CONDITIONS OF APPROVAL FOR THE APPLICATION FOR PERMIT TO DRILL

POD Name: Table Mountain Phase 2 Federal POD

Operator Name: Anadarko Petroleum Corporation

Field Office: Buffalo Field Office
Address: 1425 Fort Street
Buffalo, Wyoming 82834

Office Telephone Number: 307-684-1100

List of Wells:

	Well Name	Well #	QTR	Sec	TWN	RNG	Lease
1	TABLE MOUNTAIN 2 TM CBM	1-12*	SWNW	1	44N	77W	WYW13956
2	TABLE MOUNTAIN 2 TM CBM	1-32	SWNE	1	44N	77W	WYW13956
3	TABLE MOUNTAIN 2 TM CBM	1-34	SWSE	1	44N	77W	WYW52285
4	TABLE MOUNTAIN 2 TM CBM	1-43	NESE	1	44N	77W	WYW52285
5	TABLE MOUNTAIN 2 TM CBM	2-12	SWNW	2	44N	77W	WYW13956
6	TABLE MOUNTAIN 2 TM CBM	2-32	SWNE	2	44N	77W	WYW52285
7	TABLE MOUNTAIN 2 TM CBM	3-32	SWNE	3	44N	77W	WYW13956
8	TABLE MOUNTAIN 2 TM CBM	3-12	SWNW	3	45N	76W	WYW51703
9	TABLE MOUNTAIN 2 TM CBM	3-14	SWSW	3	45N	76W	WYW72485
10	TABLE MOUNTAIN 2 TM CBM	3-21	NENW	3	45N	76W	WYW0309257
11	TABLE MOUNTAIN 2 TM CBM	3-23	NESW	3	45N	76W	WYW51704
12	TABLE MOUNTAIN 2 TM CBM	3-32	SWNE	3	45N	76W	WYW51703
13	TABLE MOUNTAIN 2 TM CBM	3-34	SWSE	3	45N	76W	WYW51704
14	TABLE MOUNTAIN 2 TM CBM	3-41	NENE	3	45N	76W	WYW51703
15	TABLE MOUNTAIN 2 TM CBM	3-43	NESE	3	45N	76W	WYW51703
16	TABLE MOUNTAIN 2 TM CBM	6-12	SWNW	6	45N	76W	WYW0266651
17	TABLE MOUNTAIN 2 TM CBM	6-14	SWSW	6	45N	76W	WYW0266651
18	TABLE MOUNTAIN 2 TM CBM	6-21	NENW	6	45N	76W	WYW0266651
19	TABLE MOUNTAIN 2 TM CBM	6-23	NESW	6	45N	76W	WYW0266651
20	TABLE MOUNTAIN 2 TM CBM	6-41	NENE	6	45N	76W	WYW0266651
21	TABLE MOUNTAIN 2 TM CBM	7-12	SWNW	7	45N	76W	WYW0266651
22	TABLE MOUNTAIN 2 TM CBM	7-21	NENW	7	45N	76W	WYW0266651
23	TABLE MOUNTAIN 2 TM CBM	11-12	SWNW	11	45N	76W	WYW5955

	Well Name	Well #	QTR	Sec	TWN	RNG	Lease
24	TABLE MOUNTAIN 2 TM CBM	18-14	SWSW	18	45N	76W	WYW89851
25	TABLE MOUNTAIN 2 TM CBM	18-21	NENW	18	45N	76W	WYW89851
26	TABLE MOUNTAIN 2 TM CBM	18-23	NESW	18	45N	76W	WYW89851
27	TABLE MOUNTAIN 2 TM CBM	21-14	SWSW	21	45N	76W	WYW41473
28	TABLE MOUNTAIN 2 TM CBM	21-23	NESW	21	45N	76W	WYW41473
29	TABLE MOUNTAIN 2 TM CBM	22-12	SWNW	22	45N	76W	WYW21220
30	TABLE MOUNTAIN 2 TM CBM	22-14	SWSW	22	45N	76W	WYW41473
31	TABLE MOUNTAIN 2 TM CBM	22-23	NESW	22	45N	76W	WYW41473
32	TABLE MOUNTAIN 2 TM CBM	27-32	SWNE	27	45N	76W	WYW89859
33	TABLE MOUNTAIN 2 TM CBM	27-41	NENE	27	45N	76W	WYW89859
34	TABLE MOUNTAIN 2 TM CBM	28-14	SWSW	28	45N	76W	WYW89852
35	TABLE MOUNTAIN 2 TM CBM	28-23	NESW	28	45N	76W	WYW89852
36	TABLE MOUNTAIN 2 TM CBM	28-32	SWNE	28	45N	76W	WYW0266653
37	TABLE MOUNTAIN 2 TM CBM	28-41	NENE	28	45N	76W	WYW0266653
38	TABLE MOUNTAIN 2 TM CBM	1-43	NESE	1	45N	77W	WYW89851
39	TABLE MOUNTAIN 2 TM CBM	2-12	SWNW	2	45N	77W	WYW128454
40	TABLE MOUNTAIN 2 TM CBM	2-21	NENW	2	45N	77W	WYW128454
41	TABLE MOUNTAIN 2 TM CBM	3-12	SWNW	3	45N	77W	WYW128465
42	TABLE MOUNTAIN 2 TM CBM	3-14	SWSW	3	45N	77W	WYW128454
43	TABLE MOUNTAIN 2 TM CBM	3-23	NESW	3	45N	77W	WYW128454
44	TABLE MOUNTAIN 2 TM CBM	3-32	SWNE	3	45N	77W	WYW128465
45	TABLE MOUNTAIN 2 TM CBM	3-34	SWSE	3	45N	77W	WYW128454
46	TABLE MOUNTAIN 2 TM CBM	3-41	NENE	3	45N	77W	WYW128454
47	TABLE MOUNTAIN 2 TM CBM	3-43	NESE	3	45N	77W	WYW128454
48	TABLE MOUNTAIN 2 TM CBM	4-12	SWNW	4	45N	77W	WYW128454
49	TABLE MOUNTAIN 2 TM CBM	4-21	NENW	4	45N	77W	WYW128454
50	TABLE MOUNTAIN 2 TM CBM	4-23	NESW	4	45N	77W	WYW128454
51	TABLE MOUNTAIN 2 TM CBM	4-32	SWNE	4	45N	77W	WYW128454
52	TABLE MOUNTAIN 2 TM CBM	4-34	SWSE	4	45N	77W	WYW128454
53	TABLE MOUNTAIN 2 TM CBM	4-41	NENE	4	45N	77W	WYW128454
54	TABLE MOUNTAIN 2 TM CBM	4-43	NESE	4	45N	77W	WYW128454
55	TABLE MOUNTAIN 2 TM CBM	9-14	SWSW	9	45N	77W	WYW128454
56	TABLE MOUNTAIN 2 TM CBM	9-23	NESW	9	45N	77W	WYW128454
57	TABLE MOUNTAIN 2 TM CBM	9-34	SWSE	9	45N	77W	WYW0275186

