

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

Location ID:	744	744	744	744	745 ^c	745 ^c	745 ^c	745 ^c	746 ^a	746 ^a											
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	6/18/2012	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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<8E-10 U	8E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	1.3E-9	1E-9	<8E-10 U	8E-10	2.8E-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	8E-10		-		7E-10		-		8E-10		-		7E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		-		4E-10		4E-10		5E-10		7E-10		4E-10		-		5E-10		-	
Polonium 210	µCi/mL	1E-9	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<4E-10 U	4E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	5E-10		-		8E-10		-		4E-10		-		7E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	6E-10		-		3E-10		-		4E-10		-		3E-10		-		5E-10		-	
Radium 226	µCi/mL	4.6E-10	2E-10	<2E-10 U	2E-10	1.9E-10	1.6E-10	<2E-10 U	2E-10	<2.4E-10 U	2.4E-10	<2E-10 U	2E-10	<1.6E-10	1.6E-10	<2E-10 U	2E-10	1.7E-10	1.7E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	2E-10		-		1.6E-10		-		2.4E-10		-		1.6E-10		-		1.7E-10		-	
Radium 226 precision (±)	µCi/mL	1.9E-10		-		1.3E-10		-		1.5E-10		-		7E-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	<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		-		2E-10		-		1E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	9E-11		-		7E-11		-		5E-11		-		6E-11		-		8E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<6E-10 U	6E-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	<6E-10 U	6E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	6E-10		-		5E-10		-		7E-10		-		5E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		3E-10		-		4E-10		-		3E-10		-		4E-10		-	
Polonium 210	µCi/mL	<2E-10 U	2E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	5E-10	3E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<2E-10 U	2E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	2E-10		-		9E-10		-		3E-10		-		8E-10		-		2E-10		-	
Polonium 210 precision (±)	µCi/mL	2E-10		-		3E-10		-		3E-10		-		3E-10		-		1E-10		-	
Radium 226	µCi/mL	<1.5E-10	1.5E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10	<1.6E-10	1.6E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.5E-10		-		1E-10		-		1.7E-10		-		1E-10		-		1.6E-10		-	
Radium 226 precision (±)	µCi/mL	1E-10		-		7E-11		-		7E-11		-		7E-11		-		9E-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	<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	4E-11		-		5E-11		-		4E-11		-		5E-11		-		4E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0043	0.0003	0.0038	0.0003	0.0034	0.0003	0.0028	0.0003	0.0072	0.0003	0.0268	0.0003	0.0282	0.0003	0.0179	0.0003	0.0114	0.0003	0.0069	0.0003
Uranium Activity	µCi/mL	2.9E-9	2E-10	2.6E-9	2E-10	2.3E-9	2E-10	1.9E-9	2E-10	4.8E-9	2E-10	1.81E-8	2E-10	1.9E-8	2E-10	1.21E-8	2E-10	7.8E-9	2E-10	4.7E-9	2E-10
METALS, SUSPENDED																					
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 U	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

^a 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.

^b 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.

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

^d Well is inoperable, resulting in partial sampling events.

^e CBR driller water supply.

