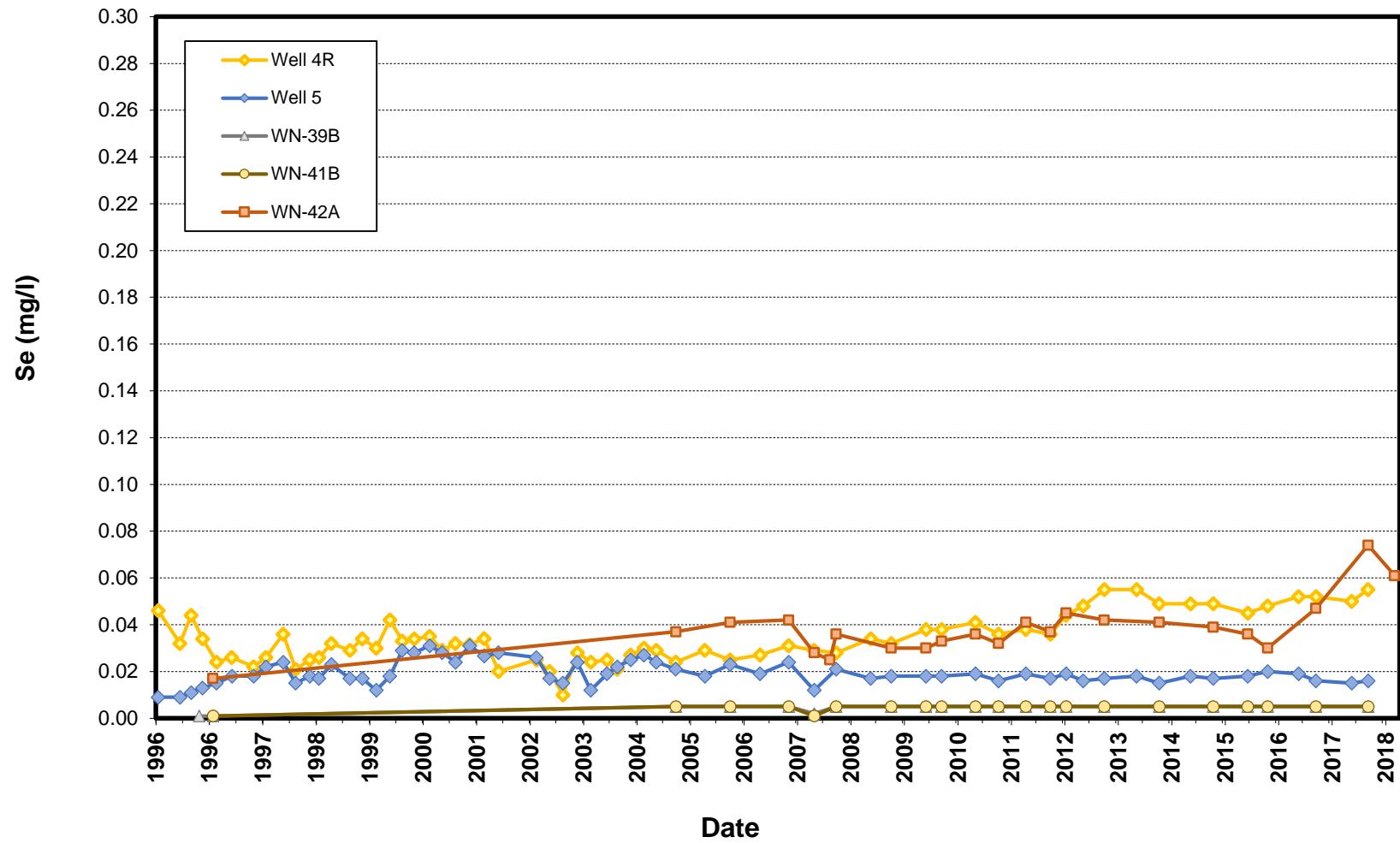
Western Nuclear, Inc. Split Rock Site

Figure 10
 Cross Section A – D
 Uranium Isopleths

PROJECT: ACL Application
 DATE: March 2019
 FILE:







Western Nuclear, Inc. Split Rock Site

Figure 12
Northwest Valley and Floodplain Well
Selenium Data (1996 – 2018)

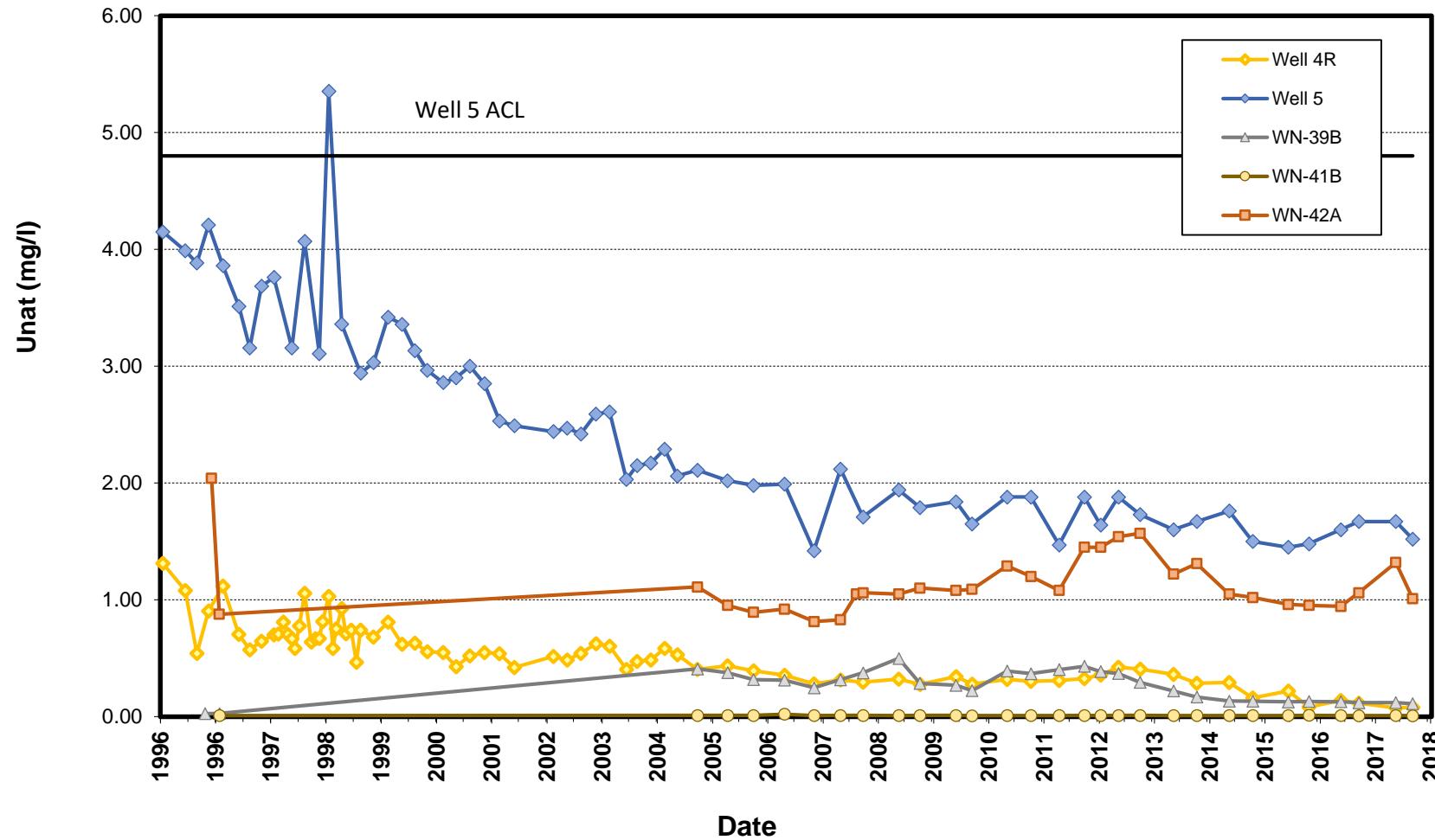
Source: SMI, 1999; Plate A-8-1

PROJECT: ACL Application

DATE: April 2019

FILE:





Western Nuclear, Inc. Split Rock Site

Figure 13
Northwest Valley and Floodplain Well
Uranium Data (1996 – 2018)

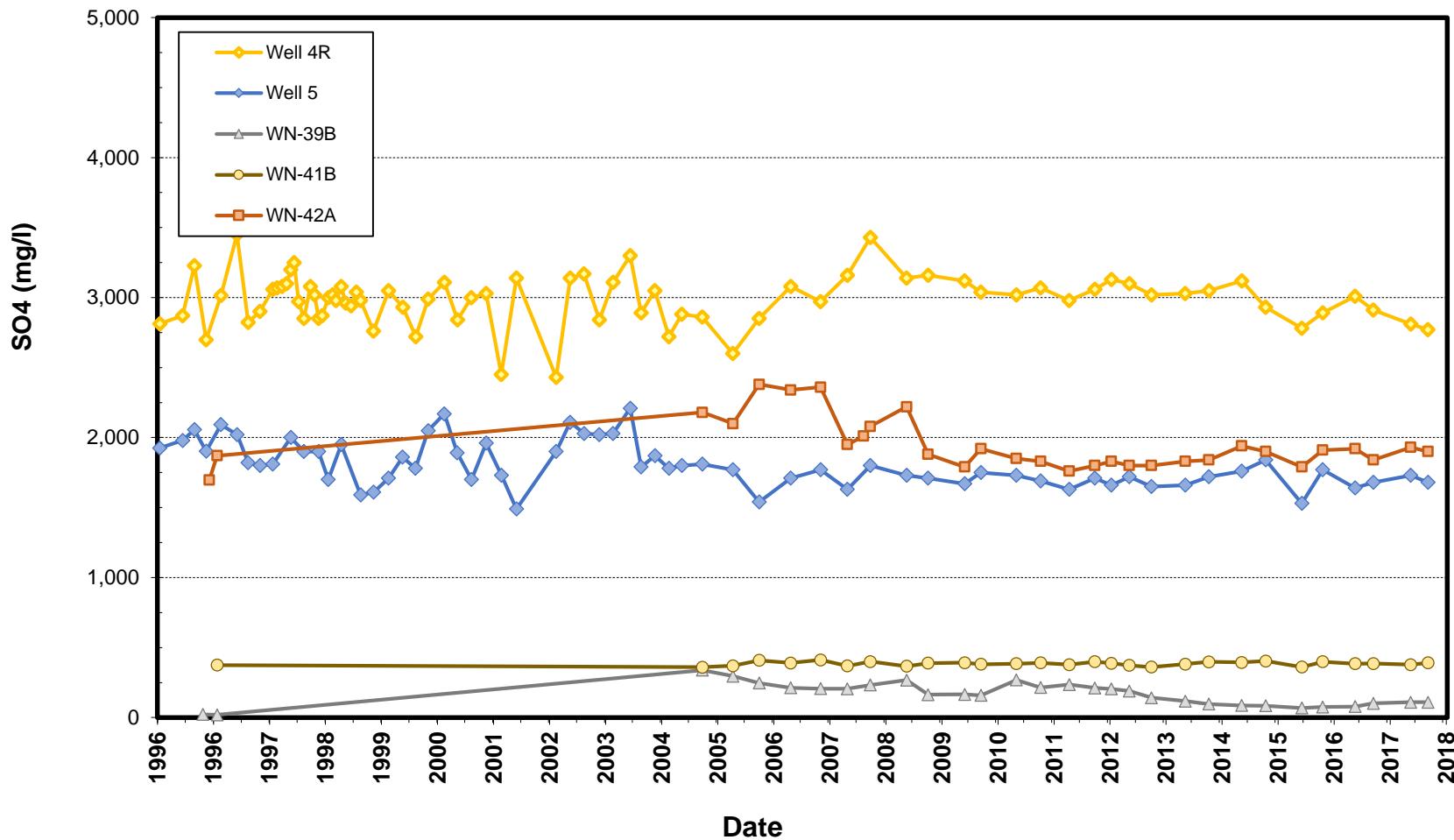
Source: SMI, 1999; Plate A-8-1

PROJECT: ACL Application

DATE: April 2019

FILE:





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Figure 14
Northwest Valley and Floodplain Well
Sulfate Data (1996 – 2018)

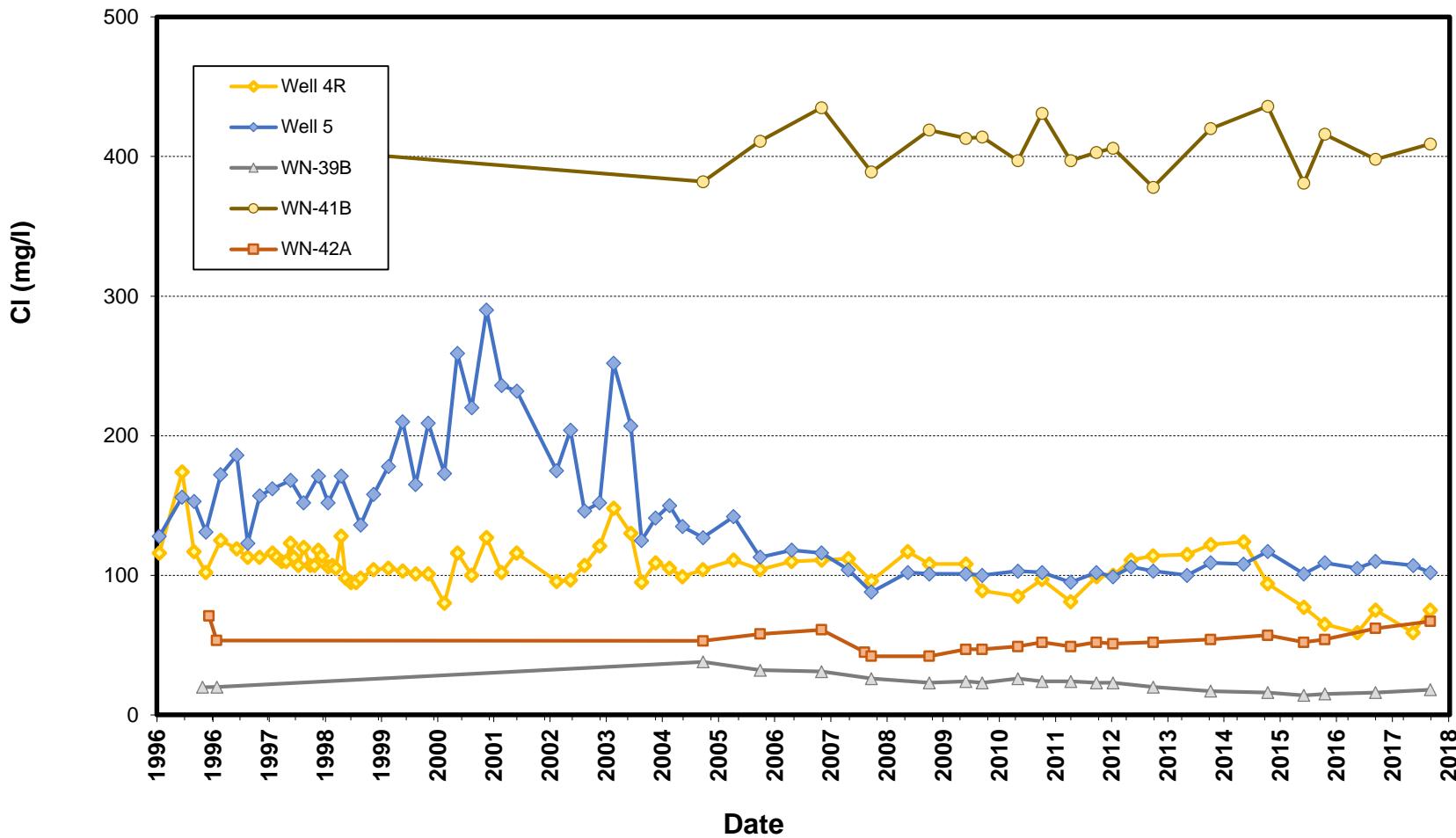
Source: SMI, 1999; Plate A-8-1

PROJECT: ACL Application

DATE: April 2019

FILE:





Western Nuclear, Inc. Split Rock Site

Figure 15
Northwest Valley and Floodplain Well
Chloride Data (1996 – 2018)

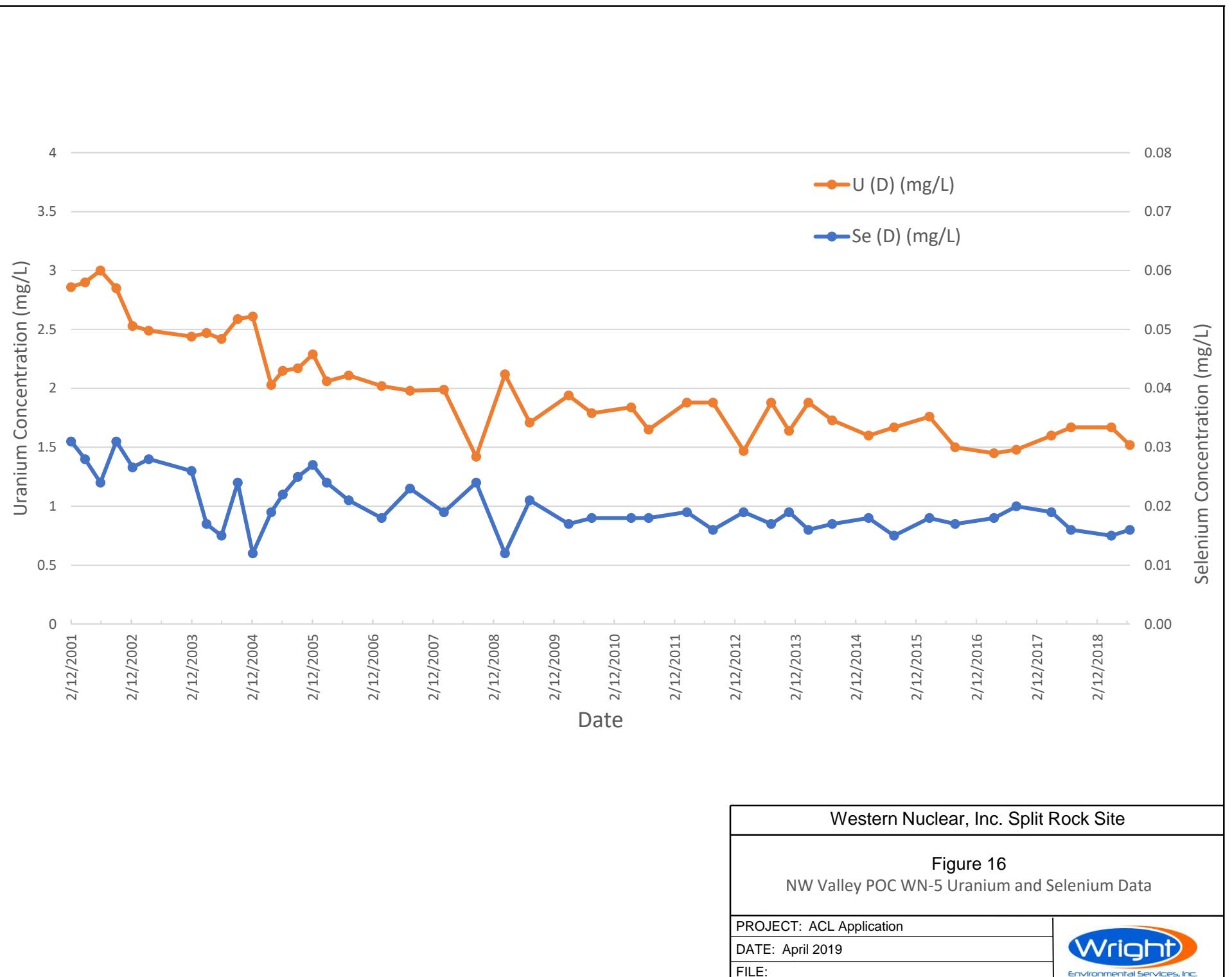
Source: SMI, 1999; Plate A-8-1

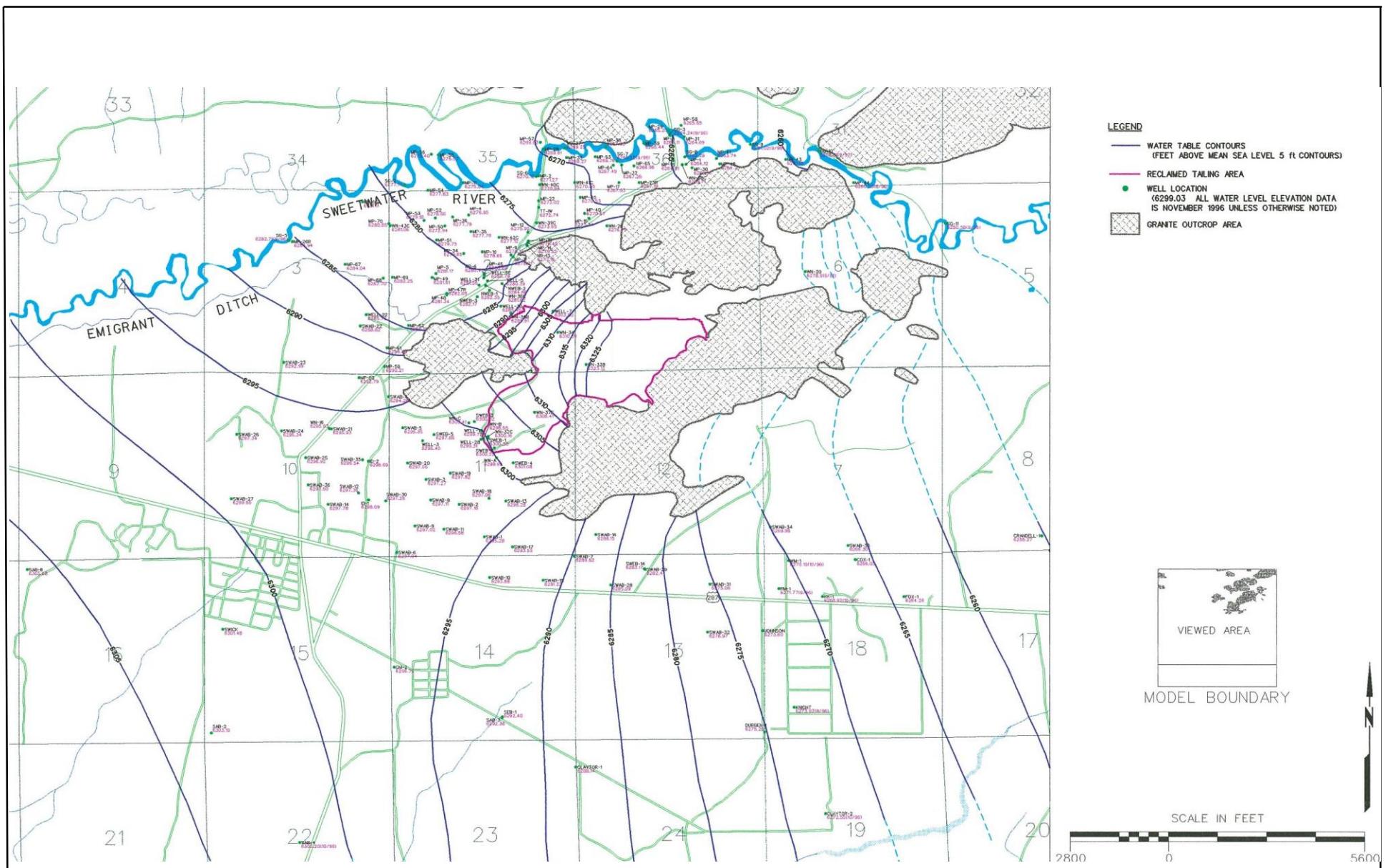
PROJECT: ACL Application

DATE: April 2019

FILE:







Western Nuclear, Inc. Split Rock Site

Figure 17
Measured Water Table Contours (1886-1997)

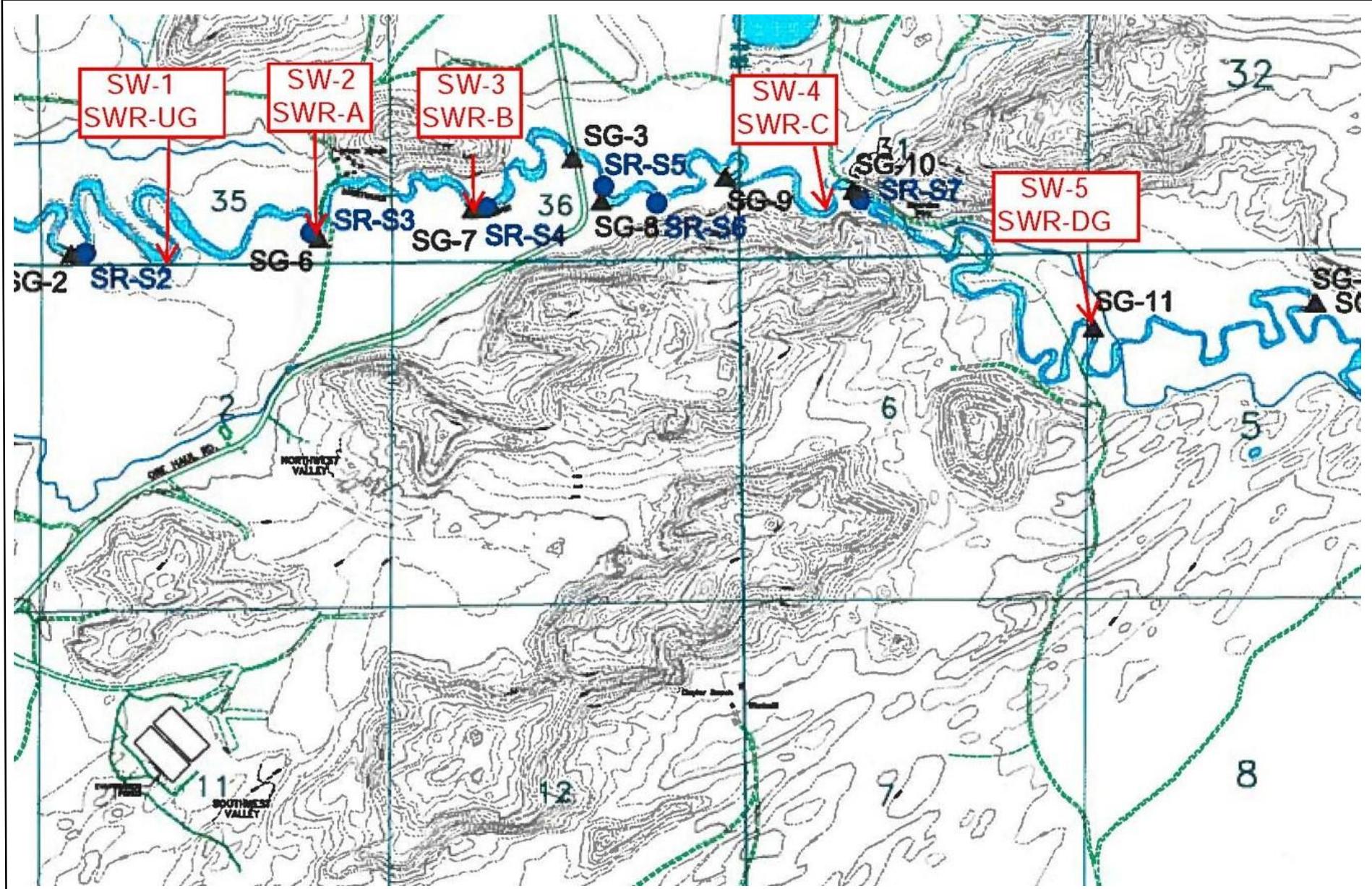
Source: SMI, 1999; Figure E-4-16

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Figure 18
Current Surface Water Sampling Locations
(Red Text Boxes Only)

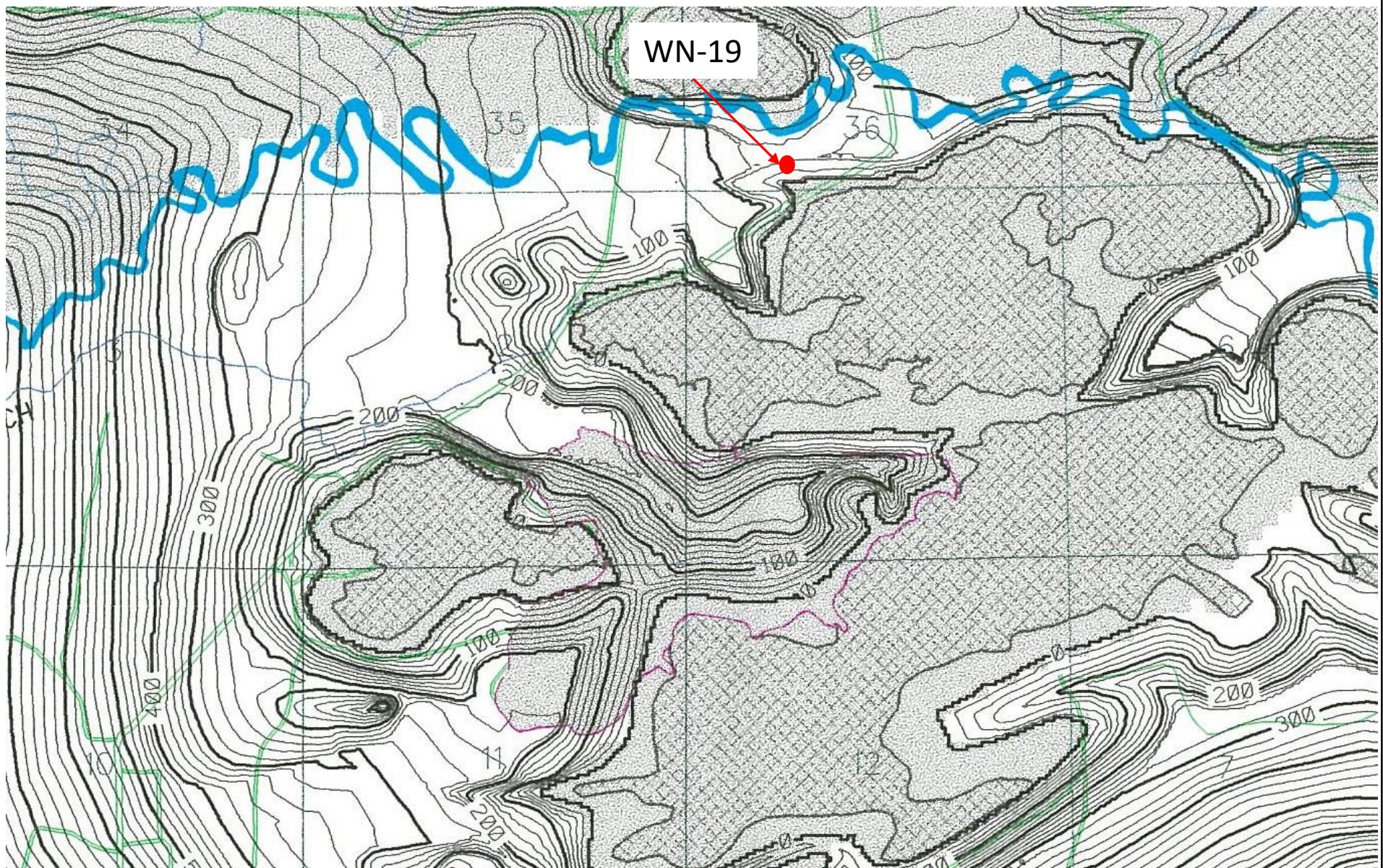
Source: SMI, 1999; Figure D-5-1

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FILE:





LEGEND

- RECLAIMED TAILING AREA
- NO FLOW ZONE (INACTIVE CELLS)
- GRANITE OUTCROP AREA
- SATURATED THICKNESS (FT)

Source: SMI, 1999; Figure E-4-6

Western Nuclear, Inc. Split Rock Site

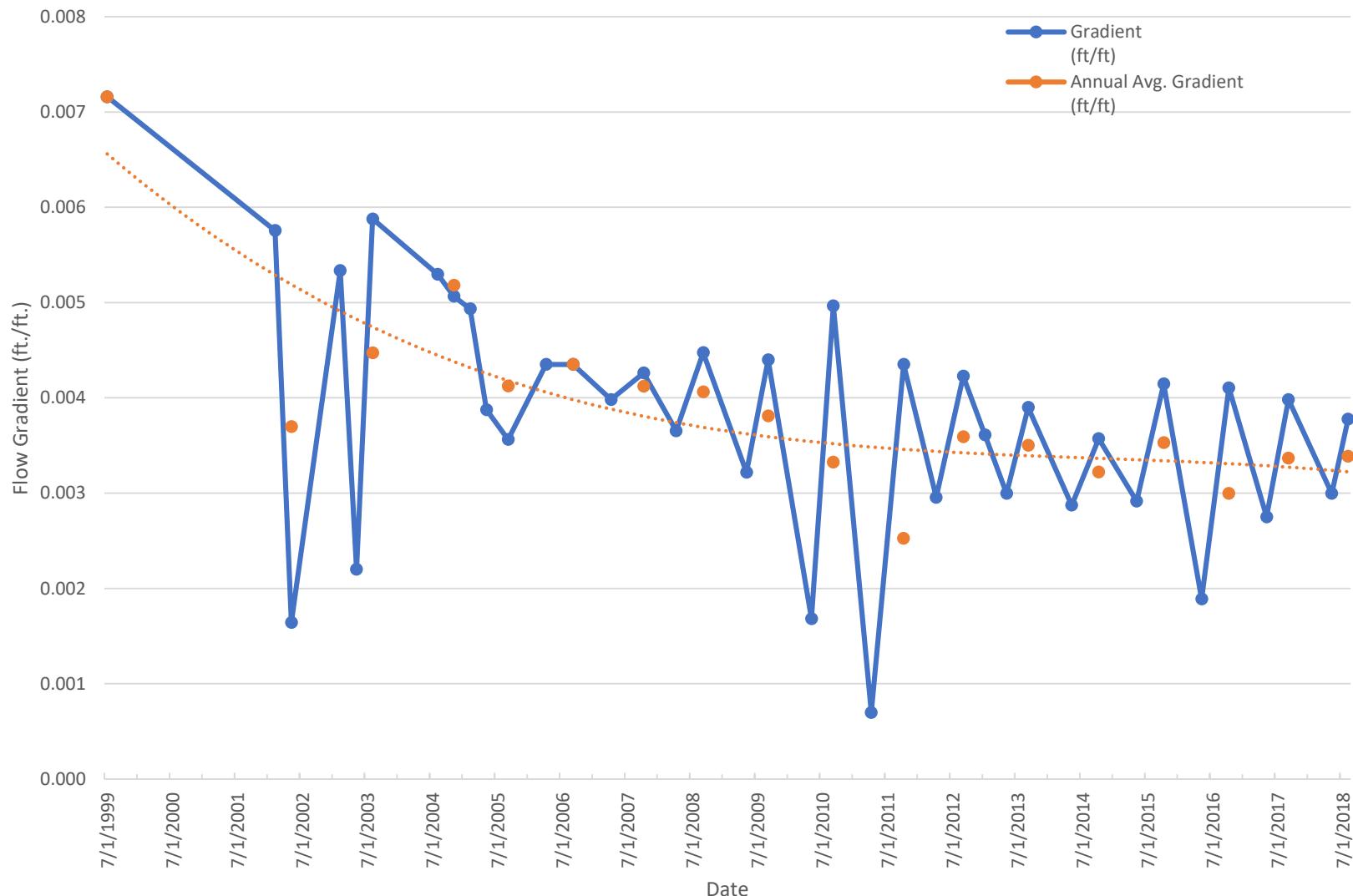
Figure 19
Upper Split Rock Unit Saturated Thickness (feet)
Model Layer 2, (1996/1997 Data)

PROJECT: ACL Application

DATE: April 2019

FILE:





Western Nuclear, Inc. Split Rock Site

Figure 20
Northwest Valley Groundwater Flow Gradient
WN-4R to WN-5

PROJECT: ACL Application

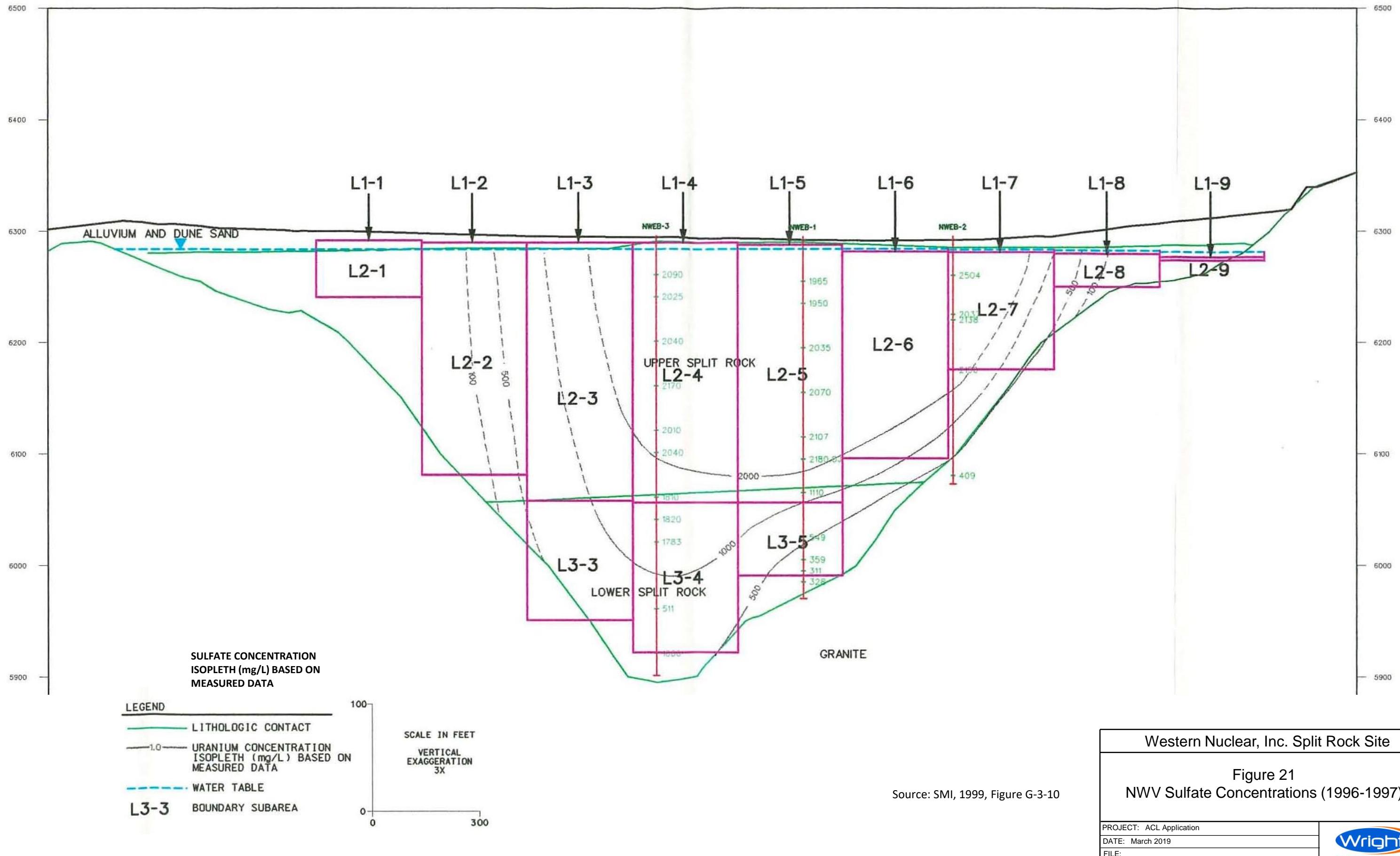
DATE: April 2019

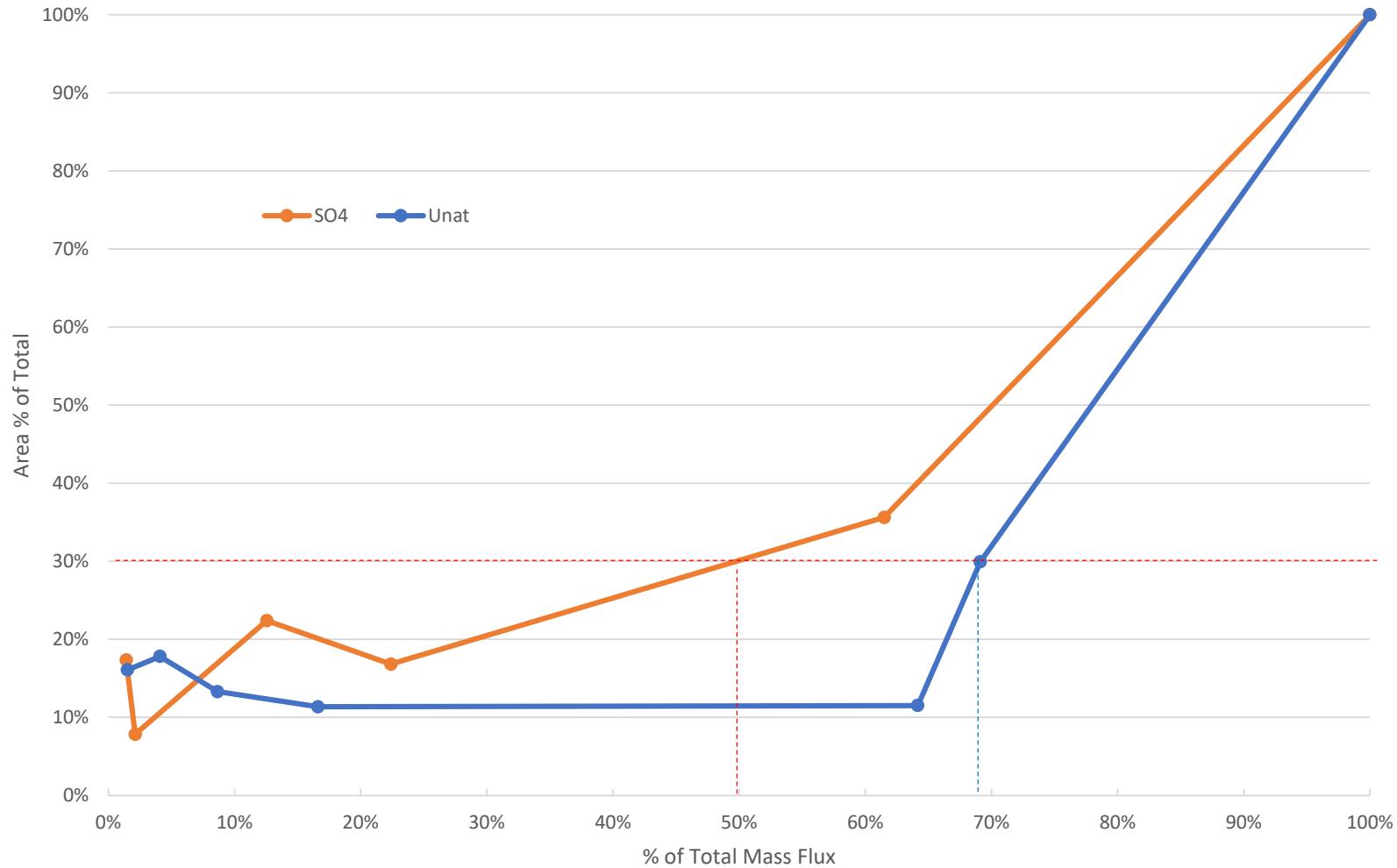
FILE:



SW

NE





Western Nuclear, Inc. Split Rock Site

Figure 22
Cross Sectional Area of Groundwater Flow vs. Percent
Contaminant Mass Flux From Northwest Valley (!996-1997)

PROJECT: ACL Application

DATE: April 2019

FILE:



