Appendix A

Supporting Information for CERCLA Groundwater Operable Units

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Contents

Supporting Information for CERCLA Groundwater Operable Units A-1
References A-1

Tables

A-1. Monitoring Wells and Constituents for the 100-BC-5 Operable Unit. A-3
A-2. Monitoring Wells and Constituents for the 100-KR-4 Pump-and Treat Systems. A-4
A-3. Monitoring Wells and Constituents for 100-KR-4 Operable Unit Long-Term Monitoring. A-5
A-4. Monitoring Wells and Constituents for 100-NR-2 Interim Action. A-6
A-5. Monitoring Wells and Constituents for 100-NR-2 Shoreline Monitoring. A-7
A-6. Monitoring Wells and Constituents for the 100-NR-2 Apatite Treatability Test Plan. A-8
A-7. Monitoring Wells and Constituents for the 100-HR-3 Operable Unit In Situ Redox Manipulation System. .. A-9
A-8. Monitoring Wells and Constituents for the 100-HR-3 Pump-and-Treat Systems. A-10
A-9. Monitoring Wells and Constituents for 100-HR-3 Operable Unit Long-Term Monitoring. A-11
A-10. Monitoring Wells and Constituents for the 100-FR-3 Operable Unit. A-13
A-11. Monitoring Wells and Constituents for the 200-ZP-1 Operable Unit. A-15
A-12. Monitoring Wells and Constituents for the 200-UP-1 Operable Unit. A-17
A-13. Monitoring Wells and Constituents for the 200-BP-5 Operable Unit. A-19
A-14. Monitoring Wells and Constituents for 200-PO-1 Operable Unit Near-Field Wells. A-22
A-15. Monitoring Wells and Constituents for the 200-PO-1 Operable Unit Far-Field Wells. A-24
A-16. Monitoring Wells and Constituents for the 300-FF-5 Operable Unit, 300 Area. A-27
A-17. Monitoring Wells and Constituents for the 300-FF-5 Operable Unit, 618-11 Subregion. A-30
A-18. Monitoring Wells and Constituents for the 300-FF-5 Operable Unit, 618-10/316-4 Subregion. A-31
A-19. Monitoring Wells and Constituents for the Former 1100-EM-1 Operable Unit. A-31

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Appendix – A Supporting Information for CERCLA Groundwater Operable Units

M. J. Hartman

Under the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980*, the groundwater and vadose zone beneath contaminated portions of the Hanford Site are divided into 11 groundwater operable units. Figure 1.1-1 of the main text shows the locations of these units and related groundwater interest areas on the Hanford Site. The interest areas are defined informally to aid in planning, scheduling, and data interpretation.

Tables A-1 through A-19 list the constituents, monitoring wells, and the frequency of sampling for each operable units required by sampling and analysis plans or other documentation. The tables also indicate whether the wells were sampled as scheduled during fiscal year 2008.

In many cases, wells are sampled for additional constituents not strictly required by the plans. Those constituents are not listed in the tables of this appendix, but data files accompanying this report include all required and supplemental data.

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Table A-1. Monitoring Wells and Constituents for the 100-BC-5 Operable Unit.

Well	Alkalinity	Alpha	Anions	Beta	Hexavalent Chromium	Metals	Strontium-90	Tritium	Technetium-99	Sampled as Scheduled in FY 2008
199-B2-12	BO	BO	BO	BO		BO	BO	BO		Not scheduled
199-B2-13	A	BE	A	BE		A	BE	BE		Yes
199-B3-1	A		A		A	A	A	A		Yes
199-B3-46	BO		BO		A	BO	A	A		Yes
199-B3-47	A	A	A	A	A	A	A	A		Yes
199-B4-1	BE	BE	BE	BE	BE	BE	BE	BE		Yes
199-B4-4		BE		BE			BE	BE		Yes
199-B4-7	BO	BO	BO	BO		BO	BO	BO		Not scheduled
199-B4-8	A	BE	A	BE		A	BE	BE		Yes
199-B5-1	A	A	A	A	A	A	BE	A		Yes
199-B5-2		BO		BO	A		BO	A		Yes
199-B8-6	BO	BO	BO	BO		BO	BO	A		Yes
199-B8-7	M/Q	M/Q	M/Q	M/Q	M/Q	M/Q		M/Q		Yes
199-B8-8	M/Q	M/Q	M/Q	M/Q	M/Q	M/Q		M/Q		Yes
199-B9-2		BE		BE			BE	BE		Yes
199-B9-3	BO	BO	BO	BO		BO	BO	BO		Not scheduled
699-63-90	BE	BE	BE	BE		BE		BE		Yes
699-65-72	BE		BE			BE		BE		Yes
699-65-83								BE		Yes
699-66-103								BE		Yes
699-67-86								BO		Not scheduled
699-68-105	BO		BO			BO		BO		Not scheduled
699-71-77	BO		BO			BO		BO	BO	Not scheduled
699-72-73	A		A			A		A	BO	Yes
699-72-92	BO		BO			BO		BO		Not scheduled
AT-01					A			A		Yes
AT-03					A			A		Yes
AT-04			A		A			A		Yes
AT-05		A	A	A	A		A	A		Yes
AT-06		A	A	A	A		A	A		Yes
AT-07		A	A	A	A			A		Yes
AT-11		A		A	A			A	A	Yes
AT-12		A		A	A			A	A	Yes
AT-B-1					A			A		Yes
AT-B-2					A			A		Yes
AT-B-3		A	A	A	A		A	A		Yes
AT-B-4		A	A	A	A			A		Yes
AT-B-5		A	A	A	A		A	A	A	Yes
AT-B-7		A	A	A	A		A	A		Yes
Seep 037-1		A		A	A			A		Sampled 9/2007. Total Cr instead of hexavalent.
Seep 039-2		A		A	A			A		Sampled 9/2007. Total Cr instead of hexavalent.

Requirements from DOE/RL-2003-38 and TPA-CN-182.

A = to be sampled annually.
BE = to be sampled biennially, even fiscal year.
BO = to be sampled biennially, odd fiscal year. M/Q = monthly through January 2008; quarterly thereafter.
FY = fiscal year.

Table A-2. Monitoring Wells and Constituents for the 100-KR-4 Pump-and Treat Systems.

Well	Monitoring Purpose	Hexavalent Chromium	Strontium-90	Tritium	Sampled as Scheduled in FY 2008	Comment
116-K-2 Trench Wells						
199-K-18	Compliance	M	A	A	Missed Mar, Aug[a]	
199-K-20	Compliance	M	A	A	Missed July[a]	
199-K-114A	Extraction/compliance	M	S	S	Yes	
199-K-117A	Compliance	M	A	A	Yes	
199-K-129	Extraction/compliance	M	S	S	Yes	
199-K-130	Extraction/compliance	A	A	A	Yes	
199-K-131	Extraction/compliance	A	A	A	Yes	
199-K-144	Compliance	A	A	A	Yes	Installed FY 2008
199-K-145	Compliance	A	A	A	Yes	Installed FY 2008
199-K-146	Compliance	A	A	A	Yes	Installed FY 2008
199-K-147	Extraction/compliance	A	A	A	Yes	Installed FY 2008
199-K-148	Extraction/compliance	A	A	A	Yes	Installed FY 2008
199-K-149	Extraction/compliance	A	A	A	Yes	Installed FY 2008
199-K-150	Compliance	A	A	A	Yes	Installed FY 2008
199-K-151	Performance	A	A	A	No tritium[b]	Installed FY 2008
199-K-152	Performance	A	A	A	Yes	Installed FY 2008
199-K-153	Performance	A	A	A	Yes	Installed FY 2008
199-K-156	Performance	A	A	A	Yes	Installed FY 2008
199-K-157	Performance	A	A	A	Yes	Installed FY 2008
199-K-161	Extraction/compliance	A	A	A	Yes	Installed FY 2008
199-K-162	Compliance	A	A	A	Yes	Installed FY 2008
KW Wells						
199-K-34	Performance	Q	S	S	Sr-90 once[b]	
199-K-106A	Performance	Q	S	S	No Sr-90[b]	
199-K-107A	Performance	Q	S	S	Sr-90 once[b]	
199-K-132	Extraction/compliance	Q	S	S	Yes	
199-K-138	Extraction/compliance	Q	S	S	Yes	
199-K-139	Extraction/compliance	Q	S	S	Yes	
199-K-140	Extraction/compliance	Q	S	S	Yes	

Requirements from DOE/RL-2006-52 and DOE/RL-2006-75. Wells 199-K-130 htrough 199-K-162 (116-K-2 Trench) monitored under “pre-startup” phase.

[a] Scheduling conflict.
[b] Scheduling error.

A = to be sampled annually.
FY = fiscal year.
Q = to be sampled quarterly.
S = to be sampled semiannually.

Table A-3. Monitoring Wells and Constituents for 100-KR-4 Operable Unit Long-Term Monitoring.

