

APPENDIX A
LIST OF PROPOSED WELL LOCATIONS

Deer Creek North POD:

Well Name/ Type	BLM Lease Number	Location/ Surface Ownership						Proposed Depth (feet)
		Twn	Rng	Sec	Qtr1	Qtr2	Owner	
DeckerFed11C-0691	MTM62340	9 S	41 E	6	NW	NW	BLM	509
DeckerFed11D3-0691	MTM62340	9 S	41 E	6	NW	NW	BLM	240
DeckerFed11M-0691	MTM62340	9 S	41 E	6	NW	NW	BLM	355
DeckerFed21C-0591	MTM62340	9 S	41 E	5	NE	NW	BLM	549
DeckerFed21D3-0591	MTM62340	9 S	41 E	5	NE	NW	BLM	285
DeckerFed21M-0591	MTM62340	9 S	41 E	5	NE	NW	BLM	402
DeckerFed24C-0591	MTM62340	9 S	41 E	5	SE	SW	BLM	492
DeckerFed24D3-0591	MTM62340	9 S	41 E	5	SE	SW	BLM	215
DeckerFed24M-0591	MTM62340	9 S	41 E	5	SE	SW	BLM	356
DeckerFed31C-0691	MTM62340	9 S	41 E	6	NW	NE	BLM	553
DeckerFed31D3-0691	MTM62340	9 S	41 E	6	NW	NE	BLM	291
DeckerFed31M-0691	MTM62340	9 S	41 E	6	NW	NE	BLM	404
DeckerFed42C-0591	MTM62340	9 S	41 E	5	SE	NE	BLM	590
DeckerFed42D3-0591	MTM62340	9 S	41 E	5	SE	NE	BLM	322
DeckerFed42M-0591	MTM62340	9 S	41 E	5	SE	NE	BLM	449
Federal11C-1191	MTM62340	9 S	41 E	11	NW	NW	BLM	822
Federal11D2-1191	MTM62340	9 S	41 E	11	NW	NW	BLM	445
Federal11D3-1191	MTM62340	9 S	41 E	11	NW	NW	BLM	607
Federal11M-1191	MTM62340	9 S	41 E	11	NW	NW	BLM	711
MTRoyaltyFed22C-0491	MTM62340	9 S	41 E	4	SE	NW	BLM	644
MTRoyaltyFed22D3-0491	MTM62340	9 S	41 E	4	SE	NW	BLM	383
MTRoyaltyFed22M-0491	MTM62340	9 S	41 E	4	SE	NW	BLM	509
Federal24C-0291	MTM62340	9 S	41 E	2	SE	SW	BLM	780
Federal24D3-0291	MTM62340	9 S	41 E	2	SE	SW	BLM	559
Federal24M-0291	MTM62340	9 S	41 E	2	SE	SW	BLM	675
PorterFed31C-0191	MTM62340	9 S	41 E	1	SW	NE	BLM	1067
PorterFed31D2-0191	MTM62340	9 S	41 E	1	SW	NE	BLM	630
PorterFed31D3-0191	MTM62340	9 S	41 E	1	SW	NE	BLM	842
PorterFed31M-0191	MTM62340	9 S	41 E	1	SW	NE	BLM	945
PorterFed31C-1291	MTM83775	9 S	41 E	12	NW	NE	BLM	909
PorterFed31D2-1291	MTM83775	9 S	41 E	12	NW	NE	BLM	491
PorterFed31D3-1291	MTM83775	9 S	41 E	12	NW	NE	BLM	697
PorterFed31M-1291	MTM83775	9 S	41 E	12	NW	NE	BLM	799
PorterFed41C-1191	MTM62340	9 S	41 E	11	NE	NE	BLM	902
PorterFed41D2-1191	MTM62340	9 S	41 E	11	NE	NE	BLM	500
PorterFed41D3-1191	MTM62340	9 S	41 E	11	NE	NE	BLM	685
PorterFed41M-1191	MTM62340	9 S	41 E	11	NE	NE	BLM	802
RancholmeFed21C-0191	MTM62340	9 S	41 E	1	NE	NW	BLM	1072
RancholmeFed21D3-0191	MTM62340	9 S	41 E	1	NE	NW	BLM	849
RancholmeFed21M-0191	MTM62340	9 S	41 E	1	NE	NW	BLM	952
RancholmeFed21C-0291	MTM62340	9 S	41 E	2	NE	NW	BLM	945
RancholmeFed21D3-0291	MTM62340	9 S	41 E	2	NE	NW	BLM	727
RancholmeFed21M-0291	MTM62340	9 S	41 E	2	NE	NW	BLM	832
MTRoyaltyFed22C-1591	MTM83775	9 S	41 E	15	SE	NW	BLM	679
MTRoyaltyFed22D2-1591	MTM83775	9 S	41 E	15	SE	NW	BLM	278
MTRoyaltyFed22D3-1591	MTM83775	9 S	41 E	15	SE	NW	BLM	416
MTRoyaltyFed22M-1591	MTM83775	9 S	41 E	15	SE	NW	BLM	539
MTRoyaltyFed23C-1591	MTM83775	9 S	41 E	15	NE	SW	BLM	678
MTRoyaltyFed23D2-1591	MTM83775	9 S	41 E	15	NE	SW	BLM	300
MTRoyaltyFed23D3-1591	MTM83775	9 S	41 E	15	NE	SW	BLM	446
MTRoyaltyFed23M-1591	MTM83775	9 S	41 E	15	NE	SW	BLM	576
MTRoyaltyFed42C-1591	MTM83775	9 S	41 E	15	SE	NE	BLM	604
MTRoyaltyFed42D1-1591	MTM83775	9 S	41 E	15	SE	NE	BLM	163
MTRoyaltyFed42D3-1591	MTM83775	9 S	41 E	15	SE	NE	BLM	378
MTRoyaltyFed42M-1591	MTM83775	9 S	41 E	15	SE	NE	BLM	505
MTRoyaltyFed44C-1591	MTM83775	9 S	41 E	15	SE	SE	BLM	810
MTRoyaltyFed44D1-1591	MTM83775	9 S	41 E	15	SE	SE	BLM	362
MTRoyaltyFed44D3-1591	MTM83775	9 S	41 E	15	SE	SE	BLM	577
MTRoyaltyFed44M-1591	MTM64473	9 S	41 E	15	SE	SE	BLM	709

APPENDIX A
LIST OF PROPOSED WELL LOCATIONS

Deer Creek North POD:

Well Name/ Type	BLM Lease Number	Location/ Surface Ownership						Proposed Depth (feet)
		Twn	Rng	Sec	Qtr1	Qtr2	Owner	
RancholmeFed22C-2291	MTM64473	9 S	41 E	22	SE	NW	BLM	787
RancholmeFed22D1-2291	MTM64473	9 S	41 E	22	SE	NW	BLM	307
RancholmeFed22D3-2291	MTM64473	9 S	41 E	22	SE	NW	BLM	542
RancholmeFed22M-2291	MTM64473	9 S	41 E	22	SE	NW	BLM	678
RancholmeFed42C-2291	MTM64473	9 S	41 E	22	SE	NE	BLM	922
RancholmeFed42D1-2291	MTM64473	9 S	41 E	22	SE	NE	BLM	471
RancholmeFed42D3-2291	MTM64473	9 S	41 E	22	SE	NE	BLM	681
RancholmeFed42M-2291	MTM64473	9 S	41 E	22	SE	NE	BLM	816
RancholmeFed44C-1191	MTM62340	9 S	41 E	11	SE	SE	BLM	821
RancholmeFed44D1-1191	MTM62340	9 S	41 E	11	SE	SE	BLM	370
RancholmeFed44D3-1191	MTM62340	9 S	41 E	11	SE	SE	BLM	606
RancholmeFed44M-1191	MTM62340	9 S	41 E	11	SE	SE	BLM	719
Decker11C-0891	N/A	9 S	41 E	8	NW	NW	Fee	450
Decker11D3-0891	N/A	9 S	41 E	8	NW	NW	Fee	173
Decker11M-0891	N/A	9 S	41 E	8	NW	NW	Fee	316
Decker13C-0991	N/A	9 S	41 E	9	NW	SW	Fee	583
Decker13D2-0991	N/A	9 S	41 E	9	NW	SW	Fee	223
Decker13D3-0991	N/A	9 S	41 E	9	NW	SW	Fee	312
Decker13M-0991	N/A	9 S	41 E	9	NW	SW	Fee	448
Decker21C-0791	N/A	9 S	41 E	7	NE	NW	Fee	396
Decker21D3-0791	N/A	9 S	41 E	7	NE	NW	Fee	117
Decker21M-0791	N/A	9 S	41 E	7	NE	NW	Fee	260
Decker24C-0691	N/A	9 S	41 E	6	SE	SW	Fee	424
Decker24D3-0691	N/A	9 S	41 E	6	SE	SW	Fee	142
Decker24M-0691	N/A	9 S	41 E	6	SE	SW	Fee	281
Decker41C-0791	N/A	9 S	41 E	7	NE	NE	Fee	421
Decker41D3-0791	N/A	9 S	41 E	7	NE	NE	Fee	145
Decker41M-0791	N/A	9 S	41 E	7	NE	NE	Fee	285
Decker43D3-0691	N/A	9 S	41 E	6	NE	SE	Fee	193
Decker43M-0691	N/A	9 S	41 E	6	NE	SE	Fee	322
MTRoyalty14C-0491	N/A	9 S	41 E	4	SW	SW	Fee	579
MTRoyalty14D3-0491	N/A	9 S	41 E	4	SW	SW	Fee	308
MTRoyalty14M-0491	N/A	9 S	41 E	4	SW	SW	Fee	446
MTRoyalty41C-0891	N/A	9 S	41 E	8	NE	NE	Fee	479
MTRoyalty41D3-0891	N/A	9 S	41 E	8	NE	NE	Fee	201
MTRoyalty41M-0891	N/A	9 S	41 E	8	NE	NE	Fee	347
MTRoyalty44C-0591	N/A	9 S	41 E	5	SE	SE	Fee	519
MTRoyalty44D3-0591	N/A	9 S	41 E	5	SE	SE	Fee	242
MTRoyalty44M-0591	N/A	9 S	41 E	5	SE	SE	Fee	386
Rancholme21C-0991	N/A	9 S	41 E	9	NE	NW	Fee	516
Rancholme21D3-0991	N/A	9 S	41 E	9	NE	NW	Fee	242
Rancholme21M-0991	N/A	9 S	41 E	9	NE	NW	Fee	384
MTRoyalty11C-1091	N/A	9 S	41 E	10	NW	NW	Fee	581
MTRoyalty11D2-1091	N/A	9 S	41 E	10	NW	NW	Fee	205
MTRoyalty11D3-1091	N/A	9 S	41 E	10	NW	NW	Fee	331
MTRoyalty11M-1091	N/A	9 S	41 E	10	NW	NW	Fee	453
MTRoyalty22C-0391	N/A	9 S	41 E	3	SE	NW	Fee	588
MTRoyalty22D3-0391	N/A	9 S	41 E	3	SE	NW	Fee	345
MTRoyalty22M-0391	N/A	9 S	41 E	3	SE	NW	Fee	460
MTRoyalty24C-0391	N/A	9 S	41 E	3	SE	SW	Fee	576
MTRoyalty24D3-0391	N/A	9 S	41 E	3	SE	SW	Fee	326
MTRoyalty24M-0391	N/A	9 S	41 E	3	SE	SW	Fee	449
MTRoyalty32C-1091	N/A	9 S	41 E	10	SW	NE	Fee	664
MTRoyalty32D2-1091	N/A	9 S	41 E	10	SW	NE	Fee	280
MTRoyalty32D3-1091	N/A	9 S	41 E	10	SW	NE	Fee	435
MTRoyalty32M-1091	N/A	9 S	41 E	10	SW	NE	Fee	542
MTRoyalty42C-0391	N/A	9 S	41 E	3	SE	NE	Fee	635
MTRoyalty42D3-0391	N/A	9 S	41 E	3	SE	NE	Fee	406
MTRoyalty42M-0391	N/A	9 S	40 E	3	SE	NE	Fee	515

**APPENDIX A
LIST OF PROPOSED WELL LOCATIONS**

Deer Creek North POD:

Well Name/ Type	BLM Lease Number	Location/ Surface Ownership						Proposed Depth (feet)
		Twn	Rng	Sec	Qtr1	Qtr2	Owner	
MTRoyalty42C-0491	N/A	9 S	40 E	4	SE	NE	Fee	593
MTRoyalty42D3-0491	N/A	9 S	40 E	4	SE	NE	Fee	339
MTRoyalty42M-0491	N/A	9 S	40 E	4	SE	NE	Fee	459
MTRoyalty44C-0391	N/A	9 S	40 E	3	SE	SE	Fee	634
MTRoyalty44D3-0391	N/A	9 S	40 E	3	SE	SE	Fee	407
MTRoyalty44M-0391	N/A	9 S	40 E	3	SE	SE	Fee	518
MTRoyalty44C-0491	N/A	9 S	40 E	4	SE	SE	Fee	607
MTRoyalty44D3-0491	N/A	9 S	40 E	4	SE	SE	Fee	351
MTRoyalty44M-0491	N/A	9 S	40 E	4	SE	SE	Fee	479
Rancholme33C-0991	N/A	9 S	40 E	9	NW	SE	Fee	583
Rancholme33D2-0991	N/A	9 S	40 E	9	NW	SE	Fee	229
Rancholme33D3-0991	N/A	9 S	40 E	9	NW	SE	Fee	324
Rancholme41C-0991	N/A	9 S	40 E	9	NE	NE	Fee	559
Rancholme41D3-0991	N/A	9 S	40 E	9	NE	NE	Fee	301
Rancholme41M-0991	N/A	9 S	41 E	9	NE	NE	Fee	432
Porter11C-1291	N/A	9 S	41 E	12	NW	NW	Fee	818
Porter11D2-1291	N/A	9 S	41 E	12	NW	NW	Fee	407
Porter11D3-1291	N/A	9 S	41 E	12	NW	NW	Fee	606
Porter11M-1291	N/A	9 S	41 E	12	NW	NW	Fee	709
Porter14C-0191	N/A	9 S	41 E	1	SW	SW	Fee	922
Porter14D2-0191	N/A	9 S	41 E	1	SW	SW	Fee	508
Porter14D3-0191	N/A	9 S	41 E	1	SW	SW	Fee	705
Porter14M-0191	N/A	9 S	41 E	1	SW	SW	Fee	821
Porter33C-0191	N/A	9 S	41 E	1	NW	SE	Fee	924
Porter33D2-0191	N/A	9 S	41 E	1	NW	SE	Fee	490
Porter33D3-0191	N/A	9 S	41 E	1	NW	SE	Fee	705
Porter33M-0191	N/A	9 S	41 E	1	NW	SE	Fee	809
Rancholme34D2-0291	N/A	9 S	41 E	2	SW	SE	Fee	484
Rancholme34D3-0291	N/A	9 S	41 E	2	SW	SE	Fee	671
Rancholme34M-0291	N/A	9 S	41 E	2	SW	SE	Fee	793
Rancholme42C-0291	N/A	9 S	41 E	2	SE	NE	Fee	946
Rancholme42D3-0291	N/A	9 S	41 E	2	SE	NE	Fee	734
Rancholme42M-0291	N/A	9 S	41 E	2	SE	NE	Fee	839
MTRoyalty13C-1091	N/A	9 S	41 E	10	NW	SW	Fee	606
MTRoyalty13D2-1091	N/A	9 S	41 E	10	NW	SW	Fee	223
MTRoyalty13D3-1091	N/A	9 S	41 E	10	NW	SW	Fee	347
MTRoyalty13M-1091	N/A	9 S	41 E	10	NW	SW	Fee	473
MTRoyalty34C-1091	N/A	9 S	41 E	10	SW	SE	Fee	645
MTRoyalty34D2-1091	N/A	9 S	41 E	10	SW	SE	Fee	250
MTRoyalty34D3-1091	N/A	9 S	41 E	10	SW	SE	Fee	424
Rancholme22C-1491	N/A	9 S	41 E	14	SE	NW	Fee	630
Rancholme22D1-1491	N/A	9 S	41 E	14	SE	NW	Fee	189
Rancholme22D3-1491	N/A	9 S	41 E	14	SE	NW	Fee	406
Rancholme22M-1491	N/A	9 S	41 E	14	SE	NW	Fee	531
Rancholme24C-1191	N/A	9 S	41 E	11	SE	SW	Fee	801
Rancholme24D2-1191	N/A	9 S	41 E	11	SE	SW	Fee	349
Rancholme24D3-1191	N/A	9 S	41 E	11	SE	SW	Fee	539
Rancholme24M-1191	N/A	9 S	41 E	11	SE	SW	Fee	688
Rancholme42C-1491	N/A	9 S	41 E	14	SE	NE	Fee	659
Rancholme42D2-1491	N/A	9 S	41 E	14	SE	NE	Fee	241
Rancholme42D3-1491	N/A	9 S	41 E	14	SE	NE	Fee	439
Rancholme42M-1491	N/A	9 S	41 E	14	SE	NE	Fee	561
Previously Drilled wells								
Decker43EC-0691	N/A	9 S	41 E	6	NE	SE	Fee	458
Rancholme33M-0991	N/A	9 S	41 E	9	NW	SE	Fee	434
Rancholme34C-0291	N/A	9 S	41 E	2	SW	SE	Fee	1015
MTRoyalty34M-1091	N/A	9 S	41 E	10	SW	SE	Fee	569

APPENDIX A
LIST OF PROPOSED WELL LOCATIONS

Pond Creek POD:								
Well Name/ Type	BLM Lease Number	Location/ Surface Ownership						Proposed Depth (feet)
		Twn	Rng	Sec	Qtr1	Qtr2	Owner	
ConsolFed12C-0199	MTM61666	9 S	39 E	1	SW	NW	BLM	766
ConsolFed12M-0199	MTM61666	9 S	39 E	1	SW	NW	BLM	621
ConsolFed14C-0199	MTM61666	9 S	39 E	1	SW	SW	BLM	832
ConsolFed14M-0199	MTM61666	9 S	39 E	1	SW	SW	BLM	691
ConsolFed14C-1299	MTM86635	9 S	39 E	12	SW	SW	BLM	874
ConsolFed14M-1299	MTM86635	9 S	39 E	12	SW	SW	BLM	695
ConsolFed21C-0790	MTM83773	9 S	40 E	7	NE	NW	BLM	744
ConsolFed21M-0790	MTM83773	9 S	40 E	7	NE	NW	BLM	597
ConsolFed21C-1199	MTM61666	9 S	39 E	11	NE	NW	BLM	788
ConsolFed21M-1199	MTM61666	9 S	39 E	11	NE	NW	BLM	650
ConsolFed21C-1299	MTM86635	9 S	39 E	12	NE	NW	BLM	936
ConsolFed21M-1299	MTM86635	9 S	39 E	12	NE	NW	BLM	767
ConsolFed22C-0399	MTM61666	9 S	39 E	3	SE	NW	BLM	759
ConsolFed23C-0790	MTM83773	9 S	40 E	7	NE	SW	BLM	642
ConsolFed23M-0790	MTM83773	9 S	40 E	7	NE	SW	BLM	499
ConsolFed24C-0299	MTM61666	9 S	39 E	2	SE	SW	BLM	798
ConsolFed24M-0299	MTM61666	9 S	39 E	2	SE	SW	BLM	655
ConsolFed32C-0199	MTM61666	9 S	39 E	1	SW	NE	BLM	715
ConsolFed32M-0199	MTM61666	9 S	39 E	1	SW	NE	BLM	565
ConsolFed32C-1890	MTM83773	9 S	40 E	18	SW	NE	BLM	668
ConsolFed32M-1890	MTM83773	9 S	40 E	18	SW	NE	BLM	530
ConsolFed34C-0199	MTM61666	9 S	39 E	1	SW	SE	BLM	802
ConsolFed34M-0199	MTM61666	9 S	39 E	1	SW	SE	BLM	643
ConsolFed34C-0399	MTM61666	9 S	39 E	3	SW	SE	BLM	777
ConsolFed34C-1199	MTM86635	9 S	39 E	11	SW	SE	BLM	798
ConsolFed34M-1199	MTM86635	9 S	39 E	11	SW	SE	BLM	639
ConsolFed34C-1299	MTM86635	9 S	39 E	12	SW	SE	BLM	844
ConsolFed34M-1299	MTM86635	9 S	39 E	12	SW	SE	BLM	670
ConsolFed41C-0399	MTM61666	9 S	39 E	3	NE	NE	BLM	768
ConsolFed41C-1299	MTM86635	9 S	39 E	12	NE	NE	BLM	723
ConsolFed41M-1299	MTM86635	9 S	39 E	12	NE	NE	BLM	569
DeckerFed11C-0890	MTM87252	9 S	40 E	8	NW	NW	BLM	679
DeckerFed11M-0890	MTM87252	9 S	40 E	8	NW	NW	BLM	532
DeckerFed12C-0590	MTM87252	9 S	40 E	5	SW	NW	BLM	503
DeckerFed12M-0590	MTM87252	9 S	40 E	5	SW	NW	BLM	356
DeckerFed24C-0590	MTM87252	9 S	40 E	5	SE	SW	BLM	532
DeckerFed24M-0590	MTM87252	9 S	40 E	5	SE	SW	BLM	382
Federal11C-0690	MTM87252	9 S	40 E	6	NW	NW	BLM	468
Federal11M-0690	MTM87252	9 S	40 E	6	NW	NW	BLM	320
Federal11C-1890	MTM83773	9 S	40 E	18	NW	NW	BLM	745
Federal11M-1890	MTM83773	9 S	40 E	18	NW	NW	BLM	592
Federal34C-0790	MTM83773	9 S	40 E	7	SW	SE	BLM	628
Federal34M-0790	MTM83773	9 S	40 E	7	SW	SE	BLM	490
Federal42C-0790	MTM83773	9 S	40 E	7	SE	NE	BLM	766
Federal42M-0790	MTM83773	9 S	40 E	7	SE	NE	BLM	618
SpringCreekFed32C-0690	MTM87252	9 S	40 E	6	SW	NE	BLM	580
SpringCreekFed32M-0690	MTM87252	9 S	40 E	6	SW	NE	BLM	435
ChevronFed44C-2299	MTM75935	9 S	39 E	22	SE	SE	BLM	869
ChevronFed44M-2299	MTM75935	9 S	39 E	22	SE	SE	BLM	729
Federal22C-2699	MTM74394	9 S	39 E	26	SE	NW	BLM	866
Federal22M-2699	MTM74394	9 S	39 E	26	SE	NW	BLM	714
Federal23C-2299	MTM75935	9 S	39 E	22	NE	SW	BLM	926
ChevronFed42C-2799	MTM61667	9 S	39 E	27	SE	NE	BLM	786
Federal44C-2799	MTM67797	9 S	39 E	27	SE	SE	BLM	770
Federal44M-2799	MTM67797	9 S	39 E	27	SE	SE	BLM	629
Consol21M-0299	N/A	9 S	39 E	2	NE	NW	BLM	616
Consol34C-0299	N/A	9 S	39 E	2	SW	SE	BLM	808
Consol34M-0299	N/A	9 S	39 E	2	SW	SE	BLM	662
SpringCreek14C-0690	N/A	9 S	40 E	6	SW	SW	BLM	687

**APPENDIX A
LIST OF PROPOSED WELL LOCATIONS**

Pond Creek POD:								
Well Name/ Type	BLM Lease Number	Location/ Surface Ownership						Proposed Depth (feet)
		Twn	Rng	Sec	Qtr1	Qtr2	Owner	
SpringCreek14M-0690	N/A	9 S	40 E	6	SW	SW	BLM	541
SpringCreek34C-0690	N/A	9 S	40 E	6	SW	SE	BLM	622
SpringCreek34M-0690	N/A	9 S	40 E	6	SW	SE	BLM	472
Consol14C-1199	N/A	9 S	39 E	11	SW	SW	BLM	582
Consol24C-1099	N/A	9 S	39 E	10	SE	SW	BLM	628
Consol32C-1099	N/A	9 S	39 E	10	SW	NE	BLM	449
Consol32M-1099	N/A	9 S	39 E	10	SW	NE	BLM	297
Consol41C-1199	N/A	9 S	39 E	11	NE	NE	BLM	831
Consol41M-1199	N/A	9 S	39 E	11	NE	NE	BLM	701
Consol43M-1099	N/A	9 S	39 E	10	NE	SE	BLM	322
Consol21C-1599	N/A	9 S	39 E	15	NE	NW	BLM	494
Consol21M-1599	N/A	9 S	39 E	15	NE	NW	Fee	363
Consol21C-2299	N/A	9 S	39 E	22	NE	NW	Fee	815
Consol21M-2299	N/A	9 S	39 E	22	NE	NW	Fee	677
Consol41C-2299	N/A	9 S	39 E	22	NE	NE	Fee	839
Consol41M-1599	N/A	9 S	39 E	22	NE	NE	Fee	706
Chevron21C-2799	N/A	9 S	39 E	27	NE	NW	Fee	862
Chevron23C-2799	N/A	9 S	39 E	27	NE	SW	Fee	821
Chevron23M-2799	N/A	9 S	39 E	27	NE	SW	Fee	730
Previously Drilled Wells								
ConsolFed21D-1199	MTM61666	9 S	39 E	11	NE	NW	BLM	522
ChevronFed24D-2799	MTM67797	9 S	39 E	27	SE	SW	BLM	580
Consol 12C-0299	N/A	9 S	39 E	2	SW	NW	Fee	775
Consol12M-0299	N/A	9 S	39 E	2	SW	NW	Fee	623
Consol14C-3589	N/A	8 S	39 E	35	SW	SW	Fee	720
Consol21C-0299	N/A	9 S	39 E	2	NE	NW	Fee	920
Consol32C-0299	N/A	9 S	39 E	2	SW	NE	Fee	767
Consol32M-0299	N/A	9 S	39 E	2	SW	NE	Fee	620
Consol34C-3489	N/A	8 S	39 E	34	SW	SE	Fee	738.5
Consol34M-3489	N/A	8 S	39 E	34	SW	SE	Fee	615
Consol14M-1199	N/A	9 S	39 E	11	SW	SW	Fee	397
Consol43C-1099	N/A	9 S	39 E	10	NE	SE	Fee	476
Consol22D2-2299	N/A	9 S	39 E	22	SE	NW	Fee	672

APPENDIX B
SPECIAL STATUS SPECIES AFFECTS DETERMINATIONS
SUMMARY TABLES

Federally Listed Threatened and Endangered Species and Species Proposed for Listing

Species	Status	In Range (yes/no)	Habitat Present (yes/no)	Affects Determination (brief rationale)
Bald Eagle	T	yes	yes	May affect see discussion Sections 3.12, 4.2.12
Least tern	E	yes	no	
Piping Plover	T	no		
Whooping Crane	E	no		
Black-footed ferret	E	yes	no	See discussion, section 3.12
Canada Lynx	T	no		
Gray wolf	E	no		
Grizzly Bear	T	no		
Bull Trout	T	no		
Pallid Sturgeon	E	no		
Spalding's Catchfly	P	no		
Ute Ladies'-tresses	T	no		
Water Howellia	T	no		
Western Prairie Fringed Orchid	T	no		

SPECIAL STATUS SPECIES AFFECTS DETERMINATIONS
SUMMARY TABLES

BLM (Montana and Dakotas) Designated Sensitive Species

BIRDS

Species	In Range (yes/no) 1	Habitat present (yes/no) 2	Effects Determination (brief rationale) 3

