TRI-PARTY AGREEMENT

Change Notice Number TPA-CN- 0741	TPA CHANGE NOTICE FORM	Date: 8/22/16
Document Number, Title, and Revision: DOE/RL-2000-59, Rev. 1, Sampling and Analysis Plan for Aquifer Sampling Tubes		Date Document Last Issued: Feb. 2009
Approved Change Notices Against this Document: TPA-CN-327, CN-353, -CN-556, -CN-612, -CN-676, -CN-0730		
Originator: M.J. Hartman		Phone: 509-376-4385

Description of Change:
Changes to the Preamble, Appendix A and Appendix B of DOE/RL-2000-59, *Sampling and Analysis Plan for Aquifer Sampling Tubes.*

M.W. Cline (**DOE**) and L.C. Buelow/N.M. Menard (**Lead Regulatory Agency**) agree that the proposed change modifies an approved workplan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, *Documentation and Records,* and not Chapter 12.0, *Changes to the Agreement.*

Aquifer tubes for the following operable units (OU) are removed from this sampling and analysis plan (SAP) because new OU-specific SAPs supersede requirements for those aquifer tubes:

- 100-BC-5 (DOE/RL-2003-38, Rev. 2)
- 100-NR-2 (DOE/RL-2001-27, Rev. 2)

In Appendix A, all of Table A-1 is replaced with the attached. The table format has been adjusted to remove analytes not required in the remaining aquifer tubes. Appendix B (added under TPA-CN-327 for 100-BC aquifer tubes) is deleted in its entirety. TPA-CN-0730 added a preamble to DOE/RL-2000-59, Rev. 1, removing requirements for 100-HR-3 aquifer tubes. The attached changes incorporates those changes to Table A-1, so the preamble is deleted.

Affected page numbers: P-1; A-3 through A-19; B-I through B-3. Added text is shown with <u>double underline</u>. Deleted text is identified by ~~strikethrough~~.

Justification and Impacts of Change:

Groundwater SAPs for the River Corridor OUs are being revised. The data quality objectives process is applied to determine appropriate sampling programs. If this process determines that aquifer tube data are needed, the aquifer tubes are incorporated into the revised SAP for the individual groundwater OU. As the SAPs are revised, the aquifer tube requirements of DOE/RL-2000-59 are being retired.

For information purposes, the bullets below list the actual or planned date for conversion of aquifer tube requirements into OU-specific SAPs:

- 100-BC-5: fall 2016 (this change notice)
- 100-FR-3: fall 2015 (TPA-CN-676)
- 100-HR-3: fall 2016 (TPA-CN-0730)
- 100-KR-4: planned for spring 2017
- 100-NR-2: fall 2016 (this change notice)
- 200-PO-1: planned for fall 2017
- 300-FF-5: fall 2015 (TPA-CN-676)

Approvals:

DOE Project Manager	8/23/2016 Date	[X] Approved [ ] Disapproved
EPA Project Manager	8/29/2016 Date	[X] Approved [ ] Disapproved
Ecology Project Manager	8/29/2016 Date	[X] Approved [ ] Disapproved

~~*Sampling and Analysis Plan for Aquifer Sampling Tubes*~~
~~DOE/RL-2000-59, Rev. 1~~

~~PREAMBLE~~

~~This sampling and analysis plan was prepared to identify requirements for collection and analysis of groundwater samples from aquifer tubes along the Hanford Site shoreline of the Columbia River. The results are intended to provide information on concentrations of contaminants in groundwater discharges to the Columbia River.~~

~~Department of Energy (DOE) Richland Operations office (RL) and Washington State Department of Ecology (Ecology) have developed an updated monitoring plan, DOE/RL-2013-30, *Sampling and Analysis Plan for 100-HR-3 Groundwater Operable Unit Monitoring*, Rev. 0, which integrates aquifer tube sampling and analysis with upland groundwater monitoring. The updated monitoring plan (DOE/RL-2013-30) meets requirements from the interim action ROD and interim action ROD amendment (EPA/AMD/R10-00/122) for implementing the interim actions in the 100-HR-3 OU.~~