Well or Seep	Alpha	Anions	Beta	C-14	Gamma	Hex Cr	Mercury	Metals	Sr-90	Tc-99	Tritium	Sampled as Scheduled in FY 2008
199-K-11		BO	BO	BO		BO		BO			BO	Not scheduled
199-K-18	A	A	A		A			A			A	Yes
199-K-19	A	A	A		A			A			A	Yes
199-K-20	A	A	A		A			A			A	Yes
199-K-21	A	A	A		A			A			A	Yes
199-K-22	A	A	A		A			A			A	Yes
199-K-23		BO	BO			A		BO			BO	Yes
199-K-27	BE	BE	BE		BE			BE	S		BE	Yes
199-K-30	BO	BO	BO		BO			BO			BO	Not scheduled
199-K-31	A	A	A		A			A			A	Yes
199-K-32A	A	A	A	A	A			A			A	Yes
199-K-32B	A	A	A		A			A			A	Yes
199-K-34	BO	BO	BO		BO			BO			BO	Yes
199-K-36	S	S	S		S	Q	Q	Q			S	Yes
199-K-37	A	A	A		A			A			A	Yes
199-K-106A	BE	BE	BE		BE			BE			BE	Yes
199-K-107A	A	A	A		A	Q		A			A	Yes
199-K-108A	A	A	A	A	A	Q		A			A	Yes
199-K-109A	A	A	A		A			A	A		A	Yes
199-K-110A	BE	BE	BE		BE			BE			BE	Yes
199-K-111A	A	A	A	A	A	A		A			A	Yes
199-K-130						A			A		A	Yes
199-K-141	Q	Q	Q	Q				Q		Q	Q	Yes
199-K-142	Q	Q	Q	Q				Q		Q	Q	Yes
199-K-143	A	A	A		A	Q		A			A	Yes
199-K-144				A							A	Yes
199-K-146				A		A			A		A	Yes
199-K-156				A		A			A		A	Yes
199-K-157				A		S			A		S	Yes
199-K-162				A		A			A		A	Yes
699-70-68	A	A	A		A			A			A	Yes
699-73-61	BE	BE	BE		BE			BE			BE	Yes
699-78-62	A	A	A		A	A		A			A	Yes
Aquifer tubes												43 tubes sampled
SK-057-3	A	A	A		A			A			A	No
SK-077-1	A	A	A		A			A			A	Yes
SK-082-2	A	A	A		A			A			A	No

Requirements from NPL agreement change control form 108, dated 11/20/96, as modified by CCN 062039 further modified in subsequent years.

A = to be sampled annually.
BE = to be sampled biennially, even fiscal year.
BO = to be sampled biennially, odd fiscal year.
FY = fiscal year.
M = to be sampled monthly.
Q = to be sampled quarterly.
S = to be sampled semiannually.

Table A-4. Monitoring Wells and Constituents for 100-NR-2 Interim Action.

Well Name	Alkalinity	Alpha	Anions	Beta	Gamma	Metals	Oil & Grease	Strontium-90	TPH	Tritium	Sampled as Scheduled in FY 2008
199-N-2	A		A	A		A		A		A	Yes
199-N-3	S		S	S		S		S	S	S	Yes
199-N-14	S		S	S		S		S		S	Yes
199-N-16	A		A	A		A	A	A	A		No TPH due to lab error
199-N-18	S		S			S	S		S		2nd delayed till 10/2008
199-N-19									A		Yes
199-N-21	A		A			A			A		No; electrical safety issue
199-N-26	A		A			A			A		No; dig site, no access
199-N-27	A	A	A		A	A		A		A	Yes
199-N-28	A		A			A		A			Yes
199-N-32	S		S	S	S	S		S		S	Yes
199-N-34	A		A			A		A		A	Yes
199-N-41	A		A			A		A		A	Yes
199-N-50				A						A	Yes
199-N-51				A						A	Yes
199-N-56			A					A			Yes
199-N-57	A		A			A		A			Yes
199-N-64	A		A	A		A		A		A	Yes
199-N-67	S	S	S	S		S		S			Yes
199-N-70	A	A	A	A	A	A		A		A	Yes
199-N-73	A		A			A					Yes
199-N-74		A		A	A	A					Yes
199-N-75	S		S	S		S		S		S	Yes
199-N-76	S		S	S	S	S		S		S	Yes
199-N-80	A	A	A	A	A	A		A		A	Yes
199-N-81	A		A	A	A	A		A		A	Yes
199-N-92A	A		A	A		A		A		A	Yes
199-N-96A	A		A	A		A	A	A	A	A	Yes
199-N-99A	A		A	A		A		A		A	Yes

Monitoring requirements have been modified (expanded) from DOE/RL-2001-27.
DOE/RL-2001-27 also lists wells 199-N-17, 199-N-54, which have been decommissioned.

A = to be sampled annually.
FY = fiscal year.
TPH = total petroleum hydrocarbons.

Table A-5. Monitoring Wells and Constituents for 100-NR-2 Shoreline Monitoring.

Well or Tube Name	Alkalinity	Anions	Beta	Dissolved Oxygen	Gamma	Metals	Strontium-90	TOC, TPH	Tritium	Sampled as Scheduled in FY 2008
199-N-2				S			S			Yes
199-N-3				S			S			Yes
199-N-14				S			S			Yes
199-N-46	Q	Q	M	M	Q	Q	Q		Q	Changed frequency to Q for all constituents [a]
199-N-67	Q	Q	M	M	Q	Q	Q		Q	Changed frequency to Q for all constituents [a]
199-N-75	Q	Q	Q	Q	Q	Q	Q		Q	Changed frequency to S for all constituents [a]
199-N-76				S			S			Yes
199-N-92A	S	S	S	S	S	S	S		S	Yes
199-N-96A	Q	Q	M	M	Q	Q	Q	Q	Q	Changed frequency to Q for all constituents.[a] Last Q delayed till 10/2008.
199-N-99A	Q	Q	M	M	Q	Q	Q		Q	Changed frequency to Q for all constituents [a]
199-N-103A	Q	Q	Q	Q	Q	Q	Q		Q	Changed frequency to S for all constituents [a]
199-N-105A	Q	Q	Q	Q	Q	Q	Q		Q	Changed frequency to S for all constituents [a]
199-N-106A	Q	Q	Q	Q	Q	Q	Q		Q	Changed frequency to S for all constituents [a]
199-N-119	Q	Q	M	M	Q	Q	Q		Q	Changed frequency to Q for all constituents [a]
199-N-120	S	S	S	S	S	S	S		S	Yes
199-N-121	S	S	S	S	S	S	S		S	Yes
199-N-122	Q	Q	M	M	Q	Q	Q		Q	Deferred sampling to apatite treatability test plan.
199-N-123	Q	Q	M	M	Q	Q	Q	Q	Q	Deferred sampling to apatite treatability test plan.
199-N-146	Q	Q	M	M	Q	Q	Q		Q	Deferred sampling to apatite treatability test plan.
199-N-147	Q	Q	M	M	Q	Q	Q		Q	Deferred sampling to apatite treatability test plan.
NVP1-1			Q	Q						No yield Dec or Jan; Missed Sep [b]
NVP1-2			Q	Q						No yield Dec; Submerged Jun; Missed Sep [b]
NVP1-3			Q	Q						No yield Dec; Submerged Jun; Missed Sep [b]
NVP1-4			Q	Q						No yield Dec; Submerged Jun; Missed Sep [b]
NVP1-5			Q	Q						Submerged Jun; Missed Sep [b]
NVP2-116.3			Q	Q						Submerged Jun; Missed Sep [b]
NVP2-116.0	Q	Q	M	M	Q	Q	Q		Q	Deferred sampling to apatite treatability test plan.
NVP2-115.7			Q	Q						Submerged Jun; Missed Sep [b]
NVP2-115.4			Q	Q						Submerged Jun; Missed Sep [b]
NVP2-115.1			Q	Q						Submerged Jun; Missed Sep [b]
Array-0A	A	A	Q	Q	A	A	Q	Q	A	Missed Sep;[b] No TPH Jun due to preservation error
Array-1A	A	A	Q	Q	A	A	Q	Q	A	Submerged Jun; Missed Sep [b]
Array-2A	A	A	Q	Q	A	A	Q	Q	A	Missed Sep [b]
Array-3A	Q	Q	M	M	Q	Q	Q		Q	Deferred sampling to apatite treatability test plan.
Array-4A	Q	Q	M	M	Q	Q	Q		Q	Deferred sampling to apatite treatability test plan.
Array-6A	Q	Q	M	M	Q	Q	Q		Q	Deferred sampling to apatite treatability test plan.
Array-7A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-8A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-9A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-10A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-11A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-12A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-13A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-14A	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-15A [c]	A	A	Q	Q	A	A	A		A	Missed Sep [b]
Array-16A [c]	A	A	Q	Q	A	A	A		A	Missed Sep [b]
C6132 [c]	A	A	Q	Q	A	A	Q	Q	A	Missed Sep [b]
C6135 [c]	A	A	Q	Q	A	A	Q	Q	A	Missed Sep [b]

Requirements from PNNL-15798.
Monitoring plan calls for citrate at selected sites; no citrate data in the *Hanford Environmental Information System* database.

[a] Decreased frequency of these wells because 2-year rebound period had passed.
[b] Aquifer tube sampling procedure was being modified.
[c] Added after monitoring plan released.

A = to be sampled annually.
FY = fiscal year.
M = to be sampled monthly.
Q = to be sampled quarterly.
S = to be sampled semiannually.
TOC = total organic carbon.
TPH = total petroleum hydrocarbons.

Table A-6. Monitoring Wells and Constituents for the 100-NR-2 Apatite Treatability Test Plan.

Well Name	Type of Well	Anions	Citrate	Beta	Metals	Sr-90	Sampled as scheduled in FY 2008
199-N-122	Compliance	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-123	Compliance	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-126	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-127	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-128	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-129	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-130	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-131	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-132	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-133	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-136	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-137	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-138	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-139	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-140	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-141	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-142	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-143	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-144	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-145	Barrier	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-146	Compliance	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-147	Compliance	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-148	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-149	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-150	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-151	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-152	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-153	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-154	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-155	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
199-N-156	Monitoring	W/BM	W/0	W/BM	W/BM	P	Yes
APT1	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Yes
APT5	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Yes
Array-2A	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Metals once; anions, beta 3X*
Array-3A	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Yes
Array-4A	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Yes
Array-6A	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Yes
Arrary-7A	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Metals once; anions, beta 3X*
NVP2-116.0	Aquifer tube	W/BM	W/0	W/BM	W/BM	P	Yes

Requirements from 0078408, “100/300 Area Unit Managers Meeting Minutes,” Attachment 2.
Additional requirements applied during injection.

* Not sampled during emplacement. Requirements in 0078408 erroneous for these tubes.

