

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		700		700		700		700		702		702		702		702		703		703	
Date Collected:		6/18/2012		9/17/2012		11/26/2012		3/18/2013		6/18/2012		9/17/2012		11/26/2012		3/18/2013		6/20/2012		9/7/2012	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<8E-10 U	8E-10	1.3E-10	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.9E-09	1E-9
Lead 210 MDC	µCi/mL	8E-10		-		8E-10		-		8E-10		-		7E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		4E-10		5E-10		-		5E-10		-		4E-10		-		5E-10		6E-10	
Polonium 210	µCi/mL	1.7E-9	6E-10	<1E-10 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-		1E-9		-		7E-10		-		8E-10		-		6E-10		-	
Polonium 210 precision (±)	µCi/mL	9E-10		-		4E-10		-		5E-10		-		3E-10		-		4E-10		-	
Radium 226	µCi/mL	<1.8E-10 U	1.8E-10	<2E-10 U	2E-10	<1.4E-10 U	1.4E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.8E-10		-		1.4E-10		-		1.5E-10		-		1.5E-10		-		1.5E-10		-	
Radium 226 precision (±)	µCi/mL	7E-11		-		1E-10		-		1E-10		-		6E-11		-		9E-10		-	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		2E-10		-		1E-10		-		1E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	5E-11		-		6E-11		-		4E-11		-		4E-11		-		8E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<6E-10 U	6E-10	1.3E-9	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	6E-10		-	-	5E-10		-		6E-10		-		5E-10		-		5E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-	-	3E-10		-		4E-10		-		3E-10		-		3E-10		-	
Polonium 210	µCi/mL	3E-10	2E-10	<1E-9	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	6E-10	3E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	2E-10		-	-	9E-10		-		3E-10		-		7E-10		-		3E-10		-	
Polonium 210 precision (±)	µCi/mL	2E-10		-	-	3E-10		-		4E-10		-		3E-10		-		2E-10		-	
Radium 226	µCi/mL	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.1E-10 U	1.1E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.2E-10		-	-	1.2E-10		-		1.3E-10		-		1.1E-10		-		1.2E-10		-	
Radium 226 precision (±)	µCi/mL	7E-11		-	-	6E-11		-		7E-11		-		6E-11		-		7E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-	-	1E-10		-		1E-10		-		2E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	4E-11		-	-	4E-11		-		5E-11		-		7E-11		-		6E-11		-	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0060	0.0003	0.0066	0.0003	0.0073	0.0003	0.0072	0.0003	0.0034	0.0003	0.0039	0.0003	0.0041	0.0003	0.0040	0.0003	0.0036	0.0003	0.0049	0.0003
Uranium Activity	µCi/mL	4.1E-9	2E-10	4.5E-9	2E-10	4.9E-9	2E-10	4.9E-9	2E-10	2.3E-9	2E-10	2.6E-9	2E-10	2.8E-9	2E-10	2.7E-9	2E-10	2.5E-9	2E-10	3.3E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		703		703		704 <sup>a</sup>		704 <sup>a</sup>		704 <sup>a</sup>		704 <sup>a</sup>		705 <sup>a</sup>		705 <sup>a</sup>		705 <sup>a</sup>		705 <sup>a</sup>	
Date Collected:		11/27/2012		3/21/2013		6/20/2012		9/7/2012		11/27/2012		3/21/2013		6/20/2012		9/19/2012		11/28/2012		3/21/2013	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9	1E-9	<8E-10 U	8E-10	1.3E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		8E-10		-		7E-10		-		9E-10		-		7E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		5E-10		5E-10		4E-10		-		5E-10		-		4E-10		-	
Polonium 210	µCi/mL	<7E-10 U	7E-10	<1E-9	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	1.3E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	7E-10		-		6E-10		-		9E-10		-		6E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-		6E-10		-		3E-10		-		3E-10		8E-10		3E-10		-	
Radium 226	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.8E-10	1.8E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	2E-10		-		1.7E-10		-		1.6E-10		-		1.6E-10		-		1.8E-10		-	
Radium 226 precision (±)	µCi/mL	1.2E-10		-		9E-10		-		9E-11		-		9E-10		-		8E-10		-	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		2E-10		-		2E-10		-		1E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	6E-11		-		7E-11		-		8E-11		-		6E-11		-		7E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<5E-10 U	5E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	3.8E-9 B	1E-9	9E-10	6E-10	1E-9	1E-9