	Well Name	Well #	QTR	Sec	TWN	RNG	Lease
58	TABLE MOUNTAIN 2 TM CBM	9-41	NENE	9	45N	77W	WYW112974
59	TABLE MOUNTAIN 2 TM CBM	9-43	NESE	9	45N	77W	WYW0275186
60	TABLE MOUNTAIN 2 TM CBM	10-12	SWNW	10	45N	77W	WYW89853
61	TABLE MOUNTAIN 2 TM CBM	10-14	SWSW	10	45N	77W	WYW0275186
62	TABLE MOUNTAIN 2 TM CBM	10-21	NENW	10	45N	77W	WYW89853
63	TABLE MOUNTAIN 2 TM CBM	10-23	NESW	10	45N	77W	WYW0275186
64	TABLE MOUNTAIN 2 TM CBM	10-34	SWSE	10	45N	77W	WYW0275186
65	TABLE MOUNTAIN 2 TM CBM	10-41	NENE	10	45N	77W	WYW128464
66	TABLE MOUNTAIN 2 TM CBM	10-43	NESE	10	45N	77W	WYW0275186
67	TABLE MOUNTAIN 2 TM CBM	14-14	SWSW	14	45N	77W	WYW125418
68	TABLE MOUNTAIN 2 TM CBM	15-12	SWNW	15	45N	77W	WYW0275186
69	TABLE MOUNTAIN 2 TM CBM	15-21	NENW	15	45N	77W	WYW0275186
70	TABLE MOUNTAIN 2 TM CBM	15-32	SWNE	15	45N	77W	WYW0275186
71	TABLE MOUNTAIN 2 TM CBM	15-34	SWSE	15	45N	77W	WYW0275186
72	TABLE MOUNTAIN 2 TM CBM	15-43	NESE	15	45N	77W	WYW0275187
73	TABLE MOUNTAIN 2 TM CBM	27-14	SWSW	27	46N	76W	WYW20291
74	TABLE MOUNTAIN 2 TM CBM	27-23	NESW	27	46N	76W	WYW20291
75	TABLE MOUNTAIN 2 TM CBM	33-14	SWSW	33	46N	77W	WYW128454
76	TABLE MOUNTAIN 2 TM CBM	33-23	NESW	33	46N	77W	WYW146305
77	TABLE MOUNTAIN 2 TM CBM	33-34	SWSE	33	46N	77W	WYW128454
78	TABLE MOUNTAIN 2 TM CBM	33-43	NESE	33	46N	77W	WYW146305
79	TABLE MOUNTAIN 2 TM CBM	34-12	SWNW	34	46N	77W	WYW89865
80	TABLE MOUNTAIN 2 TM CBM	34-14	SWSW	34	46N	77W	WYW89865
81	TABLE MOUNTAIN 2 TM CBM	34-21	NENW	34	46N	77W	WYW89865
82	TABLE MOUNTAIN 2 TM CBM	34-23	NESW	34	46N	77W	WYW89865
83	TABLE MOUNTAIN 2 TM CBM	34-32	SWNE	34	46N	77W	WYW89865
84	TABLE MOUNTAIN 2 TM CBM	34-34	SWSE	34	46N	77W	WYW89865
85	TABLE MOUNTAIN 2 TM CBM	34-41	NENE	34	46N	77W	WYW89865
86	TABLE MOUNTAIN 2 TM CBM	34-43	NESE	34	46N	77W	WYW89865

Rights-of-Way:
The following right-of-way locations were identified with the Table Mountain 2 POD for a road and/or road/utility corridor. Construction of the following locations is prohibited until authorized rights-of-ways have been issued for the following locations:

T. 45 N., R. 77 W., sec. 3, 4, 10, 11, 34;
T. 46 N., R. 77 W., sec. 33, 34, 35.

SITE SPECIFIC CONDITIONS OF APPROVAL

Surface Use

1. All permanent aboveground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The paint used will be a color which simulates "Standard Environmental Colors." The color selected for this Table Mountain Phase 2 CBNG POD is Covert Green.

2. All engineered road segments must be complete, including culverts and low water crossings before the drilling rig or other drilling equipment moves on to the well pad.

3. Due to poor reclamation potential, potential erosion, surface disturbance, and topography the operator has submitted detailed POD specific reclamation plan for locations agreed upon at the onsite. A 30-Day Stabilization COA will apply to the locations discussed in the reclamation plans which include: cross country utility corridors, utility corridors, slots, engineered pads and engineered roads as referenced in the table below.

	Site #	**Well #**	**Site Type**
1	TM2_1	4576 7-12	Road
2	TM2_10	4577 3-12	Pad
3	TM2_100	4676 27-23	Pad
4	TM2_101	4676 27-23	Road
5	TM2_102	4676 27-23	Road
6	TM2_105	4576 3-14	Road
7	TM2_106	4576 3-14	Road
8	TM2_108	4576 11-12	Pad
9	TM2_109	4576 3-34	Pad
10	TM2_11	4577 3-12	Road
11	TM2_110	4477 1-32	Pad
12	TM2_111	4477 1-32	Pad
13	TM2_112	4477 1-12	Pad
14	TM2_113	4477 2-12	Pad
15	TM2_114	4477 2-12	Road
16	TM2_115	4477 3-32	Pad
17	TM2_116	4577 9-34	Pad
18	TM2_117	4576 3-34	Road
19	TM2_12	4577 4-43	Pad
20	TM2_13	4577 9-14	Pad
21	TM2_14	4577 9-23	Road
22	TM2_15	4577 9-23	Road
23	TM2_16	4577 Sec 4, 9, 10, 15	Road
24	TM2_17	4577 Sec 4, 9, 10, 15	Road
25	TM2_18	4577 Sec 4, 9, 10, 15	Road
26	TM2_19	4577 Sec 4, 9, 10, 15	Road
27	TM2_2	4576 7-12	Pad

	Site #	Well #	Site Type
28	TM2_20	4577 Sec 4, 9, 10, 15	Road
29	TM2_200	4576 27-14	Road
30	TM2_201	4576 28-14	Pad
31	TM2_202	4576 28-14	Road
32	TM2_205	4576 22-14	Slot
33	TM2_206	4576 22-14	Road
34	TM2_207	4576 22-14	Road
35	TM2_21	4577 Sec 4, 9, 10, 15	Road
36	TM2_22	4577 Sec 4, 9, 10, 15	Road
37	TM2_23	4577 Sec 4, 9, 10, 15	Road
38	TM2_24	4577 4-23	Road
39	TM2_25	4577 4-23	Pad
40	TM2_26	4577 4-21	Road
41	TM2_27	4677 33-34	Road
42	TM2_28	4677 33-23	Pad
43	TM2_29	4677 33-14	Pad
44	TM2_3	4576 7-21	Slot
45	TM2_30	4577 4-12	Pad
46	TM2_300	4577 15-34	Pad
47	TM2_301	4577 10-34	Road
48	TM2_302	4577 10-43	Pad
49	TM2_303	4577 10-41	Road
50	TM2_304	4577 10-41	Road
51	TM2_305	4577 9-41	Slot
52	TM2_306	4576 27-32	Road
53	TM2_307	4576 28-32	Pad
54	TM2_308	4576 28-41	Road
55	TM2_309	4576 21-23	Pad
56	TM2_31	4677 34-14	Road
57	TM2_310	4576 22-12	Road
58	TM2_311	4577 3-14	Road
59	TM2_312	4577 10-12	Pad
60	TM2_313	4577 3-34	Pad
61	TM2_314	4577 3-32	Pad
62	TM2_315	4577 2-12	Pad
63	TM2_316	4677 34-32	Pad/Road
64	TM2_317	4677 34-41	Pad/Road
65	TM2_318	4576 18-21	Road
66	TM2_319	4576 6-14	Pad
67	TM2_32	4677 33-43	Pad

	Site #	Well #	Site Type
68	TM2_320	4577 2-12	Road
69	TM2_321	4577 2-12	Road
70	TM2_322	4576 3-32/3-41	Corridor
71	TM2_324	4577 3-32	Road
72	TM2_325	4577 3-32	Road
73	TM2_326	4577 3-32	Road
74	TM2_33	4677 33-43	Road
75	TM2_34	4677 33-43	Road
76	TM2_35	4677 34-12	Road
77	TM2_36	4677 34-12	Pad
78	TM2_37	4677 34-23	Pad
79	TM2_38	4677 34-21	Pad
80	TM2_4	4576 7-21	Road
81	TM2_5	4576 6-41	Pad
82	TM2_6	4576 6-23	Road
83	TM2_7	4576 6-21	Pad
84	TM2_8	4576 6-21	Road
85	TM2_9	4576 6-12	Road

4. All drilling pits will be required to be lined due to the sandy soils that occur throughout the POD.

5. The operator would follow the guidance provided in the Wyoming Policy on Reclamation (Instruction Memorandum WY-90-231). The Wyoming Reclamation Policy applies to all surface-disturbing activities. Authorizations for surface-disturbing actions are based upon the assumptions that an area can and ultimately would be successfully reclaimed. BLM reclamation goals emphasize eventual ecosystem reconstruction, which means returning the land to a condition approximate to an approved "Reference Site" or Natural Resources Conservation Service Ecological Site Transition State. Final reclamation measures are used to achieve this goal. BLM reclamation goals also include the short-term goal of quickly stabilizing disturbed areas to protect both disturbed and adjacent undisturbed areas from unnecessary degradation. Interim reclamation measures are used to achieve this short-term goal.