W = daily to twice a week first 2 weeks, then weekly for 4 weeks.
BM = bimonthly during performance monitoring period (from 6 weeks post-injection until 2 years).
P = periodic splits for strontium-90 during performance monitoring period.

Table A-7. Monitoring Wells and Constituents for the 100-HR-3 Operable Unit In Situ Redox Manipulation System.

Well name	Purpose	Anions	Arsenic	Hex Cr	Metals	Sulfate	Uranium	Sampled as Scheduled in FY 2008*
199-D2-6	Monitoring	A	A	Q	A	Q	A	Yes
199-D2-8	Monitoring	A	A	Q	A	Q	A	Yes
199-D3-2	Monitoring	A	A	Q	A	Q	A	Yes
199-D4-1	Monitoring	A	A	Q	A	Q	A	Yes
199-D4-13	Barrier performance	A		Q	A	Q		Yes
199-D4-14	Barrier performance	A		Q	A	Q		Yes
199-D4-15	Monitoring	A	A	M	A	M	A	Missed March
199-D4-19	Barrier performance	A		Q	A	Q		Yes
199-D4-20	Monitoring	A	A	Q	A	Q	A	Yes
199-D4-22	Monitoring	A	A	Q	A	Q	A	Cr, sulfate 3X
199-D4-23	Compliance	A	A	Q	A	Q	A	Yes
199-D4-26	Monitoring	A	A	Q	A	Q	A	No Hex Cr after March; sulfate twice
199-D4-31	Barrier performance	A	A	Q	A	Q	A	Yes
199-D4-32	Barrier performance	A	A	Q	A	Q	A	Yes
199-D4-38	Compliance	A	A	Q	A	Q	A	Yes
199-D4-39	Compliance	A	A	Q	A	Q	A	Yes
199-D4-4	Monitoring	A	A	Q	A	Q	A	Yes
199-D4-48	Barrier performance	A	A	Q	A	Q	A	Yes
199-D4-5	Monitoring	A	A	Q	A	Q	A	Yes
199-D4-6	Monitoring	A	A	Q	A	Q	A	Yes
199-D4-62	Barrier performance	A	A	Q	A	Q	A	Hex Cr, sulfate 3X
199-D4-7	Barrier performance	A	A	Q	A	Q	A	Yes
199-D4-78	Barrier performance	A	A	Q	A	Q	A	Yes
199-D4-83	Compliance	A	A	Q	A	Q	A	Yes
199-D4-84	Compliance	A	A	Q	A	Q	A	Yes
199-D4-85	Compliance	A	A	Q	A	Q	A	Yes
199-D4-86	Compliance	A	A	Q	A	Q	A	Hex Cr, sulfate 3X
199-D5-36	Monitoring	A	A	Q	A	Q	A	Yes
199-D5-38	Monitoring	A	A	Q	A	Q	A	Yes
199-D5-39	Monitoring	A	A	Q	A	Q	A	Sulfate twice
199-D5-43	Monitoring	A	A	M	A	M	A	Missed two hex Cr, sulfate
DD-39	Aquifer tube	A		A	A			Yes
DD-41	Aquifer tube	A		A	A			Yes
DD-42	Aquifer tube	A		A	A			Yes
DD-43	Aquifer tube	A		A	A			Yes
DD-44	Aquifer tube	A		A	A			Yes
Redox-1	Aquifer tube	A		A	A			Yes
Redox-2	Aquifer tube	A		A	A			Yes
Redox-3	Aquifer tube	A		A	A			Yes
Redox-4	Aquifer tube	A		A	A			Yes
TD-39	Aquifer tube	A		A	A			No longer in use

Requirements from DOE/RL-99-51.

* Some monthly and quarterly samples missed because of scheduling conflicts.

A = to be sampled annually.
FY = fiscal year.
M = to be sampled monthly.
Q = to be sampled quarterly.

Table A-8. Monitoring Wells and Constituents for the 100-HR-3 Pump-and-Treat Systems.

Well	Monitoring purpose	Hexavalent Chromium	Nitrate	Strontium-90	Technetium-99	Tritium	Uranium	Sampled as scheduled in FY 2008
199-D8-53	Extraction	Q		S		S		Yes
199-D8-54A	Extraction	Q		S		S		Yes
199-D8-54B	Performance	S						Yes
199-D8-68	Extraction	Q		S		S		Yes
199-D8-69	Compliance	Q		A		A		Yes
199-D8-70	Compliance	Q		A		A		Yes
199-D8-71	Performance	S						Yes
199-D8-72	Extraction	Q		S		S		Yes
199-D8-73		Q		A		A		Yes
199-D8-88		Q		A		A		Yes
199-H3-2A	Upgradient	A						Yes
199-H3-3	Former injection well	Q						Yes
199-H3-4	Former injection well	Q						Yes
199-H3-5	Former injection well	Q						Yes
199-H4-3	Extraction/Performance	Q	S	S	S	S	S	Yes
199-H4-4	Extraction/Compliance	M	A	A	A	A	A	Yes
199-H4-5	Compliance	M	A	A	A	A	A	Missed one month*
199-H4-6	Performance	S						Yes
199-H4-8	Performance	S						Yes
199-H4-10	Performance	S						Yes
199-H4-11	Performance	Q						Yes
199-H4-12A	Extraction	Q	S	S	S	S	S	Yes
199-H4-12B	Performance	S						Yes
199-H4-12C	Performance	S						Yes
199-H4-13	Performance	S						Yes
199-H4-15A	Extraction	Q	S	S	S	S	S	Yes
199-H4-15B	Performance	S						Yes
199-H4-15CS	Performance	S						Yes
199-H4-16	Performance	S						Yes
199-H4-45	Performance	S						Yes
199-H4-46	Performance	S						Yes
199-H4-48	Performance	S						Yes
199-H4-49	Performance	S						Yes
199-H4-63	Extraction/Compliance	M	A	A	A	A	A	Missed one month*
199-H4-64	Extraction/Compliance	M	A	A	A	A	A	Yes
199-H4-65	Former extraction well	S						Yes
199-H5-1A	Performance	S						Yes

Requirements from DOE/RL-96-90, as modified by DOE/RL-96-84, further modified in subsequent years.
* Scheduling conflict
A = to be sampled annually.
FY = fiscal year.
M = to be sampled monthly.
Q = to be sampled quarterly.
S = to be sampled semiannually.

Table A-9. Monitoring Wells and Constituents for 100-HR-3 Operable Unit Long-Term Monitoring.

Well	Alpha	Anions	Beta	Hex. Cr	Metals	Sulfate	Tritium	Sampled as Scheduled in FY 2008 [a]
199-D2-11				M				Yes
199-D2-6	A	A	A	Q	A	Q	A	Sulfate 3X
199-D2-8				M				Missed April
199-D3-2	A	A	A	Q	A	Q	A	Yes
199-D4-1	A	A	A	Q	A		A	Yes
199-D4-13	A	A	A	Q	A	Q	A	Yes
199-D4-14	A	A	A	Q	A	Q	A	Yes
199-D4-15	A	A	A	M	A	M	A	Missed one sulfate
199-D4-19	A	A	A	Q	A	Q	A	Yes
199-D4-20	A	A	A	Q	A	Q	A	Yes
199-D4-22	A	A	A	Q	A	Q	A	Cr, sulfate 3X
199-D4-23				Q		Q		Yes
199-D5-102				M				Yes
199-D5-104				M				Missed May
199-D5-13	A	A	A	Q	A		A	Cr 3X
199-D5-14	A	A	A	Q	A		A	Yes
199-D5-15	A	A	A	Q	A		A	Yes
199-D5-16	A	A	A	Q	A		A	Yes
199-D5-17	BE	BE	BE		BE		BE	Yes
199-D5-18				BO				Not scheduled
199-D5-19				BO				Not scheduled
199-D5-20	A	A	A		A		A	Yes
199-D5-33				Q				Yes
199-D5-34				M				Yes
199-D5-36	A	A	A	Q	A	Q	A	Yes
199-D5-37	A	A	A	Q	A	Q	A	No metals, alpha, beta, tritium
199-D5-38	A	A	A	M	A	M	A	Missed Mar; sulfate only Q
199-D5-39	A	A	A	A	A	A	A	Yes
199-D5-40	A	A	A	Q	A	Q	A	Yes
199-D5-41	A	A	A	Q	A	Q	A	Yes
199-D5-43	A	A	A	M	A	Q	A	Missed 2 Cr and sulfate; No alpha, beta, tritium
199-D5-44	A	A	A	Q	A	Q	A	Yes
199-D5-93				M				Missed April
199-D5-97				M				Missed Apr, May
199-D5-98				M				Yes
199-D5-99				M				Yes
199-D8-4	A	A	A		A		A	Yes
199-D8-5	A	A	A		A		A	Yes
199-D8-54B	A	A	A		A		A	Yes
199-D8-55	A	A	A	Q	A		A	Yes
199-D8-6				Q				Yes
199-H4-10	A	A	A		A		A	Yes
199-H4-12C	A	A	A		A		A	Yes
199-H4-13	A	A	A		A		A	Yes
199-H4-45	A	A	A		A		A	Yes
199-H4-46	BO	BO	BO		BO		BO	Not scheduled
199-H4-47	BE	BE	BE		BE		BE	Yes
199-H4-48	BE	BE	BE		BE		BE	Yes
199-H4-49	BE	BE	BE		BE		BE	Yes
199-H4-5	A	A	A		A		A	Yes
199-H4-6	BO	BO	BO		BO		BO	Not scheduled
199-H4-9	BE	BE	BE		BE		BE	Yes

Table A-9. (cont.)