**SPECIAL STATUS SPECIES AFFECTS DETERMINATIONS
SUMMARY TABLES**

BLM (Montana and Dakotas) Designated Sensitive Species

BIRDS

Mountain Plover	yes	no	See discussion, section 3.12, 4.2.12
Bairds sparrow	yes	no	
Black-backed woodpecker	yes	no	
Black Tern	yes	no	
Boreal owl	no		
Burrowing owl	yes	no	See discussion, section 3.12, 4.2.12
Canvasback duck	yes	no	
Columbian sharp-tailed grouse	no		
Common loon	no		
Dickcissel	yes	no	
Ferruginous hawk	yes	no	
Flammulated owl	no		
Great gray owl	no		
Hairy woodpecker	yes	yes	
Harlequin duck	no		
LeConte's sparrow	no		
Loggerhead shrike	yes	yes	
Long billed curlew	yes	no	
Northern goshawk	yes	no	Incidental observations on Ashland District of CNF
Peregrine falcon	yes	yes	
Pileated woodpecker	no		
Sage grouse	yes	yes	See discussion Sections 3.12, 4.2.12
Sage sparrow	no		
Swainson's hawk	yes	yes	See discussion Sections 3.12

**SPECIAL STATUS SPECIES AFFECTS DETERMINATIONS
SUMMARY TABLES**

BLM (Montana and Dakotas) Designated Sensitive Species

BIRDS

Three-toed woodpecker	yes	no	Documentation in counties west of project
Trumpeter swan	no		
White-faced ibis	no		

MAMMALS

Species	In Range (yes/no) 1	Habitat present (yes/no) 2	Effects Determination (brief rationale) 3
Black-tailed prairie dog	yes	no	See discussion, section 3.12, 4.2.12
Fisher	no		
Meadow jumping mouse	no		
Merriam's shrew	yes	yes	Very little known of this species
North American wolverine	no		
Northern Bog Lemming	no		
Preble's Shrew	yes	yes	Very little known of this species
Pygmy rabbit	no		
Spotted bat	yes	yes	Very little known of this species
Spotted skunk (western)	no		
Swift fox	yes	no	
Townsend's big-eared bat	yes	yes	
White-tailed prairie dog	no		
Woodland caribou	no		

REPTILES and AMPHIBIANS

Species	In Range (yes/no) 1	Habitat present (yes/no) 2	Effects Determination (brief rationale) 3
Snapping turtle	yes	yes	
Spiny softshell turtle	yes	yes	See discussion Sections 3.12, 4.2.12 & 4.3.12
Canadian toad	no		
Coeur d'Alene salamander	no		
Spotted frog	no		
Tailed frog	no		
Wood frog	no		
Plains Spadefoot	no	yes	See Discussion Sections 3.12, 4.2.12 & 4.3.12
Great Plains Toad	no	yes	See Discussion Sections 3.12, 4.2.12 & 4.3.12

FISH			
Species	In Range (yes/no) 1	Habitat present (yes/no) 2	Effects Determination (brief rationale) 3
Arctic grayling	no		
Blue sucker	no		
Bull trout	no		
Northern redbelly X Finescale dace	no		
Paddlefish	no		
Pearl dace	no		
Sauger	yes	yes	See discussion Sections 3.12, 4.2.12 & 4.3.12
Shortnose gar	no		
Sicklefin chub	no		
Sturgeon chub	no		
Westslope cutthroat trout	no		
Yellowstone cutthroat trout	no		

- 1) If project is not within the range of the species no determination of habitat presence is needed.
- 2) If habitat is not present no effects determination is needed.
- 3) Detailed Effects Determination is provided in the narrative of Environmental Assessment

BLM (Montana and Dakotas) Designated Sensitive Species	
Plant Species	Known sites in project area
Agastache cusickii	no
Arabis fecunda	no
Astragalus ceramicus var. apus	no
Astragalus geyeri	no
Astragalus scaphoides	no
Astragalus terminalis	no
Camissonia andina	no
Camissonia parvula	no
Carex crawei	no
Carex parryana var. idahoa (C. idahoa)	no
Cryptantha scoparia	no
Elymus flavescens (Leymus flavescens)	no
Eriogonum salsuginosum (Stenogonum salsuginosum)	no
Lesquerella carinata var. languida	no
Lesquerella lesicii	no
Lesquerella pulchella	no
Lomatium attenuatum	no
Malacothryix torreyi	no
Nama densum	no
Oenothera pallida var. idahoensis (O. pallida ssp. pallida)	no
Penstemon lemhiensis	no
Penstemon whippleanus	no
Quercus macrocarpa	no
Shoshonea pulvinata	no
Sphaeromeria argenta	no
Taraxacum eriophorum	no
Thalictrum alpinum	no
Thelypodium paniculatum	no

APPENDIX C

SOCIAL AND ECONOMIC ASSUMPTIONS

The impact analysis is based on the assumptions used in the MT FEIS, 2003 at pages 4-8, 4-111, 4-112 and the ZurMehlen, 2001 and the Langhus, 2001 data for employment and income estimates. The Montana CBNG wells have an average life of 15 years and are expected to produce .3 BCF (MT FEIS Vol. II, MIN-16). Exploration wells do not produce income and ten percent are dry holes. A gas price of \$4.00 per thousand cubic feet is assumed for this analysis.

The employment and income created are related to the project phase. The number of jobs and the associated wages for each phase are estimated as follows (ZurMehlen, 2001): 7 jobs and payroll of \$365,000 per 160 wells for exploration and development plus \$6,600 per well for 42 contract well drillers and pipeline installers (Langhus, 2001); 9 jobs and payroll of \$345,000 per 160 wells for production; and 12 jobs and payroll of \$415,000 per 160 wells for abandonment. Typical drilling operations, whether exploration or production, would require 3 to 5 days with an additional 2 to 3 days for completion work. A maximum 7 to 8 people would be present at any one time during the construction phase.

All dollar amounts are reported in 2001 dollars with no adjustments for inflation for comparison with the MT FEIS analysis.

Royalty rates for all lease ownerships, Federal, State and private, are assumed at 12.5 percent of well head value. Montana receives 50 percent of the Federal royalties paid. Montana taxes all gas production at 9.3 percent of well head value, after the first year. Private royalties are taxed at 15.1 percent. On average 50 percent of the production taxes are returned to the local governments.

Impacts to livestock operations could result from construction of the well pad sites, groundwater drawdown and produced water. However, the 160 acre spacing of the well pads and the temporary nature of the activities associated with CBNG drilling and testing, should not result in a reduction of AUM's to individual operators and suitable produced water can be used for livestock. (See Livestock section) Also, the MT-DNRC requires CBNG operators to offer water mitigation agreements to owners of water wells or natural springs adversely impacted by CBNG development. (See Hydrology section)

Direct economic impacts include changes in personal income and employment; lease royalties; income and production taxes. Indirect impacts would include induced economic activity from local purchases for supplies, equipment and services.

Social impacts would include changes to social well being due to changes in personal income and employment and possible effects to private surface owners whose land is underlain by federal minerals.

**APPENDIX D
POD LEGAL DESCRIPTIONS**

**DEER CREEK NORTH POD
LEGAL DESCRIPTION
WITH SURFACE AND MINERAL (OIL & GAS) OWNERSHIP AND ACRES**

Township	Range	Section	Subdivision	Acres of Federal Surface	Acres of Federal Minerals (O & G)	Acres of Private Surface	Acres of Private Minerals (O & G)	Total Acres
9 South	41 East	1	Lots 5-10, SW ¹ / ₄ , W ¹ / ₂ SE ¹ / ₄	--	308.22	549.16	240.94	549.16
		2	Lots 5-8, S ¹ / ₂ N ¹ / ₂ , S ¹ / ₂	222.11	243.16	339.97	318.92	562.08
		3	Lots 5-8, S ¹ / ₂ N ¹ / ₂ , S ¹ / ₂	40.00	103.19	539.28	476.09	579.28
		4	Lots 5-8, S ¹ / ₂ N ¹ / ₂ , S ¹ / ₂	29.61	288.84	566.75	307.52	596.36
		5	Lots 5-8, S ¹ / ₂ N ¹ / ₂ , S ¹ / ₂	--	493.40	613.40	120.00	613.40
		6	Lots 6-12, S ¹ / ₂ NE ¹ / ₄ , SE ¹ / ₄ NW ¹ / ₄ , E ¹ / ₂ SW ¹ / ₄ , SE ¹ / ₄	--	385.21	619.69	234.48	619.69
		7	Lots 5 & 6, E ¹ / ₂ , E ¹ / ₂ NW ¹ / ₄	--	112.96	472.96	360.00	472.96
		8	All	--	40.00	640.00	600.00	640.00
		9	All	--	--	640.00	640.00	640.00
		10	All	--	120.00	640.00	520.00	640.00
		11	All	40.00	560.00	600.00	80.00	640.00
		12	Lots 1 & 2, W ¹ / ₂ NE ¹ / ₄ , NW ¹ / ₄	--	239.30	319.30	80.00	319.30
		14	N ¹ / ₂	--	80.00	320.00	240.00	320.00
		15	All	40.00	520.00	600.00	120.00	640.00
		22	N ¹ / ₂	--	320.00	320.00	--	320.00
			TOTAL ACRES	371.72	3,814.28	7,780.51	4,337.95	8,152.23

If permitting and/or implementation of the produced water treatment facility is delayed for Deer Creek North, Fidelity will construct two containment reservoirs (23-2191 and 33-2191) on federal surface in the NE¹/₄SW¹/₄ and NW¹/₄SE¹/₄, Section 21, T. 9 S., R. 41 E. There are 360 acres of federal surface and 640 acres of federal minerals (all minerals) in Section 21, of T. 9 S., R. 41 E.

**POND CREEK POD
LEGAL DESCRIPTION
WITH SURFACE AND MINERAL (OIL & GAS) OWNERSHIP AND ACRES**

Township	Range	Section	Subdivision	Acres of Federal Surface	Acres of Federal Minerals (O & G)	Acres of Private Surface	Acres of Private Minerals (O & G)	Total Acres
8 South	39 East	34	SE¼	--	--	160.00	160.00	160.00
		35	SW¼	--	80.00	160.00	80.00	160.00
9 South	39 East	1	Lots 1-4, W½E½, W½	40	641.09	601.09	--	641.09
		2	All	--	160.00	640.00	480.00	640.00
		3	N½, SE¼	80.00	480.00	400.00	--	480.00
		10	E½, SW¼	--	200.00	480.00	280.00	480.00
		11	All	--	360.00	640.00	280.00	640.00
		12	Lots 1-4, W½E½, W½	--	639.56	639.56	--	639.56
		15	All	--	440.00	640.00	200.00	640.00
		22	All	80.00	120.00	560.00	520.00	640.00
		26	W½	200.00	320.00	120.00	--	320.00
		27	All	80.00	280.00	560.00	360.00	640.00
9 South	40 East	5	Lots 3 & 4, S½NW¼, SW¼	--	280.23	320.23	40.00	320.23
		6	Lots 1-7, S½NE¼, SE¼NW¼, E½SW¼, SE¼	114.23	314.32	514.45	314.36	628.68
		7	Lots 1-4, E½, E½W½	320.00	629.32	309.32	--	629.32
		8	NW¼	40.00	160.00	120.00	--	160.00
		18	Lots 1-4, E½, E½W½	154.95	630.00	475.05	--	630.00
			TOTAL ACRES	1,109.18	5,734.52	7,339.70	2,714.36	8,448.88
9 South Not	39 East within	23 POD	NW¼SW¼ boundary	40.00 but has	40.00 a R/W	on it for the	-- Coal Ck	40.00 POD

If permitting and/or implementation of the produced water treatment facility is delayed for Pond Creek, Fidelity will construct two containment reservoirs (23-2191 and 33-2191) on federal surface in the NE¼SW¼ and NW¼SE¼, Section 21, T. 9 S., R. 41 E. There are 360 acres of federal surface and 640 acres of federal minerals (all minerals) in Section 21, of T. 9 S., R. 41 E.

APPENDIX E
LIST OF RIGHTS-OF-WAY

DEER CREEK NORTH PLAN OF DEVELOPMENT

Fidelity Exploration & Production Company Right-of-Way MTM-94206
2585 Heartland Drive
Sheridan, Wyoming 82801
307-672-7111

Purpose of this right-of-way application is to allow for installation of buried gas and water lines across federal surface for the production and transportation of CBNG. Desired term of the R/W grant is 20 years with the right of renewal requested. The gas lines and water lines will be used for year round transporting of CBNG. Volume or amount of product to be transported is unknown. The duration and timing of the construction should be no more than three weeks per project. No temporary work areas will be required

Right of Way Width: 50 feet
 Type of Gas Line: 8-inch steel -low pressure, rated 280 PSI, MAOP
 Type of Water Line: 6-inch Poly
 Width of Trench for Gas & Water: 18-36 inches
 Depth of gas and water lines: 5 to 8 feet

A 4-inch gas and 3-inch water line, buried 48 kV electric line, and two-track access road would cross the first 1,565 feet across federal land but would be “on-lease”; therefore a right-of-way will not be required for these facilities. The 4-inch gas and 3-inch water line would be buried in one 18 to 36-inch wide, 5 to 8 feet deep trench. The buried electric line will be plowed in at a depth of 24 inches in a trench 4 inches wide and run parallel to the 4-inch gas and 3-inch water lines at a distance of 10 feet.

The 8-inch steel gas line will run parallel to the 4-inch gas and 3-inch water lines, 10-15 feet from them.

The 6-inch water line will run parallel to the 8-inch gas line. The water line will be buried 5-8 feet deep, in a trench 18-36 inches wide, 10-15 feet from the 8-inch gas line.

T	R	Sec.	Description	Length across public lands	Number-Diameter of Gas Lines	Number-Diameter of Water Lines	Electric Line(s)	Access road
9S	41E	2	E½SW¼	1,565'	1 – 8”	1 – 6”	--	Existing two-track to 24-0291 then new two-track
9S	41E	2	S½SW¼	1,875'	1 – 8”	1 – 6”	--	Existing two-track to 24-0291 then new two track

Bitter Creek Pipelines, LLC Right-of-Way MTM-94808
900 Gillette Street
Sheridan, Wyoming 82801

Purpose of this right-of-way application is to allow for installation of buried gas pipelines across federal surface for the transportation of CBNG. Desired term of the R/W grant is 30 years with the right of renewal requested. The gas line will be used for year round transporting of CBNG. Volume or amount of product to be transported is unknown. The duration and timing of the construction should be no more than three weeks per project. No temporary work areas will be required

Right of Way Width: 50 feet
 Type of Gas Line: 1 – 12-inch high pressure steel, rated at 1480 PSI, MAOP
 1 – 16-inch low pressure steel, rated 280 PSI, MAOP
 Width of Trench for Gas Lines: 24 inches for each gas line
 Depth of gas lines: 5-foot trench depth with minimum of 3-foot coverage

The gas lines will run parallel to each other and to Fidelity Exploration & Production’s gas and water line right-of-way at a distance of approximately 10-15 feet between lines.

Trench will be dug using a wheel trencher/track hoe

T	R	Sec.	Description	Length across public lands	Number-Diameter of Gas Lines	Access road
9S	41E	2	NE¼SW¼, S½SW¼	3,440'	1 – 12” 1 – 16”	Existing two-track to 24-0291 then new two-track

POND CREEK PLAN OF DEVELOPMENT

Fidelity Exploration & Production Company Right-of-Way MTM-94322
2585 Heartland Drive
Sheridan, Wyoming 82801
307-672-7111

The purpose of this right-of-way is to provide access across federal lands on new and existing two-track roads and for buried gas, water, and electric lines for the production and transportation of CBNG. The term of the R/W grant is 20 years with the right of renewal. The gas lines and water lines will be used for year round transporting of CBNG. Volume or amount of product to be transported is unknown. The duration and timing of the construction should be no more that three weeks per project. No temporary work areas will be required

Right of Way Width: 50 feet
 Type of Gas Line: 4-inch Poly
 6-inch Poly
 Type of Water Line: 4-inch Poly
 Electric Lines: 3-Phase, .48 kV (480 Volt)
 Width of Trench for Gas/Water: 18-36 inches
 Depth of gas and water lines: 5 to 8 feet

The buried electric line will be plowed in at a depth of 24 inches in a trench 4 inches wide and run parallel to the gas and water lines at a distance of 10 feet.

T	R	Sec.	Description	Length across public lands	Number-Diameter of Gas Lines	Number-Diameter of Water Lines	Electric Line(s)	Access road
9S	39E	1	SE¼SW¼	1,560'	4 - 4"	1 - 4"	--	Existing Two-Track Road
9S	39E	3	NE¼SE¼	1360'	1 - 6" 1 - 4"	1 - 4"	1	Existing Two-Track Road
9S	39E	23	NW¼SW¼ - Outside POD boundary but necessary for access to Pond Creek POD	1500'	4 - 4"	1 - 4"	1	New Two-Track Road
9S	39E	27	SE¼SE¼	1350'	5 - 4"	1 - 4"	--	
9S	39E	26	NE¼NW¼	Existing R/W MTM-88985				
9S	40E	18	SW¼NW¼	Existing R/W MTM-88985				
9S	40E	19	NE¼NW¼	Existing R/W MTM-88985				

Powder River Energy Corporation Right-of-Way MTM-94323

P. O. Box 5087

Sheridan, Wyoming 82801

307-674-6466

Purpose of this right-of-way application is to provide access across federal lands for a 14.4/24.9 kV buried 3-phase, 3-wire, distribution powerline for Fidelity E & P's CBNG Projects. Desired term of the R/W grant is 50 years with the right of renewal requested. The powerline would be used year round. The duration and timing of the construction would be no more than two weeks and would take place as soon as the right-of-way is issued. No temporary work areas would be required

Right of Way Width:	40 feet
Length:	1,354 feet buried
Electric Lines:	14.4/24.9 kV
Power Poles:	N/A
Height & Class of Poles	N/A
Distance Between Poles:	N/A
Depth of Power Line Pole Holes:	N/A
Depth of Buried Powerlines:	3.5 to 4 feet
Width of trench	18 inches

The underground power line would be installed using a trencher.

T	R	Sec.	Description	Length across public lands	Type of Line [OH-Overhead B-Buried]	Access
9S	39E	22	NW¼SE¼	1,354	B	Via Two-Track Road

APPENDIX F
RIGHT-OF-WAY STIPULATIONS

DEER CREEK NORTH PLAN OF DEVELOPMENT

The right-of-way grant to be issued to Fidelity Exploration & Production Company for buried gas and water pipelines and access road would be issued under the authority of Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185) and subject to the terms and conditions in 43 CFR 2880, in the application and plan of development, and subject to the stipulations listed below.

STIPULATIONS: Fidelity E & P Right-of-Way MTM-94206

1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with Fidelity's Deer Creek North Plan of Development which was approved and made a part of the grant. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan(s) of development, shall be made available to the authorized officer on the right-of-way area during construction, operation, and termination. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
2. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
3. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
4. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
5. Holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation.
6. The holder shall seed all disturbed areas with native seed, using an agreed upon method suitable for the location. Seeding shall be repeated if a satisfactory stand is not obtained as determined by the authorized officer upon evaluation after one growing season. The holder must seed all disturbed areas with the seed mixture(s) listed below. The seed mixture(s) must be planted in the

amounts specified in pounds of pure live seed (PLS)/acre. There must be no primary or secondary noxious weed seed in the seed mixture. Seed must be tested and the viability testing of seed must be done in accordance with State law(s) and within six months prior to purchase. Commercial seed must be either certified or registered seed. The seed mixture container must be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed must be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture must be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first. The holder must take appropriate measures to ensure this does not occur. Where drilling is not possible, seed may be broadcast and the area raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled. The seeding must be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of the second growing season after seeding. The Authorized Officer is to be notified a minimum of seven days prior to seeding of the project.

ROW Seed Mixture (Silty or Clayey Ecological Sites)

The combination must include at least four of the following species. Western wheatgrass must be included in the mix. Thickspike wheatgrass may be substituted for wheatgrass only when western wheatgrass is unavailable.

<i>Species of Seed</i>	<i>(Variety)</i>	<i>Common Name</i>	<i>Pounds/acre *(PLS)</i>
<u>Pascopyrum smithii</u>	(Rosanna)	Western wheatgrass	3.00
<u>Pseudoroegneria spicata</u>	(Goldar)	Bluebunch wheatgrass	2.00
<u>Stipa viridula</u>	(Lodom)	Green needlegrass	2.00
<u>Elymus trachycaulus</u>	(Pryor)	Slender wheatgrass	2.00
<u>Stipa comata</u>		Needleandthread	1.00
<u>Bouteloua curtipendula</u>		Sideoats Grama	2.00
<u>Schizachyrium scoparium</u>		Little bluestem	2.00

**Pure Live Seed (PLS) formula: % of purity of seed mixture times % germination of seed mixture = portion of seed mixture that is PLS*

7. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within the limits imposed in the grant stipulations).
8. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 3-4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.
9. *The holder shall coordinate with the parties holding authorized rights on the adjacent and affected land [such as the grazing permittee/lessee and right-of-way holders].
10. Sixty days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

* This non-standard stipulation was approved by the District Manager, which is the next higher level of Bureau line management, for right-of-way MTM-83461, on September 28, 1994.

The right-of-way grant to be issued to Bitter Creek Pipelines, LLC for buried gas pipelines and an access road would be issued under the authority of Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185) and subject to the terms and conditions in 43 CFR 2880, in the application/plan of development, and subject to the stipulations listed below.

STIPULATIONS: Bitter Creek Pipelines, LLC Right-of-Way MTM-94808

1. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
4. Holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation.
5. The holder shall seed all disturbed areas with native seed, using an agreed upon method suitable for the location. Seeding shall be repeated if a satisfactory stand is not obtained as determined by the authorized officer upon evaluation after one growing season. The holder must seed all disturbed areas with the seed mixture(s) listed below. The seed mixture(s) must be planted in the amounts specified in pounds of pure live seed (PLS)/acre. There must be no primary or secondary noxious weed seed in the seed mixture. Seed must be tested and the viability testing of seed must be done in accordance with State law(s) and within six months prior to purchase. Commercial seed must be either certified or registered seed. The seed mixture container must be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed must be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture must be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first. The holder must take appropriate measures to ensure this does not occur. Where drilling is not possible, seed may be broadcast and the area raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled. The seeding must be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of the second growing season after seeding. The Authorized Officer is to be notified a minimum of seven days prior to seeding of the project.

ROW Seed Mixture (Silty or Clayey Ecological Sites)

The combination must include at least four of the following species. Western wheatgrass must be included in the mix. Thickspike wheatgrass may be substituted for wheatgrass only when western wheatgrass is unavailable.

<i>Species of Seed</i>	<i>(Variety)</i>	<i>Common Name</i>	<i>Pounds/acre *(PLS)</i>
<u>Pascopyrum smithii</u>	(Rosanna)	Western wheatgrass	3.00
<u>Pseudoroegneria spicata</u>	(Goldar)	Bluebunch wheatgrass	2.00
<u>Stipa viridula</u>	(Lodom)	Green needlegrass	2.00
<u>Elymus trachycaulus</u>	(Pryor)	Slender wheatgrass	2.00
<u>Stipa comata</u>		Needleandthread	1.00
<u>Bouteloua curtipendula</u>		Sideoats Grama	2.00
<u>Schizachyrium scoparium</u>		Little bluestem	2.00

**Pure Live Seed (PLS) formula: % of purity of seed mixture times % germination of seed mixture = portion of seed mixture that is PLS*

6. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within the limits imposed in the grant stipulations).
7. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 3-4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.
8. *The grant is issued subject to the holder's compliance with the mitigations set forth in the application.
9. *The holder shall coordinate with the parties holding authorized rights on the adjacent and affected land [such as the grazing permittee/lessee and right-of-way holders].
10. Sixty days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

* These non-standard stipulations were approved by the District Manager, which is the next higher level of Bureau line management, for right-of-way MTM-83461, on September 28, 1994.

POND CREEK PLAN OF DEVELOPMENT

The right-of-way grant to Fidelity Exploration & Production Company for the buried gas and water pipelines, buried powerlines, and access roads would be issued under the authority of Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185) and subject to the terms and conditions in 43 CFR 2880, in the application and plan of development, and subject to the stipulations listed below.

STIPULATIONS: Fidelity E & P Right-of-Way MTM-94322

1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with Fidelity's Pond Creek Plan of Development which was approved and made a part of the grant. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan(s) of development, shall be made available to the authorized officer on the right-of-way area during construction, operation, and termination. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
2. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
3. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
4. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
5. Holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation.
6. The holder shall seed all disturbed areas with native seed, using an agreed upon method suitable for the location. Seeding shall be repeated if a satisfactory stand is not obtained as determined by the authorized officer upon evaluation after one growing season. The holder must seed all disturbed areas with the seed mixture(s) listed below. The seed mixture(s) must be planted in the amounts specified in pounds of pure live seed (PLS)/acre. There must be no primary or secondary noxious weed seed in the seed mixture. Seed must be tested and the viability testing of seed must be done in accordance with State law(s) and within six months prior to purchase. Commercial seed must be either certified or registered seed. The seed mixture container must be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed must be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture must be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first. The holder must take appropriate measures to ensure this does not occur. Where drilling is not possible, seed may be broadcast and the area raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled. The seeding must be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of the second growing season after seeding. The Authorized Officer is to be notified a minimum of seven days prior to seeding of the project.

ROW Seed Mixture (Silty or Clayey Ecological Sites)

The combination must include at least four of the following species. Western wheatgrass must be included in the mix. Thickspike wheatgrass may be substituted for wheatgrass only when western wheatgrass is unavailable.

<i>Species of Seed</i>	<i>(Variety)</i>	<i>Common Name</i>	<i>Pounds/acre *(PLS)</i>
<u>Pascopyrum smithii</u>	(Rosanna)	Western wheatgrass	3.00
<u>Pseudoroegneria spicata</u>	(Goldar)	Bluebunch wheatgrass	2.00
<u>Stipa viridula</u>	(Lodom)	Green needlegrass	2.00
<u>Elymus trachycaulus</u>	(Pryor)	Slender wheatgrass	2.00
<u>Stipa comata</u>		Needleandthread	1.00
<u>Bouteloua curtipendula</u>		Sideoats Grama	2.00
<u>Schizachyrium scoparium</u>		Little bluestem	2.00

**Pure Live Seed (PLS) formula: % of purity of seed mixture times % germination of seed mixture = portion of seed mixture that is PLS*

7. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within the limits imposed in the grant stipulations).
8. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 3-4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.
9. *The holder shall coordinate with the parties holding authorized rights on the adjacent and affected land [such as the grazing permittee/lessee and right-of-way holders].
10. Sixty days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

* This non-standard stipulation was approved by the District Manager, which is the next higher level of Bureau line management, for right-of-way MTM-83461, on September 28, 1994.

The right-of-way grant to Powder River Energy Corp. would be issued under the authority of Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761) and subject to the terms and conditions in 43 CFR 2800, in the application/plan of development, and subject to the stipulations listed below.

STIPULATIONS: Powder River Energy Corporation Right-of-Way MTM-94323

1. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate areas of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
4. The holder shall seed all disturbed areas with native seed, using an agreed upon method suitable for the location. Seeding shall be repeated if a satisfactory stand is not obtained as determined by the authorized officer upon evaluation after one growing season. The holder must seed all disturbed areas with the seed mixture(s) listed below. The seed mixture(s) must be planted in the amounts specified in pounds of pure live seed (PLS)/acre. There must be no primary or secondary noxious weed seed in the seed mixture. Seed must be tested and the viability testing of seed must be done in accordance with State law(s) and within six months prior to purchase. Commercial seed must be either certified or registered seed. The seed mixture container must be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed must be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture must be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first. The holder must take appropriate measures to ensure this does not occur. Where drilling is not possible, seed may be broadcast and the area raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled. The seeding must be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of the second growing season after seeding. The Authorized Officer is to be notified a minimum of seven days prior to seeding of the project.

ROW Seed Mixture (Silty or Clayey Ecological Sites)

The combination must include at least four of the following species. Western wheatgrass must be included in the mix. Thickspike wheatgrass may be substituted for wheatgrass only when western wheatgrass is unavailable.