6. The operator will seed all BLM lands within the POD with the Sandy Seed mix identified within the Table Mountain Phase 2 Federal POD Reclamation Plans for Wells/Roads 8-31-2010 page 11 for the following locations listed below:

	BLM Well #
1	4577 1-43
2	4577 2-12
3	4577 2-21
4	4577 3-32
5	4577 3-41
6	4577 3-43

	BLM Well #
7	4577 4-41
8	4577 10-21
9	4577 10-34
10	4577 10-41
11	4577 10-43
12	4577 15-12
13	4577 15-21
14	4577 15-32
15	4577 15-34
16	4577 15-44
17	4677 33-14
18	4677 33-23
19	4677 33-34
20	4677 33-43
21	4677 34-12
22	4677 34-14
23	4677 34-21
24	4677 34-23
25	4677 34-32
26	4677 34-34
27	4677 34-41
28	4677 34-43

7. In an effort to minimize disturbance in the area of Anadarko Petroleum Corporation's (Anadarko) Table Mountain 2 Plan of Development (POD) and Williams Production, RMT's (Williams) Culp-Hartzog Draw POD, both operators must utilize common roads and corridors as identified in the Table Mountain 2 POD Map D.

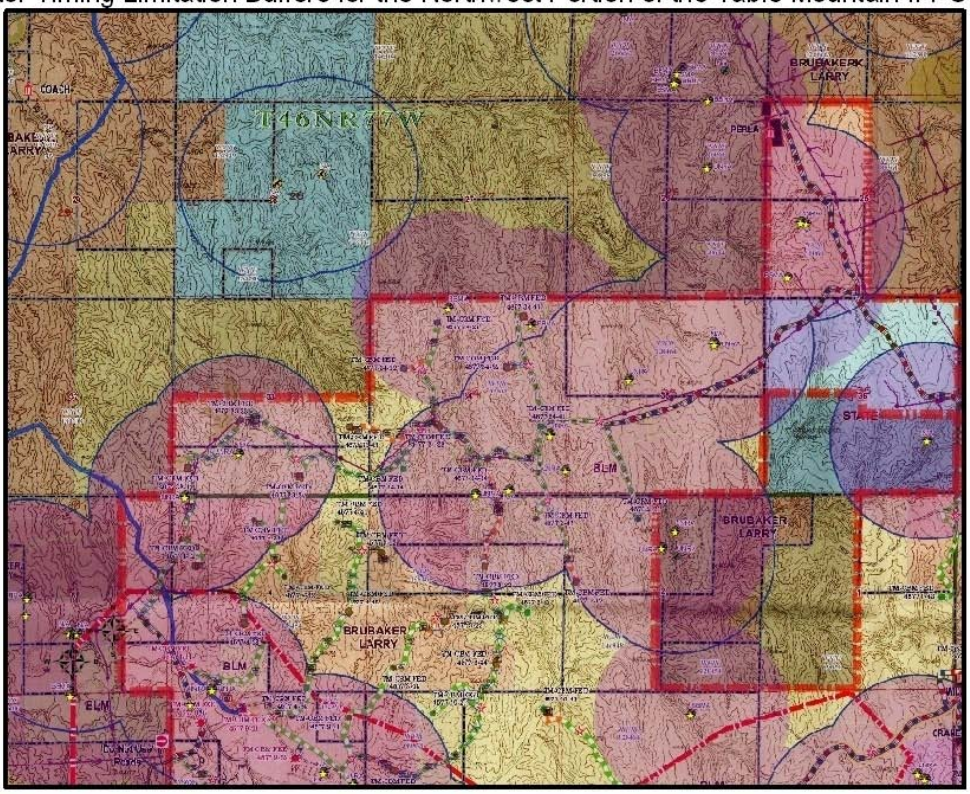
Wildlife

Raptors

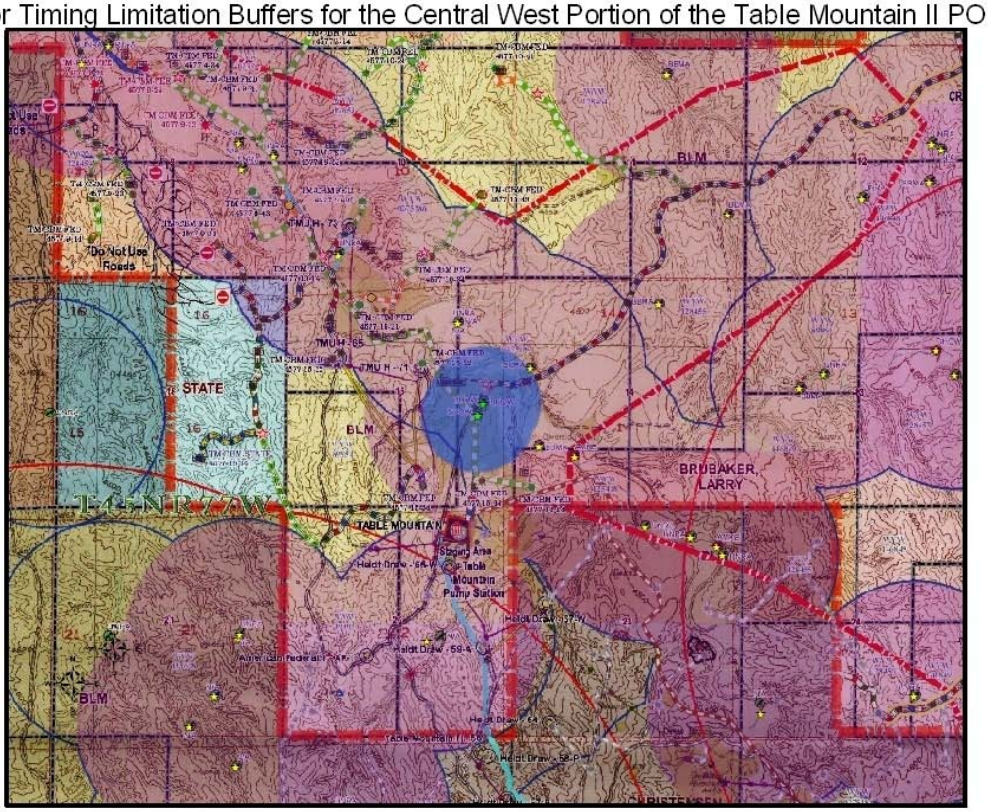
The following conditions will alleviate impacts to raptors:

1. No surface-disturbing activities shall occur within 0.5 mile of all identified raptor nests, from 1 February through 31 July, annually, prior to a nesting survey. This timing limitation will be in effect unless surveys determine the nest to be inactive. Refer to the attached raptor protection buffer maps for affected wells and infrastructure.
    a. Surveys shall be conducted by a biologist following BLM protocol. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.
    b. If an undocumented raptor nest is located during project construction or operation, the Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

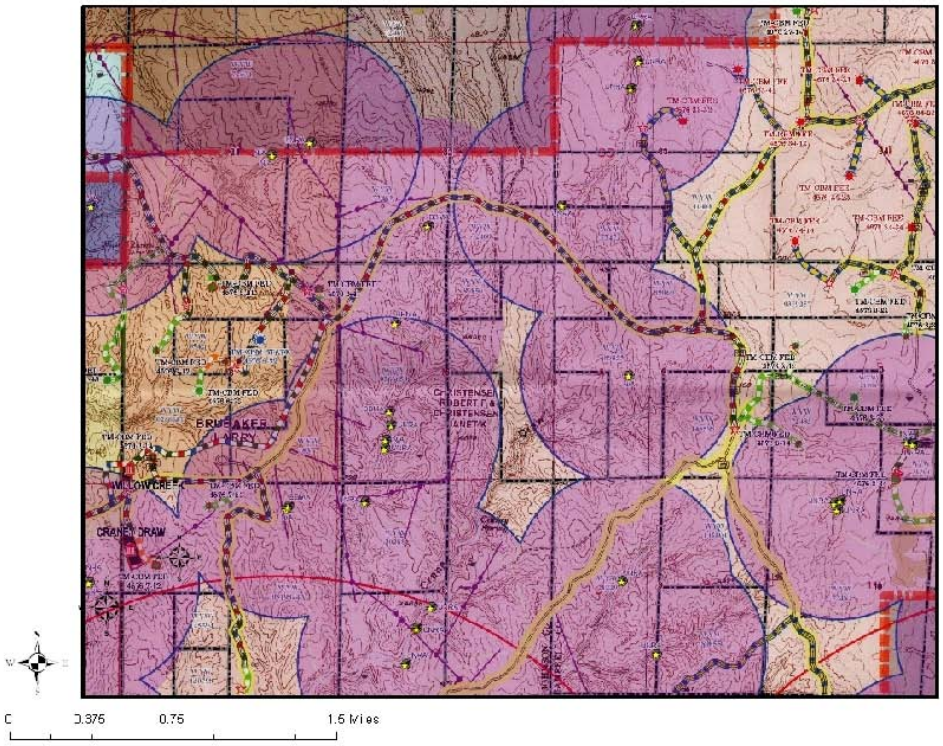
Raptor Timing Limitation Buffers for the Northwest Portion of the Table Mountain II POD



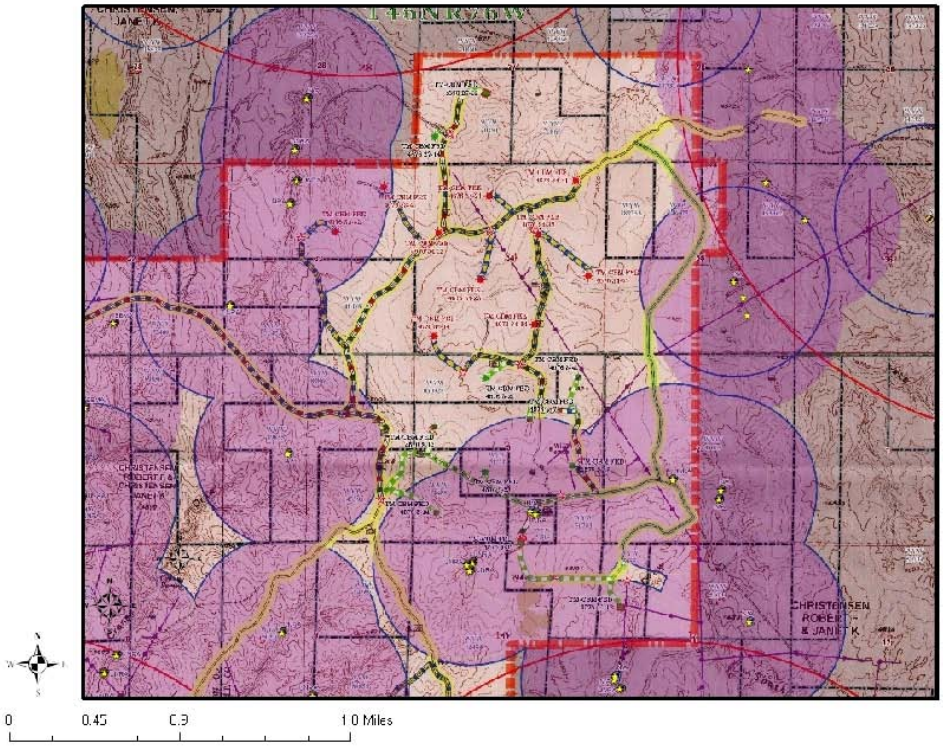
Raptor Timing Limitation Buffers for the Central West Portion of the Table Mountain II POD



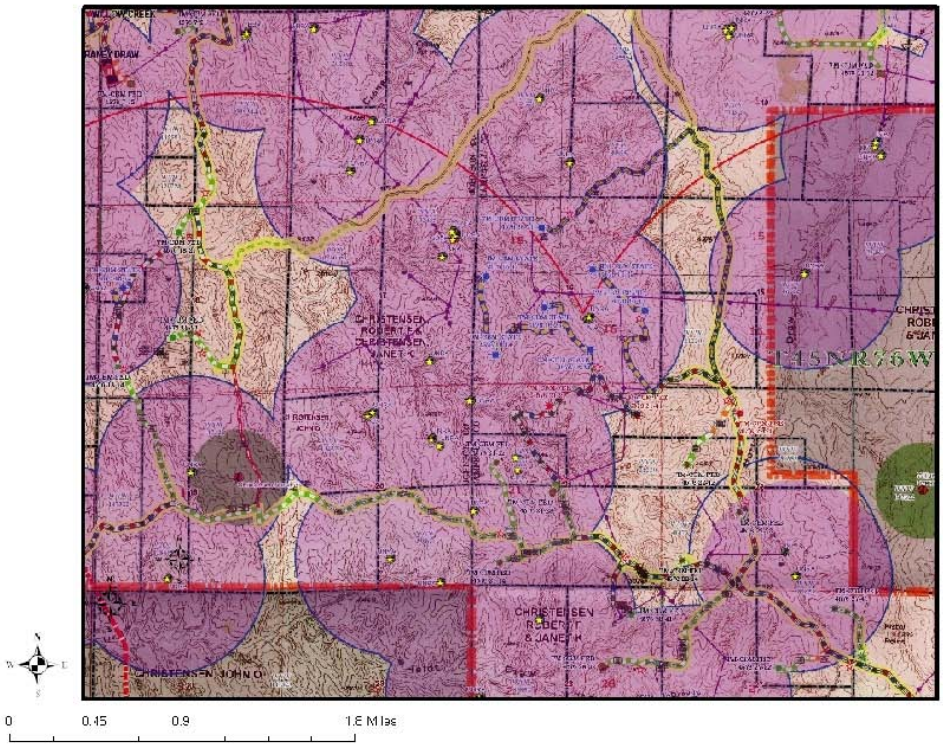
Raptor Timing Limitation Buffers for the North Central Portion of the Table Mountain II POD