Lead 210 MDC	µCi/mL	5E-10		-		6E-10		-		5E-10		-		8E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	3E-10		-		4E-10		-		3E-10		-		5E-10		6E-10 B		4E-10		4E-10	
Polonium 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<2E-10 U	2E-10	<1E-10 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	7E-10		-		3E-10		-		7E-10		-		2E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-		1E-10		-		5E-10		-		2E-10		-		5E-10		-	
Radium 226	µCi/mL	<1.1E-10 U	1E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.1E-10 U	1.1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	1.7E-10	1.2E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1E-10		-		1.2E-10		-		1.1E-10		-		1.3E-10		-		1.2E-10		-	
Radium 226 precision (±)	µCi/mL	6E-11		-		6E-11		-		5E-11		-		5E-11		-		1E-10		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-		1E-10		-		1E-10		-		1E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	5E-11		-		6E-11		-		5E-11		-		4E-11		-		7E-11		-	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0051	0.0003	0.0055	0.0003	0.0032	0.0003	0.0052	0.0003	0.0053	0.0003	0.0051	0.0003	0.0056	0.0003	0.0064	0.0003	0.0059	0.0003	0.0052	0.0003
Uranium Activity	µCi/mL	3.5E-9	2E-10	3.7E-9	2E-10	2.2E-9	2E-10	3.5E-9	2E-10	3.6E-9	2E-10	3.5E-9	2E-10	3.8E-10	2E-10	4.3E-9	2E-10	4E-9	2E-10	3.5E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

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B - Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		706 <sup>a</sup>		706 <sup>a</sup>		706 <sup>a</sup>		706 <sup>a</sup>		707 <sup>a</sup>		707 <sup>a</sup>		707 <sup>a</sup>		707 <sup>a</sup>		714 <sup>b</sup>		714 <sup>b</sup>	
Date Collected:		6/20/2012		9/7/2012		11/28/2012		3/20/2013		6/19/2012		9/7/2012		11/28/2012		3/21/2013		6/21/2012		9/18/2012	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<9E-10 U	9E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.2E-9	1E-9	<7E-10 U	7E-10	1.1E-9	1E-9	<9E-10 U	9E-10	1.1E-9	1E-9
Lead 210 MDC	µCi/mL	9E-10		-		7E-10		-		8E-10		-		7E-10		-		9E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		-		4E-10		-		5E-10		5E-10		4E-10		4E-10		5E-10		5E-10	
Polonium 210	µCi/mL	<1E-9 U	1E-9	1.2E-10	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-10 U	1E-9
Polonium 210 MDC	µCi/mL	1E-9		-		8E-10		-		3E-10		-		7E-10		-		1E-9		-	
Polonium 210 precision (±)	µCi/mL	7E-10		8E-10		4E-10		-		2E-10		-		3E-10		-		8E-10		-	
Radium 226	µCi/mL	<1.6E-10	1.6E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.4E-10 U	1.4E-10	<2E-10	2E-10	<1.7E-10	1.7E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.6E-10		-		1.6E-10		-		1.6E-10		-		1.4E-10		-		1.7E-10		-	
Radium 226 precision (±)	µCi/mL	1E-10		-		8E-10		-		9E-11		-		9E-11		-		1E-10		-	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<9E-11 U	9E-11	<2E-10	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		1E-10		-		2E-10		-		9E-11		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	1E-10		-		3E-11		-		6E-11		-		6E-11		-		5E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<5E-10 U	5E-10	<1E-9 U	1E-9	6E-10	6E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	7E-10	6E-10	1.1E-9	1E-9	<6E-10 U	6E-10	1.4E-9	1E-9
Lead 210 MDC	µCi/mL	5E-10		-		6E-10		-		8E-10		-		6E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	3E-10		-		4E-10		-		5E-10		-		4E-10		4E-10		4E-10		4E-10	
Polonium 210	µCi/mL	<2E-10 U	2E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	2E-10		-		5E-10		-		3E-10		-		7E-10		-		3E-10		-	
Polonium 210 precision (±)	µCi/mL	1E-10		-		4E-10		-		2E-10		-		5E-10		-		1E-10		-	
Radium 226	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1E-10		-		1.2E-10		-		1.2E-10		-		1.2E-10		-		1.3E-10		-	
Radium 226 precision (±)	µCi/mL	5E-11		-		7E-10		-		5E-11		-		7E-10		-		6E-11		-	