ATTACHMENTS

ATTACHMENT A
Selected Data in Electronic Format

ATTACHMENT B

1999 GWPP Appendix F Tables F-5-1 through F-5-3

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 1 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b	Temp (Field) ^b °C	U _{nat} mg/L	
FPEB-1	3/6/96	FPEB-1-GW-01-35-960306				2080		7.31						4.5	
		FPEB-1-GW-01-40-960306				1785		7.55						1.8	
		FPEB-1-GW-01-45-960306	96-18123			1786		7.60		1304				5.4	3.751
		FPEB-1-GW-01-50-960306				3080		7.71						6.6	
		FPEB-1-GW-01-55-960306	96-18124	578	110	3280	3269	7.86	7.92	1487	1714	2908 JE	9.1	3.814	
		FPEB-1-GW-02-55-960306	96-18125	578	90	3280	3246	7.86	8.04	1487	1156	2879 JE	9.1	4.018	
		FPEB-1-GW-01-60-960306				3410		7.97						8.7	
		FPEB-1-GW-01-61-960306				3410		7.97						10.1	
		FPEB-1-GW-01-62.5-960306				3340		7.74						3.5	
FPEB-2	3/7/96	FPEB-2-GW-01-35-960307	96-18171	366	100 JE	2950		8.01	7.96	1427	1180 JE			9.6	1.984
		FPEB-2-GW-01-40-960307				1237		7.67						8.0	
		FPEB-2-GW-01-55-960307	96-18172	451	78	2550	2613	8.02	8.00	984	829	2142 JE	8.3	2.359	
		FPEB-2-GW-02-55-960307	96-18173	448		2450		8.00	8.03	1031				9.1	2.359
		FPEB-2-GW-01-60-960307				2560		7.31						6.1	
		FPEB-2-GW-01-65-960307	96-18159			2600		7.77		1249				5.8	2.277
		FPEB-2-GW-01-70-960307				2570		7.79						5.9	
		FPEB-2-GW-01-75-960307	96-18160	454		2570		7.63	7.92	1002				6.3	2.399
		FPEB-2-GW-01-80-960307				2560		7.85						5.0	
		FPEB-2-GW-01-85-960307	96-18161			2510		7.85		1206				5.3	2.127
		FPEB-2-GW-01-90-960307				2360		7.73						5.2	
		FPEB-2-GW-01-95-960307	96-18162	140	30 JE	628		8.12	8.14	89.1 JZ	65 JE			6.2	0.033
		FPEB-2-GW-01-100-960307				2230		7.66						6.2	
		FPEB-2-GW-01-105-960307	96-18163			2320		7.74		1295				5.7	1.418
		FPEB-2-GW-01-110-960307				2370		7.78						6.3	
		FPEB-2-GW-01-115-960307	96-18164	364	78.7 JE	2570		7.79	7.92	1232	823 JE			6.3	1.694
		FPEB-2-GW-01-120-960307				2110		7.65						6.6	
		FPEB-2-GW-01-125-960307	96-18165			2100		7.75		1142				6.8	1.328
		FPEB-2-GW-01-130-960307				2230		7.72						7.1	
		FPEB-2-GW-01-135-960307	96-18166	372	69 JE	2070		7.64	7.85	814	682 JE			7.3	1.798
		FPEB-2-GW-01-140-960307				1593		7.59						7.4	
		FPEB-2-GW-01-142-960307	96-18167			1352		7.68		414				7.6	0.787
FPEB-3	3/8/96	FPEB-3-GW-01-20-960308	96-18222			840		7.87						11.9	0.077
		FPEB-3-GW-01-25-960308				987		8.08						12.1	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 2 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
FPEB-3	3/8/96	FPEB-3-GW-01-35-960308				1208		7.94						11.5	
(continued)		FPEB-3-GW-01-55-960308				1253		8.02						8.9	
		FPEB-3-GW-01-60-960308				1039		8.06						8.4	
		FPEB-3-GW-01-75-960308	96-18223			1276		8.01						8.7	0.032
		FPEB-3-GW-01-80-960308				1206		8.00						9.3	
		FPEB-3-GW-01-95-960308	96-18224	152	262 JE	1718		8.09	8.22	316	269 JE			11.6	0.011
		FPEB-3-GW-01-100-960308				1735		8.00						10.8	
		FPEB-3-GW-01-105-960308	96-18225			1729		8.03		309				10.8	0.018
		FPEB-3-GW-01-110-960308				1728		8.06						10.5	
		FPEB-3-GW-01-115-960308	96-18226	150		1636		7.87	8.11	302				8.6	0.017
		FPEB-3-GW-01-120-960308				1653		8.03						9.0	
		FPEB-3-GW-01-125-960308	96-18227			1664		8.06		275				9.5	0.015
		FPEB-3-GW-01-130-960308				1582		8.08						10.3	
		FPEB-3-GW-01-135-960308	96-18228	151	231	1515	1682	8.02	8.23	279	237	963 JE		10.6	0.029
		FPEB-3-GW-01-140-960308				1673		7.97						9.7	
		FPEB-3-GW-01-145-960308	96-18229			1686		7.97		281				9.9	0.017
		FPEB-3-GW-01-150-960308				1645		8.00						10.2	
		FPEB-3-GW-01-155-960308	96-18230	151		1641		8.06	8.23	258				10.6	0.012
		FPEB-3-GW-02-155-960308	96-18168	151		1641		8.06	8.18	258				10.6	0.011
		FPEB-3-GW-01-160-960309				1613		7.94						10.2	
		FPEB-3-GW-01-165-960308	96-18169											0.011	
3/9/96		FPEB-3-GW-01-165-960309				1623		7.97		260				9.4	
		FPEB-3-GW-01-190-960309	96-18175			1664		8.24		290				13.5	0.012
		FPEB-3-GW-01-195-960309	96-18176	153	267 JE	1688		8.19	8.22	321	265 JE			13.2	0.008
		FPEB-3-GW-01-200-960309				1700		8.17						12.3	
		FPEB-3-GW-01-205-960309	96-18177			1678		8.11		298				12.2	0.012
		FPEB-3-GW-01-210-960309	96-18178	146		1620		8.10	8.19	284				11.8	0.013
		FPEB-3-GW-02-210-960309	96-18179	147						8.19					0.013
		FPEB-3-GW-01-215-960309				1200		8.65						13.2	
		FPEB-3-GW-01-220-960309	96-18180			1202		8.11		226				12.4	0.014
		FPEB-3-GW-01-225-960309				1150		8.05						13.8	
		FPEB-3-GW-01-230-960309	96-18181	175		1178		8.27	8.26	226				13.5	0.007
		FPEB-3-GW-01-235-960309				1171		8.18						12.4	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 3 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μ S/cm	Conductivity (Lab) ^b μ S/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
FPEB-3	3/9/96	FPEB-3-GW-01-240-960309	96-18182			1165		8.07		249			12.3	0.007
(continued)		FPEB-3-GW-01-245-960309				1154		8.13					12.6	
		FPEB-3-GW-01-250-960309	96-18183	137		1182		8.10	8.17	274			12.3	0.010
		FPEB-3-GW-01-255-960309				1016		8.13					11.7	
		FPEB-3-GW-01-260-960309	96-18184			1222		8.17		187			13.1	0.009
		FPEB-3-GW-01-265-960309				1198		7.96					12.3	
		FPEB-3-GW-01-270-960309	96-18185	138		1247		8.13	8.22	200			13.3	0.015
		FPEB-3-GW-01-275-960309				1198		8.14					12.7	
		FPEB-3-GW-01-280-960309	96-18186			1208		8.20		261			13.4	0.007
		FPEB-3-GW-01-285-960309				1239		8.02					13.3	
		FPEB-3-GW-01-295-960309	96-18187	126	144 JE	1066		8.20	8.23	250	161 JE		13.6	0.006
		FPEB-3-GW-01-300-960309				1087		8.31					12.6	
		FPEB-3-GW-01-305-960309	96-18188			1168		8.32		280			13.2	0.009
		FPEB-3-GW-01-310-960309				1158		8.24					12.7	
		FPEB-3-GW-01-315-960309	96-18189	132		1193		7.91	8.22	315			12.3	0.006
		FPEB-3-GW-01-320-960309				1170		7.96					12.4	
		FPEB-3-GW-01-325-960309	96-18190			1397		8.20		489			12.1	0.013
		FPEB-3-GW-01-330-960309				1415		8.30					12.2	
		FPEB-3-GW-01-335-960309	96-18261			1438		8.11		244			12.4	0.005
		FPEB-3-GW-01-340-960309				1442		8.15					13.0	
		FPEB-3-GW-01-345-960309	96-18262	140		1461		8.00	8.36	259			13.1	0.005
		FPEB-3-GW-01-360-960309	96-18263	146		1634		8.17	8.38				13.0	0.001
		FPEB-3-GW-01-365-960309	96-18264			1622		8.18		334			13.0	0.011
3/10/96		FPEB-3-GW-01-380-960310	96-18265	159	352 JE	2260		8.10	8.34	517	351 JE		12.5	0.009
		FPEB-3-GW-01-385-960310				1945		8.13					10.9	
		FPEB-3-GW-01-390-960310	96-18266			2330		8.08		478			12.6	0.008
		FPEB-3-GW-01-395-960310				2330		8.10					12.8	
		FPEB-3-GW-01-400-960310	96-18267	159		2320		8.01	8.13	426			12.5	0.008
		FPEB-3-GW-01-405-960310				2320		8.03					12.0	
		FPEB-3-GW-01-410-960310	96-18268			2310		8.05		431			13.1	0.007
		FPEB-3-GW-01-415-960310				2240		8.02					13.6	
		FPEB-3-GW-01-420-960310	96-18244	160	342	2230	2409	8.05	8.31	448	348	1339 JE	14.1	0.011
		FPEB-3-GW-01-425-960310				2270		8.09					13.3	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 5 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
FPEB-5	3/12/96	FPEB-5-GW-01-75-960312	96-18476	145		1141		7.98	8.23	224			10.4	0.089
(continued)		FPEB-5-GW-01-80-960312				1075		7.90					10.8	
		FPEB-5-GW-01-85-960312				1060		7.96					10.5	
		FPEB-5-GW-01-90-960312				1187		7.91					11.7	
		FPEB-5-GW-01-95-960312	96-18477	147	178 JE	1252		8.01	8.18	200	187 JE		10.8	0.070
		FPEB-5-GW-02-95-960312	96-18478	146		1250		8.03	8.23	213			12.5	0.072
		FPEB-5-GW-01-100-960312				1216		7.84					11.5	
		FPEB-5-GW-01-105-960312	96-18479			738		7.93		210			10.9	0.058
		FPEB-5-GW-01-110-960312				810		7.92					10.5	
		FPEB-5-GW-01-115-960312	96-18480	148		1373		8.00		212			10.5	0.013
		FPEB-5-GW-01-120-960312	96-18481			1182		7.79		231			7.7	0.099
		FPEB-5-GW-01-135-960312	96-18482	148		1445		7.98		236			11.1	0.018
		FPEB-5-GW-01-140-960312				1417		7.63					7.3	
		FPEB-5-GW-01-155-960312	96-18483			1312		7.97		208			9.7	0.016
		FPEB-5-GW-01-160-960312				931		8.12					6.5	
		FPEB-5-GW-01-165-960312	96-18484			1420		8.06		251			8.8	0.018
		FPEB-5-GW-01-170-960312				1510		7.97					10.5	
		FPEB-5-GW-01-175-960312	96-18485	150		1790		7.98		343			10.5	0.014
		FPEB-5-GW-01-180-960312				1802		7.99					8.5	
		FPEB-5-GW-01-185-960312	96-18486			1784		8.00		312			8.6	0.014
		FPEB-5-GW-01-190-960312				2230		7.95					10.0	
		FPEB-5-GW-01-195-960312	96-18487	164	352	2240	2319	8.04	8.22	410	339	1325 JE	9.8	0.010
		FPEB-5-GW-01-200-960312				2240		8.13					9.6	
3/13/96		FPEB-5-GW-01-205-960313	96-18460			2280		8.20		414			8.8	0.009
		FPEB-5-GW-01-210-960313				2030		8.02					9.2	
		FPEB-5-GW-01-215-960313	96-18461	160		2070		8.05	8.27	345			9.0	0.012
		FPEB-5-GW-01-218-960313				2030		8.03					9.8	
		FPEB-5-GW-01-220-960313				2030		8.05					8.9	
		FPEB-5-GW-01-222-960313	96-18458			1982		8.03		369			11.2	0.012
FPEB-6	3/13/96	FPEB-6-GW-01-15-960313	96-18462			1414		7.37		615			8.1	0.533
		FPEB-6-GW-01-35-960313	96-18463	168	106	1056	1105	8.05	8.25	298	210	674 JE	9.5	0.057
		FPEB-6-GW-01-55-960313	96-18464	146		2010		7.88	8.20	459			10.5	0.022
		FPEB-6-GW-01-75-960313	96-18465	163		2110		8.04	8.24	423			9.8	0.017

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 6 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
FPEB-6	3/13/96	FPEB-6-GW-01-90-960313				1482		7.96		324				9.8
(continued)		FPEB-6-GW-01-95-960313	96-18466	160	334 JE	2080		8.03	8.22	417	326 JE			9.6 0.014
	3/14/96	FPEB-6-GW-01-100-960314				1698		8.08						8.5
		FPEB-6-GW-01-105-960314	96-18467			2030		8.07		421				7.9 0.016
		FPEB-6-GW-01-110-960314				2080		7.99						9.0
		FPEB-6-GW-01-115-960314	96-18468	148		2040		7.95	8.19	413				9.7 0.013
		FPEB-6-GW-01-120-960314				2060		7.97						9.7
		FPEB-6-GW-01-125-960314	96-18469			1980		8.04		400				10.6 0.012
		FPEB-6-GW-01-130-960314				2030		8.04						10.1
		FPEB-6-GW-01-135-960313	96-18470	97	332		2177		8.12		309	1167 JE		
		FPEB-6-GW-01-135-960314	96-18470	97		2090		8.02	8.12	385				10.2 0.011
		FPEB-6-GW-01-140-960314				2100		8.02						9.8
		FPEB-6-GW-01-145-960314	96-18471			1980		7.95		404				10.0 0.014
		FPEB-6-GW-01-150-960314				2020		7.95						9.8
		FPEB-6-GW-01-155-961314	96-18494	147		1688		8.07		270				9.9 0.009
		FPEB-6-GW-01-160-960314				1730		8.12						9.8
		FPEB-6-GW-01-165-961314	96-18495			1257		8.04		269				10.6 0.012
		FPEB-6-GW-01-170-960314				1237		8.18						11.7
		FPEB-6-GW-01-175-961314	96-18496			1206		8.08		272				12.6 0.011
		FPEB-6-GW-01-180-961314	96-18709	148		1700		8.06		298				16.3 0.012
		FPEB-6-GW-01-185-960314				1447		7.95						11.8
		FPEB-6-GW-01-195-960314				772		8.35						15.1
		FPEB-6-GW-01-200-961314	96-18497			640		8.55		69				14.4 0.013
		FPEB-6-GW-01-205-960314				1073		8.28						15.5
		FPEB-6-GW-01-210-960314				685		8.53						13.9
		FPEB-6-GW-01-215-961314	96-18498			584		8.19		221				15.5 0.008
		FPEB-6-GW-01-220-960314				1148		8.22						14.6
		FPEB-6-GW-01-245-961314	96-18499	134		1066		8.07		153				12.5 0.009
		FPEB-6-GW-01-250-960314				1007		8.13						13.9
		FPEB-6-GW-01-255-961314	96-18488			1087		8.09		194				13.0 0.008
		FPEB-6-GW-01-260-960314				1093		8.08						11.7
		FPEB-6-GW-01-265-960314				665		8.25						12.9
		FPEB-6-GW-01-270-960314				815		8.20						12.0

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 7 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
FPEB-6 (continued)	3/14/96	FPEB-6-GW-01-275-960314				825		8.24						11.7
		FPEB-6-GW-01-280-960314				815		7.98						10.8
		FPEB-6-GW-01-285-960314				906		8.25						10.6
		FPEB-6-GW-01-290-960314				787		8.41						10.5
		FPEB-6-GW-01-295-961314	96-18489	138	152 JE	1202		8.18		203	168 JE			11.3 0.009
		FPEB-6-GW-01-310-960314				1333		7.99						11.7
		FPEB-6-GW-01-315-961314	96-18490	158		1794		8.16		345				10.2 0.014
		FPEB-6-GW-01-320-960314				1860		8.14						10.4
		FPEB-6-GW-01-325-961314	96-18491			1876		8.13		357				10.1 0.013
		FPEB-6-GW-01-335-961314	96-18492	139		1145		8.28		189 JZ				7.5 0.004
		FPEB-6-GW-01-345-961314	96-18493			783		8.40		119 JZ				11.3 0.013
		FPEB-6-GW-01-350-960314				1666		8.21						11.2
3/15/96		FPEB-6-GW-01-385-960315				764		8.05						12.0
		FPEB-6-GW-01-386-960315				562		8.27						10.4
		FPEB-6-GW-01-390-961315	96-18679			589		8.31		112 JZ				12.8 0.008
		FPEB-6-GW-01-395-960315				497		8.25						13.2
		FPEB-6-GW-02-396-961317	96-18680	131		1603		8.31		386				7.4 0.007
3/17/96		FPEB-6-GW-02-396-961317	96-18683	131		1603		8.31		386				7.4 0.007
		FPEB-6-GW-01-400-961317	96-18681			1610		8.85		370				6.0 0.013
FPEB-7	3/26/96	FPEB-7-GW-01-15-960326	96-19173			422		8.45		108				6.6 0.135
		FPEB-7-GW-01-35-960326	96-19174	182	8.5 JE	431		8.20		58	48.1 JE			9.1 0.056
		FPEB-7-GW-01-40-960326				485		7.87						7.1
		FPEB-7-GW-01-45-960326				542		8.11						7.3
		FPEB-7-GW-01-50-960326				416		8.12						7.4
		FPEB-7-GW-01-52-960326	96-19175	203 JE	9	507	524 JE	8.21	8.44 JE	75	62	337 JE		9.7 0.086
		FPEB-7-GW-01-55-960326				560		8.19						4.7
		FPEB-7-GW-01-60-960326				535		8.31						6.9
		FPEB-7-GW-01-65-960326				528		8.19						7.0
		FPEB-7-GW-01-70-960326				532		8.10						7.7
		FPEB-7-GW-01-74-960326	96-19176	180		571		8.27		98				11.2 0.087
		FPEB-7-GW-01-75-960326				555		8.25						6.2
		FPEB-7-GW-01-80-960326				572		8.27						7.9
		FPEB-7-GW-01-85-960326				565		8.22						7.3

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 8 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b (Field) ^b mg/L	Temp °C	U _{nat} mg/L
FPEB-7	3/26/96	FPEB-7-GW-01-90-960326	96-19177	174	8.3 JE	525		8.27		85	78.8 JE		5.9	0.010
(continued)		FPEB-7-GW-01-95-960326				574		8.42						7.3
		FPEB-7-GW-01-100-960326				579		8.38						8.5
		FPEB-7-GW-01-105-960326				564		8.41						9.0
		FPEB-7-GW-01-110-960326	96-19178	206		561		8.38		88				9.5
						544		8.48						0.081
3/27/96		FPEB-7-GW-01-115-960327				549		8.25						10.3
		FPEB-7-GW-01-120-960327				548		8.36						9.6
		FPEB-7-GW-01-125-960327				541		8.35		89	74.1 JE			9.7
		FPEB-7-GW-01-130-960327	96-19179	199	7.9 JE	537		8.38		91				10.0
		FPEB-7-GW-02-130-960327	96-19180	198		527		8.41						10.5
		FPEB-7-GW-01-135-960327				530		8.34						9.9
		FPEB-7-GW-01-140-960327				534		8.31						8.8
		FPEB-7-GW-01-145-960327				540		8.49		95				9.6
		FPEB-7-GW-01-150-960327	96-19181			527		7.82						5.0
		FPEB-7-GW-01-155-960327				461		7.73		81				0.062
		FPEB-7-GW-01-160-960327	96-19163	161		475		7.74						10.1
		FPEB-7-GW-01-165-960327				466		7.73						0.026
		FPEB-7-GW-01-170-960327				423		7.87		57	46.9 JE			9.9
		FPEB-7-GW-01-175-960327	96-19164	149	5.4 JE	412		7.84						10.0
		FPEB-7-GW-01-180-960327				384		7.80		47				10.3
		FPEB-7-GW-01-185-960327	96-19165			382		7.84						0.017
		FPEB-7-GW-01-190-960327				385		7.76		61	44.6 JE			12.3
		FPEB-7-GW-01-195-960327	96-19166	148	5.9 JE	382		7.71						13.4
		FPEB-7-GW-01-200-960327				405		7.76		48				12.2
		FPEB-7-GW-01-205-960327	96-19167			388		7.87						9.9
		FPEB-7-GW-01-210-960327				399		7.87		59				10.5
		FPEB-7-GW-01-215-960327	96-19168	138		484		7.66						10.8
		FPEB-7-GW-01-220-960327				478		7.57		93				10.6
		FPEB-7-GW-01-225-960327	96-19169			473		7.64						11.9
		FPEB-7-GW-01-230-960327				520		7.61		122				11.3
		FPEB-7-GW-01-235-960327	96-19170	169		568		7.75						12.6
		FPEB-7-GW-01-240-960327				566		7.76		105				11.8
		FPEB-7-GW-01-245-960327	96-19171											12.7

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 9 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)	Cl mg/L	Conductivity (Field) ^b	Conductivity (Lab) ^b	pH (Field) ^b	pH (Lab) ^b	SO ₄ (Field) ^b	SO ₄ (Lab) ^b	TDS ^b	Temp (Field) ^b	U _{nat} mg/L
FPEB-7	3/27/96	FPEB-7-GW-01-255-960327	96-19172	171		555		7.86		100			12.0	0.036
(continued)		FPEB-7-GW-01-260-960327				472		7.88					11.5	
		FPEB-7-GW-01-265-960327	96-19155			564		7.77		104			11.7	0.025
		FPEB-7-GW-01-270-960327				455		7.82					12.0	
		FPEB-7-GW-01-275-960327	96-19156	152		443		7.85		63			12.2	0.026
		FPEB-7-GW-01-280-960327				434		7.84					11.5	
		FPEB-7-GW-01-285-960327	96-19157			428		7.86		46			11.1	0.023
		FPEB-7-GW-01-290-960327				423		7.85					11.0	
		FPEB-7-GW-01-295-960327	96-19158	140 JE	13	435	412 JE	7.73	8.29 JE	61	52	272 JE	10.9	0.025
		FPEB-7-GW-01-300-960327				476		7.83					11.3	
		FPEB-7-GW-01-305-960327	96-19159			458		7.84		60			12.1	0.035
		FPEB-7-GW-01-310-960327				500		7.74					10.8	
		FPEB-7-GW-01-315-960327	96-19160	137		484		7.87		61			11.7	0.033
		FPEB-7-GW-01-320-960327				507		7.78					11.9	
		FPEB-7-GW-01-325-960327	96-19161			533		7.79		67			12.4	0.033
		FPEB-7-GW-01-330-960327				554		7.81					12.2	
		FPEB-7-GW-01-335-960327	96-19162	131	53.8 JE	585		7.83		65	67.3 JE		12.3	0.031
		FPEB-7-GW-01-340-960327				580		7.84					9.0	
		FPEB-7-GW-01-345-960327	96-19166			659		7.75		82			9.6	0.026
		FPEB-7-GW-01-350-960327				726		7.78					10.7	
		FPEB-7-GW-01-354-960327	96-19187	126		745		7.78		91			12.0	0.026
		FPEB-7-GW-01-360-960327				839		7.84					8.3	
		FPEB-7-GW-01-365-960327	96-19182			824		7.73		110			10.2	0.031
3/28/96		FPEB-7-GW-01-370-960328				875		7.93					7.9	
		FPEB-7-GW-01-375-960328	96-19183	122		1015		7.77		143			11.3	0.029
		FPEB-7-GW-01-380-960328				933		7.98					6.9	
		FPEB-7-GW-01-385-960328	96-19184			983		7.69		125			9.9	0.032
		FPEB-7-GW-01-390-960328				995		7.69					10.7	
		FPEB-7-GW-01-395-960328	96-19185	121		1661		7.71		256			12.4	0.050
		FPEB-7-GW-01-400-960328				1592		7.62					23.0	
		FPEB-7-GW-01-407-960328	96-19328			1654		7.96		464			16.9	0.009
		FPEB-7-GW-01-408-960328	96-19329			2240		8.20		489			17.3	<0.001

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 10 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)		Conductivity		Conductivity		pH (Field) ^b	pH (Lab) ^b	SO ₄ (Field) ^b	SO ₄ (Lab) ^b	TDS ^b	Temp (Field) ^b	U _{nat}
				mg/L	mg/L	(Field) ^b μS/cm	(Lab) ^b μS/cm	std.units	std.units	mg/L	mg/L	mg/L	mg/L	mg/L	°C	mg/L
FPEB-8	3/29/96	FPEB-8-GW-01-15-960329	96-19330	229		1101		8.02		318					7.3	0.080
		FPEB-8-GW-01-20-960329				1068		7.88							9.4	
		FPEB-8-GW-01-35-960329	96-19331	143		536		7.82		62					12.2	0.010
		FPEB-8-GW-01-55-960329	96-19324	160	20	547	443 JE	7.72	8.27 JE	39	39	305 JE			13.1	0.017
		FPEB-8-GW-01-75-960329	96-19332	109		1337		7.34		245					14.6	0.020
		FPEB-8-GW-01-95-960329	96-19333	136		531		7.80		50					15.4	0.013
		FPEB-8-GW-01-115-960329	96-19325	128	162 JE	961		7.67		120	115 JE				13.6	0.015
		FPEB-8-GW-02-115-960329	96-19326	129		996		7.70		124					13.5	0.015
		FPEB-8-GW-01-120-960329				1000		7.85							3.6	
FPEB-9	3/30/96	FPEB-9-GW-01-15-960330	96-19506	313	229	2380	2758 JE	8.27	8.23 JE	1014	861	1944 JE			9.6	0.184
		FPEB-9-GW-01-35-960330	96-19504	190		1964		7.92		520					10.7	0.120
		FPEB-9-GW-01-55-960330	96-19505	139		1514		7.73		293					11.4	0.028
		FPEB-9-GW-01-75-960330	96-19507			1452		7.76		269					10.0	0.019
		FPEB-9-GW-01-80-960330				997		8.04							11.7	
		FPEB-9-GW-01-85-960330				800		8.15							12.7	
		FPEB-9-GW-01-90-960330				1085		8.06							12.4	
		FPEB-9-GW-01-95-960330	96-19508	156	273 JE	1650		8.14		253	243 JE				8.4	0.033
		FPEB-9-GW-02-95-960330	96-19509	156		1695		8.01		255					11.5	0.034
		FPEB-9-GW-01-115-960330	96-19510	159		1472		7.86		212					13.8	0.031
		FPEB-9-GW-01-130-960330	96-19511		141	1207		8.09		173	147				5.3	0.049
		FPEB-9-GW-01-135-960330				563		8.30							7.2	
		FPEB-9-GW-01-140-960330				645		8.13							10.0	
		FPEB-9-GW-01-145-960330				555		8.18							9.6	
		FPEB-9-GW-01-150-960330				608		8.22							7.5	
3/31/96	3/31/96	FPEB-9-GW-01-155-960331				695		8.32							8.7	
		FPEB-9-GW-01-160-960331				716		8.27							6.5	
		FPEB-9-GW-01-165-960331				486		8.33							8.3	
		FPEB-9-GW-01-170-960331				462		8.46							9.2	
		FPEB-9-GW-01-175-960331				423		8.44							8.2	
		FPEB-9-GW-01-180-960331				411		8.50							7.7	
		FPEB-9-GW-01-185-960331	96-19512	148	29.1 JE	537		8.27		62 JZ	59.6 JE				13.2	0.022
		FPEB-9-GW-01-190-960331				534		8.54							8.8	
		FPEB-9-GW-01-195-960331				1263		8.37							3.9	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 11 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
FPEB-9	3/3/96	FPEB-9-GW-01-210-960331				642		8.21						8.2	
(continued)		FPEB-9-GW-01-215D-960331	96-19514	172 JE	208	493	1414 JE	8.63	8.37 JE	60	222	824 JE	7.1	0.054	
		FPEB-9-GW-02-215D-960331				1340		8.77		245				8.8	0.002
		FPEB-9-GW-01-225-960331	96-19515			1121		8.19		272				12.4	0.019
		FPEB-9-GW-01-230-960331				794		8.32						9.0	
		FPEB-9-GW-01-235-960331	96-19516	159		1338		7.77		265				11.5	0.024
		FPEB-9-GW-01-240-960331	96-19517			1288		8.08		225				12.5	0.028
FPEB-10	4/1/96	FPEB-10-GW-01-35-960401	96-19502			2300		8.19		538				9.4	0.071
		FPEB-10-GW-01-55-960401	96-19559	553	452	2020		7.89		557	467			10.8	0.043
		FPEB-10-GW-01-75-960401	96-19560	165		2610		7.55		431				12.1	0.015
		FPEB-10-GW-01-95-960401	96-19561	164	478	2590	2652 JE	7.68	8.39 JE	456	453	1540 JE		15.5	0.014
		FPEB-10-GW-01-100-960401				2630		7.92						13.8	
		FPEB-10-GW-01-115-960401	96-19562	163		2690		7.80		493				13.6	0.015
		FPEB-10-GW-01-135-960401	96-19563	163	457 JE	2590		7.82		467	427 JE			13.1	0.006
		FPEB-10-GW-01-155-960401	96-19564	167		2540		8.14		466				11.6	0.010
		FPEB-10-GW-02-155-960401	96-19565	169		2530		8.13		464				12.5	0.010
		FPEB-10-GW-01-160-960401				2520		7.99						12.6	
		FPEB-10-GW-01-165-960401	96-19566		409	2510		7.96		485	408			12.4	0.020
		FPEB-10-GW-01-175-960401	96-19567	169		2480		8.11		454				11.9	0.011
		FPEB-10-GW-01-180-960401				2360		7.95						11.5	
		FPEB-10-GW-01-195-960401	96-19568		329	2230		7.98		378	339			12.1	0.015
		FPEB-10-GW-01-200-960401				1116		8.18						10.0	
		FPEB-10-GW-01-205-960401				1330		8.01						13.4	
		FPEB-10-GW-01-210-960401				897		8.37						13.7	
		FPEB-10-GW-01-215-960401	96-19569	172	59.1 JE	730		8.43		88	80 JE			14.1	0.032
		FPEB-10-GW-01-220-960401				651		8.28						11.9	
		FPEB-10-GW-01-225-960401				562		8.34						11.8	
		FPEB-10-GW-01-230-960401				500		8.13						14.6	
		FPEB-10-GW-01-235-960401	96-19570	160		675		8.24		80				13.7	0.019
		FPEB-10-GW-01-240-960401				714		8.41						11.3	
		FPEB-10-GW-01-245-960401				393		8.25						12.6	
		FPEB-10-GW-01-250-960401				650		8.38						13.7	
		FPEB-10-GW-01-255-960401	96-19571	148	56.4 JE	680		8.84		74	76 JE			13.1	0.005

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 12 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
FPEB-10	4/2/96	FPEB-10-GW-01-260-960402				729		8.44						12.9
		FPEB-10-GW-01-265-960402				566		8.43						14.6
		FPEB-10-GW-01-270-960402				602		8.23						14.8
		FPEB-10-GW-01-275-960402	96-19572	163		693		8.54		80				12.7
		FPEB-10-GW-01-280-960402				753		8.37						10.9
		FPEB-10-GW-01-285-960402				766		8.69						11.4
		FPEB-10-GW-01-294-960402	96-19573	<1		750		8.69						12.6
		FPEB-10-GW-01-294-960402	96-19573	<1		750		8.69						0.012
FPEB-11	4/2/96	FPEB-11-GW-01-55-960402				374		8.05						10.1
		FPEB-11-GW-01-60-960402				286		8.12						8.3
		FPEB-11-GW-01-65-960402	96-19575	121		406		8.02		<10Z				9.4
		FPEB-11-GW-01-70-960402				477		8.15						10.0
		FPEB-11-GW-01-72-960402	96-19577	127	54	565	537 JE	7.98	8.3 JE	62	55	301 JE		11.3
		FPEB-11-GW-02-72-960402	96-19578	127	54	558	532 JE	8.05	8.35 JE	64	55	298 JE		13.1
		FPEB-11-GW-01-75-960402				431		8.19						7.2
		FPEB-11-GW-01-80-960402	96-19576		55	564		8.26		116	80			7.7
NWEB-1	2/20/96	NWEB-1-GW-01-20-960220	96-13723			3500		7.50		2890				10.2
		NWEB-1-GW-01-40-960221	96-13724	729 JE	168	4280	4200	7.30	7.41 JE	2241	1929	3935 JE		9.279
	2/21/96	NWEB-1-GW-02-40-960221	96-13725			4420		7.60		2304				11.0
		NWEB-1-GW-01-45-960221				4250		7.60						14.2
		NWEB-1-GW-01-50-960221				4430		7.70		2247				12.1
		NWEB-1-GW-01-55-960221				3350		7.50						14.2
		NWEB-1-GW-01-60-960221	96-13726	552	156 JE	3790		7.10	7.45	2099	1950 JE			11.1
		NWEB-1-GW-01-65-960221				2510		7.50						9.0
		NWEB-1-GW-01-70-960221				3730		7.30		2073				10.9
		NWEB-1-GW-01-75-960221				3060		7.60						10.5
		NWEB-1-GW-01-80-960221	96-13727		821	4890		7.60	7.51	2036				10.4
		NWEB-1-GW-01-85-960221				4160		7.70						9.8
		NWEB-1-GW-01-90-960221				4340		7.80		2310				10.0
		NWEB-1-GW-01-95-960221				4160		7.70						9.7
		NWEB-1-GW-01-100-960221	96-13728	692 JE	163	4520	3928	7.60	7.54 JE	2435	1893	3804 JE		6.293
		NWEB-1-GW-01-105-960221				4430		8.10						8.8
		NWEB-1-GW-01-110-960221				4370		7.80		2036				8.6

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 13 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
NWEB-1 (continued)	2/22/96	NWEB-1-GW-01-120-960222	96-13729	674		4460		7.50	7.72	1945			8.7	4.747
		NWEB-1-GW-01-125-960222				2610		7.50						8.2
		NWEB-1-GW-01-130-960222				4400		7.60		533				8.1
		NWEB-1-GW-01-135-960222				4400		7.60						8.4
		NWEB-1-GW-01-140-960222	96-13730	635	156 JE	4470		7.70	7.64	2008	2070 JE		8.5	4.395
		NWEB-1-GW-01-145-960222				4600		7.70						8.0
		NWEB-1-GW-01-150-960222				4520		7.70		2167				7.6
		NWEB-1-GW-01-155-960222	96-13731	587		4480		7.70	7.69					8.0
		NWEB-1-GW-01-160-960222				2830		7.60		2253				6.8
		NWEB-1-GW-01-165-960222				2180		7.71						7.4
		NWEB-1-GW-01-175-960222				3380		7.31						11.7
		NWEB-1-GW-01-180-960222	96-13732	605 JE	119	5210	4082	7.75	7.82 JE	2665	2107	4243 JE	10.5	3.318
		NWEB-1-GW-01-185-960222				5100		7.78						10.6
		NWEB-1-GW-01-190-960222				5130		7.79		2598				9.8
		NWEB-1-GW-01-195-960222				5000		7.78						9.8
		NWEB-1-GW-01-200-960222	96-13733	591	117 JE	5060		7.85	7.56	2448	2180 JE		9.8	3.375
		NWEB-1-GW-01-205-960222				4960		7.88						10.2
		NWEB-1-GW-01-210-960222				4800		7.81		2623				9.8
		NWEB-1-GW-01-215-960222				4070		7.73						10.0
		NWEB-1-GW-01-220-960222				1958		7.64						7.8
		NWEB-1-GW-01-225-960222				1590		7.95						8.2
		NWEB-1-GW-01-230-960222	96-13778	352	105 JE	3430		8.01	8.10	1133	1110 JE		9.6	1.306
		NWEB-1-GW-01-235-960222				3470		7.88						11.7
		NWEB-1-GW-01-240-960222				3540		7.82		1561				11.1
		NWEB-1-GW-01-245-960222				3920		7.83						11.0
		NWEB-1-GW-01-250-960222	96-13779	409		3820		7.76	8.03	1457				10.8
		NWEB-1-GW-01-255-960222				3740		7.84						11.0
		NWEB-1-GW-01-260-960222				3070		7.85		876				11.0
		NWEB-1-GW-01-265-960222				2890		7.90						9.0
		NWEB-1-GW-01-270-960222	96-13773	214	39.4 JE	2240		8.00	8.12	540	549 JE		10.5	0.621
		NWEB-1-GW-01-275-960222				2240		8.00						10.0
		NWEB-1-GW-01-280-960222				2140		7.80		430				9.5
		NWEB-1-GW-01-285-960222				1928		8.00						9.7

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 14 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b	Temp (Field) ^b °C	U _{nat} mg/L
NWEB-1	2/22/96	NWEB-1-GW-01-290-960222	96-13774	190	30 JE	1856		7.80	8.08	R	359		7.6	0.268
(continued)		NWEB-1-GW-01-300-960222	96-13777			1696		8.00		R	311		9.0	0.248
		NWEB-1-GW-01-305-960222				1626		8.00					9.4	
		NWEB-1-GW-02-310-960222	96-13776	150					8.16					0.277
		NWEB-1-GW-01-310-960222	96-13775	147		1763		7.90	8.07	R	328		9.0	0.276
		NWEB-1-GW-01-315-960222				1772		7.90					9.0	
		NWEB-1-GW-01-320-960222				1737		7.90			421		6.5	
		NWEB-1-GW-01-325-960222				1721		8.00					7.1	
NWEB-2	2/23/96	NWEB-2-GW-01-20-960223				6460		7.40					4.4	
		NWEB-2-GW-01-25-960223				6250		7.40					5.8	
		NWEB-2-GW-01-35-960223	96-13780	239 JE	134	4870	4900	7.10	7.88	2965	2504	4753 JE	4.5	0.648
		NWEB-2-GW-01-40-960223				5110		7.40					3.2	
		NWEB-2-GW-01-45-960223				3190		7.20		3029			5.8	
		NWEB-2-GW-01-50-960223				4240		7.70					6.0	
		NWEB-2-GW-01-55-960223	96-13781	258		4110		7.20	7.73	2454			6.0	0.452
		NWEB-2-GW-01-60-960223				5340		7.60					7.5	
		NWEB-2-GW-01-65-960223				5450		7.60		2800			8.0	
		NWEB-2-GW-01-70-960223				4280		7.60					7.8	
		NWEB-2-GW-01-75-960223	96-13782	237 JE	142	4370	4355	7.70	8.05	2421	2138	4317 JE	8.8	0.691
		NWEB-2-GW-01-80-960223				5080		7.90					8.4	
		NWEB-2-GW-01-85-960223				5130		7.60		2953			8.4	
		NWEB-2-GW-01-90-960223				5200		7.50					8.5	
		NWEB-2-GW-01-95-960223	96-13783	492		4540		7.50	7.97	2482			8.8	0.670
2/24/96		NWEB-2-GW-01-100-960224				4040		8.10					9.1	
		NWEB-2-GW-01-105-960224				3850		8.10		2182			9.5	
		NWEB-2-GW-01-110-960224				4020		8.00					7.2	
		NWEB-2-GW-01-115-960224				3940		7.90		2864			7.6	
		NWEB-2-GW-01-120-960224	96-13882	204	102	3800	3100	7.80	8.08		2150	3799 JE	10.9	0.020
		NWEB-2-GW-01-125-960224				3820		7.70		2613			10.3	
		NWEB-2-GW-01-130-960224				4120		7.90					9.9	
		NWEB-2-GW-01-135-960224				4140		7.60		2912			10.9	
		NWEB-2-GW-01-140-960224				3250		7.70		2833			11.1	
		NWEB-2-GW-01-160-960224				2630		7.60		2105			11.1	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 15 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)	Cl mg/L	Conductivity (Field) ^b	Conductivity (Lab) ^b	pH (Field) ^b	pH (Lab) ^b	SO ₄ (Field) ^b	SO ₄ (Lab) ^b	TDS ^b	Temp (Field) ^b	U _{nat} mg/L	
NWEB-2	2/24/96	NWEB-2-GW-01-165-960224				2380		7.80						10.2	
(continued)		NWEB-2-GW-01-170-960224				2750		7.80						10.2	
		NWEB-2-GW-01-175-960224	96-13883			3270		7.50		1409				10.5	0.177
		NWEB-2-GW-02-180-960224	96-13885	206					8.29					0.075	
		NWEB-2-GW-01-180-960224	96-13884	211		1203		8.10	8.26					10.7	0.078
		NWEB-2-GW-01-185-960224				1913		8.00		956				10.3	
		NWEB-2-GW-01-190-960224				1879		8.00						10.0	
		NWEB-2-GW-01-195-960224	96-13886	218		1423		8.10	8.27	938				10.2	0.126
		NWEB-2-GW-01-200-960224				1660		7.72						9.9	
		NWEB-2-GW-01-205-960224				1172		7.80						10.0	
		NWEB-2-GW-01-210-960224				1215		7.72						9.6	
		NWEB-2-GW-01-215-960224	96-13881	210	15.8 JE	1242		7.53	8.16	413	409 JE			10.0	0.130
		NWEB-2-GW-01-220-960224				935		7.73						5.2	
		NWEB-2-GW-01-225-960224				1200		7.81		454				10.6	
NWEB-3	2/25/96	NWEB-3-GW-01-35-960225	96-13889	358	148 JE	3740		7.90	7.93	2989	2090 JE			8.7	2.538
		NWEB-3-GW-01-40-960225				3790		7.70		3007				8.5	
		NWEB-3-GW-01-50-960225				2450		7.50						9.5	
		NWEB-3-GW-01-55-960225	96-13890	379	145	4000	3947 JE	7.70	7.94	3024	2025	3636 JE		9.2	2.361
		NWEB-3-GW-01-60-960225				3800		7.80						6.8	
		NWEB-3-GW-01-65-960225				4010		7.77		2793				7.3	
		NWEB-3-GW-01-70-960225				3860		7.76						7.4	
		NWEB-3-GW-01-75-960225	96-13891	407		3910		7.74	8.00	2814				7.8	2.223
		NWEB-3-GW-01-80-960225				3940		7.78						7.5	
		NWEB-3-GW-01-85-960225				3930		7.77		2453				8.1	
		NWEB-3-GW-01-90-960225				3980		7.77						8.2	
		NWEB-3-GW-01-95-960225	96-13892	429	124 JE	4200		7.67	7.94	2754	2040 JE			10.3	2.221
		NWEB-3-GW-01-100-960225				3880		7.68						8.2	
		NWEB-3-GW-01-105-960225				3920		7.72		2891				8.6	
		NWEB-3-GW-01-110-960225				3900		7.72						8.4	
		NWEB-3-GW-02-115-960225	96-13894	449		3960		7.52	7.97	2779				8.6	2.469
		NWEB-3-GW-01-115-960225	96-13893	445		3950		7.74	8.04	2804				8.5	2.423
		NWEB-3-GW-01-120-960225				4000		7.80						8.0	
		NWEB-3-GW-01-125-960225				4040		7.80		2758				7.9	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 16 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
NWEB-3	2/25/96	NWEB-3-GW-01-130-960225				4060		7.70						8.5
(continued)		NWEB-3-GW-01-135-960225	96-13887	394	135 JE	3880		7.40	8.04	2747	2170 JE			7.4
	2/26/96	NWEB-3-GW-01-140-960226				3940		7.70						7.8
		NWEB-3-GW-01-145-960226				3960		7.70		2814				8.0
		NWEB-3-GW-01-150-960226				4020		7.70						7.6
		NWEB-3-GW-01-155-960226	96-13888							2611				
		NWEB-3-GW-01-160-960226				3880		8.10						8.0
		NWEB-3-GW-01-165-960226				3950		8.10		2926				8.3
		NWEB-3-GW-01-170-960226				3930		7.90						7.7
		NWEB-3-GW-01-175-960226	96-13876	461	126 JE	3950		7.70	7.89	2888	2010 JE			8.3
		NWEB-3-GW-01-180-960226				3420		7.90						6.3
		NWEB-3-GW-01-185-960226				3170		8.10		2018				7.5
		NWEB-3-GW-01-190-960226				3330		8.00						8.1
		NWEB-3-GW-01-195-960226	96-13877	446	140 JE	3710		7.90	7.97	3084	2040 JE			6.2
		NWEB-3-GW-01-200-960226				3680		7.90						7.9
		NWEB-3-GW-01-205-960226				3690		7.80		2491				8.4
		NWEB-3-GW-01-210-960226				3750		7.90						8.0
		NWEB-3-GW-01-215-960226	96-13878	438		3790		8.00	7.98	2642				8.0
		NWEB-3-GW-01-220-960226				3770		7.70						8.6
		NWEB-3-GW-01-225-960226				3690		7.80		2726				8.8
		NWEB-3-GW-01-230-960226				3690		7.70						8.5
		NWEB-3-GW-01-235-960226	96-13880	422	119 JE	3600		7.90	7.94	2772	1810 JE			8.0
		NWEB-3-GW-01-240-960226				3570		8.00						7.6
		NWEB-3-GW-01-245-960226				3920		7.90						7.4
		NWEB-3-GW-01-250-960226				3910		8.00		2705				7.4
		NWEB-3-GW-01-255-960226	96-13875	446	103 JE	3800		7.60	7.82	2832	1820 JE			7.4
	3/5/96	NWEB-3-GW-01-260-960305				3620		7.80						9.0
		NWEB-3-GW-01-265-960305				3690		7.84		2047				8.8
		NWEB-3-GW-01-270-960305				3620		7.83						8.8
		NWEB-3-GW-01-275-960305	96-18112	453	133	3710	3744	7.56	7.80	1861	1783	3548 JE		7.8
		NWEB-3-GW-01-280-960305				3640		7.73						8.2
		NWEB-3-GW-01-285-960305	96-18113			3730		7.78		2047				9.4
		NWEB-3-GW-01-290-960305				3580		7.85						9.0

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 17 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
NWEB-3	3/5/96	NWEB-3-GW-01-295-960305	96-18114	439		3420		7.90	7.96	1977			9.1	2.293
(continued)		NWEB-3-GW-01-300-960305				3340		7.79					9.0	
		NWEB-3-GW-01-305-960305	96-18115			1880		7.87		3241			10.3	0.954
		NWEB-3-GW-01-310-960305				1933		8.14					9.1	
		NWEB-3-GW-01-315-960305	96-18116	265		2020		8.02	8.17	587			8.6	0.844
		NWEB-3-GW-01-320-960305				1936		7.93					8.6	
		NWEB-3-GW-01-325-960305	96-18117			1720		7.82		579			8.4	0.699
		NWEB-3-GW-01-330-960305				1695		8.16					8.7	
		NWEB-3-GW-01-335-960305	96-18118	217	38.4 JE	1672		8.15	8.18	544	511 JE		8.3	0.674
		NWEB-3-GW-01-340-960305				1218		8.10					8.4	
		NWEB-3-GW-01-345-960305	96-18119			1046		8.13		273			8.6	0.228
		NWEB-3-GW-01-350-960305				930		8.39					8.9	
		NWEB-3-GW-01-355-960305		123		936		8.26	8.26	205			9.0	0.077
		NWEB-3-GW-01-360-960305				1471		8.00					9.5	
		NWEB-3-GW-01-365-960305	96-18120			1659		7.94		666			6.4	0.476
		NWEB-3-GW-01-370-960305				2100		7.84					7.1	
		NWEB-3-GW-01-375-960305	96-18121	245	116 JE	1949		7.67	8.08	1345	1060 JE		5.9	0.488
		NWEB-3-GW-01-380-960305				2760		7.64					8.2	
		NWEB-3-GW-01-385-960305	96-18122			1566		8.07		396			4.2	0.056
SEB-1	9/16/96	SEB-1-GW-01-55-960916	96-53733	126	6	412		7.22		65	46		13.8	0.031
		SEB-1-GW-01-75-960916	96-53734	124	3	369		7.43		70	40		16.5	0.017
		SEB-1-GW-01-115-960916	96-53735	143	3	414		7.69		50	38		15.1	0.024
		SEB-1-GW-01-135-960916	96-53736	149	3	402		7.82		57	37		14.1	0.024
		SEB-1-GW-01-155-960916	96-53737	154	4	400	359 JE	7.89	8.3 JE	55	37	211 JE	14.6	0.024
		SEB-1-GW-01-175-960916	96-53738	156	3	403		7.98		58	38		13.0	0.031
		SEB-1-GW-01-195-960916	96-53739	153	3	405		8.03		58	37		12.7	0.030
		SEB-1-GW-01-215-960916	96-53740	156	3	405		7.90		60	39		12.7	0.032
		SEB-1-GW-01-235-960917	96-53741	154	3						38			0.038
SWEB-1	4/3/96	SWEB-1-GW-01-35-960403	96-19744			2260		6.97		2070			10.9	2.406
		SWEB-1-GW-01-55-960403	96-19745	734 JE	148	5110	5050 JE	7.38	7.88 JE	3433	2730	4535 JE	11.3	5.043
		SWEB-1-GW-01-65-960403	96-19746			4320		7.24		2720			10.3	2.916
		SWEB-1-GW-01-70-960403				4210		7.35					10.5	
		SWEB-1-GW-01-75-960403	96-19747	573	159	4380		7.66		2965	2260		10.4	3.532