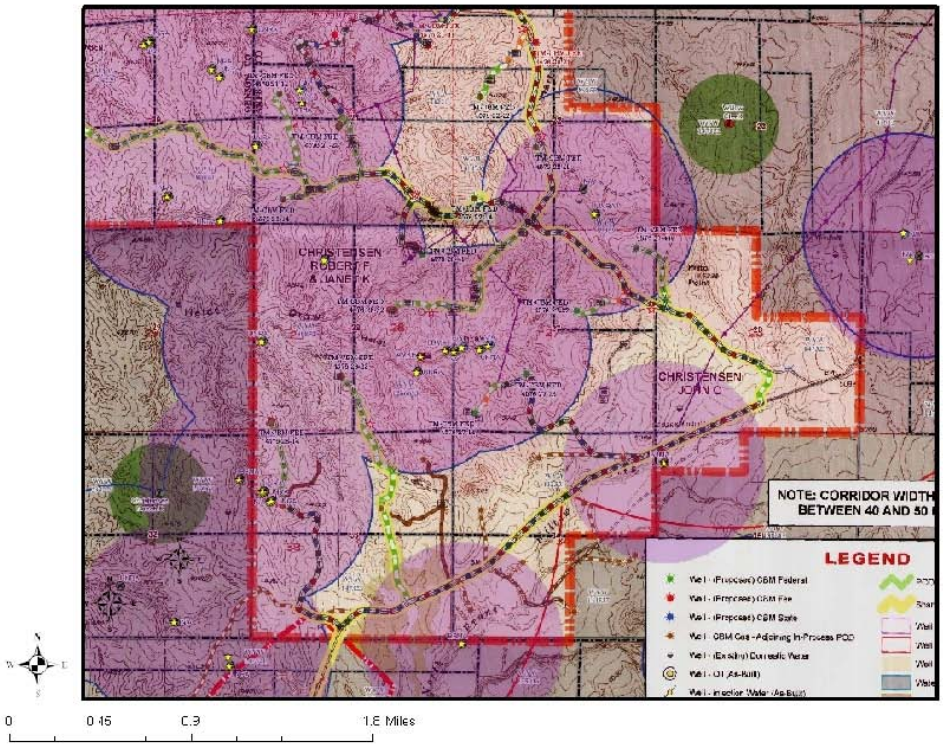
Raptor Timing Limitation Buffers for the Northeast Portion of the Table Mountain II POD



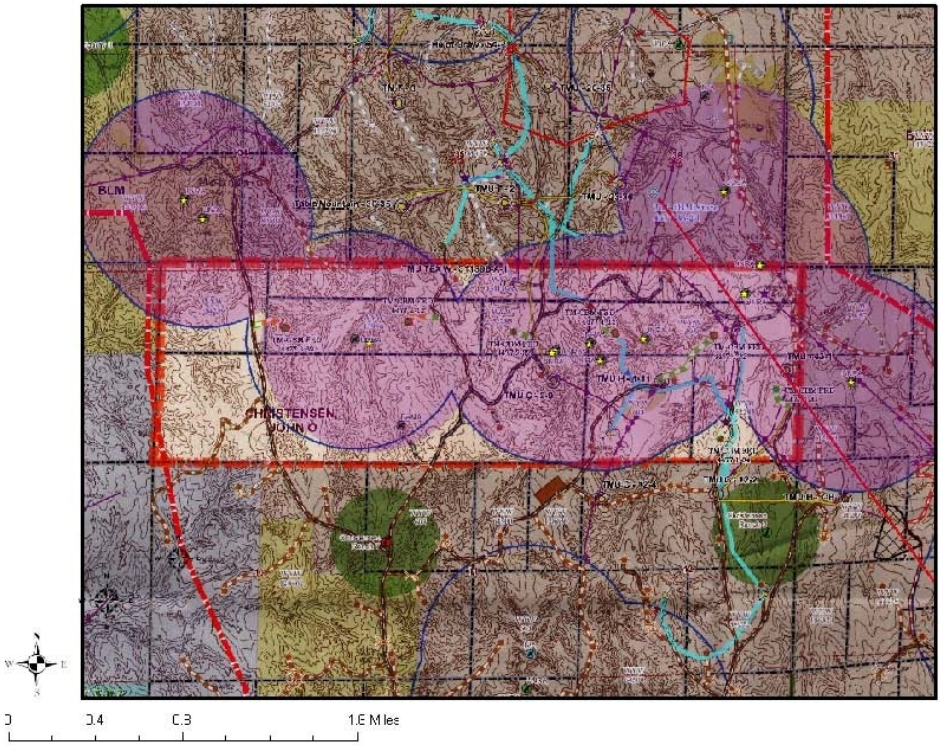
Raptor Timing Limitation Buffers for the Central Portion of the Table Mountain II POD

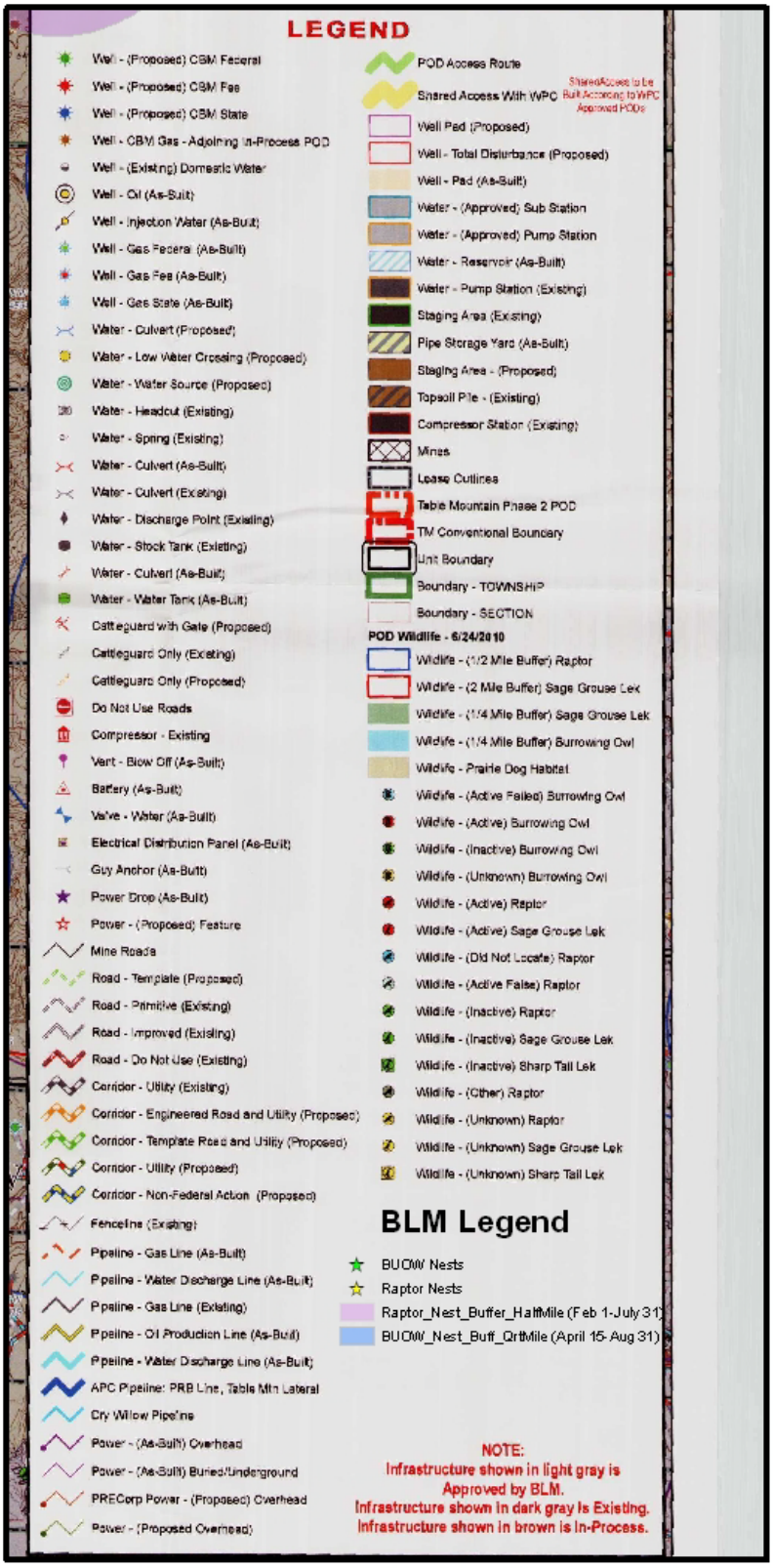


Raptor Timing Limitation Buffers for the Southeast Portion of the Table Mountain II POD