Well	Alpha	Anions	Beta	Hex. Cr	Metals	Sulfate	Tritium	Sampled as Scheduled in FY 2008 [a]
199-H5-1A	BE	BE	BE		BE		BE	Yes
199-H6-1	A	A	A		A		A	Yes
699-86-42				A				Yes
699-87-42A				A				Yes
699-88-41				A				Yes
699-90-45				A				Yes
699-91-46A	BE	BE	BE	A	BE		BE	Yes
699-93-48A	BE	BE	BE	A	BE		BE	Yes
699-94-41	Q	Q	Q	Q	Q		Q	Yes [b]
699-94-43	Q	Q	Q	Q	Q		Q	Yes [b]
699-95-45	Q	Q	Q	Q	Q		Q	Yes [b]
699-95-48	Q	Q	Q	Q	Q		Q	Yes [b]
699-95-51	Q	Q	Q	Q	Q		Q	Yes [b]
699-96-43	A	A	A	A	A		A	Yes
699-96-49	A	A	A	A	A		A	Yes
699-96-52B	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-41	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-43	BE	BE	BE	BE	BE		BE	Yes
699-97-43B	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-43C	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-45	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-45B	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-48B	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-48C	Q	Q	Q	Q	Q		Q	Yes [b]
699-97-51A	A	A	A	A	A		A	Yes
699-98-43	Q	Q	Q	Q	Q		Q	Yes [b]
699-98-46	Q	Q	Q	Q	Q		Q	Yes [b]
699-98-49A				A				Yes
699-98-51	Q	Q	Q	Q	Q		Q	Yes [b]
699-99-41	Q	Q	Q	Q	Q		Q	Yes [b]
699-99-42B	Q	Q	Q	Q	Q		Q	Yes [b]
699-99-44	Q	Q	Q	Q	Q		Q	Yes [b]
699-100-43B	Q	Q	Q	Q	Q		Q	Yes [b]
699-101-45	Q	Q	Q	Q	Q		Q	Yes [b]
Aquifer tubes								[c]
Seep SD-102-1	A	A	A		A		A	Yes
Seep SD-110-1	A	A	A		A		A	Yes
Seep SD-110-2	A	A	A		A		A	Not sampled [d]
Seep SD-098-1	A	A	A		A		A	Not sampled [d]
Seep SH-144-1	A	A	A		A		A	Not sampled [d]
Seep SH-145-1	A	A	A		A		A	Yes
Seep SH-150-1	A	A	A		A		A	Not sampled [d]
Seep SH-152-2	A	A	A		A		A	Not sampled [d]
Seep SH-153-1	A	A	A		A		A	Yes

Monitoring requirements have been modified (expanded) from CCN 062039.
Added wells to monitor DR-5 pump-and-treat, chromium source investigation, and chromium plume in the horn.

[a] Some monthly and quarterly sample missed because of scheduling conflicts. Some constituents not scheduled for analysis in FY 2008. Monitoring plan under revision in FY 2009.
[b] Routine sampling of these wells began February 2008.
[c] Aquifer tube status to be reported separately.
[d] Sampling of springs is dependant on flow conditions.

A = to be sampled annually.
BE = to be sampled biennially, even fiscal year.
FY = fiscal year.
Q = to be sampled quarterly.

Table A-10. Monitoring Wells and Constituents for the 100-FR-3 Operable Unit.

Well	Alkalinity	Alpha	Anions	Hexavalent Chromium	Metals	Strontium-90	Tritium	TCE (VOA)	Uranium	Sampled as Scheduled in FY 2008
199-F1-2	BO		BO		BO					Yes
199-F5-1	A	BE	A		A	BE	BE			Yes
199-F5-4	A	BO	A		A		BO	BO		Yes
199-F5-6	A	BE	A		A	BE	BE			Yes
199-F5-42	BO	BO	BO		BO	BO	BO			Not scheduled
199-F5-43A	BE	BE	BE		BE	BE	BE			Yes
199-F5-43B	BE	BE	BE		BE	BE				Yes
199-F5-44	BE	BE	BE		BE	BE	BE			Yes
199-F5-45	BO	BO	BO		BO	BO	BO	BO	BO	Not scheduled
199-F5-46	BE	A	BE		BE	BE	A	BE	A	Yes
199-F5-47	A	BE	A		A		A	BE	A	Yes
199-F5-48	BO	BO	BO		BO		BO		BO	Not scheduled
199-F6-1	BO	BO	BO		BO	BO	BO			Not scheduled
199-F7-1	BE		BE		BE			BE		Yes
199-F7-2	BE	BE	BE		BE		BE	BE		Yes
199-F7-3	BE	BE	BE		BE		BE	BE		Yes
199-F8-2	BO	BO	BO		BO		BO		BO	Not scheduled
199-F8-3	BO	A	BO		BO		A	BO	A	Yes
199-F8-4	BE	A	BE		BE		BE		A	Yes
699-58-24	BE		BE		BE					Yes
699-60-32	BO		BO		BO					Yes
699-62-31	BO		BO		BO					Not scheduled
699-62-43F	A		A		A		A			Yes
699-63-25A	BO		BO		BO		BO			Not scheduled
699-63-55	BO		BO		BO		A			Yes
699-64-27	BE		BE		BE					Yes
699-66-23	BE		BE		BE		BE			Yes
699-67-51	BO		BO		BO		BO			Not scheduled
699-71-30	BO	BO	BO		BO		BO			Not scheduled
699-74-44	BO		BO		BO			BO		Not scheduled
699-77-36	BE		BE		BE			BE		Yes
699-77-54	BO		BO		BO					Not scheduled
699-81-38	BE		BE		BE					Yes
699-83-47	BE		BE		BE			BE		Yes
AT-62	A		A	A	A					Yes
AT-63	A		A	A	A					Specific conductance too low to sample
AT-64	A		A	A	A	A				Yes
AT-65	A		A	A	A	A				Tubes destroyed
AT-66	A		A	A	A	A		A		Yes
AT-67	A		A	A	A					Yes
AT-68	A		A	A	A		A			Yes

Table A-10. (cont.)

Well	Alkalinity	Alpha	Anions	Hexavalent Chromium	Metals	Strontium-90	Tritium	TCE (VOA)	Uranium	Sampled as Scheduled in FY 2008
AT-72	A		A	A	A		A			Yes
AT-73	A		A	A	A		A			Not found
AT-74	A		A	A	A		A			Yes
AT-75	A		A	A	A		A			Yes
AT-76	A		A	A	A		A			Yes
AT-77	A		A	A	A					Yes
AT-78	A		A	A	A					Not found
AT-80	A		A	A	A					Yes
AT-F-1	A		A	A	A	A				Yes
AT-F-2	A		A	A	A		A	A		Yes
AT-F-3	A		A	A	A		A	A		Yes
AT-F-4	A		A	A	A		A			Yes
SF-187-1	A		A	A	A		A			No*
SF-190-4	A		A	A	A		A			No*
SF-207-1	A		A	A	A		A			Yes. Total Cr instead of hexavalent. No alkalinity.

Requirements from DOE/RL-2003-49.

* Sampling of springs is dependent on flow conditions.

A = to be sampled annually.
BE = to be sampled biennially, even fiscal year.
BO = to be sampled biennially, odd fiscal year.
FY = fiscal year.
TCE = trichloroethene.
VOA = volatile organic analyses.

Table A-11. Monitoring Wells and Constituents for the 200-ZP-1 Operable Unit.

Well	Anions	Arsenic	I-129	Metals	Sr-90	Tc-99	Tritium	Uranium	VOA	Sampled as Scheduled in FY 2008
299-W6-10	A		A	A			A	A	A	Not sampled; nearly dry
299-W7-4	A								A	Removed from schedule due to cave in potential
299-W8-1	A						A		A	Yes
299-W10-1	A	A		A			A		A	Yes
299-W10-4	S	S	S	S		S	S		S	Yes
299-W10-5	S			S		S	S		S	Sampled once; well dry
299-W10-22	S		S	S		S	S	S	S	Yes
299-W10-23	A	A	A	A		A	A	A	A	Yes
299-W10-24	Q		Q	Q		Q	Q		Q	VOA, I-129 twice [a]
299-W10-33	S	S	S	S		S	S		S	Yes
299-W11-3	S		S				S	S	S	Yes
299-W11-6	S		S					S	S	Yes
299-W11-7	A	A	A	A		A		A	A	Yes
299-W11-10	S								S	Yes
299-W11-13	S	S	S	S		S	S		S	Yes
299-W11-18	A		A	A		A	A	A	A	Yes
299-W11-37	S		S				S	S	S	Yes
299-W11-39	Q		Q	Q		Q	Q		Q	VOA, I-129 twice [a]
299-W11-40	Q		Q	Q		Q	Q		Q	Gamma once; VOA, I-129 twice [a]
299-W11-42	Q		Q	Q		Q	Q		Q	VOA, I-129 twice [a]
299-W11-43	Q		Q				Q	Q	Q	Yes
299-W11-45	Q		Q	Q		Q	Q		Q	Yes
299-W11-46	Q		Q	Q		Q	Q	Q	Q	Yes
299-W11-47	Q	Q	Q	Q		Q	Q	Q	Q	Yes
299-W11-48	Q		Q	Q		Q	Q		Q	VOA, I-129 3X. No alpha, beta, gamma [a]
299-W11-87	Q		Q			Q	Q	Q	Q	Yes
299-W11-88	Q		Q			Q	Q	Q	Q	New well; first routine sample 5/2008
299-W12-1	A		A				A		A	Yes
299-W13-1	S						S		S	Yes
299-W14-14	A		A	A		A	A		A	Yes
299-W14-16	A		A	A		A	A		A	Yes
299-W14-71	Q		Q	Q		Q	Q		Q	Yes
299-W14-72	Q			Q		Q			Q	Yes
299-W15-1	S								S	Sampled once [b]
299-W15-2	A					A			A	Yes
299-W15-7	S					S			S	Not sampled [b]
299-W15-11	S					S	S		S	Sampled once [b]
299-W15-15	Q			Q					Q	Dry well
299-W15-17	S			S		S			S	Yes
299-W15-30	S			S		S			S	Yes
299-W15-31A	S					S			S	Yes
299-W15-34	Q					Q			Q	Anions twice [b]
299-W15-35	Q			Q		Q			Q	Anions, metals twice [b]
299-W15-36	Q					Q			Q	Anions twice [b]

Table A-11. (cont.)