<i>Species of Seed</i>	<i>(Variety)</i>	<i>Common Name</i>	<i>Pounds/acre *(PLS)</i>
<u>Pascopyrum smithii</u>	<u>(Rosanna)</u>	Western wheatgrass	3.00

<u>Pseudoroegneria spicata</u>	(Goldar)	Bluebunch wheatgrass	2.00
<u>Stipa viridula</u>	(Lodom)	Green needlegrass	2.00
<u>Elymus trachycaulus</u>	(Pryor)	Slender wheatgrass	2.00
<u>Stipa comata</u>		Needleandthread	1.00
<u>Bouteloua curtipendula</u>		Sideoats Grama	2.00
<u>Schizachyrium scoparium</u>		Little bluestem	2.00

**Pure Live Seed (PLS) formula: % of purity of seed mixture times % germination of seed mixture = portion of seed mixture that is PLS*

5. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).
6. The holder of this right-of-way grant or the holder's successor in interest shall comply with Title VI of the Civil Rights Act of 1964 (43 U.S.C. 200d et seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.
7. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 3-4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.
8. * The grant is issued subject to the holder's compliance with the mitigations set forth in the application.
9. * The holder shall coordinate with the parties holding authorized rights on the adjacent and affected land [such as the grazing permittee/lessee and right-of-way holders].
10. Sixty days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

* These non-standard stipulations were approved by the District Manager, which is the next higher level of Bureau line management, for right-of-way MTM-83461, on September 28, 1994.

APPENDIX G HYDROLOGY

Table Hydro-1: Projected Discharges by Alternative and Season in gpm - Direct Impact Analysis															
Project	Existing			Alt. A			Alt. B			Alt. C			Alt. D		
	Winter	Spring	Summer	Winter	Spring	Summer	Winter	Spring	Summer	Winter	Spring	Summer	Winter	Spring	Summer
Untreated Discharge	820	820	820	1858	1684	1472	2490	2384	1262	2500	2172	1600	1640	1534	1262
Treated Discharge	---	---	---	---	---	---	0	0	850	---	---	---	850	850	850
Impoundments	---	---	---	---	---	---	X	X	X	X	X	X	---	---	---
Irrigation Areas	---	---	---	---	---	---	X	X	X	X	X	X	---	---	---
Existing Non-Project															
WY Treated	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
WY Untreated	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224
Powder River Gas	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350
Winter = November 1 to February 28															
Spring = March 1 to June 30															
Summer = July 1 to October 31															
Analysis is conducted at the time when the maximum total discharge for the season (treated and untreated) occurs.															

Table Hydro-2: Projected Discharges by Alternative and Season in gpm- Cumulative Impact Analysis												
Project	Alt. A			Alt. B			Alt. C			Alt. D		
	Winter	Spring	Summer									
Untreated Discharge	1858	1684	1472	2490	2384	1262	2500	2172	1600	1640	1534	1262
Treated Discharge	---	---	---	0	0	850	---	---	---	850	850	850
Impoundments	---	---	---	X	X	X	X	X	X	---	---	---
Irrigation Areas	---	---	---	X	X	X	X	X	X	---	---	---
Foreseeable Non-Project												
WY Treated	600	600	600	600	600	600	600	600	600	600	600	600
WY Untreated	224	224	224	224	224	224	224	224	224	224	224	224
Powder River Gas	1122	1122	1122	1122	1122	1122	1122	1122	1122	1122	1122	1122
Winter = November 1 to February 28												
Spring = March 1 to June 30												
Summer = July 1 to October 31												
Analysis is conducted at the time when the maximum total discharge for the season (treated and untreated) occurs.												

Table Hydro-3: Flow Values in Cubic Feet per Second (cfs)

	State Line			Below Dam			Birney Day		
	Winter	Spring	Summer	Winter	Spring	Summer	Winter	Spring	Summer
7Q10 ¹	76	118	36	70	70	71	73	73	74
LMM ²	175	303	171	171	221	269	173	225	235
HMM ²	225	1597	450	250	1408	565	209	1089	542
1= from DEQ EA for the Fidelity, Tongue River Project									
2= from USGS Water Data Report MT-04-1 (2005)									
Note: 448.8 gpm = 1 cfs									