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 18 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-1	4/3/96	SWEB-1-GW-01-80-960403				4090		7.26						8.6	
(continued)		SWEB-1-GW-01-85-960403	96-19748			4060		7.46		2972				8.5	4.914
		SWEB-1-GW-01-90-960403				4120		7.31						9.5	
		SWEB-1-GW-01-95-960403	96-19749	583		4200		7.58		2677				10.6	4.856
		SWEB-1-GW-01-100-960403				3780		7.23						4.6	
		SWEB-1-GW-01-105-960403				2220		7.18						6.2	
		SWEB-1-GW-01-110-960403				2290		7.20						5.7	
		SWEB-1-GW-01-115-960403	96-19750	669	147	4270		7.00		2181	2160			9.9	4.914
		SWEB-1-GW-01-120-960403				4340		7.36						6.9	
		SWEB-1-GW-01-125-960403				4600		7.48						5.1	
		SWEB-1-GW-01-130-960403				4420		7.53						5.9	
		SWEB-1-GW-01-135-960403	96-19751	687		4220		6.98		2106				7.4	3.659
		SWEB-1-GW-01-140-960403				1686		6.90						5.7	
		SWEB-1-GW-01-145-960403				2040		7.15						5.2	
		SWEB-1-GW-01-150-960403				4100		7.29						6.0	
		SWEB-1-GW-01-155-960403	96-19752	634	151	4170		7.06		2448	2450			7.2	3.875
		SWEB-1-GW-01-160-960403				2360		7.13						7.5	
		SWEB-1-GW-01-165-960403				1818		7.08						6.0	
		SWEB-1-GW-01-170-960403				1972		7.08						5.2	
		SWEB-1-GW-01-175-960403	96-19753	887		4040		7.44		1892				8.3	5.359
		SWEB-1-GW-01-180-960403				3940		7.26						7.8	
4/4/96		SWEB-1-GW-01-185-960404				4520		7.32						7.7	
		SWEB-1-GW-01-190-960404				4200		7.31						8.3	
		SWEB-1-GW-01-195-960404	96-19754	569 JE	166	4620	4616 JE	7.31	7.95 JE	2410	2363	3758 JE		7.5	5.226
		SWEB-1-GW-01-200-960404				3920		7.14						7.8	
		SWEB-1-GW-01-205-960404				2510		7.01						7.9	
		SWEB-1-GW-01-210-960404				2190		7.03						8.6	
		SWEB-1-GW-01-215-960404				1556		6.81						7.4	
		SWEB-1-GW-01-220-960404	96-19755	203		2310		7.29		621				7.1	0.729
		SWEB-1-GW-01-225-960404				2170		6.78						8.6	
		SWEB-1-GW-01-230-960404				1371		7.54						9.5	
		SWEB-1-GW-01-235-960404	96-19756	362		3280		7.01		1763				10.5	4.101
		SWEB-1-GW-01-240-960404				2530		7.24						10.6	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 19 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
SWEB-1	4/4/96	SWEB-1-GW-01-245-960404	96-19758			2140		6.89		3875			11.4	4.140
(continued)		SWEB-1-GW-01-250-960404				1442		7.11						14.0
		SWEB-1-GW-01-255-960404	96-19759	514	137	4150		6.90		2425	2220		11.6	5.494
		SWEB-1-GW-01-260-960404				2320		7.15						10.5
		SWEB-1-GW-01-265-960404	96-19760			2250		7.02		2131			11.0	4.972
		SWEB-1-GW-01-270-960404				1894		7.00						11.7
		SWEB-1-GW-01-275-960404	96-19761	583	140	4050		7.25		2323	2150		11.1	5.243
		SWEB-1-GW-02-275-960404	96-19762	583										5.010
		SWEB-1-GW-01-280-960404				2980		7.11						8.8
		SWEB-1-GW-01-285-960404	96-19763			3260		7.23		2059			8.9	2.105
		SWEB-1-GW-01-290-960404				2960		7.14						9.3
		SWEB-1-GW-01-295-960404	96-19764	546	146	4270		7.19		2252	2390		8.7	4.798
		SWEB-1-GW-01-300-960404				2810		7.50						8.6
		SWEB-1-GW-01-305-960404	96-19765			3350		7.26		1804			9.2	3.045
		SWEB-1-GW-01-310-960404				3690		7.20						8.8
		SWEB-1-GW-01-315-960404	96-19766	222	49	1546		7.59		777	637		8.5	1.336
		SWEB-1-GW-01-320-960404				875		8.14						7.4
		SWEB-1-GW-01-325-960404	96-19767			829		7.86		227			8.0	0.363
		SWEB-1-GW-01-330-960404				3210		7.15						9.6
		SWEB-1-GW-01-335-960404	96-19768	448		2940		7.26		1394			9.2	2.233
		SWEB-1-GW-01-340-960404				844		7.83						8.3
		SWEB-1-GW-01-344-960404	96-19769											1.135
4/5/96		SWEB-1-GW-01-344-960405				1839		7.71		396			11.6	
		SWEB-1-GW-01-345-960405	96-24559		34	1854		7.52		433	381		13.8	1.200
		SWEB-1-GW-01-350-960405				2360		7.63						13.9
		SWEB-1-GW-01-355-960405	96-24560	450		2070		7.60		510			16.1	1.329
		SWEB-1-GW-01-360-960405				2840		7.47						12.8
		SWEB-1-GW-01-365-960405	96-24561			3670		7.18		1712			11.9	3.560
		SWEB-1-GW-01-370-960405				2310		7.35						12.1
		SWEB-1-GW-01-375-960405	96-24564	171	48	1378		7.48		307	290		14.8	0.162
		SWEB-1-GW-01-380-960405				1432		7.59						14.2
		SWEB-1-GW-01-387-960405	96-24562			1206		7.80		325			14.4	0.122
		SWEB-1-GW-01-390-960405				1266		7.67						14.0

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 21 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-2 (continued)	4/6/96	SWEB-2-GW-01-185-960406				3030		7.21						9.4	
		SWEB-2-GW-01-190-960406				3960		7.27						9.9	
	4/7/96	SWEB-2-GW-01-195-960407	96-24578	740		3630		6.69		372				11.5	1.851
		SWEB-2-GW-01-200-960407				1326		6.92						10.1	
		SWEB-2-GW-01-205-960407						7.24						11.4	
		SWEB-2-GW-01-210-960407				2190		7.16						10.6	
		SWEB-2-GW-01-215-960407	96-24579	80		709		7.89		50 JZ				9.8	0.035
		SWEB-2-GW-01-220-960407				2260		7.18						9.1	
		SWEB-2-GW-01-225-960407				2200		7.12						9.8	
		SWEB-2-GW-01-230-960407				1374		7.42						10.2	
		SWEB-2-GW-01-235-960407	96-24580	482	80	3800		6.92		2281	1760			9.2	3.891
		SWEB-2-GW-01-240-960407				2910		7.33						9.6	
		SWEB-2-GW-01-255-960407	96-24581	112		879		7.90		2023				11.4	0.245
		SWEB-2-GW-02-255-960407	96-24582	112										0.237	
		SWEB-2-GW-01-260-960407				3480		7.49						10.4	
		SWEB-2-GW-01-265-960407	96-24583		67	3230		7.53		2074	1440			10.6	2.234
		SWEB-2-GW-01-270-960407	96-24584	743		3670		7.70		1973				10.4	2.693
		SWEB-2-GW-01-275-960407				2780		7.12						11.6	
		SWEB-2-GW-01-280-960407				3740		7.54						11.0	
		SWEB-2-GW-01-285-960407	96-24585		86	3580		7.58		1962	1710			11.0	2.642
		SWEB-2-GW-01-290-960407				2800		7.58						10.9	
		SWEB-2-GW-01-295-960407	96-24586	744 JE	98	3550	3435 JE	7.55	7.94 JE	2079	1650	3192 JE		10.9	2.531
		SWEB-2-GW-01-300-960407				3600		7.64						10.8	
		SWEB-2-GW-01-305-960407	96-24587			3510		7.49		1934	1350			11.0	2.160
		SWEB-2-GW-01-310-960407				3420		7.48						11.1	
		SWEB-2-GW-01-315-960407	96-24588	665		3170		7.55		1643				11.7	1.870
		SWEB-2-GW-01-320-960407				2760		7.51						11.6	
		SWEB-2-GW-01-325-960407	96-24589			3020		7.46		1540	1266			11.6	1.919
		SWEB-2-GW-01-330-960407				1945		7.09						12.2	
		SWEB-2-GW-01-335-960407	96-24589	280		2740		7.27		1566				17.2	1.409
		SWEB-2-GW-01-355-960407	96-24591	138		526		7.97		82 JZ				14.8	0.059
		SWEB-2-GW-01-360-960407				594		7.80						14.2	
		SWEB-2-GW-01-365-960407	96-24592			522		8.00		83 JZ				13.9	0.016

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 23 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)	Cl mg/L	Conductivity (Field) ^b	Conductivity (Lab) ^b	pH (Field) ^b	pH (Lab) ^b	SO ₄ (Field) ^b	SO ₄ (Lab) ^b	TDS ^b	Temp (Field) ^b	U _{nat}
				mg/L	µS/cm	µS/cm	std.units	std.units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
SWEB-3	4/16/96	SWEB-3-GW-01-175-960416	96-25063		124	2390		7.07		3440			11.9	1.678
(continued)		SWEB-3-GW-01-180-960416				2260		7.00						16.2
		SWEB-3-GW-01-185-960416				2080		7.02						14.0
		SWEB-3-GW-01-190-960416				3100		7.19		1652				15.0
		SWEB-3-GW-01-195-960416	96-25064	309	114	2300		6.98		2874	3010		12.8	3.655
		SWEB-3-GW-01-200-960416				1990		6.84						14.2
		SWEB-3-GW-01-205-960416				1870		6.94						13.1
		SWEB-3-GW-01-210-960416				2050		7.03						14.0
	4/17/96	SWEB-3-GW-01-215-960417	96-25065	245		1790		7.02		2104			12.3	0.694
		SWEB-3-GW-01-220-960417				3300		7.87						9.0
		SWEB-3-GW-01-225-960417				3850		7.73		1205				8.9
		SWEB-3-GW-01-230-960417				3600		7.57						9.3
		SWEB-3-GW-01-235-960417	96-25066	555	82	3310	3750 JE	7.39	7.99	1826	1860	3340 JE	10.1	3.670
		SWEB-3-GW-01-240-960417				3930		7.68						11.1
SWEB-4	5/29/96	SWEB-4-GW-01-35-960529	96-30556	244	29	1125		7.22		660	488		18.4	0.459
		SWEB-4-GW-01-40-960529				1359		7.63						15.0
	5/30/96	SWEB-4-GW-01-55-960530	96-30551	341	52	2740		6.72		2103	1610		9.6	0.376
		SWEB-4-GW-01-60-960530				2540		7.56						9.9
		SWEB-4-GW-01-75-960530	96-30552	531	82	3590	3390 JE	7.48	7.68	2968	1860	3750 JE	10.9	0.751
		SWEB-4-GW-01-80-960530				3510		7.57						11.6
		SWEB-4-GW-01-85-960530				3480		7.48						11.6
		SWEB-4-GW-01-90-960530				3590		7.62						11.1
		SWEB-4-GW-01-95-960530	96-30553	548	105	3490		7.66		2110	2010		12.4	0.945
		SWEB-4-GW-01-100-960530				3300		7.64						12.3
		SWEB-4-GW-01-105-960530				3410		7.70						12.2
		SWEB-4-GW-01-110-960530				3540		7.93						11.3
		SWEB-4-GW-01-115-960530	96-30554	498	84	3530		7.62		2092	1720		11.4	0.767
		SWEB-4-GW-01-120-960530				3360		7.46						13.2
		SWEB-4-GW-01-135-960530	96-30555	387	61	2490	2430 JE	7.72	7.85	1830	972	2550 JE	13.2	0.753
		SWEB-4-GW-01-140-960530				3120		7.12						14.8
SWEB-5	5/31/96	SWEB-5-GW-01-35-960531				1211		7.56						14.1
		SWEB-5-GW-01-55-960531	96-30799	126	7	436		7.87		136	55		13.6	0.062
		SWEB-5-GW-01-60-960531				787		7.60						15.0

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 24 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
SWEB-5	5/31/96	SWEB-5-GW-01-70-960531				427		8.06						16.1
(continued)		SWEB-5-GW-01-75-960531	96-30800	132	7	430	413 JE	8.21	8.15	367	50	290 JE	14.2	0.031
		SWEB-5-GW-01-80-960531				431		8.08						14.8
		SWEB-5-GW-01-95-960531	96-30801	163	11	767		7.91		135	134		14.0	0.090
		SWEB-5-GW-01-100-960531				720		7.62						15.0
		SWEB-5-GW-01-105-960531				833		7.85						13.7
		SWEB-5-GW-01-110-960531				913		8.07						12.8
		SWEB-5-GW-01-115-960531	96-30802	180	14	824		7.99		281	147		12.5	0.191
		SWEB-5-GW-01-120-960531				929		7.83						13.7
		SWEB-5-GW-01-125-960531				606		7.96						13.6
		SWEB-5-GW-01-130-960531				862		8.00						13.2
		SWEB-5-GW-01-135-960531	96-30803	206	16	956		8.19		407	164		13.0	0.304
		SWEB-5-GW-02-135-960531	96-30804	205										0.282
		SWEB-5-GW-01-140-960531				989		7.91						13.4
		SWEB-5-GW-01-145-960531				836		8.02						12.7
		SWEB-5-GW-01-150-960531				910		7.98						12.5
6/1/96	SWEB-5-GW-01-155-960531	96-30805	272	26	1055		8.00		724	272			12.6	0.528
		SWEB-5-GW-01-160-960531			961		7.48							13.6
		SWEB-5-GW-01-175-960531	96-30806	302	28	1555		7.97		1014	346			13.3
		SWEB-5-GW-01-180-960531			1567		7.66							12.4
		SWEB-5-GW-01-195-960601	96-30809	393	44.9QCR	2010	1950 JE	7.14	7.77	938	616QCR	1700 JE	10.7	1.670
		SWEB-5-GW-01-200-960601				1927		7.28						10.7
		SWEB-5-GW-01-205-960601				1892		7.36						10.5
SWEB-6	6/4/96	SWEB-5-GW-01-210-960601				1538		7.35						10.2
		SWEB-5-GW-01-215-960601	96-30810	318	32	1479		7.80		563	338		10.4	0.717
		SWEB-5-GW-01-220-960601				1674		7.24						12.1
		SWEB-5-GW-01-235-960601	96-30811	140	47	651		7.42		268	110			13.3
		SWEB-6-GW-01-55-960604	96-30793	173	31	1065	955 JE	7.64	8.05	379	329	766 JE	14.0	0.188
		SWEB-6-GW-01-60-960604				1091		7.70						17.6
		SWEB-6-GW-01-75-960604				592		7.76		77				21.1
		SWEB-6-GW-01-80-960604				500		7.85						20.9
		SWEB-6-GW-01-85-960604				579		7.91						20.8
		SWEB-6-GW-01-95-960604	96-30794	182	10	567		7.96		80	100			13.7
														0.043

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 25 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)	Cl mg/L	Conductivity (Field) ^b	Conductivity (Lab) ^b	pH (Field) ^b	pH (Lab) ^b	SO ₄ (Field) ^b	SO ₄ (Lab) ^b	TDS ^b	Temp (Field) ^b	U _{nat} mg/L	
				mg/L	µS/cm	µS/cm	µS/cm	std.units	std.units	mg/L	mg/L	mg/L	°C		
SWEB-6	6/4/96	SWEB-6-GW-01-100-960604				574		7.75						16.1	
(continued)		SWEB-6-GW-01-105-960604				554		7.75						15.6	
		SWEB-6-GW-01-110-960604				533		7.84						17.2	
		SWEB-6-GW-01-115-960604				517		7.88		56				19.4	
		SWEB-6-GW-01-120-960604				472		7.89						20.1	
		SWEB-6-GW-01-135-960604	96-30795	172	6	461		8.13		58	53			13.7	0.019
		SWEB-6-GW-01-140-960604				480		7.70						14.8	
		SWEB-6-GW-01-145-960604				503		7.79						13.3	
		SWEB-6-GW-01-150-960604				466		7.88						14.3	
		SWEB-6-GW-01-155-960604	96-30796	173		466		8.01		59				13.7	0.021
		SWEB-6-GW-01-160-960604				455		7.82						14.5	
6/5/96		SWEB-6-GW-01-165-960604				467		7.92						13.5	
		SWEB-6-GW-01-170-960604				482		8.04						12.4	
		SWEB-6-GW-01-175-960604	96-30797	177	5	481	453 JE	8.07	8.10	48	52	304 JE		13.2	0.023
		SWEB-6-GW-01-180-960604				474		7.87						14.7	
		SWEB-6-GW-01-185-960604				473		7.86						14.5	
		SWEB-6-GW-01-190-960604				467		7.91						16.2	
		SWEB-6-GW-01-195-960604	96-30798	181		471		8.01		54				13.8	0.022
		SWEB-6-GW-01-200-960604				472		7.87						12.8	
		SWEB-6-GW-01-205-960604				474		7.95						13.4	
		SWEB-6-GW-01-210-960604				473		7.96						13.6	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 26 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)		Conductivity (Field) ^b	Conductivity (Lab) ^b	pH (Field) ^b	pH (Lab) ^b	SO ₄ (Field) ^b	SO ₄ (Lab) ^b	TDS ^b	Temp (Field) ^b	U _{nat} mg/L
				mg/L	mg/L	µS/cm	µS/cm	std.units	std.units	mg/L	mg/L	mg/L	°C	
SWEB-6	6/5/96	SWEB-6-GW-01-275-960605	96-34810	167	12	481		8.02		60	55		12.5	0.018
(continued)		SWEB-6-GW-02-275-960605	96-34811	166		481		8.02		60			12.5	0.025
		SWEB-6-GW-01-280-960605				476		7.99					13.3	
		SWEB-6-GW-01-285-960605				474		7.89					13.8	
		SWEB-6-GW-01-290-960605				463		7.93					13.9	
		SWEB-6-GW-01-295-960605	96-34812	131		418		7.77		51			14.1	0.017
		SWEB-6-GW-01-300-960605				463		8.01					13.0	
		SWEB-6-GW-01-305-960605				470		8.09					12.9	
		SWEB-6-GW-01-310-960605				465		8.08					12.7	
		SWEB-6-GW-01-315-960605	96-34813	164	10	467		8.07		61	48		12.3	0.024
		SWEB-6-GW-01-320-960605				462		7.99					17.9	
		SWEB-6-GW-01-325-960605				461		7.89					18.6	
		SWEB-6-GW-01-330-960605				460		7.95					13.6	
		SWEB-6-GW-01-335-960605	96-34814	164		470		7.89		60			13.6	0.022
		SWEB-6-GW-01-340-960605				466		7.79					15.3	
		SWEB-6-GW-01-345-960605				468		7.84					15.4	
		SWEB-6-GW-01-350-960605				480		7.97					13.8	
		SWEB-6-GW-01-355-960605	96-34815	155	99	490		8.01		69	51		13.3	0.023
6/6/96		SWEB-6-GW-01-360-960606				508		7.92					12.2	
		SWEB-6-GW-01-365-960606				501		8.03					12.1	
		SWEB-6-GW-01-370-960606				489		8.14					11.5	
		SWEB-6-GW-01-375-960606	96-34817	164		507		7.96		69			11.5	0.024
		SWEB-6-GW-01-380-960606				510		8.03					13.0	
		SWEB-6-GW-01-385-960606				652		7.96					13.8	
		SWEB-6-GW-01-390-960606				529		8.05					12.8	
		SWEB-6-GW-01-395-960606	96-34818	156	50	608		7.98		75	62		12.9	0.024
		SWEB-6-GW-01-400-960606				571		8.09					16.3	
		SWEB-6-GW-01-405-960606				654		8.07					16.6	
		SWEB-6-GW-01-408-960606				852		8.21					17.8	
SWEB-7	6/26/96	SWEB-7-GW-01-30-960626	96-35933	209	28	1096	1119	7.82	7.34	380	328	881	16.9	0.592
		SWEB-7-GW-01-35-960626				375		7.95					23.1	
		SWEB-7-GW-01-40-960626				883		7.68					20.0	
		SWEB-7-GW-01-45-960626				790		7.81					18.8	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 27 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃)		Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
				mg/L	Cl mg/L									
SWEB-7 (continued)	6/26/96	SWEB-7-GW-01-55-960626	96-35934	148	8	463	426	8.14	7.48	72	55	290	12.9	0.033
		SWEB-7-GW-01-60-960626				457			7.86				21.3	
		SWEB-7-GW-01-65-960626				472			7.80				21.1	
		SWEB-7-GW-01-75-960626	96-35935	149	11	462	416	8.04	7.48	57	52	289	16.5	0.031
		SWEB-7-GW-01-80-960626				467			8.00				18.9	
		SWEB-7-GW-01-85-960626				492			8.00				18.2	
		SWEB-7-GW-01-91-960626	96-35936	158	11	501	539	8.01	7.41	112	95	374	19.9	0.110
		SWEB-7-GW-02-91-960626	96-35937	156	12		534		7.45		96	380		0.111
SWEB-8	7/21/96	SWEB-8-GW-01-55-960721	96-41875	165		791		7.42		327			16.3	0.011
		SWEB-8-GW-01-75-960722	96-41876	117	30	815	841 JE	7.14	8.08 JE	293	273	565 JE	14.1	0.017
		SWEB-8-GW-01-85-960722				849			7.39				12.5	
		SWEB-8-GW-01-95-960722				881			7.78				12.7	
		SWEB-8-GW-01-110-960722				987			7.66				13.2	
		SWEB-8-GW-01-115-960722	96-41877	230		1027			7.81		443		12.3	0.112
		SWEB-8-GW-02-115-960722	96-41878	220										0.098
		SWEB-8-GW-01-120-960722				1035			7.64				13.6	
		SWEB-8-GW-01-125-960722				944			7.67				14.1	
		SWEB-8-GW-01-135-960722	96-41879	179		738			7.74		211		13.8	0.048
		SWEB-8-GW-01-140-960722				805			7.56				13.3	
		SWEB-8-GW-01-145-960722				678			7.69				13.1	
		SWEB-8-GW-01-150-960722				615			7.74				13.6	
		SWEB-8-GW-01-155-960722	96-41880	140		528			7.85		60		14.6	0.014
		SWEB-8-GW-01-160-960722				541			7.73				13.3	
		SWEB-8-GW-01-165-960722				552			7.80				12.7	
		SWEB-8-GW-01-170-960722				529			7.83				12.3	
		SWEB-8-GW-01-175-960722	96-41881	136		531			7.82		69		12.8	0.016
		SWEB-8-GW-01-180-960722				522			7.49				20.2	
		SWEB-8-GW-01-185-960722				527			7.52				22.4	
		SWEB-8-GW-01-195-960722				566			7.73				23.1	
SWEB-9	7/24/96	SWEB-9-GW-01-55-960724	96-42317	166	25	996		7.38		362	289		18.8	0.164
		SWEB-9-GW-01-60-960724				1024			7.74				23.4	
		SWEB-9-GW-01-65-960724				1052			7.94				20.3	
		SWEB-9-GW-01-75-960724	96-42318	217	38	1525	1480 JE	7.57	8.03 JE	786	590	1290 JE	21.9	0.440

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

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 (Page 28 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-9 (continued)	7/24/96	SWEB-9-GW-01-80-960724				1522		7.76						22.8	
		SWEB-9-GW-01-85-960724				1510		7.79						21.1	
		SWEB-9-GW-01-90-960724				1580		7.83						26.0	
		SWEB-9-GW-01-95-960724	96-42319	266	32	1473		7.83		726	549			19.7	0.578
		SWEB-9-GW-01-100-960724				1448		7.60						18.1	
		SWEB-9-GW-01-105-960724				1340		7.70		533				16.6	
		SWEB-9-GW-01-110-960724				1303		7.75						15.8	
		SWEB-9-GW-01-115-960724				1296		7.76		599				18.2	
		SWEB-9-GW-01-120-960724				1574		7.61						21.0	
		SWEB-9-GW-01-125-960724				1579		7.71						19.9	
		SWEB-9-GW-01-130-960724				1567		7.78						19.5	
		SWEB-9-GW-01-135-960724	96-42320	154	8	1407		7.92		630	112			17.9	0.058
		SWEB-9-GW-01-140-960724				498		7.86						16.8	
		SWEB-9-GW-01-145-960724				497		7.89		88				17.7	
		SWEB-9-GW-01-150-960724				515		7.60						20.2	
		SWEB-9-GW-01-155-960724	96-42321	146	6	542		7.80		75	62			18.9	0.029
		SWEB-9-GW-01-160-960724				462		7.82						18.3	
	7/25/96	SWEB-9-GW-01-175-960725	96-42322	197	13	830		7.63		250	202			12.9	0.023
		SWEB-9-GW-01-180-960725				679		7.41						12.2	
		SWEB-9-GW-01-185-960725				645		7.69						11.4	
		SWEB-9-GW-01-190-960725				665		7.77						11.4	
		SWEB-9-GW-01-195-960725	96-42324	197	13	689	693 JE	7.79	8.14 JE	219	205	523 JE		11.5	0.164
		SWEB-9-GW-02-195-960725	96-42323	199										0.150	
		SWEB-9-GW-01-200-960725				791		8.01						13.7	
		SWEB-9-GW-01-205-960725				803		7.97						14.3	
		SWEB-9-GW-01-210-960725				756		7.76						19.2	
		SWEB-9-GW-01-215-960725	96-42325	171	13	719		7.88		161	128			19.7	0.042
		SWEB-9-GW-01-220-960725				660		7.78						19.2	
		SWEB-9-GW-01-225-960725				647		7.88						20.0	
		SWEB-9-GW-01-230-960725				611		8.01						23.2	
		SWEB-9-GW-01-235-960725	96-42306	174		646		7.83	7.82 JE	103				20.9	0.034
		SWEB-9-GW-01-240-960725				674		7.91						12.6	

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 29 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
SWEB-9 (continued)	7/25/96	SWEB-9-GW-01-245-960725	96-42307	161		609		8.10						13.1
		SWEB-9-GW-01-250-960725				602		8.06						13.9
		SWEB-9-GW-01-255-960725				598		8.04	7.7 JE	119				13.7 0.031
		SWEB-9-GW-01-260-960725				583		7.84						12.8
		SWEB-9-GW-01-265-960725				598		7.89						12.6
		SWEB-9-GW-01-270-960725				676		7.99						11.7
		SWEB-9-GW-01-275-960725				665		7.90	7.71 JE	166				12.8 0.056
SWEB-9	7/26/96	SWEB-9-GW-01-280-960726	96-42309	184		667		7.76						12.4
		SWEB-9-GW-01-285-960726				785		7.79						11.8
		SWEB-9-GW-01-290-960726				714		7.95						11.5
		SWEB-9-GW-01-295-960726				741		8.08	7.82 JE	221				11.4 0.111
		SWEB-9-GW-01-300-960726				683		7.86						11.5
		SWEB-9-GW-01-305-960726				673		8.14						11.9
		SWEB-9-GW-01-310-960726				715		8.13						12.3
		SWEB-9-GW-01-315-960726				697		8.09	7.81 JE	153				12.2 0.075
		SWEB-9-GW-01-320-960726				659		8.03						14.5
		SWEB-9-GW-01-325-960726				751		8.01						13.5
		SWEB-9-GW-01-330-960726				739		8.14						14.1
		SWEB-9-GW-01-335-960726				665		8.07	7.79 JE	156				14.3 0.072
		SWEB-9-GW-01-340-960726				763		8.08						14.8
SWEB-9	7/27/96	SWEB-9-GW-01-345-960726	96-42311	179		698		8.11						13.3
		SWEB-9-GW-01-350-960726				660		8.13						12.7
		SWEB-9-GW-01-355-960726				690		8.16	7.81 JE	160				12.6 0.059
		SWEB-9-GW-01-360-960727				780		7.70						13.7
		SWEB-9-GW-01-365-960727				745		7.79						13.2
		SWEB-9-GW-01-370-960727				747		7.84						13.1
		SWEB-9-GW-01-375-960727				729		7.88	7.82 JE	174				14.5 0.077
		SWEB-9-GW-01-380-960727				734		7.87						15.9
SWEB-9	7/28/96	SWEB-9-GW-01-385-960727	96-42313	176		722		7.89						18.0
		SWEB-9-GW-01-390-960727				739		7.93						16.1
		SWEB-9-GW-01-395-960727				752		7.93	7.87 JE	206				17.4 0.094
		SWEB-9-GW-01-400-960727				662		7.65						16.8
		SWEB-9-GW-01-405-960727				783		7.65						16.2

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 30 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-9	7/27/96	SWEB-9-GW-01-410-960727				729		7.82						16.4	
(continued)		SWEB-9-GW-01-415-960727	96-42315	176		689		7.99	7.84 JE	163				17.8	0.093
SWEB-10	8/9/96	SWEB-10-GW-01-40-960809				1016		7.28		222				14.3	
		SWEB-10-GW-01-65-960809				1144		7.72						16.4	
		SWEB-10-GW-01-70-960809				1210		7.56						15.8	
		SWEB-10-GW-01-75-960809	96-45492	241		1290		7.60	8.13	387				13.2	0.915
		SWEB-10-GW-02-75-960809	96-45493	235					8.14						0.934
		SWEB-10-GW-01-80-960809				1291		7.38						15.4	
		SWEB-10-GW-01-85-960809				1348		7.55		381				15.3	
		SWEB-10-GW-01-90-960809				1347		7.58						14.4	
		SWEB-10-GW-01-95-960809	96-45491	251	28	1374	1170 JE	7.80	8.14	363	406	938 JE	13.0	0.903	
		SWEB-10-GW-01-100-960809				1335		7.45						16.4	
		SWEB-10-GW-01-105-960809				1197		7.55						14.7	
		SWEB-10-GW-01-110-960809				1230		7.80						13.8	
		SWEB-10-GW-01-115-960809	96-45490	208	22	1168		7.55	8.16	242	227			15.3	0.438
		SWEB-10-GW-01-120-960809				920		7.97						16.1	
		SWEB-10-GW-01-135-960809	96-45489	174		691		7.66	8.22	176				15.5	0.326
		SWEB-10-GW-01-140-960809				741		7.56						17.3	
		SWEB-10-GW-01-145-960809				674		7.59		173				15.8	
		SWEB-10-GW-01-150-960809				670		7.62						17.0	
		SWEB-10-GW-01-155-960809	96-45488	158	24	684		7.75	8.25	179	157			15.5	0.083
		SWEB-10-GW-01-160-960809				675		7.30						17.9	
		SWEB-10-GW-01-165-960809				644		7.38						18.6	
		SWEB-10-GW-01-170-960809				589		7.33						19.3	
		SWEB-10-GW-01-175-960809	96-45487	160	23	677	649 JE	7.49	8.22	172	149	465 JE	17.0	0.127	
		SWEB-10-GW-01-180-960809				651		6.62						18.2	
		SWEB-10-GW-01-185-960809				699		6.98						19.3	
		SWEB-10-GW-01-195-960809	96-45486	144		567		6.91	8.17	101				16.2	0.044
		SWEB-10-GW-01-200-960809				578		6.57						17.0	
		SWEB-10-GW-01-230-960809				502 JZ		6.62 JZ		56.94 JZ				20.8 JZ	
8/11/96		SWEB-11-GW-01-15-960811	96-45620	165	30	1471		7.28	7.64 JE	564	705			8.6	0.196
		SWEB-11-GW-01-30-960811				1617		7.44						10.1	
		SWEB-11-GW-01-35-960811	96-45621	220	29	1747		7.35	7.19 JE	640	670			10.8	0.962

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 31 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
SWEB-11	8/11/96	SWEB-11-GW-01-40-960811				1786		7.44						10.8
(continued)		SWEB-11-GW-01-45-960811				1849		7.42		644				12.0
		SWEB-11-GW-01-50-960811				1739		7.49						11.1
		SWEB-11-GW-01-55-960811	96-45622	249	38	1991		7.43	7.22 JE	1638	804			10.0
		SWEB-11-GW-01-60-960811				1950		7.44						11.4
		SWEB-11-GW-01-65-960811				2240		7.50		2049				11.5
		SWEB-11-GW-01-75-960811	96-45623	212		2430		7.39	7.46 JE	2774				13.5
		SWEB-11-GW-01-80-960811				2400		7.39						16.9
		SWEB-11-GW-01-85-960811				2440		7.58		1907				17.7
		SWEB-11-GW-01-90-960811				2200		7.80						16.6
		SWEB-11-GW-01-95-960811	96-45624	272	46	2530	2410 JE	7.59	7.46 JE	1240	1120	2260 JE		13.5
		SWEB-11-GW-01-100-960811				2460		7.43						16.0
		SWEB-11-GW-01-105-960811				2610		7.70		1765				14.5
		SWEB-11-GW-01-110-960811				2870		7.66						13.9
		SWEB-11-GW-01-175-960811	96-45625	147	7	422		7.17	7.46 JE	39	37			16.6
8/12/96		SWEB-11-GW-01-180-960811				354		7.08						21.5
		SWEB-11-GW-01-185-960811				368		7.28						21.9
		SWEB-11-GW-01-195-960811	96-45626	150		383		7.81	8.24 JE	40				18.9
		SWEB-11-GW-02-195-960811	96-45627	151					7.9 JE					0.020
		SWEB-11-GW-01-200-960812				396		7.58						10.6
		SWEB-11-GW-01-205-960812				474		7.47						10.1
		SWEB-11-GW-01-210-960812				475		7.45						10.7
		SWEB-11-GW-01-215-960812	96-45614	177	4	416		7.52	7.72	53	44			10.3
		SWEB-11-GW-01-220-960812				417		6.43						11.0
		SWEB-11-GW-01-225-960812				402		6.85		57				11.1
		SWEB-11-GW-01-230-960812				410		7.22						10.8
		SWEB-11-GW-01-235-960812	96-45615	152	4	388		7.68	7.56	57	47			11.9
		SWEB-11-GW-01-240-960812				408		6.91						11.8
		SWEB-11-GW-01-245-960812				467		7.26		55				11.9
		SWEB-11-GW-01-250-960812				430		7.52						11.7
		SWEB-11-GW-01-255-9608121	96-45616	155		404		7.53	7.61	57				12.3
		SWEB-11-GW-01-260-960812				420		6.73						15.9
		SWEB-11-GW-01-265-960812				452		7.13						13.2

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 32 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-11	8/12/96	SWEB-11-GW-01-270-960812				411		7.45						14.8	
(continued)		SWEB-11-GW-01-275-960812	96-45617	154	4	397		7.40	7.63	49	43			15.5	0.022
		SWEB-11-GW-01-280-960812				406		7.18						16.4	
		SWEB-11-GW-01-285-960812				403		7.36						19.7	
		SWEB-11-GW-01-290-960812				405		7.50						15.3	
		SWEB-11-GW-01-295-960812	96-45618	153		408		7.60	7.36	54				17.6	0.026
		SWEB-11-GW-01-300-960812				412		6.69						15.5	
		SWEB-11-GW-01-305-960812				393		6.99						14.4	
		SWEB-11-GW-01-310-960812				378		7.15						13.7	
		SWEB-11-GW-01-315-960812	96-45619	160		465		7.36	7.52	68				14.2	0.032
		SWEB-11-GW-01-320-960813				490		6.98						12.0	
8/13/96		SWEB-11-GW-01-325-960813				641		7.53		107				12.8	
		SWEB-11-GW-01-330-960813				726		7.69						12.8	
		SWEB-11-GW-01-335-960813	96-45628	252	15	1339		7.80	7.77	232	253			12.7	0.471
		SWEB-11-GW-01-340-960813				881		7.53						12.7	
		SWEB-11-GW-01-345-960813				1515		7.66		365				12.8	
		SWEB-11-GW-01-350-960813				2350		7.75						13.3	
		SWEB-11-GW-01-355-960813	96-45629	384	29	2130	1840 JE	7.70	7.54	569	529	1440 JE		15.0	1.084
		SWEB-11-GW-01-360-960813				1219		7.98						13.6	
		SWEB-11-GW-01-365-960813				1449		7.89		400				15.0	
		SWEB-11-GW-01-370-960813				2090		7.99						15.0	
		SWEB-11-GW-01-375-960813	96-45630	312	25	1762		7.91	7.48	551	404			14.9	0.928
		SWEB-11-GW-01-380-960813				2180		7.86						13.3	
		SWEB-11-GW-01-385-960813				2110		7.80						14.7	
		SWEB-11-GW-01-390-960813				2370		7.84						14.5	
		SWEB-11-GW-01-395-960813	96-45631	354		1898		7.86	6.83	597				16.3	0.992
		SWEB-11-GW-01-400-960813				1742		7.80						18.6	
		SWEB-11-GW-01-405-960813				1678		7.69						18.2	
		SWEB-11-GW-01-410-960813				1603 JZ		7.82 JZ						20.8 JZ	
		SWEB-11-GW-01-415-960813				497 JZ		8.02 JZ						24.3 JZ	
		SWEB-11-GW-01-420-960813				497 JZ		7.99 JZ						26 JZ	
		SWEB-11-GW-01-425-960813				478 JZ		8.15 JZ						25.7 JZ	
		SWEB-11-GW-01-430-960813				521 JZ		8.24 JZ						22.2 JZ	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

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 (Page 33 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-11	8/13/96	SWEB-11-GW-01-435-960813				507 JZ		8.29 JZ						23.1 JZ	
(continued)		SWEB-11-GW-01-445-960813				473 JZ		8.06 JZ						20.1 JZ	
		SWEB-11-GW-01-450-960813				475 JZ		8.11 JZ						9.3 JZ	
		SWEB-11-GW-01-455-960813	96-45835	179 JZ		578 JZ		8.17 JZ	7.82 JZ	71.26 JZ				18.7 JZ	0.011
		SWEB-11-GW-01-460-960813				614 JZ		8.22 JZ						16.6 JZ	
		SWEB-11-GW-01-465-960813				614 JZ		8.3 JZ						17.4 JZ	
		SWEB-11-GW-01-470-960813				451 JZ		8.23 JZ						18.6 JZ	
	8/14/96	SWEB-11-GW-01-480-960814				428 JZ		7.49 JZ						14.4 JZ	
SWEB-12		SWEB-11-GW-01-485-960814				454 JZ		7.95 JZ						15.3 JZ	
		SWEB-11-GW-01-490-960814				487 JZ		7.64 JZ						16.3 JZ	
		SWEB-11-GW-01-495-960814				539 JZ		8.24 JZ						18.4 JZ	
	8/18/96	SWEB-12-GW-01-15-960818	96-46009	128		471		7.28		57				23.4	0.051
		SWEB-12-GW-01-55-960818				371		7.19						20.1	
SWEB-12		SWEB-12-GW-01-60-960818				368		7.35						20.6	
		SWEB-12-GW-01-65-960818				431		7.44						18.3	
		SWEB-12-GW-01-75-960818	96-46010	141		360 JZ		7.62		38				19.3	0.071
	8/19/96	SWEB-12-GW-01-80-960819				362		7.22						9.5	
		SWEB-12-GW-01-90-960819				282		7.62						9.5	
		SWEB-12-GW-01-95-960819	96-45990	134		277		7.82		<10				10.2	0.011
		SWEB-12-GW-02-95-960819	96-45991	134											0.011
		SWEB-12-GW-01-100-960819				318		7.72						12.1	
		SWEB-12-GW-01-115-960819				410		7.77						12.4	
		SWEB-12-GW-01-120-960819				411		7.85						12.0	
		SWEB-12-GW-01-125-960819				374		7.90		22				12.7	
		SWEB-12-GW-01-130-960819				396		7.84						12.4	
		SWEB-12-GW-01-135-960819	96-45992	156	5	393		7.23		38	33			12.2	0.037
		SWEB-12-GW-01-140-960819				425		7.70						12.9	
		SWEB-12-GW-01-145-960819				418		7.83						11.7	
		SWEB-12-GW-01-150-960819				420		7.82						11.5	
		SWEB-12-GW-01-155-960819	96-45993	156	5	417	394 JE	7.78	8.41 JE	37	33	204 JE		11.9	0.088
		SWEB-12-GW-01-160-960819				408		7.98						11.1	
		SWEB-12-GW-01-165-960819				405		7.94						11.1	
		SWEB-12-GW-01-170-960819				429		7.97						11.8	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 34 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-12 (continued)	8/19/96	SWEB-12-GW-01-175-960819	96-45994	140		434		7.65		26				12.1	0.051
		SWEB-12-GW-01-180-960819				410		7.89						13.8	
		SWEB-12-GW-01-185-960819				395		8.62						15.0	
		SWEB-12-GW-01-190-960819				267		7.97						14.2	
		SWEB-12-GW-01-195-960819	96-45995	146	4	411		7.44		49	41			14.1	0.018
		SWEB-12-GW-01-200-960819				423		7.87						13.9	
		SWEB-12-GW-01-205-960819				383		7.43						14.2	
		SWEB-12-GW-01-220-960819				452		7.88						16.5	
		SWEB-12-GW-01-235-960819	96-45996	150		388		7.92		55				16.2	0.023
		SWEB-12-GW-01-240-960819				416		7.75						16.0	
		SWEB-12-GW-01-245-960819				414		7.83						16.3	
		SWEB-12-GW-01-250-960819				406		7.98						16.9	
		SWEB-12-GW-01-255-960819	96-45997	223	4	405		7.93		56	44			15.7	0.022
		SWEB-12-GW-01-260-960819				397		7.74						15.7	
		SWEB-12-GW-01-265-960819				409		7.82						15.3	
		SWEB-12-GW-01-270-960819				419		8.05						15.6	
		SWEB-12-GW-01-275-960819	96-45998	173		407		8.00		55				14.8	0.024
		SWEB-12-GW-01-280-960819				424		7.98						13.1	
		SWEB-12-GW-01-285-960819				415		8.07						13.1	
		SWEB-12-GW-01-290-960819				414		7.99						14.0	
		SWEB-12-GW-01-295-960819	96-45999	156	5	415		7.52		53	45			15.1	0.027
8/20/96		SWEB-12-GW-01-300-960820				428		7.52						12.4	
		SWEB-12-GW-01-305-960820				438		7.74						11.8	
		SWEB-12-GW-01-310-960820				435		7.90						11.8	
		SWEB-12-GW-01-315-960820	96-46000	212		421		7.78		51				12.1	0.025
		SWEB-12-GW-01-320-960820				431		7.59						12.1	
		SWEB-12-GW-01-325-960820				440		7.86						12.2	
		SWEB-12-GW-01-330-960820				446		7.92						12.3	
		SWEB-12-GW-01-335-960820	96-46001	177		437		7.60		57				13.2	0.026
		SWEB-12-GW-01-340-960820				435		7.62						12.4	
		SWEB-12-GW-01-345-960820				442		7.80						13.6	
		SWEB-12-GW-01-350-960820				438		7.82						12.6	
		SWEB-12-GW-01-355-960820	96-46002	203		428		7.90		54				13.2	0.026

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 35 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-12	8/20/96	SWEB-12-GW-01-360-960820				422		7.99						13.8	
(continued)		SWEB-12-GW-01-365-960820				455		7.92						14.0	
		SWEB-12-GW-01-370-960820				441		7.98						15.0	
		SWEB-12-GW-01-375-960820	96-46003	159		419		7.43		58				15.2	0.026
		SWEB-12-GW-01-380-960820				413		7.84						13.1	
		SWEB-12-GW-01-385-960820				418		7.88						12.6	
		SWEB-12-GW-01-390-960820				430		8.07						13.3	
		SWEB-12-GW-01-395-960820	96-46004	160		434		8.15		60				14.4	0.026
		SWEB-12-GW-01-400-960820				441		7.45						15.2	
		SWEB-12-GW-01-405-960820				447		7.73						14.6	
		SWEB-12-GW-01-410-960820				450		7.77						13.9	
		SWEB-12-GW-01-415-960820	96-46005	167		461		7.90		63				15.3	0.032
		SWEB-12-GW-01-420-960820				463		7.77						17.5	
		SWEB-12-GW-01-425-960820				462		7.88						17.9	
		SWEB-12-GW-01-430-960820				459		7.89						17.8	
		SWEB-12-GW-01-435-960820	96-46006	163		451		7.57		62				15.5	0.028
		SWEB-12-GW-01-440-960820				444		7.44						15.4	
		SWEB-12-GW-01-445-960820				471		7.75						14.2	
		SWEB-12-GW-01-450-960820				480		7.95						14.0	
		SWEB-12-GW-01-455-960820	96-46007	157		472		8.02		68				13.8	0.028
		SWEB-12-GW-01-460-960820				487		7.78						16.0	
		SWEB-12-GW-01-465-960820				477		7.83						15.9	
		SWEB-12-GW-01-470-960820				463		7.89						15.6	
		SWEB-12-GW-01-475-960820	96-46008	154		478		7.95		67				15.4	0.034
SWEB-13	10/3/96	SWEB-13-GW-01-65-961003	96-58440	140	<4C	404		8.08		50	41			13.4	0.017
		SWEB-13-GW-01-70-961003				388		7.92						13.8	
		SWEB-13-GW-01-75-961003	96-58441			364		8.22		66				12.5	0.019
		SWEB-13-GW-01-80-961003				387		8.18						13.5	
		SWEB-13-GW-01-85-961003				383		8.21						12.3	
		SWEB-13-GW-01-90-961003				391		8.25						11.7	
		SWEB-13-GW-01-95-961003	96-58442	139	<3.4C	367		8.39		38	29			11.3	0.014
		SWEB-13-GW-01-100-961003				396		8.21						12.8	
		SWEB-13-GW-01-105-961003				383		8.27						11.9	