Well	Anions	Arsenic	I-129	Metals	Sr-90	Tc-99	Tritium	Uranium	VOA	Sampled as Scheduled in FY 2008
299-W15-38	A			A					A	Yes
299-W15-39	S								S	Dry well
299-W15-40	Q		Q	Q		Q	Q		Q	Missed 4th quarter [a]
299-W15-41	S			S		S	S		S	Yes
299-W15-42	S			S		S			S	Sampled once
299-W15-43	Q		Q	Q		Q	Q		Q	Missed 4th quarter [a]
299-W15-44	Q		Q	Q		Q	Q		Q	Missed 4th quarter [a]
299-W15-45	Q					Q			Q	Missed 4th quarter [a]
299-W15-46	Q					Q			Q	Missed 4th quarter [a]
299-W15-47	Q					Q			Q	Missed 4th quarter [a]
299-W15-49	Q								Q	Yes
299-W15-50	Q			Q		Q			Q	Yes
299-W15-152	S								S	VOA once
299-W15-763	Q		Q			Q	Q		Q	Missed 4th quarter
299-W15-765	Q		Q	Q		Q	Q		Q	Missed 4th quarter [a]
299-W17-1	S		S	S		S	S		S	Yes
299-W18-1	S			S					S	Not sampled; scheduling error
299-W18-16	Q								Q	Yes
299-W18-23	Q					Q		Q	Q	Sampled twice; dry well
699-43-69	BO								BO	Not scheduled
699-43-89	BO	BO	BO	BO	BO	BO	BO	BO	BO	Not scheduled
699-44-64			BO			BO	BO	BO		Not scheduled
699-45-69A	BO		BO						BO	Not scheduled
699-45-69C	Q		Q			Q	Q	Q	Q	New well; first routine sample 6/2008
699-47-60	BO		BO	BO		BO	BO	BO	BO	Not scheduled
699-48-71	S		S				S	S	S	Yes
699-48-77A	BO			BO			BO		BO	Not scheduled
699-50-74	S		S	S		S	S	S	S	Yes
699-55-60A	BE		BE	BE		BE	BE	BE	BE	Yes

Requirements have been modified (expanded) from DOE/RL-2003-55.
The following wells from DOE/RL-2003-55 have gone dry: 299-W7-12, 299-W10-13, 299-W10-20, 299-W10-21, 299-W11-14, 299-W18-27.

a Not sampled due to aquifer recovery test.
b Extraction well. Availability for sampling varied.

A = to be sampled annually.
BE = to be sampled biennially, even fiscal year.
BO = to be sampled biennially, odd fiscal year.
FY = fiscal year.
Q = to be sampled quarterly.
S = to be sampled semiannually.

Table A-12. Monitoring Wells and Constituents for the 200-UP-1 Operable Unit.

Well	Arsenic	Cadmium	Chromium	I-129	Iron	Manganese	Nitrate	Sr-90	Tc-99	Tritium	Uranium	VOA	Sampled as Scheduled in FY 2008
299-W15-37	A	A					A				A	A	Yes
299-W18-15	S						S				S	S	Yes
299-W18-21	A						A		A		A	A	Yes
299-W18-22	A						A		A		A	A	Yes
299-W18-30	A			A			A				A	A	Yes
299-W19-18				A			A		A		A	A	Yes
299-W19-101				Q			Q		Q		Q	Q	Yes
299-W19-105	Q		Q	Q			Q	Q	Q	Q	Q	Q	Yes
299-W19-107	Q		Q	Q			Q	Q	Q		Q	Q	Yes
299-W19-34A				A			A		A		A	A	Yes
299-W19-34B				BE			BE		BE		BE	BE	Yes
299-W19-35		S		S			S		S		S	S	Yes
299-W19-36				A			A		A		A	A	Yes
299-W19-39				S			S		S		S	S	Not sampled; pump problem
299-W19-43				S			S		S		S	S	Yes
299-W19-46		S		S		S	S		S	S	S	S	Yes
299-W19-47													[a]
299-W19-48				Q			Q		Q	Q	Q	Q	Yes
299-W19-49 [b]				S			S		S	S	S	S	Yes
299-W19-50													[c]
299-W21-2 [b]				S			S	S	S	S	S	S	Yes
299-W22-9				BO		BO	BO	BO	BO	BO	BO	BO	Not scheduled
299-W22-20				A			A	A	A	A	A	A	Yes
299-W22-26		A		A			A			A	A	A	Yes
299-W22-45		A		A			A	A		A	A	A	Yes
299-W22-48	S	S		S		S	S	S		S	S	S	Yes
299-W22-49		S		S	S	S	S	S	S	S	S	S	Yes
299-W22-69				Q			Q		Q	Q		Q	Yes
299-W22-72				Q			Q	Q	Q	Q	Q	Q	Yes
299-W22-83		Q		Q			Q	Q	Q	Q	Q	Q	Yes
299-W22-86			Q	Q			Q			Q		Q	4th event delayed till FY 2009
299-W22-87				Q			Q		Q	Q	Q	Q	Yes
299-W22-88 [d]				Q			Q		Q	Q	Q		New well, sampled twice
299-W23-4	S						S			S	S	S	Yes
299-W23-9							A		A	A	A	A	Dry
299-W23-15					S		S		S	S	S	S	Yes
299-W23-21							Q		Q	Q	Q	Q	Yes
299-W26-13				BO			BO			BO	BO	BO	Not scheduled
299-W26-14				BE		BE	BE		BE	BE	BE	BE	Yes
699-30-66 [b]				S			S			S	S	S	I-129 once; laboratory problem
699-32-62			BO	BO			BO			BO			Not scheduled

Table A-12. (cont.)

Well	Arsenic	Cadmium	Chromium	I-129	Iron	Manganese	Nitrate	Sr-90	Tc-99	Tritium	Uranium	VOA	Sampled as Scheduled in FY 2008
699-32-72A				BO			BO			BO		BO	Not scheduled
699-32-76 [d]			Q	Q			Q					Q	New well, sampled twice
699-33-74 [d]			Q	Q			Q			Q	Q	Q	New well, sampled twice
699-33-75 [d]			Q	Q			Q			Q	Q	Q	New well, sampled twice
699-33-76 [d]			Q	Q			Q					Q	New well, sampled once
699-34-72 [d]				Q			Q	Q	Q	Q	Q	Q	New well, sampled twice
699-35-66A [b]			BO	BO			BO			BO		BO	Not scheduled
699-35-70				BE			BE			BE		BE	Yes
699-35-78A	A						A				A	A	Yes
699-36-61A			BE	BE			BE			BE			Yes
699-36-70A				A			A		A	A	A	A	Yes
699-36-70B [b]				S			S		S	S	S	S	Yes
699-38-65				A			A			A			Delayed till FY 2009
699-38-68A				BO			BO		BO	BO	BO	BO	Not scheduled
699-38-70				A			A		A	A	A	A	Dry
699-38-70B [b]				S			S		S	S	S	S	VOA once
699-38-70C [b]				S			S		S	S	S	S	Yes
699-40-62				BO			BO		BO	BO	BO		Not scheduled
699-40-65 [b]				S			S			S		S	Yes

Requirements modified from DOE/RL-92-76.
Wells in the plan that are now dry: 299-W18-33, 299-W19-37, 299-W19-40, 299-W23-10, 299-W23-14.

[a] Inclusion of this well was apparently a typographical error in DOE/RL-92-72; the correct well is 299-W19-49.
[b] Frequency reduced from quarterly after first year.
[c] Well number listed in DOE/RL-92-72, but well could not be completed and was replaced by 299-W19-101.
[d] New wells will be sampled quarterly for four quarters; frequency may be reduced thereafter.

A = to be sampled annually.
BE = to be sampled biennially, even fiscal year.
BO = to be sampled biennially, odd fiscal year.
FY = fiscal year.
Q = to be sampled quarterly.
S = to be sampled semiannually.

Table A-13. Monitoring Wells and Constituents for the 200-BP-5 Operable Unit.

Well	Contaminants of Concern										Supporting Constituents							Sampled as Scheduled in FY 2008
	Cesium-137	Cobalt-60	Cyanide	Iodine-129	Nitrate	Plutonium-239/240	Strontium-90	Technetium-99	Tritium	Uranium	Alkalinity	Alpha/Beta	Americium-241	Arsenic	Metals (filtered)	Neptunium-237	TOC/TOX	
299-E27-155*	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Yes
299-E33-341	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Yes
299-E33-342	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Yes
299-E33-343	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Yes
299-E33-344	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Yes
299-E33-345	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Yes
699-52-55	A	A			A			A	A	A	A	A			A			Delayed till 10/2008
299-E24-8	3-07	3-07		3-07	3-07				3-07			3-07		3-07				Not scheduled
299-E26-10				A	A				A									Yes
299-E26-11				3-07	3-07				3-07					3-07				Not scheduled
299-E27-10				3-07	3-07				3-07					3-07				Not scheduled
299-E27-14				A	A			A	A									Yes
299-E27-15					A			A			A				A			Yes
299-E27-17				3-07	3-07				3-07					3-07				Not scheduled
299-E27-18				3-07	3-07				3-07					3-07				Not scheduled
299-E27-7				A	A			A	A					A				Yes
299-E28-13				3-07	3-07		3-07		3-07	3-07		3-07						Not scheduled
299-E28-17	A				A	A	A			A								No Pu
299-E28-18				A	A				A	A		A		A				Yes
299-E28-2	A			A	A	A	A	A	A		A	A			A			No Pu
299-E28-21										A								Yes
299-E28-23	A					A	A			A		A	A			A		Yes
299-E28-24	A					A	A		A	A		A	A			A		Yes
299-E28-25	A			A	A	A	A		A	A		A	A	A		A		Yes
299-E28-26				3-07	A			A	3-07	A				3-07				Yes
299-E28-27	A			A	A	A	A	A	3-07	A								Yes
299-E28-28				3-07	3-07				3-07									Not scheduled
299-E28-5	A			3-07	3-07	A	A		3-07	A		3-07		3-07				No Sr-90 or Pu
299-E28-6	A	A		3-07	3-07	A	A		3-07	A		3-07		3-07				No Pu
299-E28-8	A					A	A	A		A								No Sr-90 or Pu
299-E32-10		A	A	3-07	3-07			A	3-07	A				3-07				Yes
299-E32-2				3-07	3-07				3-07									Not scheduled
299-E32-4				A	A			A	A									Yes
299-E32-5				3-07	3-07				3-07	3-07								Not scheduled
299-E32-6				3-07	A			A	3-07	3-07								Yes
299-E32-7				3-07	3-07				3-07									Not scheduled
299-E32-8				3-07	3-07				3-07									Not scheduled
299-E32-9			3-07	A	A				3-07									Yes
299-E33-12								3-07										Not scheduled
299-E33-13			A							A								Yes
299-E33-15					A			A										Yes
299-E33-16				A	A			A		A								Yes
299-E33-18				A	A			A		A								Yes

Table A-13. (cont.)