Thorium 230	µCi/mL	<9E-11 U	9E-11	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	9E-11		-		1E-10		-		1E-10		-		1E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	4E-11		-		5E-11		-		6E-11		-		6E-11		-		9E-11		-	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0038	0.0003	0.0056	0.0003	0.0059	0.0003	0.0058	0.0003	0.0036	0.0003	0.005	0.0003	0.0048	0.0003	0.0052	0.0003	0.0086	0.0003	0.0055	0.0003
Uranium Activity	µCi/mL	2.5E-9	2E-10	3.5E-9	2E-10	4E-9	2E-10	3.9E-9	2E-10	2.4E-9	2E-10	3.4E-9	2E-10	3.2E-9	2E-10	3.5E-9	2E-10	5.8E-9	2.00E-10	3.7E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		714 <sup>b</sup>		714 <sup>b</sup>		715 <sup>c</sup>		716 <sup>c</sup>		719		719		719		719		720 <sup>e</sup>		720 <sup>e</sup>	
Date Collected:		11/28/2012		3/21/2013		6/21/2012		6/21/2012		6/21/2012		9/18/2012		11/27/2012		3/18/2013		6/21/2012		9/17/2012	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9	1E-9	<9E-10 U	9E-10	<9E-10 U	9E-10	<9E-10 U	9E-10	1.4E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		9E-10		9E-10		9E-10		-		7E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		5E-10		5E-10		5E-10		5E-10		4E-10		-		5E-10		-	
Polonium 210	µCi/mL	<8E-10 U	8E-10	<1E-9	1E-9	<1E-9 U	1E-9	<1E-9	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	1.5E-9	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	8E-10		-		1E-9		1E-9		6E-10		-		9E-10		-		9E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-		5E-10		4E-10		4E-10		-		3E-10		-		7E-10		-	
Radium 226	µCi/mL	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<1.7E-10 U	1.7E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.8E-10	1.8E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.6E-10		-		1.7E-10		1.7E-10		1.7E-10		-		1.7E-10		-		1.8E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		1E-10		8E-11		8E-11		-		5E-11		-		9E-11		-	
Thorium 230	µCi/mL	<2E-10	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		1E-10		1E-10		2E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	7E-11		-		6E-11		5E-11		6E-11		-		8E-11		-		9E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<5E-10 U	5E-10	3.5E-9	1E-9	<7E-10 U	7E-10	<7E-10 U	7E-10	<7E-10 U	7E-10	1.3E-9 B	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	5E-10		-		7E-10		7E-10		7E-10		-		5E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	3E-10		6E-10		4E-10		4E-10		4E-10		5E-10 B		3E-10		-		5E-10		-	
Polonium 210	µCi/mL	<7E-10 U	7E-10	2.9E-9	1E-9	<3E-10 U	3E-10	<4E-10 U	4E-10	<3E-10 U	3E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	7E-10		-		3E-10		4E-10		3E-10		-		7E-10		-		3E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		9E-10		2E-10		1E-10		2E-10		-		4E-10		-		2E-10		-	
Radium 226	µCi/mL	<1.1E-10 U	1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<1.3E-10 U	1.3E-10	1.1E-10 U	1.1E-10	<2E-10 U	2E-10	<1.1E-10 U	1.1E-10	<2E-10 U	2E-10	<1.5E-10	1.5E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.1E-10		-		1.3E-10		1.3E-10		1.1E-10		-		1.1E-10		-		1.5E-10		-	
Radium 226 precision (±)	µCi/mL	7E-11		-		6E-11		0.07		6E-11		-		6E-11		-		6E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<9E-11 U	9E-11	<1E-10 U	1E-10	<9E-11	9E-11	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10	1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-		9E-11		1E-10		9E-11		-		1E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	5E-10		-		6E-11		8E-11		6E-11		-		4E-11		-		6E-11		-	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.006	0.0003	0.006	0.0003	0.0058	0.0003	0.0059	0.0003	0.0072	0.0003	0.0087	0.0003	0.0065	0.0003	0.006	0.0003	0.0067	0.0003	0.0073	0.0003
Uranium Activity	µCi/mL	4.1E-9	2E-10	4.1E-9	2E-10	3.9E-9	2E-10	4E-9	2E-10	4.9E-9	2E-10	5.9E-9	2E-10	4.4E-9	2E-10	4.1E-9	2E-10	4.6E-9	2E-10	4.9E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		720 <sup>e</sup>		720 <sup>e</sup>		721 <sup>e</sup>		721 <sup>e</sup>		721 <sup>e</sup>		721 <sup>e</sup>		722		722		722		722	