Chart Hydro-1

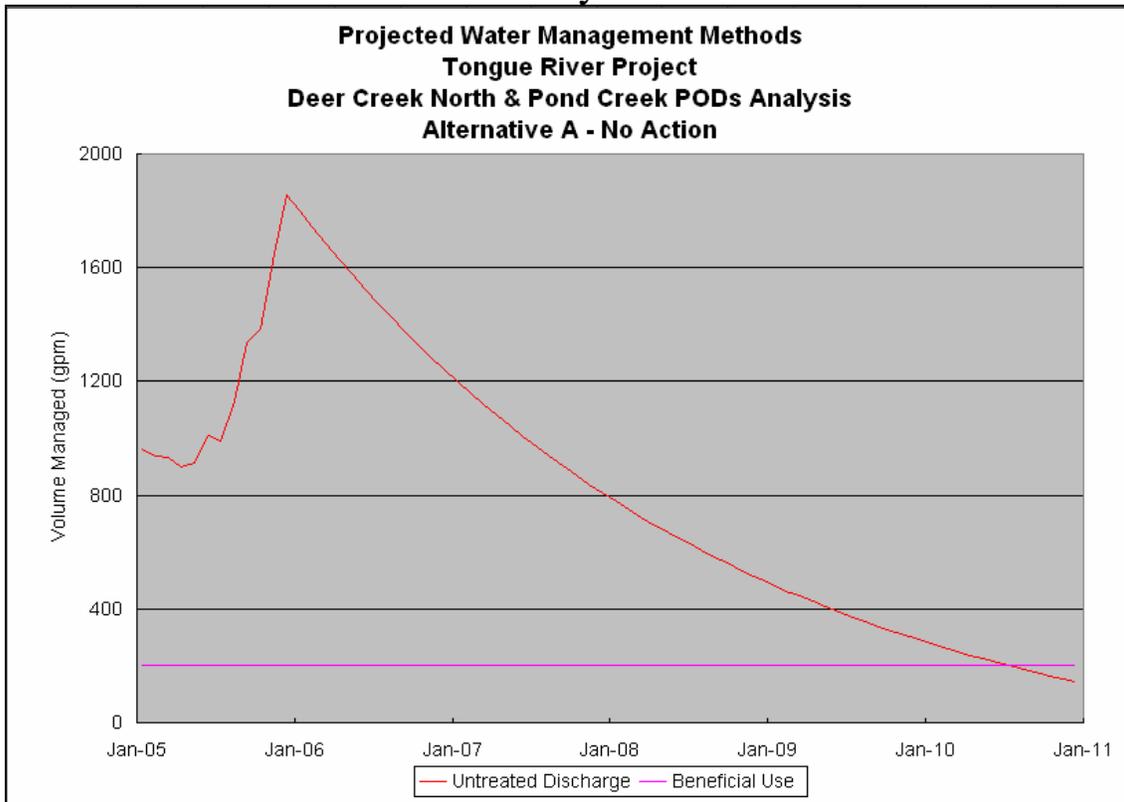


Chart Hydro-2

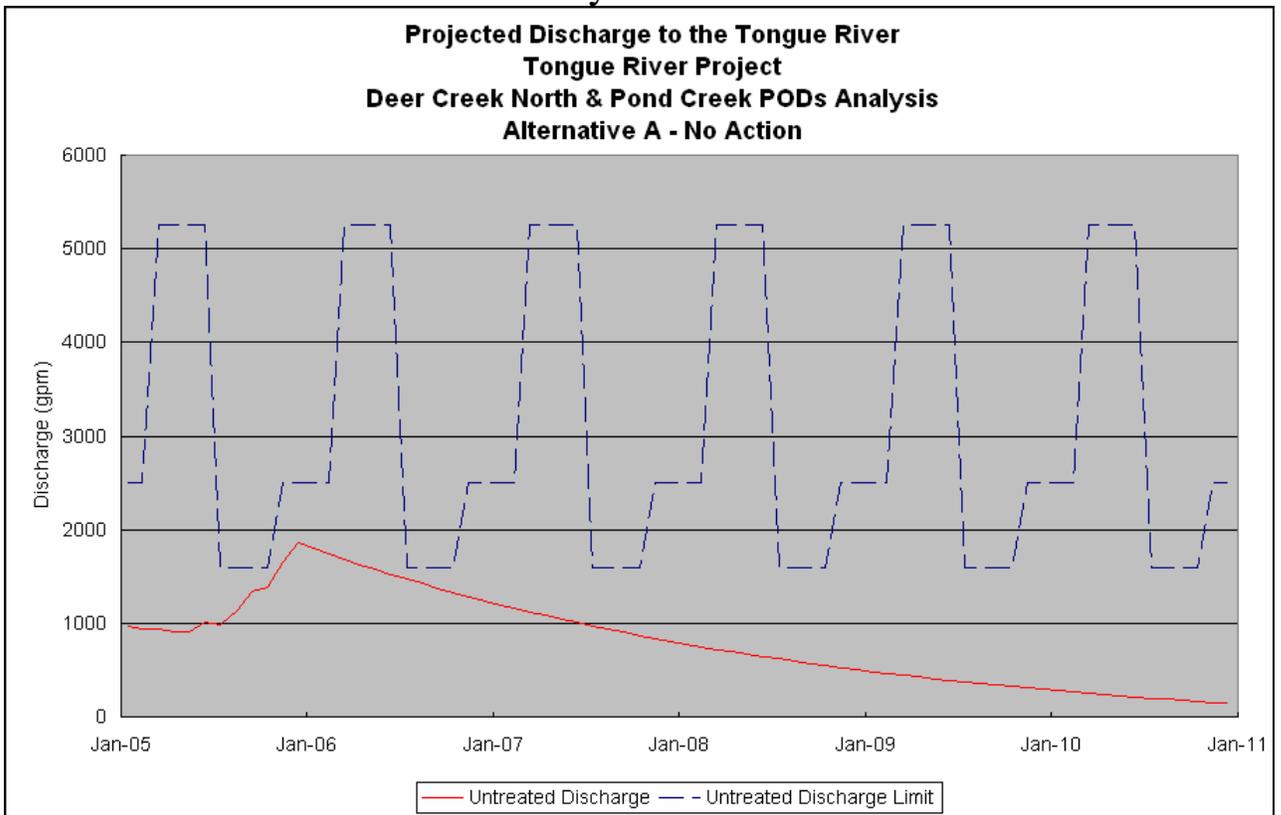


Chart Hydro-3

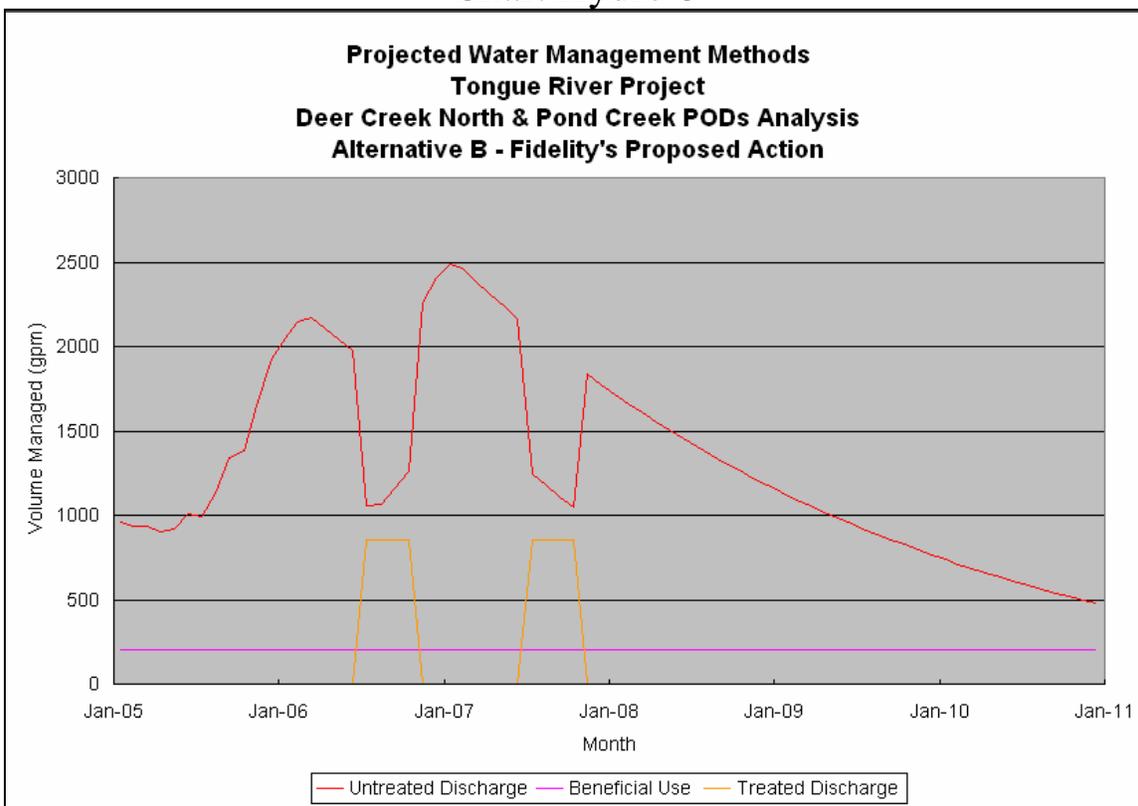


Chart Hydro-4

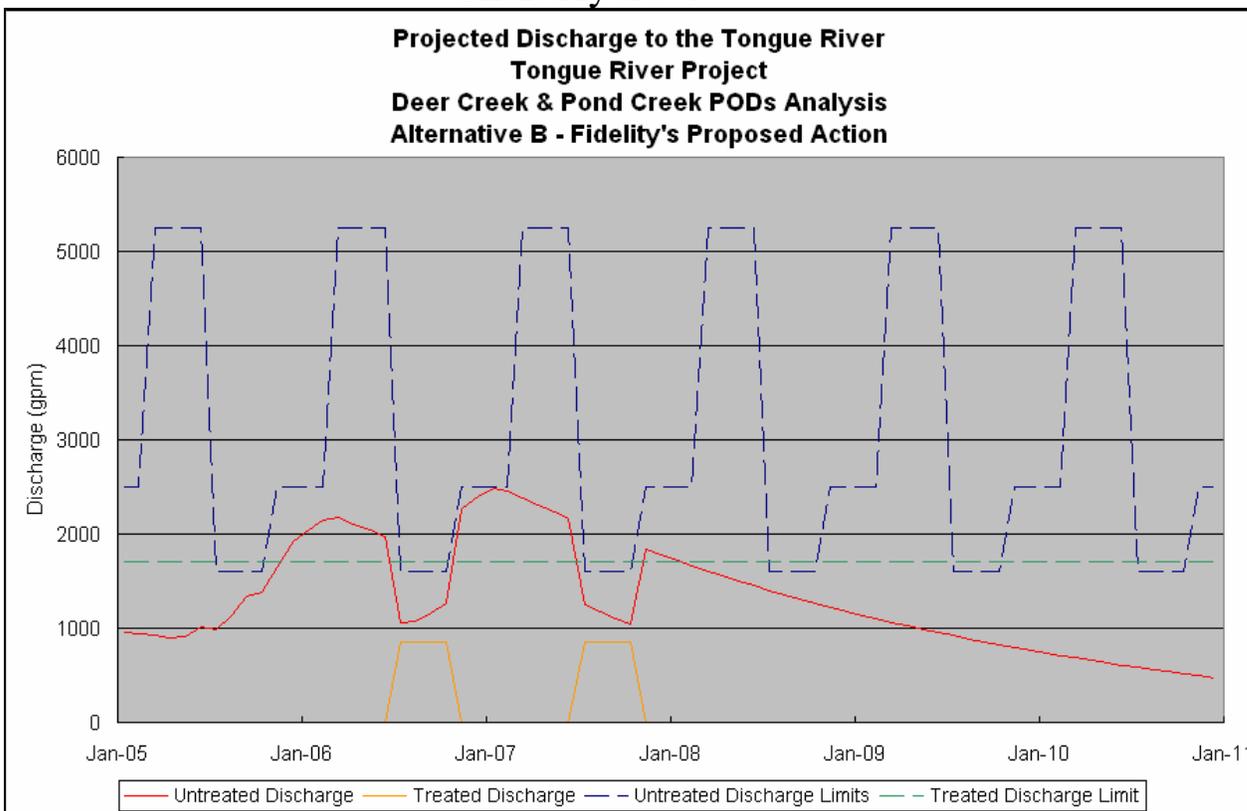


Chart Hydro-5

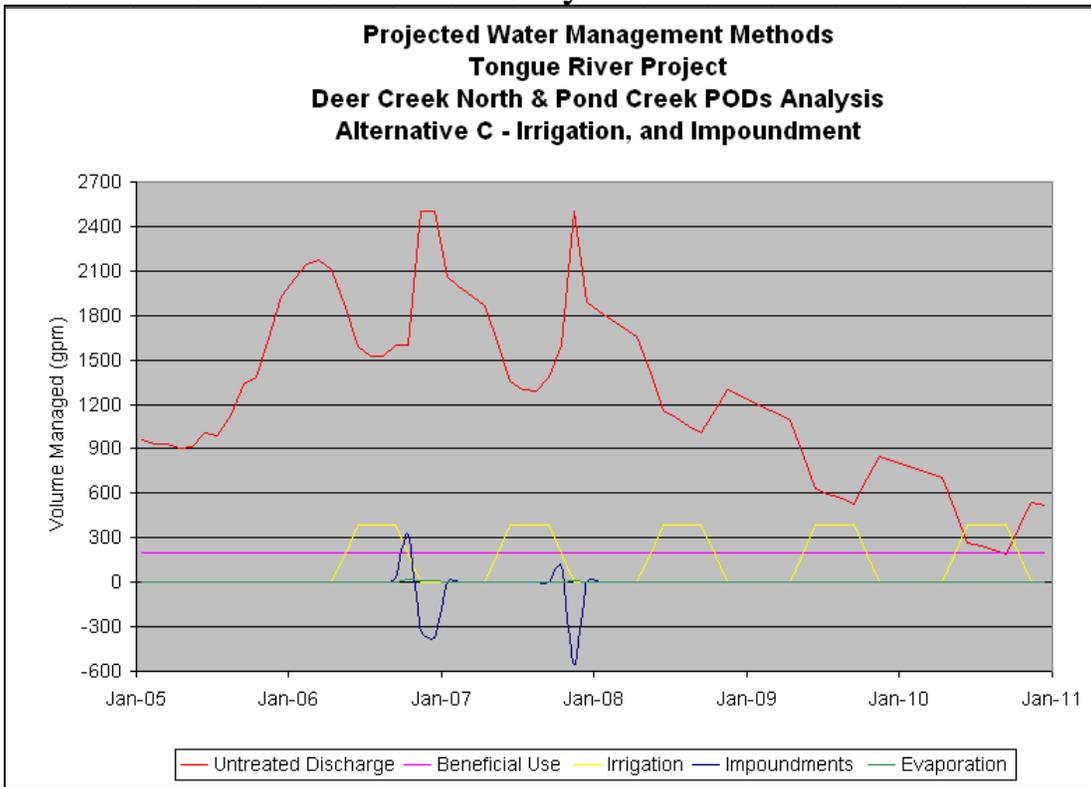


Chart Hydro-6

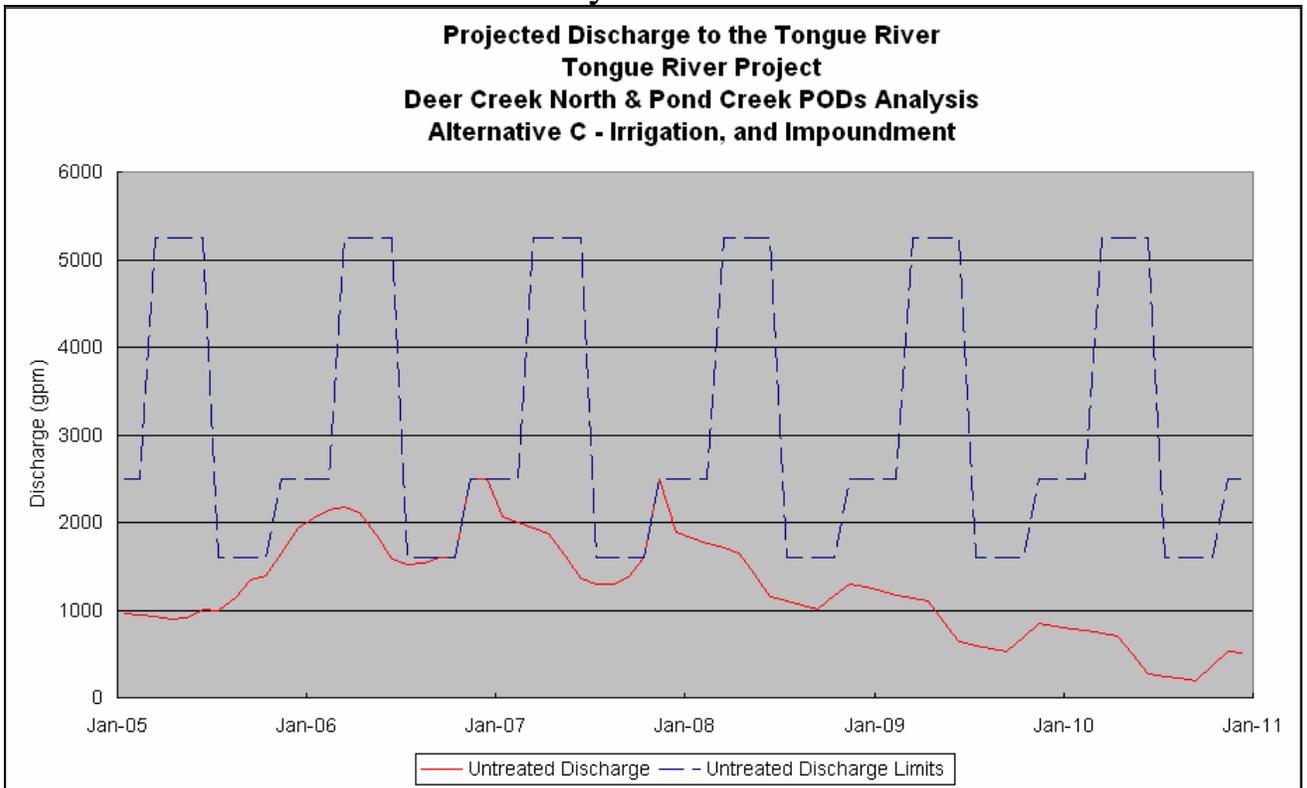


Chart Hydro-7

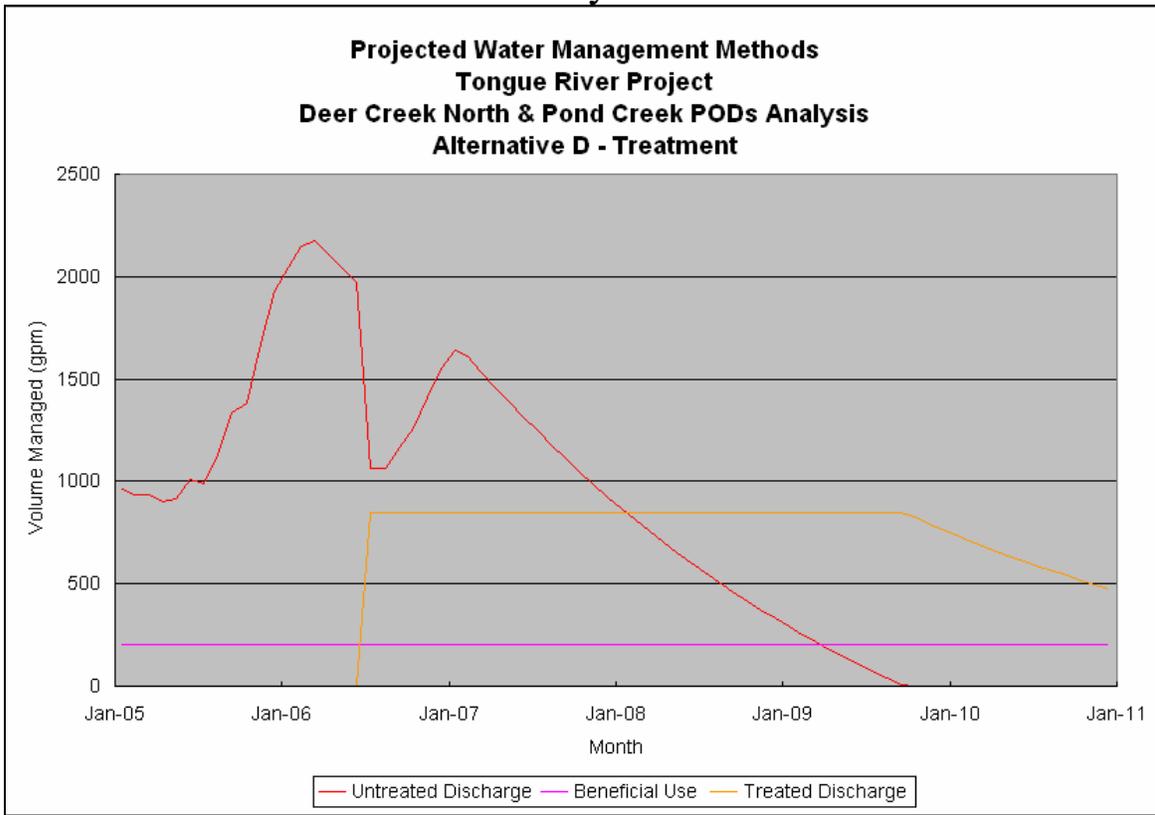


Chart Hydro-8

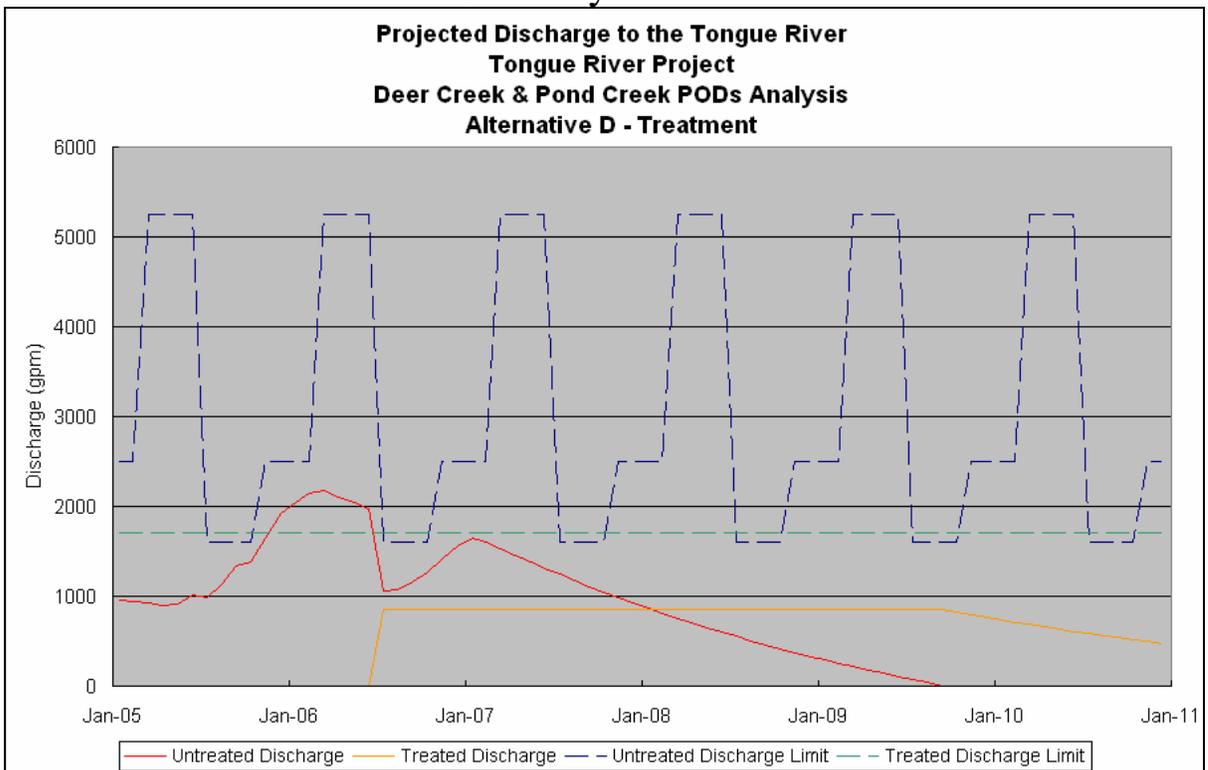


Chart Hydro-9

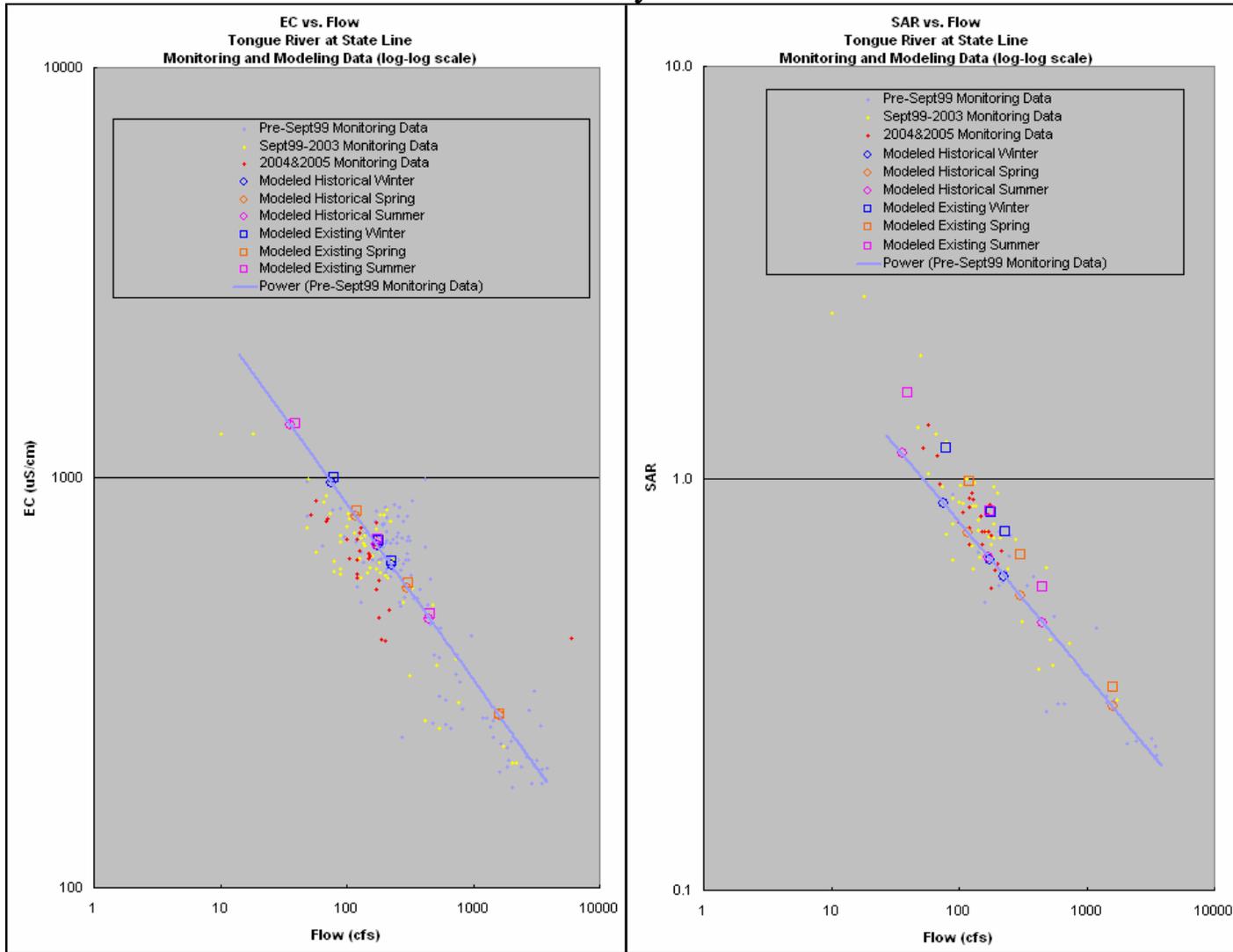


Chart Hydro-10

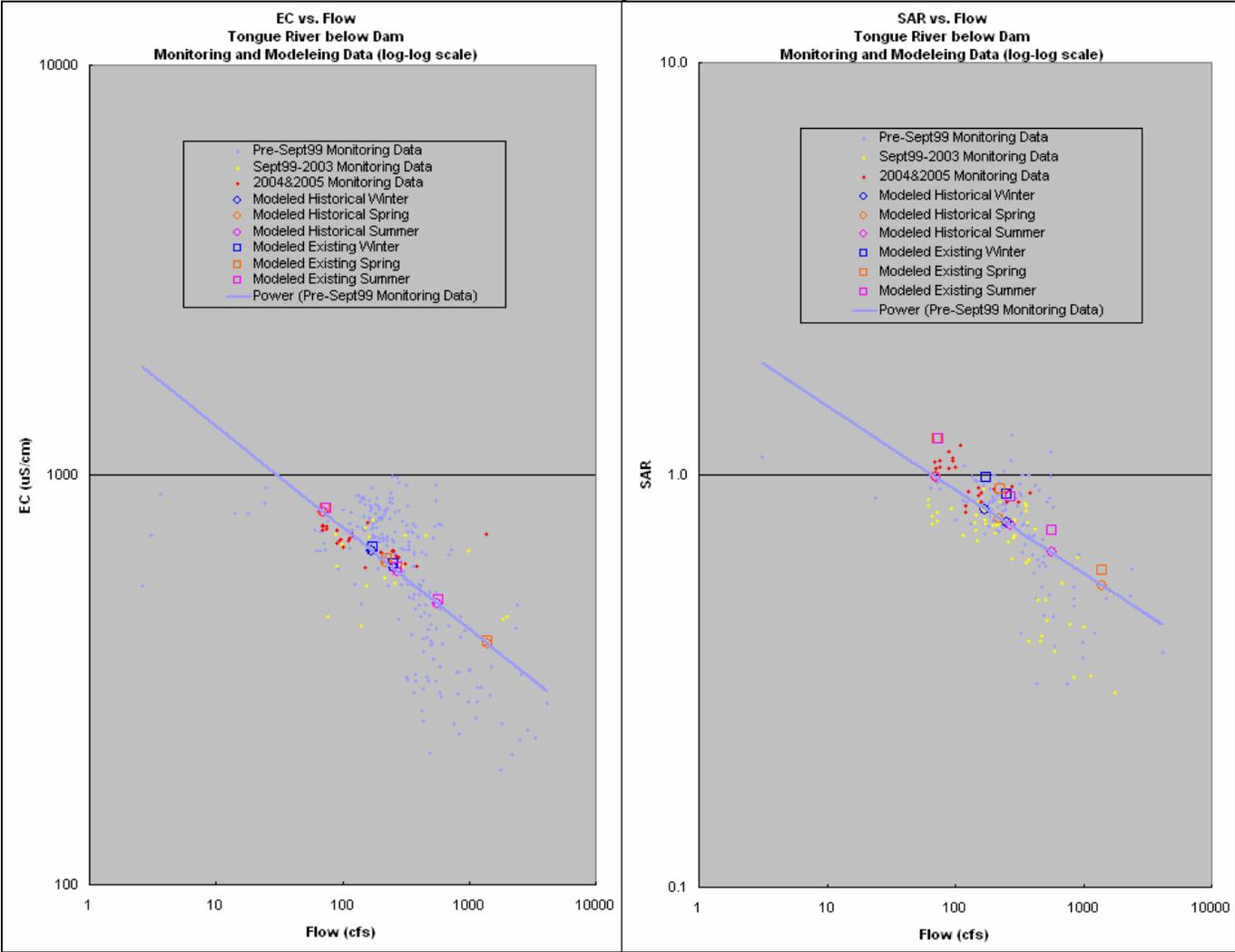


Chart Hydro-11

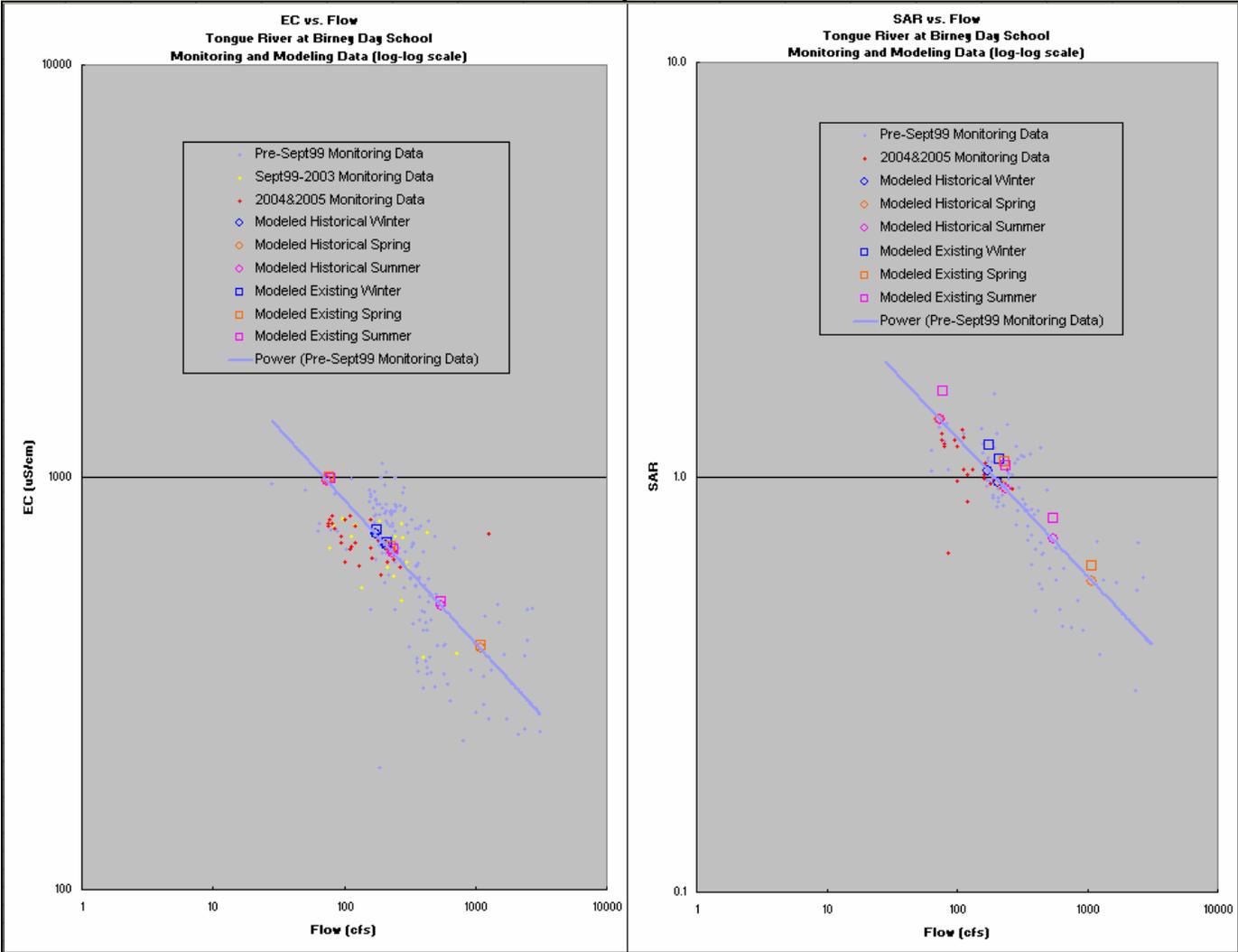


Table Hydro-4: Comparison of Projected Direct Surface Water Impacts - Winter																			
	Flow Conditions	Historical (Pre-Sept 99)			Modeled Existing			Alt. A: No Action			Alt. B: Fidelity's Proposal			Alt. C: Impoundment and Irrigation			Alt. D: Treatment		
		(0_0 gpm)			(820_0 gpm)			(1858_0 gpm)			(2490_0 gpm)			(2500_0 gpm)			(1640_850 gpm)		
		Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR
Tongue River at State Line	7Q10	76	974	0.87	80	999	1.18	82	1026	1.47	83	1041	1.64	83	1041	1.64	83	1008	1.42
	LMM	175	681	0.64	179	700	0.83	181	718	1.00	182	728	1.10	182	729	1.10	182	711	0.97
	HMM	225	611	0.58	229	628	0.74	231	643	0.89	232	652	0.97	232	652	0.97	232	637	0.86
Tongue River Below Dam	7Q10	70	812	0.99	73	829	1.22	75	845	1.42	77	854	1.54	77	854	1.54	77	834	1.39
	LMM	171	651	0.83	174	666	0.99	176	679	1.12	178	686	1.20	178	686	1.20	178	673	1.10
	HMM	250	593	0.76	253	606	0.90	255	617	1.01	257	623	1.08	257	624	1.08	257	613	1.00
Tongue River at Birney Day School	7Q10	73	983	1.38	77	1000	1.62	80	1016	1.82	81	1025	1.93	81	1025	1.94	81	1005	1.78
	LMM	173	728	1.04	177	743	1.20	180	756	1.33	181	763	1.41	181	763	1.42	181	750	1.31
	HMM	209	682	0.97	213	695	1.11	216	706	1.22	217	712	1.29	217	713	1.29	217	702	1.20

Values in parentheses represent the rate of discharge by Fidelity under MPDES permit MT-0030457 (untreated) followed by the Amount to be discharged under MT-0030724 (treated).

Other discharges accounted for in the direct analysis include the PRG discharge downstream from the Tongue River Dam (350 gpm), the Wyoming treated (600 gpm) and untreated (225 gpm) discharges, and discharges from the Coal Mines (variable).

Table Hydro-5: Comparison of Projected Cumulative Surface Water Impacts - Winter																	
	Flow Conditions	Historical (Pre-Sept 99)			Alt. A: No Action			Alt. B: Fidelity's Proposal			Alt. C: Impoundment and Irrigation			Alt. D: Treatment			
		(0_0 gpm)			(1858_0 gpm)			(2490_0 gpm)			(2500_0 gpm)			(1640_850 gpm)			
		Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	Flow (cfs)	EC ($\mu\text{S}/\text{cm}$)	SAR	
Tongue River at State Line	7Q10	76	974	0.87	82	1026	1.47	83	1041	1.64	83	1041	1.64	83	1008	1.42	
	LMM	175	681	0.64	181	718	1.00	182	728	1.10	182	729	1.10	182	711	0.97	
	HMM	225	611	0.58	231	643	0.89	232	652	0.97	232	652	0.97	232	637	0.86	
Tongue River Below Dam	7Q10	70	812	0.99	77	844	1.44	79	853	1.56	79	853	1.56	79	832	1.41	
	LMM	171	651	0.83	178	680	1.14	180	687	1.22	180	687	1.22	180	674	1.12	
	HMM	250	593	0.76	257	618	1.03	259	624	1.09	259	624	1.09	259	614	1.01	
Tongue River at Birney Day School	7Q10	73	983	1.38	81	1014	1.84	83	1024	1.95	83	1024	1.96	83	1003	1.80	
	LMM	173	728	1.04	181	757	1.35	183	764	1.43	183	764	1.43	183	751	1.33	
	HMM	209	682	0.97	217	707	1.23	219	713	1.30	219	713	1.30	219	703	1.22	

Values in parentheses represent the rate of discharge by Fidelity under MPDES permit MT-0030457 (untreated) followed by the Amount to be discharged under MT-0030724 (treated).

Other discharges accounted for in the direct analysis include the PRG discharge downstream from the Tongue River Dam (1122 gpm), the Wyoming treated (600 gpm) and untreated (225 gpm) discharges, and discharges from the Coal Mines (variable).

	Flow Conditions	Historical (Pre-Sept 99)			Modeled Existing			Alt. A: No Action			Alt. B: Fidelity's Proposal			Alt. C: Impoundment and Irrigation			Alt. D: Treatment		
		(0_0 gpm)			(820_0 gpm)			(1684_0 gpm)			(2384_0 gpm)			(2172_0 gpm)			(1534_850 gpm)		
		Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR
Tongue River at State Line	7Q10	118	806	0.74	122	829	0.98	124	848	1.16	125	862	1.31	125	858	1.27	125	838	1.14
	LMM	303	538	0.52	307	551	0.65	309	562	0.75	310	570	0.83	310	567	0.80	310	559	0.74
	HMM	1597	263	0.28	1601	266	0.31	1603	267	0.34	1604	269	0.36	1604	268	0.35	1604	267	0.34
Tongue River Below Dam	7Q10	70	812	0.99	73	829	1.22	75	842	1.39	77	853	1.52	76	850	1.48	77	832	1.37
	LMM	221	611	0.78	224	625	0.93	226	634	1.03	228	642	1.11	227	640	1.08	228	631	1.02
	HMM	1408	387	0.54	1411	392	0.59	1413	396	0.62	1415	399	0.65	1414	398	0.64	1415	396	0.62
Tongue River at Birney Day School	7Q10	73	983	1.38	77	1000	1.62	79	1013	1.78	81	1024	1.91	80	1021	1.87	81	1003	1.76
	LMM	225	665	0.95	229	678	1.09	231	688	1.19	233	696	1.27	232	693	1.25	233	684	1.18
	HMM	1089	384	0.56	1093	390	0.61	1095	393	0.65	1097	396	0.67	1096	396	0.66	1097	393	0.64

Values in parentheses represent the rate of discharge by Fidelity under MPDES permit MT-0030457 (untreated) followed by the Amount to be discharged under MT-0030724 (treated).

Other discharges accounted for in the direct analysis include the PRG discharge downstream from the Tongue River Dam (350 gpm), the Wyoming treated (600 gpm) and untreated (225 gpm) discharges, and discharges from the Coal Mines (variable).

	Flow Conditions	Historical (Pre-Sept 99)			Alt. A: No Action			Alt. B: Fidelity's Proposal			Alt. C: Impoundment and Irrigation			Alt. D: Treatment		
		(0_0 gpm)			(1684_0 gpm)			(2384_0 gpm)			(2172_0 gpm)			(1534_850 gpm)		
		Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR	Flow (cfs)	EC ($\mu S/cm$)	SAR
Tongue River at State Line	7Q10	118	806	0.74	124	848	1.16	125	862	1.31	125	858	1.27	125	838	1.14
	LMM	303	538	0.52	309	562	0.75	310	570	0.83	310	567	0.80	310	559	0.74
	HMM	1597	263	0.28	1603	267	0.34	1604	269	0.36	1604	268	0.35	1604	267	0.34
Tongue River Below Dam	7Q10	70	812	0.99	77	841	1.41	78	851	1.54	78	848	1.50	78	831	1.39
	LMM	221	611	0.78	228	635	1.04	229	643	1.12	229	641	1.10	229	632	1.03
	HMM	1408	387	0.54	1415	397	0.63	1416	400	0.65	1416	399	0.65	1416	397	0.63
Tongue River at Birney Day School	7Q10	73	983	1.38	81	1012	1.80	83	1022	1.93	82	1019	1.90	83	1002	1.78
	LMM	225	665	0.95	233	689	1.21	235	696	1.29	234	694	1.26	235	685	1.20
	HMM	1089	384	0.56	1097	394	0.65	1099	397	0.68	1098	396	0.67	1099	394	0.65

Values in parentheses represent the rate of discharge by Fidelity under MPDES permit MT-0030457 (untreated) followed by the Amount to be discharged under MT-0030724 (treated).

Other discharges accounted for in the direct analysis include the PRG discharge downstream from the Tongue River Dam (1122 gpm), the Wyoming treated (600 gpm) and untreated (225 gpm) discharges, and discharges from the Coal Mines (variable).

Table Hydro-8: Comparison of Projected Direct Surface Water Impacts - Summer																			
	Flow Conditions	Historical (Pre-Sept 99)			Modeled Existing			Alt. A: No Action			Alt. B: Fidelity's Proposal			Alt. C: Impoundment and Irrigation			Alt. D: Treatment		
		(0_0 gpm)			(820_0 gpm)			(1484_0 gpm)			(1262_850 gpm)			(1600_0 gpm)			(1262_850 gpm)		
		Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR
Tongue River at State Line	7Q10	36	1342	1.15	40	1357	1.61	41	1374	1.88	43	1337	1.78	41	1377	1.93	43	1337	1.78
	LMM	171	687	0.64	175	707	0.83	176	718	0.94	178	711	0.92	176	720	0.97	178	711	0.92
	HMM	450	454	0.45	454	464	0.55	455	470	0.60	457	467	0.59	455	470	0.61	457	467	0.59
Tongue River Below Dam	7Q10	71	809	0.99	74	827	1.22	76	837	1.34	77	825	1.31	76	838	1.37	77	825	1.31
	LMM	269	582	0.75	272	595	0.88	274	602	0.95	275	598	0.94	274	603	0.97	275	598	0.94
	HMM	565	485	0.65	568	494	0.74	570	499	0.78	571	497	0.77	570	499	0.79	571	497	0.77
Tongue River at Birney Day School	7Q10	74	978	1.38	78	996	1.61	80	1006	1.73	81	994	1.70	80	1007	1.76	81	994	1.70
	LMM	235	655	0.94	239	667	1.07	241	674	1.13	242	670	1.12	241	675	1.15	242	670	1.12
	HMM	542	489	0.71	546	499	0.80	548	504	0.84	549	502	0.83	548	504	0.85	549	502	0.83

Values in parentheses represent the rate of discharge by Fidelity under MPDES permit MT-0030457 (untreated) followed by the Amount to be discharged under MT-0030724 (treated).

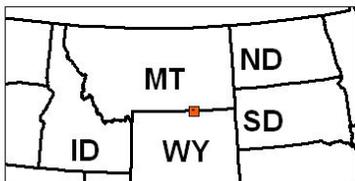
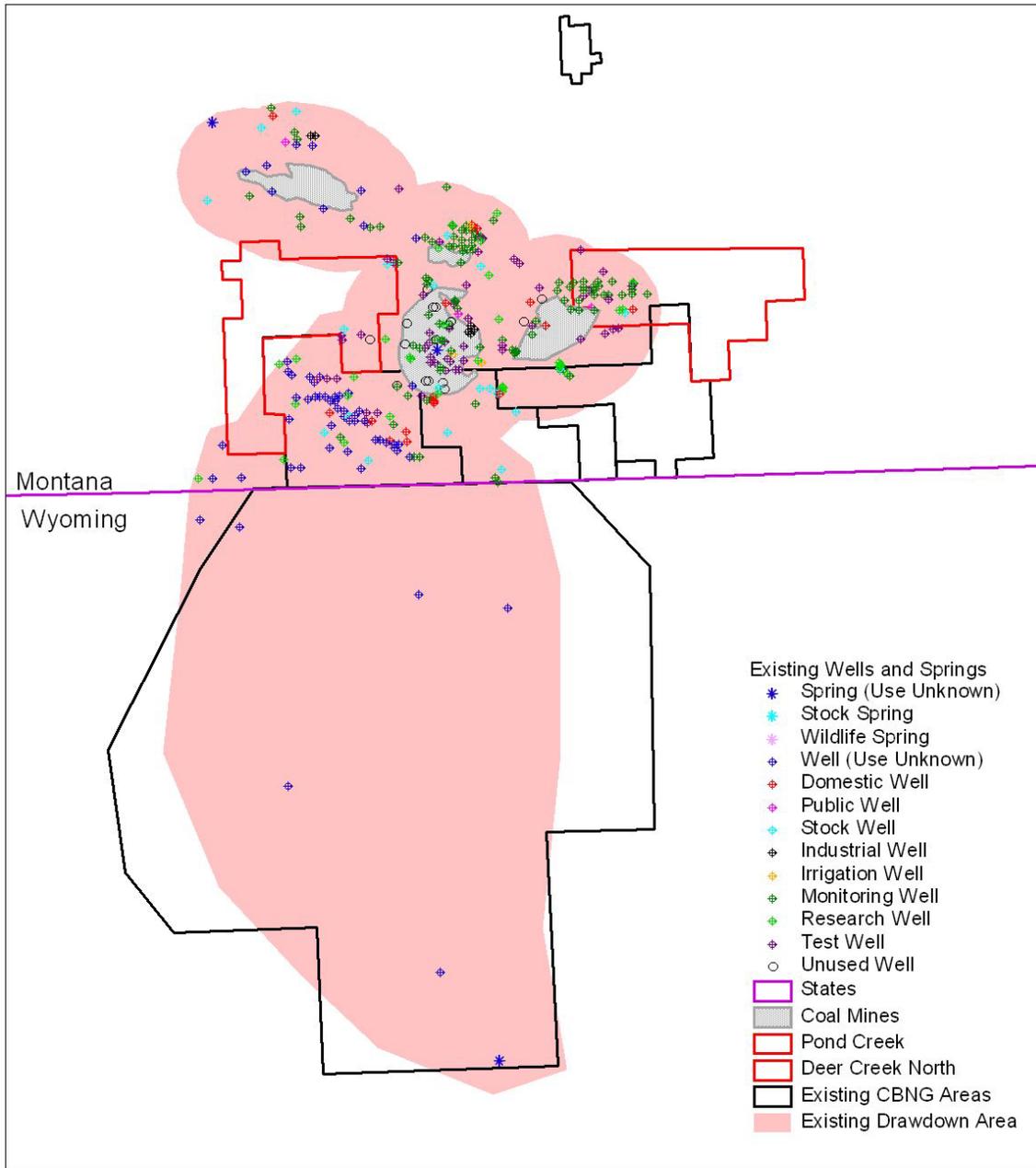
Other discharges accounted for in the direct analysis include the PRG discharge downstream from the Tongue River Dam (350 gpm), the Wyoming treated (600 gpm) and untreated (225 gpm) discharges, and discharges from the Coal Mines (variable).

Table Hydro-9: Comparison of Projected Cumulative Surface Water Impacts - Summer																		
	Flow Conditions	Historical (Pre-Sept 99)			Alt. A: No Action			Alt. B: Fidelity's Proposal			Alt. C: Impoundment and Irrigation			Alt. D: Treatment				
		(0_0 gpm)			(1484_0 gpm)			(1262_850 gpm)			(1600_0 gpm)			(1262_850 gpm)				
		Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR	Flow (cfs)	EC (µS/cm)	SAR		
Tongue River at State Line	7Q10	36	1342	1.15	41	1374	1.88	43	1337	1.78	41	1377	1.93	43	1337	1.78		
	LMM	171	687	0.64	176	718	0.94	178	711	0.92	176	720	0.97	178	711	0.92		
	HMM	450	454	0.45	455	470	0.60	457	467	0.59	455	470	0.61	457	467	0.59		
Tongue River Below Dam	7Q10	71	809	0.99	77	835	1.37	79	824	1.33	78	837	1.39	79	824	1.33		
	LMM	269	582	0.75	275	602	0.96	277	599	0.95	276	604	0.98	277	599	0.95		
	HMM	565	485	0.65	571	499	0.79	573	498	0.78	572	500	0.80	573	498	0.78		
Tongue River at Birney Day School	7Q10	74	978	1.38	82	1004	1.76	83	993	1.72	82	1006	1.78	83	993	1.72		
	LMM	235	655	0.94	243	675	1.15	244	671	1.13	243	676	1.16	244	671	1.13		
	HMM	542	489	0.71	550	504	0.85	551	503	0.84	550	505	0.86	551	503	0.84		

Values in parentheses represent the rate of discharge by Fidelity under MPDES permit MT-0030457 (untreated) followed by the Amount to be discharged under MT-0030724 (treated).

Other discharges accounted for in the direct analysis include the PRG discharge downstream from the Tongue River Dam (1122 gpm), the Wyoming treated (600 gpm) and untreated (225 gpm) discharges, and discharges from the Coal Mines (variable).