Well	Contaminants of Concern										Supporting Constituents							Sampled as Scheduled in FY 2008
	Cesium-137	Cobalt-60	Cyanide	Iodine-129	Nitrate	Plutonium-239/240	Strontium-90	Technetium-99	Tritium	Uranium	Alkalinity	Alpha/Beta	Americium-241	Arsenic	Metals (filtered)	Neptunium-237	TOC/TOX	
299-E33-26		A	A	3-07	3-07			A	3-07	A		3-07						Yes
299-E33-28					A			A										Yes
299-E33-29				3-07	3-07			3-07	3-07									Not scheduled
299-E33-30					A			A										Yes
299-E33-32				3-07	3-07			3-07	3-07									Not scheduled
299-E33-33				3-07	3-07				3-07	3-07				3-07				Not scheduled
299-E33-334					A			A		A								Yes
299-E33-335						A		A										No Pu
299-E33-338								A		A								Yes
299-E33-34		A	A	A	A			A	A	A								Yes
299-E33-35	3-07	3-07	A	3-07	A			A	3-07	A								Yes
299-E33-37				3-07	3-07				3-07									Not scheduled
299-E33-38		A	A	A	A	A	A	A	A	A		A		A				No Pu
299-E33-39			A	A	A			A	A	A								Yes
299-E33-40*	A	A	A	A	A			A	A	A	A	A			A			Yes
299-E33-41	3-07	3-07	3-07	3-07	3-07			A	3-07	A								Yes
299-E33-42				A				A		A								Yes
299-E33-43				A				A		A								Yes
299-E33-44		A						A		A								Yes
299-E33-50*	A	A	A		A			A	A	A								Yes
299-E33-7	A	A	A	A	A			A	A	A		A						Yes
299-E34-2				A	A				A									Yes
299-E34-9				3-07	3-07				3-07									Not scheduled
699-44-39B				3-07	3-07				3-07									Not scheduled
699-45-42				3-07	3-07				3-07									Not scheduled
699-47-60				A	A			A	A									Yes
699-48-50B*	A	A	A	A	A			A	A	A								Yes
699-49-55A	A	A	A	A	A	A	A	A	A	A		A						Not sampled
699-49-55B*	A	A	A	A	A			A	A	A	A	A			A			Yes
699-49-57A	A	A	A	A	A			A	A	A				A				Yes
699-49-57B	A	A	A	A	A			A	A									Yes
699-50-56*	A	A	A	A	A			A	A	A								Yes
699-50-59		3-06		3-06	3-06			3-06		3-06	3-06				3-06			Not scheduled
699-53-47A					A		A		A			A						No; well does not sustain flow
699-53-47B					3-06		3-06											Not scheduled
699-53-48A				A	A		A		A			A			A			Yes
699-53-55A		A	A		A			A	A									Yes
699-53-55B		A	A		A			A	A									Yes
699-53-55C		A	A	A	A			A	A									Yes
699-54-45A					3-06													Not scheduled
699-54-45B					3-06													Not scheduled
699-54-48							3-06											Not scheduled

Table A-13. (cont.)

Well	Contaminants of Concern										Supporting Constituents							Sampled as Scheduled in FY 2008
	Cesium-137	Cobalt-60	Cyanide	Iodine-129	Nitrate	Plutonium-239/240	Strontium-90	Technetium-99	Tritium	Uranium	Alkalinity	Alpha/Beta	Americium-241	Arsenic	Metals (filtered)	Neptunium-237	TOC/TOX	
699-54-49					A		A		A			A						Yes
699-55-50C				A	A		A	A	A									Yes
699-55-57		A	A	A	A			A	A									Yes
699-55-60A		A	A	A	A			A	A									Yes
699-57-59	A	A	A	A	A	A	A	A	A	A	A	A			A		A	No Sr-90, Pu, TOC, TOX
699-59-58	A	A	A	A	A	A	A	A	A	A	A	A			A		A	No Sr-90, Pu, TOC, TOX
699-60-60	A	A	A	A	A	A	A	A	A	A	A	A			A		A	No Sr-90, Pu, TOC, TOX
699-61-62	A	A	A	A	A	A	A	A	A	A	A	A			A		A	No Sr-90, Pu, TOC, TOX
699-61-66	A	A	A	A	A	A	A	A	A	A	A	A			A		A	No Sr-90, Pu, TOC, TOX
699-64-62	A	A	A	A	A	A	A	A	A	A	A	A			A		A	No Sr-90, Pu, TOC, TOX
699-65-50								3-07										Not scheduled
699-65-72									3-07									Not scheduled
699-66-58								3-07	3-07									Not scheduled
699-66-64								3-07	3-07									Not scheduled
699-70-68								3-07	3-07									Not scheduled
699-72-73					3-07			3-07	3-07									Not scheduled
699-73-61									3-07									Not scheduled

Requirements from DOE/RL-2001-49.

* Well not listed in DOE/RL-2001-49 but added to sampling schedule.

3-xx = to be sampled triennially (every three years); xx indicates the fiscal year of sampling for specified analyte.
A = to be sampled annually.
FY = fiscal year.
TOC = total organic carbon.
TOX = total organic halides.

Table A-14. Monitoring Wells and Constituents for 200-PO-1 Operable Unit Near-Field Wells.

Well Number [a]	Contaminants of Concern							Supporting Constituents				Sampled as Scheduled in FY 2008
	Arsenic	Chromium, Manganese, and Vanadium (filtered)	Iodine-129	Nitrate	Strontium-90	Technetium-99	Tritium	Alpha	Anions [b]	Beta	Metals [c]	
299-E16-2	A	A	A	A	A		A	A	A	A	A	Yes
299-E17-12	A	A	A	A	A		A	A	A	A	A	Yes
299-E17-13	A	A	A	A	A		A	A	A	A	A	Yes
299-E17-14	A	A	A	A	A		A	A	A	A	A	Yes
299-E17-16	A	A	A	A	A		A	A	A	A	A	Yes
299-E17-18	A	A	A	A	A		A	A	A	A	A	Yes
299-E17-19	A	A	A	A	A		A	A	A	A	A	Yes
299-E17-23	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E17-25	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E18-1	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E23-1	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E24-18	A	A	A	A	A		A	A	A	A	A	Yes
299-E24-20	A	A	A	A	A	A	A	A	A	A	A	Yes
299-E24-5	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-17	A	A	A	A	A		A	A	A	A	A	Yes
299-E25-18	A	A	A	A	A		A	A	A	A	A	Yes
299-E25-19	A	A	A	A	A		A	A	A	A	A	Yes
299-E25-20	A	A	A	A	A		A	A	A	A	A	Yes
299-E25-22	A	A	A	A	A		A	A	A	A	A	Yes
299-E25-28	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-29P	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-29Q	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-3	A	A	A	A	A		A	A	A	A	A	Yes
299-E25-32P	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-32Q	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-34	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-35	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-36	A	A	A	A	A		A	A	A	A	A	Yes
299-E25-37	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-41	A	A	A	A	A	A	A	A	A	A	A	Yes
299-E25-42	A	A	A	A	A	A	A	A	A	A	A	Yes
299-E25-43	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-44	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-47	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
299-E25-6	A	A	A	A	A		A	A	A	A	A	Yes
299-E26-4	A	A	A	A	A		A	A	A	A	A	Yes
699-37-47A	A	A	A	A	A		A	A	A	A	A	Yes
699-39-39	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled

Table A-14. (cont.)

Well Number [a]	Contaminants of Concern							Supporting Constituents				Sampled as Scheduled in FY 2008
	Arsenic	Chromium, Manganese, and Vanadium (filtered)	Iodine-129	Nitrate	Strontium-90	Technetium-99	Tritium	Alpha	Anions [b]	Beta	Metals [c]	
699-42-42B	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
699-43-45	3-07	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	Not scheduled
699-44-39B	3-07	3-07	3-07			3-07	3-07	3-07	3-07	3-07	3-07	Not scheduled

Requirements from DOE/RL-2003-04.

[a] Some wells added in anticipation of revision of DOE/RL-2003-04.
[b] Anions - Analytes include but not limited to nitrate.
[c] Metals - Analytes include but not limited to chromium, manganese, and vanadium.

3-xx = to be sampled triennially (every three years); xx indicates the fiscal year of sampling for specified analyte.
A = to be sampled annually.
ICP = inductively coupled plasma.
VOA = volatile organic analyses.

Table A-15. Monitoring Wells and Constituents for the 200-PO-1 Operable Unit Far-Field Wells.