Date Collected:		11/27/2012		3/21/2013		6/21/2012		9/17/2012		11/27/2012		3/18/2013		6/21/2012		9/17/2012		11/27/2012		3/21/2013	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	1.3E-9	1E-9	<7E-10 U	7E-10	1E-9	1E-9	<9E-10 U	9E-10	1.3E-9	1E-9	<7E-10 U	7E-10	1.6	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		9E-10		-		7E-10		-		9E-10		-		7E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		5E-10		4E-10		4E-10		4E-10		5E-10		4E-10		4E-10		7E-10	
Polonium 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<1.7E-9 U	1.7E-9	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	7E-10		-		1.7E-9		-		9E-10		-		7E-10		-		9E-10		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-		1E-9		-		3E-10		-		3E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.4E-10	1.4E-10	<2E-10 U	2E-10	1.3E-9 U	1E-10	<2E-10 U	2E-10	<1.5E-10	1.5E-10	<2E-10 U	2E-10	<1.7E-10	1.7E-10	<2E-10 U	2E-10	<1.5E-10	1.5E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.4E-10		-		1E-10		-		1.5E-10		-		1.7E-10		-		1.5E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		2.6E-10		-		9E-11		-		7E-11		-		9E-11		-	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		2E-10		-		2E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	7E-11		-		7E-11		-		7E-11		-		5E-11		-		7E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<5E-10 U	5E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	5E-10		-		7E-10		-		5E-10		-		7E-10		-		5E-10		-	
Lead 210 precision (±)	µCi/mL	3E-10		-		4E-10		-		3E-10		-		4E-10		-		3E-10		-	
Polonium 210	µCi/mL	<9E-10 U	9E-10	<1E-9 U	1E-9	<4E-10 U	4E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<4E-10 U	4E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	9E-10		-		4E-10		-		6E-10		-		4E-10		-		6E-10		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-		1E-10		-		4E-10		-		1E-10		-		4E-10		-	
Radium 226	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.1E-10	1.1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.1E-10 U	1.1E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1E-10		-		1.3E-10		-		1.1E-10		-		1.3E-10		-		1.1E-10		-	
Radium 226 precision (±)	µCi/mL	6E-11		-		6E-11		-		7E-10		-		6E-11		-		7E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-		1E-10		-		1E-10		-		1E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	4E-11		-		7E-11		-		4E-11		-		7E-11		-		7E-11		-	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0082	0.0003	0.0077	0.0003	0.0074	0.0003	0.0055	0.0003	0.0056	0.0003	0.0054	0.0003	0.0088	0.0003	0.0061	0.0003	0.0086	0.0003	0.0084	0.0003
Uranium Activity	µCi/mL	5.6E-9	2E-10	5.2E-9	2E-10	5E-9	2E-10	3.7E-9	2E-10	3.8E-9	2E-10	3.7E-9	2E-10	6E-9	2E-10	4.1E-9	2E-10	5.8E-9	2E-10	5.7E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		723 <sup>d</sup>		723 <sup>d</sup>		725		725		725		725		725		725		727		727	
Date Collected:		6/19/2012		9/17/2012		3/31/2011		6/15/2011		6/21/2012		9/18/2012		11/29/2012		3/20/2013		6/19/2012		9/18/2012	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<8E-10 U	8E-10	1.5E-9	1E-9	<8E-10 U	8E-10	<8E-10 U	8E-10	<8E-10 U	8E-10	1.7E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	1.9E-9	1E-9
Lead 210 MDC	µCi/mL	8E-10		-		8E-10		8E-10		8E-10		-		7E-10		-		9E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		6E-10		5E-10		5E-10		5E-10		6E-10		4E-10		-		5E-10		5E-10	
Polonium 210	µCi/mL	<6E-10 U	6E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<5E-10 U	5E-10	<5E-10 U	5E-10	1.2E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	1.8E-9	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-		5E-10		5E-10		5E-10		-		7E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	5E-10		-		3E-10		3E-10		4E-10		7E-10		4E-10		-		4E-10		9E-10	
Radium 226	µCi/mL	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	3E-10	9E-11	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.6E-10		-		2E-10		9E-11		1.6E-10		-		1.6E-10		-		1.5E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		6E-11		1E-10		7E-11		-		7E-11		-		7E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-		1E-10		1E-10		2E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	6E-11		-		6E-11		7E-11		5E-11		-		6E-11		-		6E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<8E-10 U	8E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<6E-10 U	6E-10	<8E-10 U	8E-10	1.1E-9 B	1E-9	<6E-10 U	6E-10	1.8E-9	1E-9	<8E-10 U	8E-10	1.5E-9 B	1E-9