Raptor Timing Limitation Buffers for the Southwest Portion of the Table Mountain II POD





Western Burrowing Owls

The following conditions will alleviate impacts to burrowing owls:

1. No surface-disturbing activities shall occur within 0.25 mile of all identified prairie dog colonies, from 15 April through 31 August, annually, prior to a burrowing owl survey. This timing limitation will be in effect unless surveys determine that no burrowing owls are present. A 0.25 mile buffer will be applied if a burrowing owl nest is identified. Refer to the attached raptor protection buffer maps for affected wells and infrastructure.
    a. Surveys shall be conducted by a biologist following BLM protocol. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.
    b. If a burrowing owl nest is located during project construction or operation, the Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

Sage-Grouse

The following conditions will alleviate impacts to sage-grouse:

1. No surface-disturbing activities shall occur within sage-grouse habitat, from 15 March through 30 June, annually. This affects the following wells and associated infrastructure:

Township/Range	Section	Wells
T45N R77W	24	Access/utility corridor through the SE ¼ of Section 24
T45N R76W	18	18-14, 18-21, and 18-23
	19	Access/utility corridor in SE ¼ of Section 19
	20	Access/utility corridor in S 1/2 of Section 20
	21	21-12, 21-14, and 21-23
	22	22-12, 22-14, and 22-23
	27	27-14, 27-23, 27-32, and 27-41
	28	28-14, 28-23, 28-32, and 28-41
	33	The access/utility corridors to 28-14 and 14-23
T44N R77W	1	1-12, 1-32, and 1-43
	2	2-12 and 2-32
	3	3-32

2. Maximum design speed on all operator-constructed and maintained roads will not exceed 25 miles per hour except travel along roads within 1/2 mile of the Christensen Ranch 4 sage grouse lek located in. These roads will be posted at 10 mph. This will affect the roads in T45N, R76W, sections 19. Vehicles will not stop or passengers be outside of vehicles in the E ½ of Section 19.

3. Disruptive activity is restricted on or within a 0.25 mile radius of the perimeter of occupied or undetermined sage-grouse leks from 3:00 pm to 10:00 am from March 15-May15. "Disruptive activities are those that "…require people and/or activity to be in nesting habitats for a duration of 1 hour or more during a 24 hour period…" (BLM 2009). This condition applies to the Christensen Ranch 4 sage-grouse lek located within 0.25 mile of the access road passing through T45N, R76W, sections 19.

Water Management

1. Submit a copy of the site facility plans and proof of bonds for the Table Mountain Pump Station when available.
2. Equip stock water tanks with wildlife escape ramps and barrier's per Idaho BLM Technical Bulletin 89-4.

Cultural

1. New ground disturbing activity for pipeline construction in eastern half of T45N R76W Section 6 will not be authorized pending additional cultural testing near cultural site 48JO1480. Pipeline reroute

may be necessary based on the testing results. If the pipeline can be kept within existing disturbance this testing will not be necessary. The pipeline route will be field reviewed at the pre-construction on-site.

2. Per the Programmatic Agreement between the Bureau of Land Management and the Wyoming State Historic Preservation Officer Regarding Mitigation of Adverse Effects to the Pumpkin Buttes Traditional Cultural Property from Anticipated Federal Minerals Development in Campbell County, Wyoming; Appendix A-G; Anadarko will operate under mitigation measures found in appendices A-G of the PA during all phases (drilling, construction, operation, reclamation, etc) of all approved wells in the Table Mountain 2 POD and their associated infrastructure (new surface disturbance to junction with existing disturbance) within T45N R76W Sections 26, 27, 28, 33 and 34.

3. All surface disturbing activity in the following areas will be monitored by a BLM cultural resource use permit (CRUP) holder or permitted crew chief. The Bureau has identified these areas as having a high potential for buried cultural deposits (areas containing alluvial deposits along Willow Creek). Some portions of the monitoring areas as described may lie outside alluvial deposits and exact monitoring areas are left to the discretion of the archeological monitor (as illustrated on cultural inventory report for the Table Mountain 2 POD). All monitored areas must be plotted on the map provided with the monitoring report. The submission of two copies of a monitoring report to BFO is required within 30 days of the completion of all monitoring work.

    1. Infrastructure along Willow Creek drainage (T45N R77W Sections 4, 9, 10, 14, 16)
    2. Infrastructure within the vicinity of eligible site 48JO1496 (T45N R77W Section 10).
    3. Infrastructure within the vicinity of eligible site 48JO1480 (T45N R76W Section 6).

PROGRAMMATIC

1. Channel Crossings:
    - Minimize channel disturbance as much as possible by limiting pipeline and road crossings.
    - Avoid running pipelines and access roads within floodplains or parallel to a stream channel.
    - Channel crossings by road and pipelines will be constructed perpendicular to flow. Culverts will be installed at appropriate locations for streams and channels crossed by roads as specified in the BLM Manual 9112-Bridges and Major Culverts and Manual 9113-Roads. Streams will be crossed perpendicular to flow, where possible, and all stream crossing structures will be designed to carry the 25-year discharge event or other capacities as directed by the BLM.
    - Channel crossings by pipelines will be constructed so that the pipe is buried at least four feet below the channel bottom.
2. Low water crossings will be constructed at original streambed elevation in a manner that will prevent any blockage or restriction of the existing channel. Material removed will be stockpiled for use in reclamation of the crossings.

Vegetation

1. Weed educational material will be reviewed with operators during preconstruction on-site meetings with operators, subcontractors, and landowners and will also be attached to approved APDs and PODs.

STANDARD

General

1. All contractors/operators will have a complete copy of the approved APD/POD, including COAs, at

the drill site, during the construction of the roads and drill pad, the drilling of the well, completion of the well, and all other related construction activities.

2. A pre-construction field meeting shall be conducted prior to beginning any dirt work approved under this POD. The operator shall contact the BLM Authorized Officer Andy Perez @ NRS Phone number Here at least 4-days prior to beginning operations so that the meeting can be scheduled. The operator is responsible for having all contractors present (dirt contractors, drilling contractor, pipeline contractor, project oversight personnel, etc.) including the overall field operations superintendent, and for providing all contractors copies of the approved POD, project map and BLM Conditions of Approval pertinent to the work that each will be doing.

3. Approval of this APD does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease that would entitle the applicant to conduct operations thereon. In addition, approval of this APD does not imply that the operator has legal access to the drilling location. When crossing private surface 43 CFR 3814 regulations must be complied with and when crossing public surface off-lease the operator must have an approved right-of-way.

4. Confine all equipment and vehicles to the access road(s), pad(s), and area(s) specified in the approved APD or POD.

5. The approval of this project does not grant authority to use off lease Federal lands. No surface disturbing activity, or use of off-lease federal lands, is allowed on affected leases until right-of-way grants become effective which is the date signed by the authorized officer.