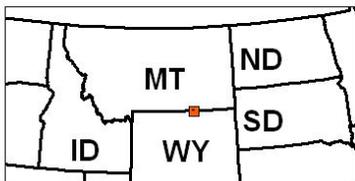
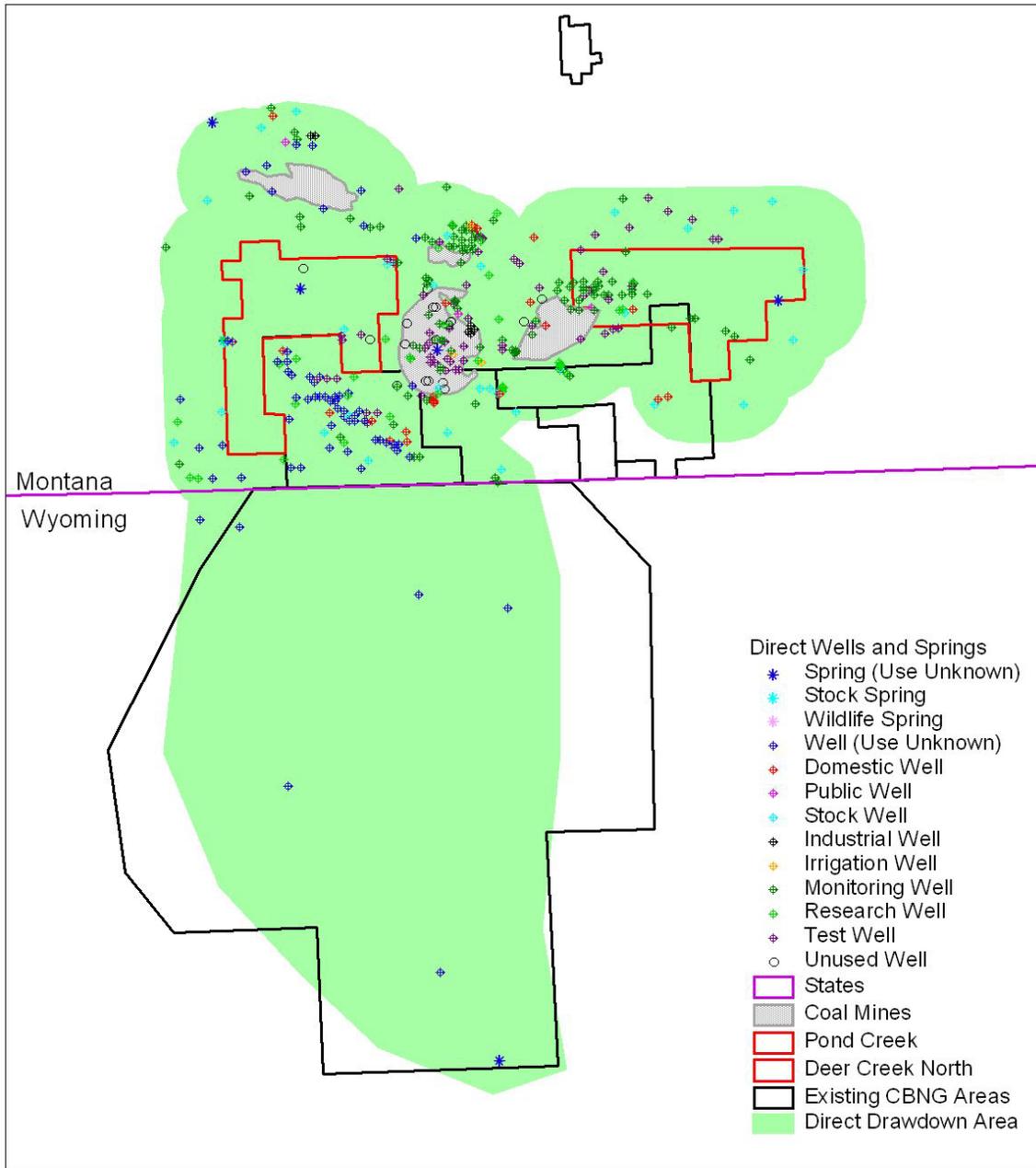
Map Hydro-1



Existing Drawdown Area 20' Drawdown Contour (Alt. A)



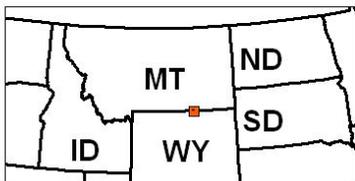
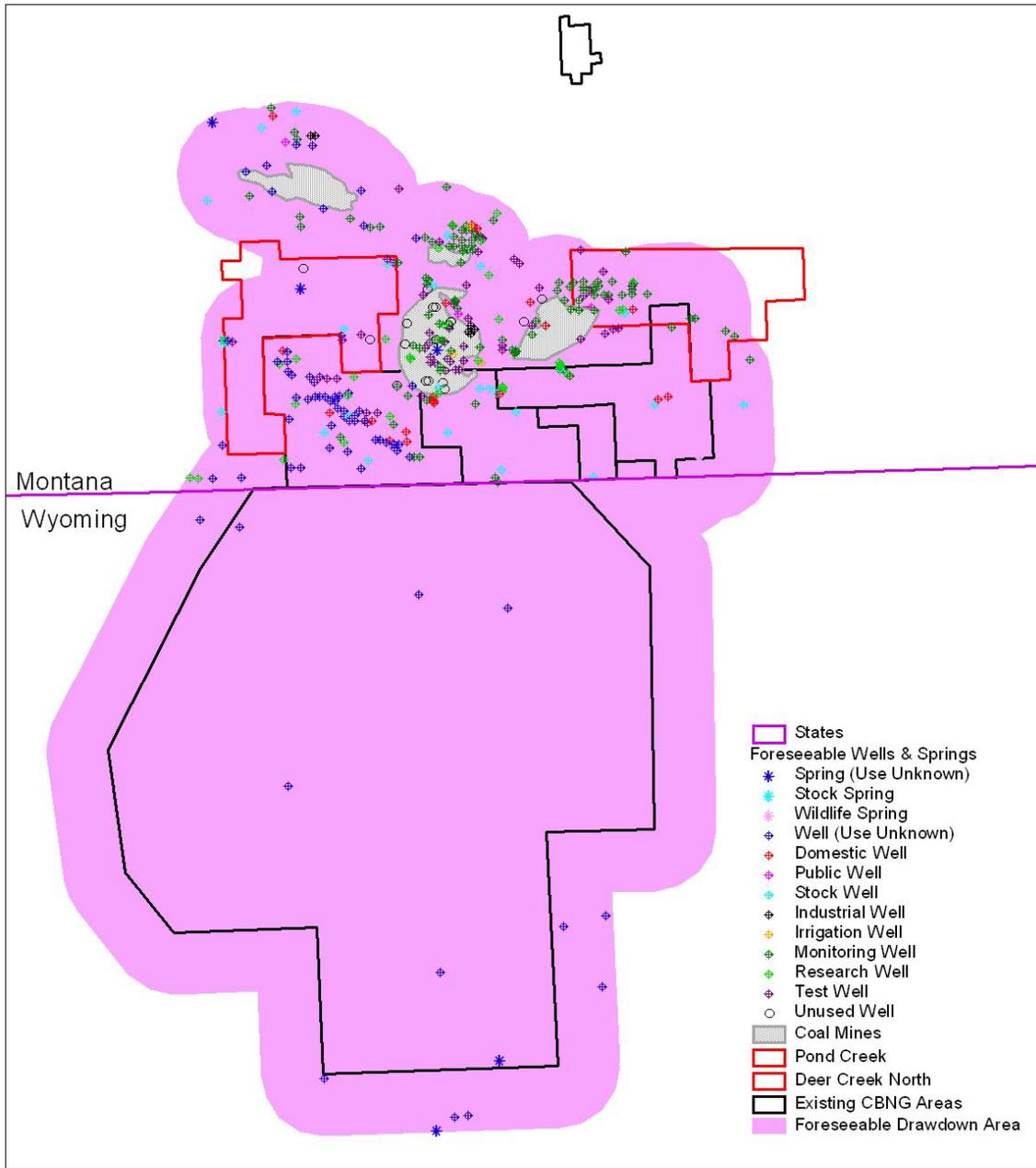
Map Hydro-2



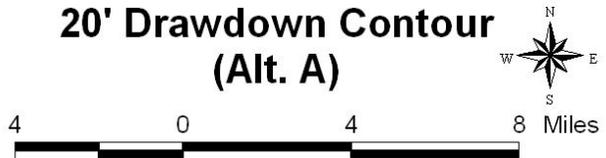
Direct Drawdown Area 20' Drawdown Contour (Alts. B, C, & D)



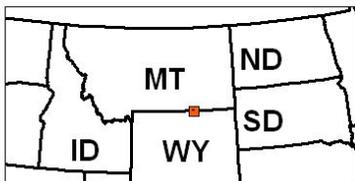
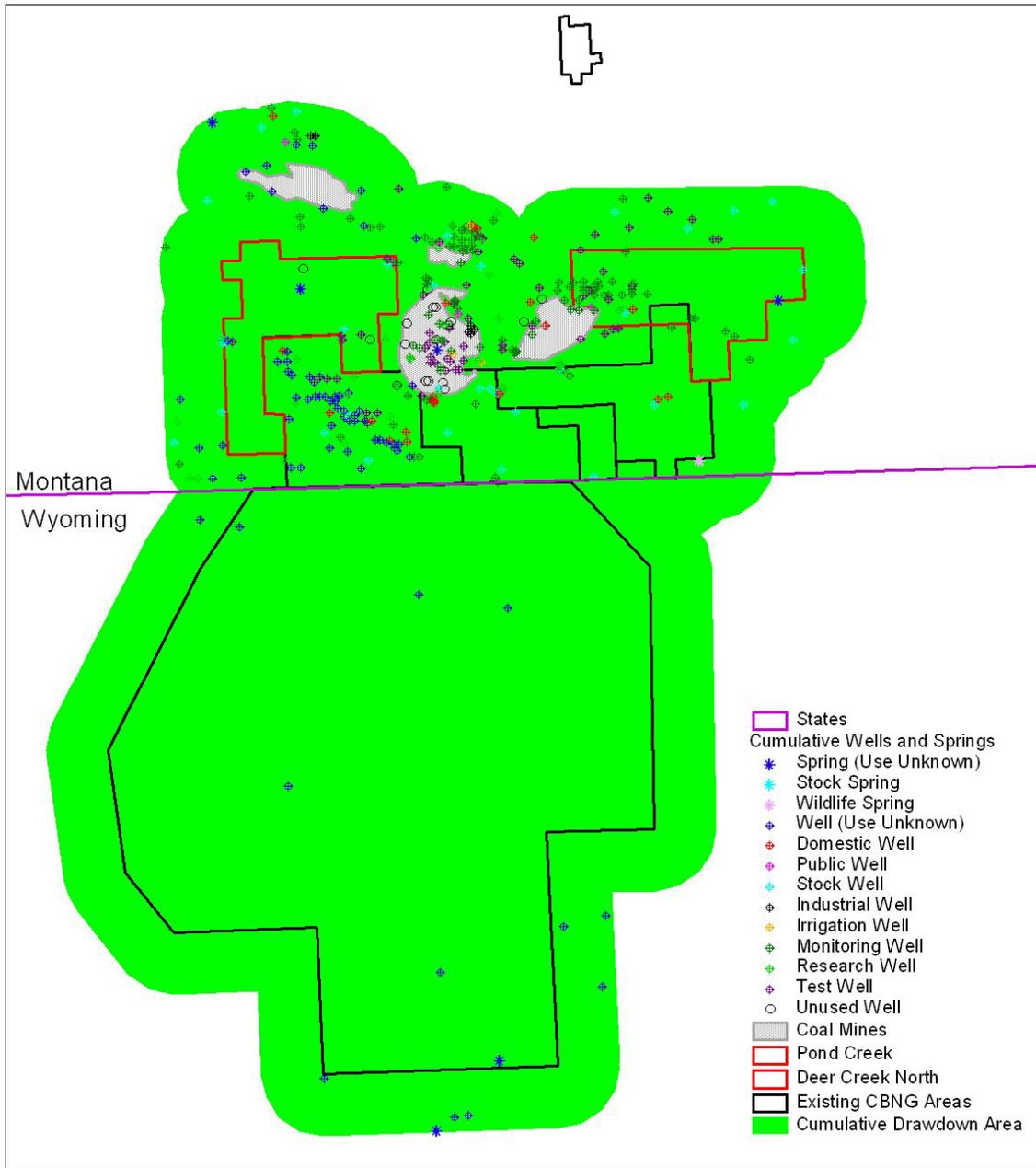
Map Hydro-3



Foreseeable Drawdown Area 20' Drawdown Contour (Alt. A)



Map Hydro-4



Cumulative Drawdown Area 20' Drawdown Contour (Alts. B, C, & D)

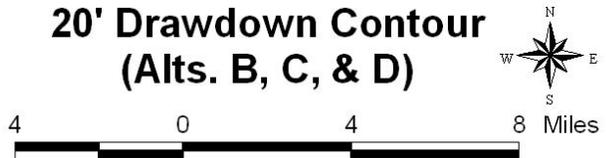


Table Hydro-10: Summary of Direct Impacts to Groundwater Area, Wells and Springs Located within the 20' Drawdown Contour					
	Existing	Alt. A	Alt. B	Alt. C	Alt. D
Area (mi ²)	213	213	268	268	268
# Domestic/Public Water Supply Wells	26	26	30	30	30
# Stock Wells	22	22	33	33	33
# Industrial/Irrigation Wells	13	13	13	13	13
# Other/Unknown Wells	10	10	10	10	10
# Monitoring/Research/Test Wells	322	322	372	372	372
# Unused Wells	20	20	21	21	21
# Springs	3	3	7	7	7

Table Hydro-11: Summary of Cumulative Impacts to Groundwater Area, Wells and Springs Located within the 20' Drawdown Contour				
	Alt. A	Alt. B	Alt. C	Alt. D
Area (mi ²)	348	378	378	378
# Domestic/Public Water Supply Wells	29	30	30	30
# Stock Wells	26	34	34	34
# Industrial/Irrigation Wells	13	13	13	13
# Unknown Wells	16	16	16	16
# Monitoring/Research/Test Wells	354	377	377	377
# Unused Wells	21	21	21	21
# Springs	8	9	9	9

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total_dept
* YOUNG J. * 13.6 M NW DECKER MT *	09S	39E	16	SPRING	UNKNOWN		3930	
THOMPSON J.W. *14 MI S OF BIG BEND SCHOOL	09S	40E	16	SPRING	UNKNOWN			
NHD Spring 1				SPRING	UNKNOWN			
BUMBACA DOMINIC F & ESTHER I	09S	40E	29	WELL	DOMESTIC	125TGRV	3525	155
DECKER COAL CO WELL 270-71	09S	40E	10	WELL	DOMESTIC	125TGRV	3452	140
DECKER COAL CO.	09S	40E	21	WELL	DOMESTIC		3557	580
DECKER COAL COMPANY	09S	41E	8	WELL	DOMESTIC			100
EIDER WILLIS * 1.5 M NE DECKER MT	09S	40E	21	WELL	DOMESTIC	125TGRV	3556	110
ELDER WILLIAM * 1.5 MI NE DECKER MT	09S	40E	21	WELL	DOMESTIC	125TGRV	3554	110
FOSS CLARIS W	09S	40E	31	WELL	DOMESTIC			
HERRINGTON D * 13 MI SE BIG BEND SCHOOL	09S	40E	9	WELL	DOMESTIC	125TGRV	3520	150
JOHNSTON * 1.3 M NE DECKER MT *	09S	40E	21	WELL	DOMESTIC	125TGRV	3570	227
JOHNSTON MANSEL	09S	40E	21	WELL	DOMESTIC	125TGRV	3570	280
KUCHUKA	08S	40E	34	WELL	DOMESTIC		3457	98
KUKUCHKA	08S	40E	34	WELL	DOMESTIC		3456	40
KUKUCHKA WILLIAM	08S	40E	34	WELL	DOMESTIC	125TGRV	3457	98
MCCARTHY JAMES * 5 M SW SQUIRREL SCH *	09S	40E	29	WELL	DOMESTIC	125TGRV	3520	151
MONTANA CLUB BAR * 1.5 MI NE DECKER MT	09S	40E	21	WELL	DOMESTIC	125TGRV	3574	227
MUNSON EMMET * 3.5 MI NE DECKER	09S	40E	22	WELL	DOMESTIC	125TGRV	3460	170
PENSON CHARLES & GREGG	09S	40E	11	WELL	DOMESTIC			100
PETER KIEWIT SONS CO	09S	40E	12	WELL	DOMESTIC	125TGRV		82
PKS-CX RANCH * 4 MI SW OF DECKER MT	09S	40E	30	WELL	DOMESTIC	125TGRV	3540	
POWERS EVERETT	09S	39E	24	WELL	DOMESTIC	125TGRV		235
POWERS EVERETT	09S	39E	24	WELL	DOMESTIC	125TGRV	3610	244
SPRING CREEK COAL COMPANY * SCAL-2 (TW)	08S	39E	15	WELL	DOMESTIC			21.5
SQUIRRELL CREEK SCHOOL	09S	40E	29	WELL	DOMESTIC			189
PORTER HARVEY	09S	41E	7	WELL	PUBLIC WATER SUPPLY			338
SPRING CREEK COAL DOMESTIC	08S	39E	14	WELL	PUBLIC WATER SUPPLY			1220
WEST DECKER COAL MINE	09S	40E	10	WELL	PUBLIC WATER SUPPLY			326
* HOLMES RANCH * 7.4 M E DECKER MT *	09S	41E	8	WELL	STOCKWATER	125TGRV	3530	
* KUKUCHKA * 7M N SQUIRREL CREEK SCHOOL *	09S	40E	3	WELL	STOCKWATER	125TGRV	3424	
CONSOLIDATION COAL CO	08S	39E	29	WELL	STOCKWATER			662
CONSOLIDATION COAL CO	09S	40E	7	WELL	STOCKWATER			462
DECKER COAL CO.	09S	40E	5	WELL	STOCKWATER	125TGRV	3580	260
FOSS CLARIS	09S	40E	31	WELL	STOCKWATER			
FOSS CLARIS W.	09S	39E	25	WELL	STOCKWATER	125TGRV	3585	150

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
KUKUCHKA WM * 6.5 M NE DECKER MT	09S	40E	33	WELL	STOCKWATER	125TGRV	3485	
MINER JIM * 4.2 M SE DECKER MT	09S	40E	4	WELL	STOCKWATER	125TGRV	3542	
MULLER JAMES	09S	40E	28	WELL	STOCKWATER		3465	300
MULLER JIM	09S	40E	35	WELL	STOCKWATER		3480	120
MUNSON	09S	40E	21	WELL	STOCKWATER		3502	171
MUNSON EMMET * 2.4 M NE DECKER MT *	09S	40E	22	WELL	STOCKWATER	125TGRV	3455	169.4
MUNSON EMMETT	09S	40E	24	WELL	STOCKWATER	125TGRV	3520	140
MUNSON EMMETT	09S	40E	26	WELL	STOCKWATER	125TGRV	3490	40
MUNSON MRS EMMETT	09S	40E	22	WELL	STOCKWATER			30.1
MUNSON MRS EMMETT	09S	40E	22	WELL	STOCKWATER			80
NINER J * 15 MI NW DECKER MT	08S	39E	14	WELL	STOCKWATER	125TGRV	3810	
PIERCE J * 11.5 M E DECKER MT	08S	39E	13	WELL	STOCKWATER	125TGRV	4080	348
POWERS EVERETT G.	09S	40E	7	WELL	STOCKWATER	125TGRV	3720	274
POWERS EVERETT G.	09S	40E	30	WELL	STOCKWATER	125TGRV	3570	238
THOMAS JESS	09S	40E	21	WELL	STOCKWATER			462
DECKER COAL	09S	40E	10	WELL	INDUSTRIAL		3465	498
DECKER COAL CO WELL 270A-71	09S	40E	10	WELL	INDUSTRIAL	125TGRV	3452	160
DECKER COAL CO.	09S	40E	10	WELL	INDUSTRIAL	125TGRV		150
DECKER COAL CO.	09S	40E	10	WELL	INDUSTRIAL	125TGRV		150
DECKER COAL CO.	09S	40E	15	WELL	INDUSTRIAL	125TGRV		300
DECKER COAL CO.	09S	40E	10	WELL	INDUSTRIAL	125TGRV		15
DECKER COAL COMPANY	09S	40E	15	WELL	INDUSTRIAL			300
SPRING CREEK COAL CO	08S	39E	24	WELL	INDUSTRIAL	125TGRV		1027
SPRING CREEK COAL CO	08S	39E	24	WELL	INDUSTRIAL	125TGRV		1027
SPRING CREEK COAL CO	08S	39E	24	WELL	INDUSTRIAL	125TGRV		1700
DECKER COAL CO.	09S	40E	16	WELL	IRRIGATION	125TGRV	3472	103
DECKER COAL COMPANY	09S	40E	15	WELL	IRRIGATION	125TGRV	3436	53
KUKUCHKA * 1.25 MI NE TONGUE RIVER MINE.	08S	40E	34	WELL	IRRIGATION	125TGRV	3457	553
MYER GARRETT	09S	40E	29	WELL	UNKNOWN			620
NHD Well 1			0	WELL	UNKNOWN		0	0
NHD Well 2			0	WELL	UNKNOWN		0	0
NHD Well 3			0	WELL	UNKNOWN		0	0
NHD Well 4			0	WELL	UNKNOWN		0	0
NHD Well 5			0	WELL	UNKNOWN		0	0
NHD Well 6			0	WELL	UNKNOWN		0	0
NHD Well 7			0	WELL	UNKNOWN		0	0

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
NHD Well 8			0	WELL	UNKNOWN		0	0
NHD Well 9			0	WELL	UNKNOWN		0	0
DECKER COAL	09S	41E	5	WELL	MONITORING			32
DECKER COAL	09S	41E	6	WELL	MONITORING			90
DECKER COAL	09S	41E	6	WELL	MONITORING			58
DECKER COAL	09S	41E	6	WELL	MONITORING			90
DECKER COAL	09S	41E	6	WELL	MONITORING			38
DECKER COAL	09S	41E	6	WELL	MONITORING			52
DECKER COAL	09S	41E	6	WELL	MONITORING			50
DECKER COAL	09S	41E	6	WELL	MONITORING			88
DECKER COAL	09S	41E	7	WELL	MONITORING			98
DECKER COAL	09S	41E	7	WELL	MONITORING			19
DECKER COAL	09S	41E	7	WELL	MONITORING			51
DECKER COAL	09S	41E	7	WELL	MONITORING			19
DECKER COAL	09S	41E	7	WELL	MONITORING			33
DECKER COAL	09S	41E	7	WELL	MONITORING			90
DECKER COAL	09S	41E	7	WELL	MONITORING			33
DECKER COAL	09S	41E	7	WELL	MONITORING		3503	85.5
DECKER COAL	09S	41E	7	WELL	MONITORING		3518	116
DECKER COAL	09S	41E	7	WELL	MONITORING		3505	109
DECKER COAL	09S	41E	7	WELL	MONITORING		3506	105
DECKER COAL	09S	41E	8	WELL	MONITORING			37
DECKER COAL	09S	41E	8	WELL	MONITORING			25
DECKER COAL	09S	41E	8	WELL	MONITORING			34
DECKER COAL	09S	41E	8	WELL	MONITORING			28
DECKER COAL	09S	41E	6	WELL	MONITORING			48
DECKER COAL	09S	41E	6	WELL	MONITORING			85
DECKER COAL	09S	41E	7	WELL	MONITORING			46
DECKER COAL	09S	41E	7	WELL	MONITORING			38
DECKER COAL	09S	41E	7	WELL	MONITORING			71
DECKER COAL	09S	41E	8	WELL	MONITORING			45
DECKER COAL 2353	09S	40E	1	WELL	MONITORING			90
DECKER COAL 2354	09S	40E	1	WELL	MONITORING			90
DECKER COAL 2355	09S	40E	1	WELL	MONITORING			72
DECKER COAL 2357	09S	40E	1	WELL	MONITORING			84
DECKER COAL 2358	09S	40E	1	WELL	MONITORING			33
DECKER COAL 2359	09S	40E	1	WELL	MONITORING			27

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
DECKER COAL 2360	09S	40E	1	WELL	MONITORING			27
DECKER COAL 2361	09S	40E	1	WELL	MONITORING			23
DECKER COAL 2382	09S	41E	8	WELL	MONITORING			20
DECKER COAL CO	08S	40E	34	WELL	MONITORING			192
DECKER COAL CO #3203-97	08S	40E	28	WELL	MONITORING	125CNCB	3500	201
DECKER COAL CO * 79702	09S	40E	32	WELL	MONITORING	125D2CB		374
DECKER COAL CO * 79703	09S	40E	32	WELL	MONITORING	125D1CB		330
DECKER COAL CO * 79704	09S	40E	32	WELL	MONITORING	125ANCB		311
DECKER COAL CO * 79705	09S	40E	14	WELL	MONITORING	125ANCB		112
DECKER COAL CO * 79706	09S	40E	14	WELL	MONITORING	125D1CB		165
DECKER COAL CO * 79707	09S	40E	14	WELL	MONITORING	125D2CB		242
DECKER COAL CO * 79708	09S	40E	14	WELL	MONITORING	125CNCB		390
DECKER COAL CO.	09S	41E	7	WELL	MONITORING		3506	110
DECKER COAL COMPANY	09S	40E	5	WELL	MONITORING			275
DECKER COAL COMPANY * 1245-93	09S	40E	9	WELL	MONITORING			157
DECKER COAL COMPANY * 2270	09S	40E	12	WELL	MONITORING		3514	77
DECKER COAL COMPANY * 2271	09S	40E	12	WELL	MONITORING		3526	100
DECKER COAL COMPANY * 2515	09S	40E	12	WELL	MONITORING			300
DECKER COAL COMPANY * 2516	09S	40E	12	WELL	MONITORING			300
DECKER COAL COMPANY * 3154-92	09S	40E	21	WELL	MONITORING			408
DECKER COAL COMPANY * 3155-92	09S	40E	21	WELL	MONITORING			328
DECKER COAL COMPANY * 3156-92	09S	40E	21	WELL	MONITORING			261
DECKER COAL COMPANY * 3157-92	09S	40E	20	WELL	MONITORING			331
DECKER COAL COMPANY * 3158-92	08S	40E	33	WELL	MONITORING			55
DECKER COAL COMPANY * 3159-92	08S	40E	33	WELL	MONITORING			59
DECKER COAL COMPANY * 3160-92	08S	40E	33	WELL	MONITORING			56
DECKER COAL COMPANY * 3161-92	08S	40E	34	WELL	MONITORING			43
DECKER COAL COMPANY * 3162-92	08S	40E	34	WELL	MONITORING			36.5
DECKER COAL COMPANY * 3164-92	08S	40E	34	WELL	MONITORING			58
DECKER COAL COMPANY * 3165-92	08S	40E	34	WELL	MONITORING			56
DECKER COAL COMPANY * 3166-92	08S	40E	34	WELL	MONITORING			56
DECKER COAL COMPANY * 3167-92	08S	40E	34	WELL	MONITORING			31.5
DECKER COAL COMPANY * 3168-92	08S	40E	34	WELL	MONITORING			37.5
DECKER COAL COMPANY * 3169-92	08S	40E	34	WELL	MONITORING			41
DECKER COAL COMPANY * 3170-92	08S	40E	34	WELL	MONITORING			29
DECKER COAL COMPANY * 3171-92	08S	40E	34	WELL	MONITORING			30
DECKER COAL COMPANY * 3173-92	08S	40E	34	WELL	MONITORING			60
DECKER COAL COMPANY * 3174-92	08S	40E	34	WELL	MONITORING			55