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 36 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
SWEB-13	10/3/96	SWEB-13-GW-01-110-961003				387		8.26						11.4	
(continued)		SWEB-13-GW-01-115-961003	96-58443			375		8.10		32				15.1	0.008
		SWEB-13-GW-01-120-961003				289		8.12						14.1	
		SWEB-13-GW-01-125-961003				396		8.16						13.3	
		SWEB-13-GW-01-130-961003				362		8.25						12.7	
		SWEB-13-GW-01-135-961003	96-58444	138	<3.6C	360	333 JE	8.21	8.27 JE	32	25	200 JE	11.6	0.011	
		SWEB-13-GW-01-140-961003				377		8.25						12.7	
		SWEB-13-GW-01-145-961003				368		8.30						11.5	
		SWEB-13-GW-01-150-961003				363		8.30						11.6	
		SWEB-13-GW-01-155-961003	96-58445	135	<3.8C	345		8.41		28	20			11.6	0.011
		SWEB-13-GW-01-160-961003				371		8.12						12.8	
		SWEB-13-GW-01-165-961003				378		8.19						11.9	
		SWEB-13-GW-01-170-961003				350		8.25						12.6	
		SWEB-13-GW-01-175-961003	96-58446	133	<2.7C	331		8.41		23	17			11.9	0.013
		SWEB-13-GW-01-180-961003				338		8.19						12.3	
		SWEB-13-GW-01-185-961003				333		8.25						11.4	
		SWEB-13-GW-01-190-961003				326		8.29						11.7	
	10/4/96	SWEB-13-GW-01-195-961004	96-58448	119	2	303		7.27		24	16			7.0	0.003
		SWEB-13-GW-01-200-961004				291		7.75						6.6	
		SWEB-13-GW-01-205-961004				334		7.84						7.3	
		SWEB-13-GW-01-210-961004				231		7.83						8.9	
		SWEB-13-GW-01-215-961004	96-58449	127	3	228		7.91		29	19			8.1	0.007
		SWEB-13-GW-01-220-961004				342		7.89						9.0	
		SWEB-13-GW-01-225-961004				203		7.98						9.1	
		SWEB-13-GW-01-230-961004				207		8.03						8.6	
		SWEB-13-GW-01-235-961004				178		8.10		30				9.0	
		SWEB-13-GW-01-280-961004				356		8.03						15.6	
		SWEB-13-GW-01-285-961004				372		8.20						15.4	
		SWEB-13-GW-01-290-961004				391		8.21						15.5	
		SWEB-13-GW-01-295-961004	96-58452	105	21	403		8.25		67	61			13.8	0.012
		SWEB-13-GW-01-300-961004				433		8.18						14.5	
		SWEB-13-GW-01-305-961004				439		7.71		67				13.7	
		SWEB-13-GW-01-310-961004				407		7.67						14.0	

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 37 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
SWEB-13	10/4/96	SWEB-13-GW-01-315-961004	96-58453	105	21	412		7.78		67	63		14.1	0.011
(continued)		SWEB-13-GW-01-320-961004				420		7.73						12.5
		SWEB-13-GW-01-325-961004				413		7.67						12.8
		SWEB-13-GW-01-330-961004				421		7.80						12.8
		SWEB-13-GW-01-335-961004	96-58454	106	23	415		7.80		69	61		15.1	0.012
		SWEB-13-GW-01-340-961004				420		7.72						13.4
		SWEB-13-GW-01-345-961004				408		7.76						14.1
		SWEB-13-GW-01-350-961004				421		7.85						16.0
		SWEB-13-GW-01-355-961004	96-58455	107	23	416		7.82		60	61		14.6	0.012
		SWEB-13-GW-01-360-961004				409		7.48						13.6
		SWEB-13-GW-01-365-961004				420		7.73						13.1
		SWEB-13-GW-01-370-961004				426		7.91						13.0
		SWEB-13-GW-01-375-961004	96-58456	106	27	416		7.79		59	61		13.2	0.011
10/5/96		SWEB-13-GW-01-380-961005				430		7.37						10.8
		SWEB-13-GW-01-385-961005				437		7.54						11.5
		SWEB-13-GW-01-390-961005				456		7.60						11.5
		SWEB-13-GW-01-395-961005	96-58457	106	28	446		7.68		69	61		11.6	0.013
		SWEB-13-GW-01-400-961005				440		7.46						11.6
		SWEB-13-GW-01-405-961005				451		7.70						11.8
		SWEB-13-GW-01-410-961005				459		7.69						11.9
		SWEB-13-GW-01-415-961005	96-58458	106	35	463		7.80		70	64		12.0	0.013
		SWEB-13-GW-01-420-961005				463		7.63						12.5
		SWEB-13-GW-01-425-961005				538		7.73						12.6
		SWEB-13-GW-01-430-961005				683		7.77						13.4
		SWEB-13-GW-01-435-961005	96-58459	107	27	441		7.84		80	65		12.8	0.013
		SWEB-13-GW-01-440-961005				467		7.67						13.2
		SWEB-13-GW-01-445-961005				455		7.80						13.1
		SWEB-13-GW-01-450-961005				443		7.81						12.8
		SWEB-13-GW-01-455-961005	96-58460	105	38	476		7.89		86	65		13.2	0.013
		SWEB-13-GW-01-460-961005				464		7.84						12.9
		SWEB-13-GW-01-465-961005				462		7.87						12.8
		SWEB-13-GW-01-470-961005				502		7.70						12.7
		SWEB-13-GW-01-475-961005	96-58461	106	39	484		7.92		82	67		13.2	0.014

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 38 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
SWEB-13 (continued)	10/5/96	SWEB-13-GW-01-480-961005				438		7.73						14.7
		SWEB-13-GW-01-485-961005				481		7.79						14.4
		SWEB-13-GW-01-490-961005				534		7.82						14.0
		SWEB-13-GW-01-495-961005	96-58462	95	106	722	681 JE	7.26	8.06 JE		84	395 JE	16.7	0.020
		SWEB-13-GW-01-500-961005				792		7.66						17.2
		SWEB-13-GW-01-510-961005	96-58463	111	26	433		7.73			78	60	14.8	0.018
		SWEB-13-GW-01-515-961005				456		7.65						15.6
SWEB-14	11/23/96 11/24/96	SWEB-14-GW-01-35-961123	96-65069	181	11	493	451		8.02	58	47	284	8.5	0.024
		SWEB-14-GW-01-55-961124	96-65070		7	434				53	42		3.9	0.007
		SWEB-14-GW-01-60-961124				526								6.1
		SWEB-14-GW-01-65-961124	96-65071		9	584				125	105		6.7	0.093
		SWEB-14-GW-01-70-961124				727								6.4
		SWEB-14-GW-01-75-961124	96-65072		5	480				69	58		8.3	0.034
		SWEB-14-GW-02-75-961124	96-65073		6						57			0.032
		SWEB-14-GW-01-80-961124				474								6.3
		SWEB-14-GW-01-85-961124	96-65074		7	513				91	64		7.0	0.051
		SWEB-14-GW-01-90-961124				567								6.9
		SWEB-14-GW-01-95-961124	96-65075		5	469				78	53		7.7	0.032
		SWEB-14-GW-01-100-961124				491								8.4
		SWEB-14-GW-01-105-961124	96-65076		6	538				82	60		8.9	0.043
		SWEB-14-GW-01-110-961124				508								9.3
		SWEB-14-GW-01-115-961124	96-65077	177	6	497	500		8.05	95	70	328	9.1	0.042
TEB-1	4/24/96	TEB-1-GW-01-960424	96-25314	0 JE	97QCR		8830 JQCR		2.66 JQCR		5885QCR	360 JQCR		0.300
		TEB-1-GW-01-35.5-960424				8570		4.53		3661				9.6
TEB-3	6/25/96	TEB-3-GW-01-960625	96-35932	65	98QCR	6080	6840	5.73	5.43	4722	332QCR	6960	19.4	0.887
										2254				
WN-33A	4/23/96	WN-33A-GW-01-115-960423	96-25309	<1		5430		4.46		2305				12.5
		WN-33A-GW-01-135-960423	96-25310	<1		5360		4.81		2254				15.5
		WN-33A-GW-01-140-960423				6010		4.93						17.9
		WN-33A-GW-01-145-960423				5840		4.48						13.1
		WN-33A-GW-01-150-960423				4600		5.48						16.8
		WN-33A-GW-01-155-960423	96-25311	<1		4550		4.97		2387				11.9
		WN-33A-GW-01-160-960423				4480		4.67						15.5
		WN-33A-GW-01-165-960423				4480		4.59						12.4

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

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(Page 39 of 45)**

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WN-33A	4/23/96	WN-33A-GW-01-170-960423				4220		4.72						16.0	
(continued)		WN-33A-GW-01-175-960423	96-25312	26		4510		4.97		1808				11.9	0.075
	4/24/96	WN-33A-GW-01-185-960424				4200		6.04						10.0	
		WN-33A-GW-01-190-960424				4210		5.60						10.5	
		WN-33A-GW-01-195-960424	96-25313	3		4360		5.02		2350				10.7	0.282
		WN-33A-GW-01-200-960424				3850		5.53						12.6	
		WN-33A-GW-01-205-960424				2940		6.40						11.1	
		WN-33A-GW-01-210-960424				2640		6.62						11.7	
		WN-33A-GW-01-215-960424	96-25315	173		2880		6.65		1507				12.5	0.492
	4/25/96	WN-33A-GW-01-235-960425	96-25316	45		4160		6.52		1288				10.1	0.236
		WN-33A-GW-01-240-960425				4790		5.23						7.4	
WN-34	6/10/96	WN-34-GW-01-55-960610	96-34802	<0		6650	7466	4.21	4.23	5703		7377	14.9	0.026	
		WN-34-GW-01-60-960610				6330		4.10						13.4	
		WN-34-GW-01-80-960610				6810		4.07						18.4	
		WN-34-GW-01-85-960610				7260		3.92						18.5	
		WN-34-GW-01-90-960610				7180		3.92						16.8	
		WN-34-GW-01-95-960610	96-34804	<0		7010	7889	3.96	4.07	5803		7370	14.4	4.108	
		WN-34-GW-01-100-960610				7150		4.04						20.5	
		WN-34-GW-01-105-960610				7120		4.03						19.0	
		WN-34-GW-01-110-960610				7040		4.01						18.2	
		WN-34-GW-01-115-960610	96-34805	<0		6200	6959	3.92	4.00	5450		7123	13.7	3.274	
		WN-34-GW-01-120-960610				6230		3.98						22.5	
		WN-34-GW-01-125-960610				6150		3.95						21.1	
		WN-34-GW-01-130-960610				6290		3.93						17.7	
		WN-34-GW-01-135-960610	96-34806	<0		7100	8227	3.68	3.77	8834		11625	17.2	1.771	
		WN-34-GW-01-140-960610				7170		3.68						21.9	
	6/11/96	WN-34-GW-01-160-960611				8230		3.67		12226				14.5	
		WN-34-GW-01-175-960611	96-35081			8580		3.67						21.5	8.490
		WN-34-GW-01-190-960611				1406		6.12						16.2	
		WN-34-GW-01-195-960611	96-35082	<1		5210 JZ		4.42 JZ		5325 JZ				17.3 JZ	0.174
		WN-34-GW-01-200-960611				10740		3.74						20.7	
		WN-34-GW-01-205-960611				3290		4.63						19.6	

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 40 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
WN-34	6/11/96	WN-34-GW-01-210-960611				718		6.09						18.5
(continued)		WN-34-GW-01-215-960611	96-35083	<1		7050		4.03		8843				17.7 1.044
	6/12/96	WN-34-GW-01-220-960612				3610		6.54						14.0
		WN-34-GW-01-225-960612				6530		6.85						15.1
		WN-34-GW-01-250-960612	96-35079	108 JZ		980 JZ		6.78 JZ		440 JZ				15.8 JZ 0.038
		WN-34-GW-01-255-960612				1403		7.11						17.3
		WN-34-GW-01-260-960612				1354		7.19						21.1
WN-35A	5/11/96	WN-35A-GW-01-40-960511				5920		7.39						17.4
		WN-35A-GW-01-45-960511				3360		7.13		2966				16.0
		WN-35A-GW-01-60-960511				6610		7.14						13.7
		WN-35A-GW-01-65-960511				3950		7.05		3023				12.9
		WN-35A-GW-01-80-960511				3110		6.93						15.8
		WN-35A-GW-01-85-960511				4380		6.93						14.8
		WN-35A-GW-01-90-960511				3280		6.85						16.4
		WN-35A-GW-01-100-960511				5290		7.19						14.7
		WN-35A-GW-01-105-960511				6720		7.15						12.1
		WN-35A-GW-01-110-960511				6680		7.39						11.9
	5/12/96	WN-35A-GW-01-115-960512	96-30819	432		6250		6.94		1080	2748			10.1 0.600
		WN-35A-GW-01-120-960512				5490		6.78						10.0
		WN-35A-GW-01-125-960512				3630		6.86						9.5
		WN-35A-GW-01-140-960512				3990		7.27						12.1
		WN-35A-GW-01-145-960512				4010		7.31		2046				10.8
		WN-35A-GW-01-150-960512				3850		7.04						12.1
		WN-35A-GW-01-155-960512				4030		7.12		2091				11.3
		WN-35A-GW-01-160-960512				4080		7.46						12.0
		WN-35A-GW-01-165-960512				4040		7.49						11.4
		WN-35A-GW-01-170-960512				4050		7.37						11.5
		WN-35A-GW-01-180-960512				3950		7.36						13.2
		WN-35A-GW-01-185-960512				4080		7.36		1976				12.1
		WN-35A-GW-01-190-960512				2700		7.28						13.4
		WN-35A-GW-01-195-960512		415		4090		7.28		898				12.4 2.475
		WN-35A-GW-01-200-960512				2680		7.29						13.6

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 41 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
WN-35A	5/12/96	WN-35A-GW-01-220-960512				2650		7.23						12.4	
(continued)		WN-35A-GW-01-225-960512				3370		7.49						14.7	
		WN-35A-GW-01-230-960512				2760		7.41						13.2	
		WN-35A-GW-01-235-960512		190		1207		7.59		82				16.4	0.670
		WN-35A-GW-01-240-960512				3290		7.43						15.3	
WN-36B	4/19/96	WN-36B-GW-01-50-960419				2370		7.60						10.4	
		WN-36B-GW-01-60-960419				4030		7.55						9.8	
	4/20/96	WN-36B-GW-01-110-960420				2040		7.47						6.5	
		WN-36B-GW-01-125-960420				4550		7.23						5.0	
		WN-36B-GW-01-135-960420				2200		7.03						7.4	
		WN-36B-GW-01-140-960420				4460		7.19						7.2	
		WN-36B-GW-01-150-960420				4110		7.44						7.9	
		WN-36B-GW-01-160-960420				2260		7.45						9.2	
		WN-36B-GW-01-170-960420				1100		7.88						8.5	
		WN-36B-GW-01-175-960420				3830		7.58						10.3	
		WN-36B-GW-01-180-960420				2070		7.56						9.5	
WN-37E	7/17/96	WN-37E-GW-01-100-960717	96-41531	131										3.177	
		WN-37E-GW-01-115-960717	96-41532	247		3200		6.74		2640				20.3	1.248
		WN-37E-GW-01-125-960717				4920		7.93		3329				21.1	
		WN-37E-GW-01-135-960717	96-41533	383		3490		7.16		1966				17.1	0.456
		WN-37E-GW-01-140-960717				3460		7.22						15.3	
		WN-37E-GW-01-145-960717				3410		7.32		2003				15.7	
		WN-37E-GW-01-150-960717				3690		7.23						18.4	
		WN-37E-GW-01-155-960717	96-41534	100		3770		6.58		2579				19.2	1.447
		WN-37E-GW-01-160-960717				3380		6.96						14.3	
		WN-37E-GW-01-165-960717				3150		7.10		2345				15.9	
		WN-37E-GW-01-170-960717				3220		7.04						17.6	
		WN-37E-GW-01-175-960717	96-41535	101		3410		6.71		2605				15.3	1.654
	7/18/96	WN-37E-GW-01-180-960718				3470		7.29						11.5	
		WN-37E-GW-01-185-960718				3290		7.21		2654				11.9	
		WN-37E-GW-01-190-960718				3100		7.15						13.3	
		WN-37E-GW-01-195-960718	96-41537	264		3300		7.29		2756				13.0	1.974
		WN-37E-GW-02-195-960718	96-41538	273										2.239	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 42 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
WN-37E	7/18/96	WN-37E-GW-01-200-960718				2670		7.09						20.1
(continued)		WN-37E-GW-01-204-960718				2630		6.92		2239				15.0
WN-38A	9/8/96	WN-38A-GW-01-15-960908				3060		6.44		685				7.6
		WN-38A-GW-01-55-960908	96-53408	139	203	1749		7.14		164	125			18.3 0.019
		WN-38A-GW-01-85-960908	96-53409	105	306						207			0.018
		WN-38A-GW-01-95-960908	96-53410	150	355	2530		7.30		397	315			14.7 0.019
		WN-38A-GW-01-100-960908				2500		7.37						16.7
		WN-38A-GW-01-105-960908				2470		7.40						16.4
		WN-38A-GW-01-110-960908				2450		7.41						16.1
		WN-38A-GW-01-120-960908				2490		7.34						15.2
		WN-38A-GW-01-130-960908				2470		7.38						15.5
		WN-38A-GW-01-135-960908	96-53412	156	254	1478		7.50		310	219			14.4 0.057
		WN-38A-GW-01-140-960908				1881		7.36						17.8
		WN-38A-GW-01-167-960908	96-53413	137	376	2380		7.18		352	293			16.1 0.026
WN-38C	9/11/96	WN-38C-GW-01-15-960911	96-53405	261	107	1904		7.45			568			13.7 0.264
WN-39A	9/11/96	WN-39A-GW-01-35-960911	96-53398	351	45	1594		7.84		596	523			10.5 1.670
		WN-39A-GW-01-40-960911				1560		7.87						11.0
		WN-39A-GW-01-45-960911				1187		7.71						10.8
		WN-39A-GW-01-55-960911	96-53399	147	18	627		7.95		117	109			11.4 0.064
		WN-39A-GW-01-60-960911				616		7.70						14.0
		WN-39A-GW-01-65-960911				605		7.67						13.0
		WN-39A-GW-01-75-960911	96-53400	135	17	563		7.87		91	94			11.9 0.080
		WN-39A-GW-01-80-960911				603		7.83						14.3
		WN-39A-GW-01-85-960911				566		7.83						13.8
		WN-39A-GW-01-90-960911				452		7.80						14.6
		WN-39A-GW-01-100-960911				400		7.90						12.4
		WN-39A-GW-01-105-960911				462		7.94						11.9
		WN-39A-GW-01-110-960911				468		8.06						12.2
		WN-39A-GW-02-115-960911	96-53403	126	102						113			0.087
		WN-39A-GW-01-120-960911				825		7.93						11.8
		WN-39A-GW-01-125-960911				1019		7.98		165				11.3
		WN-39A-GW-01-130-960911				1050		7.97						10.1

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 43 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b (Field) ^b mg/L	Temp °C	U _{nat} mg/L
WN-39A (continued)	9/11/96	WN-39A-GW-01-135-960911 WN-39A-GW-01-140-960911	96-53404	148	138	990		8.04		189	173		11.3	0.116
						812		7.79						17.3
WN-40A	11/13/96	WN-40A-GW-01-35-961113 WN-40A-GW-01-45-961113 WN-40A-GW-01-55-961113 WN-40A-GW-01-65-961113 WN-40A-GW-01-75-961113 WN-40A-GW-01-85-961113 WN-40A-GW-01-95-961113	96-64362 96-64363 96-64364 96-64365 96-64366 96-64367 96-64368		34 40 44 41 40 42 44	1011 1304 861 849 772 771 643		7.71 7.79 7.82 7.68 7.89 7.68 7.83		245 369 176 175 156 135 102	262 356 208 192 177 149 111		12.2	0.235
														14.1 12.0 14.9 11.2 12.5 11.2
														0.552 0.140 0.135 0.086 0.103 0.043
	11/14/96	WN-40A-GW-01-105-961114 WN-40A-GW-01-125-961114 WN-40A-GW-01-140-961114 WN-40A-GW-01-160-961114 WN-40A-GW-01-165-961114 WN-40A-GW-01-185-961114 WN-40A-GW-02-185-961114 WN-40A-GW-01-190-961114 WN-40A-GW-01-195-961114 WN-40A-GW-01-200-961114 WN-40A-GW-01-210-961114 WN-40A-GW-01-215-961114	96-64369 96-64371 96-64385 96-64384 96-64373 96-64375 96-64374 96-64377	42 45 229 421 372 373 361 314	621 582 1903 1944 1915 1969 1989 2010 1919 1801		7.48 7.88 8.08 8.12 8.08 8.06 8.09 8.09 8.14 8.14		78 84 206 325 327 273 358 337 300	105 81 206 330 335 337 297		10.5 10.4 0.011 9.8 0.008 11.9 14.0 11.0 14.4 9.8 11.4 12.0	0.036 0.025 0.011 0.008 0.010 0.010 0.011 0.011	
WN-41A	11/19/96	WN-41A-GW-01-35-961119 WN-41A-GW-01-55-961119 WN-41A-GW-01-60-961119 WN-41A-GW-01-75-961119 WN-41A-GW-01-80-961119 WN-41A-GW-01-100-961119 WN-41A-GW-01-115-961119 WN-41A-GW-01-120-961119 WN-41A-GW-01-135-961119 WN-41A-GW-01-140-961119	96-64481 96-64482 96-64483 96-64485 96-64486 96-64487 96-64488	392 445 391 314 389	2540 2130 1695 2400 2450 2480 2470 1330 1594 1272		8.49 8.09 8.13 8.06 8.17 8.11 7.87 7.99 8.08 8.12		610 513 425 355 378 413 306 539 375 449	383 425 378 330 335 337 306 375 355		13.6 13.6 12.8 13.1 11.9 10.6 10.2 10.0 9.8 10.2	0.022 0.013 0.012 0.014 0.009	
	11/20/96	WN-41A-GW-01-155-961120 WN-41A-GW-01-175-961120	96-64487 96-64488	381 362	1569 2330		8.07 8.22			365 449	355		6.8 10.8	0.013 0.013

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 44 of 45)**

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b μS/cm	Conductivity (Lab) ^b μS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L	
WN-41A	11/20/96	WN-41A-GW-01-180-961120				2230		7.99						9.8	
(continued)		WN-41A-GW-01-185-961120	96-64489	160	370	2330	2210	8.14	7.99 JE	483	358	1450	12.4	0.009	
WN-42A	12/4/96	WN-42A-GW-01-35-961204	96-65430		94	3400		7.64		1220	1345		7.8	4.660	
		WN-42A-GW-01-40-961204				3620		7.69						5.3	
		WN-42A-GW-01-45-961204				3750		7.68						5.8	
		WN-42A-GW-01-50-961204				3910		7.76						5.3	
		WN-42A-GW-01-55-961205	96-65431	407 JE	71QCR								1696QCR		2.040
	12/5/96	WN-42A-GW-01-60-961205				3830		7.81						1.8	
		WN-42A-GW-01-65-961205	96-65432		72	3720		7.85		2074	1797		1.6	2.720	
		WN-42A-GW-01-70-961205				3690		7.84						2.9	
		WN-42A-GW-01-75-961205	96-65433		75	3560		7.98		2017	1955		5.4	1.960	
		WN-42A-GW-01-80-961205				3520		7.94						5.8	
		WN-42A-GW-01-85-961205	96-65434		72	3560		7.94		1797	1915		6.2	2.320	
		WN-42A-GW-01-90-961205				3570		7.91						6.3	
		WN-42A-GW-01-95-961205	96-65435		64	3560		7.68		1995	1937		6.5	2.680	
		WN-42A-GW-01-100-961205				3670		7.82						5.1	
		WN-42A-GW-01-105-961205	96-65436		60	3690		7.86		2052	2029		5.5	2.170	
		WN-42A-GW-01-110-961205				4230		7.81						4.9	
		WN-42A-GW-01-115-961205	96-65437	553 JE	70	3450		7.78		1611	1733		6.9	0.672	
		WN-42A-GW-02-115-961205	96-65429	482 JE	62						1653			0.863	
		WN-42A-GW-01-120-961205				3470		7.78						4.9	
		WN-42A-GW-01-125-961205	96-65438		67	3630		8.00		1902	1881		3.9	2.280	
		WN-42A-GW-01-130-961205				2910		8.04						5.9	
		WN-42A-GW-01-135-961205	96-65439		61	2820		7.36		1087	1029		7.5	0.756	
		WN-42A-GW-02-135-961205	96-65440		61						1027			0.733	
WN-43A	12/8/96	WN-43A-GW-01-15-961208				756		7.93						1.5	
		WN-43A-GW-01-35-961208				588		7.75		61				5.1	
		WN-43A-GW-01-95-961208	96-69825		15	440		7.81		58	57			10.7	0.019
		WN-43A-GW-01-100-961208				446		7.93						8.1	
		WN-43A-GW-01-110-961208				480		8.02						8.8	
		WN-43A-GW-01-115-961208	96-69826		20	458		7.95		57	63			10.5	0.015
		WN-43A-GW-01-120-961208				449		7.78						9.7	
		WN-43A-GW-01-125-961208				485		7.90						9.0	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-1 Analytical Results (Short List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 45 of 45)

Location	Sample Date	Sample Identification ^a	Lab ID	Alkalinity (as CaCO ₃) mg/L	Cl mg/L	Conductivity (Field) ^b µS/cm	Conductivity (Lab) ^b µS/cm	pH (Field) ^b std.units	pH (Lab) ^b std.units	SO ₄ (Field) ^b mg/L	SO ₄ (Lab) ^b mg/L	TDS ^b mg/L	Temp (Field) ^b °C	U _{nat} mg/L
WN-43A (continued)	12/8/96	WN-43A-GW-01-135-961208	96-69827		20	458		7.95		64	66		10.5	0.015
		WN-43A-GW-01-140-961208				458		7.71					9.9	
		WN-43A-GW-01-145-961208				462		7.75					9.5	
		WN-43A-GW-01-150-961208				465		7.85					9.9	
		WN-43A-GW-01-155-961208	96-69828		24	479		7.78		73	73		10.4	0.015
	12/9/96	WN-43A-GW-01-160-961209				500		7.95					6.7	
		WN-43A-GW-01-165-961209	96-69829		25	488		7.87			69		7.9	0.016
		WN-43A-GW-01-170-961209				487		7.82					8.4	
		WN-43A-GW-01-175-961209				481		7.40		78			9.3	
		WN-43A-GW-01-180-961209				478		7.97					9.7	
		WN-43A-GW-01-185-961209	96-69830		27	477		8.07		69			10.7	0.017
		WN-43A-GW-01-190-961209				462		8.08					11.1	
		WN-43A-GW-01-195-961209	96-69832		35	477		8.12		77	70		11.3	0.015
		WN-43A-GW-01-200-961209				474		8.08					11.4	
		WN-43A-GW-01-205-961209	96-69833		36	490		8.08		68			11.9	0.013
		WN-43A-GW-01-210-961209				521		8.08					11.0	
		WN-43A-GW-01-220-961209				537		8.01					11.5	
		WN-43A-GW-01-225-961209	96-69835		50	533		8.02			75		11.3	0.014
		WN-43A-GW-01-230-961209				545		8.06					11.3	
		WN-43A-GW-01-235-961209	96-69836		51	540		7.97		88	79		12.4	0.016

Notes: *Depth is indicated in Sample ID (i.e., FPEB-1-GW-01-35-96306 is a sample from FPEB-1, ground water, primary [02 = duplicate], 35 feet, March 6, 1996).

^bData from nonfiltered samples (all other data are from 0.45 µm filtered samples - dissolved).

J = Associated numeric value is estimated for the reason indicated below:

C = Field blank contamination

E = Exceeded holding time

H = Results biased high (see sample note in database for explanation)

Z = Other explanation (see sample note in database for explanation)

R = Data rejected (see sample note in database for explanation).

Matrix_code (in project database) for all samples in this table = GW_SCRN

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 1 of 20)

Location	Sample Date	Sample Depth	Lab ID	Matrix Code ^a	Sample ID	Alkalinity (as CaCO ₃)							
						Ag	AI			As	B	Ba	Be
FPEB-1	03/06/96	55	96-18124	GW_SCRN	FPEB-1-GW-01-55-960306	<0.05	<0.1	578	<0.002	<0.1	<0.1	<0.01	
			96-18125	GW_SCRN	FPEB-1-GW-02-55-960306	<0.05	<0.1	578	0.007	<0.1	<0.1	<0.01	
			96-30163	SLRY_WAT	FPEB-1-GW-01-55-960306	<0.05	<0.1	424 JE	<0.002	<0.1	<0.1	<0.01	
			96-30164	SLRY_WAT	FPEB-1-GW-02-55-960306	<0.05	<0.1	341 JE	<0.002	<0.1	<0.1	<0.01	
FPEB-2	03/07/96	55	96-18172	GW_SCRN	FPEB-2-GW-01-55-960307	<0.05	<0.1	451	<0.002	0.14	<0.01		
			96-30165	SLRY_WAT	FPEB-2-GW-01-55-960307	<0.05	<0.1	314 JE	<0.002	<0.1	<0.1	<0.01	
FPEB-3	03/08/96	135	96-18228	GW_SCRN	FPEB-3-GW-01-135-960308	<0.05	<0.1	151	0.004	<0.1	<0.1	<0.01	
			03/10/96	420	96-18244	GW_SCRN	FPEB-3-GW-01-420-960310	<0.05	<0.1	160	<0.002	<0.1	<0.01
FPEB-4	03/11/96	30	96-18251	GW_SCRN	FPEB-4-GW-01-30-960311	<0.05	<0.1	147	<0.002	<0.1	<0.1	<0.01	
			50	96-30166	SLRY_WAT	FPEB-4-GW-01-50-960311	<0.05	<0.1	136 JE	<0.002	<0.1	<0.1	<0.01
			95	96-18256	GW_SCRN	FPEB-4-GW-01-95-960311	<0.05	<0.1	141	<0.002	<0.1	<0.1	<0.01
FPEB-5	03/12/96	55	96-18475	GW_SCRN	FPEB-5-GW-01-55-960312	<0.05	<0.1	145	<0.002	<0.1	<0.1	<0.01	
			55	96-30167	SLRY_WAT	FPEB-5-GW-01-55-960312	<0.05	<0.1	135 JE	<0.002	<0.1	<0.1	<0.01
			195	96-18487	GW_SCRN	FPEB-5-GW-01-195-960312	<0.05	<0.1	164	<0.002	<0.1	<0.1	<0.01
FPEB-6	03/13/96	35	96-18463	GW_SCRN	FPEB-6-GW-01-35-960313	<0.05	<0.1	168	<0.002	<0.1	<0.1	<0.01	
			75	96-30169	SLRY_WAT	FPEB-6-GW-01-75-960313	<0.05	<0.1	176 JE	0.003	<0.1	<0.1	<0.01
			135	96-18470	GW_SCRN	FPEB-6-GW-01-135-960313	<0.05	<0.1	96.5	<0.002	<0.1	<0.1	<0.01
FPEB-7	03/26/96	52	96-19175	GW_SCRN	FPEB-7-GW-01-52-960326	<0.05	<0.1	203 JE	0.002 JSL	<0.1	<0.1	<0.01	
			52	96-30170	SLRY_WAT	FPEB-7-GW-01-52-960326	<0.05	<0.1	191 JE	<0.002	<0.1	<0.1	<0.01
			295	96-19158	GW_SCRN	FPEB-7-GW-01-295-960327	<0.05	<0.1	140 JE	<0.002 JSL	<0.1	<0.1	<0.01
FPEB-8	03/29/96	55	96-19324	GW_SCRN	FPEB-8-GW-01-55-960329	<0.05	<0.1	160	0.002 JSL	<0.1	<0.1	<0.01	
FPEB-9	03/30/96	15	96-19506	GW_SCRN	FPEB-9-GW-01-15-960330	<0.05	<0.1	313	<0.002 JSL	<0.1	<0.1	<0.01	
			215	96-19514	GW_SCRN	FPEB-9-GW-01-215D-960331	<0.05	<0.1	172 JE	<0.002 JSL	<0.1	<0.1	<0.01
FPEB-10	04/01/96	55	96-30171	SLRY_WAT	FPEB-10-GW-01-55-960401	<0.05	<0.1	175 JE	<0.002	<0.1	<0.1	<0.01	
			95	96-19561	GW_SCRN	FPEB-10-GW-01-95-960401	<0.05	<0.1	164	<0.002 JSL	<0.1	<0.1	<0.01
FPEB-11	04/02/96	65	96-30172	SLRY_WAT	FPEB-11-GW-01-65-960402	<0.05	<0.1	144 JE	<0.002	<0.1	<0.1	<0.01	
			72	96-19577	GW_SCRN	FPEB-11-GW-01-72-960402	<0.05	<0.1	127	<0.002 JSL	<0.1	<0.1	<0.01
			72	96-19578	GW_SCRN	FPEB-11-GW-02-72-960402	<0.05	<0.1	127	<0.002 JSL	<0.1	<0.1	<0.01
NWEB-1	02/21/96	40	96-13724	GW_SCRN	NWEB-1-GW-01-40-960221	<0.1		729 JE	0.003	<0.1	<0.1	<0.01	
			60	96-30159	SLRY_WAT	NWEB-1-GW-01-60-960221	<0.05	<0.1	303 JE	0.002	<0.1	<0.1	<0.01
			100	96-13728	GW_SCRN	NWEB-1-GW-01-100-960221	<0.1		692 JE	0.003	<0.1	<0.1	<0.01
	02/22/96	180	96-13732	GW_SCRN	NWEB-1-GW-01-180-960222	<0.1		605 JE	0.002	<0.1	<0.1	<0.01	
			3/10/96	40	96-18236	GW_SCRN	NWEB-1-GW-01-40-960310	<0.1		733	0.007	<0.1	<0.01
(profiling)		100	96-18237	GW_SCRN	NWEB-1-GW-01-100-960310	<0.1		735	0.006	<0.1	<0.1	<0.01	
			180	96-18238	GW_SCRN	NWEB-1-GW-01-180-960310	<0.1		754	0.005	<0.1	<0.1	<0.01

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 2 of 20)**

Location	Sample Date	Sample Depth	Lab ID	Matrix Code ^a	Sample ID	Alkalinity (as CaCO ₃)					
						Ag	AI	As	B	Ba	Be
NWEB-2	02/23/96	55	96-30160	SLRY_WAT	NWEB-2-GW-01-55-960223	<0.05	<0.1	220 JE	<0.002	<0.1	<0.01
	02/23/96	55	96-30161	SLRY_WAT	NWEB-2-GW-02-55-960223	<0.05	<0.1	220 JE	<0.002	<0.1	<0.01
	02/23/96	35	96-13780	GW_SCRN	NWEB-2-GW-01-35-960223	<0.1	239 JE	0.002	<0.1	<0.1	<0.01
	02/23/96	75	96-13782	GW_SCRN	NWEB-2-GW-01-75-960223	<0.1	237 JE	0.003	<0.1	<0.1	<0.01
	02/24/96	120	96-13882	GW_SCRN	NWEB-2-GW-01-120-960224	<0.1	204	0.004	<0.1	<0.1	<0.01
	03/10/96	35	96-18239	GW_SCRN	NWEB-2-GW-01-35-960310	<0.1	383	0.006	<0.1	<0.1	<0.01
	(profiling)	70	96-18240	GW_SCRN	NWEB-2-GW-01-70-960310	<0.1	463	0.004	<0.1	<0.1	<0.01
		120	96-18241	GW_SCRN	NWEB-2-GW-01-120-960310	<0.1	454	0.004	<0.1	<0.1	<0.01
NWEB-3	02/25/96	55	96-13890	GW_SCRN	NWEB-3-GW-01-55-960225	<0.05	<0.1	379	<0.002	<0.1	<0.01
	03/05/96	275	96-18112	GW_SCRN	NWEB-3-GW-01-275-960305	<0.05	<0.1	453	<0.002	<0.1	<0.01
	03/06/96	55	96-30162	SLRY_WAT	NWEB-3-GW-01-55-960306	<0.05	<0.1	181 JE	0.002	<0.1	<0.01
SEB-1	09/16/96	155	96-53737	GW_SCRN	SEB-1-GW-01-155-960916	<0.05	<0.1	154	<0.002	0.02	<0.1 <0.004
SWEB-1	04/03/96	55	96-19745	GW_SCRN	SWEB-1-GW-01-55-960403	<0.05	<0.1	734 JE	<0.002 JSL	<0.1	<0.01
		75	96-30173	SLRY_WAT	SWEB-1-GW-01-75-960403	<0.05	<0.1	458 JE	<0.002	<0.1	<0.01
	04/04/96	195	96-19754	GW_SCRN	SWEB-1-GW-01-195-960404	<0.05	<0.1	569 JE	<0.002 JSL	<0.1	<0.01
	04/05/96	395	96-24565	GW_SCRN	SWEB-1-GW-01-395-960405	<0.05	<0.1	178 JE	<0.002 JSL	<0.1	<0.01
SWEB-2	04/06/96	55	96-24570	GW_SCRN	SWEB-2-GW-01-55-960406	<0.05	<0.1	527	0.005	<0.1	<0.001
		75	96-30175	SLRY_WAT	SWEB-2-GW-01-75-960406	<0.05	<0.1	544 JE	<0.002	<0.1	<0.01
		95	96-24573	GW_SCRN	SWEB-2-GW-01-95-960406	<0.05	<0.1	546 JE	<0.002 JSL	<0.1	<0.01
	04/07/96	295	96-24586	GW_SCRN	SWEB-2-GW-01-295-960407	<0.05	<0.1	744 JE	<0.002 JSL	0.11	<0.01
		295	96-24586	SLRY_WAT	SWEB-2-GW-01-295-960407	<0.05	<0.1	168 JE	<0.002	<0.1	<0.01
SWEB-3	04/16/96	75	96-25058	GW_SCRN	SWEB-3-GW-01-75-960416	<0.05	<0.1	681	<0.002 JSL	0.08	<0.1 <0.004
		75	96-30174	SLRY_WAT	SWEB-3-GW-01-75-960416	<0.05	<0.1	518 JE	<0.002	<0.1	<0.01
		155	96-25062	GW_SCRN	SWEB-3-GW-01-155-960416	<0.05	<0.1	453	<0.002	0.11	<0.1 <0.004
	04/17/96	235	96-25066	GW_SCRN	SWEB-3-GW-01-235-960417	<0.05	<0.1	555	<0.002	0.1	0.14 <0.004
SWEB-4	05/30/96	75	96-30552	GW_SCRN	SWEB-4-GW-01-75-960530	<0.05	<0.1	531	<0.002	0.08	<0.1 <0.004
		95	96-30553	SLRY_WAT	SWEB-4-GW-01-95-960530	<0.05	<0.1	370 JE	<0.002	<0.1	<0.01
		135	96-30555	SLRY_WAT	SWEB-4-GW-01-135-960530	<0.05	<0.1	225 JE	<0.002	<0.1	<0.01
		135	96-30555	GW_SCRN	SWEB-4-GW-01-135-960530	<0.05	<0.1	387	<0.002	0.04	0.16 <0.004
SWEB-5	05/31/96	75	96-30800	GW_SCRN	SWEB-5-GW-01-75-960531	<0.05	<0.1	132	<0.002	0.03	<0.1 <0.004
	05/31/96	75/95	96-30800-801	SLRY_WAT	SWEB-5-GW-01-75/95-960531	<0.05	0.1	140 JE	<0.002	<0.1	<0.01
		155/175	96-30805-806	SLRY_WAT	SWEB-5-GW-01-155/175-960531	<0.05	<0.1	191 JE	<0.002	<0.1	<0.01
		155/175	6-30805-806	SLRY_WAT	SWEB-5-GW-01-155/175-960531	<0.05	<0.1	194 JE	<0.002	<0.1	<0.01
	06/01/96	195	96-30809	GW_SCRN	SWEB-5-GW-01-195-960601	<0.05	<0.1	393	<0.002	0.16	<0.1 <0.004
	06/01/96	215	96-30810	SLRY_WAT	SWEB-5-GW-01-215-960601	<0.05	<0.1	236 JE	<0.002	<0.1	<0.01

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 3 of 20)

Location	Sample Date	Sample Depth	Lab ID	Matrix Code*	Sample ID	Ag	Al	Alkalinity (as CaCO ₃)	As	B	Ba	Be
SWEB-6	06/04/96	55	96-30793	GW_SCRN	SWEB-6-GW-01-55-960604	<0.05	<0.1	173	0.005 JSH	0.04	<0.1	<0.004
		175	96-30797	GW_SCRN	SWEB-6-GW-01-175-960604	<0.05	<0.1	177	0.002 JSH	0.03	<0.1	<0.004
		155/175	96-30796	SLRY_WAT	SWEB-6-GW-01-155/175-960604	<0.05	<0.1	164 JE	<0.002	<0.1	<0.1	<0.01
	06/05/96	335/355	96-34814	SLRY_WAT	SWEB-6-GW-01-335/355-960605	<0.05	<0.1	133 JE	<0.002	<0.1	<0.1	<0.01
SWEB-7	06/26/96	30	96-35933	GW_SCRN	SWEB-7-GW-01-30-960626	<0.05	<0.1	209	<0.002	<0.1	<0.1	<0.01
		30	96-35933	SLRY_WAT	SWEB-7-GW-01-30-960626	<0.05	<0.1	199 JE	<0.002	<0.1	<0.1	<0.01
		55	96-35934	GW_SCRN	SWEB-7-GW-01-55-960626	<0.05	0.9	148	0.02	0.14	<0.1	<0.01
		75	96-35935	GW_SCRN	SWEB-7-GW-01-75-960626	<0.05	0.2	149	<0.002	<0.1	<0.1	<0.01
		91	96-35936	GW_SCRN	SWEB-7-GW-01-91-960626	<0.05	0.28	158	0.002	<0.1	<0.1	<0.01
SWEB-8	07/22/96	75	96-41876	GW_SCRN	SWEB-8-GW-01-75-960722	<0.05	<0.1	117	<0.002	0.1	0.1	<0.004
		75	96-42318	GW_SCRN	SWEB-9-GW-01-75-960724	<0.05	<0.1	217	<0.002	0.1	0.1	<0.004
SWEB-9	07/25/96	195	96-42324	GW_SCRN	SWEB-9-GW-01-195-960725	<0.05	<0.1	197	<0.002	0.03	<0.1	<0.004
		91	96-45491	GW_SCRN	SWEB-10-GW-01-95-960809	<0.05	<0.1	251	<0.002	0.03	<0.1	<0.004
SWEB-10	08/09/96	95	96-45487	GW_SCRN	SWEB-10-GW-01-175-960809	<0.05	<0.1	160	<0.002	0.04	<0.1	<0.004
		175	96-45624	GW_SCRN	SWEB-11-GW-01-95-960811	<0.05	<0.1	272	<0.002	0.08	<0.1	<0.004
SWEB-11	08/13/96	95	96-45629	GW_SCRN	SWEB-11-GW-01-355-960813	<0.05	<0.1	384	<0.002	0.08	0.18	<0.004
		355	96-45993	SLRY_WAT	SWEB-12-GW-01-235-960819	<0.05	<0.1	142				
SWEB-12	08/19/96	155	97-21327	SLRY_WAT	SWEB-12-GW-01-395-960820	<0.05	<0.1	156	<0.002	0.03	<0.1	<0.004
		235	97-21328	SLRY_WAT				152				
SWEB-13	10/03/96	135	96-58444	GW_SCRN	SWEB-13-GW-01-135-961003	<0.05	0.14	138	<0.002	0.04	<0.1	<0.004
		65	97-21329	SLRY_WAT	SWEB-13-GW-01-65-961003			149				
		455	97-21330	SLRY_WAT	SWEB-13-GW-01-455-961005			104				
		495	96-58462	GW_SCRN	SWEB-13-GW-01-495-961005	<0.05	<0.1	94.5	<0.002	0.16	<0.1	<0.004
SWEB-14	11/23/96	35	96-65069	GW_SCRN	SWEB-14-GW-01-35-961123	<0.05	<0.1	181	<0.002	0.29	<0.1	<0.004
		115	96-65077	GW_SCRN	SWEB-14-GW-01-115-961124	<0.05	<0.1	177	0.005	0.04	<0.1	<0.004
TEB-1	04/24/96	35	96-25314	GW_SCRN	TEB-1-GW-01-960424	<0.05	63.5	0 JE	2.22	<0.1	0.02	
TEB-3	06/25/96	42	96-35932	GW_SCRN	TEB-3-GW-01-960625	<0.05	13.8	65	0.002	0.5	<0.1	0.018
WN-34	06/10/96	75	96-34803	GW_SCRN	WN-34-GW-01-75-960610	<0.05	<204	<0.1	0.003 JSH	0.38	<0.1	0.05
		95	96-34804	SLRY_WAT	WN-34-GW-01-95-960610	<0.05	183	1 JE	<0.002	<0.1	<0.1	0.05
		115	96-34805	SLRY_WAT	WN-34-GW-01-115-960610	<0.05	198	<1 JE	<0.002	<0.1	0.035	
		250	96-35079	SLRY_WAT	WN-34-GW-01-250-960612	<0.05	<0.1	124 JE	<0.002	<0.1	<0.1	<0.01
WN-35A	05/11/96	35	96-30814	GW_SCRN	WN-35A-GW-01-35-960511	<0.05	<0.1	322	0.002	<0.1	<0.1	<0.01
		95	96-30815	GW_SCRN	WN-35A-GW-01-95-960511	<0.05	<0.1	348	<0.002	<0.1	<0.1	<0.01

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 4 of 20)

Location	Sample Date	Sample Depth	Lab ID	Matrix Code ^a	Sample ID	Ag	AI	Alkalinity (as CaCO ₃)	As	B	Ba	Be
WN-35A	05/12/96	135	96-30816	GW_SCRN	WN-35A-GW-01-135-960512	<0.05	<0.1	780	0.003	<0.1	<0.01	
		175	96-30817	GW_SCRN	WN-35A-GW-01-175-960512	<0.05	<0.1	747	<0.002	<0.1	<0.01	
		215	96-30818	GW_SCRN	WN-35A-GW-01-215-960512	<0.05	<0.1	496	0.003	<0.1	<0.01	
WN-38A	09/08/96	125	96-53411	GW_SCRN	WN-38A-GW-01-125-960908	<0.05	<0.1	150	<0.002	0.73	<0.1	<0.004
WN-38C	09/11/96	15	96-53405w	SLRY_WAT	WN-38C-GW-01-15-960911	<0.05	0.11	330 JE	0.004	<0.1	<0.01	
WN-39A	09/11/96	15	96-53397	GW_SCRN	WN-39A-GW-01-15-960911	<0.05	<0.1	276	<0.002	0.08	<0.1	<0.004
		15	96-53397w	SLRY_WAT	WN-39A-GW-01-15-960911	<0.05	<0.1	217 JE	<0.002	<0.1	<0.1	<0.01
		95	96-53401	GW_SCRN	WN-39A-GW-01-95-960911	<0.05	0.22	118	<0.002	0.06	<0.1	<0.004
		115	96-53402	GW_SCRN	WN-39A-GW-01-115-960911	<0.05	<0.1	127	<0.002	0.14	<0.1	<0.004
WN-40A	11/13/96	15	96-64383w	SLRY_WAT	WN-40A-GW-01-15-961113	<0.05	<0.1	326 JE	0.006	<0.1	<0.01	
		115	96-64370	GW_SCRN	WN-40A-GW-01-115-961114	<0.05	<0.1	145	0.003	0.04	<0.1	<0.004
		205	96-64376	GW_SCRN	WN-40A-GW-01-205-961114	<0.05	0.15	146	0.003	0.59	<0.1	<0.004
WN-41A	11/19/96	15	96-64492w	SLRY_WAT	WN-41A-GW-01-15-961119	<0.05	0.11	306 JE	0.011	<0.1	<0.01	
		95	96-64490	GW_SCRN	WN-41A-GW-01-95-961119	<0.05	0.21	163	<0.002	0.88	<0.1	<0.004
		185	96-64491	GW_SCRN	WN-41A-GW-01-185-961120	<0.05	0.15	160	<0.002	0.9	<0.1	<0.004
WN-42A	12/04/96	15	96-65441w	SLRY_WAT	WN-42A-GW-01-15-961204	<0.05	<0.1	298 JE	<0.002	<0.1	<0.01	
WN-43A	12/07/96 03/25/97 12/08/96 12/09/96	15	96-69823w	SLRY_WAT	WN-43A-GW-01-15-961207	<0.05	0.96	269 JE	0.005	<0.1	<0.01	
		15	97-21331	SLRY_WAT	WN-43A-GW-01-15-961207							
		55	96-69824	GW_SCRN	WN-43A-GW-01-55-961208	<0.05	<0.1	144	0.002	0.05	<0.1	<0.004
		215	96-69834	GW_SCRN	WN-43A-GW-01-215-961209	<0.05	0.13	114	0.004	0.06	<0.1	<0.004

Notes: ^aMatrix GW_SCRN = sample filtered, preserved immediately after collection; SLRY_WAT = sample separated (filtered) and preserved from archived slurry.