~~For the 100-HR-3 OU only, this change notice retires the requirements and remaining activities in DOE/RL-2000-59, Rev. 1, and replaces them with the requirements and remaining activities in DOE/RL-2013-30, Rev. 0, beginning August 1, 2016. The requirements and remaining activities in DOE/RL-2000-59, Rev. 1, remain in effect for the 100-BC-5, 100-FR-3, 100-KR-4, 100-NR-3, and 200-PO-1, and 300-FF-5 groundwater operable units.~~

Table A-1. Aquifer Tube Sampling Sites and Analyses

Tube Name	Scheduled Collection Month	Frequency	Field Parameters	Anions	Hexavalent Chromium	Metals (Unfiltered)	Metals (Filtered)	Arsenic	Tritium	Gross Alpha/ Beta	Carbon-14	Iodine-129	Strontium-90	Technetium-99
100-K Segment														
14-D	Oct	A	1	1	1				1	1				1
C6236	Oct	A	1		1									
C6237	Oct	A	1		1									
C6238	Oct	A	1	1	1				1		1			
AT-K-1-D	Oct	A	1	1	1	1	1		1	1	1			1
17-D	Oct	A	1	1	1	1	1		1	1	1			1
C6239	Oct	A	1		1									
C6240	Oct	A	1		1									
C6241	Oct	A	1	1	1				1		1			
C6242	Oct	A	1		1								1	
C6243	Oct	A	1		1								1	
C6244	Oct	A	1	1	1				1		1		1	
AT-K-2-D	Oct	A	1	1	1	1	1		1	1	1			
C6245	Oct	A	1		1								1	
C6246	Oct	A	1		1								1	
C6247	Oct	A	1	1	1				1		1		1	
19-M	Oct	A	1		1								1	
19-D	Oct	A	1	1	1				1	1	1			
AT-K-3-S	Oct	A	1	1	1									
AT-K-3-M	Oct	A	1	1	1								1	
AT-K-3-D	Oct	A	1	1	1	1	1		1		1			
C6248	Oct	A	1		1									
C6249	Oct	A	1		1									
C6250	Oct	A	1	1	1				1		1			
C6251	Oct	A	1		1									
C6252	Oct	A	1		1									
C6253	Oct	A	1	1	1				1		1			
21-S	Oct	A	1		1									
21-M	Oct	A	1	1	1				1				1	
C6254	Oct	A	1		1								1	

Table A-1. Aquifer Tube Sampling Sites and Analyses

Tube Name	Scheduled Collection Month	Frequency	Field Parameters	Anions	Hexavalent Chromium	Metals (Unfiltered)	Metals (Filtered)	Arsenic	Tritium	Gross Alpha/ Beta	Carbon-14	Iodine-129	Strontium-90	Technetium-99
C6255	Oct	A	1		1								1	
C6256	Oct	A	1	1	1				1		1		1	
C6257	Oct	A	1		1								1	
C6258	Oct	A	1		1								1	
C6259	Oct	A	1	1	1				1		1		1	
22-M	Oct	A	1		1								1	
22-D	Oct	A	1	1	1				1					
AT-K-4-S	Oct	A	1		1									
AT-K-4-M	Oct	A	1	1	1				1				1	
23-M	Oct	A	1	1	1								1	
C6260	Oct	A	1	1	1									
C6261	Oct	A	1	1	1				1		1			
AT-K-5-S	Oct	A	1	1	1									
AT-K-5-M	Oct	A	1	1	1								1	
AT-K-5-D	Oct	A	1	1	1			1	1					
DK-04-2	Oct	A	1	1	1			1	1					
25-D	Oct	A	1	1	1				1					
AT-K-6-S	Oct	A	1		1									
AT-K-6-M	Oct	A	1	1	1				1					
AT-K-6-D	Oct	A	1		1									
26-S	Oct	A	1		1									
26-M	Oct	A	1		1									
26-D	Oct	A	1	1	1				1					
C6263	Oct	A	1		1									
C6264	Oct	A	1		1									
C6265	Oct	A	1	1	1				1		1			
200-PO Segment														
85-D	Oct	A	1	1					1	1		1		1
86-D	Oct	A	1	1					1	1		1		1
C6383	Oct	A	1											
C6384	Oct	A	1	1	1				1	1		1		1