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
DECKER COAL COMPANY * 3177-92	08S	40E	34	WELL	MONITORING			82
DECKER COAL COMPANY * 3178-92	08S	40E	34	WELL	MONITORING			80
DECKER COAL COMPANY * 3179-92	08S	40E	34	WELL	MONITORING			80
DECKER COAL COMPANY * 3180-92	08S	40E	34	WELL	MONITORING			65
DECKER COAL COMPANY * 3182-92	08S	40E	33	WELL	MONITORING			90
DECKER COAL COMPANY * 3184-92	08S	40E	34	WELL	MONITORING			86
DECKER COAL COMPANY * 3185-92	08S	40E	33	WELL	MONITORING			62
DECKER COAL COMPANY * 3186-92	08S	40E	34	WELL	MONITORING			58
DECKER COAL COMPANY * 3187-94	09S	40E	21	WELL	MONITORING			208
DECKER COAL COMPANY * 3188-94	09S	40E	14	WELL	MONITORING			160
DECKER COAL COMPANY * 3189-94	09S	40E	14	WELL	MONITORING			160
DECKER COAL COMPANY * 3190-95	09S	40E	16	WELL	MONITORING			212
DECKER COAL COMPANY * 3191-95	09S	40E	16	WELL	MONITORING			195
DECKER COAL COMPANY * 3192-95	09S	40E	9	WELL	MONITORING			268
DECKER COAL COMPANY * ED 2227	09S	40E	12	WELL	MONITORING		3550	268
DECKER COAL COMPANY *WD 2234	09S	40E	17	WELL	MONITORING		3538	39
DECKER COAL COMPANY *WD 2334-82	09S	40E	21	WELL	MONITORING		3605	340
DECKER COAL COMPANY *WD-2329-82	09S	40E	21	WELL	MONITORING		3610	280
DECKER COAL COMPANY *WD-2330-82	09S	40E	21	WELL	MONITORING		3610	260
DECKER COAL COMPANY *3163-92	08S	40E	34	WELL	MONITORING			57
DECKER COAL COMPANY *3208-01	09N	40E	3	WELL	MONITORING			128
DECKER COAL D2292-82	09S	40E	10	WELL	MONITORING		3520	180
DECKER COAL WD2225	09S	40E	9	WELL	MONITORING		3517	120
DECKER COAL WD2226	09S	40E	9	WELL	MONITORING		3517	120
FIDELITY E AND P	09S	40E	34	WELL	MONITORING			48
FIDELITY E AND P	09S	40E	34	WELL	MONITORING			
FIDELITY E AND P	09S	40E	34	WELL	MONITORING			
KIEWIT WD(CX)2244-81	09S	40E	22	WELL	MONITORING		3470	292
MBMG MONITORING WELL WRE-18	09S	40E	24	WELL	MONITORING	125ANCB	3573.1	445
MBMG MONITORING WELL WRE-20	09S	40E	24	WELL	MONITORING	125ANCB	3519.4	120
MBMG MONITORING WELL DCC #3194-97	09S	40E	32	WELL	MONITORING	125CNCB	3520	471
MBMG MONITORING WELL DCC #3195-97	09S	40E	32	WELL	MONITORING	125D2CB	3515	374
MBMG MONITORING WELL DCC #3196-97	09S	40E	32	WELL	MONITORING	125DICB	3515	330
MBMG MONITORING WELL DCC #3197-97	09S	40E	32	WELL	MONITORING	125ANCB	3515	311
MBMG MONITORING WELL PKS-3198	09S	40E	14	WELL	MONITORING	125ANCB	3440	112
MBMG MONITORING WELL PKS-3199	09S	40E	14	WELL	MONITORING	125DICB	3439	165
MBMG MONITORING WELL PKS-3200	09S	40E	14	WELL	MONITORING	125D2CB	3438	242
MBMG MONITORING WELL PKS-3201	09S	40E	14	WELL	MONITORING	125CNCB	3438	390

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
MBMG MONITORING WELL PKS-3204	08S	40E	28	WELL	MONITORING	125ADKC	3500	82
MBMG MONITORING WELL WR-06	09S	40E	16	WELL	MONITORING	125ADCB	3499.2	135
MBMG MONITORING WELL WR-29R	09S	40E	15	WELL	MONITORING	125ADKC	3461	72
MBMG MONITORING WELL WR-51	09S	40E	29	WELL	MONITORING	125AND2	3541	344
MBMG MONITORING WELL WR-54	09S	39E	25	WELL	MONITORING	125AND2	3629.9	384
MBMG MONITORING WELL WRE-05	09S	40E	12	WELL	MONITORING	125D2CB	3478	139
MBMG MONITORING WELL WRE-19	09S	40E	24	WELL	MONITORING	125ANCB	3520.3	140
MBMG MONITORING WELL WRE-25	09S	41E	5	WELL	MONITORING	125ANCB	3549.4	114.5
MBMG MONITORING WELL WRN-02	08S	40E	33	WELL	MONITORING	125TGRV	3492.9	90
MBMG MONITORING WELL WRN-04	08S	40E	33	WELL	MONITORING	125ADCB	3492.9	39
MBMG MONITORING WELL WRN-05	08S	40E	33	WELL	MONITORING	125D2CB	3475.2	85
MBMG MONITORING WELL WRN-06	08S	40E	33	WELL	MONITORING	125ADCB	3476.3	50
MBMG MONITORING WELL WRN-08	08S	40E	34	WELL	MONITORING	125D2CB	3423.7	50
MBMG MONITORING WELL WRN-09A	08S	40E	34	WELL	MONITORING	125D23I	3424	129
MBMG MONITORING WELL WRN-11	09S	40E	3	WELL	MONITORING	125ADKC	3436.8	50
MBMG MONITORING WELL WRN-12	09S	40E	4	WELL	MONITORING	125ADKC	3525	85
MBMG MONITORING WELL WRN-13	09S	40E	4	WELL	MONITORING	125D2CB	3514.8	124
MBMG MONITORING WELL WRN-14	09S	40E	4	WELL	MONITORING	125ADCB	3514.2	78
MBMG MONITORING WELL WRN-15	09S	40E	9	WELL	MONITORING	125D2CB	3499.8	140
MBMG MONITORING WELL WRN-16	09S	40E	9	WELL	MONITORING	125ADKB	3499.6	89
MBMG OBS WELL	09S	40E	16	WELL	MONITORING			
PETER KIEWIT EH2262	09S	40E	14	WELL	MONITORING		3580	27
PETER KIEWIT WD2253	09S	40E	20	WELL	MONITORING			420
SPRING CREEK COAL CO	08S	39E	23	WELL	MONITORING			120
SPRING CREEK COAL CO	08S	39E	23	WELL	MONITORING			120
SPRING CREEK COAL CO	08S	39E	27	WELL	MONITORING			525
SPRING CREEK COAL CO	08S	39E	35	WELL	MONITORING			325
SPRING CREEK COAL CO	08S	40E	31	WELL	MONITORING			127
SPRING CREEK COAL CO*SP-3	08S	39E	26	WELL	MONITORING			173
SPRING CREEK COAL COMPANY	08S	39E	15	WELL	MONITORING			231
SPRING CREEK COAL COMPANY	08S	40E	30	WELL	MONITORING			131
SPRING CREEK COAL COMPANY	08S	40E	31	WELL	MONITORING			111
SPRING CREEK COAL COMPANY * SCAL-1 (TW)	08S	39E	15	WELL	MONITORING			20.5
SPRING CREEK COAL COMPANY * SCAL-4 (TW)	08S	39E	14	WELL	MONITORING			16
USGS RESEARCH WELL *	09S	40E	16	WELL	MONITORING	125TGRV	3519.1	136
MBMG MONITORING WELL DS-02A	09S	40E	15	WELL	RESEARCH	125D2CB	3430	150
MBMG MONITORING WELL DS-05A	09S	40E	9	WELL	RESEARCH	125D2CB	3505.5	166
MBMG MONITORING WELL PKS-1179	09S	40E	23	WELL	RESEARCH	125D2CB	3458	282

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
MBMG MONITORING WELL PKS-2061	09S	40E	17	WELL	RESEARCH	125ADCB	3604.8	244
MBMG MONITORING WELL WCX-26	09S	39E	14	WELL	RESEARCH			
MBMG MONITORING WELL WR-01	09S	40E	16	WELL	RESEARCH	125D1D2	3498	125
MBMG MONITORING WELL WR-04	09S	40E	17	WELL	RESEARCH		3584.6	226
MBMG MONITORING WELL WR-07	09S	40E	16	WELL	RESEARCH	125D2CB	3498.2	207
MBMG MONITORING WELL WR-10	09S	40E	21	WELL	RESEARCH	125ADCB	3537	196
MBMG MONITORING WELL WR-12	09S	40E	17	WELL	RESEARCH		3586	230
MBMG MONITORING WELL WR-15	09S	40E	19	WELL	RESEARCH	125AND2	3685	390
MBMG MONITORING WELL WR-17	09S	40E	29	WELL	RESEARCH	125AND2	3573	300
MBMG MONITORING WELL WR-18	09S	39E	23	WELL	RESEARCH	125ADCB	3702.1	381
MBMG MONITORING WELL WR-22	09S	39E	14	WELL	RESEARCH	125D1D2	3690	357
MBMG MONITORING WELL WR-27	09S	39E	33	WELL	RESEARCH	125AND2	3672	363
MBMG MONITORING WELL WR-28	09S	39E	35	WELL	RESEARCH	125AND2	3654.7	364
MBMG MONITORING WELL WR-53	09S	39E	25	WELL	RESEARCH	125AND2	3607.1	384
MBMG MONITORING WELL WR-55	09S	40E	19	WELL	RESEARCH	125AND2	3591.2	288
MBMG MONITORING WELL WRE-09	09S	40E	13	WELL	RESEARCH	125D2CB	3510.7	232
MBMG MONITORING WELL WRE-10	09S	40E	13	WELL	RESEARCH	125DICB	3518.5	183
MBMG MONITORING WELL WRE-11	09S	40E	13	WELL	RESEARCH	125ANCB	3508.9	127
MBMG MONITORING WELL WRE-12	09S	40E	23	WELL	RESEARCH	125ANCB	3463.2	172
MBMG MONITORING WELL WRE-13	09S	40E	23	WELL	RESEARCH	125DICB	3462.6	206
MBMG MONITORING WELL WRE-14	09S	40E	23	WELL	RESEARCH	125D2CB	3463	292
MBMG MONITORING WELL WRE-16	09S	40E	24	WELL	RESEARCH	125ANCB	3550.5	458
MBMG MONITORING WELL WRE-21	09S	40E	24	WELL	RESEARCH	125ANCB	3529.4	130
MBMG MONITORING WELL WRE-23	09S	41E	5	WELL	RESEARCH	125D2CB	3556.7	240
MBMG MONITORING WELL WRE-24	09S	41E	5	WELL	RESEARCH	125DICB	3552.1	154
MBMG MONITORING WELL WRE-27	09S	41E	8	WELL	RESEARCH	125ANCB	3523.8	77
MBMG MONITORING WELL WRE-28	09S	41E	8	WELL	RESEARCH	125DICB	3525.2	153
MBMG MONITORING WELL WRE-29	09S	41E	8	WELL	RESEARCH	125D2CB	3523.3	217
MBMG MONITORING WELL WRN-01	08S	40E	26	WELL	RESEARCH	125D2CB	3463.2	40
MBMG MONITORING WELL WRN-03	08S	40E	33	WELL	RESEARCH	125ADCB	3491.3	59
MBMG MONITORING WELL WRN-07	08S	40E	33	WELL	RESEARCH	125ADCB	3482.4	49
MBMG MONITORING WELL WRN-09	08S	40E	34	WELL	RESEARCH	125CNCB	3424	185
MBMG MONITORING WELL WRN-10	09S	40E	3	WELL	RESEARCH	125D2CB	3433.3	79
MBMG MONITORING WELL WRN-17	09S	40E	11	WELL	RESEARCH	125D2CB	3423.5	104
DECKER ANTICLINE (NO 1)	09S	40E	16	WELL	TEST WELL	125TGRV		3485
DECKER COAL CO.	08S	40E	33	WELL	TEST WELL			105
DECKER COAL COMPANY * 2224	09S	40E	15	WELL	TEST WELL		3437	291
DECKER COAL D2293-82	09S	40E	9	WELL	TEST WELL		3510	160

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
P. KIEWIT EK2137-80	09S	40E	2	WELL	TEST WELL		3460	210
P. KIEWIT EK2138-80	09S	40E	2	WELL	TEST WELL		3460	40
PETER KIEWIT 2040	09S	40E	16	WELL	TEST WELL		3523	146
PETER KIEWIT 2040	09S	40E	21	WELL	TEST WELL		3508	131
PETER KIEWIT 2041	09S	40E	21	WELL	TEST WELL		3517	140
PETER KIEWIT 2042	09S	40E	21	WELL	TEST WELL		3543	177
PETER KIEWIT 2043	09S	40E	16	WELL	TEST WELL		3510	135
PETER KIEWIT 2045	09S	40E	16	WELL	TEST WELL		3514	146
PETER KIEWIT 2046	09S	40E	16	WELL	TEST WELL		3540	185
PETER KIEWIT 2047	09S	40E	16	WELL	TEST WELL		3532	147
PETER KIEWIT 2049	09S	40E	16	WELL	TEST WELL		3486	197
PETER KIEWIT 2050	09S	40E	16	WELL	TEST WELL		3484	118
PETER KIEWIT 2051	09S	40E	16	WELL	TEST WELL		3486	195
PETER KIEWIT 2052	09S	40E	16	WELL	TEST WELL		3491	125
PETER KIEWIT 2053	09S	40E	15	WELL	TEST WELL		3552	166
PETER KIEWIT 2054	09S	40E	9	WELL	TEST WELL		3539	150
PETER KIEWIT 2057	09S	40E	18	WELL	TEST WELL		3669	340
PETER KIEWIT 2058	09S	40E	18	WELL	TEST WELL		3671	340
PETER KIEWIT 2059	09S	40E	18	WELL	TEST WELL		3676	360
PETER KIEWIT 2062	09S	40E	9	WELL	TEST WELL		3592	246
PETER KIEWIT 2063	09S	40E	9	WELL	TEST WELL		3594	198
PETER KIEWIT 2068	09S	40E	21	WELL	TEST WELL		3530	351
PETER KIEWIT 2108-80	09S	40E	11	WELL	TEST WELL		3450	200
PETER KIEWIT 2109-80	09S	40E	11	WELL	TEST WELL		3450	199
PETER KIEWIT 2110-80	09S	40E	5	WELL	TEST WELL		3570	160
PETER KIEWIT 2111-80	09S	40E	3	WELL	TEST WELL		3450	35
PETER KIEWIT 2112-80	09S	40E	3	WELL	TEST WELL		3450	45
PETER KIEWIT 2114-80	09S	40E	3	WELL	TEST WELL		3450	60
PETER KIEWIT 2116-80	09S	40E	14	WELL	TEST WELL		3430	140
PETER KIEWIT 2117-80	09S	40E	14	WELL	TEST WELL		3430	401
PETER KIEWIT 2118-80	09S	40E	14	WELL	TEST WELL		3430	255
PETER KIEWIT 2119-80	09S	40E	14	WELL	TEST WELL		3430	160
PETER KIEWIT 2131-80	09S	40E	1	WELL	TEST WELL		3420	347
PETER KIEWIT 2132-80	09S	40E	1	WELL	TEST WELL		3440	209
PETER KIEWIT 2136-80	09S	40E	2	WELL	TEST WELL		3510	160
PETER KIEWIT SON'S	09S	41E	18	WELL	TEST WELL		3590	424
PETER KIEWIT SON'S	09S	40E	16	WELL	TEST WELL		3539	183
PETER KIEWIT SON'S	09S	40E	22	WELL	TEST WELL		3501.9	135

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
PETER KIEWIT SONS 2066	09S	40E	10	WELL	TEST WELL		3430	106
PETER KIEWIT SONS 2067	09S	40E	10	WELL	TEST WELL		3430	237
PETER KIEWIT SONS CO	09S	40E	18	WELL	TEST WELL		3638	424
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3550.2	66
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3554.8	61
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3548.3	58
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3543	40
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3545.7	46
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3544	45
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3595	38
PETER KIEWIT SONS CO	09S	40E	30	WELL	TEST WELL		3543	41
PETER KIEWIT SONS CO	09S	41E	7	WELL	TEST WELL		3530	80
PETER KIEWIT SONS CO	09S	41E	7	WELL	TEST WELL		3540	60
PETER KIEWIT SONS CO	09S	41E	7	WELL	TEST WELL		3530	137
PETER KIEWIT SONS CO	09S	41E	7	WELL	TEST WELL		3530	200
PETER KIEWIT SONS CO	09S	41E	6	WELL	TEST WELL		3550	140
PETER KIEWIT SONS CO	08S	40E	34	WELL	TEST WELL			20
PETER KIEWIT SONS CO	08S	40E	34	WELL	TEST WELL	125TGRV	3435	20
PETER KIEWIT SONS CO	08S	40E	34	WELL	TEST WELL			31
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3605	54
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3606	60
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3606	47.5
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3608	50
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3605	60
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3605	55
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3604	60
PETER KIEWIT SONS CO	09S	39E	24	WELL	TEST WELL		3604	59
PETER KIEWIT SONS CO * 2113-80	08S	40E	34	WELL	TEST WELL		3440	78
PETER KIEWIT SONS CO * 2115-80	08S	40E	34	WELL	TEST WELL		3430	60
PETER KIEWIT SONS CO * EH -2175-81	08S	41E	31	WELL	TEST WELL		3640	253
PETER KIEWIT SONS CO * GN2106-80	08S	40E	29	WELL	TEST WELL		3690	159
PETER KIEWIT SONS CO * GN2107-80	08S	40E	32	WELL	TEST WELL		3720	234
PETER KIEWIT SONS CO.	09S	41E	5	WELL	TEST WELL		3540	220
PETER KIEWIT SONS CO.	09S	41E	17	WELL	TEST WELL		3580	220
PETER KIEWIT SONS CO.	09S	41E	17	WELL	TEST WELL		3590	116
PETER KIEWIT SONS CO.	09S	41E	18	WELL	TEST WELL		3600	170
PETER KIEWIT SONS CO.	09S	41E	18	WELL	TEST WELL		3600	240
PETER KIEWIT SONS CO.	09S	41E	18	WELL	TEST WELL		3600	320

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
PETER KIEWIT SONS INC.	09S	41E	18	WELL	TEST WELL		3600	319
1916-79WWW	09S	40E	20	WELL	TEST WELL		3591.19	403
3194-97	09S	40E	32	WELL	TEST WELL	125CNCB		
44-79WWW	09S	39E	24	WELL	TEST WELL		3614.33	372
45-79WWW	09S	39E	24	WELL	TEST WELL		3614.33	372
46-79WWW	09S	40E	30	WELL	TEST WELL		3576.75	440
52-79WWW	09S	40E	32	WELL	TEST WELL		3534.88	520
56-79WWW	09S	40E	19	WELL	TEST WELL		3615.65	400
79-CX-18WWW	09S	40E	30	WELL	TEST WELL		3674.85	575
CX-15-80	09S	39E	25	WELL	TEST WELL		3555.69	410
CX-23-80	09S	39E	14	WELL	TEST WELL		3678.61	340
CX-26-80	09S	39E	35	WELL	TEST WELL		3606.52	570
CX-30-80	09S	39E	26	WELL	TEST WELL		3913.16	615
CX-33-80	09S	39E	35	WELL	TEST WELL		3616.96	315
CX-5-80	09S	40E	31	WELL	TEST WELL		3566.96	600
DECKER COAL COMPANY	08S	40E	32	WELL	TEST WELL			218
MBMG MONITORING WELL WR-47	09S	39E	28	WELL	TEST WELL	125AND2	3815.9	367
MBMG RESEARCH WELL WR-46	09S	39E	34	WELL	TEST WELL	125AND2	3758.86	
S-49	09S	40E	30	WELL	TEST WELL			
S-94	09S	40E	30	WELL	TEST WELL		3545	18.5
S-95	09S	40E	30	WELL	TEST WELL		3543	14.7
S-96	09S	39E	24	WELL	TEST WELL		3605	19
S-97	09S	39E	24	WELL	TEST WELL		3605	22.5
SPRING CREEK COAL CO *C	08S	39E	24	WELL	TEST WELL			232
SPRING CREEK COAL CO *C	08S	39E	25	WELL	TEST WELL			311.5
SPRING CREEK COAL CO *S	08S	39E	22	WELL	TEST WELL			148
SPRING CREEK COAL COMPAN	08S	40E	30	WELL	TEST WELL			152
SPRING CREEK COAL COMPANY	08S	39E	22	WELL	TEST WELL			30
SPRING CREEK COAL COMPANY	08S	39E	22	WELL	TEST WELL			50
WCX-02-79	09S	39E	24	WELL	TEST WELL		3630.23	51
WCX-02-79	09S	39E	24	WELL	TEST WELL		3626.99	47
WCX-03-79	09S	39E	24	WELL	TEST WELL		3610	53
WCX-04-79	09S	39E	24	WELL	TEST WELL		3633.79	58.5
WCX-05-79	09S	39E	24	WELL	TEST WELL		3583.15	48
WCX-06-79	09S	39E	24	WELL	TEST WELL		3584.59	70
WCX-07-79	09S	39E	24	WELL	TEST WELL		3584.64	67
WCX-08-79	09S	39E	24	WELL	TEST WELL		3600.38	30
WCX-09-79	09S	40E	30	WELL	TEST WELL		3579.12	40

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
WCX-10-79	09S	40E	30	WELL	TEST WELL		3572.85	31
WCX-12-79	09S	40E	30	WELL	TEST WELL		3580.69	50
WCX-13-79	09S	40E	30	WELL	TEST WELL		3561.17	40
WCX-15-79	09S	40E	30	WELL	TEST WELL		3552.85	52
WCX-16-79	09S	40E	29	WELL	TEST WELL		3510.81	50
WCX-17-79	09S	40E	29	WELL	TEST WELL		3512.79	54
WCX-18-79	09S	39E	23	WELL	TEST WELL		3627.84	461
WCX-19-1979	09S	39E	25	WELL	TEST WELL		3627.84	349.5
WCX-20-79	09S	40E	30	WELL	TEST WELL		3593.3	426.9
WCX-21-79	09S	40E	32	WELL	TEST WELL		3508.5	386
WCX-22-79	09S	39E	24	WELL	TEST WELL		3582.6	50
WCX-23-80	09S	40E	29	WELL	TEST WELL		3501.09	46
WCX-24-80	09S	40E	29	WELL	TEST WELL		3499.99	43
WCX-25-80	09S	40E	32	WELL	TEST WELL		3477.88	30
WCX-28-80	09S	39E	14	WELL	TEST WELL		3642.13	54
WCX-31-80	09S	39E	24	WELL	TEST WELL		3605.92	39
WCX-32-80	09S	39E	24	WELL	TEST WELL		3581.71	48
WCX-47	09S	40E	31	WELL	TEST WELL		3480	38
WCX-48	09S	40E	31	WELL	TEST WELL		3480	34
WR-27	09S	39E	33	WELL	TEST WELL		3672	
WR58E	09S	39E	14	WELL	TEST WELL		3634.44	
DECKER COAL	09S	40E	17	WELL	UNUSED			180
MBMG MONITORING WELL WR-02	09S	40E	9	WELL	UNUSED		3600	192
MBMG MONITORING WELL WR-03	09S	40E	8	WELL	UNUSED		3640	217
MBMG MONITORING WELL WR-05	09S	40E	21	WELL	UNUSED	125ADCB	3574.1	205
MBMG MONITORING WELL WR-08	09S	40E	21	WELL	UNUSED	125ADCB	3533	165
MBMG MONITORING WELL WR-09	09S	40E	21	WELL	UNUSED		3533	255
MBMG MONITORING WELL WR-11	09S	40E	21	WELL	UNUSED		3575	210
MBMG MONITORING WELL WR-13	09S	40E	9	WELL	UNUSED		3605	247
MBMG MONITORING WELL WR-14	09S	40E	9	WELL	UNUSED		3606	192
MBMG MONITORING WELL WR-16	09S	40E	18	WELL	UNUSED	125D1D2	3640	237
MBMG MONITORING WELL WRE-03	09S	40E	11	WELL	UNUSED		3446	151
MBMG MONITORING WELL WRE-04	09S	40E	11	WELL	UNUSED		3451.8	69
MBMG MONITORING WELL WRE-07	09S	40E	12	WELL	UNUSED		3445	48
MBMG MONITORING WELL WRE-08	09S	40E	12	WELL	UNUSED		3445.4	47
MBMG MONITORING WELL WRN-19	09S	40E	4	WELL	UNUSED		3565	334
USGS OBS. WELL *	09S	40E	20	WELL	UNUSED	125TGRV	3665	380

Table Hydro-12: Wells and Springs within the Existing 20' drawdown contour & Aquifer is not exclusive of Coals (Alt. A)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
USGS OBS. WELL *	09S	40E	20	WELL	UNUSED	125TGRV	3665	380
USGS RESEARCH WELL	09S	40E	9	WELL	UNUSED	125TGRV	3510	108
USGS RESEARCH WELL	09S	40E	16	WELL	UNUSED	125TGRV	3521	135.5
USGS RESEARCH WELL	09S	40E	9	WELL	UNUSED	125TGRV	3505	96

Table Hydro-13: Wells and Springs Added to the 20' Drawdown Contour as a Direct Result of Action & Aquifer is not exclusive of Coals (Alt. B, C, & D) (all wells on Table Hydro-12 would also be included)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total_dept
CX RANCH	09S	39E	16	SPRING	STOCKWATER		3800	
COAL CONSOLIDATED * 3.3 MI N PEARL SCHOOL.	09S	39E	16	SPRING	UNKNOWN		3790	
COAL CONSOLIDATED *5 MI NW DECKER MT.	09S	39E	1	SPRING	UNKNOWN		3980	
PORTER H. * 11.5 M E DECKER MT *	09S	41E	12	SPRING	UNKNOWN		3685	
CONSOL COAL CO * 5 M W DECKER MT *	09S	39E	14	WELL	DOMESTIC	125TGRV	3655	300
DEPT OF FISH-WILDLIFE AND PARKS	08S	40E	35	WELL	DOMESTIC			46
JOHNSTON	09S	41E	21	WELL	DOMESTIC		3642	200
JOHNSTON	09S	41E	21	WELL	DOMESTIC		3565	280
BUREAU OF LAND MANAGEMENT * BENCHMARK	09S	41E	13	WELL	STOCKWATER			322
ELDER WILLIS W.	09S	41E	26	WELL	STOCKWATER			252
HOLMES RANCH CO * 1.8 MI N HOLMES RANCH.	08S	41E	34	WELL	STOCKWATER	125TGRV	3670	181
PENSON CHARLES AND GREGG	08S	41E	32	WELL	STOCKWATER	125TGRV	3635	199
PORTER H * 14 M NE DECKER MT *	08S	41E	25	WELL	STOCKWATER	125TGRV	4150	420
PORTER H.A. * 12.3 MI NEW OF DECKER MT.	09S	41E	1	WELL	STOCKWATER	125TGRV	3805	180
RANCHOLME CATTLE CO.	09S	41E	28	WELL	STOCKWATER			200
STATES J. VERNON	09S	39E	21	WELL	STOCKWATER			615
STATES VERNON	09S	39E	29	WELL	STOCKWATER	125TGRV		64
WILSON LEWIS C AND BEULAH A	08S	41E	35	WELL	STOCKWATER			12
WILSON LEWIS C AND BEULAH A	08S	41E	35	WELL	STOCKWATER			12
DECKER COAL	09S	41E	16	WELL	MONITORING			20
DECKER COAL CO	08S	41E	29	WELL	MONITORING			225
DECKER COAL CO	09S	41E	5	WELL	MONITORING			366
MBMG MONITORING WELL WR-21	08S	39E	32	WELL	MONITORING	125D1D2	3890	206
MBMG MONITORING WELL WR-33	09S	39E	32	WELL	MONITORING	125ADKC	3732.3	165
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING			214
PETER KIEWIT SONES CO.	09S	41E	10	WELL	MONITORING		3540	24
PETER KIEWIT SONS	09S	41E	10	WELL	MONITORING			80
PETER KIEWIT SONS	09S	41E	14	WELL	MONITORING		3580	32
PETER KIEWIT SONS	09S	41E	14	WELL	MONITORING		3580	30
PETER KIEWIT SONS	09S	41E	15	WELL	MONITORING		3590	159
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	23
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	40
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING			194
PETER KIEWIT SONS CO.	09S	41E	14	WELL	MONITORING		3625	400
PETER KIEWIT SONS CO.	09S	41E	14	WELL	MONITORING		3625	320