Lead 210 MDC	µCi/mL	8E-10		-		7E-10		6E-10		8E-10		-		6E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		-		4E-10		3E-10		5E-10		5E-10 B		4E-10		5E-10		5E-10		5E-10 B	
Polonium 210	µCi/mL	<3E-10 U	3E-10	<1E-9 U	1E-9	<2E-10 U	2E-10	<2E-10 U	2E-10	<3E-10 U	3E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	3E-10		-		2E-10		2E-10		3E-10		-		6E-10		-		3E-10		-	
Polonium 210 precision (±)	µCi/mL	1E-10		-		1E-10		8E-11		1E-10		-		3E-10		-		2E-10		-	
Radium 226	µCi/mL	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<1E-10 U	1E-10	<1.4E-10 U	1.4E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.2E-10 U	1E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.2E-10		-		1E-10		1E-10		1.4E-10		-		1.3E-10		-		1.2E-10		-	
Radium 226 precision (±)	µCi/mL	6E-11		-		6E-11		5E-11		7E-11		-		9E-11		-		5E-11		-	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<1E-10 U	1E-10	<1E-10 U	1E-10	2E-10	2E-10	<9E-11 U	9E-11	<2E-10 U	2E-10	<1E-10 U	1E-10	2E-10	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		1E-10		1E-10		1E-10		-		9E-11		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	8E-11		-		7E-11		4E-11		5E-11		1E-10		4E-11		-		6E-11		1E-10	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0056	0.0003	0.0078	0.0003	0.0071	0.0003	0.0065	0.0003	0.0047	0.0003	0.006	0.0003	0.0075	0.0003	0.0059	0.0003	0.0089	0.0003	0.009	0.0003
Uranium Activity	µCi/mL	3.8E-9	2E-10	5.3E-9	2E-10	4.8E-9	2E-10	4.4E-9	2E-10	3.2E-9	2E-10	4.1E-9	2E-10	5.1E-9	2E-10	4E-9	2E-10	6.1E-9	2E-10	6.1E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		727		727		728		728		728		728		730 <sup>a,d</sup>		730 <sup>a,d</sup>		731 <sup>d</sup>		731 <sup>d</sup>	
Date Collected:		11/29/2012		3/18/2013		6/19/2012		9/17/2012		12/5/2012		3/18/2013		6/19/2012		9/17/2012		6/20/2012		9/18/2012	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9	1E-9	<7E-10 U	7E-10	1.2E-9	1E-9	<8E-10 U	8E-10	1.5E-9	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		8E-10		-		7E-10		-		8E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		5E-10		-		4E-10		4E-10		5E-10		5E-10		5E-10		-	
Polonium 210	µCi/mL	<9E-10 U	9E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	5E-10	5E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	9E-10		-		6E-10		-		1E-9		-		5E-10		-		5E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-		2E-10		-		6E-10		-		3E-10		-		5E-10		-	
Radium 226	µCi/mL	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.6E-10		-		1.6E-10		-		2E-10		-		1.6E-10		-		1.7E-10		-	
Radium 226 precision (±)	µCi/mL	9E-11		-		6E-11		-		1E-10		-		7E-11		-		1E-10		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-		2E-10		-		1E-10		-		1E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	7E-11		-		5E-11		-		4E-11		-		5E-11		-		6E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	7E-10	6E-10	1.4E-9	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.1E-9	1E-9
Lead 210 MDC	µCi/mL	6E-10		-		8E-10		-		6E-10		-		8E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		4E-10		5E-10		-		4E-10		-		5E-10		-		5E-10		5E-10	
Polonium 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<2E-10 U	2E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9	<2E-10 U	2E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	7E-10		-		2E-10		-		5E-10		-		3E-10		-		2E-10		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-		0.07		-		2E-10		-		1E-10		-		2E-10		-	
Radium 226	µCi/mL	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.2E-10		-		1.3E-10		-		1E-10		-		1.3E-10		-		1.3E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		7E-11		-		5E-11		-		6E-11		-		5E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	2E-10	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	2E-10	2E-10	<1E-10 U	1E-10	2E-10	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-		1E-10		-		1E-10		-		2E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	5E-11		-		4E-11		1E-10		7E-11		-		6E-11		1E-10		6E-11		1E-10	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0104	0.0003	0.0084	0.0003	0.0063	0.0003	0.0066	0.0003	0.0077	0.0003	0.0067	0.0003	0.0056	0.0003	0.0079	0.0003	0.0055	0.0003	0.0073	0.0003