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

Location ID:		746 ^a		746 ^a		747		747		747		747		748 ^a		748 ^a		748 ^a		748 ^a	
Date Collected:		11/29/2012		3/18/2013		6/18/2012		9/17/2012		11/26/2012		3/18/2013		6/18/2012		9/17/2012		11/26/2012		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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.6E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.3E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		8E-10		-		7E-10		-		8E-10		-		7E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		5E-10		4E-10		4E-10		-		5E-10		4E-10		4E-10		-	
Polonium 210	µCi/mL	<1E-9 U	1E-9	<1E-9 U	1E-9	<4E-10 U	4E-10	<1E-9 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
Polonium 210 MDC	µCi/mL	1E-9		-		4E-10		-		1E-9		-		7E-10		-		8E-10		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-		3E-10		-		4E-10		-		4E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.5E-10	1.5E-10	<2E-10 U	2E-10	<1.7E-10	1.7E-10	<2E-10 U	2E-10	<1.4E-10	1.4E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.5E-10		-		1.7E-10		-		1.4E-10		-		1.7E-10		-		1.5E-10		-	
Radium 226 precision (±)	µCi/mL	6E-11		-		1.1E-10		-		7E-11		-		1.2E-10		-		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	<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		-		2E-10		-		1E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	7E-11		-		7E-11		-		5E-11		-		7E-11		-		7E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<6E-10 U	6E-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	<6E-10 U	6E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	1.9E-9	1E-9
Lead 210 MDC	µCi/mL	6E-10		-		6E-10		-		5E-10		-		6E-10		-		5E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		4E-10		-		3E-10		-		4E-10		-		3E-10		4E-10	
Polonium 210	µCi/mL	<5E-10 U	5E-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	<2E-10 U	2E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	5E-10		-		3E-10		-		5E-10		-		2E-10		-		8E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-		1E-10		-		3E-10		-		1E-10		-		5E-10		-	
Radium 226	µCi/mL	<1.2E-10	1.2E-10	<2E-10 U	2E-10	<1.5E-10	1.5E-10	<2E-10 U	2E-10	<9E-11 U	9E-11	<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		-		1.5E-10		-		9E-11		-		1.3E-10		-		1.1E-10		-	
Radium 226 precision (±)	µCi/mL	7E-11		-		6E-11		-		5E-11		-		9E-11		-		5E-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	<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	6E-11		-		7E-11		-		6E-11		-		5E-11		-		5E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0075	0.0003	0.0073	0.0003	0.0134	0.0003	0.0078	0.0003	0.0061	0.0003	0.0047	0.0003	0.0082	0.0003	0.0051	0.0003	0.0043	0.0003	0.0042	0.0003
Uranium Activity	µCi/mL	5.1E-9	2E-10	4.9E-9	2E-10	9.1E-9	2E-10	5.3E-9	2E-10	4.2E-9	2E-10	3.2E-9	2E-10	5.6E-9	2E-10	3.5E-9	2E-10	2.9E-9	2E-10	2.8E-9	2E-10
METALS, SUSPENDED																					
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

^a 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.

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^d Well is inoperable, resulting in partial sampling events.

^e CBR driller water supply.

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

Location ID:		750 ^a		750 ^a		750 ^a		750 ^a		752		752		752		752		753		753	
Date Collected:		6/18/2012		9/17/2012		11/26/2012		3/18/2013		6/21/2012		9/7/2012		11/27/2012		3/21/2013		6/21/2012		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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	2,1E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	1.5E-9	1E-9	<7E-10 U	7E-10	1.3E-9	1E-9	<9E-10 U	9E-10	1.3E-9	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		7E-10		-		9E-10		-		7E-10		-		9E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		7E-10		4E-10		-		5E-10		5E-10		4E-10		5E-10		5E-10		4E-10	
Polonium 210	µCi/mL	<6E-10 U	6E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-		1E-9		-		7E-10		-		1E-9		-		1E-9		-	
Polonium 210 precision (±)	µCi/mL	5E-10		-		7E-10		-		5E-10		-		6E-10		-		4E-10		-	
Radium 226	µCi/mL	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	2.9E-10	1.9E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	<1.9E-10 U	1.9E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.7E-10		-		1.5E-10		-		1.9E-10		-		1.5E-10		-		1.9E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		9E-11		-		1.6E-10		-		9E-11		-		8E-11		-	
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	<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		-		2E-10		-		1E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	9E-11		-		7E-11		-		6E-11		-		8E-11		-		1E-10		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<6E-10 U	6E-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	<6E-10 U	6E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	1.4E-9	1E-9
Lead 210 MDC	µCi/mL	6E-10		-		5E-10		-		7E-10		-		6E-10		-		7E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		3E-10		-		4E-10		-		4E-10		-		4E-10		4E-10	
Polonium 210	µCi/mL	<3E-10 U	3E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<4E-10 U	4E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	3E-10		-		9E-10		-		4E-10		-		8E-10		-		3E-10		-	
Polonium 210 precision (±)	µCi/mL	1E-10		-		4E-10		-		1E-10		-		3E-10		-		1E-10		-	
Radium 226	µCi/mL	<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	<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
Radium 226 MDC	µCi/mL	1.3E-10		-		1.1E-10		-		1.3E-10		-		1.2E-10		-		1.3E-10		-	
Radium 226 precision (±)	µCi/mL	6E-11		-		6E-11		-		8E-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	<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		-		4E-11		-		7E-11		-		4E-11		-		7E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0054	0.0003	0.0059	0.0003	0.0058	0.0003	0.0066	0.0003	0.0096	0.0003	0.0087	0.0003	0.0084	0.0003	0.007	0.0003	0.0059	0.0003	0.0057	0.0003
Uranium Activity	µCi/mL	3.7E-9	2E-10	4E-9	2E-10	3.9E-9	2E-10	4.5E-9	2E-10	6.5E-9	2E-10	5.9E-9	2E-10	5.9E-9	2E-10	4.7E-9	2E-10	4E-9	2E-10	3.9E-9	2E-10
METALS, SUSPENDED																					
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 U	2E-10	<2E-10	2E-10	<2E-10 U	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

^a 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.