Table Hydro-13: Wells and Springs Added to the 20' Drawdown Contour as a Direct Result of Action & Aquifer is not exclusive of Coals (Alt. B, C, & D) (all wells on Table Hydro-12 would also be included)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	31
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	20
PETER KIEWIT SONS CO.	09S	41E	14	WELL	MONITORING		3625	221
MBMG MONITORING WELL WR-19	09S	39E	16	WELL	RESEARCH	125D1D2	3835.4	305
MBMG MONITORING WELL WR-20	09S	39E	16	WELL	RESEARCH	125ANCB	3835.3	166
MBMG MONITORING WELL WR-26	09S	39E	29	WELL	RESEARCH	125ADCB	3770	267
MBMG MONITORING WELL WR-34	09S	39E	33	WELL	RESEARCH	125AND2	3772.1	522
MBMG MONITORING WELL WR-36	09S	39E	28	WELL	RESEARCH	125D1D2	3716	192
MBMG MONITORING WELL WR-37	09S	39E	28	WELL	RESEARCH	125ADCB	3715.8	126
PETER KIEWIT AND SONS CO.	09S	41E	5	WELL	TEST WELL		3600	269
PETER KIEWIT SONS	09S	41E	15	WELL	TEST WELL		3590	160
PETER KIEWIT SONS CO	09S	39E	15	WELL	TEST WELL		3776.2	260
PETER KIEWIT SONS' CO * EH 2171-81	08S	41E	32	WELL	TEST WELL		3775	331
PETER KIEWIT SONS' CO * EH 2172-81	08S	41E	32	WELL	TEST WELL		3775	289
PETER KIEWIT SONS' CO * EH 2187-81	08S	41E	34	WELL	TEST WELL		3800	350
PETER KIEWIT SONS' CO * EH 2188-81	08S	41E	34	WELL	TEST WELL		3775	181
PETER KIEWIT SONS' CO * EP 2096-80	08S	41E	29	WELL	TEST WELL		3750	340
PETER KIEWIT SONS' CO * EP 2098-80	08S	41E	33	WELL	TEST WELL		3850	242
PETER KIEWIT SONS' CO * EP-3097-80	08S	41E	29	WELL	TEST WELL		3750	299
PETER KIEWIT SONS CO.	09S	41E	10	WELL	TEST WELL		3530	320
PETER KIEWIT SONS CO.	09S	41E	10	WELL	TEST WELL		3530	439
PETER KIEWIT SON'S CO.	09S	41E	5	WELL	TEST WELL		3600	271
PETER KIEWIT SONS' INC * EH 2128-81	08S	41E	34	WELL	TEST WELL		3700	301
PETER KIEWIT SONS INC * EH-2126-81	08S	41E	31	WELL	TEST WELL		3700	176
PETER KIEWIT SONS'CO * EH 2189-81	08S	41E	34	WELL	TEST WELL		3770	320
MBMG MONITORING WELL WR-35	09S	39E	20	WELL	TEST WELL	125D1D2	3886.7	273
MBMG MONITORING WELL WR-36A	09S	39E	28	WELL	TEST WELL	125D1D2	3716.3	192
PETER KIEWIT SONS CO	09S	39E	15	WELL	TEST WELL		3780.5	100
PETER KIEWIT SONS CONST	09S	39E	15	WELL	TEST WELL		3780.9	280
WCX-26-80	09S	39E	14	WELL	TEST WELL		3655.74	22
WCX-27-80	09S	39E	14	WELL	TEST WELL		3649	23
WCX-29-80	09S	39E	14	WELL	TEST WELL		3651.36	65
WCX-30-80	09S	39E	14	WELL	TEST WELL		3641.95	57
WR-34	09S	39E	33	WELL	TEST WELL		3772.1	
USGS OBS. WELL *WR-62	09S	39E	1	WELL	UNUSED	125TGRV	3961	465

Table Hydro-14: Wells and Springs within the Foreseeable Cumulative 20' Drawdown Contour & Aquifer is not exclusive of Coals (Alt. A) (all wells on Table Hydro-12 would also be included)

Site_name	Township	Range	Section	Type	Well_use	Aquifer	Altitude	Total_dept
CX RANCH	09S	39E	16	SPRING	STOCKWATER		3800	
44 MAGNUM	09S	41E	34	SPRING	WILDLIFE		4040	
COAL CONSOLIDATED * 3.3 MI N PEARL SCHOOL.	09S	39E	16	SPRING			3790	
COAL CONSOLIDATED *5 MI NW DECKER MT.	09S	39E	1	SPRING			3980	
NHD 2				SPRING				
CONSOL COAL CO * 5 M W DECKER MT *	09S	39E	14	WELL	DOMESTIC	125TGRV	3655	300
JOHNSTON	09S	41E	21	WELL	DOMESTIC		3642	200
JOHNSTON	09S	41E	21	WELL	DOMESTIC		3565	280
ELDER WILLIS W.	09S	41E	26	WELL	STOCKWATER			252
MUNSON VADA	09S	41E	31	WELL	STOCKWATER			257
RANCHOLME CATTLE CO.	09S	41E	28	WELL	STOCKWATER			200
STATES J. VERNON	09S	39E	21	WELL	STOCKWATER			615
NHD Well 10			0	WELL	UNKNOWN		0	0
NHD Well 11			0	WELL	UNKNOWN		0	0
NHD Well 12			0	WELL	UNKNOWN		0	0
NHD Well 13			0	WELL	UNKNOWN		0	0
NHD Well 14			0	WELL	UNKNOWN		0	0
NHD Well 15			0	WELL	UNKNOWN		0	0
DECKER COAL	09S	41E	16	WELL	MONITORING			20
DECKER COAL CO	09S	41E	5	WELL	MONITORING			366
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING			214
PETER KIEWIT SONES CO.	09S	41E	10	WELL	MONITORING		3540	24
PETER KIEWIT SONS	09S	41E	10	WELL	MONITORING			80
PETER KIEWIT SONS	09S	41E	14	WELL	MONITORING		3580	32
PETER KIEWIT SONS	09S	41E	14	WELL	MONITORING		3580	30
PETER KIEWIT SONS	09S	41E	15	WELL	MONITORING		3590	159
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	23
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	40
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING			194
PETER KIEWIT SONS CO.	09S	41E	14	WELL	MONITORING		3625	400
PETER KIEWIT SONS CO.	09S	41E	14	WELL	MONITORING		3625	320
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	31
PETER KIEWIT SONS CO.	09S	41E	10	WELL	MONITORING		3540	20
PETER KIEWIT SONS CO.	09S	41E	14	WELL	MONITORING		3625	221

Table Hydro-14: Wells and Springs within the Foreseeable Cumulative 20' Drawdown Contour & Aquifer is not exclusive of Coals (Alt. A) (all wells on Table Hydro-12 would also be included)

Site_name	Township	Range	Section	Type	Well_use	Aquifer	Altitude	Total_dept
MBMG MONITORING WELL WR-19	09S	39E	16	WELL	RESEARCH	125D1D2	3835.4	305
MBMG MONITORING WELL WR-20	09S	39E	16	WELL	RESEARCH	125ANCB	3835.3	166
MBMG MONITORING WELL WR-34	09S	39E	33	WELL	RESEARCH	125AND2	3772.1	522
PETER KIEWIT SONS	09S	41E	15	WELL	TEST WELL		3590	160
PETER KIEWIT SONS	09S	41E	18	WELL	TEST WELL		3590	424
PETER KIEWIT SONS CO	09S	39E	15	WELL	TEST WELL		3776.2	260
PETER KIEWIT SONS CO.	09S	41E	10	WELL	TEST WELL		3530	320
PETER KIEWIT SONS CO.	09S	41E	10	WELL	TEST WELL		3530	439
PETER KIEWIT SON'S CO.	09S	41E	5	WELL	TEST WELL		3600	271
PETER KIEWIT SONS CO	09S	39E	15	WELL	TEST WELL		3780.5	100
PETER KIEWIT SONS CONST	09S	39E	15	WELL	TEST WELL		3780.9	280
WCX-26-80	09S	39E	14	WELL	TEST WELL		3655.74	22
WCX-27-80	09S	39E	14	WELL	TEST WELL		3649	23
WCX-29-80	09S	39E	14	WELL	TEST WELL		3651.36	65
WCX-30-80	09S	39E	14	WELL	TEST WELL		3641.95	57
WR-34	09S	39E	33	WELL	TEST WELL		3772.1	
USGS OBS. WELL *WR-62	09S	39E	1	WELL	UNUSED	125TGRV	3961	465

Table Hydro-15: Wells and Springs Added to the 20' Drawdown Contour as a Cumulative Result of Action & Aquifer is not exclusive of Coals (Alt. B, C, & D) (all wells on Tables Hydro-12 and Hydro-14 would also be included)

Site name	Township	Range	Section	Type	Well use	Aquifer	Altitude	Total dept
PORTER H. * 11.5 M E DECKER MT *	09S	41E	12	SPRING	UNKNOWN		3685	
DEPT OF FISH-WILDLIFE AND PARKS	08S	40E	35	WELL	DOMESTIC			46
BUREAU OF LAND MANAGEMENT * BENCHMARK	09S	41E	13	WELL	STOCKWATER			322
HOLMES RANCH CO * 1.8 MI N HOLMES RANCH.	08S	41E	34	WELL	STOCKWATER	125TGRV	3670	181
PENSON CHARLES AND GREGG	08S	41E	32	WELL	STOCKWATER	125TGRV	3635	199
PORTER H * 14 M NE DECKER MT *	08S	41E	25	WELL	STOCKWATER	125TGRV	4150	420
PORTER H.A. * 12.3 MI NEW OF DECKER MT.	09S	41E	1	WELL	STOCKWATER	125TGRV	3805	180
STATES J. VERNON	09S	39E	21	WELL	STOCKWATER			615
WILSON LEWIS C AND BEULAH A	08S	41E	35	WELL	STOCKWATER			12
WILSON LEWIS C AND BEULAH A	08S	41E	35	WELL	STOCKWATER			12
DECKER COAL CO	08S	41E	29	WELL	MONITORING			225
MBMG MONITORING WELL WR-17A	09S	40E	29	WELL	MONITORING	125ADOB	3573.9	88
MBMG MONITORING WELL WR-21	08S	39E	32	WELL	MONITORING	125D1D2	3890	206
MBMG MONITORING WELL WR-33	09S	39E	32	WELL	MONITORING	125ADKC	3732.3	165
MBMG MONITORING WELL WR-41	09S	39E	34	WELL	MONITORING	110ALVM	3642.67	40
MBMG MONITORING WELL WR-17B	09S	40E	29	WELL	RESEARCH	125ADOB	3574.7	160
MBMG MONITORING WELL WR-18A	09S	39E	23	WELL	RESEARCH	125ADOB	3703	111
MBMG MONITORING WELL WR-22A	09S	39E	14	WELL	RESEARCH	125ADOB	3700.7	185
MBMG MONITORING WELL WR-26	09S	39E	29	WELL	RESEARCH	125ADCB	3770	267
MBMG MONITORING WELL WR-36	09S	39E	28	WELL	RESEARCH	125D1D2	3716	192
MBMG MONITORING WELL WR-37	09S	39E	28	WELL	RESEARCH	125ADCB	3715.8	126
MBMG MONITORING WELL WR-35	09S	39E	20	WELL	TEST WELL	125D1D2	3886.7	273
MBMG MONITORING WELL WR-36A	09S	39E	28	WELL	TEST WELL	125D1D2	3716.3	192
PETER KIEWIT SONS' CO * EH 2172-81	08S	41E	32	WELL	TEST WELL		3775	289
PETER KIEWIT SONS CO * EH -2175-81	08S	41E	31	WELL	TEST WELL		3640	253
PETER KIEWIT SONS' CO * EH 2187-81	08S	41E	34	WELL	TEST WELL		3800	350
PETER KIEWIT SONS' CO * EH 2188-81	08S	41E	34	WELL	TEST WELL		3775	181
PETER KIEWIT SONS' CO * EP 2096-80	08S	41E	29	WELL	TEST WELL		3750	340
PETER KIEWIT SONS' CO * EP 2098-80	08S	41E	33	WELL	TEST WELL		3850	242
PETER KIEWIT SONS' CO * EP-3097-80	08S	41E	29	WELL	TEST WELL		3750	299
PETER KIEWIT SONS' INC * EH 2128-81	08S	41E	34	WELL	TEST WELL		3700	301
PETER KIEWIT SONS INC * EH-2126-81	08S	41E	31	WELL	TEST WELL		3700	176
PETER KIEWIT SONS'CO * EH 2189-81	08S	41E	34	WELL	TEST WELL		3770	320

Fidelity E&P – Deer Creek North and Pond Creek PODs Compliance with Onshore Order #7

The purpose of Onshore Order #7 (43 CFR 3160) is to “specify informational and procedural requirements for submitted of an application for the disposal of produced water, and the design, construction and maintenance requirements for pits as well as the minimum standards necessary to satisfy the requirements and procedures for seeking a variance from the minimum standards.” (I.B)

Under Onshore Order #7 “Lined pit means an excavated and/or bermed area that is required to be lined with natural or manmade material that will prevent seepage. Such pit shall also include a leak detection system.” while “Unlined pit means an excavated and/or bermed area that is not required to be lined, or any pit that is lined but does not contain a leak detection system.”

All of impoundments associated with the Deer Creek North and Pond Creek PODs would be lined with natural material that will prevent seepage, and monitoring will be required per the MDEQ MPDES permits. As such, these are considered to be lined impoundments.

The existing impoundment (23-0299), the previously approved impoundment (44-3490), and one of the proposed new impoundments (31-2991) are located on private surface. The other proposed impoundments (23-2191 and 33-2191) are located on BLM surface. The impoundments on BLM surface are considered to be "off-lease" since they would receive some of their water from different leases.

Onshore Order #7 states in III.B.2.ii that if an operator submits a permit for the facility from the State or any other regulatory authority, approval can be granted unless such approval will have adverse effects on the Federal/Indian lands, or public health and safety. Fidelity has obtained permits from MBOGC for 2 of the impoundments on private surface, and they have applied for a permit for 31-2991. Permits from MDEQ are not required since these impoundments are not located on drainage, and do not have spillways (i.e. they are used solely to impound waste, and they do not have the potential to discharge to surface waters).

The informational requirements for lined pits in Onshore Order #7 have been meet for the two lined impoundments on BLM surface.

Onshore Order #7 states in III.G.1 that if an operator submits valid MPDES permits, approval to discharge produced water to state waters can be granted. Fidelity currently has one MPDES permit for untreated discharge to the Tongue River (MT-0030457). This existing permit is currently under review. Fidelity has also applied for another MPDES permit to discharge treated CBNG water to the Tongue River.

The treatment of produced water via ion exchange will create a residual low pH Na-Cl type brine. Fidelity proposes to manage this brine by injection, or on-site solidification. If this brine is managed by injection a Sundry notice and a copy of the approved Underground Injection Control (UIC) permit(s) will be required. Once these materials are in hand, the BLM can approve injection of the brine. If the residual brine is to be solidified on-site a Sundry notice, including all applicable informational requirements under Onshore Order #7, and a valid state permit must be submitted to, and approved by, the BLM.

In order to ensure compliance with Onshore Order #7 the following conditions of approval (COAs) will apply:

1. Water from federal wells can not be discharged into impoundments unless the appropriate State permits are in place.
2. The operator will comply with the groundwater monitoring plan requirements for impoundments established by the MDEQ in the MPDES permits. For those impoundments located on BLM surface the operator will provide the BLM with a copy of the monitoring/interpretive reports prepared for the MDEQ.

3. Water from federal wells will not be discharged to surface waters unless valid MPDES permits are in place for that discharge.
4. Residual brine which results from the treatment of water from Federal wells will not be moved off site and injected until a Sundry notice and a copy of the applicable UIC permit(s) are submitted to, and approved by, the BLM.
5. Residual brine which results from the treatment of water from Federal wells will not be discharged into an on-site pit for solidification unless the appropriate state permits are in place, and a Sundry notice, including a copy of the applicable MBOGC permit(s), and all applicable informational requirements under Onshore Order #7, are submitted to, and approved by, the BLM.

APPENDIX H

SOILS

Managed Irrigation Units

The following is a synopsis of Protocol for Evaluating, Designing, Operating and Monitoring Managed Irrigating Systems for Coal Bed Natural Gas Produced water for the Tongue River – Badger Hills Project, Big Horn County, Montana (Kevin Harvey 2003).

At the core of application of produced water is control of the sodium adsorption ratio (SAR) in the soil – water system. Because of naturally low levels of calcium and magnesium and high levels of sodium and bicarbonate result in relatively high SAR values in the produced water, some type of treatment, either of the water and/or soil is required. To lower the SAR and counteract the potential effects of sodium adsorption on soil, either sodium removal or addition calcium or magnesium is necessary.

Coal bed natural gas produced groundwater would be stored in off channel reservoirs during the late fall, winter and early spring months followed by application of the produced water during the irrigation season.

To address the effects to soils and near surface groundwater, several items need to be addressed. These include water balance projections, soil and/or water conditional prescriptions, site selection and characterization, selection and design of irrigation system and development of an irrigation and crop management plan.

Water balance projections would simulate monthly water balances to provide estimates of water production with time, annual storage requirements and annual irrigation area requirements. For this project, a proprietary water balance model was developed by KC Harvey, Inc. Model input includes produced water pumping rates, pumping decline functions, precipitation inflow, reservoir evaporation and percolation rates and irrigation rates. This model includes deterministic functions to reflect project specific operations and probabilistic functions to simulate uncertainty and variability in the water balance associated with climate and pumping rates.

Soil and/or water conditioning prescriptions include laboratory analysis of the water to be used, soils it is applied to and geochemical modeling of water chemistry to derive site specific soils and/or water conditioning prescriptions. Laboratory analysis of water and soil will include: pH, electrical conductivity (EC), total dissolved solids (TDS), dissolved cations (calcium, magnesium, sodium, potassium) and dissolved anions (carbonate, bicarbonate, sulfate, chloride). Data would permit an evaluation of the suitability of water for irrigation with respect to salinity and sodicity.

The amounts of soil and/or water amendments to be added are based on the chemistry of the water and the amount of water applied. The geochemical models PHREEQC or MINTEQ would be used to assess the equilibrium chemistry of the applied water with the added amendments. The models are used to determine possible changes in chemistry when produced water is equilibrated with atmospheric pCO₂ levels; to predict if the sulfur and gypsum at various rates of application would dissolve and yield the required amounts of acid and calcium respectively; and to determine if target pH and ESP-SAR goals would be obtained. These soil-water interactions include potential formation of CaCO₃ and/or decrease in HCO₃⁻ levels associated with high soil pCO₂ values.

Visual inspections would be made for observable changes in vegetation and soil conditions and to assess and optimize the water management approaches employed. The emergence of new seedlings, height and color of plants and percent ground covered by vegetation, as well as any unusual conditions, such as leaf browning, would be noted.

Site selection and characteristics would include screening for candidate sites and soil characterization of final sites to document baseline soils physical and chemical conditions and provide information required to design the land application system.

A number of soil pits would be excavated to characterize major soil types and to facilitate the development of a site soil map. For each soil pit, a soil profile description would be prepared by a qualified soil scientist with USDA protocols. In addition to routine soil profile descriptors, any horizons that may be hydraulically limiting would be identified. Each major soil horizon would be sampled and analyzed for pH, EC, SAR, ESP and other pertinent chemical and physical parameters. In addition, soil infiltration rates would be measured immediately adjacent to each test pit location. Soil permeability testing of the most limiting horizon would be conducted at the appropriate depth.

Irrigation system selection would be based on topography of the landscape, soil texture, soil infiltration rate, permeability, soil water holding capacity, cropping requirements, climate, landowner preference, size of irrigated area and cost. Possible irrigation equipment options include: center pivot, wheel line, hand move/solid set, big gun, subsurface drip and gated pipe.

Irrigation and crop management addresses procedures for irrigation scheduling, cropping, site monitoring and soil action levels and responses. Irrigation scheduling would be accomplished through the development of a soil-water balance. A site specific soil-water balance is developed using local precipitation, crop evapotranspiration data, sprinkler type efficiencies, soil water holding capacity, crop rooting depth, crop harvesting requirements and leaching requirement. The leaching requirement is calculated to maintain a target average root zone EC based on the salinity thresholds for specific vegetation. Any irrigation rates determined from the soil-water balance must not exceed the infiltration rate of the soil, eliminating potential water run off from the site. Monitoring would be conducted during irrigation season to ensure no runoff occurs.

The cropping plan would detail the specific crops to be grown, seeding rates, seeding methods, site preparation requirements and harvesting methods. Crop selection would be based on landowner preference, salinity tolerance, water use and general site tolerances.

Irrigation site monitoring insures that the applied soil amendments, as calculated, are performed to mitigate any potential impacts caused by sodic water application. Monitoring of the site includes an evaluation of soil chemistry, run off and erosion, water quality and vegetative performance.

Before and after each irrigation season, discrete and/or composite soil samples would be collected from each application area. Discrete samples would generally be collected from 0-6 inch and 6- 24 inch depths or based on soil characteristics if appropriate. Composite soil samples would be collected along a random zigzag pattern across the entire site. Soils samples would be analyzed for pH, EC, SAR, exchangeable sodium percentage (ESP), Nitrogen (N), Phosphorus (P) and Potassium (K) and other pertinent parameters.

Both quantity and quality of the irrigation water applied would be monitored. Water samples will be analyzed on a monthly basis for pH, EC, SAR, major cations, major anions and other pertinent parameters. The amount of water applied at each area would be continued measured.

Site specific soil chemistry action levels would be established for each area to ensure that the soil is not measurably impacted and that remedial actions can be implemented before damage to soil takes place. Actions levels would be based on soil type, crop type, irrigation water quality, amendments used, land use, beneficial use goals and landowner input. The quantitative measurements of average root zone EC and ESP would be the primary means to assess the potential impact of water on soils. With respect to salinity,

as measured by the average root zone EC, the action level would be based on an appropriate salinity yield threshold for the selected crop species.

Because a soil characterized by a relatively high EC can maintain its physical integrity even when it has a high ESP (ESP>15) and the soils with a low EC could disperse even if the soil is characterized with a ESP of less than 5, the interaction between salinity and sodicity is an important relationship that requires both parameters to be assessed together when determining if a soil may be impacted by the applied water. Generally, if the soil EC is less than or equal to 3 dS/m, then the ESP should be less than or equal to 8 and if the EC is greater than 3 dS/m, then the ESP should be less than or equal to 15.

Corrective measures would be taken if the average root zone soil chemistry results for any monitoring period indicate values outside the guidelines. Initial response measures may include infiltration measurements for comparison to baseline values. Significant decreases in soil infiltration would indicate that impacts to soil structure are occurring. Corrective measures at that point include, but are not limited to, halting or reducing the application of produced water, applying additional amendments, application of gypsum at the end of the irrigation season to reduce the ESP during winter and spring snowmelt and rainfall events and/or using a less sodic water supply.

APPENDIX I
CULTURAL

TABLE 3.2.1-1 SITE ELIGIBILITY AND IMPACT TABLE - DEER CREEK NORTH POD INVENTORY AREAS			
Site #	Site Type	NRHP Determination	Project Related Impacts
24BH1005	Lithic Scatter/Stone Feature	Not Eligible A-C; unknown under D; unknown TCP	None
24BH1015	Multi-Component	Not Eligible	None
24BH1016	Lithic Scatter/Stone Feature	Not Eligible under A-C; unknown under D	None
24BH1017	Lithic Scatter	Not Eligible under A-C; unknown under D	None
24BH1516	Lithic Scatter	Not Eligible	Not Found
24BH1519	Stone feature	Not Eligible	None
24BH1521	Lithic Scatter	Not Eligible	None
24BH1523	Lithic Scatter	Not Eligible under A-C; unknown under D	None
24BH1524	Lithic Scatter	Not Eligible	None
24BH1554	Lithic Scatter/Stone Feature	Not Eligible	None
24BH1555	Lithic Scatter	Not Eligible	Not Found
24BH1556	Lithic Scatter	Not Eligible	None
24BH1557	Lithic Scatter	Not Eligible	None
24BH1558	Lithic Scatter	Not Eligible	None
24BH1560	Lithic Scatter	Not Eligible	Not Found

**TABLE 3.2.1-1
SITE ELIGIBILITY AND IMPACT TABLE - DEER CREEK NORTH POD
INVENTORY AREAS**

Site #	Site Type	NRHP Determination	Project Related Impacts
24BH1561	Lithic Scatter	Not Eligible	Not Found
24BH1562	Lithic Scatter	Not Eligible	Not Found
24BH3166	Historic Homestead	Not Eligible	None
24BH3167	Historic Homestead	Not Eligible	None
24BH3168	Multi-Component	Not Eligible under A-C; unknown under D	None
24BH3169	Stone feature	Not Eligible under A-C; unknown under D	None
24BH3170	Lithic Scatter	Not Eligible	Outside the POD
24BH3171	Historic Homestead	Not Eligible	Yes, Utility Corridor
24BH3172	Historic Homestead	Not Eligible	None
24BH3173	Lithic Scatter	Not Eligible	Outside the POD
24BH3174	Lithic Scatter	Not Eligible under A-C; unknown under D	None
24BH3175	Lithic Scatter	Not Eligible/Unresolved	None
24BH3176	Lithic Scatter	Not Eligible	Yes, Utility Corridor
24BH3177	Lithic Scatter	Not Eligible	None
24BH3178	Lithic Scatter	Not Eligible A-C; unknown under D	None
24BH3179	Lithic Scatter	Not Eligible under A-C; unknown under D	None
24BH3180	Stone feature	Not Eligible/Unresolved	Outside the POD
24BH3181	Lithic Scatter	Not Eligible/Unresolved	None

**TABLE 3.2.1-1
SITE ELIGIBILITY AND IMPACT TABLE - DEER CREEK NORTH POD
INVENTORY AREAS**

Site #	Site Type	NRHP Determination	Project Related Impacts
24BH3182	Lithic Scatter	Not Eligible under A-C; unknown under D	None
24BH3183	Lithic Scatter	Not Eligible	None
24BH3184	Historic Homestead	Not Eligible	None
24BH3185	Historic Homestead	Eligible under C	Outside the POD
24BH3186	Historic Homestead	Not Eligible /Unresolved	None
24BH3187	Historic Bridge	Eligible under C	Impacts non-contributing element only, Underground Powerline
24BH3188	Historic Homestead	Not Eligible	Yes, Utility Corridor
24BH3189	Historic Homestead	Not Eligible	None
24BH3190	Historic Homestead	Not Eligible	None
24BH3191	Historic Homestead	Not Eligible	None
24BH3192	Historic Homestead	Not Eligible/Unresolved	None
24BH3193	Historic Homestead	Not Eligible	Impact, Utility Corridor
24BH3194	Historic Homestead	Not Eligible	None
24BH3195	Historic Homestead	Not Eligible	None
24BH3196	Historic Homestead	Not Eligible	Yes, Utility Corridor
24BH3201	Historic Material Scatter	Not Eligible	None
24BH3202	Lithic Scatter and Cairn	Not Eligible A-C, Unkown under D	None