6. This POD is valid for two years from the date of approval or until the oil and gas lease expires/terminates, whichever occurs first. If this well intends to earn a lease extension, diligent operations (actual drilling) must be in progress over the lease expiration date, advance lease rentals must have been paid, and a letter stating drilling operations were in progress must be submitted to this office no later than five days past the expiration date. If the APD terminates, any surface disturbance created under the application must be reclaimed according to an approved plan.

7. The operator will be in compliance with all applicable local, state and/or federal laws, regulations, and/or statutes.

8. A progress report must be filed a minimum of once a month starting with the month the well was spudded continuing until the well is completed. The report must be filed by the 25th of each month on a Sundry Notice (Form 3160-5). The report will include the spud date, casing information such as size, grade, weight, hole size, and setting depth, amount and type of cement used, top of cement, depth of cementing tools, casing test method, intervals tested, perforated, acidized, fractured and results obtained and the dates all work done.

9. In the event abandonment of the hole is desired, an oral request may be granted by this office but must be timely followed within 5 days with a "Notice of Intention to Abandon" (Form 3160-5). The "Subsequent Report of Abandonment" (Form 3160-5) must be submitted within 30 days after the actual plugging of the well bore, reporting where the plugs were placed, and the current status of the surface restoration.

10. Whether the well is completed as a dry hole or as a producer, two copies of all logs run, core descriptions, core analysis, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, work over, and/or completion operations will be filed with Form 3160-4. A gamma ray log shall be run from T.D. to ground surface.

11. The operator is responsible for informing all persons associated with this project that they shall be subject to prosecution for damaging, altering, excavating or removing any archaeological, historical, or vertebrate fossil objects on site. If archaeological, historical, or vertebrate fossil materials are discovered, the operator is to suspend all operations that further disturb such materials and immediately contact the Authorized Officer. Operations are not to resume until written authorization to proceed is issued by the Authorized Officer.

12. Within five (5) working days, the Authorized Officer will evaluate the discovery and inform the operator of actions that will be necessary to prevent loss of significant cultural or scientific values.

13. The operator is responsible for the cost of any mitigation required by the Authorized Officer. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the operator will be allowed to resume operations.
    a. If any cultural values [sites, artifacts, human remains (Appendix L FEIS)] are observed during operation of this lease/permit/right-of-way, they will be left intact and the Buffalo 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 (AO). 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.

    b. If paleontological resources, either large or conspicuous, and/or a significant scientific value are discovered during construction, the find will be reported to the Authorized Officer immediately. Construction will 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 (5) 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 will not be resumed until written authorization to proceed is issued by the Authorized Officer. The applicant will 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.

14. The operator shall be responsible for the prevention of fires on public lands caused by its employees, contractors or subcontractors. During conditions of extreme fire danger, surface use operations may be limited or suspended in specific areas.

15. All survey monuments found within the area of operations shall be protected. Survey monuments include, but are not limited to: General Land Office and Bureau of Land Management Cadastral

Survey Corners, reference corners, witness points, U. S. Coast and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any survey monuments, the incident shall be reported in writing to the Authorized Officer.

16. If 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 contraction in the unit or other 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.

17. Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever first occurs, without the prior written approval of the authorized officer. If gas is vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

18. The first producing well drilled to each targeted coal zone will be designated as the POD "Reference Well". Reference wells will not be required for PODs within a 6 mile radius of the first reference well designated by the operator, nor for co-mingled coal zones. The designated reference well must be equipped to be sampled at the well head. A reference well sample will be collected from the wellhead and submitted for analysis; using the list of analytes identified in WDEQ WYPDES Application for Permit to Surface Discharge Produced Water from CBM New Discharges, Renewals, or Major Modifications, within 30 to 60 days of initial water production. Results of the analysis will be submitted to the BFO-BLM authorized Officer as they become available and will include the following information: Operator Name, POD Name, Well Name and location and Date Sampled.

19. By November 1 each year, companies will submit the following information, attached to a Sundry Form 3160-5, where construction and development have taken place in the last year.

    - Georeferenced spatial data depicting as-built locations of all facilities, wells, roads, pipelines, power lines, reservoirs, discharge points, and other related facilities to the BLM for all PODs.
    - Two as-built copies of Map D.

20. If any dead or injured threatened, endangered, proposed, or candidate species is located during construction or operation, the U.S. Fish and Wildlife Service's Wyoming Field Office (307-772-2374), their law enforcement office (307-261-6365), and the BLM Buffalo Field Office (307-684-1100) shall be notified within 24 hours. If any dead or injured sensitive species is located during construction or operation, the BLM Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

21. Operators shall comply with all other conservation measures and terms and conditions identified in the Powder River Basin Oil and Gas Project Biological Opinion (ES-6-WY-07-F012).

22. If an undocumented raptor nest is located during project construction or operation, the Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

DRILLING AND PRODUCTION OPERATIONS

1. The spud date will be reported electronically, (see website location above) to the Authorized Officer 24 HOURS BEFORE SPUDDING, unless otherwise required in site specific conditions of approval.

   Spud Notice Site:
   http://www.wy.blm.gov/minerals/og/og_notices/spud_notice.php

2. The operator shall complete coal bed natural gas wells (case, cement and under ream) as soon as possible, but no later than 30 days after drilling operations, unless an extension is given by the BLM Authorized Officer.

Well Control Equipment

1. The well control equipment approved in this project lists the minimum requirements.

2. The flow line shall be a minimum of 30 feet from the well bore and securely anchored. The 30-foot length of line is a minimum and operators must make consideration for increasing this length for topography and/or wind direction.

3. The flow line shall be a straight run.

4. The flow line must be constructed from non-flammable material.

5. All cuttings and circulating medium shall be directed to and contained in a reserve pit.

6. The nearest edge of the pits shall be a minimum of 25' from the rig.

7. A minimum of 2' of freeboard shall be maintained in the pits at all times.

8. The authorized officer may modify these requirements at any time if it is determined that increased pressure control is deemed necessary.

9. Verbal notification shall be given to the Authorized Officer at least 24 hours before formation tests, BOP tests, running and cementing casing, and drilling over lease expiration dates.

Casing Program

1. The minimum requirement for casing centralizers is as follows: all casing strings will have centralizers on the bottom three joints (i.e. a minimum of one centralizer per joint starting with the shoe joint).

2. In addition, the production casing string shall be centralized with API approved centralizers using the following specifications:

   1.1. One centralizer per~120'(specifically every third or fourth joint depending on joint length).

   1.2. One centralizer 25' above surface casing shoe.

3. Surface casing length shall follow current requirements set forth by the WOGCC. Increased surface casing may be required so that the surface casing shoe may be set into a competent formation.

Cement Program

1. If there are indications of inadequate primary cementing of the surface, intermediate, or production casing strings; such as but not limited to no returns to surface, cement channeling, fallback or mechanical failure of equipment, the operator will evaluate the adequacy of the cementing operations. This evaluation will consist of running a cement bond log (CBL) or an alternate method approved by the Authorized Officer (AO) no sooner than 12 hours and no later than 24 hours from the time the cement was first pumped.

2. If the evaluation indicates inadequate cementing, the operator shall contact a BLM Buffalo Field Office Petroleum Engineer for approval of remedial cementing work. Remedial cementing will consist of, but may not be limited to:

    2.1. Perforating and squeezing cement to ground surface should the top of cement (TOC) be below the surface casing shoe. This shall be done within 36 hours of the completion of pumping the primary cement job.

    2.2. One-inching cement to ground surface should the top of cement (TOC) be above the surface casing shoe.

    2.3. Fallback that is found to be less than 30' from ground surface may be topped off with cement slurry.

3. The adequacy of the remedial cementing operations shall be verified by a cement bond log (CBL) or an alternate method approved by the Authorized Officer (AO). All remedial work shall be completed and verified prior to drilling out the casing shoe or perforating the casing for purposes other than remedial cementing.