^b 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.

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

^d Well is inoperable, resulting in partial sampling events.

^e CBR driller water supply.

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

Location ID:		753		753		754		754		754		754		755		755		755		755	
Date Collected:		11/27/2012		3/21/2013		6/21/2012		9/7/2012		11/27/2012		3/21/2013		6/21/2012		9/7/2012		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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	1.3E-9	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	1.8E-9	1E-9	<9E-10 U	9E-10	1.8E-9	1E-9	<7E-10 U	7E-10	1.8E-9	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		9E-10		-		7E-10		-		9E-10		-		7E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		4E-10		5E-10		-		4E-10		7E-10		5E-10		5E-10		4E-10		6E-10	
Polonium 210	µCi/mL	<8E-10 U	8E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<1E-9 U	1E-09	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	8E-10		-		8E-10		-		8E-10		-		1E-9		-		8E-10		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-		3E-10		-		4E-10		-		8E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.8E-10	1.8E-10	<2E-10 U	2E-10	9.5E-9	1.9E-10	<2E-10 U	2E-10	<1.9E-10 U	1.9E-10	<2E-10 U	2E-10	2.4E-9	1.7E-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		-		1.9E-10		-		1.9E-09		-		1.7E-10		-		1.5E-10		-	
Radium 226 precision (±)	µCi/mL	9E-11		-		6.7E-10		-		1E-10		-		3E-10		-		8E-11		-	
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	<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		-		2E-10		-		1E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	4E-11		-		7E-11		-		6E-11		-		7E-11		-		1E-10		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	6E-10	6E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	6E-10	6E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	9E-10	6E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	6E-10		-		7E-10		-		6E-10		-		7E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		4E-10		-		4E-10		-		4E-10		-		4E-10		-	
Polonium 210	µCi/mL	<6E-10 U	6E-10	<1E-9 U	1E-9	<3E-10 U	3E-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	6E-10		-		3E-10		-		6E-10		-		4E-10		-		6E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-		2E-10		-		2E-10		-		2E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.2E-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	<1.4E-10 U	1.4E-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		-		1.3E-10		-		1.3E-10		-		1.4E-10		-		1.2E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		7E-11		-		8E-11		-		8E-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	<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	6E-11		-		9E-11		-		4E-11		-		7E-11		-		4E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0055	0.0003	0.0054	0.0003	0.0082	0.0003	0.0065	0.0003	0.0077	0.0003	0.0067	0.0003	0.0075	0.0003	0.0051	0.0003	0.0052	0.0003	0.0051	0.0003
Uranium Activity	µCi/mL	3.7E-9	2E-10	3.7E-9	2E-10	5.5E-9	2E-10	4.4E-9	2E-10	5.2E-9	2E-10	4.5E-9	2E-10	5.1E-9	2E-10	3.5E-9	2E-10	3.5E-9	2E-10	3.5E-9	2E-10
METALS, SUSPENDED																					
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 U	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10	2E-10	<2E-10 U	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

^a 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.

^b 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.

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

^d Well is inoperable, resulting in partial sampling events.

^e CBR driller water supply.