Table A-1. Aquifer Tube Sampling Sites and Analyses

Tube Name	Scheduled Collection Month	Frequency	Field Parameters	Anions	Hexavalent Chromium	Metals (Unfiltered)	Metals (Filtered)	Arsenic	Tritium	Gross Alpha/ Beta	Carbon-14	Iodine-129	Strontium-90	Technetium-99
C6353	Oct	A	1	1	1				1	1		1		1
C6356	Oct	A	1	1	1				1	1		1		1
C6359	Oct	A	1	1	1				1	1		1		1
C6362	Oct	A	1	1	1				1	1		1		1
C6368	Oct	A	1	1	1				1	1		1		1
C6371	Oct	A	1	1	1				1	1		1		1
C6374	Oct	A	1											
C6375	Oct	A	1	1	1				1	1		1		1
C6378	Oct	A	1	1	1				1	1		1		1
C6380	Oct	A	1	1	1				1	1		1		1

Frequency: A = annual

Numerals in the constituent columns indicate number of samples to be collected (1 = annual)

Field parameters include dissolved oxygen, pH, specific conductance, temperature and turbidity.

Metals include calcium, chromium, magnesium, potassium, and sodium.

Anions include chloride, fluoride, nitrate, nitrite, and sulfate.

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~100-BC-5 Segment~~																						
~~01-M~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~											
~~03-D~~		~~Sep~~	~~A~~	~~1~~		~~1~~					~~1~~											
~~AT-B-1-M~~		~~Sep~~	~~A~~	~~1~~		~~1~~					~~1~~											
~~AT-B-2-D~~		~~Sep~~	~~A~~	~~1~~		~~1~~					~~1~~											
~~04-D~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~											
~~C6227~~	~~S~~	~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6228~~	~~M~~	~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6229~~	~~D~~	~~Sep~~	~~A~~	~~1~~		~~1~~					~~1~~						~~1~~					
~~05-S~~		~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~05-M~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~	~~1~~					~~1~~					
~~05-D~~		~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~AT-B-3-S~~		~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~AT-B-3-M~~		~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~AT-B-3-D~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~	~~1~~					~~1~~					
~~06-S~~		~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~06-M~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~	~~1~~					~~1~~					
~~06-D~~		~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6230~~	~~S~~	~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6231~~	~~M~~	~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6232~~	~~D~~	~~Sep~~	~~A~~	~~1~~		~~1~~					~~1~~						~~1~~					

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~C6233~~	~~S~~	~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6234~~	~~M~~	~~Sep~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6235~~	~~D~~	~~Sep~~	~~A~~	~~1~~		~~1~~					~~1~~						~~1~~					
~~AT-B-7-M~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~					~~1~~					
~~AT-B-5-D~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~					~~1~~	~~1~~				
~~12-D~~		~~Sep~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~							~~1~~				
~~100-KR-4 Segment~~																						
~~14-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~						~~1~~				
~~C6236~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6237~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6238~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~								
~~AT-K-1-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~	~~1~~		~~1~~				~~1~~				
~~17-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~	~~1~~		~~1~~				~~1~~				
~~C6239~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6240~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6241~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~								
~~C6242~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6243~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6244~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~			~~1~~					
~~AT-K-2-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~	~~1~~		~~1~~								
~~C6245~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					

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~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~C6246~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6247~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~			~~1~~					
~~19-M~~		~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~19-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~		~~1~~								
~~AT-K-3-S~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~AT-K-3-M~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~											~~1~~					
~~AT-K-3-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~			~~1~~								
~~C6248~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6249~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6250~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~								
~~C6251~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6252~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6253~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~								
~~21-S~~		~~Oct~~	~~A~~	~~1~~		~~1~~																
~~21-M~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~						~~1~~					
~~C6254~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6255~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6256~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~			~~1~~					
~~C6257~~	~~S~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6258~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~C6259~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~			~~1~~					