^bData from nonfiltered samples (all other data are from 0.45 µm filtered).

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

C = Field blank contamination

D = Duplicate relative percent differences out of acceptable range

E = Exceeded holding time

H = Results biased high (see sample note in database for explanation)

S = LCS (Laboratory Control Sample) or spike sample recovery outside acceptable limits.

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 5 of 20)

Location	Sample Date	Sample Depth	Lab ID	Ca	Cd	Cl Wet	Cl	Co	Conductivity (Field) ^b		Conductivity (Lab) ^b		Cr	Cu	F	Fe	
									Conductivity (Field) ^b	Conductivity (Lab) ^b	Cr	Cu					
FPEB-1	03/06/96	55	96-18124	610	<0.01	74.5 JE	110		3280	3269	<0.05	<0.01	<0.1	<0.05			
			96-18125	615	<0.01	78 JE	90		3280	3246	<0.05	<0.01	<0.1	<0.05			
			96-30163	568	<0.01		95.8			3132 JE	<0.05	<0.01	0.11 JE	<0.05			
			96-30164	536	<0.01		98			3066 JE	<0.05	<0.01	0.11 JE	<0.05			
FPEB-2	03/07/96	55	96-18172	400	<0.01	72.3 JE	78		2550	2613	<0.05	<0.01	0.11	<0.05			
			96-30165	397	<0.01		93.3			2506 JE	<0.05	<0.01	0.17 JE	<0.05			
FPEB-3	03/08/96	135	96-18228	33	<0.01	248 JE	231		1515	1682	<0.05	<0.01	1.29	<0.05			
			03/10/96	420	26.6	<0.01	376 JE	342		2230	2409	<0.05	<0.01	1.11	<0.05		
FPEB-4	03/11/96	30	96-18251	41	<0.01	6.7 JE	6		462	417	<0.05	<0.01	0.36	<0.05			
			50	96-30166	45.9	<0.01		6.3			384 JE	<0.05	<0.01	0.32 JE	<0.05		
			95	96-18256	41	<0.01	7.8 JE	7.1		454	400	<0.05	<0.01	0.29	<0.05		
FPEB-5	03/12/96	55	96-18475	84.3	<0.01	167 JE	150		1106	1190	<0.05	<0.01	0.38	<0.05			
			55	96-30167	92.8	<0.01		168			1143 JE	<0.05	<0.01	0.41 JE	<0.05		
			195	96-18487	31.1	<0.01	369 JE	352		2240	2319	<0.05	<0.01	1.18	<0.05		
FPEB-6	03/13/96	35	96-18463	24.9	<0.01	92.2 JE	106		1056	1105	<0.05	<0.01	0.78	<0.05			
			75	96-30169	45.6	<0.01		366			2275 JE	<0.05	<0.01	1.1 JE	<0.05		
			135	96-18470	28.2	<0.01	347 JE	332			2177	<0.05	<0.01	1.34	<0.05		
FPEB-7	03/26/96	52	96-19175	66.1	<0.01		8.7		507	524 JE	<0.05	<0.01	0.45 JE	<0.05			
			52	96-30170	56.3	<0.01		9.9			503 JE	<0.05	<0.01	0.5 JE	<0.05		
			295	96-19158	51.8	<0.01		12.6		435	412 JE	<0.05	<0.01	0.3 JE	<0.05		
FPEB-8	03/29/96	55	96-19324	54.3	<0.01		19.5		547	443 JE	<0.05	<0.01	0.59 JE	<0.05			
FPEB-9	03/30/96	15	96-19506	152	<0.01		229		2380	2758 JE	<0.05	<0.01	0.89 JE	<0.05			
			03/31/96	215	96-19514	36	<0.01	208		493	1414 JE	<0.05	<0.01	0.75 JE	<0.05		
FPEB-10	04/01/96	55	96-30171	62	<0.01		474			2616 JE	<0.05	<0.01	0.57 JE	<0.05			
			95	96-19561	54.4	<0.01		478		2590	2652 JE	<0.05	<0.01	1.4 JE	<0.05		
FPEB-11	04/02/96	65	96-30172	24.2	<0.01		12.4			378 JE	<0.05	<0.01	0.47 JE	<0.05			
			72	96-19577	29.9	<0.01		54.1		565	537 JE	<0.05	<0.01	0.66 JE	<0.05		
			72	96-19578	29.9	<0.01		53.9		558	532 JE	<0.05	<0.01	0.66 JE	<0.05		
NWEB-1	02/21/96	40	96-13724	959	<0.01		168		4280	4200	<0.01	<0.1	<0.05				
			60	96-30159	680	<0.01		170			3363 JE	<0.05	0.02	<0.1 JE	<0.05		
			100	96-13728	926	<0.01		163		4520	3928	<0.01	<0.1	<0.05			
	02/22/96	180	96-13732	1020	<0.01		119		5210	4082	<0.01	<0.1	<0.05				
			3/10/96	40	96-18236	940	<0.01	183			4545	<0.01	<0.1	<0.05			
(profiling)		100	96-18237	912	<0.01		187			4404	<0.01	<0.1	0.05				
			180	96-18238	931	<0.01		191			4673	<0.01	<0.1	<0.05			

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 6 of 20)

Location	Sample Date	Sample Depth	Lab ID	Ca	Cd	Cl Wet	Cl	Co	Conductivity (Field) ^b	Conductivity (Lab) ^b	Cr	Cu	F	Fe
NWEB-2	02/23/96	55	96-30160	694	<0.01		122			3923 JE	<0.05	<0.01	<0.1 JE	<0.05
	02/23/96	55	96-30161	696	<0.01		125			3923 JE	<0.05	<0.01	<0.1 JE	<0.05
	02/23/96	35	96-13780	989	<0.01		134		4870	4900	<0.01	<0.1	<0.05	
	02/23/96	75	96-13782	949	<0.01		142			4355	<0.01	<0.1	<0.05	
	02/24/96	120	96-13882	668	<0.01		102			3100	0.04	0.1	0.37	
	03/10/96	35	96-18239	969	<0.01		214			5083	<0.01	0.11	<0.05	
	(profiling)	70	96-18240	952	<0.01		194			4455	<0.01	<0.1	<0.05	
		120	96-18241	928	<0.01		195			4391	<0.01	<0.1	<0.05	
NWEB-3	02/25/96	55	96-13890	920	<0.01	135 JE	145			3947 JE	<0.05	<0.01	<0.1 JE	0.12
	03/05/96	275	96-18112		<0.01	106 JE	133		3710	3744	<0.05	<0.01	<0.1	0.62
	03/06/96	55	96-30162	680	<0.01		142			2978 JE	<0.05	<0.01	0.12 JE	<0.05
SEB-1	09/16/96	155	96-53737	54.6	<0.007		3.5	<0.01	400	359 JE	<0.05	<0.01	0.31 JE	<0.05
SWEB-1	04/03/96	55	96-19745	636	<0.01		148		5110	5050 JE	<0.05	<0.01	0.4 JE	0.08
		75	96-30173	555	<0.01		139			3978 JE	<0.05	<0.01	0.13 JE	<0.05
	04/04/96	195	96-19754	652	<0.01		166		4620	4616 JE	<0.05	<0.01	0.82 JE	<0.05
	04/05/96	395	96-24565	128	<0.01		58.1		1426	1403 JE	<0.05	<0.01	0.32 JE	<0.05
SWEB-2	04/06/96	55	96-24570	698	<0.01		146		3810	3535 JE	<0.05	<0.01	0.21 JE	<0.05
		75	96-30175	805	<0.01		78.4			3374 JE	<0.05	<0.01	<0.1 JE	<0.05
		95	96-24573	645	<0.01		50.1		2930	2811 JE	<0.05	<0.01	0.13 JE	<0.05
	04/07/96	295	96-24586	815	<0.01		97.8		3550	3435 JE	<0.05	<0.01	0.1 JE	<0.05
		295	96-24586	707	<0.005		91			2630 JE	<0.05	<0.01	0.12 JE	<0.05
	SWEB-3	04/16/96	75	96-25058	856	<0.007		100	4170	3560 JE	<0.05	<0.01	<0.1 JE	5.29
		75	96-30174	735	<0.01		106			3858 JE	<0.05	<0.01	0.22 JE	<0.05
		155	96-25062	588	<0.007		91.4		4210	4540 JE	<0.05	<0.01	1.22 JE	0.06
		04/17/96	235	96-25066	616	<0.007		82	3310	3750 JE	<0.05	<0.01	1.37 JE	0.14
SWEB-4	05/30/96	75	96-30552	984	<0.007		82		3590	3390 JE	<0.05	<0.01	<0.1 JE	<0.05
		95	96-30553	794	<0.01		98			3240 JE	<0.05	<0.01	<0.1 JE	<0.05
		135	96-30555	499	<0.005		63.9			2360 JE	<0.05	<0.01	<0.1 JE	<0.05
		135	96-30555	594	<0.007		61		2490	2430 JE	<0.05	<0.01	<0.1 JE	<0.05
SWEB-5	05/31/96	75	96-30800	51.7	<0.007		6.7		430	413 JE	<0.05	<0.01	0.35 JE	<0.05
	05/31/96	75/95	96-30800-801	75	<0.01		7.6			575 JE	<0.05	<0.01	0.3 JE	0.05
		155/175	96-30805-806	171	<0.01		27			1270 JE	<0.05	<0.01	0.2 JE	<0.05
		155/175	6-30805-806	170	<0.01		26			1270 JE	<0.05	<0.01	0.2 JE	<0.05
	06/01/96	195	96-30809	323	<0.007		44.9		2010	1950 JE	<0.05	<0.01	0.14 JE	2.26
	06/01/96	215	96-30810	223	<0.01		32.4			1570 JE	<0.05	<0.01	0.17 JE	<0.05

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 7 of 20)

Location	Sample Date	Sample Depth	Lab ID	Ca	Cd	Cl Wet	Cl	Co	Conductivity (Field) ^b	Conductivity (Lab) ^b	Cr	Cu	F	Fe
SWEB-6	06/04/96	55	96-30793	165	<0.007		31.2		1065	955 JE	<0.05	<0.01	0.44 JE	<0.05
		175	96-30797	56.5	<0.007		5.4		481	453 JE	<0.05	<0.01	0.24 JE	<0.05
		155/175	96-30796	50	<0.01		5.5			449 JE	<0.05	<0.01	0.29 JE	<0.05
	06/05/96	335/355	96-34814	44.3	<0.01		14.6			415 JE	<0.05	<0.01	0.25 JE	<0.05
SWEB-7	06/26/96	30	96-35933	133	<0.01		28.2		1096	1119	<0.05	0.01	0.32	<0.05
		30	96-35933	141	<0.01		25.1			1160 JE	<0.05	<0.01	0.32 JE	<0.05
		55	96-35934	51	<0.01		8.2		463	426	<0.05	0.05	0.4	0.29
	07/25/96	75	96-35935	56.3	<0.01		10.9		462	416	<0.05	<0.01	0.47	0.07
		91	96-35936	65.7	<0.01		11.3		501	539	<0.05	<0.01	0.32	0.16
		91	96-35937	65.9	<0.01		11.6			534	<0.05	<0.01	0.33	<0.05
SWEB-8	07/22/96	75	96-41876	109	<0.007		30.4	<0.01	815	841 JE	<0.05	<0.01	0.28 JE	<0.05
SWEB-9	07/24/96	75	96-42318	276	<0.007		38.4	<0.01	1525	1480 JE	<0.05	<0.01	0.24 JE	<0.05
	07/25/96	195	96-42324	115	<0.007		13.1	<0.01	689	693 JE	<0.05	<0.01	0.21 JE	<0.05
SWEB-10	08/09/96	95	96-45491	207	<0.007		28	<0.01	1374	1170 JE	<0.05	<0.01	0.12 JE	<0.05
	08/11/96	175	96-45487	89.4	<0.007		22.9	<0.01	677	649 JE	<0.05	<0.01	0.22 JE	<0.05
SWEB-11	08/11/96	95	96-45624	426	<0.007		46.3	<0.01	2530	2410 JE	<0.05	<0.01	0.15 JE	<0.05
	08/13/96	355	96-45629	329	<0.007		29	<0.01	2130	1840 JE	<0.05	<0.01	<0.1 JE	<0.05
SWEB-12	08/19/96	155	96-45993	53.1	<0.007		5.4	<0.01	417	394 JE	<0.05	<0.01	0.32 JE	<0.05
	03/25/97	235	97-21327	53.9			5.4			389				
		395	97-21328	56.8			7.9			418				
SWEB-13	10/03/96	135	96-58444	37.3	<0.007		<3.6	<0.01	360	333 JE	<0.05	<0.01	0.36 JE	<0.05
		65	97-21329	51			5.8			397				
		455	97-21330	48.6			40.9			491				
	10/05/96	495	96-58462	59.6	<0.007		106	<0.01	722	681 JE	<0.05	<0.01	0.4 JE	<0.05
SWEB-14	11/23/96	35	96-65069	39.8	<0.007		10.9		493	451	<0.05	0.02	0.24	0.05
	11/24/96	115	96-65077	59.7	<0.007		5.8		497	500	<0.05	<0.01	0.18	<0.05
TEB-1	04/24/96	35	96-25314	382	<0.01		113			9065	<0.05	<0.01	4.02	685
TEB-3	06/25/96	42	96-35932	495	0.188		96		6080	6840	<0.05	0.02		399
WN-34	06/10/96	75	96-34803	392	0.019		118		6660	6960 JE	<0.05	0.15	5.99 JE	228
		95	96-34804	372	<0.01		118			6880 JE	<0.05	0.11	8.81 JE	34.1
		115	96-34805	390	<0.01		138			6090 JE	<0.05	0.1	8.64 JE	35.9
	06/12/96	250	96-35079	144	<0.01		9.4			1040 JE	<0.05	<0.01	1.04 JE	<0.05
WN-35A	05/11/96	35	96-30814	560	<0.01		136		6310	6613	<0.05	<0.01	2.74 JE	<0.05
	05/11/96	95	96-30815	775	<0.01		146		3380	7006	<0.05	<0.01	3.39 JE	<0.05

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 8 of 20)

Location	Sample Date	Sample Depth	Lab ID	Ca	Cd	Cl Wet	Cl	Co	Conductivity (Field) ^b	Conductivity (Lab) ^b	Cr	Cu	F	Fe
WN-35A	05/12/96	135	96-30816	945	<0.01		94.1		4290	3936	<0.05	<0.01	<0.1 JE	<0.05
		175	96-30817	925	<0.01		103		3890	3970	<0.05	<0.01	<0.1 JE	<0.05
		215	96-30818	670	<0.01		45		3450	3520	<0.05	<0.01	0.1 JE	<0.05
WN-38A	09/08/96	125	96-53411	99	<0.007		352	<0.01	2480	1760 JE	<0.05	<0.01	0.52 JE	<0.05
WN-38C	09/11/96	15	96-53405w	149	<0.01		126			2050 JE	<0.05	<0.01	0.8 JE	0.13
WN-39A	09/11/96	15	96-53397	361	<0.007		57	<0.01	1893	1790 JE	<0.05	<0.01	0.29 JE	<0.05
		15	96-53397w	381	<0.01		56.7			1870 JE	<0.05	<0.01	0.35 JE	0.05
		95	96-53401	40.6	<0.007		25.8	<0.01	407	383 JE	<0.05	<0.01	0.34 JE	0.08
		115	96-53402	66.3	<0.007		105	<0.01	784	791 JE	<0.05	<0.01	0.38 JE	<0.05
WN-40A	11/13/96	15	96-64383w	224	<0.01		45.3			3800 JE	<0.05	<0.01	0.8 JE	<0.05
		115	96-64370	41.3	<0.007		41		559	561	<0.05	<0.01	0.36	<0.05
		205	96-64376	26.9	<0.007		334		1754	1810	<0.05	<0.01	1.27	0.08
WN-41A	11/19/96	15	96-64492w	139	<0.01		180			2060 JE	<0.05	<0.01	0.83 JE	0.1
		95	96-64490	31.7	<0.007		337		2440	2300	<0.05	<0.01	1.14	0.11
		185	96-64491	28.2	<0.007		370		2330	2210	<0.05	<0.01	1.16	0.05
WN-42A	12/04/96	15	96-65441w	745	<0.01		131			3280 JE	<0.05	<0.01	0.42	0.08
WN-43A	12/07/96	15	96-69823w	49.5	<0.01		89			1460 JE	<0.05	<0.01	1.24	1.23
		03/25/97	97-21331	22.4			110						1880	
		12/08/96	55	96-69824	46.7	<0.007	13.6		462	463	<0.05	<0.01	0.43	<0.05
		12/09/96	215	96-69834	48.2	<0.007	49.7			577	<0.05	0.01	0.39	0.1

Notes: ^aMatrix GW_SCRN = sample filtered, preserved immediately after collection; SLRY_WAT = sample separated (filtered) and preserved from archived slurry.

^bData from nonfiltered samples (all other data are from 0.45 µm filtered).

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

C = Field blank contamination

D = Duplicate relative percent differences out of acceptable range

E = Exceeded holding time

H = Results biased high (see sample note in database for explanation)

S = LCS (Laboratory Control Sample) or spike sample recovery outside acceptable limits.

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 9 of 20)

Location	Sample Date	Sample Depth	Lab ID	Hg	K	Mg	Mn	Mo	Na	NH ₄ -N	Ni	NO ₂ +NO ₃ -N	P	Pb
FPEB-1	03/06/96	55	96-18124	<0.001	18.1	88	0.44	<0.1	92.4	<0.05 JE	<0.05	83.3	0.06	<0.001
			96-18125	<0.001	17.6	89	0.44	<0.1	90.1	<0.05 JE	<0.05	77.4	<0.05	<0.001
			96-30163	<0.001 JE	17.1	82.7	0.63	<0.1	104		<0.05		<0.1	<0.002
			96-30164	<0.001 JE	17.2	83	0.54	<0.1	104		<0.05		<0.1	<0.002
FPEB-2	03/07/96	55	96-18172	<0.001	17	66	0.12	<0.1	108	<0.05 JE	<0.05	46.2	<0.05	<0.001
			96-30165	<0.001 JE	18.2	64.4	0.46	<0.1	103		<0.05		<0.1	<0.002
FPEB-3	03/08/96	135	96-18228	<0.001	8.3	6	0.03	<0.1	276	<0.05	<0.05	0.33	<0.05	<0.001
	03/10/96	420	96-18244	<0.001	9.4	5.4	0.03	<0.1	405	<0.05	<0.05	0.14	<0.05	<0.001
FPEB-4	03/11/96	30	96-18251	<0.001	7.5	7.6	0.03	<0.1	21.5	<0.05	<0.05	0.7	<0.05	<0.001
		50	96-30166	<0.001 JE	5.9	7.9	<0.01	<0.1	19.6		<0.05		<0.1	<0.002
		95	96-18256	<0.001	6.6	7.5	0.02	<0.1	23.2	<0.05	<0.05	0.78	<0.05	<0.001
FPEB-5	03/12/96	55	96-18475	<0.001	10.6	12.7	0.01	<0.1	118	<0.05	<0.05	0.64	<0.05	0.014
		55	96-30167	<0.001 JE	9.8	13.5	<0.01	<0.1	114		<0.05		<0.1	<0.002
		195	96-18487	<0.001	9	6	0.02	<0.1	397	<0.05	<0.05	0.2	<0.05	<0.001
FPEB-6	03/13/96	35	96-18463	<0.001	8.3	4.9	0.02	<0.1	178	<0.05	<0.05	0.78	<0.05	<0.001
		75	96-30169	<0.001 JE	9.3	8.1	<0.01	<0.1	402		<0.05		<0.1	<0.002
		135	96-18470	<0.001	8.3	5.5	0.02	<0.1	363	<0.05	<0.05	0.42	<0.05	<0.001
FPEB-7	03/26/96	52	96-19175	<0.001 JE	10.9	12.7	0.11	<0.1	31.8	<0.05 JE	<0.05	0.14 JE	<0.05	<0.002
		52	96-30170	<0.001 JE	10.1	11.1	0.05	<0.1	32.7		<0.05		<0.1	<0.002
		295	96-19158	<0.001 JE	6.5	8.6	0.04	<0.1	23.6	<0.05 JE	<0.05	0.64 JE	<0.05	<0.002
FPEB-8	03/29/96	55	96-19324	<0.001 JE	6.7	8.9	0.02	<0.1	30.9	<0.05 JE	<0.05	0.67 JE	<0.05	<0.002
FPEB-9	03/30/96	15	96-19506	<0.001 JE	18.9	34.8	0.32	<0.1	429	0.15 JE	<0.05	<0.1 JE	0.1	<0.002
		215	96-19514	<0.001 JE	8.3	7.5	0.08	<0.1	246	0.14 JE	<0.05	0.22 JE	<0.05	<0.002
FPEB-10	04/01/96	55	96-30171	<0.001 JE	11.5	11.2	0.51	<0.1	453		<0.05		<0.1	<0.002
		95	96-19561	<0.001 JE	12.1	9.5	0.04	<0.1	481	<0.05 JE	<0.05	0.26 JE	<0.05	<0.002
FPEB-11	04/02/96	65	96-30172	<0.001 JE	4.4	4.4	0.01	<0.1	49.8		<0.05		<0.1	<0.002
		72	96-19577	<0.001 JE	5.4	5.4	<0.01	<0.1	75.2	0.09 JE	<0.05	0.46 JE	<0.05	<0.002
		72	96-19578	<0.001 JE	5.4	5.4	<0.01	<0.1	75.1	0.06 JE	<0.05	0.46 JE	<0.05	<0.002
NWEB-1	02/21/96	40	96-13724		23.1	99.4	0.68		191	0.06	<0.05	63.5	<0.1	<0.002
		60	96-30159	<0.001 JE	21	91	1.17	0.27	65.4		<0.05		<0.1	<0.002
		100	96-13728		21.5	104	0.37		147	0.06	<0.05	45.1	<0.1	<0.002
	02/22/96	180	96-13732		17.7	132	0.31		57	0.11	<0.05	94.8	0.15	<0.002
		40	96-18236		20.3	97.7	0.16		190	0.06	<0.05	57.2	0.1	<0.002
(profiling)	3/10/96	100	96-18237		21.3	103	0.22		173	0.07	<0.05	58.2	0.13	<0.002
		180	96-18238		21.4	105	0.2		176	0.06	<0.05	58.5	0.1	<0.002

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 10 of 20)

Location	Sample Date	Sample Depth	Lab ID	Hg	K	Mg	Mn	Mo	Na	NH ₄ -N	Ni	NO ₂ +NO ₃ -N	P	Pb
NWEB-2	02/23/96	55	96-30160	<0.001 JE	16.3	82.6	1.42	<0.1	219		<0.05		<0.1	<0.002
	02/23/96	55	96-30161	<0.001 JE	15.8	83.7	1.4	<0.1	214		<0.05		<0.1	<0.002
	02/23/96	35	96-13780		16.8	130	3.05		239	0.17	<0.05	144	<0.1	<0.002
	02/23/96	75	96-13782		15.3	109	0.41		161	0.14	<0.05	117	0.12	<0.002
	02/24/96	120	96-13882		18.2	64	3.45		310	0.15	<0.05	15.9	0.23	<0.002
	03/10/96	35	96-18239		14.3	128	0.44		145	0.17	<0.05	149	0.1	<0.002
	(profiling)	70	96-18240		13.9	114	0.51		110	0.14	<0.05	87	0.1	<0.002
		120	96-18241		14.3	110	0.69		114	0.12	<0.05	81.3	0.1	<0.002
NWEB-3	02/25/96	55	96-13890	<0.001 JE	10	80	0.26	0.21	38.8	0.08 JE	<0.05	35.2 JE	<0.05	<0.001
	03/05/96	275	96-18112	<0.001	14.2	105	0.24	0.18	82.4	0.07 JE	<0.05	52.3	0.19	<0.001
	03/06/96	55	96-30162	<0.001 JE	8.7	63.1	0.09	0.12	38.1		<0.05		0.12	<0.002
SEB-1	09/16/96	155	96-53737	<0.001 JE	4.3	6.5	<0.01	<0.1	19.2	<0.05 JE	<0.05	<0.1 JE	<0.05	<0.002
SWEB-1	04/03/96	55	96-19745	<0.001 JE	61.1	306	6.62	<0.1	279	65.8 JE	<0.05	2.81 JE	<0.05	<0.002
		75	96-30173	<0.001 JE	33.3	130	1.83	<0.1	263		<0.05		<0.1	<0.002
	04/04/96	195	96-19754	<0.001 JE	31.3	157	8.09	<0.1	210	108 JE	<0.05	9.25 JE	<0.05	<0.002
	04/05/96	395	96-24565	<0.001 JE	12.9	20.5	0.07	<0.1	142	0.17 JE	<0.05	39.2 JE	<0.05	<0.002
SWEB-2	04/06/96	55	96-24570	<0.001 JE	46.3	130	0.35	0.14	158	27.5 JE	<0.05	7.98 JE	<0.05	<0.002
		75	96-30175	<0.001 JE	16.1	113	1.85	<0.1	40.1		<0.05		<0.1	<0.002
		95	96-24573	<0.001 JE	15.6	87.6	2.13	<0.1	30	0.97 JE	<0.05	92.2 JE	<0.05	<0.002
	04/07/96	295	96-24586	<0.001 JE	19.6	108	0.95	<0.1	60.4	15.5 JE	<0.05	24.4 JE	0.1	<0.002
		295	96-24586	<0.001 JE	18.4	78.1	0.37	<0.1	31.8		<0.05		<0.1	<0.001
SWEB-3	04/16/96	75	96-25058	<0.001 JE	33.8	152	7.11	<0.1	128	28.5 JE	0.05	10.9 JE	0.06	<0.002
		75	96-30174	<0.001 JE	28.8	128	7.2	<0.1	116		<0.05		<0.1	<0.002
		155	96-25062	<0.001 JE	39.4	168	27.7	<0.1	156	187 JE	0.14	42.3 JE	0.09	<0.002
	04/17/96	235	96-25066	<0.001 JE	40.4	136	15.2	<0.1	149	101 JE	0.12	42.2 JE	0.07	<0.002
SWEB-4	05/30/96	75	96-30552	<0.001 JE	19.5	81	0.21	<0.1	37.3	<0.05 JE	<0.05	24.7 JE	0.08	<0.002
		95	96-30553	<0.001 JE	18	79	0.39	<0.1	30.8		<0.05		<0.1	<0.001
		135	96-30555	<0.001 JE	15.6	60.4	0.09	<0.1	28.2		<0.05		<0.1	<0.001
		135	96-30555	<0.001 JE	18.7	66	0.14	<0.1	29.4	<0.05 JE	<0.05	64 JE	0.07	<0.002
SWEB-5	05/31/96	75	96-30800	<0.001 JE	7	7.9	0.02	<0.1	19.1	<0.05 JE	<0.05	4.45 JE	<0.05	<0.002
	05/31/96	75/95	96-30800-801	<0.001 JE	7	10.8	0.02	<0.1	24.5		<0.05		<0.1	<0.001
		155/175	96-30805-806	<0.001 JE	11.6	27.9	0.13	<0.1	58.6		<0.05		<0.1	0.002
		155/175	6-30805-806	<0.001 JE	11.6	27.8	0.13	<0.1	59		<0.05		<0.1	0.002
	06/01/96	195	96-30809	<0.001 JE	16.6	51	0.88	<0.1	78	0.27 JE	0.06	50.2 JE	<0.05	<0.002
	06/01/96	215	96-30810	<0.001 JE	12.7	34.8	0.24	<0.1	65.7		<0.05		<0.1	0.001

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 11 of 20)

Location	Sample Date	Sample Depth	Lab ID	Hg	K	Mg	Mn	Mo	Na	NH ₄ -N	Ni	NO ₂ +NO ₃ -N	P	Pb
SWEB-6	06/04/96	55	96-30793	<0.001 JE	10.7	21	0.08	<0.1	35.5	0.1 JE	<0.05	0.27 JE	<0.05	<0.002
		175	96-30797	<0.001 JE	6.4	8.4	<0.01	<0.1	28.7	0.06 JE	<0.05	0.28 JE	<0.05	<0.002
		155/175	96-30796	<0.001 JE	5.4	7.3	<0.01	<0.1	28.1		<0.05		<0.1	0.002
	06/05/96	335/355	96-34814	<0.001 JE	5.5	6.8	0.02	<0.1	26.5		<0.05		<0.1	0.002
SWEB-7	06/26/96	30	96-35933	<0.001	11.4	23.9	0.05	<0.1	74.5		<0.05		<0.1	<0.002
		30	96-35933	<0.001 JE	10	23.8	0.05	<0.1	73.2		<0.05		<0.1	0.002
		55	96-35934	<0.001	5.9	7.9	0.05	<0.1	30.8		<0.05		<0.1	<0.002
	07/25/96	75	96-35935	<0.001	7.3	8.1	0.04	<0.1	23.7		<0.05		<0.1	<0.002
		91	96-35936	<0.001	7.4	10	0.03	<0.1	35.9		<0.05		<0.1	<0.002
		91	96-35937	<0.001	7.6	10	0.03	<0.1	36.2		<0.05		<0.1	<0.002
SWEB-8	07/22/96	75	96-41876	<0.001 JE	8.6	15	0.9	<0.1	39.4	0.06 JE	<0.05	0.34 JE	<0.05	<0.002
SWEB-9	07/24/96	75	96-42318	<0.001 JE	13.7	38.6	0.95	<0.1	49.9	0.11 JE	<0.05	24.3 JE	<0.05	<0.002
	07/25/96	195	96-42324	<0.001 JE	7.9	16.3	0.02	<0.1	35.6	<0.05 JE	<0.05	8 JE	<0.05	<0.002
SWEB-10	08/09/96	95	96-45491	<0.001 JE	10.2	31.6	0.07	<0.1	47.5	<0.05 JE	<0.05	29.1 JE	<0.05	<0.002
	08/09/96	175	96-45487	<0.001 JE	8.3	13.4	0.01	<0.1	27.4	<0.05 JE	<0.05	3.9 JE	<0.05	<0.002
SWEB-11	08/11/96	95	96-45624	<0.001 JE	14.1	60.4	0.1	<0.1	99	<0.05 JE	<0.05	43.3 JE	<0.05	<0.002
	08/13/96	355	96-45629	<0.001 JE	14.3	47.2	0.05	<0.1	80	0.06 JE	<0.05	85.3 JE	<0.05	<0.002
SWEB-12	08/19/96	155	96-45993	<0.001 JE	3.7	6.3	0.1	<0.1	14.5	0.06 JE	<0.05	2.08 JE	<0.05	<0.002
	03/25/97	235	97-21327		6	7.2	0.02		19.7					
		395	97-21328		5.98	7.8	0.02		21.9					
SWEB-13	10/03/96	135	96-58444	<0.001 JE	5.1	5.3	<0.01	<0.1	29.1	<0.05 JE	<0.05	1.14 JE	<0.05	<0.002
		65	97-21329		6.1	6.95	<0.01		25					
		455	97-21330		6.95	6.6	<0.01		40.1					
	10/05/96	495	96-58462	<0.001 JE	10.3	6.5	0.11	<0.1	70	<0.05 JE	<0.05	0.63 JE	<0.05	<0.002
SWEB-14	11/23/96	35	96-65069	<0.001	5.35	6.3	0.13	<0.1	42.6	0.13	<0.05	0.1	0.05	<0.002
	11/24/96	115	96-65077	<0.001	6	8.9	0.14	<0.1	29.4	<0.05	<0.05	<0.1	0.11	<0.002
TEB-1	04/24/96	35	96-25314	<0.001	33.8	245	21.8	<0.1	215	614	0.43	0.11	0.33	0.01
TEB-3	06/25/96	42	96-35932	<0.001 JE	39.5	289	124	<0.1	154		2.29		0.05	<0.002
WN-34	06/10/96	75	96-34803	<0.001 JE	52	174	52.5	<0.1	220	364 JE	0.52	0.43 JE	<0.09	<0.002
		95	96-34804	<0.001 JE	101	185	82.4	<0.1	256		0.46		<0.1	0.007
		115	96-34805	<0.001 JE	58.7	272	166	<0.1	232		0.63		<0.1	0.003
	06/12/96	250	96-35079	<0.001 JE	12.9	32.7	1.25	<0.1	27.1		<0.05		<0.1	0.004
WN-35A	05/11/96	35	96-30814	<0.001 JE	191	280	110	<0.1	259	279	0.12	115	<0.1	<0.002
		95	96-30815	<0.001 JE	98	292	104	<0.1	284	183	0.18	323	0.24	<0.002

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 12 of 20)

Location	Sample Date	Sample Depth	Lab ID	Hg	K	Mg	Mn	Mo	Na	NH ₄ -N	Ni	NO ₂ +NO ₃ -N	P	Pb
WN-35A	05/12/96	135	96-30816	<0.001 JE	16.1	123	0.89	0.12	143	0.58	<0.05	3.06	0.3	<0.002
		175	96-30817	<0.001 JE	18.2	125	0.63	0.14	193	0.1	<0.05	0.92	0.32	<0.002
		215	96-30818	<0.001 JE	25.9	135	0.6	0.18	97	0.05	<0.05	147	0.14	<0.002
WN-38A	09/08/96	125	96-53411	<0.001 JE	13.3	17.9	0.03	<0.1	264	<0.05 JE	<0.05	0.12 JE	<0.05	<0.002
WN-38C	09/11/96	15	96-53405w	<0.001 JE	14.4	34.8	<0.01	<0.1	305		<0.05		<0.1	0.002
WN-39A	09/11/96	15	96-53397	<0.001 JE	16.3	44.1	1.13	<0.1	53.1	0.16 JE	<0.05	19.7 JE	<0.05	<0.002
		15	96-53397w	<0.001 JE	16.2	45.4	0.23	<0.1	56.2		<0.05		<0.1	<0.002
	95	96-53401	<0.001 JE	6.8	6.4	0.01	<0.1	28.4	<0.05 JE	<0.05		1.33 JE	<0.05	<0.002
	115	96-53402	<0.001 JE	9.2	10.5	0.02	<0.1	80.6	<0.05 JE	<0.05		1.06 JE	<0.05	<0.002
WN-40A	11/13/96	15	96-64383w	<0.001 JE	22.8	50.9	2.65	<0.1	84.8		<0.05		<0.1	<0.002
	11/14/96	115	96-64370	<0.001	8.4	7.6	0.14	<0.1	67.5	<0.05	<0.05	0.69	0.11	<0.002
		205	96-64376	<0.001	9.4	5	0.02	0.1	362	<0.05	<0.05	0.22	0.06	<0.002
WN-41A	11/19/96	15	96-64492w	<0.001 JE	20.8	26.4	<0.01	<0.1	313		<0.05		<0.1	<0.002
		95	96-64490	<0.001	9.3	5.5	0.03	<0.1	468	<0.05	<0.05	0.29	<0.05	<0.002
	11/20/96	185	96-64491	<0.001	9.8	5.1	0.02	<0.1	456	<0.05	<0.05	0.17	<0.05	<0.002
WN-42A	12/04/96	15	96-65441w	<0.001 JE	26.5	94.2	3.15	<0.1	86.6		<0.05		0.11	<0.002
WN-43A	12/07/96	15	96-69823w	<0.001 JE	41.8	9.6	0.03	<0.1	243		<0.05		<0.1	<0.002
	03/25/97	15	97-21331		54.6	16.7	<0.01			326				
	12/08/96	55	96-69824	<0.001	9.6	8.2	0.01	<0.1	36.9	<0.05	<0.05	0.84	<0.05	<0.002
	12/09/96	215	96-69834	<0.001	12	7.88	<0.01	<0.1	54	<0.05	<0.05	0.52	<0.05	<0.002

Notes: ^aMatrix GW_SCRN = sample filtered, preserved immediately after collection; SLRY_WAT = sample separated (filtered) and preserved from archived slurry.

^bData from nonfiltered samples (all other data are from 0.45 µm filtered).

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

C = Field blank contamination

D = Duplicate relative percent differences out of acceptable range

E = Exceeded holding time

H = Results biased high (see sample note in database for explanation)

S = LCS (Laboratory Control Sample) or spike sample recovery outside acceptable limits.

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 13 of 20)

Location	Sample Date	Sample Depth	Lab ID	pH (Field) ^b	pH (Lab) ^b	Ra-226	Ra-228	Sb	Se	SiO ₂	SO ₄ Wet	SO ₄ (Field)	SO ₄ (Lab)
FPEB-1	03/06/96	55	96-18124	7.86	7.92	<0.2	1.8	<0.003	<0.003	31.1	1179 JE	1487	1714
			96-18125	7.86	8.04	0.5 JSL	<1	<0.003	0.007	31.5	1153 JE	1487	1156
			96-30163		8.01 JE	1.6 JSH	<1.0	<0.003	0.019	30.4			1214
			96-30164		8.07 JE	0.4 JSH	<1.0	<0.003	0.02	29			1308
FPEB-2	03/07/96	55	96-18172	8.02	8	<0.2	<1	<0.003	<0.003	46	882 JE	984	829
			96-30165		8.21 JE	0.3 JSH	<1.0	<0.003	0.007	39.5			885
FPEB-3	03/08/96	135	96-18228	8.02	8.23			<0.003	<0.003	32	265 JE	279	237
	03/10/96	420	96-18244	8.05	8.31			<0.003	<0.003	23.2	385 JE	448	348
FPEB-4	03/11/96	30	96-18251	8.04	8.27	0.7 JSL	<1	<0.003	0.006	47.5	51 JE	58	46.2
		50	96-30166		8.27 JE	<0.2	<1.0	<0.003	<0.003	46.1			42.7
		95	96-18256	8.17	8.26			<0.003	<0.003	48.5	47.6 JE	48.3	46.2
FPEB-5	03/12/96	55	96-18475	7.87	8.19	<0.2	<1	<0.003	<0.003	31.4	178 JE	193	168
		55	96-30167		8.13 JE	0.4 JSH	<1.0	<0.003	<0.003	31.8			174
		195	96-18487	8.04	8.22			<0.003	<0.003	28.6	366 JE	410	339
FPEB-6	03/13/96	35	96-18463	8.05	8.25			<0.003	0.003	34.6	210 JE	298	210
		75	96-30169		8.22 JE	<0.2	<1.0	<0.003	<0.003	30.9			381
		135	96-18470		8.12			<0.003	<0.003	26.1	344 JE		309
FPEB-7	03/26/96	52	96-19175	8.21	8.44 JE			<0.003	<0.003	41.6		75	62.2
		52	96-30170		8.14 JE	<0.2	<1.0	<0.003	<0.003	23.4			58.1
	03/27/96	295	96-19158	7.73	8.29 JE			<0.003	<0.003	53.6		61	52.4
FPEB-8	03/29/96	55	96-19324	7.72	8.27 JE			<0.003	<0.003	40.2		39	39.4
FPEB-9	03/30/96	15	96-19506	8.27	8.23 JE			<0.003	<0.003	10.2		1014	861
	03/31/96	215	96-19514	8.63	8.37 JE			<0.003	<0.003	13.7		60	222
FPEB-10	04/01/96	55	96-30171		8.08 JE	1.7 JSH	<1.0	<0.003	<0.003	5.7			418
		95	96-19561	7.68	8.39 JE			<0.003	<0.003	24.4		456	453
FPEB-11	04/02/96	65	96-30172		8.24 JE	0.3 JSH	<1.0	<0.003	<0.003	20.7			29.9
		72	96-19577	7.98	8.3 JE			<0.003	<0.003	19.4		62	54.7
		72	96-19578	8.05	8.35 JE			<0.003	<0.003	19.3		64	54.7
NWBB-1	02/21/96	40	96-13724	7.30	7.41 JE	<0.2	<1	0.011	0.011	38		2241	1929
		60	96-30159		8.15 JE	2.3 JSH	<1.0	<0.003	0.012	27.4			1554
		100	96-13728	7.60	7.54 JE	<0.2	<1	0.01	0.01	39.1		2435	1893
	02/22/96	180	96-13732	7.75	7.82 JE	<0.2	<1	0.011	0.011	34.8		2665	2107
	3/10/96	40	96-18236		8.08	0.3	<1	0.01	0.01	40.1			1965
(profiling)		100	96-18237		7.33	0.3	<1	0.013	0.013	42.1			2035
		180	96-18238		7.37	<0.2	<1	0.01	0.01	42.1			2049

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 14 of 20)

Location	Sample Date	Sample Depth	Lab ID	pH (Field) ^b	pH (Lab) ^b	Ra-226	Ra-228	Sb	Se	SiO ₂	SO ₄ Wet	SO ₄ (Field)	SO ₄ (Lab)
NWEB-2	02/23/96	55	96-30160		8.12 JE	0.3 JSH	<1.0	<0.003	0.009	31.2			1922
	02/23/96	55	96-30161		8.14 JE	0.3 JSH	<1.0	<0.003	0.01	30.8			1940
	02/23/96	35	96-13780	7.10	7.88 JE	<0.2	<1		0.008	32.5		2965	2504
	02/23/96	75	96-13782	7.70	8.05 JE	<0.2	<1		0.007	34.7		2421	2138
	02/24/96	120	96-13882	7.80	8.08	<0.2	<1		0.03	34.6		2150	
	03/10/96 (profiling)	35	96-18239		7.49	<0.2	<1		0.016	36.2		2149	
		70	96-18240		7.62	<0.2	<1		0.018	35.3		2037	
		120	96-18241		7.58	<0.2	<1		0.019	35.9		2008	
NWEB-3	02/25/96	55	96-13890	7.70	7.94-	<0.2	<1	<0.003	<0.003	33.5	2296 JE	3024	2025
	03/05/96	275	96-18112	7.56	7.8	0.6 JSL	1.8	<0.003	<0.003	33	1839 JE	1861	1783
	03/06/96	55	96-30162		8.15 JE	<0.2	<1.0	<0.003	0.004	29.1			1452
SEB-1	09/16/96	155	96-53737	7.89				<0.003	<0.003	36.3		55.06	37
SWEB-1	04/03/96	55	96-19745	7.38	7.88 JE	0.3	<1	<0.003	<0.003	35.6		3433	2730
		75	96-30173		8.02 JE	0.5 JSH	<1.0	<0.003	<0.003	40.6			1992
	04/04/96	195	96-19754	7.31	7.95 JE	1	<1	<0.003	<0.003	37.5		2410	2363
	04/05/96	395	96-24565	7.77	8.15 JE	0.3	<1	<0.003	<0.003	37.8		310	300
SWEB-2	04/06/96	55	96-24570	7.24	7.45 JE	<0.2	<1	<0.003	0.003	32.2		2034	2110
		75	96-30175		7.79 JE	<0.2	<1.0	<0.003	<0.003	31.3			1718
		95	96-24573	7.14	8.01 JE	<0.2	<1	<0.003	<0.003	40.8		1367	1071
	04/07/96	295	96-24586	7.56	7.94 JE	<0.2	<1	<0.003	<0.003	46.8		2079	1650
		295	96-24586		7.95 JE	<0.2		<0.003	0.01	35.6			1790
SWEB-3	04/16/96	75	96-25058	7.48	7.75	<0.2	<1	<0.003	0.003 JSH	45		2531	2090
		75	96-30174		7.87 JE	<0.2	<1.0	<0.003	<0.003	24.5			1922
		155	96-25062	6.96	7.75	<0.2	<1	<0.003	0.009 JSH	32.3		1935	2300
	04/17/96	235	96-25066	7.39	7.99	<0.2	<1	<0.003	0.006 JSH	33.1		1826	1860
SWEB-4	05/30/96	75	96-30552	7.48	7.68	<0.2	<1	<0.003	0.131 JSH	36.4		2968	1860
		95	96-30553		7.71 JE	<0.2		<0.003	0.104	36.2			1860
		135	96-30555		7.78 JE	<0.2		<0.003	0.114	32.9			968
		135	96-30555	7.72	7.85	0.4	<1	<0.003	0.155 JSH	36.4		1830	972
SWEB-5	05/31/96	75	96-30800	8.21	8.15	0.9	<1	<0.003	0.005 JSH	46.4		366.7	49.6
	05/31/96	75/95	96-30800-801		8.17 JE	<0.2		<0.003	0.012	43.6			91.5
		155/175	96-30805-806		8.03 JE	<0.2		<0.003	0.01	38.1			296
		155/175	6-30805-806 D		8.21 JE	<0.2		<0.003	0.009	37.9			294
	06/01/96	195	96-30809	7.14	7.77			0.003	0.012 JSH	34.3		937.8	616
	06/01/96	215	96-30810		7.94 JE	<0.2		<0.003	0.009	34.8			381