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

Location ID:		759 ^d		759 ^d		759 ^d		759 ^d		760 ^{a,c}		760 ^{a,c}		777		777		777		777	
Date Collected:		3/31/2011		6/10/2011		9/22/2011		12/15/2011		11/28/2012		3/21/2013		6/20/2012		9/7/2012		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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<8E-10 U	8E-10	<1.1E-9 U	1.1E-9	<8E-10 U	8E-10	<7E-10 U	7E-10	<7E-10 U	7E-10	1.2 E-9	1E-9	<8E-10 U	8E-10	3E-9	1E-9	<7E-10 U	7E-10	2.2E-9	1E-9
Lead 210 MDC	µCi/mL	8E-10		1.1E-9		8E-10		7E-10		7E-10		-		8E-10		-		7E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		7E-10		5E-10		4E-10		4E-10		4E-10		5E-10		6E-10		4E-10		7E-10	
Polonium 210	µCi/mL	<6E-10 U	6E-10	<5E-10 U	5E-10	<5E-10 U	5E-10	<6E-10 U	6E-10	<8E-10 U	8E-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
Polonium 210 MDC	µCi/mL	6E-10		5E-10		5E-10		6E-10		8E-10		-		6E-10		-		1E-9		-	
Polonium 210 precision (±)	µCi/mL	2E-10		2E-10		4E-10		2E-10		3E-10		-		4E-10		-		4E-10		-	
Radium 226	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	7E-10	2E-10	1E-9	1E-10	<1.6E-10 U	1.6E-10	<2E-10 U	2E-10	<1.4E-10 U	1.4E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	2E-10		2E-10		2E-10		1E-10		1.6E-10		-		1.4E-10		-		1.7E-10		-	
Radium 226 precision (±)	µCi/mL	7E-11		1E-10		2E-10		2E-10		9E-11		-		8E-11		-		8E-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	<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	2E-10		2E-10		2E-10		2E-10		1E-10		-		2E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	9E-11		7E-11		8E-11		7E-11		7E-11		-		9E-11		-		6E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<6E-10 U	6E-10	<6E-10 U	6E-10	<8E-10 U	8E-10	<6E-10 U	6E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.5E-9 B	1E-9	7E-10	6E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		6E-10		6E-10		8E-10		6E-10		-		8E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		4E-10		3E-10		5E-10		4E-10		-		5E-10		5E-10 B		4E-10		-	
Polonium 210	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<5E-10 U	5E-10	<7E-10 U	7E-10	<1E-9 U	1E-9	<2E-10 U	2E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	2E-10		2E-10		2E-10		5E-10		7E-10		-		2E-10		-		8E-10		-	
Polonium 210 precision (±)	µCi/mL	1E-10		1E-10		1E-10		2E-10		3E-10		-		1E-10		-		4E-10		-	
Radium 226	µCi/mL	<1E-10 U	1E-10	<1E-10 U	1E-10	<1E-10 U	1E-10	<1E-10 U	1E-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	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1E-10		1E-10		1E-10		1E-10		1.2E-10		-		1.3E-10		-		1.2E-10		-	
Radium 226 precision (±)	µCi/mL	6E-11		6E-11		4E-11		4E-11		8E-11		-		6E-11		-		5E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	<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	<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		2E-10		1E-10		1E-10		-		1E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	8E-11		5E-11		1E-10		6E-11		5E-11		-		4E-11		-		9E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0072	0.0003	0.0064	0.0003	0.0075	0.0003	0.0049	0.0003	0.0069	0.0003	0.0065	0.0003	0.0113	0.0003	0.0148	0.0003	0.0136	0.0003	0.0132	0.0003
Uranium Activity	µCi/mL	4.9E-9	2E-10	4.3E-9	2E-10	5.1E-9	2E-10	3.3E-9	2E-10	4.7E-9	2E-10	4.4E-9	2E-10	7.7E-9	2E-10	1E-8	2E-10	9.2E-9	2E-10	8.9E-9	2E-10
METALS, SUSPENDED																					
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
^a 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.
^b 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.
^c Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.
^d Well is inoperable, resulting in partial sampling events.
^e CBR driller water supply.