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~~22-M~~		~~Oct~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~22-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~											
~~AT-K-4-S~~		~~Oct~~	~~A~~	~~1~~		~~1~~																
~~AT-K-4-M~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~						~~1~~					
~~23-M~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~											~~1~~					
~~C6260~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~C6261~~	~~M~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~								
~~AT-K-5-S~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~AT-K-5-M~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~											~~1~~					
~~AT-K-5-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~				~~1~~	~~1~~											
~~DK-04-2~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~				~~1~~	~~1~~											
~~25-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~											
~~AT-K-6-S~~		~~Oct~~	~~A~~	~~1~~		~~1~~																
~~AT-K-6-M~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~											
~~AT-K-6-D~~		~~Oct~~	~~A~~	~~1~~		~~1~~																
~~26-S~~		~~Oct~~	~~A~~	~~1~~		~~1~~																
~~26-M~~		~~Oct~~	~~A~~	~~1~~		~~1~~																
~~26-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~											
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~~C6264~~	~~M~~	~~Oct~~	~~A~~	~~1~~		~~1~~																
~~C6265~~	~~D~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~			~~1~~								

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~~100-NR-2 Segment~~																						
~~C6317~~	~~S~~	~~Dec~~	~~A~~	~~1~~																		
~~C6318~~	~~M~~	~~Dec~~	~~A~~	~~1~~																		
~~C6319~~	~~D~~	~~Dec~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~													~~1~~	
~~C6320~~	~~S~~	~~Dec~~	~~A~~	~~1~~																		
~~C6321~~	~~M1~~	~~Dec~~	~~A~~	~~1~~																		
~~C6352~~	~~M2~~	~~Dec~~	~~A~~	~~1~~																		
~~C6322~~	~~D~~	~~Dec~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~													~~1~~	
~~C6132~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	~~4~~									~~4~~								~~4~~	~~4~~
~~N116mArray-0A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	~~4~~	~~4~~		~~1~~	~~1~~	~~1~~			~~1~~	~~4~~				~~4~~				~~4~~	~~4~~
~~N116mArray-1A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	~~4~~	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~	~~4~~				~~1~~				~~4~~	~~4~~
~~N116mArray-2A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	~~4~~	~~4~~		~~1~~	~~1~~	~~1~~			~~1~~	~~4~~				~~1~~				~~4~~	~~4~~
~~N116mArray-3A~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	~~4~~	~~4~~		~~4~~	~~4~~	~~4~~			~~4~~	~~4~~		~~4~~		~~4~~					
~~N116mArray-4A~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	~~4~~	~~4~~		~~4~~	~~4~~	~~4~~			~~4~~	~~4~~		~~4~~		~~4~~					
~~NVP1-1~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	~~4~~									~~4~~									
~~NVP1-2~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	~~4~~									~~4~~									

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~NVP1-3~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~NVP1-4~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~NVP1-5~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~NVP2-116.3~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~NVP2-116.0~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4	4		4	4	4			4	4		4		4					
~~NVP2-115.7~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~NVP2-115.4~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~NVP2-115.1~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~N116mArray-6A~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4									4									
~~N116mArray-8A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	4	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~	4				~~1~~					
~~N116mArray-8.5A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	4	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~	4				~~1~~					
~~N116mArray-9A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	4	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~	4				~~1~~					
~~N116mArray-10A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	4	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~	4				~~1~~					