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
(Page 15 of 20)**

Location	Sample Date	Sample Depth	Lab ID	pH (Field) ^b	pH (Lab) ^b	Ra-226	Ra-228	Sb	Se	SiO ₂	SO ₄ Wet	SO ₄ (Field)	SO ₄ (Lab)
SWEB-6	06/04/96	55	96-30793	7.64	8.05			<0.003	0.003 JSH	37.2		379	329
		175	96-30797	8.07	8.1	<0.2	<1	<0.003	0.003 JSH	45		48	52
		155/175	96-30796	8.33 JE		<0.2		<0.003	0.003	40.4			52.5
	06/05/96	335/355	96-34814	8.14 JE		<0.2		<0.003	<0.003	39.2			51
SWEB-7	06/26/96	30	96-35933	7.82	7.34			<0.003	0.012	41.6		380.2	328
		30	96-35933		8.07 JE	<0.2		<0.003	0.008	36.6			319
		55	96-35934	8.14	7.48			<0.003	<0.003	49.1		71.52	55.4
	07/26/96	75	96-35935	8.04	7.48			<0.003	<0.003	45.9		57.1	51.8
		91	96-35936	8.01	7.41			<0.003	<0.003	44.2		112.3	94.6
		91	96-35937		7.45			<0.003	<0.003	42.3			96
SWEB-8	07/22/96	75	96-41876	7.14	8.08 JE			0.003	<0.003	16.9		293	273
SWEB-9	07/24/96	75	96-42318	7.57	8.03 JE			<0.003	<0.003	35.9		786.3	590
	07/25/96	195	96-42324	7.79	8.14 JE			<0.003	<0.003	48.3		218.8	205
SWEB-10	08/09/96	95	96-45491	7.80	8.14	<0.2	<1	<0.003	<0.003	47.1		362.9	406
		175	96-45487	7.49	8.22	<0.2	<1	<0.003	<0.003	48.6		171.6	149
SWEB-11	08/11/96	95	96-45624	7.59	7.46 JE	<0.2	<1	<0.003	<0.003	47		1240	1120
	08/13/96	355	96-45629	7.70	7.54	<0.2	<1	<0.003	0.021	51.9		569.4	529
SWEB-12	08/19/96	155	96-45993	7.78	8.41 JE			<0.003	0.005	31.6		37.43	32.9
	03/25/97	235	97-21327		8.33				0.003	42.5			44.4
		395	97-21328		8.22			<0.003	37.9				48.4
SWEB-13	10/03/96	135	96-58444	8.21	8.27 JE			<0.003	<0.003	49.6		32.37	25.4
		65	97-21329		8.32			<0.003		40.6			44.9
		455	97-21330		8.17			<0.003		47.7			70.8
	10/05/96	495	96-58462	7.26	8.06 JE			<0.003	<0.003	26.6			83.8
SWEB-14	11/23/96	35	96-65069		8.02			<0.003	<0.003	40.1		58.2	47.2
	11/24/96	115	96-65077		8.05			<0.003	<0.003	43.2		95.4	69.8
TEB-1	04/24/96	35	96-25314		4.08	1750 JD	11.4	<0.003	<0.003	92.7			5980
TEB-3	06/25/96	42	96-35932	5.73	5.43			<0.003	0.053	31		4722	4850
WN-34	06/10/96	75	96-34803	3.93	4	20.9	<1	<0.003	0.012 JSH	68		5962	4660
		95	96-34804		3.99 JE	1.7		<0.003	0.02	68			4490
		115	96-34805		3.95 JE	0.6		<0.003	0.032	69			4350
	06/12/96	250	96-35079		8.14 JE	1		<0.003	<0.003	7.7			408
WN-35A	05/11/96	35	96-30814	7.30	7.77	2.8	<1	<0.003	0.029	37		4896	3305
		95	96-30815	6.81	7.6			<0.003	0.028	42.2		2542	2770

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 16 of 20)

Location	Sample Date	Sample Depth	Lab ID	pH (Field) ^b	pH (Lab) ^b	Ra-226	Ra-228	Sb	Se	SiO ₂	SO ₄ Wet	SO ₄ (Field)	SO ₄ (Lab)	
WN-35A	05/12/96	135	96-30816	7.16	7.75	1.1	<1	<0.003	0.033	38.2		2052	2416	
		175	96-30817	7.18	7.77			<0.003	0.033	39.9		831	2486	
		215	96-30818	7.46	7.96			<0.003	0.011	33.4		792	1484	
WN-38A	09/08/96	125	96-53411	7.35	8.09 JE	<0.2	<1	0.007	<0.003	35.9		407.7	306	
WN-38C	09/11/96	15	96-53405w		8.15 JE			<0.003	<0.003	19.2			643	
WN-39A	09/11/96	15	96-53397	7.59	7.96 JE	<0.2	<1	0.004	0.004	29.1		956.1	786	
			96-53397w		7.73 JE			<0.003	0.004	20.5			800	
		95	96-53401	7.80	8.29 JE	<0.2	<1	<0.003	<0.003	35.7		32.82	31.2	
		115	96-53402	8.08	9.53 JE	<0.2	<1	<0.003	<0.003	33.6		108.1	112	
WN-40A	11/13/96	15	96-64383w		7.94 JE			<0.003	<0.003	37.6			498	
		115	96-64370	7.93	8.22 JE	<0.2	<1	<0.003	0.005	43.2		61.3	81	
		205	96-64376	8.07	8.15 JE	<0.2	<1	<0.003	0.003	33.8		299	310	
WN-41A	11/19/96	15	96-64492w		8.14 JE			<0.003	0.004	31			545	
		95	96-64490	7.97	8.15 JE			<0.003	<0.003	28.9		476.2	321	
		11/20/96	185	96-64491	8.14	7.99 JE		<0.003	<0.003	27.1		483.1	358	
WN-42A	12/04/96	15	96-65441w		7.82 JE			<0.003	0.011	19.4			1640	
WN-43A	12/07/96	15	96-69823w		8.24 JE			<0.003	<0.003	34.7			328	
		03/25/97	97-21331		8.36			<0.003	<0.003	47.7			291	
		12/08/96	55	96-69824	7.98	8.18 JE	<0.2	<1	<0.003	<0.003	44.6		55.52	65.2
		12/09/96	215	96-69834		8.15 JE	<0.2	<1	<0.003	<0.003	60		77.7	78.2

Notes: ^aMatrix GW_SCRN = sample filtered, preserved immediately after collection; SLRY_WAT = sample separated (filtered) and preserved from archived slurry.

^bData from nonfiltered samples (all other data are from 0.45 µm filtered).

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

C = Field blank contamination

D = Duplicate relative percent differences out of acceptable range

E = Exceeded holding time

H = Results biased high (see sample note in database for explanation)

S = LCS (Laboratory Control Sample) or spike sample recovery outside acceptable limits.

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 17 of 20)

Location	Sample Date	Sample Depth	Lab ID	Sr	TDS	Temperature (Field)	Th-230	TI	U _{nat}	V	Zn
FPEB-1	03/06/96	55	96-18124	3.76	2908 JE	9.1	<0.4	<0.002	3.814	<0.1	0.01
			96-18125	3.62	2879 JE	9.1	<0.4	<0.002	4.018	<0.1	<0.01
			96-30163	3.52	2792 JE			<0.002	3.509	<0.1	0.01
			96-30164	3.47	2838 JE			<0.002	3.243	<0.1	<0.01
FPEB-2	03/07/96	55	96-18172	2.91	2142 JE	8.3	<0.4	<0.002	2.359	<0.1	0.02
			96-30165	2.71	2021 JE			<0.002	2.093	<0.1	0.01
FPEB-3	03/08/96	135	96-18228	0.42	963 JE	10.6		<0.002	0.029	<0.1	0.01
			03/10/96	420	96-18244	14.1		<0.002	0.011	<0.1	0.02
FPEB-4	03/11/96	30	96-18251	0.44	263 JE	14.4	<0.4	<0.002	0.025	<0.1	0.02
			50	0.43	270 JE			<0.002	0.027	<0.1	<0.01
			95	0.5	258 JE	12.3		<0.002	0.019	<0.1	0.02
FPEB-5	03/12/96	55	96-18475	0.68	699 JE	12.3	<0.4	<0.002	0.097	<0.1	<0.01
			55	0.7	724 JE			<0.002	0.102	<0.1	<0.01
			195	0.5	1325 JE	9.8		<0.002	0.0096	<0.1	0.03
FPEB-6	03/13/96	35	96-18463	0.35	674 JE	9.5		<0.002	0.057	<0.1	0.01
			75	0.52	1390 JE			<0.002	0.028	<0.1	<0.01
			135	0.4	1167 JE			<0.002		<0.1	0.02
FPEB-7	03/26/96	52	96-19175		337 JE	9.7		0.002	0.086 JSH	<0.1	<0.01
			52	0.43	318 JE			<0.002	0.074	<0.1	<0.01
			03/27/96	295	96-19158	272 JE	10.9	<0.002	0.025 JSH	<0.1	<0.01
FPEB-8	03/29/96	55	96-19324		305 JE	13.1		0.004	0.017	<0.1	<0.01
FPEB-9	03/30/96	15	96-19506		1944 JE	9.6		0.002	0.184	<0.1	<0.01
			03/31/96	215	96-19514	824 JE	7.1	<0.002	0.054 JSH	<0.1	<0.01
FPEB-10	04/01/96	55	96-30171	0.76	1574 JE			<0.002	0.026	<0.1	<0.01
			95	0.76	1540 JE	15.5		<0.002	0.014	<0.1	<0.01
FPEB-11	04/02/96	65	96-30172	0.24	248 JE			<0.002	0.053	<0.1	<0.01
			72	0.24	301 JE	11.3		<0.002	0.04	<0.1	<0.01
			72	0.24	298 JE	13.1		<0.002	0.036	<0.1	<0.01
NWEB-1	02/21/96	40	96-13724	6.18	3935 JE	11	<0.4		9.279	<0.1	<0.01
			60	4.16	3294 JE		<0.4	<0.002	4.911	<0.1	0.01
			100	5.05	3804 JE		0.9		6.293	<0.1	0.02
	02/22/96	180	96-13732	6.28	4243 JE	10.5	<0.4		3.318	<0.1	0.01
			3/10/96	40	4297	0.4			6.596	<0.1	<0.01
	(profiling)	100	96-18236	5.38	4165	<0.4			6.131	<0.1	0.02
			180	5.5	4220	<0.4			6.189	<0.1	0.01

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 18 of 20)

Location	Sample Date	Sample Depth	Lab ID	Sr	TDS	Temperature (Field)	Th-230	TI	U _{nat}	V	Zn
NWEB-2	02/23/96	55	96-30160	2.04	3781 JE	4.5	<0.4	<0.002	0.542	<0.1	<0.01
	02/23/96	55	96-30161	2.05	3817 JE			<0.002	0.534	<0.1	<0.01
	02/23/96	35	96-13780	3.42	4753 JE			0.648	<0.1	0.04	
	02/23/96	75	96-13782	2.86	4317 JE			0.691	<0.1	0.02	
	02/24/96	120	96-13882	2.63	3799 JE	<0.4	<0.4	0.02	<0.1	0.02	
	03/10/96	35	96-18239	3.24	4688			0.622	<0.1	0.01	
	(profiling)	70	96-18240	3.24	4303			0.561	<0.1	0.01	
		120	96-18241	3.1	4223			0.511	<0.1	0.01	
NWEB-3	02/25/96	55	96-13890	2.42	3636 JE	9.2	<0.4	<0.002	2.361	<0.1	0.01
	03/05/96	275	96-18112	3.6	3548 JE	7.8	<0.4	<0.002	2.462	<0.1	0.04
	03/06/96	55	96-30162	1.68	2993 JE	<0.4	<0.4	<0.002	2.211	<0.1	<0.01
SEB-1	09/16/96	155	96-53737	0.44	211 JE			<0.002	0.024	<0.1	<0.01
SWEB-1	04/03/96	55	96-19745	1.16	4535 JE	11.3	1.2	0.004	5.127	<0.1	<0.01
		75	96-30173		3757 JE	7.5	2.9	<0.002	3.683	<0.1	<0.01
	04/04/96	195	96-19754	993 JE	3758 JE			0.006	5.533	<0.1	<0.01
	04/05/96	395	96-24565		993 JE		<0.4	0.004	0.204	<0.1	<0.01
SWEB-2	04/06/96	55	96-24570	1.91	3372 JE	13.8	<0.4	<0.002	3.869	<0.1	<0.01
		75	96-30175	1.34	2998 JE	13	<0.4	<0.002	2.014	<0.1	<0.01
		95	96-24573	2440 JE	2638 JE			0.017	1.073	<0.1	<0.01
	04/07/96	295	96-24586		3192 JE	10.9	0.7	0.007	2.246	<0.1	<0.01
		295	96-24586		2440 JE	0.7	<0.002	1.72	<0.1	<0.01	
SWEB-3	04/16/96	75	96-25058	2.58	3640 JE	8.5	<0.4	<0.002	5.58	<0.1	0.03
		75	96-30174	2.04	3686 JE	15.6	<0.4	<0.002	3.781	<0.1	<0.01
		155	96-25062	2.89	3810 JE			<0.002	3.993	<0.1	0.03
	04/17/96	235	96-25066	3.72	3340 JE	10.1	<0.4	<0.002	3.67	<0.1	0.04
SWEB-4	05/30/96	75	96-30552	2.66	3750 JE	10.9	<0.4	<0.002	0.751	<0.1	0.04
		95	96-30553	2.38	3280 JE	0.8	<0.002	<0.002	0.856	<0.1	<0.01
		135	96-30555	3.16	2040 JE			0.7	0.806	<0.1	<0.01
		135	96-30555	3.53	2550 JE	13.2	<0.4	<0.002	0.753	<0.1	0.02
SWEB-5	05/31/96	75	96-30800	0.4	290 JE	14.2	<0.4	<0.002	0.031	<0.1	0.03
	05/31/96	75/95	96-30800-801	0.66	294 JE	1.3	<0.002	<0.002	0.075	<0.1	<0.01
		155/175	96-30805-806	1.6	918 JE			0.9	<0.002	0.6	<0.1
		155/175	96-30805-806 D	1.58	909 JE	10.7	<0.002	<0.002	0.598	<0.1	<0.01
	06/01/96	195	96-30809	2.44	1700 JE			<0.002	1.67	<0.1	0.06
	06/01/96	215	96-30810	1.9	1100 JE			0.8	<0.002	1.21	<0.1

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 19 of 20)

Location	Sample Date	Sample Depth	Lab ID	Sr	TDS	Temperature (Field)	Th-230	Tl	U _{nat}	V	Zn
SWEB-6	06/04/96	55	96-30793	1.06	766 JE	14		<0.002	0.188	<0.1	0.03
		175	96-30797	0.41	304 JE	13.2	<0.4	<0.002	0.023	<0.1	0.05
		155/175	96-30796	0.36	201 JE		1.7	<0.002	0.0254	<0.1	<0.01
	06/05/96	335/355	96-34814	0.36	170 JE		0.7	<0.002	0.0187	<0.1	<0.01
SWEB-7	06/26/96	30	96-35933	1.08	881.0	16.9		<0.002	0.592	<0.1	<0.01
		30	96-35933	1.08	826 JE		1.6	<0.002	0.6515	<0.1	<0.01
		55	96-35934	0.35	290	12.9		<0.002	0.033	<0.1	<0.01
		75	96-35935	0.41	289	16.5		<0.002	0.031	<0.1	<0.01
		91	96-35936	0.53	374	19.9		<0.002	0.11	<0.1	<0.01
SWEB-8	07/22/96	91	96-35937	0.5	380			<0.002	0.111	<0.1	<0.01
		75	96-41876	0.8	565 JE	14.1		<0.002	0.017	<0.1	<0.01
SWEB-9	07/24/96	75	96-42318	1.29	1290 JE	21.9		<0.002	0.44	<0.1	<0.01
		195	96-42324	0.73	523 JE	11.5		<0.002	0.164	<0.1	<0.01
SWEB-10	08/09/96	95	96-45491	1.22	938 JE	13	<0.4	<0.002	0.903	<0.1	<0.01
		175	96-45487	0.73	465 JE	17	<0.4	<0.002	0.127	<0.1	0.01
SWEB-11	08/11/96	95	96-45624	2.26	2260 JE	13.5	<0.4	<0.002	1.646	<0.1	0.01
		355	96-45629	2.49	1440 JE	15	<0.4	<0.002	1.084	<0.1	0.01
SWEB-12	08/19/96	155	96-45993	0.53	204 JE	11.9		<0.002	0.088	<0.1	<0.01
		235	97-21327						0.023		
		395	97-21328						0.021		
SWEB-13	10/03/96	135	96-58444	0.29	200 JE	11.6		<0.002	0.011	<0.1	<0.01
		65	97-21329						0.017		
		455	97-21330						0.011		
	10/05/96	495	96-58462	0.74	395 JE	16.7		<0.002	0.02	<0.1	<0.01
SWEB-14	11/23/96	35	96-65069	0.33	284.0	8.5		<0.002	0.0237	<0.1	0.05
		115	96-65077	0.48	328.0	9.1		<0.002	0.0418	<0.1	0.12
TEB-1	04/24/96	35	96-25314	3.24	8663		23.4	0.045	0.306	<0.1	3.12
TEB-3	06/25/96	42	96-35932	2.75	6960	19.4		0.021	0.887	<0.1	1.28
WN-34	06/10/96	75	96-34803	2.21	7680 JE	14.4	1.9	<0.002	2.09	<0.1	0.8
		95	96-34804	2.3	7140 JE		3.2	<0.002	3.97	<0.1	1.05
		115	96-34805	2.73	6900 JE		4.6	<0.002	5.1085	<0.1	0.78
	06/12/96	250	96-35079	1.05	738 JE		4.6	<0.002	0.0963	<0.1	<0.01
WN-35A	05/11/96	35	96-30814	3.78	5401 JE	15.2	1.5	<0.002	1.194	<0.1	<0.01
		95	96-30815	4.92	6441 JE	15.6		<0.002	1.227	<0.1	<0.01

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

Table F-5-2 Analytical Results (Long List) for Ground Water Samples Collected During Drilling, Split Rock Site
 (Page 20 of 20)

Location	Sample Date	Sample Depth	Lab ID	Sr	TDS	Temperature (Field)	Th-230	Tl	U _{nat}	V	Zn
WN-35A	05/12/96	135	96-30816	5.09	4409 JE	9.4	0.5	<0.002	1.771	<0.1	<0.01
		175	96-30817	5.72	4334 JE	13.3		<0.002	1.691	<0.1	<0.01
		215	96-30818	5.49	3576 JE	12		<0.002	3.675	<0.1	<0.01
WN-38A	09/08/96	125	96-53411	1.25	1140 JE	11.7	<0.4	<0.002	0.022	<0.1	<0.01
WN-38C	09/11/96	15	96-53405w	1.18	1530 JE			<0.002	0.264	<0.1	<0.01
WN-39A	09/11/96	15	96-53397	1.95	1590 JE	7.8	<0.4	<0.002	1.88	<0.1	0.02
		15	96-53397w	1.76	1660 JE			<0.002	1.28	<0.1	0.01
		95	96-53401	0.28	197 JE	12.5	<0.4	<0.002	0.046	<0.1	<0.01
		115	96-53402	0.46	452 JE	11.4	<0.4	<0.002	0.087	<0.1	<0.01
WN-40A	11/13/96	15	96-64383w	2.43	1240 JE			<0.002	0.623	<0.1	<0.01
		115	96-64370	0.48	362 JE	10.1	<0.4	<0.002	0.0251	<0.1	0.12
		205	96-64376	0.42	1160 JE	12.4	<0.4	<0.002	0.0087	<0.1	<0.01
WN-41A	11/19/96	15	96-64492w	1.36	1510 JE			<0.002	0.906	<0.1	<0.01
		95	96-64490	0.43	1500	11.4		<0.002	0.008	<0.1	<0.01
		11/20/96	185	96-64491	0.42	1450	12.4	<0.002	0.009	<0.1	<0.01
WN-42A	12/04/96	15	96-65441w	2.97	3460 JE			<0.002	3.88	<0.1	<0.01
WN-43A	12/07/96	15	96-69823w	0.5	1030 JE			<0.002	0.167	<0.1	<0.01
		15	97-21331						0.469		
		55	96-69824	0.38	304 JE	10.7	<0.4	<0.002	0.0367	<0.1	<0.01
		215	96-69834	0.5	390 JE		<0.4	<0.002	0.0163	<0.1	<0.01

Notes: ^aMatrix GW_SCRN = sample filtered, preserved immediately after collection; SLRY_WAT = sample separated (filtered) and preserved from archived slurry.

^bData from nonfiltered samples (all other data are from 0.45 µm filtered).

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

C = Field blank contamination

D = Duplicate relative percent differences out of acceptable range

E = Exceeded holding time

H = Results biased high (see sample note in database for explanation)

S = LCS (Laboratory Control Sample) or spike sample recovery outside acceptable limits.

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 1 of 30)**

Location (Depth)	Sample Date	Sample Identification	Lab ID (Energy Labs)	Ag mg/L	Al mg/L	Alkalinity (as CaCO ₃) mg/L	As mg/L	B mg/L	Ba mg/L	Be mg/L	Ca mg/L	
WN-32A (321')	6/17/96	WN-32A-GW-01-960617	96-35411	<0.05	<0.1	191	<0.002	na	<0.1	<0.01	115	
	8/31/96	WN-32A-GW-01-960831	96-46806	<0.05	<0.1	162	<0.002	0.16	<0.1	<0.004	91.7	
	10/20/96	WN-32A-GW-01-961020	96-59310	<0.005	<0.1	152	<0.002	0.4	<0.05	<0.004	86.6	
	1/24/97	WN-32A-GW-01-970124	97-11560	<0.005	<0.1	146	0.002	0.13	<0.05	<0.004	82.1	
	9/10/97	WN-32A-GW-01-970910	97-53739	<0.005	<0.1	134	0.005	0.16	<0.05	<0.004	57.8	
	11/6/97	WN-32A-GW-01-971106	97-65409	<0.004	<0.1	144	<0.005	0.14	<0.05	<0.004	66.4	
WN-32B (176')	6/17/96	WN-32B-GW-01-960617	96-35412	<0.05	<0.1	974	<0.002	na	<0.1	<0.01	977	
	8/31/96	WN-32B-GW-01-960831	96-46807	<0.05	<0.1	na	<0.002	0.11	<0.1	<0.004	1050	
	10/22/96	WN-32B-GW-01-961022	96-59556	<0.005	<0.1	978	<0.002	0.11	<0.05	<0.004	1080	
	1/24/97	WN-32B-GW-01-970124	97-11559	<0.005	<0.1	993	<0.002	0.1	<0.05	<0.004	1090	
	9/10/97	WN-32B-GW-01-970910	97-53738	<0.005	<0.1	996	<0.002	JB	0.08	<0.05	<0.004	1040
	11/6/97	WN-32B-GW-01-971106	97-65410	<0.004	<0.1	982	<0.005	0.1	<0.05	<0.004	950	
	11/6/97	WN-32B-GW-02-971106	97-65411	<0.004	<0.1	981	<0.005	0.1	<0.05	<0.004	960	
WN-32C (35')	6/17/96	WN-32C-GW-01-960617	96-35413	<0.05	0.13	186	<0.002	na	<0.1	<0.01	578	
	8/31/96	WN-32C-GW-01-960831	96-46808	<0.05	0.37	137	<0.002	0.08	<0.1	<0.004	616	
	8/31/96	WN-32C-GW-02-960831	96-46809	<0.05	0.36	138	<0.002	0.09	<0.1	0.004	618	
	10/20/96	WN-32C-GW-01-961020	96-59311	<0.005	0.23	145	<0.002	0.05	<0.05	<0.004	586	
	11/7/96	WN-32C-GW-01-961107	96-63892	na	na	na	na	na	na	na	na	
	1/23/97	WN-32C-GW-01-970123	97-11429	<0.005	0.29	133	<0.002	0.06	<0.05	<0.004	630	
	9/10/97	WN-32C-GW-01-970910	97-53740	<0.005	0.23	134	<0.002	0.06	<0.05	<0.004	590	
	9/10/97	WN-32C-GW-02-970910	97-53741	<0.005	0.23	131	<0.002	0.06	<0.05	<0.004	595	
	11/6/97	WN-32C-GW-01-971106	97-65412	<0.004	0.23	132	<0.005	0.06	<0.05	<0.004	580	
	11/6/97	WN-32C-GW-02-971106	97-65413	<0.004	0.23	133	<0.005	0.06	<0.05	<0.004	581	
WN-33B (103')	6/17/96	WN-33B-GW-01-960617	96-35246	<0.05	38.5	0.5	<0.002	na	<0.1	0.02	416	
	8/30/96	WN-33B-GW-01-960830	96-46800	<0.05	53.8	<0.1	<0.002	0.05	<0.1	0.024	449	
	10/22/96	WN-33B-GW-01-961022	96-59559	<0.005	51.3	<0.1	<0.002	0.02	<0.05	0.023	505	
	10/22/96	WN-33B-GW-02-961022	96-59560	<0.005	53.6	<0.1	<0.002	0.02	<0.05	0.023	486	
	1/24/97	WN-33B-GW-01-970124	97-11558	<0.005	45.4	0	0.002	0.02	<0.05	0.023	432	
	1/24/97	WN-33B-GW-02-970124	97-11563	<0.005	47.2	0	<0.002	<0.02	<0.05	0.022	456	
	9/10/97	WN-33B-GW-01-970910	97-53735	<0.005	45.7	<0.1	<0.002	<0.02	<0.05	0.023	525	
	11/3/97	WN-33B-GW-01-971103	97-65090	<0.004	42.8	<1	<0.005	0.02	<0.05	0.023	417	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 2 of 30)**

Location (Depth)	Sample Date	Sample Identification	Lab ID (Energy Labs)	Alkalinity							
				Ag mg/L	Al mg/L	(as CaCO ₃) mg/L	As mg/L	B mg/L	Ba mg/L	Be mg/L	Ca mg/L
WN-33C (219')	6/16/96	WN-33C-GW-01-960616	96-35250	<0.05	<0.1	139	<0.002	na	<0.1	<0.01	427
	11/6/96	WN-33C-GW-01-961106	96-60261	<0.005	<0.1	144	<0.002	0.03	<0.05	<0.004	455
	1/27/97	WN-33C-GW-01-970127	97-11575	<0.005	<0.1	146	<0.002	0.03	<0.05	<0.004	471
	9/10/97	WN-33C-GW-01-970910	97-53736	<0.005	<0.1	163	<0.002	0.03	<0.05	<0.004	585
	11/3/97	WN-33C-GW-01-971103	97-65091	<0.004	<0.1	170	<0.005	0.03	<0.05	<0.004	560
WN-33D (51')	6/16/96	WN-33D-GW-01-960616	96-35247	<0.05	124	<0.1	1.44	na	<0.1	0.03	362
	6/16/96	WN-33D-GW-02-960616	96-35248	<0.05	123	<0.1	1.45	na	<0.1	0.03	370
	8/30/96	WN-33D-GW-01-960830	96-46799	<0.05	178	<0.1	1.67	0.86	<0.1	0.018	357
	10/22/96	WN-33D-GW-01-961022	96-59558	<0.005	138	<0.1	1.56	0.1	<0.05	0.033	440
	11/6/96	WN-33D-GW-01-961106	96-63890	na	na	na	na	na	na	na	na
	1/23/97	WN-33D-GW-01-970123	97-11430	<0.005	180	0	1.67	0.29	<0.05	0.033	455
	9/10/97	WN-33D-GW-01-970910	97-53737	<0.005	150	<0.1	2.64	0.39	<0.05	0.026	458
	11/3/97	WN-33D-GW-01-971103	97-65092	<0.004	134	<1	1.87	<0.02	<0.05	0.028	395
WN-34 (129')	7/28/96	WN-34-GW-01	96-42327	na	na	<1	na	na	na	na	446
	8/31/96	WN-34-GW-01-960831	96-46814	<0.05	574	<0.1	0.005	0.67	<0.1	0.084	468
	10/22/96	WN-34-GW-01-961022	96-59557	<0.005	578	<0.1	<0.002	1.36	<0.05	0.08	464
	11/7/96	WN-34-GW-01-961107	96-63894	na	na	na	na	na	na	na	na
	1/22/97	WN-34-GW-01-970122	97-11426	<0.005	563	0	<0.003B	0.43	<0.05	0.08	453
	9/11/97	WN-34-GW-01-970911	97-53746	<0.005	538	0	0.002	0.35	<0.05	0.075	501
	11/6/97	WN-34-GW-01-971106	97-65407	<0.004	502	<1	<0.005	0.33	<0.05	0.076	462
WN-35A (206')	6/15/96	WN-35A-GW-01-960615	96-35251	<0.05	<0.1	457	0.003	na	<0.1	<0.01	541
	8/30/96	WN-35A-GW-01-960830	96-46802	<0.05	<0.1	504	0.003	0.13	<0.1	<0.004	686
	10/19/96	WN-35A-GW-01-961019	96-59305	<0.005	<0.1	514	<0.002	0.14	<0.05	<0.004	607
	1/25/97	WN-35A-GW-01-970125	97-11564	<0.005	<0.1	534	0.002	0.14	<0.05	<0.004	665
	9/11/97	WN-35A-GW-01-970911	97-53747	<0.005	<0.1	557	0.002	0.15	<0.05	<0.004	655
	11/4/97	WN-35A-GW-01-971104	97-65103	<0.004	<0.1	578	<0.005	0.14	<0.05	<0.004	630
WN-35B (28')	6/15/96	WN-35B-GW-01-960615	96-35252	<0.05	<0.1	239	0.02	na	<0.1	<0.01	746
	8/30/96	WN-35B-GW-01-960830	96-46801	<0.05	<0.1	1020	0.009	0.24	<0.1	<0.004	693
	10/19/96	WN-35B-GW-01-961019	96-59306	<0.005	<0.1	385	0.004	0.07	<0.05	<0.004	582

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 3 of 30)**

Location (Depth)	Sample Date	Sample Identification	Lab ID (Energy Labs)	Alkalinity							
				Ag mg/L	Al mg/L	(as CaCO ₃) mg/L	As mg/L	B mg/L	Ba mg/L	Be mg/L	Ca mg/L
WN-35B (28')	1/24/97	WN-35B-GW-01-970124	97-11562	<0.005	<0.1	391	0.01	0.08	<0.05	<0.004	660
	9/11/97	WN-35B-GW-01-970911	97-53748	<0.005	<0.1	383	0.01	0.09	<0.05	<0.004	615
	11/4/97	WN-35B-GW-01-971104	97-65102	<0.004	<0.1	390	0.01	0.09	<0.05	<0.004	606
WN-36A (247')	6/15/96	WN-36A-GW-01-960615	96-35255	<0.05	<0.1	162	<0.002	na	<0.1	<0.01	194
	8/31/96	WN-36A-GW-01-960831	96-46813	<0.05	<0.1	160	<0.002	0.05	<0.1	<0.004	189
	10/20/96	WN-36A-GW-01-961020	96-59309	<0.005	<0.1	165	<0.002	0.04	<0.05	<0.004	211
	1/25/97	WN-36A-GW-01-970125	97-11566	<0.005	<0.1	166	0.003	0.04	0.05	<0.004	184
	9/10/97	WN-36A-GW-01-970910	97-53742	<0.005	<0.1	169	<0.002	0.04	<0.05	<0.004	191
	11/6/97	WN-36A-GW-01-971106	97-65403	<0.004	<0.1	182	<0.005	0.05	0.05	<0.004	213
WN-36B (164.5')	6/15/96	WN-36B-GW-01-960615	96-35254	<0.05	<0.1	719	0.002	na	<0.1	<0.01	882
	8/31/96	WN-36B-GW-01-960831	96-46812	<0.05	<0.1	806	0.005	0.08	<0.1	<0.004	1104
	10/20/96	WN-36B-GW-01-961020	96-59308	<0.005	<0.1	782	0.004	0.06	<0.05	<0.004	1079
	1/25/97	WN-36B-GW-01-970125	97-11565	<0.005	<0.1	781	0.003	0.07	<0.05	<0.004	1050
	9/10/97	WN-36B-GW-01-970910	97-53743	<0.005	<0.1	789	0.002	0.07	<0.05	<0.004	1060
	11/6/97	WN-36B-GW-01-971106	97-65404	<0.004	<0.1	780	<0.005	0.08	<0.05	<0.004	940
WN-36C (21')	6/15/96	WN-36C-GW-01-960615	96-35253	<0.05	<0.1	733	<0.002	na	<0.1	<0.01	822
	8/31/96	WN-36C-GW-01-960831	96-46811	<0.05	<0.1	600	0.005	0.72	<0.1	<0.004	809
	10/20/96	WN-36C-GW-01-961020	96-59307	<0.005	<0.1	782	0.004	0.56	<0.05	<0.004	1010
	11/7/96	WN-36C-GW-01-961107	96-63893	na	na	na	na	na	na	na	na
	1/23/97	WN-36C-GW-01-970123	97-11431	<0.005	<0.1	711	0.006	0.54	<0.05	<0.004	920
	9/10/97	WN-36C-GW-01-970910	97-53744	<0.005	<0.1	544	0.011	0.48	<0.05	<0.004	645
	11/6/97	WN-36C-GW-01-971106	97-65405	<0.004	<0.1	674	0.007	0.56	<0.05	<0.004	730
WN-37E (110')	7/26/96	WN-37E-GW-01	96-42329	na	na	229	na	na	na	na	409
	8/31/96	WN-37E-GW-01-960831	96-46810	<0.05	<0.1	348	<0.002	0.09	<0.1	<0.004	727
	10/22/96	WN-37E-GW-01-961022MS/MSD	96-59561	<0.005	<0.1	347	<0.002	0.06	<0.05	<0.004	727
	11/7/96	WN-37E-GW-01-961107	96-63891	na	na	na	na	na	na	na	na
	1/22/97	WN-37E-GW-01-970123	97-11428	<0.005	<0.1	353	<0.002	0.06	<0.05	<0.004	715
	9/11/97	WN-37E-GW-01-970911	97-53749	<0.005	<0.1	358	<0.002	0.07	<0.05	<0.004	695
	11/6/97	WN-37E-GW-02-971106	97-65415	<0.004	<0.1	356	<0.005	0.06	<0.05	<0.004	627
	11/6/97	WN-37E-GW-01-971106	97-65413	<0.004	<0.1	356	<0.005	0.06	<0.05	<0.004	619

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 4 of 30)**

Location (Depth)	Sample Date	Sample Identification	Lab ID (Energy Labs)	Alkalinity (as CaCO ₃)								Ca mg/L
				Ag mg/L	Al mg/L	mg/L	As mg/L	B mg/L	Ba mg/L	Be mg/L		
WN-38A (160')	10/23/96	WN-38A-GW-01-961023	96-59551	<0.005	<0.1	159	<0.002	0.87	<0.05	<0.004	<0.004	82.9
	1/26/97	WN-38A-GW-01-970126	97-11581	<0.005	<0.1	160	<0.002	0.82	<0.05	<0.004	<0.004	85.9
	9/8/97	WN-38A-GW-01-970908	97-53757	<0.005	<0.1	164	0.002	0.89	<0.05	<0.004	<0.004	77.3
	11/4/97	WN-38A-GW-01-971104	97-65094	<0.004	<0.1	167	<0.005	0.87	<0.05	<0.004	<0.004	78.2
WN-38B (109')	11/8/96	WN-38B-GW-02-931108	96-60308	<0.005	<0.1	156	<0.002	0.86	<0.05	<0.004	<0.004	83.1
	11/8/96	WN-38B-GW-02-961108	96-60309	<0.005	<0.1	156	<0.002	0.87	<0.05	<0.004	<0.004	82.9
	1/27/97	WN-38B-GW-01-970127	97-11582	<0.005	<0.1	155	0.002	0.82	<0.05	<0.004	<0.004	91.4
	1/27/97	WN-38B-GW-02-970127A	97-11583	<0.005	<0.1	156Z	<0.002	0.8	<0.05	<0.004	<0.004	88.6
	1/27/97	WN-38B-GW-02-970127B	97-11584	<0.005	<0.1	156	<0.002	0.8	<0.05	<0.004	<0.004	88.6
	9/8/97	WN-38B-GW-01-970908	97-53758	<0.005	<0.1	158	<0.002	0.84	<0.05	<0.004	<0.004	77
WN-38C (12')	10/23/96	WN-38C-GW-01-961023	96-59550	<0.005	<0.1	313	0.005	0.33	0.066	<0.004	<0.004	169
	1/23/97	WN-38C-GW-01-970123	97-11557	<0.005	<0.1	339	0.006	0.31	0.07	<0.004	<0.004	176
	9/8/97	WN-38C-GW-01-970908	97-53759	<0.005	<0.1	288	0.014	0.27	0.06	<0.004	<0.004	128
	11/4/97	WN-38C-GW-01-971104	97-65093	<0.004	<0.1	312	0.013	0.29	0.06	<0.004	<0.004	163
WN-39A (124')	10/23/96	WN-39A-GW-01-961023	96-59555	<0.005	<0.1	144	<0.002	0.31	0.062	<0.004	<0.004	102
	1/25/97	WN-39A-GW-01-970125	97-11567	<0.005	<0.1	148	<0.002	JZ	0.28	0.05	<0.004	95.9
	9/9/97	WN-39A-GW-01-970909	97-53731	<0.005	<0.1	157	<0.002	JB	0.32	0.06	<0.004	112
	11/4/97	WN-39A-GW-01-971104	97-65097	<0.004	<0.1	159	<0.005	0.33	0.05	<0.004	<0.004	102
WN-39B (87')	10/23/96	WN-39B-GW-01-961023	96-59554	<0.005	0.11	108	<0.002	0.06	<0.05	<0.004	<0.004	37.2
	1/25/97	WN-39B-GW-01-970125	97-11568	<0.005	<0.1	108	<0.002	0.05	<0.05	<0.004	<0.004	33
	1/25/97	WN-39B-GW-02-970125	97-11569	<0.005	<0.1	107	<0.002	0.05	<0.05	<0.004	<0.004	32.9
	9/9/97	WN-39B-GW-01-970909	97-53732	<0.005	<0.1	113	<0.002	JB	0.06	<0.05	<0.004	40.4
	11/4/97	WN-39B-GW-01-971104	97-65098	<0.004	<0.1	114	<0.005	0.06	<0.05	<0.004	<0.004	37.6
WN-39C (10')	10/23/96	WN-39C-GW-01-961023	96-59552	<0.005	<0.1	240	<0.002	0.09	<0.05	<0.004	<0.004	241
	10/23/96	WN-39C-GW-02-961023	96-59553	<0.005	<0.1	238	<0.002	0.08	<0.05	<0.004	<0.004	242
	1/22/97	WN-39C-GW-01-970122	97-11427	<0.005	<0.1	297	<0.002	0.07	0.06	<0.004	<0.004	368
	9/9/97	WN-39C-GW-01-970909	97-53733	<0.005	<0.1	193	<0.003	JB	0.06	<0.05	<0.004	149
	11/4/97	WN-39C-GW-01-971104	97-65096	<0.004	<0.1	234	<0.005	0.07	0.06	<0.004	<0.004	227
WN-40A (195')	1/26/97	WN-40A-GW-01-970126	97-11576	<0.005	<0.1	142	0.016	0.52	<0.05	<0.004	<0.004	26.5
	9/9/97	WN-40A-GW-01-970909	97-53728	<0.005	<0.1	146	0.017	0.56	<0.05	<0.004	<0.004	29.8
	11/4/97	WN-40A-GW-01-971104	97-65100	<0.004	<0.1	150	0.015	0.54	<0.05	<0.004	<0.004	27.5

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 5 of 30)**

Location (Depth)	Sample Date	Sample Identification	Lab ID (Energy Labs)	Alkalinity							
				Ag mg/L	Al mg/L	(as CaCO ₃) mg/L	As mg/L	B mg/L	Ba mg/L	Be mg/L	Ca mg/L
WN-40B (105')	1/26/97	WN-40B-GW-01-970126	97-11577	<0.005	<0.1	140	0.003	0.14	<0.05	<0.004	39.8
	9/9/97	WN-40B-GW-01-970909	97-53729	<0.005	<0.1	137	0.005	0.15	<0.05	<0.004	38.7
	11/4/97	WN-40B-GW-01-971104	97-65101	<0.004	<0.1	148	<0.005	0.14	<0.05	<0.004	35.1
WN-40C (14')	1/26/97	WN-40C-GW-01-970126	97-11578	<0.005	<0.1	437	0.016	0.11	0.1	<0.004	344
	9/9/97	WN-40C-GW-01-970909	97-53730	<0.005	<0.1	412	0.024	0.13	0.06	<0.004	201
	11/4/97	WN-40C-GW-01-971104	97-65099	<0.004	<0.1	428	0.018	0.12	0.07	<0.004	263
WN-41A (165')	1/26/97	WN-41A-GW-01-970126	97-11579	<0.005	<0.1	162	0.008	0.88	<0.05	<0.004	29
	9/9/97	WN-41A-GW-01-970909	97-53724	<0.005	<0.1	165	0.007	0.98	<0.05	<0.004	29.6
	11/5/97	WN-41A-GW-01-971105	97-65399	<0.004	<0.1	163	0.008	0.96	<0.05	<0.004	29.6
WN-41B (92')	1/25/97	WN-41B-GW-01-970125	97-11570	<0.005	<0.1	162	0.006	0.87	<0.05	<0.004	29.3
	9/9/97	WN-41B-GW-01-970909	97-53725	<0.005	<0.1	167	0.01	0.93	<0.05	<0.004	30.7
	9/12/97	WN-41B-GW-01-970912	97-53756	<0.005	<0.1	167	0.009	0.92	<0.05	<0.004	30.3
	11/5/97	WN-41B-GW-01-971105	97-65400	<0.004	<0.1	165	0.009	0.92	<0.05	<0.004	30.1
WN-41C (11')	1/27/97	WN-41C-GW-01-970127	97-11571	<0.005	<0.1	256	0.006	0.21	0.06	<0.004	184
	9/9/97	WN-41C-GW-01-970909	97-53726	<0.005	<0.1	269	<0.004 JB	0.19	0.07	<0.004	198
	9/9/97	WN-41C-GW-02-970909	97-53727	<0.005	<0.1	270	<0.004 JB	0.18	0.07	<0.004	204
	11/5/97	WN-41C-GW-01-971105	97-65401	<0.004	<0.1	268	<0.005	0.18	0.06	<0.004	200
WN-42A (110')	1/24/97	WN-42A-GW-01-970124	97-11561	<0.005	<0.1	860	0.006	0.17	0.05	<0.004	857
	9/8/97	WN-42A-GW-01-970908	97-53761	<0.005	<0.1	824	0.003	0.19	<0.05	<0.004	825
	11/5/97	WN-42A-GW-01-971105	97-65398	<0.004	<0.1	864	<0.005	0.18	<0.05	<0.004	839
WN-42B (39')	1/23/97	WN-42B-GW-01-970123	97-11432	<0.005	<0.1	658	<0.005 JB	0.12	0.05	<0.004	815
	9/8/97	WN-42B-GW-01-970908	97-53762	<0.005	<0.1	550	0.002	0.13	<0.05	<0.004	890
	11/5/97	WN-42B-GW-01-971105	97-65396	<0.004	<0.1	528	<0.005	0.13	<0.05	<0.004	809
WN-42C (12')	1/26/97	WN-42C-GW-01-970126	97-11580	<0.005	<0.1	455	0.003	0.11	<0.05	<0.004	950
	9/8/97	WN-42C-GW-01-970908	97-53760	<0.005	<0.1	463	0.003	0.11	<0.05	<0.004	880
	11/5/97	WN-42C-GW-01-971105	97-65397	<0.004	<0.1	476	<0.005	0.1	<0.05	<0.004	805
	11/5/97	WN-42C-GW-02-971105	97-65402	<0.004	<0.1	474	<0.005	0.11	<0.05	<0.004	805
WN-43A (195')	1/22/97	WN-43A-GW-01-970122	97-11456M	<0.005	<0.1	110	<0.004 JB	0.07	<0.05	<0.004	48.8
	9/8/97	WN-43A-GW-01-970908	97-53763	<0.005	<0.1	114	0.007	0.07	<0.05	<0.004	59.1
	11/5/97	WN-43A-GW-01-971105	97-65393	<0.004	<0.1	114	0.006	0.07	<0.05	<0.004	55.9

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 6 of 30)**

Location (Depth)	Sample Date	Sample Identification	Lab ID (Energy Labs)	Alkalinity							
				Ag mg/L	AI mg/L	(as CaCO ₃) mg/L	As mg/L	B mg/L	Ba mg/L	Be mg/L	Ca mg/L
WN-43B (35')	1/23/97	WN-43B-GW-01-970123	97-11555	<0.005	<0.1	139	0.006	0.03	<0.05	<0.004	46.7
	1/23/97	WN-43B-GW-02-970123	97-11556	<0.005	<0.1	146	0.002	0.04	<0.05	<0.004	46.5
	9/8/97	WN-43B-GW-01-970908	97-53764	<0.005	<0.1	150	0.004	0.04	<0.05	<0.004	50.5
	11/5/97	WN-43B-GW-01-971105	97-65394	<0.004	<0.1	150	<0.005	0.04	<0.05	<0.004	48.6
WN-43C (13')	4/2/97	WN-43C-GW-01-970402	97-21685	<0.05	<0.1	168	0.007	0.04	<0.1	<0.004	52.5
	9/8/97	WN-43C-GW-01-970908	97-53765	<0.005	<0.1	177	0.01	0.04	0.07	<0.004	55.4
	11/5/97	WN-43C-GW-01-971105	97-65395	<0.004	<0.1	178	0.009	0.04	0.07	<0.004	53.6

Notes: ^aData from nonfiltered samples (all other data are from 0.45 µm filtered samples - dissolved)

^bTOC analyses performed by Core Laboratories, Inc. under different Lab ID

^cntu = nephelometric turbidity units

na = not analyzed

Matrix_code (in database) for all samples in this table = GW

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

E = Exceeded holding time

S = LCS (Lab Control Sample) or spike sample recovery outside acceptable limits

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

> = Result is greater than reported value (diluted sample was off scale).