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

Location ID:		788		788		788		788		794 ^b		794 ^b		794 ^b		794 ^b		795 ^b		795 ^b	
Date Collected:		6/22/2012		9/18/2012		12/5/2012		3/20/2013		6/19/2012		9/6/2012		12/5/2012		3/21/2013		6/19/2012		9/6/2012	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<9E-10 U	9E-10	1.7E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.9E-9	1E-9	<7E-10 U	7E-10	<1E-9	1E-9	<9E-10 U	9E-10	1.2E-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		6E-10		4E-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	<7E-10 U	7E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-		7E-10		-		5E-10		-		9E-10		-		6E-10		-	
Polonium 210 precision (±)	µCi/mL	5E-10		-		3E-10		-		3E-10		-		4E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.9E-10	1.9E-10	<2E-10 U	2E-10	2.1E-10	1.8E-10	<2E-10 U	2E-10	<1.6E-10	1.6E-10	<2E-10 U	2E-10	<1.8E-10	1.8E-10	<2E-10 U	2E-10	<1.8E-10	1.8E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.9E-10		-		1.8E-10		-		1.6E-10		-		1.8E-10		-		1.8E-10		-	
Radium 226 precision (±)	µCi/mL	1.2E-10		-		1.4E-10		-		6E-11		-		1.1E-10		-		8E-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	<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		-		2E-10		-		2E-10		-		2E-10		-	
Thorium 230 precision (±)	µCi/mL	8E-11		-		7E-11		-		7E-11		-		6E-11		-		8E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	7E-10	6E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	1.1E-9	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		6E-10		-		6E-10		-		6E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		4E-10		-		4E-10		-		4E-10		-		4E-10		5E-10	
Polonium 210	µCi/mL	<4E-10 U	4E-10	<1E-9 U	1E-9	<4E-10 U	4E-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
Polonium 210 MDC	µCi/mL	4E-10		-		4E-10		-		2E-10		-		5E-10		-		3E-10		-	
Polonium 210 precision (±)	µCi/mL	2E-10		-		2E-10		-		1E-10		-		4E-10		-		2E-10		-	
Radium 226	µCi/mL	<1.4E-10	1.4E-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	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.4E-10		-		1E-10		-		1.3E-10		-		1E-10		-		1.3E-10		-	
Radium 226 precision (±)	µCi/mL	7E-11		-		6E-11		-		7E-11		-		5E-11		-		8E-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	<1.3E-10 U	1.3E-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	6E-11		-		6E-11		-		4E-11		-		6E-11		-		6E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0081	0.0003	0.0069	0.0003	0.0076	0.0003	0.0062	0.0003	0.0055	0.0003	0.0063	0.0003	0.0063	0.0003	0.006	0.0003	0.005	0.0003	0.0058	0.0003
Uranium Activity	µCi/mL	5.5E-9	2E-10	4.7E-9	2E-10	5.1E-9	2E-10	4.2E-9	2E-10	3.8E-9	2E-10	4.3E-9	2E-10	4.3E-9	2E-10	4.1E-9	2E-10	3.4E-9	2E-10	3.9E-9	2E-10
METALS, SUSPENDED																					
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	2.0E-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
- ^a 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.
- ^b 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.
- ^c Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.
- ^d Well is inoperable, resulting in partial sampling events.
- ^e CBR driller water supply.

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

Location ID:		795 ^b		795 ^b		799		799		799		799		802		802		802		802	
Date Collected:		12/5/2012		3/21/2013		6/19/2012		9/18/2012		11/29/2012		3/20/2013		6/18/2012		9/18/2012		11/29/2012		3/18/2013	
Analyte	Units	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL	RESULT	RL
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	1E-9	1E-9	<8E-10 U	8E-10	1.2E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.1E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		8E-10		-		7E-10		-		8E-10		-		7E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		4E-10		5E-10		8E-10		4E-10		-		5E-10		5E-10		4E-10		-	
Polonium 210	µCi/mL	<1E-9 U	1E-9	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	1E-9		-		5E-10		-		8E-10		-		5E-10		-		8E-10		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-		3E-10		-		3E-10		-		3E-10		-		4E-10		-	
Radium 226	µCi/mL	<1.9E-10	1.9E-10	<2E-10 U	2E-10	<1.8E-10 U	1.8E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-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
Radium 226 MDC	µCi/mL	1.9E-10		-		1.8E-10		-		1.5E-10		-		1.7E-10		-		1.7E-10		-	
Radium 226 precision (±)	µCi/mL	1.3E-10		-		1.2E-10		-		6E-11		-		8E-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	<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		-		2E-10		-		1E-10		-		2E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	6E-11		-		6E-11		-		4E-11		-		5E-11		-		7E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	6E-10	6E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.1E-9	1E-9	6E-10	6E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	1.1E-9	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	6E-10		-		8E-10		-		6E-10		-		9E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-		5E-10		4E-10		4E-10		-		6E-10		4E-10		4E-10		-	
Polonium 210	µCi/mL	<5E-10 U	5E-10	<1E-9 U	1E-9	<2E-10 U	2E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	8E-10	4E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	5E-10		-		2E-10		-		7E-10		-		4E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	2E-10		-		9E-11		-		3E-10		-		5E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.1E-10	1.1E-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	<1.9E-10 U	1.9E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.1E-10		-		1.3E-10		-		1.3E-10		-		1.9E-10		-		1.3E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		5E-11		-		7E-11		-		1E-10		-		7E-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	<2E-10 U	2E-10	2E-10	2E-10	<1E-10 U	1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		1E-10		-		1E-10		-		2E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	9E-11		-		6E-11		-		5E-11		-		6E-11		1E-10		4E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0062	0.0003	0.0062	0.0003	0.0063	0.0003	0.0079	0.0003	0.0086	0.0003	0.0076	0.0003	0.0045	0.0003	0.0046	0.0003	0.005	0.0003	0.0043	0.0003
Uranium Activity	µCi/mL	4.2E-9	2E-10	4.2E-9	2E-10	4.3E-9	2E-10	5.4E-9	2E-10	5.9E-9	2E-10	5.2E-9	2E-10	3E-9	2E-10	3.1E-9	2E-10	3.4E-9	2E-10	2.9E-9	2E-10
METALS, SUSPENDED																					
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

^a 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.