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~N116mArray-11A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	4	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~	4				~~1~~					
~~N116mArray-13A~~		~~Dec, Mar, Jun, Sep~~	~~Q/A~~	4	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~	4				~~1~~					
~~C6323~~	~~S~~	~~Dec~~	~~A~~	~~1~~													~~1~~					
~~C6324~~	~~M~~	~~Dec~~	~~A~~	~~1~~													~~1~~					
~~C6325~~	~~D~~	~~Dec~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~			~~1~~						~~1~~					
~~N116mArray-15A~~		~~Dec, Mar, Jun, Sep~~	~~Q~~	4	~~1~~		~~1~~	~~1~~	~~1~~		~~1~~	~~1~~	4				~~1~~					
~~C6326~~	~~S~~	~~Dec~~	~~A~~	~~1~~																		
~~C6327~~	~~M~~	~~Dec~~	~~A~~	~~1~~																		
~~C6328~~	~~D~~	~~Dec~~	~~A~~	~~1~~		~~1~~	~~1~~	~~1~~			~~1~~											
~~C6329~~	~~S~~	~~Dec~~	~~A~~	~~1~~																		
~~C6330~~	~~M~~	~~Dec~~	~~A~~	~~1~~																		
~~C6331~~	~~D~~	~~Dec~~	~~A~~	~~1~~			~~1~~	~~1~~			~~1~~											
~~C6332~~	~~S~~	~~Dec~~	~~A~~	~~1~~																		
~~C6333~~	~~M~~	~~Dec~~	~~A~~	~~1~~																		
~~C6334~~	~~D~~	~~Dec~~	~~A~~	~~1~~			~~1~~	~~1~~			~~1~~											
~~100-HR-3-D Segment~~																						
~~DD-50-1~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~DD-50-2~~		~~Nov~~	~~A~~	~~1~~		~~1~~																

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~DD-50-3~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~											
~~DD-50-4~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~DD-49-1~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~DD-49-2~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~DD-49-3~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~DD-49-4~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~											
~~C6266~~	~~S~~	~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~C6267~~	~~M~~	~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~C6268~~	~~D~~	~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~					~~1~~											
~~C6269~~	~~S~~	~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~C6270~~	~~M~~	~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~C6271~~	~~D~~	~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~					~~1~~											
~~DD-44-3~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~DD-44-4~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~1~~	~~1~~		~~1~~	~~1~~											
~~DD-43-2~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~DD-43-3~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~1~~	~~1~~			~~1~~											
~~DD-42-2~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~DD-42-3~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~DD-42-4~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~1~~	~~1~~			~~1~~											
~~DD-41-1~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~DD-41-2~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~1~~	~~1~~		~~1~~												

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~DD-41-3~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~REDOX-4-3.0~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~REDOX-4-6.0~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~1~~	~~1~~														
~~REDOX-3-3.3~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~REDOX-3-4.6~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~4~~	~~4~~		~~4~~												
~~DD-39-1~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
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~~REDOX-2-6.0~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~1~~	~~1~~														
~~REDOX-1-3.3~~		~~Nov, May~~	~~S~~	~~2~~		~~2~~																
~~REDOX-1-6.0~~		~~Nov, May~~	~~S~~	~~2~~	~~1[a]~~	~~2~~	~~1~~	~~1~~		~~1~~												
~~AT-D-1-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-D-1-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-D-1-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~														
~~C6272~~	~~S~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~AT-D-4-S~~		~~Nov~~	~~A~~	~~1~~																		
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~~AT-D-4-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~AT-D-2-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-D-2-M~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~36-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~36-M~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~AT-D-3-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-D-3-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-D-3-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~C6275~~	~~S~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~38-M~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~38-D~~		~~Nov~~	~~A~~	~~1~~																		
~~DD-17-2~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~DD-17-3~~		~~Nov~~	~~A~~	~~1~~		~~1~~	~~1~~	~~1~~									~~1~~					
~~C6278~~	~~S~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~											~~1~~					
~~DD-16-3~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~DD-16-4~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~DD-15-2~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~DD-15-3~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~											~~1~~					
~~DD-15-4~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~DD-12-2~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~DD-12-4~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~AT-D-5-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-D-5-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~DD-06-2~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~DD-06-3~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6281~~	~~S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~C6282~~	~~M~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~100-HR-3-H Segment~~																						
~~C6284~~	~~S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6285~~	~~M~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6286~~	~~D~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5632~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5633~~	~~Horn; M~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5634~~	~~Horn; D~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5635~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5636~~	~~Horn; M~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5637~~	~~Horn; D~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5638~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6287~~	~~S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6288~~	~~M~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~C5641~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5644~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~	~~1~~	~~1~~														
~~44-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5673~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5674~~	~~Horn; M~~	~~Nov~~	~~A~~	~~1~~		~~1~~	~~1~~	~~1~~														
~~C5676~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5677~~	~~Horn; M~~	~~Nov~~	~~A~~	~~1~~		~~1~~																