Uranium Activity	µCi/mL	7E-9	2E-10	5.7E-9	2E-10	4.3E-9	2E-10	4.5E-9	2E-10	5.2E-9	2E-10	4.5E-9	2E-10	3.8E-9	2E-10	5.4E-9	2E-10	3.7E-9	2E-10	4.9E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	0.0006	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	4E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:		732 <sup>c</sup>		732 <sup>c</sup>		734 <sup>b</sup>		734 <sup>b</sup>		734 <sup>b</sup>		734 <sup>b</sup>		735 <sup>b,d</sup>		736 <sup>b,c</sup>		736 <sup>b,c</sup>		737 <sup>b,c</sup>	
Date Collected:		6/19/2012		9/7/2012		6/20/2012		9/7/2012		12/5/2012		3/21/2013		6/20/2012		6/2012		9/7/2012		6/29/2012	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<8E-10 U	8E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.6E-9	1E-9	<8E-10 U	8E-10	2.5E-9	1E-9	<8E-10 U	8E-10	<9E-10 U	9E-10	<1E-9 U	1E-9	<9E-10 U	9E-10
Lead 210 MDC	µCi/mL	8E-10		-		8E-10		-		8E-10		-		8E-10		9E-10		-		9E-10	
Lead 210 precision (±)	µCi/mL	5E-10		-		5E-10		6E-10		5E-10		4E-10		5E-10		5E-10		-		5E-10	
Polonium 210	µCi/mL	<6E-10	6E-10	<1E-9 U	1E-9	7E-10	6E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<7E-10 U	7E-10	<8E-10 U	8E-10	<1E-9 U	1E-9	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-		6E-10		-		1E-9		-		7E-10		8E-10		-		1E-9	
Polonium 210 precision (±)	µCi/mL	4E-10		-		7E-10		-		7E-10		-		4E-10		3E-10		-		7E-10	
Radium 226	µCi/mL	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<1.9E-10 U	1.9E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.6E-10		-		1.6E-10		-		1.7E-10		-		1.6E-10		1.9E-10		-		2E-10	
Radium 226 precision (±)	µCi/mL	9E-11		-		6E-11		-		9E-11		-		1E-10		1.2E-10		-		1E-10	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		1E-10		-		1E-10		-		2E-10		2E-10		-		2E-10	
Thorium 230 precision (±)	µCi/mL	7E-11		-		6E-11		-		6E-11		-		1E-10		7E-11		-		6E-11	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<9E-10 U	9E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1E-9	1E-9	8E-10	6E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<8E-10 U	8E-10	<1E-9 U	1E-9	<7E-10 U	7E-10
Lead 210 MDC	µCi/mL	9E-10		-		8E-10		-		6E-10		-		8E-10		8E-10		-		7E-10	
Lead 210 precision (±)	µCi/mL	5E-10		-		5E-10		4E-10		4E-10		-		5E-10		5E-10		-		4E-10	
Polonium 210	µCi/mL	<2E-10 U	2E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<4E-10 U	4E-10	<1E-9 U	1E-9	<4E-10 U	4E-10
Polonium 210 MDC	µCi/mL	2E-10		-		3E-10		-		5E-10		-		3E-10		4E-10		-		4E-10	
Polonium 210 precision (±)	µCi/mL	1E-10		-		2E-10		-		4E-10		-		1E-10		2E-10		-		2E-10	
Radium 226	µCi/mL	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.1E-10 U	1.1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<6E-11 U	6E-11	<2E-10 U	2E-10	<6E-11 U	6E-11
Radium 226 MDC	µCi/mL	1.2E-10		-		1.3E-10		-		1.1E-10		-		1.3E-10		6E-11		-		6E-11	
Radium 226 precision (±)	µCi/mL	5E-11		-		6E-11		-		6E-11		-		5E-11		3E-11		-		3E-11	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	6E-11	4E-11	<2E-10 U	2E-10	5E-11	4E-11
Thorium 230 MDC	µCi/mL	1E-10		-		1E-10		-		1E-10		-		1E-10		4E-11		-		4E-11	
Thorium 230 precision (±)	µCi/mL	6E-11		-		8E-11		-		7E-11		-		4E-11		3E-11		-		3E-11	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0066	0.0003	0.0075	0.0003	0.0078	0.0003	0.0089	0.0003	0.009	0.0003	0.0069	0.0003	0.0063	0.0003	0.0081	0.0003	0.0069	0.0003	0.0086	0.0003
Uranium Activity	µCi/mL	4.5E-9	2E-10	5.1E-9	2E-10	5.2E-9	2E-10	6E-9	2E-10	6.1E-9	2E-10	4.7E-9	2E-10	4.2E-9	2E-10	5.5E-9	2E-10	4.7E-9	2E-10	5.8E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	0.001	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	6.5E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2.0E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.



Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:	737 <sup>b,c</sup>		737 <sup>b,c</sup>		739		739		739		739		740 <sup>c</sup>		740 <sup>c</sup>		741		741		
Date Collected:	9/28/2012		3/21/2013		6/20/2012		9/18/2012		11/27/2012		3/21/2013		6/20/2012		9/18/2012		3/31/2011		6/10/2011		
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<1E-9 U	1E-9	1.5E-9	1E-9	<8E-10 U	8E-10	1.5E-9	1E-9	<8E-10 U	8E-10	3E-9	1E-9	<8E-10 U	8E-10	1.7E-9	1E-9	<8E-10 U	8E-10	<1.1E-9 U	1.1E-9
Lead 210 MDC	µCi/mL	-		-		8E-10		-		8E-10		-		8E-10		-		8E-10		1.1E-9	
Lead 210 precision (±)	µCi/mL	-		4E-10		5E-10		5E-10		5E-10		1E-9		5E-10		5E-10		5E-10		6E-10	
Polonium 210	µCi/mL	<1E-9 U	1E-9	<1.E-9	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	1.1E-9	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<5E-10 U	5E-10
Polonium 210 MDC	µCi/mL	-		-		8E-10		-		7E-10		-		6E-10		-		5E-10		5E-10	
Polonium 210 precision (±)	µCi/mL	-		-		4E-10		-		4E-10		4E-10		5E-10		-		4E-10		3E-10	
Radium 226	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	2.9E-10	1E-10
Radium 226 MDC	µCi/mL	-		-		1.5E-10		-		1.6E-10		-		1.3E-10		-		2E-10		1E-10	
Radium 226 precision (±)	µCi/mL	-		-		1E-10		-		7E-11		-		9E-11		-		6E-11		1E-10	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	-		-		2E-10		-		2E-10		-		2E-10		-		2E-10		2E-10	
Thorium 230 precision (±)	µCi/mL	-		-		6E-11		-		6E-11		-		8E-11		-		8E-11		7E-10	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<1E-9 U	1E-9	<1E-9 U	1E-9	<8E-10 U	8E-10	1.2E-9	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<6E-10 U	6E-10
Lead 210 MDC	µCi/mL	-		-		8E-10		-		5E-10		-		8E-10		-		7E-10		6E-10	
Lead 210 precision (±)	µCi/mL	-		-		4E-10		5E-10		3E-10		-		5E-10		-		4E-10		4E-10	
Polonium 210	µCi/mL	<1E-9 U	1E-9	<1E-9 U	1E-9	<3E-10 U	3E-10	2.8E-9	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<2E-10 U	2E-10	1.2E-9	1E-9	<2E-10 U	2E-10	<2E-10 U	2E-10
Polonium 210 MDC	µCi/mL	-		-		3E-10		-		1E-9		-		2E-10		-		2E-10		2E-10	
Polonium 210 precision (±)	µCi/mL	-		-		2E-10		6E-10		5E-10		-		2E-10		5E-10		1E-10		1E-10	
Radium 226	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<1E-10 U	1E-10
Radium 226 MDC	µCi/mL	-		-		1.2E-10		-		1E-10		-		1.3E-10		-		1E-10		1E-10	
Radium 226 precision (±)	µCi/mL	-		-		5E-11		-		4E-11		-		6E-11		-		6E-11		5E-11	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10
Thorium 230 MDC	µCi/mL	-		-		1E-10		-		1E-10		-		1E-10		-		2E-10		1E-10	
Thorium 230 precision (±)	µCi/mL	-		-		5E-11		-		4E-11		-		6E-11		-		9E-11		7E-11	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0061	0.0003	0.0059	0.0003	0.0089	0.0003	0.0097	0.0003	0.0114	0.0003	0.0102	0.0003	0.013	0.0003	0.0191	0.0003	0.0058	0.0003	0.0081	0.0003
Uranium Activity	µCi/mL	4.1E-9	2E-10	4E-9	2E-10	6E-9	2E-10	6.6E-9	2E-10	7.7E-9	2E-10	6.9E-9	2E-10	8.8E-9	2E-10	1.29E-8	2E-10	3.9E-9	2E-10	5.5E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	0.001	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	6.5E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.