^b 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.

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

^d Well is inoperable, resulting in partial sampling events.

^e CBR driller water supply.

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

Location ID:		809		809		809		809		810 ^a		810 ^a		810 ^a		810 ^a		811 ^a		811 ^a	
Date Collected:		6/21/2012		9/18/2012		11/29/2012		3/18/2013		6/21/2012		9/18/2012		11/29/2012		3/18/2013		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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<9E-10 U	9E-10	1.6E-9	1E-9	<7E-10 U	7E-10	1.1E-9	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	5.9E-9	1E-9	<9E-10 U	9E-10	1.5E-9	1E-9
Lead 210 MDC	µCi/mL	9E-10		-		7E-10		-		9E-10		-		7E-10		-		9E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		5E-10		4E-10		4E-10		5E-10		-		4E-10		7E-10		5E-10		5E-10	
Polonium 210	µCi/mL	<9E-10 U	9E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	4.4E-9	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	9E-10		-		8E-10		-		9E-10		-		8E-10		-		1E-9		-	
Polonium 210 precision (±)	µCi/mL	6E-10		-		3E-10		-		6E-10		-		4E-10		1E-9		5E-10		-	
Radium 226	µCi/mL	5.7E-10	1.7E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	1.1E-9	1.7E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	9.5E-10	1.7E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.7E-10		-		1.7E-10		-		1.7E-10		-		1.5E-10		-		1.7E-10		-	
Radium 226 precision (±)	µCi/mL	1.8E-10		-		7E-11		-		2.3E-10		-		8E-11		-		2.2E-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	<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	1E-10		-		2E-10		-		2E-10		-		1E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	5E-11		-		7E-11		-		5E-11		-		7E-11		-		6E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	1.1E-9	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<1E-9	1E-9	1.2E-9 B	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		6E-10		-		6E-10		-		6E-10		-		1E-9		-	
Lead 210 precision (±)	µCi/mL	4E-10		4E-10		3E-10		-		4E-10		-		4E-10		-		6E-10		4E-10 B	
Polonium 210	µCi/mL	<5E-10 U	5E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<3E-10 U	3E-10	2.1E-9	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	5E-10		-		6E-10		-		3E-10		-		5E-10		-		5E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-		2E-10		-		1E-10		6E-10		2E-10		-		2E-10		-	
Radium 226	µCi/mL	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	<1.4E-10 U	1.4E-10	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.3E-10		-		1.2E-10		-		1.5E-10		-		1.4E-10		-		2E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		5E-11		-		9E-11		-		7E-11		-		8E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1E-10	2E-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	<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	6E-11		1E-10		4E-11		-		5E-11		-		4E-11		-		7E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0067	0.0003	0.0083	0.0003	0.0079	0.0003	0.0072	0.0003	0.0064	0.0003	0.0053	0.0003	0.0039	0.0003	0.0056	0.0003	0.0077	0.0003	0.0055	0.0003
Uranium Activity	µCi/mL	4.6E-8	2E-10	5.6E-9	2E-10	5.4E-9	2E-10	4.9E-9	2E-10	4.4E-8	2E-10	3.6E-9	2E-10	2.6E-9	2E-10	3.8E-9	2E-10	5.2E-8	2E-10	3.7E-9	2E-10
METALS, SUSPENDED																					
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
^a 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.
^b 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.
^c Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.
^d Well is inoperable, resulting in partial sampling events.
^e CBR driller water supply.