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~C5678~~	~~Horn; D~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5679~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5680~~	~~Horn; M~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C5681~~	~~Horn; D~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~45-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~45-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~45-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~C5682~~	~~Horn; S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6290~~	~~S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6291~~	~~M~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~C6293~~	~~S~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~											~~1~~	~~1~~	~~1~~			
~~AT-H-1-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-H-1-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~AT-H-1-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~												~~1~~	~~1~~			
~~AT-H-2-S~~		~~Nov~~	~~A~~	~~1~~																		
~~AT-H-2-M~~		~~Nov~~	~~A~~	~~1~~																		
~~AT-H-2-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~												~~1~~	~~1~~			
~~AT-H-3-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~AT-H-3-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~						~~1~~					~~1~~	~~1~~	~~1~~			
~~47-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~47-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~						~~1~~					~~1~~					

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
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~~C6297~~	~~M~~	~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~48-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~											~~1~~					
~~48-M~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~						~~1~~					~~1~~					
~~C6299~~	~~S~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6300~~	~~M~~	~~Nov~~	~~A~~	~~1~~		~~1~~																
~~C6301~~	~~D~~	~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~49-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~50-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~50-M~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~51-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~51-M~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~51-D~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~52-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~52-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~52-D~~		~~Nov~~	~~A~~	~~1~~	~~1~~	~~1~~																
~~54-S~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~54-M~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~54-D~~		~~Nov~~	~~A~~	~~1~~		~~1~~																
~~200-PO-1 Segment~~																						
~~85-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~						~~1~~	~~1~~				~~1~~		~~1~~				

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~
~~86-D~~		~~Oct~~	~~A~~	~~1~~	~~1~~						~~1~~	~~1~~				~~1~~		~~1~~				
~~C6383~~	~~S~~	~~Oct~~	~~A~~	~~1~~																		
~~C6384~~	~~M~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6353~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6356~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6359~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6362~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6368~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6371~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6374~~	~~S~~	~~Oct~~	~~A~~	~~1~~																		
~~C6375~~	~~M~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6378~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				
~~C6380~~	~~S~~	~~Oct~~	~~A~~	~~1~~	~~1~~	~~1~~					~~1~~	~~1~~				~~1~~		~~1~~				

~~[a] Anions are to be sampled during the November sampling event.~~

~~[b] Horn area sampling and analysis instruction (SGW-33224) specifies frequency of quarterly for one year (last quarter will be November 2008), then review data and determine frequency. Will schedule annually for FY09 (i.e., November). Can add more if Horn area evaluation warrants.~~

~~[c] Sample regardless of specific conductance.~~

~~NOTES:~~

~~Choice of tube depths to sample for full suite of constituents may vary depending on field conditions. See Table A-2 for recommendations of tube depths to sample.~~

~~Notes for tubes installed 2007 or 2008: Horn area tubes in accordance with SGW-33224; others in accordance with SGW-36398. "S," "M," and "D" indicate relative depths of tubes.~~

~~Frequency: A = annual; S = semi-annual; Q = quarterly~~

~~Q/A = quarterly for key constituents; annually (during low river stage) for full suite~~

~~Numerals in the constituent columns indicate number of samples to be collected during FY09 (e.g., 1 = annual, 4 = quarterly).~~