Table 2.9-5 Radiological Analyses for Private Water Supply Wells in Marsland Area of Review

Location ID:	741	741	742	742	742	742	743 <sup>b</sup>	743 <sup>b</sup>	743 <sup>b</sup>	743 <sup>b</sup>											
Date Collected:	9/22/2011	12/15/2011	6/20/2012	9/18/2012	11/27/2012	3/21/2013	6/18/2012	9/17/2012	11/26/2012	3/18/2013											
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL		
<b>RADIONUCLIDES-DISSOLVED</b>																					
Lead 210	µCi/mL	<7E-10	7E-10	<7E-10	7E-10	<7E-10 U	7E-10	2.2E-9	1E-9	<8E-10 U	8E-10	1.5E-9	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		7E-10		7E-10		-		8E-10		-		8E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		4E-10		5E-10		5E-10		5E-10		5E-10		5E-10		-		5E-10		-	
Polonium 210	µCi/mL	6E-10	5E-10	1.7E-9	1.3E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	1.6E-9	6E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	5E-10		1.3E-9		8E-10		-		8E-10		-		6E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	5E-10		1.5E-9		3E-10		-		6E-10		-		1E-9		-		3E-10		-	
Radium 226	µCi/mL	2.4E-9	2E-10	5E-10	1E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	4.2E-10	1.8E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	2E-10		1E-10		1.5E-10		-		1.5E-10		-		1.8E-10		-		1.5E-10		-	
Radium 226 precision (±)	µCi/mL	3E-10		1E-10		9E-11		-		1E-10		-		1.7E-10		-		8E-11		-	
Thorium 230	µCi/mL	<2E-10	2E-10	<1E-10	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		1E-10		2E-10		-		2E-10		-		1E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	6E-11		5E-11		6E-11		-		5E-11		-		5E-11		-		9E-11		-	
<b>RADIONUCLIDES-SUSPENDED</b>																					
Lead 210	µCi/mL	<6E-10	6E-10	<8E-10	8E-10	<8E-10 U	8E-10	1.5E-9	1E-9	<5E-10 U	5E-10	1.9E-9	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	6E-10		8E-10		8E-10		-		5E-10		-		6E-10		-		5E-10		-	
Lead 210 precision (±)	µCi/mL	3E-10		5E-10		5E-10		5E-10		3E-10		4E-10		4E-10		-		3E-10		-	
Polonium 210	µCi/mL	<2E-10	2E-10	<6E-10	6E-10	<2E-10 U	2E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	7E-10	3E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	2E-10		6E-10		2E-10		-		1E-9		-		3E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	8E-11		2E-10		1E-10		-		4E-10		-		4E-10		-		3E-10		-	
Radium 226	µCi/mL	<1E-10	1E-10	<1E-10	1E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.4E-10	1.4E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1E-10		1E-10		1.3E-10		-		1.2E-10		-		1.4E-10		-		1E-10		-	
Radium 226 precision (±)	µCi/mL	3E-11		8E-11		5E-11		-		6E-11		-		5E-11		-		7E-11		-	
Thorium 230	µCi/mL	2E-10	1E-10	<1E-10	1E-10	<1E-10 U	1E-10	3E-10	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		1E-10		1E-10		-		1E-10		-		1E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	1E-10		5E-11		6E-11		1E-10		4E-11		-		5E-11		-		5E-11		-	
<b>METALS, DISSOLVED</b>																					
Uranium	mg/L	0.0091	0.0003	0.0057	0.0003	0.0128	0.0003	0.0116	0.0003	0.0128	0.0003	0.0095	0.0003	0.0165	0.0003	0.0057	0.0003	0.0077	0.0003	0.0075	0.0003
Uranium Activity	µCi/mL	6.2E-9	2E-10	3.9E-9	2E-10	8.6E-9	2E-10	7.9E-9	2E-10	8.7E-9	2E-10	6.4E-9	2E-10	1.1E-8	2E-10	3.9E-9	2E-10	5.2E-9	2E-10	5.1E-9	2E-10
<b>METALS, SUSPENDED</b>																					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10

Notes:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

B- Analyte detected in the associated method blank

µCi/mL - microcuries per milliliter

mg/l - milligrams per liter

<sup>a</sup> Discussions with land owners regarding known completion depths of private water wells in the area suggest that these wells are completed within the Arikaree Formation or the Brule Formation or a combination of both.

<sup>b</sup> Information provided by private well owner and nearby well data indicate that one or more aquifer is used, but cannot be specifically determined. Assigned formation based on available information.

<sup>c</sup> Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.

<sup>d</sup> Well is inoperable, resulting in partial sampling events.

<sup>e</sup> CBR driller water supply.