Well or Aquifer Tube Name	Contaminants of Concern			Supporting Constituents										Sampled as Scheduled in FY 2008
	Iodine-129	Nitrate	Tritium	Alpha	Anions [b]	Beta	Cyanide	Gamma	Metals [c]	Strontium-90	Technetium-99	Uranium	VOA	
BC Cribs														
299-E13-14		A	A	A	A	A	A	A	A	A	A	A		Yes
299-E13-5		A	A	A	A	A	A	A	A	A	A	A		Yes
Southeast Transect														
699-10-54A		A	A	A	A	A		A	A	A			A	Yes
699-24-46	A	A	A	A	A	A		A	A	A			A	Yes
699-26-33	A	A	A	A	A	A		A	A	A			A	Yes
699-31-31	A	A	A	A	A	A		A	A	A			A	Yes
699-32-22A	A	A	A	A	A	A		A	A	A			A	Yes
699-32-43	A	A	A	A	A	A		A	A	A			A	Yes
699-41-23	A	A	A	A	A	A		A	A	A			A	Yes
699-46-21B	A	A	A	A	A	A		A	A	A			A	Yes
River Transect														
699-10-E12		A	A	A	A	A		A	A	A			A	Yes
699-20-E12O	A	A	A	A	A	A		A	A	A			A	Yes
699-41-1A	A	A	A	A	A	A		A	A	A			A	Yes
699-46-4	A	A	A	A	A	A		A	A	A			A	Yes
699-S3-E12		A	A	A	A	A		A	A	A			A	Yes
699-S19-E13		A	A	A	A	A		A	A	A			A	Yes
Basalt Confined Aquifer														
299-E16-1	3-07	3-07	3-07	3-07	3-07	3-07			3-07					Not scheduled
699-13-1C		3-07	3-07	3-07	3-07	3-07			3-07					Not scheduled
699-24-1P		3-07	3-07	3-07	3-07	3-07			3-07					Not scheduled
699-32-22B	3-07	3-07	3-07	3-07	3-07	3-07			3-07					Not scheduled
699-42-40C	3-07	3-07	3-07	3-07	3-07	3-07			3-07					Not scheduled
699-S11-E12AP		3-07	3-07	3-07	3-07	3-07			3-07					Not scheduled
Far-Field General														
499-S0-7		3-07	3-07		3-07									Not scheduled
499-S0-8 [a]	A	A	A	A	A	A			A					Yes
499-S1-8J [a]	A	A	A	A	A	A		A		A	A	A	A	Yes
699-12-4D	3-07	3-07	3-07		3-07									Not scheduled
699-13-1A	3-07	3-07	3-07		3-07									Not scheduled
699-13-3A		3-07	3-07		3-07									Not scheduled
699-14-38		3-07	3-07		3-07									Not scheduled
699-17-5	3-07	3-07	3-07		3-07									Not scheduled
699-19-43	3-07	3-07	3-07		3-07									Not scheduled
699-20-20	3-07	3-07	3-07		3-07									Not scheduled
699-20-E12S		3-07	3-07		3-07									Not scheduled
699-20-E5A		3-07	3-07		3-07									Not scheduled

Table A-15. (cont.)

Well or Aquifer Tube Name	Contaminants of Concern			Supporting Constituents										Sampled as Scheduled in FY 2008
	Iodine-129	Nitrate	Tritium	Alpha	Anions [b]	Beta	Cyanide	Gamma	Metals [c]	Strontium-90	Technetium-99	Uranium	VOA	
699-21-6	3-07	3-07	3-07		3-07									Not scheduled
699-2-3	3-07	3-07	3-07		3-07									Not scheduled
699-22-35	3-07	3-07	3-07		3-07									Not scheduled
699-24-34C	3-07	3-07	3-07		3-07									Not scheduled
699-26-15A	3-07	3-07	3-07		3-07									Not scheduled
699-26-35A	3-07	3-07	3-07		3-07									Not scheduled
699-2-6A [a]		A	A		A									Yes
699-2-7 [a]		A	A		A									Yes
699-28-40	3-07	3-07	3-07		3-07									Not scheduled
699-29-4	3-07	3-07	3-07		3-07									Not scheduled
699-31-11	3-07	3-07	3-07		3-07									Not scheduled
699-33-42	3-07	3-07	3-07		3-07									Not scheduled
699-33-56	3-07	3-07	3-07		3-07									Not scheduled
699-34-41B	3-07	3-07	3-07		3-07									Not scheduled
699-34-42	3-07	3-07	3-07		3-07									Not scheduled
699-35-9	3-07	3-07	3-07		3-07									Not scheduled
699-37-43	3-07	3-07	3-07		3-07									Not scheduled
699-37-E4	3-07	3-07	3-07		3-07									Not scheduled
699-38-15	3-07	3-07	3-07		3-07									Not scheduled
699-40-1	3-07	3-07	3-07		3-07									Not scheduled
699-40-33A	3-07	3-07	3-07		3-07									Not scheduled
699-41-40	3-07	3-07	3-07		3-07									Not scheduled
699-41-42 [a]	3-07	3-07	3-07	3-07	3-07	3-07								Not scheduled
699-42-12A	3-07	3-07	3-07		3-07									Not scheduled
699-42-39A	3-07	3-07	3-07		3-07									Not scheduled
699-42-39B	3-07	3-07	3-07		3-07									Not scheduled
699-42-40A [a]	3-07	3-07	3-07	3-07	3-07	30-7								Not scheduled
699-43-3	3-07	3-07	3-07		3-07									Not scheduled
699-43-41E	3-07	3-07	3-07		3-07									Not scheduled
699-45-42	3-07	3-07	3-07		3-07									Not scheduled
699-47-5	3-07	3-07	3-07		3-07									Not scheduled
699-48-7A		3-07	3-07		3-07									Not scheduled
699-49-13E	3-07	3-07	3-07		3-07									Not scheduled
699-50-28B	3-07	3-07	3-07		3-07									Not scheduled
699-52-19		3-07	3-07		3-07									Not scheduled
699-8-17	3-07	3-07	3-07		3-07									Not scheduled
699-8-25	3-07	3-07	3-07		3-07									Not scheduled
699-9-E2	3-07	3-07	3-07		3-07									Not scheduled
699-S12-3		3-07	3-07		3-07									Not scheduled
699-S19-E14		3-07	3-07		3-07									Not scheduled

Table A-15. (cont.)

Well or Aquifer Tube Name	Contaminants of Concern			Supporting Constituents										Sampled as Scheduled in FY 2008
	Iodine-129	Nitrate	Tritium	Alpha	Anions [b]	Beta	Cyanide	Gamma	Metals [c]	Strontium-90	Technetium-99	Uranium	VOA	
699-S2-34B	A	A	A		A				A					Yes
699-S3-25		3-07	3-07		3-07									Not scheduled
699-S6-E14A		3-07	3-07		3-07									Not scheduled
699-S6-E4A		3-07	3-07		3-07									Not scheduled
699-S6-E4B		3-07	3-07		3-07									Not scheduled
699-S8-19		3-07	3-07		3-07									Not scheduled
81-D, M, S	A	A	A	A	A	A					A			Not found
82-M, S	A	A	A	A	A	A					A			Yes
83-D	A	A	A	A	A	A					A			Not found
84-D, M, S	A	A	A	A	A	A					A			No [d]
85-D, M, S	A	A	A	A	A	A					A			No [d]
86-D, M, S	A	A	A	A	A	A					A			Yes
New aquifer tubes [a]	A	A	A	A	A	A					A			13 tubes installed FY 2008; 6 sampled

Requirements from DOE/RL-2003-04.

[a] Some wells added in anticipation of revision of DOE/RL-2003-04.
[b] Anions - Analytes include but not limited to nitrate.
[c] Metals - Analytes include but not limited to chromium, manganese, and vanadium.
[d] Specific conductance too low to sample.

3-xx = to be sampled triennially (every three years); xx indicates the fiscal year of sampling for specified analyte.
A = to be sampled annually.
FY = fiscal year.
ICP = inductively coupled plasma.
VOA = volatile organic analyses.

Table A-16. Monitoring Wells and Constituents for the 300-FF-5 Operable Unit, 300 Area.

Well	Hydrologic Unit Monitored	Contaminants of Concern			Contaminants of Potential Concern				Supporting Measurements						Sampled as scheduled in FY 2008
		cis-1,2-Dichloroethene	Trichloroethene	Uranium, total (unfiltered)	Tetrachloroethene	Strontium-90	Tritium	Nitrate	Anions	Alkalinity	Metals	Volatile Organic Compounds	Alpha/Beta	Uranium-isotopic	
Near-River Well Group															
399-1-1	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-10A [a]	TU	S	S	Q	S		A	Q	Q	Q	S	S	S	A	Missed 1 quarter anions. No tritium, metals, alpha, beta, U-iso
399-1-10B	LU	S	S	S	S			S	S	S	S	S			Yes
399-1-16A [a]	TU	S	S	Q	S		A	Q	Q	Q	S	S	S	A	Missed 1 quarter anions. No tritium, metals, alpha, beta, U-iso
399-1-16B	LU	S	S	S	S			S	S	S	S	S			Yes
399-1-16C	C	A	A	A	A			A	A	A	A	A			Yes
399-2-1	TU	S	S	Q	S		A	Q	Q	Q	S	S	S	A	Yes
399-2-2	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-3-1	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-3-9	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-3-10	TU	S	S	Q	S		A	Q	Q	Q	S	S	S	A	Yes
399-3-18 [a]	TU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q	A	VOA, metals 3X
399-4-7	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-4-9	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-4-10	TU	S	S	S	S			S	S	S	S	S	S		Yes
Central Region-Uranium Plume Transport Corridor Well Group															
399-1-2	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-6	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-7	TU	S	S	S	S			S	S	S	S	S	S		Sampled once, well in use to supply water for treatability test
399-1-8	LU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-9	C	A	A	A	A			A	A	A	A	A			Yes
399-1-11	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-12	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-17A [a]	TU	S	S	Q	S		A	Q	Q	Q	S	S	S	A	Anions 3X. No alpha, beta, metals, U-iso
399-1-17B	LU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-17C	C	A	A	A	A			A	A	A	A	A			Yes
399-1-21A	TU	S	S	Q	S		A	Q	Q	Q	S	S	S	A	Yes
399-1-21B	LU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-23	TU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q	A	Sampled 3X; electrical problems
399-2-5 [b]	TU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q	A	Sampled 3X. No U-iso
399-3-11	TU	S	S	Q	S	A	A	Q	Q	Q	S	S	S	A	Missed quarter; access limited; 4th delayed till FY 2009. No Sr-90, tritium, U-iso
399-3-12	TU	S	S	S	S			S	S	S	S	S			Yes

Table A-16. (cont.)