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

Location ID:		811 ^a		811 ^a		815		815		815		815		821 ^b		821 ^b		821 ^b		821 ^b	
Date Collected:		11/29/2012		3/18/2013		6/21/2012		9/18/2012		11/29/2012		3/21/2013		6/21/2012		9/18/2012		11/29/2012		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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	2.3E-9	1E-9	<7E-10 U	7E-10	1.2E-9	1E-9	<9E-10 U	9E-10	1.4E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	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		5E-11		4E-10		4E-10		5E-10		5E-10		4E-10		-	
Polonium 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	2.9E-9	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	1E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	7E-10		-		1E-9		-		8E-10		-		1E-9		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-		7E-10		1.1E-9		3E-10		-		9E-10		7E-10		4E-10		-	
Radium 226	µCi/mL	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.4E-10 U	1.4E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.7E-10		-		1.7E-10		-		1.4E-10		-		1.7E-10		-		2E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-		9E-11		-		7E-11		-		8E-11		-		8E-11		-	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10	<2E-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	<8E-11 U	8E-11	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-		2E-10		-		2E-10		-		2E-10		-		8E-11		-	
Thorium 230 precision (±)	µCi/mL	9E-11		-		6E-11		-		6E-11		-		6E-11		-		5E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<7E-10 U	7E-10	2.5E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<6E-10 U	6E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		-		7E-10		-		6E-10		-		7E-10		-		6E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		5E-10		4E-10		-		4E-10		-		4E-10		-		4E-10		-	
Polonium 210	µCi/mL	<6E-10 U	6E-10	1.5E-9	1E-9	<4E-10 U	4E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<4E-10 U	4E-10	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-		4E-10		-		7E-10		-		4E-10		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		1E-9		2E-10		-		3E-10		-		2E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.4E-10 U	1.4E-10	<2E-10 U	2E-10	<1.4E-10 U	1.4E-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	<1.2E-10 U	1.2E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.4E-10		-		1.4E-10		-		1.2E-10		-		1.3E-10		-		1.2E-10		-	
Radium 226 precision (±)	µCi/mL	5E-11		-		8E-11		-		7E-11		-		5E-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	<9E-11 U	9E-11	<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		-		9E-11		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	5E-11		-		6E-11		-		3E-11		-		3E-11		-		4E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0071	0.0003	0.0059	0.0003	0.0058	0.0003	0.0046	0.0003	0.0055	0.0003	0.0052	0.0003	0.0057	0.0003	0.0053	0.0003	0.0060	0.0003	0.0057	0.0003
Uranium Activity	µCi/mL	4.8E-9	2E-10	4E-9	2E-10	3.9E-9	2E-10	3.1E-9	2E-10	3.7E-9	2E-10	3.5E-9	2E-10	3.9E-9	2E-10	3.6E-9	2E-10	4.1E-9	2E-10	3.9E-9	2E-10
METALS, SUSPENDED																					
Uranium	mg/L	0.0004	0.0003	0.0004	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	2.5E-10	2E-10	3E-10	2E-10	<2E-10 U	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
^a 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.
^b 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.
^c Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.
^d Well is inoperable, resulting in partial sampling events.
^e CBR driller water supply.