**TABLE 3.2.1-1
SITE ELIGIBILITY AND IMPACT TABLE - DEER CREEK NORTH POD
INVENTORY AREAS**

Site #	Site Type	NRHP Determination	Project Related Impacts
24BH3203	Historic Grafitti	Not Eligible	None
24BH3204	Historic Carin/Lithic Scatter	Historic Component (Cairn) Not Eligible Lithic Scatter Not Eligible Ac- Unknown under D	None
24BH3205	Prehistoric Carin/Lithic Scatter	Not Eligible A-C Unknown under D	None
24BH3206	Stone Circle/Lithic Scatter	Not Eligible A-C Unknown under D	None
24BH3207	Lithic Scatter	Not Eligible A-C, Unknown under D	None
24BH3208	Historic Homestead	Not Eligible	None
24BH3209	Historic Homestead	Not Eligible	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
4BH1022	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH1023	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH1033	Cairn/Cultural Material Scatter	Not Eligible under A-C; Unknown under D	Yes	None (20-30 m buffer)
24BH1040	Multi-Component	Eligible under Criterion D	No	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH1042	Multi-Component	Eligible under C, Unknown under D	Yes	None
24BH1060	Stone Feature/ Lithics	Not Eligible under A-C; Unknown under D	Yes	None
24BH1061	Stone Feature/ Lithics	Not Eligible under A-C; Unknown under D	Yes	None, Site missed by 45 feet.
24BH1065	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH1066	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH1641	Cultural Material Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH1942	Stone Feature/ Lithics	Not Eligible under A-C; Unknown under D	No	None
24BH1943	Cairn/Lithics	Not Eligible under A-C; Unknown under D	No	None
24BH1944	Stone Feature/ Lithics	Eligible Under D	No	None
24BH1954	Cairns/Lithics	Not Eligible under A-C; Unknown under D	No	None
24BH1957	Lithic Scatter	Not Eligible	Yes	Yes
24BH1958	Stone Feature/ Lithics	Not Eligible under A-C; Criterion D cannot be ascertained	Yes	Yes, Monitoring required if existing disturbance expanded

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH1961	Petroglyph	Eligible under Criterion C and D	Yes	None
24BH1968	Culture Material Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2003	Homestead	Not Eligible	Yes	None
24BH2014	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2025	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2091	Stone Feature/ Lithics	Eligible under C. Unknown under D	yes	None
24BH2093	Lithic Scatter	N/A	N/A	Not Found
24BH2095	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2099	Lithic Scatter/ Quarry/ Depression	Not Eligible under A-C; Unknown under D	Yes	None
24BH2100	Lithic Scatter	N/A	N/A	Not Found
24BH2113	Lithic Scatter	Eligible under Criterion D	Yes	None, missed by 15 feet
24BH2114	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2115/2236	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH2116	Petroglyph/ Lithic Scatter	Eligible Under C and D	Yes	None
24BH2117	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2119	Multi- Component	Not Eligible under A-C; Unknown under D	Yes	None
24BH2129	Homestead	Not Eligible	No	None
24BH2130	Homestead	Not Eligible	Yes	None
24BH2131	Multi- Component	Not Eligible under A-C; Unknown under D	Yes	None, missed by 50 feet
24BH2133	Farmstead	Not Eligible	No	None
24BH2141	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2142	Lithic Scatter	Not Eligible	Yes	None
24BH2143	Lithic Scatter	N/A	N/A	Not Found
24BH2144	Lithic Scatter	Not Eligible	Yes	None
24BH2145	Lithic Scatter	Not Eligible under A-C; Unknown under D (OSM 1986); BLM concurs	Yes	None
24BH2146/2246	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH2147	Lithic Scatter	Not Eligible	Yes	None
24BH2148	Lithic Scatter	N/A	N/A	Not Found
24BH2149	Lithic Scatter	Not Eligible	Yes	None
24BH2150	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH2152	Lithic Scatter	N/A	N/A	Not Found
24BH2154	Cairn/Lithics	Not Eligible under A-C; Criterion D cannot be ascertained	no	Yes, Monitoring required
24BH2238	Lithic Scatter	Not Eligible	No	None
24BH2239	Lithic Scatter	Not Eligible	Yes	None
24BH2241	Lithic Scatter	Not Eligible	No	None
24BH2244	Lithic Scatter	Not Eligible	Yes	None
24BH3079	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3080	Historic CMS	Not Eligible	Yes	None
24BH3081	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3082	Lithic Scatter	Not Eligible under A-C; Unknown	Yes	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
		under D		
24BH3083	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3084	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3085	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	Yes	None
24BH3086	Lithic Scatter	Eligible under Criterion D	Yes	None
24BH3087	Lithic Scatter/ Quarry	Eligible under Criterion D	Yes	None
24BH3088	Lithic Scatter	Not Eligible	Yes	None
24BH3089	Lithic Scatter	Not Eligible	Yes	None
24BH3090	Lithic Scatter	Not Eligible	Yes	None
24BH3091	Stone Feature/ Lithics	Not Eligible under A-C; Unknown under D	Yes	None
24BH3092	Stone Feature/ Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	Yes
24BH3093	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3094	Culture Material Scatter	Not Eligible under A-C; Unknown under D	Yes	None, (missed by 75 ft)
24BH3095	Lithic Scatter	Not Eligible under A-C;	Yes	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
		Unknown under D		
24BH3096	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3097	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3098	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3099	Multi-Component	Not Eligible	Yes	None
24BH3100	Lithic Scatter/ Depression	Not Eligible under A-C; Unknown under D	Yes	None
24BH3101	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3102	Multi-Component	Not Eligible under A-C; Unknown under D	Yes	None (missed by 30 ft)
24BH3103	Lithic Scatter	Not Eligible	Yes	Yes
24BH3104	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3105	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3106	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH3107	Stone Feature/ Lithics	Eligible under Criterion D	Yes	Yes, Requires monitoring
24BH3108	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	Yes	None
24BH3109	Lithic Scatter	Not Eligible	Yes	None
24BH3110	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3111	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3112	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3113	Historic Feature	Not Eligible	Yes	None
24BH3114	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3115	Irrigation Ditch	Not Eligible	Yes	Yes
24BH3116	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3117	Historic	Not Eligible	No	None
24BH 3118	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH3119	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3120	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3121	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3122	Cultural Material Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3123	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	Yes	None
24BH3124	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	Yes	None
24BH3125	Stone Feature/ Lithics	Not Eligible under A-C; Unknown under D	No	None
24BH3126	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3127	Stone Feature/ Lithics	Not Eligible under A-C; Unknown under D	No	None
24BH3128	Homestead	Not Eligible	No	None
24BH3129	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3130	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH3131	Homestead	Not Eligible	No	None
24BH3132	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3133	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3134	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3135	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3136	Lithic Scatter	Not Eligible	No	None
24BH3137	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3138	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3139	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3140	Stone Feature/ Lithics	Not Eligible under A-C; Unknown under D	No	None
24BH3141	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3142	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH3143	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3144	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3145	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3146	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3147	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3149	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3150	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	No	None
24BH3151	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3154	Homestead	Not Eligible	No	None
24BH3155	Homestead	Not Eligible	Yes	None
24BH3156	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3157	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	Yes	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
24BH3158	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3159	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3160	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3210	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3211	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3212	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3213	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3214	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3215	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3216	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3217	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3218	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown	Yes	None

**TABLE 3.2.1-2
SITE ELIGIBILITY AND IMPACT TABLE - POND CREEK POD
INVENTORY AREAS**

Site #	Site Type	NRHP Eligibility	Within POD	Impacts
		under D		
24BH3219	Lithic Scatter/ Quarry	Not Eligible under A-C; Unknown under D	Yes	None
24BH3220	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None (missed by 30 ft)
24BH3221	Lithic Scatter	Not Eligible under A-C; Unknown under D	Yes	None
24BH3222	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3223	Lithic Scatter	Not Eligible under A-C; Unknown under D	No	None
24BH3224	Irrigation Ditch	Not Eligible as Landscape under A	No	Yes
24BH3225	Irrigation Ditch	Not Eligible	No	Yes

APPENDIX J
ALTERNATIVES C AND D
ADDITIONAL MITIGATING MEASURES

Alternative C Mitigating Measures

1. The operator shall notify BLM (406-232-7001) at least 48 hours before beginning construction activities associated with the sites listed below. BLM shall immediately notify the Northern Cheyenne Tribe about construction activities. The company shall have its consulting archaeologist or an archaeologist holding a valid BLM Cultural Resources Permit at the sites listed below during construction. The operator shall provide the opportunity to the Northern Cheyenne Tribe for a qualified cultural resources specialist to monitor construction in the locations listed below for the Federal portion of the Coal Creek Project Area. The results of monitoring shall be reported in writing by the Consulting Archaeologist and Tribe to BLM within 14 days after completion of monitoring activities.
2. The purpose of the monitoring is to identify any cultural resources that may be discovered by construction activities. The archaeologist or cultural resources specialist may temporarily halt construction within 300 feet (100 meters) of the find until it can be evaluated by a BLM Cultural Resources Specialist. The operator shall immediately notify BLM (406-232-7001) upon the discovery of cultural resources. The BLM authorized officer shall respond to the operator within the five working days as per Condition of Approval No. 5. The same conditions in Condition of Approval No. 5 would apply for buried cultural resources encountered during monitoring.

Required Monitoring Deer Creek North POD:

Utility Corridor from the 44-0491 Well to the drop point for the 24-0491 Well

Utility Corridor from the 22-1591 Well to the Rancholme 14 Battery

Required Monitoring Pond Creek POD:

Utility Corridor to the 21-1199 Well

Utility Corridor from the 34-1199 Well

Utility Corridor to the 41-1299 Well

Utility Corridor to the 32-1199 Well

Utility Corridor between the CX12 Battery and 14-1299 Well

Utility Corridor to the 32-0299 Well

Utility Corridor to the 41-2299 Well

Portions of the Utility Corridor between the CX14 Battery and the 24-1099 Well

3. Construction and drilling timing stipulation for grouse: No construction and drilling activities from March 1 to June 15 in grouse nesting habitat within two miles of an active lek would apply for the following wells, unless BLM grants an exception (see Appendix K):
 - o All wells within the Pond Creek POD.
 - o Deer Creek North POD: Timing stipulations would apply for all wells except 44-1191, 42-1591, 11-1191, 24-0291.
4. Construction and drilling timing stipulation for crucial mule deer winter range: No construction and drilling activities from December 1 to March 31 within the boundaries of the crucial winter range would apply to the following wells, unless BLM grants an exception (see Appendix K):
 - o All wells within the Pond Creek POD.
 - o Deer Creek North POD: Timing stipulations would apply for all wells except 31-0191, 31-1291, 21-0191, 11-0691, 31-0691, and 24-0591
5. Construction and drilling timing stipulation for raptor nests active within the past two years: Construction and drilling activities are prohibited within 0.5 miles of a nest from March 1 to August 1, on the following wells, unless BLM grants an exception (see Appendix K):

- Pond Creek POD: 34-0399.
 - Deer Creek North POD: 11-1191, 24-0291, 31-0191, 21-0191, 44-1591, 42-2291.
6. Fidelity would be required to submit a right-of-way application and additional information before construction can begin on impoundments 23-2191 and 33-2191, located on BLM administered surface.
 7. Prior to stock water tank installation on BLM administered surface, a “Cooperative Agreement for Range Improvements” must be obtained from the Miles City Field Office.
 8. In order to ensure compliance with Onshore Order #7 the following mitigating measures would apply:
 - Water from federal wells can not be discharged into lined impoundments unless the appropriate State permits are in place.
 - The operator will comply with the groundwater monitoring plan requirements for lined impoundments established by the MDEQ in the MPDES permits.
 - For those lined impoundments located on BLM surface the operator will provide the BLM with a copy of the monitoring/interpretive reports prepared for the MDEQ.
 - Water from federal wells will not be discharged to surface waters unless a valid MPDES permit is in place for that discharge.

Alternative D Mitigating Measures

1. The operator shall notify BLM (406-232-7001) at least 48 hours before beginning construction activities associated with the sites listed below. BLM shall immediately notify the Northern Cheyenne Tribe about construction activities. The company shall have its consulting archaeologist or an archaeologist holding a valid BLM Cultural Resources Permit at the sites listed below during construction. The operator shall provide the opportunity to the Northern Cheyenne Tribe for a qualified cultural resources specialist to monitor construction in the locations listed below for the Federal portion of the Coal Creek Project Area. The results of monitoring shall be reported in writing by the Consulting Archaeologist and Tribe to BLM within 14 days after completion of monitoring activities.
2. The purpose of the monitoring is to identify any cultural resources that may be discovered by construction activities. The archaeologist or cultural resources specialist may temporarily halt construction within 300 feet (100 meters) of the find until it can be evaluated by a BLM Cultural Resources Specialist. The operator shall immediately notify BLM (406-232-7001) upon the discovery of cultural resources. The BLM authorized officer shall respond to the operator within the five working days as per Condition of Approval No. 5. The same conditions in Condition of Approval No. 5 would apply for buried cultural resources encountered during monitoring.

Required Monitoring Deer Creek North POD:

Utility Corridor from the 44-0491 Well to the drop point for the 24-0491 Well
 Utility Corridor from the 22-1591 Well to the Rancholme 14 Battery

Required Monitoring Pond Creek POD:

Utility Corridor to the 21-1199 Well
 Utility Corridor from the 34-1199 Well
 Utility Corridor to the 41-1299 Well
 Utility Corridor to the 32-1199 Well
 Utility Corridor between the CX12 Battery and 14-1299 Well
 Utility Corridor to the 32-0299 Well
 Utility Corridor to the 41-2299 Well
 Portions of the Utility Corridor between the CX14 Battery and the 24-1099 Well

3. Construction and drilling timing stipulation for grouse: No construction and drilling activities from March 1 to June 15 in grouse nesting habitat within two miles of an active lek would apply for the following wells, unless BLM grants an exception (see Appendix K):
 - All wells within the Pond Creek POD.
 - Deer Creek North POD: Timing stipulations would apply for all wells except 44-1191, 42-1591, 11-1191, 24-0291.
4. Construction and drilling timing stipulation for crucial mule deer winter range: No construction and drilling activities from December 1 to March 31 within the boundaries of the crucial winter range would apply to the following wells, unless BLM grants an exception (see Appendix K):
 - All wells within the Pond Creek POD.
 - Deer Creek North POD: Timing stipulations would apply for all wells except 31-0191, 31-1291, 21-0191, 11-0691, 31-0691, and 24-0591
5. Construction and drilling timing stipulation for raptor nests active within the past two years: Construction and drilling activities are prohibited within 0.5 miles of a nest from March 1 to August 1, on the following wells, unless BLM grants an exception (see Appendix K):
 - Pond Creek POD: 34-0399.
 - Deer Creek North POD: 11-1191, 24-0291, 31-0191, 21-0191, 44-1591, 42-2291.
6. Prior to stock water tank installation on BLM administered surface, a “Cooperative Agreement for Range Improvements” must be obtained from the Miles City Field Office.
7. In order to ensure compliance with Onshore Order #7 the following mitigating measures would apply:
 - Water from federal wells can not be discharged into lined impoundments unless the appropriate State permits are in place.
 - The operator will comply with the groundwater monitoring plan requirements for lined impoundments established by the MDEQ in the MPDES permits.
 - Water from federal wells will not be discharged to surface waters unless valid MPDES permits are in place for that discharge.
 - Residual brine which results from the treatment of water from Federal wells will not be moved off site and injected until a Sundry notice and a copy of the applicable UIC permit(s) are submitted to, and approved by, the BLM.
 - Residual brine which results from the treatment of water from Federal wells will not be discharged into an on-site lined pit for solidification unless the appropriate state permits are in place, and a Sundry notice, including a copy of the applicable MBOGC permit(s), and all applicable informational requirements under Onshore Order #7, are submitted to, and approved by, the BLM.

Mitigating Measures Alternatives C & D

General

1. If any cultural values (sites, artifacts, human remains, etc.) are observed during operation of this lease/permit/right-of-way, they are to be left intact and the Miles City Field Manager notified. The authorized officer will conduct an evaluation of the cultural values to establish appropriate mitigation, salvage or treatment. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials and contact the authorized BLM officer. Within five working days, the AO will inform the operator as to:
 - Whether the materials appear eligible for the National Register of Historic Places;

- The mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
 - A time-frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction measures.
2. If paleontological resources, either large or conspicuous and/or a significant scientific value are discovered during construction, the find must be reported to the Authorized Officer immediately. Construction must be suspended within 250 feet of said find. An evaluation of the paleontological discovery will be made by a BLM approved professional paleontologist within five working days, weather permitting, to determine the appropriate action(s) to prevent the potential loss of any significant paleontological values. Operations within 250 feet of such a discovery must not be resumed until written authorization to proceed is issued by the Authorized Officer. The applicant must bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operation.
 3. Prior to the use of pesticides on public land, the applicant must obtain from the BLM authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers and any other information deemed necessary by the authorized officer to such use. Disturbed areas must be monitored annually for the presence of noxious weeds from June through August. Monitoring must begin prior to disturbance.

Drilling

1. Any evidence of non-exempt wastes being put into the reserve pit may result in the BLM Authorized Officer requiring specific testing and closure requirements.
2. If these wells are drilled during the fire season (June-October), the operator must take all necessary precautions to ensure that fire hazard is minimized, including but not limited to mowing vegetation on the access routes and well sites and keeping fire fighting equipment readily available when drilling.

Access

1. Access roads, including drainage control, must be improved and maintained as necessary or as directed by the BLM Authorized Officer to prevent soil erosion and to provide for safe and environmentally-sound access.
2. Water or other non-saline dust suppressants with at least 50 percent control efficiency must be applied during well site, battery site and road construction. Dust inhibitors (surfacing materials, non-saline dust suppressants and water) must be used as necessary on unpaved roads that present a fugitive dust problem. The use of chemical dust suppressants on public surface will require prior approval from the BLM Authorized Officer.
3. The operator must establish, post and enforce speed limits to achieve at least a 65% reduction of fugitive dust emissions from an assumed base speed equal to 40 miles per hour. The operator must administer dust control measures on active access roads, well sites and battery sites.

Reclamation

1. Pit reclamation:

- a. All pit(s) must be emptied of all fluids within 90 days after completion of drilling operations. The pit must be closed properly to assure protection of soil, water and vegetation.
 - b. The pit may not be cut or trenched.
 - c. Pit mud/sludge material may be buried onsite after the material has dried.
 - d. The plastic pit liner (if any) must be cut off below grade and properly disposed of at a state authorized landfill before beginning to recontour the site.
 - e. The pit material must be covered with a minimum of 3' of soil
2. Reclamation of disturbed areas on private surface must be in accordance with agreements between Fidelity and the landowners. The disturbed areas must be disked and seeded with a weed-seed free mix approved by the Natural Resource Conservation Service and the surface owner. At a minimum, 12 pounds per acre of seed would be planted, with the initial reseeded in the fall of 2005.
 3. Areas of surface disturbance must be ripped or scarified to a depth of at least 12 inches before recontouring and redistributing topsoil. The rippers must not be set more than 24 inches apart.
 4. Topsoil must be distributed evenly over the entire recontoured area. Prepare the seedbed by disking to a depth of 4-6 inches following the contour. Seed must be drilled on the contour to a depth of one-half inch, followed by cultipaction to compact the seedbed, preventing soil and seed losses
 5. All disturbed areas on BLM surface must be seeded after October 1 (before ground freezes) or prior to May 15 (after ground thaws) at 6" drill row spacing at a depth of ¼" to ½" with the following mixture:

Combination must include at least four of the following species:

<i>Species of Seed</i>	<i>(Variety)</i>	<i>Common Name</i>	<i>Pounds/acre *(PLS)</i>
<u>Pascopyrum smithii</u>	(Rosanna)	Western wheatgrass	3.00
<u>Pseudoroegneria spicata</u>	(Goldar)	Bluebunch wheatgrass	2.00
<u>Stipa viridula</u>	(Lodom)	Green needlegrass	2.00
<u>Elymus trachycaulus</u>	(Pryor)	Slender wheatgrass	2.00
<u>Stipa comata</u>		Needleandthread	1.00
<u>Bouteloua curtipendula</u>		Sideoats Grama	2.00
<u>Schizachyrium scoparium</u>		Little bluestem	2.00

**Pure Live Seed (PLS) formula: % of purity of seed mixture times % germination of seed mixture = portion of seed mixture that is PLS*

Western wheatgrass must be included in the seed mix. Thickspike wheatgrass may be substituted only when Western wheatgrass is unavailable.

6. Slopes too steep for machinery may be seeded by hand broadcast with twice the amount of specified seed and raked.
7. Waterbars must be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage and extended into established vegetation. All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial waterbar should be constructed at the top of the backslope. Subsequent waterbars should follow the following general spacing guidelines:

Slope (percent)	Spacing Interval (feet)
< 2	200
2 – 4	100
4 – 5	75
> 5	50

8. BLM will not release the bond until all disturbed areas associated with the APD/POD have been successfully revegetated (evaluation will be made after the second complete growing season) and has met all other reclamation goals of the surface owner and surface management agency.
9. For bond release approval, a Final Abandonment Notice (with a surface owner release letter on split-estate) must be submitted prior to a final abandonment evaluation by BLM.
10. Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.

STANDARD DRILLING OPERATOR REQUIREMENTS

This is not a complete list of requirements, but is an abstract of some major requirements.

1. General Requirements

- a. The lessee or designated operator shall comply with applicable laws and regulations; with the lease terms, Onshore Oil and Gas Orders; NTL's; and with other orders and instructions of the authorized officer. Any deviation from the terms of the approved APD require prior approval from BLM (43 CFR 3162.1(a)).
- b. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease due to a lease or unit boundary change, the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation determined by the authorized officer.

2. Drilling Operations (Onshore Order No. 2)

- a. All applicable safety precautions outlined in Onshore Order No. 2 shall be observed.

3. Well Abandonment (43 CFR 3162.3-4, Onshore Order No. 1 - Sec. V)

Approval for abandonment shall be obtained prior to beginning plugging operations. Initial approval for plugging operations may be verbal, but shall be followed-up in writing within 30 days. Subsequent and final abandonment notifications are required and shall be submitted on Sundry Notice (Form 3160-5), in triplicate.

4. Reports and Notifications (43 CFR 3162.4-1, 3162.4-3)

- a. Within 30 days of completion of the well as a dry hole or producer, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions or data obtained and compiled during the drilling, workover, and/or completion operations shall be filed with a Completion Report (Form 3160-4), in duplicate.
- b. In accordance with 43 CFR 3162.4-3, this well shall be reported on the Oil and Gas Operations Report (OGOR, MMS-4054), starting with the month in which drilling operations commence, and continuing each month until the well is physically plugged and abandoned.
- c. Notify this office within 5 business days of production start-up if either of the following two conditions occur:
 - (1) The well is placed on production.
 - (2) The well resumes production after being off of production for more than 90 days.
"Placed on production" means shipment or sales of hydrocarbons from temporary tanks, production into permanent facilities or measurement through permanent facilities.

Notification may be written or verbal with written follow-up within 15 days, and must include the following information:

1. Operator name, address, and telephone number.
2. Well name and number, county and state.
3. Well location, "1/4", Section, Township, Range, P.M."

4. Date well begins or resumes production.
5. The nature of the well's production; that is crude oil, or crude oil casing gas, or natural gas and entrained liquid hydrocarbons.
6. The Federal or Indian lease number.
7. As appropriate, the Unit Agreement name, number and Participating Area name.
8. As appropriate, the Communitization Agreement number.

5. Verbal Notifications

Made to the BLM, MCFO 406-232-7001, or after business hours to the appropriate individual's home phone shown on the list attached.

- A. Notify this office verbally at least 48 hours prior to beginning construction.
- B. Notify this office verbally at least 12 hours prior to spudding the well. (To be followed up in writing within 5 days.)
- C. Notify this office verbally at least 12 hours prior to running any casing or conducting any BOP tests. (To be followed up in writing within 5 days.)
- D. Notify this office verbally at least 6 hours prior to commencing any DST test.
- E. Notify this office verbally at least 24 hours prior to plugging the well to receive verbal plugging orders. (Refer to Informational Notice Item No. 3 for additional abandonment instructions.)
- F. Notify this office verbally at least 24 hours prior to removal of fluids from the reserve pit.

6. Environmental Obligations and Disposition of Production (43 CFR 3162.5-1, 3162.7-1 and 40 CFR 302-4)

- a. With BLM approval, water produced from newly completed wells may be temporarily stored in reserve pits up to 90 days. During this initial period, application for the permanent disposal method shall be made to this office in accordance with Onshore Order No. 7. If underground injection is proposed, an EPA or State permit shall also be obtained. If surface discharge of produced water is proposed, an MPDES permit shall also be required.
- b. Spills, accidents, fires, injuries, blowout and other undesirable events shall be reported to this office within the timeframes in NTL-3A.
- c. You are required to take all necessary steps to prevent any death of a migratory bird in pits or open vessels associated with the drilling, testing, completion, or production of this well. The death of any migratory bird found in such a pit or open vessel is a violation of the Migratory Bird Treaty Act and is considered a criminal act. Any deaths of migratory birds attributable to pits or open vessels associated with drilling, testing, completing or production operations must be reported to this office and the United States Fish and Wildlife Service within 24 hours.

We may require that the pit be designed or the open vessel be covered to deter the entry of birds in any facility associated with drilling, testing, completion or production of this well. Fencing, screening and netting of pits may be required as a means to deter bird entry. These conditions would most likely be imposed to prevent the entry of migratory birds if oil is left in pits or open vessels after the cessation of drilling or completion of operations, if water disposal pits consistently receive oil, or if pits or open vessels are used repeatedly for emergency situations which result in the accumulation of oil.

Voluntary pit fencing, screening and netting, or sealing vessels, is encouraged to avoid potential instances that may result in the death of a migratory bird.

7. Well Identification (43 CFR 3162.6)

Each drilling, producing or abandoned well shall be identified with the operator's name, the lease serial number, the well number, and the surveyed description of the well (either footages or the quarter-quarter section, the section, township and range). The Indian lessor's name may also be required. All markings shall be legible, and in a conspicuous place.

8. A complete copy of the approved Application for Permit to Drill (APD), including conditions, stipulations, and the H2S contingency plan (if required) shall be available for reference at the well site during the construction and drilling phases.

9. This drilling permit is valid for either one year from the approval date or until lease expiration, whichever occurs first.

10. Public Availability of Information (43 CFR 3100.4)

All submitted information not marked "CONFIDENTIAL INFORMATION" will be available for public inspection upon request.

If you have any questions, please contact a member of our staff at 406-232-7001, or at home, after business hours.

BUSINESS HOURS: 7:45 A.M. to 4:30 P.M. (Mountain Time) Monday - Friday

APPENDIX K

OIL & GAS LEASE STIPULATIONS

Certain resources require protection from impacts associated with oil and gas activities. The specific resource and the method of protection are contained in lease stipulations. Lease stipulations are usually no surface occupancy, controlled surface use or timing limitation. Lease stipulations become a part of the lease and modify the terms of the lease.

Circumstances under which stipulations may be waived, excepted or modified are described in the stipulation. Stipulations may be waived, excepted, or modified at the discretion of the Authorized Officer during the environmental review process conducted for proposed Applications for Permit to Drill (APDs) or other permits related to oil and gas exploration and development. Waivers, exceptions and modifications of stipulations must be granted in accordance with the guidelines identified in the Record of Decision for the Miles City Oil & Gas RMP/FEIS Amendment, 1994.

The lessee or operator may submit a written request to the Authorized Officer for a waiver, exception or modification. The Authorized Officer will respond in writing by either granting or denying the request after reviewing circumstances and data pertinent to the request, as well as consulting with other applicable agencies. The response will include any constraints associated with granting the request or reasons for denying the request.

Deer Creek North and Pond Creek PODs wildlife lease stipulations:

- Construction and drilling timing stipulation for grouse: No construction and drilling activities from March 1 to June 15 in grouse nesting habitat within two miles of an active lek would apply for the following wells, unless BLM grants an exception:
 - All wells within the Pond Creek POD.
 - Deer Creek North POD: Timing stipulations would apply for all wells except 44-1191, 42-1591, 11-1191, 24-0291.

- Construction and drilling timing stipulation for crucial mule deer winter range: No construction and drilling activities from December 1 to March 31 within the boundaries of the crucial winter range would apply to the following wells, unless BLM grants an exception:
 - All wells within the Pond Creek POD.
 - Deer Creek North POD: Timing stipulations would apply for all wells except 31-0191, 31-1291, 21-0191, 11-0691, 31-0691, and 24-0591

- Construction and drilling timing stipulation for raptor nests active within the past two years: Construction and drilling activities are prohibited within 0.5 miles of a nest from March 1 to August 1, on the following wells, unless BLM grants an exception:
 - Pond Creek POD: 34-0399.
 - Deer Creek North POD: 11-1191, 24-0291, 31-0191, 21-0191, 44-1591, 42-2291.