Well	Hydrologic Unit Monitored	Contaminants of Concern			Contaminants of Potential Concern				Supporting Measurements						Sampled as scheduled in FY 2008
		cis-1,2-Dichloroethene	Trichloroethene	Uranium, total (unfiltered)	Tetrachloroethene	Strontium-90	Tritium	Nitrate	Anions	Alkalinity	Metals	Volatile Organic Compounds	Alpha/Beta	Uranium-isotopic	
399-3-20	TU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q	A	Sampled 2X; electrical problems
399-3-21 [b]	LU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q	A	Yes
399-3-22 [b]	LU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q	A	Yes
Northwest Region-Upgradient Conditions Well Group															
399-1-15	TU	S	S	S	S			S	S	S	S	S	S		Yes
399-1-18A	TU			S			S	S	S	S	S				No tritium anions, metals; scheduling error
399-1-18B	LU			S			S	S	S	S	S				Yes
399-1-18C	C			A				A	A	A	A				Yes
399-8-5A [c]	TU	S	S	S	S			S	S	S	S	S	S		Yes
699-S20-E10	TU			S			S	S	S	S	S				Yes
Southwest Region-Upgradient Conditions Well Group															
399-3-2	TU	S	S	S	S			S	S	S	S	S			Yes
399-3-6	TU	S	S	S	S			S	S	S	S	S			Yes
399-3-19	TU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q	A	Sampled twice; access limitations. No U-iso, tritium
399-4-1	TU	S	S	S	S			S	S	S	S	S			Yes
399-4-12	TU	S	S	S	S			S	S	S	S	S			Yes
399-4-14 [b]	LU	Q	Q	Q	Q		A	Q	Q	Q	Q	Q	Q		Yes
399-5-4B	TU	S	S	S	S			S	S	S	S	S			Yes
699-S27-E14	TU	A	A	A	A			A	A	A	A	A			Yes
Shoreline-Aquifer Tubes [d]															
AT-3-1-D(1)	TU			A											Yes
AT-3-1-M	TU	S	S	S	S		A	S	S	S	S	S	S		No VOA, metals, alpha, beta; scheduling error
AT-3-1-S	TU			A											Yes
AT-3-2-M	TU	S	S	S	S		A	S	S	S	S	S	S		Sampled once; no alpha, beta; scheduling error
AT-3-2-S	TU			A											Yes
C6343 (-D)	TU			A								S			Yes
C6342 (-M)	TU	S	S	S	S		A	S	S	S	S	S	S		Yes
C6341 (-S)	TU			A								S			Yes
AT-3-3-D	TU			A								S			Yes
AT-3-3-M	TU			A											Yes
AT-3-3-S	TU	S	S	S	S			S	S	S	S	S	S		VOA once. No metals, alpha, beta; scheduling error
C6344 (-S)	TU	S	S	S	S		A	S	S	S	S	S	S		Yes
AT-3-4-D	TU			A								S			Yes
AT-3-4-M	TU			A											Yes
AT-3-4-S	TU			S				S	S	S	S		S		No apha, beta; scheduling error

TableA-16. (cont.)

Well	Hydrologic Unit Monitored	Contaminants of Concern			Contaminants of Potential Concern				Supporting Measurements						Sampled as scheduled in FY 2008
		cis-1,2-Dichloroethene	Trichloroethene	Uranium, total (unfiltered)	Tetrachloroethene	Strontium-90	Tritium	Nitrate	Anions	Alkalinity	Metals	Volatile Organic Compounds	Alpha/Beta	Uranium-isotopic	
C6348 (-D)	TU	S	S	S	S		A	S	S	S	S	S	S		Yes
C6347 (-M)	TU			A								S			Yes
AT-3-5-S	TU			S				S	S	S	S		S		Sampled once. No alpha, beta; scheduling error
C6351 (-M)	TU	S	S	S	S		A	S	S	S	S	S	S		Yes
C6350 (-S)	TU			A								S			Yes
AT-3-6-D	TU			A											Yes
AT-3-6-M	TU			A											Yes
AT-3-6-S	TU			S				S	S	S	S		S		Sampled once. No alpha, beta; scheduling error
AT-3-7-D	TU			A											Yes
AT-3-7-M	TU			S				S	S	S	S		S		Sampled once. No alpha, beta; scheduling error
AT-3-7-S	TU			A											Yes
AT-3-8-D	TU			A											Not sampled; no yield previous year; scheduling error
AT-3-8-M	TU			A											Yes
AT-3-8-S	TU			S				S	S	S	S		S		Sampled once. No alpha, beta; scheduling error
Shoreline-Riverbank Springs [e,f]															
S3-42-2	SW			A				A	A	A	A		A		Yes
S3-DR42-2	SW			A				A	A	A	A		A		Yes
SPRING 10	SW			A				A	A	A	A		A		Yes
SPRING 11	SW			A				A	A	A	A		A		Yes

Requirements from DOE/RL-2002-11, as updated for FY 2008.

[a] Combined CERCLA and RCRA sampling provides monthly monitoring for uranium.
[b] Wells put into service during FY 2008.
[c] Frequency increased to quarterly during remedial action at 618-7 Burial Ground.
[d] New tubes (C63xx series names) installed during spring 2008. Tubes to be removed from DOE/RL-2002-11 and added to separate aquifer tube sampling and analysis plan during FY 2009.
[e] Sampling of springs depends on flow conditions. Riverbank springs to be removed from DOE/RL-2002-11 during FY 2009.
[f] Isotopic uranium is measured in surface water (in contrast to total uranium in groundwater).

A = to be sampled annually.
C = uppermost confined aquifer.
FY = fiscal year.
LU = lower unconfined aquifer.
Q = to be sampled quarterly.
S = to be sampled semiannually.
SW = surface water.
TU = top of unconfined aquifer.

Table A-17. Monitoring Wells and Constituents for the 300-FF-5 Operable Unit, 618-11 ubregion.

Well	Contaminants of Potential Concern						Supporting Measurements			Sampled as Scheduled in FY 2008
	Tritium	Gross Beta	Uranium, total (unfiltered)	Technetium-99	Gross Alpha	Nitrate	Anions	Alkalinity	Metals	
Downgradient of 618-11 Burial Ground (Near-Field)										
699-12-2C	Q	Q	S	S	Q	S	S	S	S	Yes
699-13-2D	Q	Q	S	S	Q	S	S	S	S	Yes
699-13-3A	Q	Q	S	S	Q	S	S	S	S	Yes
Upgradient Conditions (Near-Field)										
699-12-4D	A	A	A	A	A	A	A	A	A	Yes
Downgradient of 618-11 Burial Ground (Far-Field)										
699-13-0A	Q	Q			Q	S	S	S	S	Sampled once; electrical problem
699-13-1E	Q	Q			Q	S	S	S	S	Sampled once; electrical problem

Requirements from DOE/RL-2002-11, as updated for FY 2008.

A = to be sampled annually.
FY = fiscal year.
Q = to be sampled quarterly.
S = to be sampled semiannually.

Table A-18. Monitoring Wells and Constituents for the 300-FF-5 Operable Unit, 618-10/316-4 Subregion.

Well	Contaminants of Potential Concern					Supporting Measurements						Sampled as Scheduled in FY 2008
	Uranium, total (unfiltered)	Tributyl Phosphate	Gross Alpha	Gross Beta	Nitrate	Alkalinity	Metals	Volatile Organic Compounds	Tritium	Technetium-99	Uranium-isotopic	
Downgradient of 618-10 Burial Ground (Near-Field)												
699-S6-E4K	S	S	S	S	S	S	S	S	S	S	A	Yes
699-S6-E4L	Q	S	Q	Q	Q	S	S	S	S	S	A	Missed 1 Q, 1 S. No U-iso; scheduling error
Downgradient of 618-10 Burial Ground; Within 316-4 Crib Footprint (Near-Field)												
699-S6-E4A	Q	S	Q	Q	Q	S	S	S	S	S	A	Missed 1st quarter (electrical problem); 4th quarter delayed till FY 2009
Background: 618-10 Burial Ground/316-4 Cribs												
699-S6-E4D	A		A	A	A	A	A		A	A		No tritium
Downgradient of 618-10 Burial Ground/316-4 Crib												
699-S6-E4B	S		S	S	S	S	S		S			Tritium once
699-S6-E4E	S		S	S	S	S	S		S			2nd sample delayed till FY 2009

Requirements from DOE/RL-2002-11, as updated for FY 2008.
Wells completed at the top of the unconfined aquifer.

A = to be sampled annually.
FY = fiscal year.
Q = to be sampled quarterly.
S = to be sampled semiannually.

Table A-19. Monitoring Wells and Constituents for the Former 1100-EM-1 Operable Unit.

Well	1,1-Dichloroethene	Trichloroethene	Vinyl Chloride	Sampled as Scheduled in FY 2008
699-S28-E12	A	A	A	Yes
699-S31-E10A	A	A	A	Yes
699-S31-E10C	A	A	A	Yes

Requirements from TPA-CN-163.

A = to be sampled annually.
FY = fiscal year.

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