~~FY = fiscal year~~

~~Table A-1. Aquifer Tube Sampling Sites and Analyses. (19 sheets)~~

~~Tube Name~~	~~Note for Tubes Installed 2007 or 2008~~	~~Scheduled Collection Month~~	~~Frequency~~	~~Field Parameters~~	~~Anions~~	~~Hexavalent Chromium~~	~~Metals (Unfiltered)~~	~~Metals (Filtered)~~	~~Alkalinity~~	~~Arsenic~~	~~Tritium~~	~~Gross Alpha/ Beta~~	~~Gross Beta~~	~~Carbon-14~~	~~Gamma Scan~~	~~Iodine-129~~	~~Strontium-90~~	~~Technetium-99~~	~~Total Uranium~~	~~VOA~~	~~TPH~~	~~TOC~~

~~TOC = total organic carbon~~
~~TPH = total petroleum hydrocarbon~~
~~VOA = volatile organic analysis~~

~~Field parameters include the following:~~

- ~~Dissolved oxygen~~
- ~~Oxidation-reduction potential~~
- ~~pH~~
- ~~Specific conductance~~
- ~~Temperature~~
- ~~Turbidity~~

~~Metals analysis includes the following:~~

- ~~Calcium~~
- ~~Chromium~~
- ~~Magnesium~~
- ~~Potassium~~
- ~~Sodium~~

~~Anions analysis includes the following:~~

- ~~Chloride~~
- ~~Fluoride~~
- ~~Nitrate~~
- ~~Nitrite~~
- ~~Phosphate~~
- ~~Sulfate~~

~~APPENDIX B~~

~~INSTALLATION AND SAMPLING OF NEW AQUIFER SAMPLING TUBES AT THE 100-BC AREA~~

~~Aquifer sampling tubes are small-diameter polyethylene tubes that have a screen at the lower end. The tubes are implanted into the aquifer by driving temporary steel casing into the ground and inserting a tube into the casing. The end of each tube is fitted with a screended section that acts as the sampling port. The temporary steel casing is driven by either a hydraulic ram attached to a vehicle or by a hand-carried pneumatic or hydraulic hammer. The steel casing is then backpulled, leaving the tube and stainless steel drive point in place. Water is withdrawn from the tube using a peristaltic pump. The tubing exposed at the ground surface is of minimal length (several feet) and is protected from wildlife and the elements by polyvinyl chloride conduit. The new aquifer sampling tubes to be installed in the 100-BC Area are listed in Table B-1 at locations shown on Figure B-1. Table B-2 lists the sampling activities for the new aquifer sampling tubes.~~

~~Table B-1. New Aquifer Sampling Tubes for the 100-BC Area~~

~~C7718~~	~~C7724~~	~~C7780~~
~~C7719~~	~~C7725~~	~~C7781~~
~~C7720~~	~~C7726~~	~~C7782~~

~~*This addition of Appendix B was approved under TPA-CN-327.~~

~~Table B-2. Sampling Activities for New Aquifer Sampling Tubes in the 100-BC Area~~