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

Location ID:		836		836		836		836		841 ^b		841 ^b		841 ^b		841 ^b		845 ^a		845 ^a	
Date Collected:		6/19/2012		9/17/2012		11/26/2012		3/20/2013		6/19/2012		9/17/2012		11/26/2012		3/20/2013		6/19/2012		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
RADIONUCLIDES-DISSOLVED																					
Lead 210	µCi/mL	<9E-10 U	9E-10	1.2E-9	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9	<9E-10 U	9E-10	1.6E-9	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	9E-10		-		7E-10		-		9E-10		-		8E-10		-		1E-09		-	
Lead 210 precision (±)	µCi/mL	5E-10		5E-10		4E-10		-		5E-10		6E-10		5E-10		-		6E-10		-	
Polonium 210	µCi/mL	<6E-10 U	6E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	2.8E-9	6E-10	<1E-9 U	1E-9	<1E-9 U	1E-9	<1E-9 U	1E-9	<7E-10 U	7E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-		1E-9		-		6E-10		-		1E-9		-		7E-10		-	
Polonium 210 precision (±)	µCi/mL	5E-10		-		6E-10		-		1.2E-9		-		5E-10		-		3E-10		-	
Radium 226	µCi/mL	<1.9E-10	1.9E-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	<1.5E-10 U	1.5E-10	<2E-10 U	2E-10	<1.7E-10 U	1.7E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.9E-10		-		1.6E-10		-		1.7E-10		-		1.5E-10		-		1.7E-10		-	
Radium 226 precision (±)	µCi/mL	1.1E-10		-		7E-11		-		1E-10		-		6E-11		-		1.2E-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	7E-11		-		5E-11		-		6E-11		-		7E-11		-		6E-11		-	
RADIONUCLIDES-SUSPENDED																					
Lead 210	µCi/mL	<8E-10 U	8E-10	1.4E-9	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<8E-10 U	8E-10	1.1E-9	1E-9
Lead 210 MDC	µCi/mL	8E-10		-		5E-10		-		8E-10		-		5E-10		-		8E-10		-	
Lead 210 precision (±)	µCi/mL	5E-10		5E-10		3E-10		-		5E-10		-		3E-10		-		5E-10		5E-10	
Polonium 210	µCi/mL	<3E-10 U	3E-10	<1E-9 U	1E-9	<5E-10 U	5E-10	<1E-9 U	1E-9	<2E-10 U	2E-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	3E-10		-		5E-10		-		2E-10		-		7E-10		-		3E-10		-	
Polonium 210 precision (±)	µCi/mL	1E-10		-		2E-10		-		1E-10		-		3E-10		-		2E-10		-	
Radium 226	µCi/mL	<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	<1E-10 U	1E-10	<2E-10 U	2E-10	<1.3E-10 U	1.3E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.3E-10		-		1E-10		-		1.3E-10		-		1E-10		-		1.3E-10		-	
Radium 226 precision (±)	µCi/mL	7E-11		-		6E-11		-		5E-11		-		6E-11		-		6E-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	<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	1E-10		-		1E-10		-		2E-10		-		1E-10		-		1E-10		-	
Thorium 230 precision (±)	µCi/mL	6E-11		-		4E-11		-		6E-11		-		4E-11		-		6E-11		-	
METALS, DISSOLVED																					
Uranium	mg/L	0.0048	0.0003	0.0068	0.0003	0.0066	0.0003	0.0068	0.0003	0.0038	0.0003	0.0053	0.0003	0.0055	0.0003	0.0053	0.0003	0.0039	0.0003	0.0064	0.0003
Uranium Activity	µCi/mL	3.2E-9	2E-10	4.6E-9	2E-10	4.5E-9	2E-10	4.6E-9	2E-10	2.6E-9	2E-10	3.6E-9	2E-10	3.7E-9	2E-10	3.6E-9	2E-10	2.6E-9	2E-10	4.3E-9	2E-10
METALS, SUSPENDED																					
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 U	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
^a 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.
^b 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.
^c Wells are not active year-around. Wells are used seasonally and sampled when active, resulting in irregular sampling events.
^d Well is inoperable, resulting in partial sampling events.
^e CBR driller water supply.

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

Location ID:		845 ^a		845 ^a	
Date Collected:		11/26/2012		3/21/2013	
Analyte	Units	RESULT	RL	RESULT	RL
RADIONUCLIDES-DISSOLVED					
Lead 210	µCi/mL	<7E-10 U	7E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	7E-10		-	
Lead 210 precision (±)	µCi/mL	4E-10		-	
Polonium 210	µCi/mL	<1E-9 U	1E-9	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	1E-9		-	
Polonium 210 precision (±)	µCi/mL	4E-10		-	
Radium 226	µCi/mL	<1.8E-10	1.8E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.8E-10		-	
Radium 226 precision (±)	µCi/mL	8E-11		-	
Thorium 230	µCi/mL	<2E-10 U	2E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	2E-10		-	
Thorium 230 precision (±)	µCi/mL	6E-11		-	
RADIONUCLIDES-SUSPENDED					
Lead 210	µCi/mL	<5E-10 U	5E-10	<1E-9 U	1E-9
Lead 210 MDC	µCi/mL	5E-10		-	
Lead 210 precision (±)	µCi/mL	3E-10		-	
Polonium 210	µCi/mL	<6E-10 U	6E-10	<1E-9 U	1E-9
Polonium 210 MDC	µCi/mL	6E-10		-	
Polonium 210 precision (±)	µCi/mL	3E-10		-	
Radium 226	µCi/mL	<1.1E-10	1.1E-10	<2E-10 U	2E-10
Radium 226 MDC	µCi/mL	1.1E-10		-	
Radium 226 precision (±)	µCi/mL	6E-11		-	
Thorium 230	µCi/mL	<1E-10 U	1.1E-10	<2E-10 U	2E-10
Thorium 230 MDC	µCi/mL	1E-10		-	
Thorium 230 precision (±)	µCi/mL	6E-11		-	
METALS, DISSOLVED					
Uranium	mg/L	0.00565	0.0003	0.0056	0.0003
Uranium Activity	µCi/mL	3.8E-9	2E-10	3.8E-9	2E-10
METALS, SUSPENDED					
Uranium	mg/L	<0.0003	0.0003	<0.0003	0.0003
Uranium Activity	µCi/mL	<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

^a 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.

^b 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.

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

^d Well is inoperable, resulting in partial sampling events.

^e CBR driller water supply.