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 7 of 30)**

Location (Depth)	Sample Date	Cd mg/L	Cl mg/L	Co mg/L	Conductivity (Field) ^a μS/cm	Conductivity (Lab) ^a μS/cm	DO ^a (Field) mg/L	Eh ^a (Field) mV	F mg/L	Fe mg/L	Fe2 (Field) mg/L	FeT (Field) mg/L
WN-32A (321')	6/17/96	<0.01	40.6	na	na	965	<0.05	<0.01	na	0.26	0.15	na
	8/31/96	<0.007	41	na	na	840	<0.05	<0.01	0.43	464 JZ	0.37	<0.05
	10/20/96	<0.007	45.8	na	704	785	<0.005	<0.01	3.5	441	0.38	<0.05
	1/24/97	<0.007	46.9	<0.01	790	771	<0.005	<0.01	2.1	381	0.35	<0.05
	9/10/97	<0.007	39.7	<0.01	655	658	0.005	<0.01	na	402	0.41	<0.05
	11/6/97	<0.001	38	<0.02	732	722	<0.005	<0.01	na	414	0.37	<0.05
WN-32B (176')	6/17/96	<0.01	104	na	na	3960	<0.05	<0.01	na	na	<0.1	1.12
	8/31/96	<0.007	96	na	3880	na	<0.05	<0.01	0.19	414 JZ	na	0.08
	10/22/96	<0.007	104	na	3750	3890	<0.005	<0.01	2.8	450	<0.1	<0.05
	1/24/97	<0.007	106	<0.01	4220	4270	<0.005	<0.01	3	397	<0.1	<0.05
	9/10/97	<0.007	138	<0.01	4020	4180	<0.005	<0.01	na	453	<0.1	0.07
	11/6/97	<0.001	96.1	<0.02	3860	4210	<0.005	<0.01	na	429	<0.1	<0.05
	11/6/97	<0.001	97	<0.02	3860	4210	<0.005	<0.01	na	429	<0.1	<0.05
WN-32C (35')	6/17/96	0.01	119	na	4320	4320	<0.05	<0.01	na	na	1.85	0.16
	8/31/96	0.01	175	na	4260	4310	<0.05	<0.01	0.18	470 JZ	1.13	0.22
	8/31/96	<0.007	161	na	na	4280	<0.05	<0.01	na	na	1.16	0.23
	10/20/96	<0.007	112	na	3820	4300	<0.005	<0.01	2.1	419	1.17	0.12
	11/7/96	na	na	na	4180	na	na	na	na	na	na	na
	1/23/97	<0.007	117	0.06	na	4400	<0.005	<0.01	na	na	1.31	0.26
	9/10/97	<0.007	104	0.05	3810	4280	<0.005	<0.01	na	433	1.24	0.08
	9/10/97	<0.007	104	0.05	na	4270	<0.005	<0.01	na	na	1.25	0.08
	11/6/97	0.006	93.7	0.05	4010	4290	<0.005	<0.01	na	439	1.07	0.08
	WN-33B (103')	<0.01	91.3	na	na	6240	<0.05	<0.01	na	na	3.88	0.56
	8/30/96	<0.007	106	na	na	5930	<0.05	<0.01	na	na	3.79	0.48
	10/22/96	<0.007	117	na	5560	6000	<0.005	<0.01	4.7	600	3.94	0.43
	10/22/96	<0.007	114	na	na	6050	<0.005	<0.01	na	na	3.98	0.29
	1/24/97	<0.007	104	0.08	6450	6470	<0.005	<0.01	<10	528	3.81	0.16
	1/24/97	<0.007	117	0.08	na	6460	<0.005	<0.01	na	na	3.81	0.15
	9/10/97	0.007	119	0.08	6050	6320	<0.005	<0.01	na	544	5.15	0.35
	11/3/97	0.008	100	0.08	6030	6320	<0.005	<0.01	na	606	4	0.34

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 8 of 30)**

Location (Depth)	Sample Date	Conductivity			Conductivity			DO ^a		Eh ^a		Fe2		FeT
		Cd mg/L	Cl mg/L	Co mg/L	(Field) ^a μS/cm	(Lab) ^a μS/cm	Cr mg/L	Cu mg/L	(Field) mg/L	(Field) mV	F mg/L	Fe mg/L	(Field) mg/L	(Field) mg/L
WN-33C (219')	6/16/96	<0.01	51.6	na	na	2340	<0.05	<0.01	na	na	0.18	0.12	na	na
	11/6/96	<0.007	55.7	na	2350	2380	<0.005	<0.01	4.3	396	0.19	<0.05	<0.05	<0.05
	1/27/97	<0.007	58.3	<0.01	2570	2440	<0.005	<0.01	na	415	0.17	0.06	na	na
	9/10/97	<0.007	101	<0.01	2640	2680	<0.005	<0.01	na	316	0.15	<0.05	na	na
	11/3/97	<0.001	82.1	<0.02	2620	2670	<0.005	<0.01	na	520	0.13	<0.05	na	na
WN-33D (51')	6/16/96	0.03	102	na	na	9570	<0.05	<0.01	na	na	5.25	942	na	na
	6/16/96	0.03	102	na	na	9790	<0.05	<0.01	na	na	5.61	918	na	na
	8/30/96	0.03	97	na	na	9060	<0.05	<0.01	na	na	5.9	904	na	na
	10/22/96	0.03	109	na	8510	9440	0.025	<0.01	<0.07	427	5.65	990	516	532
	11/6/96	na	na	na	8890	na	na	na	na	na	na	na	na	na
	1/23/97	0.047	131	0.44	na	9850	0.023	<0.01	na	na	5.95	990	na	na
	9/10/97	0.019	145	0.4	9050	9500	0.019	<0.01	na	441	5.44	900	na	na
	11/3/97	0.017	102	0.35	8930	9200	0.02	<0.01	na	502	4.45	835	na	na
WN-34 (129')	7/28/96	na	76.6	na	na	9600	na	na	na	na	707	na	na	na
	8/31/96	0.016	101	na	6420	7200	<0.05	0.214	0.07	563JZ	21.7	195	5.1JZ	na
	10/22/96	<0.007	93.2	na	6740	6840	0.01	0.19	7.6	487	20.8	229	65.52	196
	11/7/96	na	na	na	6560	na	na	na	na	na	na	na	na	na
	1/22/97	0.015	95	0.21	7120	7500	0.007	0.17	2.61	476	20.1	234	252	253
	9/11/97	0.011	126	0.21	6720	7100	<0.005	0.12	na	518	17.2	163	na	na
	11/6/97	0.008	97.9	0.2	6720	7240	0.008	0.14	na	554	13.1	186	na	na
WN-35A (206')	6/15/96	<0.01	39.5	na	na	3030	<0.05	<0.01	na	na	<0.1	<0.05	na	na
	8/30/96	<0.007	44.8	na	na	3250	<0.05	<0.01	na	na	<0.1	<0.05	na	na
	10/19/96	<0.007	39.5	na	2720	3130	<0.005	<0.01	na	na	<0.1	<0.05	0.54	na
	1/25/97	<0.007	51.4	<0.01	3330	3380	<0.005	<0.01	1.7 JZ	386	<0.1	<0.05	0.44 JZ	0.24 JZ
	9/11/97	<0.007	44.7	<0.01	3210	3270	<0.005	<0.01	na	239	<0.1	<0.05	na	na
	11/4/97	<0.001	42.1	<0.02	3280	3350	<0.005	<0.01	na	459	<0.1	<0.05	na	na
WN-35B (28')	6/15/96	<0.01	87.3	na	na	7170	<0.05	<0.01	na	na	7.54	<0.05	na	na
	8/30/96	<0.007	131	na	na	3970	<0.05	<0.01	na	na	<0.1	<0.05	na	na
	10/19/96	<0.007	103	na	5870	6490	<0.005	<0.01	na	424	3.61	<0.05	<0.05	<0.05

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 9 of 30)**

Location (Depth)	Sample Date	Conductivity			Conductivity			DO ^a		Eh ^a		Fe2	FeT	
		Cd mg/L	Cl mg/L	Co mg/L	(Field) ^a μS/cm	(Lab) ^a μS/cm	Cr mg/L	Cu mg/L	(Field) mg/L	(Field) mV	F mg/L	Fe mg/L	(Field) mg/L	(Field) mg/L
	1/24/97	<0.007	125	<0.01	6920	6930	<0.005	<0.01	2.4	466	4.52	<0.05	<0.05	<0.05
	9/11/97	<0.007	151	<0.01	6800	6880	<0.005	<0.01	na	504	4.59	<0.05	na	na
	11/4/97	<0.001	116	<0.02	1630	7040	<0.005	<0.01	na	474	4.75	<0.05	na	na
WN-36A (247')	6/15/96	<0.01	33.6	na	na	1450	<0.05	<0.01	na	na	0.19	0.12	na	na
	8/31/96	0.007	29.8	na	1410	1480	<0.05	<0.01	0.39	428 JZ	0.16	<0.05	<0	na
	10/20/96	<0.007	35.6	na	1294	1420	<0.005	<0.01	0.9	401	0.17	<0.05	<0.05	<0.05
	1/25/97	<0.007	29.2	<0.01	1470	1500	<0.005	<0.01	1.9	386	0.16	<0.05	<0.05	<0.05
	9/10/97	<0.007	31.6	<0.01	1456	1460	<0.005	<0.01	na	438	0.18	<0.05	na	na
	11/6/97	<0.001	29.2	<0.02	1593	1570	<0.005	<0.01	na	445	0.15	<0.05	na	na
WN-36B (164.5')	6/15/96	<0.01	126	na	na	4020	<0.05	<0.01	na	na	<0.1	<0.05	na	na
	8/31/96	<0.007	154	na	na	4170	<0.05	<0.01	na	na	<0.1	<0.05	na	na
	10/20/96	<0.007	182	na	na	4030	0.005	<0.01	na	na	<0.1	<0.05	na	na
	1/25/97	<0.007	158	<0.01	4330	4370	<0.005	<0.01	2.5	386	<0.1	<0.05	<0.05	<0.05
	9/10/97	<0.007	161	<0.01	4210	4280	<0.005	<0.01	na	458	<0.1	<0.05	na	na
	11/6/97	<0.001	128	<0.02	4230	4320	<0.005	<0.01	na	466	<0.1	<0.05	na	na
WN-36C (21')	6/15/96	<0.01	187	na	na	4470	<0.05	<0.01	na	na	<0.1	<0.05	na	na
	8/31/96	<0.007	230	na	na	4620	<0.05	<0.01	na	na	<0.1	<0.05	na	na
	10/20/96	<0.007	211	na	4310	4590	<0.005	<0.01	4.8	409	<0.1	<0.05	<0.05	<0.05
	11/7/96	na	na	na	4400	na	na	na	na	na	na	na	na	na
	1/23/97	<0.007	245	<0.01	na	4780	<0.005	<0.01	na	na	<0.1	<0.05	na	na
	9/10/97	0.01	194	<0.01	4310	4400	<0.005	<0.01	na	453	<0.1	<0.05	na	na
	11/6/97	<0.001	146	<0.02	4310	4420	<0.005	<0.01	na	475	<0.1	<0.05	na	na
WN-37E (110')	7/26/96	na	55	na	na	3060	na	na	na	na	36.7	na	na	na
	8/31/96	<0.007	109	na	3710	4190	<0.05	<0.01	0.2	394 JZ	0.34	0.55	0.78	na
	10/22/96	<0.007 JZ	139	na	3990	4330	<0.005	<0.01	2.2	364	0.14	0.09	0.05	0.08
	11/7/96	na	na	na	4130	na	na	na	na	na	na	na	na	na
	1/22/97	<0.007	134	<0.01	na	4560	<0.005	<0.01	na	na	<0.1	0.06	na	na
	9/11/97	<0.007	142	0.01	4330	4530	0.007	<0.01	na	368	<0.1	0.1	na	na
	11/6/97	<0.001	109	<0.02	4090	4610	<0.005	<0.01	na	495	<0.1	<0.05	na	na
	11/6/97	<0.001	106	<0.02	4090	4610	<0.005	<0.01	na	495	<0.1	<0.05	na	na

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 10 of 30)**

Location (Depth)	Sample Date	Conductivity			Conductivity			DO ^a (Field) mg/L	Eh ^a (Field) mV	F mg/L	Fe mg/L	Fe2 (Field) mg/L	FeT (Field) mg/L
		Cd mg/L	Cl mg/L	Co mg/L	(Field) ^a μS/cm	(Lab) ^a μS/cm	Cr mg/L						
WN-38A (160')	10/23/96	<0.007	374	na	na	1980	<0.005	<0.01	na	na	0.51	<0.05	na
	1/26/97	<0.007	409	<0.01	2040	1950	<0.005	<0.01	7.2	491	0.5	<0.05	<0.05
	9/8/97	<0.007	346	<0.01	2050	2060	<0.005	<0.01	na	248	0.55	<0.05	na
	11/4/97	<0.001	321	<0.02	1695	2040	<0.005	<0.01	na	318	0.53	<0.05	na
WN-38B (109')	11/8/96	<0.007	329	na	1752	1780	<0.005	<0.01	1.4	240	0.5	0.06	0.08
	11/8/96	<0.007	329	na	na	1780	<0.005	<0.01	na	na	0.49	0.06	na
	1/27/97	<0.007	373	<0.01	1690	1740	<0.005	<0.01	1.2	407	0.47	<0.05	<0.05
	1/27/97	<0.007	357	<0.01	na	1750	<0.005	<0.01	na	na	0.47	<0.05	na
	1/27/97	<0.007	357	<0.01	na	1750	<0.005	<0.01	na	na	0.47	<0.05	na
	9/8/97	0.013	292	<0.01	1667	1700	<0.005	<0.01	na	312	0.42	<0.05	na
WN-38C (12')	10/23/96	<0.007	98.3	na	na	1810	<0.005	<0.01	na	na	0.58	0.53	na
	1/23/97	<0.007	116	<0.01	2080	2090	<0.005	<0.01	na	227	0.55	1.17	na
	9/8/97	<0.007	86.6	<0.01	1493	1580	<0.005	<0.01	na	na	0.74	1.35	na
	11/4/97	<0.001	97.4	<0.02	1715	1770	<0.005	<0.01	na	192	0.65	2.28	na
WN-39A (124')	10/23/96	<0.007	196	na	na	1250	<0.005	<0.01	na	na	0.39	<0.05	na
	1/25/97	<0.007	177	<0.01	1260	1300	<0.005	<0.01	3	308	0.34	<0.05	<0.05
	9/9/97	<0.007	199	<0.01	1267	1300	<0.005	<0.01	na	350	0.37	<0.05	na
	11/4/97	<0.001	175	<0.02	1274	1290	<0.005	<0.01	na	374	0.36	<0.05	na
WN-39B (87')	10/23/96	<0.007	19.9	na	329	328	<0.005	<0.01	5.2	532	0.36	<0.05	<0.05
	1/25/97	<0.007	20	<0.01	324	341	<0.005	<0.01	na	na	0.32	<0.05	na
	1/25/97	<0.007	19	<0.01	na	342	<0.005	<0.01	na	na	0.33	<0.05	na
	9/9/97	<0.007	20.4	<0.01	382	367	<0.005	<0.01	na	335	0.36	<0.05	na
WN-39C (10')	10/23/96	<0.007	33.6	na	na	1320	<0.005	<0.01	na	na	0.21	<0.05	na
	10/23/96	<0.007	34.8	na	na	1280	<0.005	<0.01	na	na	0.22	<0.05	na
	1/22/97	<0.007	52.4	<0.01	1870	1830	<0.005	<0.01	na	na	0.17	<0.05	na
	9/9/97	<0.007	21.2	<0.01	899	915	<0.005	<0.01	na	364	0.28	<0.05	na
WN-40A (195')	11/4/97	<0.001	29.5	<0.02	1265	1310	<0.005	<0.01	na	378	0.24	<0.05	na
	1/26/97	<0.007	279	<0.01	1690	1630	<0.005	<0.01	4.1	415	1.14	<0.05	<0.05
	9/9/97	<0.007	307	<0.01	1733	1760	<0.005	<0.01	na	388	1.28	<0.05	na
	11/4/97	<0.001	258	<0.02	1785	1760	0.005	<0.01	na	408	1.2	<0.05	na

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 11 of 30)**

Location (Depth)	Sample Date	Conductivity			Conductivity			DO ^a		Eh ^a		Fe2		FeT	
		Cd mg/L	Cl mg/L	Co mg/L	(Field) ^a μS/cm	(Lab) ^a μS/cm	Cr mg/L	Cu mg/L	(Field) mg/L	(Field) mV	F mg/L	Fe mg/L	(Field) mg/L	(Field) mg/L	
WN-40B (105')	1/26/97	<0.007	71	<0.01	695	664	<0.005	<0.01	12	435	0.4	<0.05	<0.05	<0.05	
	9/9/97	<0.007	69.2	<0.01	677	674	<0.005	<0.01	na	373	0.48	<0.05	na	na	
	11/4/97	<0.001	55.5	<0.02	690	662	<0.005	<0.01	na	408	0.45	<0.05	na	na	
WN-40C (14')	1/26/97	<0.007	69.2	<0.01	2300	2200	<0.005	<0.01	0.8	517	0.55	<0.05	<0.05	<0.05	
	9/9/97	<0.007	32.5	<0.01	1432	1450	<0.005	<0.01	na	407	0.8	<0.05	na	na	
	11/4/97	<0.001	43.8	<0.02	1860	1870	<0.005	<0.01	na	427	0.71	<0.05	na	na	
WN-41A (165')	1/26/97	<0.007	428	<0.01	2380	2260	<0.005	<0.01	na	446	1.17	<0.05	na	na	
	9/9/97	<0.007	373	<0.01	2320	2370	<0.005	<0.01	na	355	1.32	<0.05	na	na	
	11/5/97	<0.001	362	<0.02	2330	2420	<0.005	<0.01	na	371	1.1	<0.05	na	na	
WN-41B (92')	1/25/97	<0.007	410	<0.01	2490	2520	<0.005	<0.01	na	368	1.15	<0.05	na	na	
	9/9/97	<0.007	430	<0.01	2450	2470	<0.005	<0.01	na	385	1.33	<0.05	na	na	
	9/12/97	0.007	417	<0.01	2440	2470	<0.005	<0.01	na	330	1.26	<0.05	na	na	
	11/5/97	<0.001	382	<0.02	2430	2500	<0.005	<0.01	na	356	1.12	<0.05	na	na	
WN-41C (11')	1/27/97	<0.007	124	<0.01	1630	1750	<0.005	<0.01	na	na	0.31	<0.05	na	na	
	9/9/97	<0.007	110	<0.01	1652	1670	<0.005	<0.01	na	379	0.37	<0.05	na	na	
	9/9/97	<0.007	113	<0.01	na	1670	<0.005	<0.01	na	na	0.36	<0.05	na	na	
	11/5/97	<0.001	96.2	<0.02	1648	1700	<0.005	<0.01	na	430	0.3	<0.05	na	na	
WN-42A (110')	1/24/97	<0.007	53.3	<0.01	4230	4260	<0.005	<0.01	na	397	0.17	<0.05	na	na	
	9/8/97	<0.007	61.4	<0.01	3910	3980	<0.005	<0.01	na	439	0.16	<0.05	na	na	
	11/5/97	<0.001	52.1	<0.02	3780	4160	<0.005	<0.01	na	494	0.13	<0.05	na	na	
WN-42B (39')	1/23/97	<0.007	99	<0.01	na	4050	<0.005	<0.01	na	na	0.12	<0.05	na	na	
	9/8/97	<0.007	83.4	<0.01	4040	4020	<0.005	<0.01	na	441	0.12	<0.05	na	na	
	11/5/97	<0.001	62.3	<0.02	3690	4040	<0.005	<0.01	na	495	<0.1	<0.05	na	na	
WN-42C (12')	1/26/97	<0.007	160	<0.01	3980	3750	<0.005	<0.01	2.2	479	0.23	<0.05	<0.05	<0.05	
	9/8/97	<0.007	147	<0.01	3710	3840	<0.005	<0.01	na	434	0.26	<0.05	na	na	
	11/5/97	<0.001	129	<0.02	3610	3880	<0.005	<0.01	na	489	0.23	<0.05	na	na	
	11/5/97	<0.001	124	<0.02	3610	3910	<0.005	<0.01	na	489	0.23	<0.05	na	na	
WN-43A (195')	1/22/97	<0.007	58.5	<0.01	570	572	<0.005	<0.01	na	na	0.39	<0.05	na	na	
	9/8/97	<0.007	84.5	<0.01	673	656	0.006	<0.01	na	361	0.42	<0.05	na	na	
	11/5/97	<0.001	66.5	<0.02	628	646	0.006	<0.01	na	403	0.35	<0.05	na	na	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 12 of 30)**

Location (Depth)	Sample Date	Conductivity			Conductivity			DO ^a		Eh ^a		Fe2		FeT	
		Cd mg/L	Cl mg/L	Co mg/L	(Field) ^a μS/cm	(Lab) ^a μS/cm	Cr mg/L	Cu mg/L	(Field) mg/L	(Field) mV	F mg/L	Fe mg/L	(Field) mg/L	(Field) mg/L	
WN-43B (35')	1/23/97	<0.007	6.7	<0.01	419	392	<0.005	<0.01	na	na	0.31	<0.05	na	na	
	1/23/97	<0.007	6.4	<0.01	na	392	<0.005	<0.01	na	na	0.31	<0.05	na	na	
	9/8/97	0.014	9	<0.01	430	400	0.005	<0.01	na	360	0.34	<0.05	na	na	
	11/5/97	<0.001	5.8	<0.02	405	402	<0.005	<0.01	na	410	0.29	<0.05	na	na	
WN-43C (13')	4/2/97	<0.007	6.1	<0.01	468	459	<0.05	<0.01	na	na	0.46	<0.05	na	na	
	9/8/97	0.008	8.7	<0.01	461	442	<0.005	<0.01	na	378	0.8	<0.05	na	na	
	11/5/97	<0.001	6.5	<0.02	458	447	<0.005	<0.01	na	400	0.43	<0.05	na	na	

Notes: ^aData from nonfiltered samples (all other data are from 0.45 μm filtered samples - dissolved)

^bTOC analyses performed by Core Laboratories, Inc. under different Lab ID

^cntu = nephelometric turbidity units

na = not analyzed

Matrix_code (in database) for all samples in this table = GW

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

E = Exceeded holding time

S = LCS (Lab Control Sample) or spike sample recovery outside acceptable limits

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

> = Result is greater than reported value (diluted sample was off scale).

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 13 of 30)**

Location (Depth)	Sample Date	H ₂ S ^a mg/L	Hg mg/L	K mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Na mg/L	NH ₄ -N mg/L	Ni mg/L	NO ₂ +NO ₃ -N mg/L	P mg/L
WN-32A (321')	6/17/96	<1	<0.001	10.4	18.6	0.36	<0.1	64.5	1.13	<0.05	7.26	<0.05
	8/31/96	0.05 JE	<0.001	10.2	14.3	0.39	<0.1	64	0.89	<0.05	3.92	<0.05
	10/20/96	<0.04	<0.001	9.37	12.8	0.29	<0.05	60.6	0.78	<0.05	5.86	<0.05
	1/24/97	na	<0.001	9.9	13.2	0.27	<0.05	59.8	0.69	<0.05	7	<0.05
	9/10/97	na	<0.001	8.6	9.5	0.1	<0.05	62.6	0.19	<0.05	4.71	<0.05
	11/6/97	na	<0.001	9	10.8	0.18	<0.1	62.4	0.36	<0.05	7.58	<0.1
WN-32B (176')	6/17/96	na	<0.001	17.5	139	0.38	<0.1	44.6	0.27	<0.05	30	0.09
	8/31/96	<0.04 JE	<0.001	16.8	164	0.05	<0.1	43.2	<0.05	<0.05	23.6	0.34
	10/22/96	<0.08	<0.001	17.8	165	0.05	<0.05	43.9	0.06	<0.05	22.7	0.23
	1/24/97	na	<0.001	19	174	0.03	<0.05	43.6	0.06	<0.05	21.7	0.14
	9/10/97	na	<0.001	16.2	151	0.02	<0.05	40.5	0.09	<0.05	22.7	0.06
	11/6/97	na	<0.001	17.9	155	0.02	<0.1	46.5	0.16	<0.05	24.7	0.12
	11/6/97	na	<0.001	18	156	0.02	<0.1	46.1	0.19	<0.05	25.2	0.18
WN-32C (35')	6/17/96	na	<0.001	8.2	132	16.4	<0.1	137	125	0.16	89.9	0.1
	8/31/96	<0.04 JE	<0.001	5.07	146	17.8	<0.1	127	141	0.15	94.9	0.11
	8/31/96	<0.04 JE	<0.001	5.13	146	17.6	<0.1	132	142	0.14	98.5	0.14
	10/20/96	<0.04	<0.001	5.38	144	15	<0.05	156	132	0.12	95.1	<0.05
	11/7/96	na	na	na	na	na	na	na	na	na	na	0.15
	1/23/97	na	<0.001	6	153	15.9	<0.05	150	133	0.14	91	0.05
	9/10/97	na	<0.001	5	134	15	<0.05	156	114	0.1	76.7	<0.05
	9/10/97	na	<0.001	4.8	133	14.8	<0.05	152	116	0.12	80.2	0.08
	11/6/97	na	<0.001	5.2	136	14.4	<0.1	146	112	0.09	83.2	<0.1
	11/6/97	na	<0.001	5.2	136	14.4	<0.1	146	112	0.09	83.2	<0.1
WN-33B (103')	6/17/96	na	<0.001	43.2	77	21.4	<0.1	189	398	0.16	50.7	0.08
	8/30/96	na	<0.001	41.8	83	23.3	<0.1	178	439	0.19	49.8	0.09
	10/22/96	<0.08	<0.001	39.9	83.4	22.7	<0.05	171	421	0.19	46.3	0.13
	10/22/96	<0.04	<0.001	42.2	81.2	21.6	<0.05	187	427	0.16	45.3	0.12
	1/24/97	na	<0.001	44.5	83.3	21.1	<0.05	184	430	0.16	45.2	0.07
	1/24/97	na	<0.001	42.6	84.2	21.6	<0.05	171	447	0.16	45.3	0.06
	9/10/97	na	<0.001	39.6	82.3	22.9	<0.05	178	413	0.18	43.6	0.13
	11/3/97	na	<0.001	39.5	76.1	20.8	<0.1	182	420	0.16	49.8	0.14

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 14 of 30)**

Location (Depth)	Sample Date	H ₂ S ^a mg/L	Hg mg/L	K mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Na mg/L	NH ₄ -N mg/L	Ni mg/L	NO ₂ +NO ₃ -N mg/L	P mg/L
WN-33C (219')	6/16/96	na	<0.001	17.3	55.2	2.98	<0.1	44.9	3.79	<0.05	76.2	0.08
	11/6/96	<0.04	<0.001	16.5	60.4	1.39	<0.05	34.1	0.76	<0.05	76.7	<0.05
	1/27/97	na	<0.001	16.8	64.7	1.04	<0.05	32.2	0.4	<0.05	79.9	0.1
	9/10/97	na	<0.001	14.4	65	0.28	<0.05	29.4	0.18	<0.05	65.1	0.15
	11/3/97	na	<0.001	82.1	69.4	0.08	<0.1	32.8	0.16	<0.05	65.2	0.14
WN-33D (51')	6/16/96	na	<0.001	42.5	216	22.1	<0.1	228	587	0.89	0.16	1
	6/16/96	na	<0.001	42.1	215	21.5	<0.1	229	608	0.89	<0.1	1.02
	8/30/96	na	<0.001	44.4	269	24.8	<0.1	214	608	0.92	0.31	1.07
	10/22/96	<0.08	<0.001	43.2	281	26	<0.05	208	598	1.03	<0.1	1.13
	11/6/96	na	na	na	na	na	na	na	na	na	na	1.04
	1/23/97	na	<0.001	45.4	290	25.7	<0.05	194	596	0.91	0.26	1.19
	9/10/97	na	<0.001	37.5	237	18.3	<0.05	174	591	0.86	<0.1	1.15
	11/3/97	na	<0.001	39.6	226	17.6	<0.1	194	580	0.71	<0.2	0.98
WN-34 (129')	7/28/96	na	na	123	673	98.3	na	376	na	na	na	na
	8/31/96	na	<0.001	128	340	54.5	<0.1	275	78.6	0.49	62.7	1.21
	10/22/96	<0.08	<0.001	131	346	50.5	<0.05	289	79	0.47	58.4	1.31
	11/7/96	na	na	na	na	na	na	na	na	na	na	na
	1/22/97	na	<0.001	136	360	48.3	<0.05	285	73.1	0.47	56.2	1.36
	9/11/97	na	<0.001	111	318	41.5	<0.05	253	66	0.45	55.7	1.21
	11/6/97	na	<0.001	125	328	41.2	<0.1	279	71.5	0.43	55.2	1.18
WN-35A (206')	6/15/96	na	<0.001	25.1	103	0.08	0.14	87.6	0.1	<0.05	93.1	0.19
	8/30/96	0.81 JE	<0.001	26.6	134	0.1	0.13	90.1	0.1	<0.05	121	0.31
	10/19/96	<0.04	<0.001	26.1	124	0.05	0.14	89	0.07	<0.05	97.9	0.33
	1/25/97	na	<0.001	27.5	138	0.04	0.13	82.3	0.11	<0.05	85.9	0.26
	9/11/97	na	<0.001	27.3	117	0.04	0.13	83	0.14	<0.05	69.5	0.24
	11/4/97	na	<0.001	25.6	126	0.04	0.13	82.9	0.24	<0.05	77.7	0.28
WN-35B (28')	6/15/96	na	<0.001	104	253	101	<0.1	223	278	0.19	308	0.33
	8/30/96	0.39 JE	<0.001	130	316	126	<0.1	237	326	0.19	362	0.33
	10/19/96	<0.04	<0.001	124	281	110	<0.05	290	260	0.11	166	0.22

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 15 of 30)**

Location (Depth)	Sample Date	H ₂ S ^a mg/L	Hg mg/L	K mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Na mg/L	NH ₄ -N mg/L	Ni mg/L	NO ₂ +NO ₃ -N mg/L	P mg/L
WN-36A (247')	1/24/97	na	<0.001	129	270	100	<0.05	285	285	0.11	98	0.25
	9/11/97	na	<0.001	123	222	82	<0.05	247	281	0.11	118	0.21
	11/4/97	na	<0.001	128	217	80.1	<0.1	295	278	0.12	184	0.26
	6/15/96	na	<0.001	11.3	37	0.34	<0.1	65.1	0.48	<0.05	75.3	<0.05
	8/31/96	<0.04JE	<0.001	11.4	39.1	0.14	<0.1	54.9	0.11	<0.05	75.7	0.06
	10/20/96	<0.04	<0.001	10.5	40.4	0.14	<0.05	49.5	0.08	<0.05	75.7	<0.05
WN-36B (164.5')	1/25/97	na	<0.001	11.3	39.4	0.12	<0.05	50.6	0.08	<0.05	72.4	0.05
	9/10/97	na	<0.001	9.4	36.5	0.11	<0.05	46.1	0.05	<0.05	68.1	0.07
	11/6/97	na	<0.001	11.5	42.2	0.14	<0.1	53.8	0.13	<0.05	80.4	<0.1
	6/15/96	na	<0.001	15.5	118	0.19	<0.1	80.7	0.1	<0.05	68.6	0.15
	8/31/96	<0.04JE	<0.001	16	162	0.08	<0.1	60	0.08	<0.05	59.6	0.16
	10/20/96	<0.04	<0.001	14.6	153	0.13	0.052	52.2	0.09	<0.05	68.6	0.24
WN-36C (21')	1/25/97	na	<0.001	17.5	156	0.11	<0.05	61.3	0.12	<0.05	65.2	0.25
	9/10/97	na	<0.001	14.6	144	0.09	<0.05	59.1	0.16	<0.05	62	0.14
	11/6/97	na	<0.001	16.8	139	0.12	<0.1	68.7	0.26	<0.05	61.1	0.19
	6/15/96	na	<0.001	22.9	68.9	0.13	<0.1	319	0.07	<0.05	65.1	0.12
	8/31/96	<0.04JE	<0.001	23.1	63.9	0.04	<0.1	471	<0.05	<0.05	67.1	0.15
	10/20/96	<0.04	<0.001	24.4	72.5	0.02	<0.05	360	<0.05	<0.05	84.3	0.19
WN-37E (110')	11/7/96	na	na	na	na	na	na	na	na	na	na	0.19
	1/23/97	na	<0.001	25.4	73	0.01	0.05	362	<0.05	<0.05	66.6	0.1
	9/10/97	na	<0.001	17	44.7	<0.01	0.06	376	0.09	<0.05	76.4	0.12
	11/6/97	na	<0.001	22.7	58.7	<0.01	<0.1	359	0.19	<0.05	60.3	0.15
	7/26/96	na	na	30	123	27.2	na	119	na	na	na	na
	8/31/96	<0.04JE	<0.001	21.2	246	22	<0.1	237	3.75	<0.05	39.7	0.1
	10/22/96	<0.08	<0.001	22	245	24.2	<0.05	229	0.89	<0.05	43	0.13
	11/7/96	na	na	na	na	na	na	na	na	na	na	na
	1/22/97	na	<0.001	24.8	267	31	<0.05	236	0.46	<0.05	44.3	0.12
	9/11/97	na	<0.001	23.5	264	35.8	<0.05	229	3.07	<0.05	38.9	0.09
	11/6/97	na	<0.001	24	259	34.6	<0.1	258	2.87	<0.05	38.3	<0.1
	11/6/97	na	<0.001	24.1	254	31.8	<0.1	262	3.25	<0.05	38.5	<0.1

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells, Split Rock Site (Page 16 of 30)

Location (Depth)	Sample Date	H ₂ S ^a mg/L	Hg mg/L	K mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Na mg/L	NH ₄ -N mg/L	Ni mg/L	NO ₂ +NO ₃ -N mg/L	P mg/L
WN-38A (160')	10/23/96	<0.04	<0.001	13.4	17.9	0.04	<0.05	311	<0.05	<0.05	<0.1	<0.05
	1/26/97	na	<0.001	13.1	18.6	0.08	<0.05	267	<0.05	<0.05	<0.1	0.07
	9/8/97	na	<0.001	13.8	17.5	0.07	<0.05	314	<0.05	<0.05	<0.1	0.07
	11/4/97	na	<0.001	12.9	17.1	0.04	<0.1	310	<0.05	<0.05	<0.2	<0.1
WN-38B (109')	11/8/96	<0.04	<0.001	13.9	15.9	0.08	<0.05	251	<0.05	<0.05	0.11	<0.05
	11/8/96	<0.04	<0.001	14	15.9	0.08	<0.05	254	<0.05	<0.05	<0.1	<0.05
	1/27/97	na	<0.001	14.1	17.4	0.05	<0.05	222	<0.05	<0.05	<0.1	0.13
	1/27/97	na	<0.001	14	17	0.04	<0.05	223	<0.05	<0.05	<0.1	0.08
	1/27/97	na	<0.001	14	17	0.04	<0.05	223	<0.05	<0.05	<0.1	0.08
	9/8/97	na	<0.001	14.1	16.3	<0.01	<0.05	241	<0.05	<0.05	<0.1	0.12
	11/4/97	na	<0.001	13.9	16	<0.01	<0.1	248	<0.05	<0.05	<0.2	<0.1
WN-38C (12')	10/23/96	<0.04	<0.001	15.1	37.6	0.71	<0.05	207	0.11	<0.05	<0.1	0.12
	1/23/97	na	<0.001	15.5	42.7	0.81	<0.05	240	0.14	<0.05	<0.1	0.11
	9/8/97	na	<0.001	15.2	31.1	0.56	<0.05	162	0.13	<0.05	<0.1	0.19
	11/4/97	na	<0.001	14.2	36.8	0.78	<0.1	191	0.23	<0.05	<0.2	0.15
WN-39A (124')	10/23/96	<0.04	<0.001	10.4	16.1	0.13	<0.05	132	<0.05	<0.05	0.32	0.05
	1/25/97	na	<0.001	10.8	16.4	0.05	<0.05	121	<0.05	<0.05	0.87	<0.05
	9/9/97	na	<0.001	10.6	17.6	0.04	<0.05	127	<0.05	<0.05	1.41	<0.05
	11/4/97	na	<0.001	10.4	16.2	0.03	<0.1	131	<0.05	<0.05	1.07	<0.1
WN-39B (87')	10/23/96	<0.08	<0.001	5.53	5.43	0.06	<0.05	24.9	<0.05	<0.05	1.11	0.06
	1/25/97	na	<0.001	5.6	5.2	0.04	<0.05	22.9	<0.05	<0.05	1.38	<0.05
	1/25/97	na	<0.001	5.6	5.2	0.04	<0.05	22.8	<0.05	<0.05	1.34	<0.05
	9/9/97	na	<0.001	5.3	5.9	<0.01	<0.05	24.6	<0.05	<0.05	2.64	<0.05
	11/4/97	na	<0.001	5.4	5.6	<0.01	<0.1	25.2	<0.05	<0.05	2.49	<0.1
WN-39C (10')	10/23/96	<0.04	<0.001	11.7	27	<0.01	<0.05	36.5	<0.05	<0.05	12.9	0.09
	10/23/96	<0.04	<0.001	11.9	27.3	<0.01	<0.05	37.1	<0.05	<0.05	12.8	0.15
	1/22/97	na	<0.001	14.2	42.9	<0.01	<0.05	40.1	<0.05	<0.05	21	0.07
	9/9/97	na	<0.001	9	17.1	<0.01	<0.05	27.7	<0.05	0.07	6.7	0.06
	11/4/97	na	<0.001	11.2	25.5	<0.01	<0.1	33.5	0.07	<0.05	12.4	<0.1
WN-40A (195')	1/26/97	na	<0.001	8.9	4.9	<0.01	<0.05	290	<0.05	<0.05	0.16	<0.05
	9/9/97	na	<0.001	9.2	5.2	<0.01	<0.05	321	<0.05	<0.05	0.17	<0.05
	11/4/97	na	<0.001	9	4.9	<0.01	<0.1	316	<0.05	<0.05	<0.2	<0.1

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
Split Rock Site (Page 17 of 30)**

Location (Depth)	Sample Date	H ₂ S ^a mg/L	Hg mg/L	K mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Na mg/L	NH ₄ -N mg/L	Ni mg/L	NO ₂ +NO ₃ -N mg/L	P mg/L
WN-40B (105')	1/26/97	na	<0.001	8.3	7.6	<0.01	<0.05	81.7	<0.05	<0.05	0.6	<0.05
	9/9/97	na	<0.001	8	7	<0.01	<0.05	92.4	<0.05	<0.05	0.53	<0.05
	11/4/97	na	<0.001	7.7	6.4	<0.01	<0.1	88.8	<0.05	<0.05	0.61	<0.1
WN-40C (14')	1/26/97	na	<0.001	30.4	75.8	0.5	<0.05	86.3	0.06	<0.05	22.7	0.06
	9/9/97	na	<0.001	24.6	44.1	0.32	<0.05	75	0.06	<0.05	5.48	0.06
	11/4/97	na	<0.001	27.9	57.3	0.41	<0.1	83	0.12	<0.05	14.4	<0.1
WN-41A (165')	1/26/97	na	<0.001	8.9	5.5	<0.01	<0.05	401	<0.05	<0.05	0.11	0.07
	9/9/97	na	<0.001	9.2	5.5	<0.01	<0.05	437	<0.05	<0.05	<0.1	<0.05
	11/5/97	na	<0.001	9.2	5.5	<0.01	<0.1	434	<0.05	<0.05	<0.2	<0.1
WN-41B (92')	1/25/97	na	<0.001	9.2	5.3	<0.01	<0.05	437	<0.05	<0.05	0.15	0.05
	9/9/97	na	<0.001	9.2	5.3	<0.01	<0.05	457	<0.05	<0.05	0.1	<0.05
	9/12/97	na	<0.001	9.3	5.4	<0.01	<0.05	461	<0.05	<0.05	<0.1	<0.05
	11/5/97	na	<0.001	9.1	5.1	<0.01	<0.1	453	<0.05	<0.05	<0.2	<0.1
WN-41C (11')	1/27/97	na	<0.001	14.6	30	0.08	<0.05	134	<0.05	<0.05	7.96	<0.05
	9/9/97	na	<0.001	15.1	30.9	0.16	<0.05	130	<0.05	<0.05	10.6	<0.05
	9/9/97	na	<0.001	15	31.6	0.16	<0.05	129	<0.05	<0.05	9.53	<0.05
	11/5/97	na	<0.001	15	31.2	0.15	<0.1	126	0.09	<0.05	10.8	<0.1
WN-42A (110')	1/24/97	na	<0.001	23.9	158	0.29	<0.05	124	0.14	<0.05	59.9	0.33
	9/8/97	na	<0.001	22.9	148	0.58	<0.05	144	0.2	<0.05	58.6	0.27
	11/5/97	na	<0.001	21.5	147	0.68	<0.1	126	0.35	<0.05	54.7	0.32
WN-42B (39')	1/23/97	na	<0.001	20.7	144	<0.01	<0.05	91.9	<0.05	<0.05	122	0.18
	9/8/97	na	<0.001	20.6	146	0.01	<0.05	87.9	0.14	<0.05	105	0.27
	11/5/97	na	<0.001	20.4	133	0.01	<0.1	95.2	0.24	<0.05	104	0.22
WN-42C (12')	1/26/97	na	<0.001	26.4	99.4	0.13	<0.05	94	0.09	<0.05	50.4	0.11
	9/8/97	na	<0.001	27.2	91.8	0.1	<0.05	106	0.16	<0.05	45.6	0.12
	11/5/97	na	<0.001	25.8	89.4	0.11	<0.1	103	0.26	<0.05	51.7	0.14
	11/5/97	na	<0.001	26.5	88.7	0.12	<0.1	106	0.26	<0.05	55.5	0.17
WN-43A (195')	1/22/97	na	<0.001	12.2	8.3	<0.01	<0.05	51	<0.05	<0.05	0.54	<0.05
	9/8/97	na	<0.001	12.2	9.3	<0.01	<0.05	52.7	<0.05	<0.05	0.5	<0.05
	11/5/97	na	<0.001	12.2	8.8	<0.01	<0.1	56.7	<0.05	<0.05	0.48	<0.1

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 18 of 30)**

Location (Depth)	Sample Date	H ₂ S ^a mg/L	Hg mg/L	K mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Na mg/L	NH ₄ -N mg/L	Ni mg/L	NO ₂ +NO ₃ -N mg/L	P mg/L
WN-43B (35')	1/23/97	na	<0.001	7.5	7.9	<0.01	<0.05	22.1	<0.05	<0.05	0.61	<0.05
	1/23/97	na	<0.001	7.5	7.9	<0.01	<0.05	22	<0.05	<0.05	0.63	<0.05
	9/8/97	na	<0.001	6.8	8.1	<0.01	<0.05	20.1	<0.05	<0.05	0.54	<0.05
	11/5/97	na	<0.001	7.1	7.8	<0.01	<0.1	22	<0.05	<0.05	0.67	<0.1
WN-43C (13')	4/2/97	na	<0.001	9.9	8.5	0.02	<0.1	20.1	0.05	<0.05	0.52	<0.05
	9/8/97	na	<0.001	11.2	8.5	0.01	<0.05	24.1	<0.05	<0.05	0.45	<0.05
	11/5/97	na	<0.001	12	8.2	<0.01	<0.1	23.5	<0.05	<0.05	0.54	<0.1

Notes: ^aData from nonfiltered samples (all other data are from 0.45 µm filtered samples - dissolved)

^bTOC analyses performed by Core Laboratories, Inc. under different Lab ID

^cntu = nephelometric turbidity units

na = not analyzed

Matrix_code (in database) for all samples in this table = GW

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

E = Exceeded holding time

S = LCS (Lab Control Sample) or spike sample recovery outside acceptable limits

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

> = Result is greater than reported value (diluted sample was off scale).