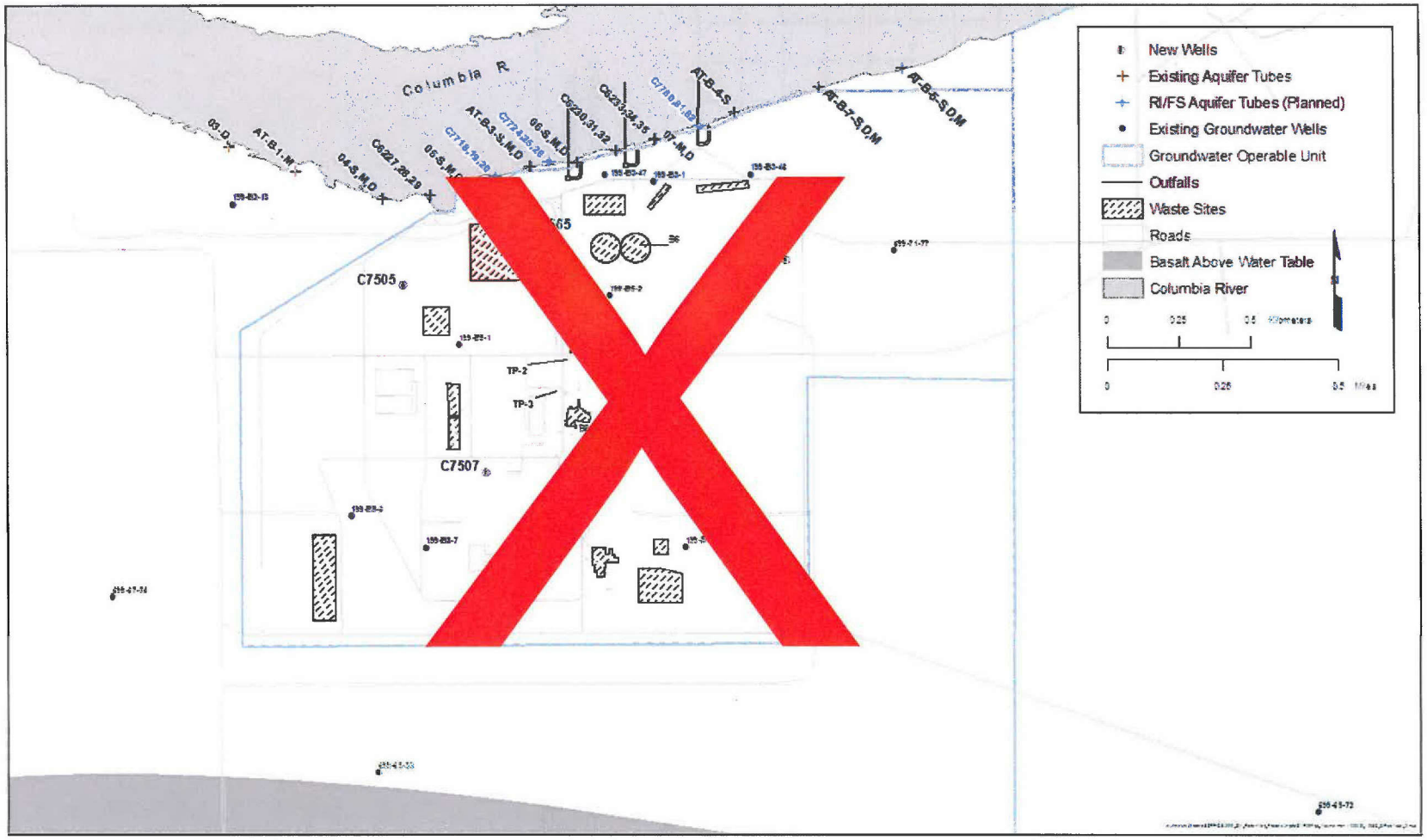
Tube Name	Note for Tube Installed	Frequency	Field Parameters	Anions	Hexavalent Chromium	Metals (Unfiltered)	Metals (Filtered)	Alkalinity	Arsenic	Tritium	Gross Alpha/Beta	Gross Beta	Carbon-14	Gamma Scan	Iodine-129	Strontium-90*	Technetium-99	Total Uranium	VOA	TPH	TOC
C7718	S	A	1		1											1					
C7719	M	A	1		1											1					
C7720	D	A	1	1	1	1	1			1	1					1					
C7724	S	A	1		1											1					
C7725	M	A	1		1											1					
C7726	D	A	1	1	1	1	1			1	1					1					
C7780	S	A	1		1											1					
C7781	M	A	1		1											1					
C7782	D	A	1		1					1						1					

~~*Sample regardless of specific conductance.~~

~~A – annually~~
~~D – deep~~
~~M – middle~~
~~S – shallow~~

~~TOC – total organic carbon~~
~~TPH – total petroleum hydrocarbons~~
~~VOA – volatile organic compounds~~

~~*This addition of Appendix B was approved under TPA-CN-327.~~



~~Figure B-2. Location of Planned and Existing Aquifer Sampling Tubes for the 100-BC Area~~

~~*This addition of Appendix B was approved under TPA-CN-327.~~