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 19 of 30)**

Location (Depth)	Sample Date	PO ₄ -P mg/L	Pb mg/L	pH ^a (Field) std.units	pH ^a (Lab) std.units	Ra-226 pCi/L	Ra-228 pCi/L	Sb mg/L	Se mg/L	SiO ₂ mg/L	SO ₄ (Lab) mg/L	SO ₄ (Field) mg/L
WN-32A (321')	6/17/96	na	<0.002	na	7.80	<1	<1.5	<0.003	<0.003	49.8	229	na
	8/31/96	na	<0.002	7.34 JZ	7.95	<1	<1JSL	<0.003	<0.003	38.8	203	na
	10/20/96	na	<0.002	7.47	7.93	<0.5	<2.3	0.01	<0.003	39.8	169	na
	1/24/97	na	<0.002	7.53	7.73	<0.6	<2.2	<0.003	<0.003	44.5	163	na
	9/10/97	na	<0.002	7.53	8.01	<0.6	<2.6	<0.003	<0.003	43.7	107	na
	11/6/97	na	<0.005	7.78	7.92	<1	<2	<0.005	<0.005	42.6	117	na
WN-32B (176')	6/17/96	na	<0.002	na	6.83	<1	<1.9	<0.003	0.006	57.1	1710	na
	8/31/96	na	<0.002	6.25	na	<1	<1JSL	<0.003	<0.003	56.3	1670	na
	10/22/96	na	<0.002	6.31	6.80	<0.5	<2.3	0.003	0.003	57.6	1880	na
	1/24/97	na	<0.002	6.47	7.34	<0.6	2.9	<0.003	0.003	58	2040	na
	9/10/97	na	<0.002	6.43	7.32	<0.6	<2.6	<0.003	<0.003	58	1790	na
	11/6/97	na	<0.005	6.39	6.92	1.8	<3.3	<0.005	<0.005	58.8	1600	na
	11/6/97	na	<0.005	6.39	7.01	<1.3	<3.3	<0.005	<0.005	59	1620	na
WN-32C (35')	6/17/96	na	<0.002	6.29	6.88	1.6	<1.9	<0.003	0.077	16.3	1990	na
	8/31/96	na	<0.002	6.11	6.85	3.1	<1JSL	<0.003	0.081	14.6	2292	na
	8/31/96	na	<0.002	na	6.51	2.9	<1JSL	<0.003	0.083	14.5	2228	na
	10/20/96	na	<0.002	5.79	6.70	0.8	<2.3	0.003	0.094	2.91	2050	na
	11/7/96	<0.01JE	na	5.74	na	na	na	na	na	na	na	na
	1/23/97	na	<0.002	na	6.68	1.8	<2.2	<0.003	0.079	14.2	2170	na
	9/10/97	na	<0.002	6.25	7.22	0.9	<2.6	<0.003JD	0.061	13.6	2020	na
	9/10/97	na	<0.002	na	7.44	<1	<4.3	<0.003JD	0.066	13.4	2010	na
	11/6/97	na	<0.005	6.31	6.42	<1	<2	<0.005	0.081	13.6	1900	na
WN-33B (103')	6/17/96	na	<0.002	na	4.54	<1	<2.5	<0.003	0.022	63.3	3040	na
	8/30/96	na	<0.002	na	4.26	1.1	<1JSL	<0.003	0.02	71.7	3216	na
	10/22/96	na	<0.002	4.36	4.18	0.6	<2.3	0.017	0.02	81	3440	na
	10/22/96	na	<0.002	na	4.16	<0.5	<2.3	0.013	0.02	73.8	3390	na
	1/24/97	na	<0.002	4.40	4.35	0.7	<2.2	<0.003	0.017	70.1	3580	na
	1/24/97	na	<0.002	na	4.31	0.6	<2.2	<0.003	0.019	70.2	3670	na
	9/10/97	na	<0.002	4.47	4.25	<0.6	<2.6	<0.003	0.015	70.8	3330	na
	11/3/97	na	<0.005	4.35 JZ	4.27	<1	<2	<0.005	0.022	69.4	2840	na

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
Split Rock Site (Page 20 of 30)**

Location (Depth)	Sample Date	PO ₄ -P mg/L	Pb mg/L	pH ^a		pH ^a		Ra-226 pCi/L	Ra-228 pCi/L	Sb mg/L	Se mg/L	SiO ₂ (Lab) mg/L	SO ₄ (Field) mg/L
				(Field) std.units	(Lab) std.units	(Field) std.units	(Lab) std.units						
WN-33C (219')	6/16/96	na	<0.002	na	7.88	<1	<1.5	<0.003	0.04	28	920	na	
	11/6/96	na	<0.002	7.02	7.67	<0.8	<3.5	<0.003	0.05	28.9	950	na	
	1/27/97	na	<0.002	7.35	7.68	<0.9	<1.6	<0.003	0.041	28.6	972	na	
	9/10/97	na	<0.002	7.35	7.70	<0.6	<2.6	<0.003	0.024	29.1	1110	na	
	11/3/97	na	<0.005	7.37 JZ	7.78	<1.1	<3.2	<0.005	0.034	30.1	1120	na	
WN-33D (51')	6/16/96	na	0.011	na	3.92	214	26.3	<0.003	0.007	94.5	6730	na	
	6/16/96	na	0.012	na	3.88	218	23.9	<0.003	0.005	95.2	6590	na	
	8/30/96	na	0.005	na	3.75	185	23.1 JSL	<0.003	0.007	104	6790	na	
	10/22/96	na	0.006	3.79	3.67	229	22	0.006	0.006	98.1	7140	na	
	11/6/96	0.1 JE	na	3.55	na	na	na	na	na	na	na	na	
	1/23/97	na	0.012	na	3.83	189	15.1	<0.003	0.007	109	7600	na	
	9/10/97	na	0.021	3.94	3.82	155	23	<0.003	<0.003	101	6680	na	
	11/3/97	na	0.017	na	3.89	209	14	<0.005	0.033	102	5760	na	
WN-34 (129')	7/28/96	na	na	na	3.59	na	na	na	na	na	12400	na	
	8/31/96	na	<0.002	4.04	3.63	1	<1JS	<0.003	0.059	74.5	6471	na	
	10/22/96	na	<0.002	3.81	3.51	0.6	<2.3	<0.003	0.044	90.2	6670	na	
	11/7/96	na	na	3.74	na	na	na	na	na	na	na	na	
	1/22/97	1.28 JE	0.002	3.88	3.73	0.9	<2.2	<0.003	0.055	74	6710	na	
	9/11/97	na	0.002	3.89	3.69	<0.7	<2.8	0.003 JD	0.041	72	6430	na	
	11/6/97	na	<0.005	3.93	3.67	1.3	2	<0.005	0.045	76.6	5880	na	
WN-35A (206')	6/15/96	na	<0.002	na	8.05	<1	3.4	<0.003	0.012	36.5	1170	na	
	8/30/96	na	<0.002	na	7.30	1.8	<1JSL	<0.003	0.011	37.3	1255	na	
	10/19/96	0.04	<0.002	7.07	7.22	<0.8	<3.8	0.004	0.006	37.2	1220	na	
	1/25/97	na	<0.002	7.16	7.64	1.3	<3.6	<0.003	0.011	38.6	1440	na	
	9/11/97	na	<0.002	6.81	7.63	<0.7	<2.8	<0.003JD	0.011	38.4	1440	na	
	11/4/97	na	<0.005	7.03	7.43	<1	<2	<0.005	0.007	37.8	1300	na	
WN-35B (28')	6/15/96	na	<0.002	na	7.34	<1	<1.5	<0.003	0.034	47.3	2980	na	
	8/30/96	na	<0.002	na	6.64	<1	<1JSL	<0.003	0.037	42.7	3094	na	
	10/19/96	0.06	<0.002	6.53	6.95	<0.8	<3.8	<0.003	0.021	40.3	3310	2390	

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
Split Rock Site (Page 21 of 30)**

Location (Depth)	Sample Date	pH ^a		pH ^a		Ra-226 pCi/L	Ra-228 pCi/L	Sb mg/L	Se mg/L	SO ₄	
		PO ₄ -P mg/L	Pb mg/L	(Field) std.units	(Lab) std.units					(Lab) mg/L	(Field) mg/L
	1/24/97	na	<0.002	6.83	7.47	1	<2.2	<0.003	0.022	9.6	3880
	9/11/97	na	<0.002	6.70	7.38	<0.7	<2.8	<0.003JD	0.026	42	3180
	11/4/97	na	<0.005	6.69	7.24	<1.1	<2	<0.005	0.03	45.1	2880
WN-36A (247')	6/15/96	na	<0.002	na	8.16	<1	<2.5	<0.003	0.005	27.6	312
	8/31/96	na	<0.002	7.54	7.88	<1	<1JS	<0.003	0.004	30	285
	10/20/96	na	<0.002	7.50	7.08	<0.5	<2.3	0.006	<0.003	29.4	299
	1/25/97	na	<0.002	7.73	7.69	<1.5	<2.6	<0.003	0.006	29	279
	9/10/97	na	<0.002	7.47	7.98	<0.6	<2.6	<0.003JD	<0.003	27.5	276
	11/6/97	na	<0.005	7.64	7.74	<1	<2	<0.005	<0.005	29.1	316
WN-36B (164.5')	6/15/96	na	<0.002	na	7.87	<1	<2.5	<0.003	0.012	36.6	1620
	8/31/96	na	<0.002	na	7.33	<1	<1JS	<0.003	0.012	42.1	1810
	10/20/96	na	<0.002	na	7.09	<0.5	<2.3	<0.003	0.01	39.5	1920
	1/25/97	na	<0.002	6.93	7.58	<1	<3.6	<0.003	0.009	40.2	1970
	9/10/97	na	<0.002	6.71	7.79	<0.6	<2.6	<0.003JD	0.007	37.4	1920
	11/6/97	na	<0.005	6.87	7.06	<1	<2	<0.005	0.007	38.4	1700
WN-36C (21')	6/15/96	na	<0.002	na	7.78	<1	<1.5	<0.003	0.016	35.1	1770
	8/31/96	na	<0.002	na	7.55	1.2	<1JSL	<0.003	0.014	38.3	2114
	10/20/96	0.03	<0.002	6.83	7.09	<0.5	<2.3	0.003	0.009	38.2	2080
	11/7/96	0.04 JE	na	6.67	na	na	na	na	na	na	na
	1/23/97	na	<0.002	na	7.40	<0.6	<2.2	<0.003	0.013	39.9	2160
	9/10/97	na	<0.002	7.12	7.86	<0.7	<2.8	<0.003JD	0.021	34.1	1630
	11/6/97	na	<0.005	7.03	7.45	<1	<2	<0.005	0.017	36	1590
WN-37E (110')	7/26/96	na	na	na	6.52 JE	na	na	na	na	1640	na
	8/31/96	na	<0.002	6.56	7.03	<1	<1JSL	<0.003	0.028	47.8	2273
	10/22/96	na	<0.002	6.43	7.04	<0.8	<3.8	0.005	0.031	53.7	2550
	11/7/96	na	na	6.15	na	na	na	na	na	na	na
	1/22/97	na	<0.002	na	7.07	0.7	<2.2	<0.003	0.038	53.7	2700
	9/11/97	na	<0.002	6.23	7.61	<0.7	<2.8	<0.003JD	0.084	51.5	2710
	11/6/97	na	<0.005	6.20	6.96	<1	<3	<0.005	0.125	53.3	2310
	11/6/97	na	<0.005	6.20	6.93	<1	<2	<0.005	0.119	52.8	2270

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
Split Rock Site (Page 22 of 30)**

Location (Depth)	Sample Date	PO ₄ -P mg/L	Pb mg/L	pH ^a (Field) std.units	pH ^a (Lab) std.units	Ra-226 pCi/L	Ra-228 pCi/L	Sb mg/L	Se mg/L	SiO ₂ (Lab) mg/L	SO ₄ (Field) mg/L
WN-38A (160')	10/23/96	na	<0.002	na	7.8	2.7	5.9	0.018	<0.003	31.3	329
	1/26/97	na	<0.002	7.77	7.99	4.7	10.3	<0.003	0.006	31.7	346
	9/8/97	na	<0.002	7.89	8.02	3.1	13.7	<0.003JD	<0.003	29.3	332
	11/4/97	na	<0.005	7.54	7.98	3.6	6.3	<0.005	<0.005	31.4	314
WN-38B (109')	11/8/96	na	<0.002	7.58	7.92	<0.5	<2.1	0.004	<0.003	34.4	255
	11/8/96	na	<0.002	na	7.91	<0.8	<3.5	0.004	<0.003	34.6	256
	1/27/97	na	<0.002	7.71	7.99	<0.9	<1.6	<0.003	<0.003	35.2	272
	1/27/97	na	<0.002	na	8.04	<0.9	<1.6	<0.003	<0.003	34.8	266
	1/27/97	na	<0.002	na	8.04	<0.9	<1.6	<0.003	<0.003	34.8	266
	9/8/97	na	<0.002	7.68	8.03	<0.7	<2.8	<0.003JD	<0.003	31.5	245
	11/4/97	na	<0.005	7.70	7.94	<1	<2	<0.005	<0.005	34.1	242
WN-38C (12')	10/23/96	na	<0.002	na	7.38	<0.5	<2.3	0.01	<0.003	28.7	544
	1/23/97	na	<0.002	7.37	7.60	0.7	<2.2	<0.003	<0.003	29.9	627
	9/8/97	na	<0.002	7.37	7.89	<0.7	<2.8	<0.003JD	<0.003	34.7	409
	11/4/97	na	<0.005	6.98	7.51	<1	<2	<0.005	<0.005	36.8	498
WN-39A (124')	10/23/96	na	<0.002	na	7.9	<0.5	<2.3	0.01	<0.003	29.6	187
	1/25/97	na	<0.002	7.86	7.71	<1.5	<2.6	<0.003	<0.003	30.7	183
	9/9/97	na	<0.002	7.70	7.87	<0.6	<2.6	<0.003	<0.003	32	203
	11/4/97	na	<0.005	7.92	7.94	<1	<2	<0.005	<0.005	31.4	188
WN-39B (87')	10/23/96	na	<0.002	7.96	7.95	<0.5	<2.3	<0.003	<0.003	32.4	22
	1/25/97	na	<0.002	7.88	7.70	<0.9	<1.6	<0.003	<0.003	31	19.6
	1/25/97	na	<0.002	na	7.67	<0.9	<1.6	<0.003	<0.003	30.9	19.6
	9/9/97	na	<0.002	7.99	8.14	<0.6	<2.6	<0.003	<0.003	33	28.4
	11/4/97	na	<0.005	7.83	8.03	<1	<2	<0.005	<0.005	32.6	25.3
WN-39C (10')	10/23/96	na	<0.002	na	7.32	<0.5	2.4	0.009	0.006	37.9	412
	10/23/96	na	<0.002	na	7.29	<0.5	2.5	0.012	0.004	37.9	413
	1/22/97	<0.05JE	<0.002	7.84	7.29	<0.6	<2.2	<0.003	<0.003	37.9	701
	9/9/97	na	<0.002	7.20	7.92	<0.6	<2.6	<0.003	<0.003	36.3	235
	11/4/97	na	<0.005	7.27	7.41	<1	<2	<0.005	<0.005	37.4	382
WN-40A (195')	1/26/97	na	<0.002	8.08	7.95	<0.9	2.4	<0.003	<0.003	38.6	259
	9/9/97	na	<0.002	8.17	8.2	<0.6	<2.6	<0.003	<0.003	39.8	277
	11/4/97	na	<0.005	8.15	8.25	<1	2	<0.005	<0.005	38.2	256

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
Split Rock Site (Page 23 of 30)**

Location (Depth)	Sample Date	PO ₄ -P mg/L	Pb mg/L	pH ^a		pH ^a		Ra-226 pCi/L	Ra-228 pCi/L	Sb mg/L	Se mg/L	SiO ₂ (Lab) mg/L	SO ₄	
				(Field) std.units	(Lab) std.units	(Lab)	(Field)						(Lab)	(Field)
WN-40B (105')	1/26/97	na	<0.002	7.82	7.79	<0.9	2.7	<0.003	<0.003	43.2	88.2	na		
	9/9/97	na	<0.002	7.98	8.08	<0.6	<2.6	<0.003	<0.003	45	89	na		
	11/4/97	na	<0.005	7.91	8.17	<1	<2	<0.005	<0.005	43.2	79	na		
WN-40C (14')	1/26/97	na	<0.002	7.06	7.84	0.9	<1.6	<0.003	<0.003	56.7	736	na		
	9/9/97	na	<0.002	7.20	7.86	<0.6	<2.6	<0.003	0.003	60.5	352	na		
	11/4/97	na	<0.005	7.01	7.80	<1	<2	<0.005	0.005	57.8	514	na		
WN-41A (165')	1/26/97	na	<0.002	8.12	7.96	<0.9	<1.6	<0.003	<0.003	33.3	380	na		
	9/9/97	na	<0.002	7.71	8.06	<0.6	<2.6	<0.003	<0.003	31.8	374	na		
	11/5/97	na	<0.005	8.04	8.09	<1	<2	<0.005	<0.005	31.2	364	na		
WN-41B (92')	1/25/97	na	<0.002	8.04	8.00	<0.9	<1.6	<0.003	<0.003	32.7	375	na		
	9/9/97	na	<0.002	8.14	8.18	<0.6	<2.6	<0.003	<0.003	33.9	391	na		
	9/12/97	na	<0.002	8.05	8.11	<0.7	<2.8	<0.003JD	<0.003	32.8	396	na		
	11/5/97	na	<0.005	8.15	8.15	<1	<2	<0.005	<0.005	32.4	373	na		
WN-41C (11')	1/27/97	na	<0.002	7.31	7.63	1.5	<1.6	<0.003	0.007	40.3	418	na		
	9/9/97	na	<0.002	7.16	7.73	<0.6	<2.6	<0.003	<0.003	42.9	444	na		
	9/9/97	na	<0.002	na	7.67	<0.6	<2.6	<0.003	<0.003	43.7	454	na		
	11/5/97	na	<0.005	7.19	7.42	<1	<2	<0.005	<0.005	42.1	436	na		
WN-42A (110')	1/24/97	na	<0.002	7.11	7.71	<0.6	<2.2	<0.003	0.017	43.9	1870	na		
	9/8/97	na	<0.002	7.06	7.61	<0.7	<2.8	<0.003JD	0.012	43.2	1920	na		
	11/5/97	na	<0.005	7.04	7.01	<1	<2	<0.005	0.011	42.1	1670	na		
WN-42B (39')	1/23/97	na	<0.002	na	7.52	<0.6	<2.2	<0.003	0.013	53.2	1740	na		
	9/8/97	na	<0.002	7.14	7.66	<1.1	<4.6	<0.003JD	0.007	51.2	1970	na		
	11/5/97	na	<0.005	7.00	7.37	<1	<2	<0.005	0.006	50.6	1660	na		
WN-42C (12')	1/26/97	na	<0.002	6.93	7.72	<0.9	<1.6	<0.003	0.007	43.1	2050	na		
	9/8/97	na	<0.002	7.01	7.66	<0.7	<2.8	<0.003JD	<0.009 B	42.6	1950	na		
	11/5/97	na	<0.005	6.97	7.15	<1	<2	<0.005	0.01	41.9	1640	na		
	11/5/97	na	<0.005	6.97	7.16	<1	<2	<0.005	0.01	41.9	1620	na		
WN-43A (195')	1/22/97	na	<0.002	7.32	7.66	<0.6	<2.2	<0.003	<0.003	60.5	81.6	na		
	9/8/97	na	<0.002	7.96	8.1	<1.1	<4.6	<0.003JD	<0.003	58	97.3	na		
	11/5/97	na	<0.005	7.68	7.94	<1	<2	<0.005	<0.005	58.7	87.2	na		

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 24 of 30)**

Location (Depth)	Sample Date	PO ₄ -P mg/L	Pb mg/L	pH ^a		pH ^a		Ra-226 pCi/L	Ra-228 pCi/L	Sb mg/L	Se mg/L	SO ₄	
				(Field) std.units	(Lab) std.units	(Field) std.units	(Lab) std.units					(Lab) mg/L	(Field) mg/L
WN-43B (35')	1/23/97	na	<0.002	7.37	7.89	<0.6	<2.2	<0.003	<0.003	54.3	40.2	na	
	1/23/97	na	<0.002	na	7.74	<0.6	<2.2	<0.003	<0.003	55.3	40	na	
	9/8/97	na	<0.002	7.92	8.07	<1.3	<4.7	<0.003JD	<0.003	52.9	41.5	na	
	11/5/97	na	<0.005	7.47	7.94	<1	<2	<0.005	<0.005	53.7	38.1	na	
WN-43C (13')	4/2/97	na	<0.002	7.59	7.75 JE	0.4	<1	<0.003	<0.003	46.9	33.1	na	
	9/8/97	na	<0.002	7.86	8.06	<1.3	<4.7	<0.003JD	<0.003	51	38.1	na	
	11/5/97	na	<0.005	7.46	7.92	<1	<2	<0.005	<0.005	51.9	32.9	na	

Notes: ^aData from nonfiltered samples (all other data are from 0.45 µm filtered samples - dissolved)

^bTOC analyses performed by Core Laboratories, Inc. under different Lab ID

^cntu = nephelometric turbidity units

na = not analyzed

Matrix_code (in database) for all samples in this table = GW

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

E = Exceeded holding time

S = LCS (Lab Control Sample) or spike sample recovery outside acceptable limits

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

> = Result is greater than reported value (diluted sample was off scale).

Z = qualified for other reason (see database for explanation).

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells, Split Rock Site (Page 25 of 30)

Location (Depth)	Sample Date	Sr mg/L	TDS mg/L	Temp (Field) °C	Th-230 pCi/L	Tl mg/L	TIC mg/L	TOC ^b mg/L	Turbidity ntu ^c	U _{nat} mg/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	V mg/L	Zn mg/L	
WN-32A (321')	6/17/96	na	711	na	<0.4B	<0.002	na	na	na	0.377	na	na	na	<0.1	<0.01	
	8/31/96	0.57	587	10.5	0.4	<0.002	na	<40	na	0.163	na	na	na	<0.1	<0.01	
	10/20/96	0.5	560	8.1	<0.4	na	na	na	na	0.131	na	na	na	<0.1	<0.01	
	1/24/97	0.55	503	8.6	<0.4	<0.002B	na	na	4	0.112	na	na	na	<0.1	<0.01	
	9/10/97	0.47	439 JE	11.8	<0.2JD	<0.002	na	na	na	0.072	na	na	na	<0.1	<0.01	
	11/6/97	0.49	469	9.8	<0.4	<0.003	na	na	na	0.117	na	na	na	<0.1	<0.05	
WN-32B (176')	6/17/96	na	4140	na	<0.4	<0.002	na	na	na	3.55	na	na	na	<0.1	<0.01	
	8/31/96	5.07	na	10.4	<0.4	<0.002	na	<40	na	3.69	na	na	na	<0.1	<0.01	
	10/22/96	4.67	4100	7.8	<0.4	na	na	<1	na	0.35	na	na	na	<0.1	<0.01	
	1/24/97	4.45	4049	7.1	<0.4	<0.002	na	na	1.4	3.3	na	na	na	<0.1	<0.01	
	9/10/97	4.31	4060 JE	11.4	0.4 JD	<0.002	454	<5	na	2.75	na	na	na	<0.1	<0.01	
	11/6/97	4.33	3980	10	<0.4	<0.003	na	na	na	2.73	na	na	na	<0.1	<0.05	
	11/6/97	4.51	3980	10	<0.4	<0.003	na	na	na	3.28	na	na	na	<0.1	<0.05	
WN-32C (35')	6/17/96	na	3950	10.8	<0.7B	0.005	na	na	na	1.27	na	na	na	<0.1	0.1	
	8/31/96	1.98	3440	9.3	<0.4	0.009	na	<40	na	0.959	267.6	13.2	290.3	<0.1	0.15	
	8/31/96	1.99	3420	na	<0.4	0.008	na	<40	na	0.89	279.8	11.4	285.3	<0.1	0.15	
	10/20/96	1.83	3490	7.4	0.5	na	na	<1	na	0.931	na	na	na	<0.1	0.09	
	11/7/96	na	na	8.3	na	na	na	na	na	na	na	na	na	na	na	
	1/23/97	1.92	3390	na	<0.4	0.006	na	na	3.8	0.674	na	na	na	<0.1	0.12	
	9/10/97	1.69	3800 JE	11.5	0.2 JD	0.014	76	12	na	0.787	na	na	na	<0.1	0.09	
	9/10/97	1.8	3540 JE	na	<0.2JD	0.014	na	na	na	0.741	na	na	na	<0.1	0.08	
	11/6/97	1.85	3290	10.2	<0.4	0.011	na	na	na	0.819	na	na	na	<0.1	0.08	
	WN-33B (103')	6/17/96	na	4790	na	0.4	0.002	na	na	na	0.685	na	na	na	<0.1	0.12
	8/30/96	1.94	4620	na	0.4	<0.002	na	<40	na	0.706	na	na	na	<0.1	0.12	
	10/22/96	1.83	5070	8.1	<0.4	na	na	5	41.8	0.702	na	na	na	<0.1	0.11	
	10/22/96	1.8	5040	na	<0.4	na	na	6	na	0.665	na	na	na	<0.1	0.11	
	1/24/97	1.7	4659	6.7	0.4	<0.002	na	na	25	0.631	na	na	na	<0.1	0.1	
	1/24/97	1.79	4676	na	<0.4	0.002	na	na	na	0.606	na	na	na	<0.1	0.11	
	9/10/97	1.7	5430 JE	10.2	<0.2JD	0.004	8	4	na	0.481	na	na	na	<0.1	0.12	
	11/3/97	1.48	4540	8.3	<0.4	<0.003	na	na	na	0.606	na	na	na	<0.1	0.11	

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
Split Rock Site (Page 26 of 30)**

Location (Depth)	Sample Date	Temp				Th-230 pCi/L	Tl mg/L	TIC mg/L	TOC ^b mg/L	Turbidity ntu ^c	U _{nat} mg/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	V mg/L	Zn mg/L
		Sr mg/L	TDS mg/L	(Field) °C												
WN-33C (219')	6/16/96	na	2220	na	0.7	<0.002	na	na	na	na	0.733	na	na	na	<0.1	<0.01
	11/6/96	2.37	2170	8.1	<0.4	<0.002	na	3	na	na	0.637	na	na	na	<0.1	<0.01
	1/27/97	1.97	2230	9.2	<0.4	<0.002	na	na	na	1.8	0.54	na	na	na	<0.1	<0.01
	9/10/97	1.92	2930 JE	12.6	0.3 JD	<0.002	na	na	na	na	0.514	na	na	na	<0.1	<0.01
	11/3/97	2.03	2440	9.1	<0.4	<0.003	na	na	na	na	0.538	na	na	na	<0.1	<0.05
WN-33D (51')	6/16/96	na	10600	na	36.8	0.065	na	na	na	na	0.694	na	na	na	0.63	3.64
	6/16/96	na	10900	na	33.6	0.063	na	na	na	na	0.65	na	na	na	0.63	3.61
	8/30/96	3.2	10400	na	45.4	0.075	na	<40	na	na	0.851	240.7	7	234.8	0.62	3.26
	10/22/96	2.95	10900	7.5	43.4	na	na	4	56	0.798	na	na	na	0.61	3.66	
	11/6/96	na	na	5.9	na	na	na	na	na	na	na	na	na	na	na	na
	1/23/97	3.14	10400	na	54.1	0.063	na	na	na	na	0.663	na	na	na	0.62	3.99
	9/10/97	2.85	10400 JE	12.9	47.5 JD	0.064	na	4	na	0.35	na	na	na	na	0.54	3.55
	11/3/97	2.67	9330	7.4	40	0.031	na	na	na	0.337	na	na	na	na	0.54	3.32
WN-34 (129')	7/28/96	na	18900 JE	na	na	na	na	na	na	na	3.58	na	na	na	na	na
	8/31/96	4.04	9650	11.3	5.5	<0.002	na	<40	na	1.53	433.9	20.7	440.1	0.31	1.92	
	10/22/96	3.6	10300	9.7	5.8	na	na	30	2.39	1.56	na	na	na	0.32	1.95	
	11/7/96	na	na	10	na	na	na	na	na	na	na	na	na	na	na	na
	1/22/97	3.45	9830	8.5	6.7	<0.002	na	na	na	1.63	na	na	na	0.3	2.01	
	9/11/97	3.75	11500	11.3	8.8	0.002	83	31	na	1.07	na	na	na	0.23	1.86	
	11/6/97	3.51	9290	10.3	10.4	<0.003	na	na	na	1.34	na	na	na	0.25	1.82	
WN-35A (206')	6/15/96	na	3010	na	<0.4	<0.002	na	na	na	2.95	na	na	na	<0.1	0.06	
	8/30/96	5.28	2910	na	0.5	<0.002	na	<40	na	3.36	na	na	na	<0.1	<0.01	
	10/19/96	4.89	3060	8.6	<0.4	na	na	66	na	2.967	na	na	na	<0.1	<0.01	
	1/25/97	4.96	3042	8.1	<0.4	<0.002	na	na	0.2JZ	3.05	na	na	na	<0.1	<0.01	
	9/11/97	4.84	3310	10.6	<0.3 B	<0.002	174	74	na	2.46	na	na	na	<0.1	<0.01	
	11/4/97	4.76	3060	9.8	<0.4	<0.003	na	na	na	2.86	na	na	na	<0.1	<0.05	
WN-35B (28')	6/15/96	na	5840	na	<0.4	<0.002	na	na	na	1.63	na	na	na	<0.1	<0.01	
	8/30/96	4.69	4160	na	0.4	<0.002	na	<40	na	1.52	na	na	na	<0.1	<0.01	
	10/19/96	4.28	5330	8.6	0.6	na	na	14	4.21	1.244	na	na	na	<0.1	<0.01	

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 27 of 30)**

Location (Depth)	Sample Date	Temp												
		Sr mg/L	TDS mg/L	(Field) °C	Th-230 pCi/L	Tl mg/L	TIC mg/L	TOC ^b mg/L	Turbidity ntu ^c	U _{nat} mg/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	V mg/L
	1/24/97	3.81	5187	8.2	<0.4	<0.002	na	na	10.4	0.958	na	na	na	<0.1 <0.01
	9/11/97	3.66	5150	10.3	<0.5B	<0.002	130	7	na	0.588	na	na	na	<0.1 <0.01
	11/4/97	3.73	5120	10.4	<0.4	<0.003	na	na	na	0.779	na	na	na	<0.1 <0.05
WN-36A (247')	6/15/96	na	1260	na	0.7	<0.002	na	na	na	0.295	na	na	na	<0.1 0.02
	8/31/96	1.7	1150	11.1	0.4	<0.002	na	<40	na	0.219	na	na	na	<0.1 <0.01
	10/20/96	1.67	1220	8.2	0.6	na	na	15	na	0.273	na	na	na	<0.1 <0.01
	1/25/97	1.56	1103	8	<0.4	<0.002	na	na	3.4	0.243	na	na	na	<0.1 <0.01
	9/10/97	1.69	1200 JE	11.1	<0.2JD	<0.002	na	na	na	0.236	na	na	na	<0.1 <0.01
	11/6/97	1.81	1140	9.1	<0.4	<0.003	na	na	na	0.321	na	na	na	<0.1 <0.05
WN-36B (164.5')	6/15/96	na	4190	na	0.5	<0.002	na	na	na	3.39	na	na	na	<0.1 0.02
	8/31/96	6.06	4170	na	0.4	<0.002	na	<40	na	4.35	na	na	na	<0.1 <0.01
	10/20/96	5.29	4220	na	<0.4	na	na	28	na	4.219	na	na	na	<0.1 <0.01
	1/25/97	5.27	4139	8.1	0.5	<0.002	na	na	0.8	4.07	na	na	na	<0.1 0.01
	9/10/97	5.12	4130 JE	11.3	<0.3 B	<0.002	267	19	na	2.9	na	na	na	<0.1 <0.01
	11/6/97	5.25	4050	8.5	<0.4	<0.003	na	na	na	4.01	na	na	na	<0.1 <0.05
WN-36C (21')	6/15/96	na	4300	na	0.5	<0.002	na	na	na	7.51	na	na	na	<0.1 <0.01
	8/31/96	3.26	4320	na	<0.4	<0.002	na	<40	na	6.62	na	na	na	<0.1 <0.01
	10/20/96	4.07	4550	8.4	<0.4	na	na	12	0.25	8.699	na	na	na	<0.1 <0.01
	11/7/96	na	na	9.3	na	na	na	na	na	na	na	na	na	na
	1/23/97	3.4	4390	na	<0.4	<0.002	na	na	0.5	6.27	na	na	na	<0.1 <0.01
	9/10/97	2.39	3870 JE	10.7	<0.4B	<0.002	162	6	na	3.83	na	na	na	<0.1 <0.01
	11/6/97	3.16	3840	9.2	<0.4	<0.003	na	na	na	6.95	na	na	na	<0.1 <0.05
WN-37E (110')	7/26/96	na	3000 JE	na	na	na	na	na	na	1.66	na	na	na	na
	8/31/96	3.3	4300	10.2	0.4	<0.002	na	<40	na	0.598	na	na	na	<0.1 0.02
	10/22/96	3.21	4470	8.9	<0.4	na	na	5	3.4	0.517	na	na	na	<0.1 0.01
	11/7/96	na	na	9	na	na	na	na	na	na	na	na	na	na
	1/22/97	2.83	4350	na	<0.4	<0.002	na	na	1.5	0.428	na	na	na	<0.1 0.01
	9/11/97	3.01	4510	11.3	<0.4B	<0.002	148	<2	na	0.399	na	na	na	<0.1 0.02
	11/6/97	3.14	4340	9	<0.4	<0.003	na	na	na	0.512	na	na	na	<0.1 <0.05
	11/6/97	3	4350	9	<0.4	<0.003	na	na	na	0.506	na	na	na	<0.1 <0.05

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 28 of 30)**

Location (Depth)	Sample Date	Temp			Th-230 pCi/L	TI mg/L	TIC mg/L	TOC ^b mg/L	Turbidity ntu ^c	U _{nat} mg/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	V mg/L	Zn mg/L
		Sr mg/L	TDS mg/L	(Field) °C											
WN-38A (160')	10/23/96	0.96	1250	na	0.6	na	na	<1	0.7	0.055	na	na	na	<0.1	<0.01
	1/26/97	1.06	1200	8	<0.4	<0.002	na	na	1	0.047	na	na	na	<0.1	0.01
	9/8/97	0.98	1260 JE	10.8	<0.3 B	<0.002	na	na	na	0.042	na	na	na	<0.1	<0.01
	11/4/97	0.88	1230	11	<0.4	<0.003	na	na	na	0.051	na	na	na	<0.1	<0.05
WN-38B (109')	11/8/96	1.34	1030	9.5	<0.4	<0.002	na	<1	na	0.027	na	na	na	<0.1	<0.01
	11/8/96	1.36	1030	na	<0.4	<0.002	na	na	na	0.027	na	na	na	<0.1	<0.01
	1/27/97	1.09	1040	6.9	0.4	<0.002	na	na	0.2	0.025	na	na	na	<0.1	<0.01
	1/27/97	1.13	1060	na	<0.4	<0.002	na	na	na	0.025	na	na	na	<0.1	<0.01
	1/27/97	1.13	1060	na	<0.4	<0.002	na	na	na	0.025	na	na	na	<0.1	<0.01
	9/8/97	1	1030 JE	12.1	<0.3 B	<0.002	na	na	na	0.025	na	na	na	<0.1	<0.01
WN-38C (12')	10/23/96	1.27	1350	na	<0.4	na	na	8	1	0.108	na	na	na	<0.1	<0.01
	1/23/97	1.4	1483	7.2	<0.4	<0.002	na	na	na	0.101	na	na	na	<0.1	<0.01
	9/8/97	0.99	1060 JE	12.7	<0.3 B	<0.002	na	na	na	0.06	na	na	na	<0.1	<0.01
	11/4/97	1.21	1250	11.9	<0.4	0.003	na	na	na	0.073	na	na	na	<0.1	<0.05
WN-39A (124')	10/23/96	0.72	779	na	0.5	na	na	<1	0.6	0.088	na	na	na	<0.1	<0.01
	1/25/97	0.74	771	6.7	<0.4	<0.0022	na	na	0.4	0.104	na	na	na	<0.1	<0.01
	9/9/97	0.85	855 JE	9.4	0.5 JD	<0.002	na	na	na	0.099	na	na	na	<0.1	<0.01
	11/4/97	0.75	789	9.8	<0.4	<0.003	na	na	na	0.109	na	na	na	<0.1	<0.05
WN-39B (87')	10/23/96	0.21	210	8.8	2.1	RS	na	<1	18	0.026	na	na	na	<0.1	<0.01
	1/25/97	0.23	193	7.4	<0.4	<0.002	na	na	na	0.027	na	na	na	<0.1	<0.01
	1/25/97	0.24	209	na	<0.4	<0.002	na	na	na	0.029	na	na	na	<0.1	<0.01
	9/9/97	0.23	255 JE	9.2	<0.2JD	<0.002	na	na	na	0.024	na	na	na	<0.1	0.01
	11/4/97	0.22	221	9.1	0.4	<0.003	na	na	na	0.03	na	na	na	<0.1	<0.05
WN-39C (10')	10/23/96	1.04	1030	na	0.7	na	na	2	na	0.779	na	na	na	<0.1	<0.01
	10/23/96	1.04	1030	na	0.8	na	na	<1	na	0.833	na	na	na	<0.1	<0.01
	1/22/97	1.51	1490	9.8	<0.4	<0.002	na	na	na	1.25	na	na	na	<0.1	<0.01
	9/9/97	0.67	687 JE	9.8	0.4 JD	<0.002	na	na	na	0.328	na	na	na	<0.1	<0.01
	11/4/97	1	975	11.2	<0.4	<0.003	na	na	na	0.692	na	na	na	<0.1	<0.05
WN-40A (195')	1/26/97	0.37	978	9.2	<0.4	<0.002	na	na	1.8	0.006	na	na	na	<0.1	<0.01
	9/9/97	0.4	1040 JE	11.1	0.2 JD	<0.002	na	na	1.8	0.006	na	na	na	<0.1	<0.01
	11/4/97	0.34	1050	11.4	<0.4	<0.003	na	na	na	0.007	na	na	na	<0.1	<0.05

Western Nuclear, Inc.

Split Rock Site Ground Water Protection Plan

Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
Split Rock Site (Page 29 of 30)**

Location (Depth)	Sample Date	Temp				Th-230 pCi/L	Tl mg/L	TIC mg/L	TOC ^b mg/L	Turbidity ntu ^c	U _{nat} mg/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	V mg/L	Zn mg/L
		Sr mg/L	TDS mg/L	(Field) °C												
WN-40B (105')	1/26/97	0.54	365	9.1	<0.4	<0.002	na	na	na	na	0.02	na	na	na	<0.1	0.02
	9/9/97	0.5	435 JE	11.2	<0.2JD	<0.002	na	na	na	na	0.023	na	na	na	<0.1	<0.01
	11/4/97	0.46	432	10.6	<0.4	<0.003	na	na	na	na	0.025	na	na	na	<0.1	<0.05
WN-40C (14')	1/26/97	3.21	1810	7.6	<0.4	<0.002	na	na	na	0.8	1.23	na	na	na	<0.1	<0.01
	9/9/97	1.84	1110 JE	12	<0.2JD	<0.002	na	na	na	na	0.509	na	na	na	<0.1	<0.01
	11/4/97	2.36	1460	11.6	<0.4	<0.003	na	na	na	na	0.941	na	na	na	<0.1	<0.05
WN-41A (165')	1/26/97	0.45	1360	7.7	<0.4	<0.002	na	na	na	na	0.007	na	na	na	<0.1	0.03
	9/9/97	0.37	1420 JE	9.4	<0.2JD	<0.002	na	na	na	na	0.007	na	na	na	<0.1	<0.01
	11/5/97	0.38	1390	8.2	<0.4	<0.003	na	na	na	na	0.008	na	na	na	<0.1	<0.05
WN-41B (92')	1/25/97	0.41	1445	6.3	<0.4	<0.002	na	na	na	na	0.009	na	na	na	<0.1	0.03
	9/9/97	0.4	1490 JE	8.8	<0.2JD	<0.002	na	na	na	na	0.007	na	na	na	<0.1	<0.01
	9/12/97	0.44	1470	9.1	<0.3 B	<0.002	na	na	na	na	0.008	na	na	na	<0.1	<0.01
	11/5/97	0.38	1450	8.4	<0.4	<0.003	na	na	na	na	0.007	na	na	na	<0.1	<0.05
WN-41C (11')	1/27/97	1.53	1191	na	0.5	<0.002	na	na	na	na	0.706	na	na	na	<0.1	<0.01
	9/9/97	1.68	1230 JE	9.7	<0.2JD	<0.002	na	na	na	na	0.689	na	na	na	<0.1	<0.01
	9/9/97	1.65	1240 JE	na	<0.2JD	<0.002	na	na	na	na	0.671	na	na	na	<0.1	<0.01
	11/5/97	1.63	1200	9	0.4	<0.003	na	na	na	na	0.761	na	na	na	<0.1	<0.05
WN-42A (110')	1/24/97	6.14	4174	6.3	<0.4	<0.002	na	na	na	na	0.877	na	na	na	<0.1	<0.01
	9/8/97	5.88	4070 JE	9.9	<0.4B	<0.002	na	na	na	na	0.739	na	na	na	<0.1	<0.01
	11/5/97	6.07	4010	10	<0.4	<0.003	na	na	na	na	0.759	na	na	na	<0.1	<0.05
WN-42B (39')	1/23/97	5.94	3770	na	<0.4	<0.002	na	na	na	0.2	4.05	na	na	na	<0.1	<0.01
	9/8/97	6.1	4080 JE	8.6	<0.4	<0.002	na	na	na	na	2.75	na	na	na	<0.1	<0.01
	11/5/97	5.56	3810	9.6	<0.4	<0.003	na	na	na	na	3.37	na	na	na	<0.1	<0.05
WN-42C (12')	1/26/97	3.07	3650	5.7	<0.4	<0.002	na	na	na	0.8	1.84	na	na	na	<0.1	<0.01
	9/8/97	2.46	3770 JE	10.3	<0.3 B	<0.002	na	na	na	na	1.43	na	na	na	<0.1	<0.01
	11/5/97	2.85	3600	9.8	<0.4	<0.003	na	na	na	na	1.61	na	na	na	<0.1	<0.05
	11/5/97	2.89	3590	9.8	<0.4	<0.003	na	na	na	na	1.61	na	na	na	<0.1	<0.05
WN-43A (195')	1/22/97	0.45	369	14	<0.4	<0.002	na	na	na	na	0.012	na	na	na	<0.1	<0.01
	9/8/97	0.68	443 JE	12.5	<0.6	<0.002	na	na	na	na	0.014	na	na	na	<0.1	<0.01
	11/5/97	0.56	400	10.6	<0.4	<0.003	na	na	na	na	0.013	na	na	na	<0.1	<0.05

Western Nuclear, Inc.
 Split Rock Site Ground Water Protection Plan
 Appendix F - Geochemical Characterization Report

**Table F-5-3 Analytical Results for Ground Water Samples Collected from Completed WN-Series Monitoring Wells,
 Split Rock Site (Page 30 of 30)**

Location (Depth)	Sample Date	Temp				Th-230 pCi/L	Tl mg/L	TIC mg/L	TOC ^b mg/L	Turbidity ntu ^c	U _{nat} mg/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	V mg/L	Zn mg/L
		Sr mg/L	TDS mg/L	(Field) °C	na											
WN-43B (35')	1/23/97	0.41	270	3.3	<0.4	<0.002	na	na	na	na	0.015	na	na	na	<0.1	<0.01
	1/23/97	0.39	253	na	<0.4	<0.002	na	na	na	na	0.014	na	na	na	<0.1	<0.01
	9/8/97	0.41	282 JE	9.5	<0.6	<0.002	na	na	na	na	0.013	na	na	na	<0.1	<0.01
	11/5/97	0.37	255	9	0.5	<0.003	na	na	na	na	0.014	na	na	na	<0.1	<0.05
WN-43C (13')	4/2/97	0.36	313	5.7	<0.4	<0.002	na	na	na	na	0.02	na	na	na	<0.1	<0.01
	9/8/97	0.29	302 JE	11.2	<0.5	<0.002	na	na	na	na	0.014	na	na	na	<0.1	<0.01
	11/5/97	0.29	274	8.8	<0.4	<0.003	na	na	na	na	0.017	na	na	na	<0.1	<0.05

Notes: ^aData from nonfiltered samples (all other data are from 0.45 µm filtered samples - dissolved)

^bTOC analyses performed by Core Laboratories, Inc. under different Lab ID

^cntu = nephelometric turbidity units

na = not analyzed

Matrix_code (in database) for all samples in this table = GW

J = Associated numeric value is estimated for the reason indicated below:

B = Laboratory blank contamination

E = Exceeded holding time

S = LCS (Lab Control Sample) or spike sample recovery outside acceptable limits

SL = LCS or spike recovery outside limit; result biased low

SH = LCS or spike recovery outside limit; result biased high

> = Result is greater than reported value (diluted sample was off scale).

Z = qualified for other reason (see database for explanation).

ATTACHMENT C

SWToolBox Output File for

Sweetwater River Gaging Station Daily Discharge Data: 10/1/1973 – 3/31/2019

Station number: 06638090

DFLOW CALCULATION REPORT

Program SWToolbox U.S. GEOLOGICAL SURVEY Version 1.0
Analysis: DFLOW (version 4.x)
Run Date and Time: 4/1/2019 2:04 PM
Username: aprillafferty

INPUTS

YEARS AND SEASONS

Seasonal Calculation? No
Season Or Year Start: 1-Apr
Season Or Year End: 31-Mar
Years Included in Calculations: 46
Start: 1973
End: 2018

STATIONS

Station #1

Gage: USGS 06638090 Discharge, cubic feet per second (Mean)
Input File Name: Read from T:\splitrock\designflow\newdesignflow\dv
Period of Record Start: 09/30/1973
Period of Record End: 11/29/2018
Days in Record: 16496
Zero Values: 0
Missing Values: 7988
Negative Values: 0

RESULTS: USGS 06638090 Discharge, cubic feet per second (Mean)

BIOLOGICALLY BASED CRITICAL FLOWS

Flow Statistic	Flow Value	Percentile	x-day avg. excur. per 3 yr.
1B3	5.42923717644164	0.77%	0.88636
4B3	8.32005311883893	3.02%	0.88636

NON-BIOLOGICALLY BASED CRITICAL FLOWS

Flow Statistic	Flow Value	Percentile	1-day excur. per 3 yr.
7Q10	4.68194627761841	0.41%	0.068182
Harmonic Mean Adj	14.498110828203	12.10%	N/A

EXCURSION ANALYSES FOR BIOLOGICALLY BASED CRITICAL FLOWS (1B3)

Cluster Start	Excursions	Period Start	DurationAvg	Excursion
1988/08/10	5	1988/08/10	34	91.27%
1988/09/22	1			8.58%
1989/09/04	3	1989/09/04	3	8.61%
1990/12/21	5	1990/12/21	6	8.06%
1990/12/28	1			0.54%
1991/01/04	9			5.43%
1991/01/21	7			2.80%
1991/01/30	1			8.58%
Total	13			

EXCURSION ANALYSES FOR BIOLOGICALLY BASED CRITICAL FLOWS (4B3)				
Cluster Start	Excursions	Period Start	Duration	Avg Excursion
1977/01/07	1	1977/01/07	25	2878.67%
1977/09/08	1	1977/09/08	7	705.14%
1978/01/03	1	1978/01/03	5	415.06%
1988/01/06	2	1988/01/06	3	210.40%
1988/02/03	2			104.80%
1988/08/04	2	1988/08/04	42	10468.07%
1988/09/19	9			961.24%
1988/12/19	1	1988/12/19	56	6185.76%
1989/09/01	1	1989/09/01	9	1119.94%
1990/02/22	1	1990/02/22	1	0.24%
1990/08/19	1	1990/08/19	12	1182.04%
1990/12/22	1	1990/12/22	49	7133.82%
2015/09/10	1	2015/09/10	11	1331.19%
Total	13			

YEARS EXCLUDED FROM ANALYSIS

1973

*** END OF REPORT FOR STATION #1 ***

END