4. The cement mix water used must be the same water used to develop the cement program and be of adequate quality, so as not to degrade the setting properties. Waters containing high carbonates or bicarbonates (greater than 2,000 ppm) should be avoided.

Production Equipment

1. All gas measurement equipment that deviates from Onshore Order #5 (or WY NTL 2004-1 in the case of electronic flow computers) shall be approved via a Notice of Intent sundry (Form No. 3160-5) prior to installation and use. This includes any type of primary device other than a standard orifice plate meter. Requests for a variance from the minimum standards of Onshore Order #5 must list:

    The specific type of equipment.

    How this equipment will meet or exceed the requirements of Onshore Order #5.

    The location, specific well and lease number where the equipment will be used.

2. An appropriate pressure gauge is required to be installed on each casing annulus to monitor this pressure.

3. Other actions such as off-lease measurement, commingling, allocation, etc. shall be approved via a Notice of Intent sundry (Form No. 3160-5). Submission of additional information in the POD shall not be construed as permission for these items. If the operator wishes to utilize off-lease gas measurement for wells approved in this POD, they are required to obtain approval via a Notice of Intent sundry (Form No. 3160-5) prior to any gas production. A map shall be attached to the sundry

that delineates where the individual wells will be measured for federal royalty. Unless this POD is committed to a Federal Oil & Gas Unit or Agreement, the production from all Federal wells shall be measured for Federal royalty prior to being combined with production from any other Federal, Indian, or non-Federal leases.

Well and POD Building Identification

1. From the time a well pad is constructed or a well is spudded (if no well pad needed), until abandonment, all well locations must be properly identified with a legible sign. The sign will include the well name and number, operator name, lease number, and the surveyed location.

2. At each POD building site where federal wells are metered, the operator is required to maintain a legible sign displayed in a conspicuous place. This sign is required to be in place at the time metering goes online. The sign shall include: POD name, Operator, Federal well names and numbers, Federal lease numbers being metered at the POD building, and surveyed location of the building.

Protection of Fresh Water Resources

1. All oil and gas operations shall be conducted in a manner to prevent the pollution of all freshwater resources. All fresh waters and waters of present or probable future value for domestic, municipal, commercial, stock or agricultural purposes will be confined to their respective strata and shall be adequately protected. Special precautions will be taken to guard against any loss of artesian water from the strata in which it occurs and the contamination of fresh water by objectionable water, oil, condensate, gas or other deleterious substance to such fresh water.

Miscellaneous Conditions

1. Any changes to the approved drilling plan and/or these conditions of approval shall be approved by the BLM-Buffalo Field Office Petroleum Engineer prior to being implemented.

   After hour's numbers:

Petroleum Engineer: Matthew Warren	Home Telephone: 307-620-0103
Petroleum Engineer: James Evans	Home Telephone: 307-331-5421

2. If any cores are collected, a copy of all analysis performed shall be submitted to the BLM-Buffalo Field Office Petroleum Engineer.

SURFACE USE STANDARD

Construction

1. Prior to construction, the operator will remove all staking (engineered road, pads, well stakes, etc.) for those areas which were not approved with the POD/APD.

2. All roads, well pads, rig slots, culverts, spot upgrades and locations where engineered construction will occur will be completely slope staked for review prior to construction.

3. Topsoil will be segregated for all excavation including the entire disturbance area for constructed pads and excavated areas for rig leveling, reserve pits, constructed roads, spot upgrades, reservoir upgrades, outfalls and utility trenches and redistributed for interim reclamation activities. This requirement will not be applied for pipelines installed with wheel trenchers.

4. The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved without creating additional undue surface disturbance and where it does not impede watershed and drainage flows.

5. Maintain a minimum 20-foot undisturbed vegetative border between disturbance areas and the edge of adjacent drainages, unless otherwise directed by the BLM Authorized Officer.

6. Reserve pits will be adequately fenced during and after drilling operations until pit is reclaimed so as to effectively keep out wildlife and livestock. Adequate fencing, in lieu of more stringent requirements by the surface owner, is defined as follows:

7. Construction materials will consist of steel or wood posts. Three or four strand wire (smooth or barbed) fence or hog panel (16-foot length by 50-inch height) or plastic snow fence must be used with connectors such as fence staples, quick-connect clips, hog rings, hose clamps, twisted wire, etc. Electric fences will not be allowed.

8. Construction standards: Posts shall be firmly set in ground. If wire is used, it must be taut and evenly spaced, from ground level to top wire, to effectively keep out animals. Hog panels must be tied securely into posts and one another using fence staples, clamps, etc. Plastic snow fencing must be taut and sturdy. Fence must be at least 2-feet from edge of pit. 3 sides fenced before beginning drilling, the fourth side fenced immediately upon completion of drilling and prior to rig release. Fence must be left up and maintained in adequate condition until pit is closed.

9. The reserve pit will be oriented to prevent collection of surface runoff. After the drilling rig is removed, the operator may need to construct a trench on the uphill side of the reserve pit to divert surface drainage around it. If constructed, the trench will be left intact until the pit is closed.

10. The reserve pit will be lined with an impermeable liner if permeable subsurface material is encountered. An impermeable liner is any liner having permeability less than 10-7 cm/sec. The liner will be installed so that it will not leak and will be chemically compatible with all substances that may be put in the pit. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use. In gravelly or rocky soils, a suitable bedding material such as sand will be used prior to installing the liner.

11. The reserve pit will be constructed so that at least half of its total volume is in solid cut material (below natural ground level).

12. The culvert locations will be staked prior to construction. The culvert invert grade and finished road grade will be clearly indicated on the stakes. Culverts will be installed on natural ground, or on a designed flow line of a ditch. The minimum cover over culverts will be 12" or one-half the diameter whichever is greater. Drainage laterals in the form of culverts or waterbars shall be placed according to the following spacing:

Soil Type	**Road Grade 2-4%**	**Road Grade 5-8%**	**Road Grade 9-12%**	**Road Grade 13-16%**
Highly erosive Granitic or sandy	240	180	140	100
Intermediate Erosive clay or load	310	260	200	150
Low erosive shale or gravel	400	325	250	175

13. Provide 4" of aggregate where grades exceed 8%. Surface material must meet requirements set forth in Wyoming Supplement to BLM Road Manual 9113.

14. The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113 or at the discretion of the Authorized Officer.

15. Maximum speed on all operator-constructed and maintained roads will not exceed 25 miles per hour.

16. Pipeline construction shall not block nor change the natural course of any drainage. Pipelines shall cross perpendicular to drainages. Suspended pipelines shall provide adequate clearance for maximum runoff.

17. During construction, emissions of particulate matter from well pad and road construction would be minimized by application of water or other non-saline dust suppressants with at least 50 percent control efficiency. Dust inhibitors (surfacing materials, non-saline dust suppressants, and water) will 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.

18. All overhead power lines will be constructed to Avian Power Line Interaction Committee (2006 edition or most recent edition) by the standards and additional standards identified in the PRB FEIS Biological Opinion (Volume 3, Appendix K, page 43).

Operations/Maintenance

1. All waste, other than human waste and drilling fluids, will be contained in a portable trash cage. This waste will be transported to a State approved waste disposal site immediately upon completion of drilling operations. No trash or empty barrels will be placed in the reserve pit or buried on location. Operators and their contractors will comply with all state and local laws and regulations pertaining to disposal of human and solid waste will be complied with.

2. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.

3. The operator and their contractors shall ensure that all use, production, storage, transport and disposal of hazardous and extremely hazardous materials associated with the drilling, completion and production of these wells will be in accordance with all applicable existing or hereafter promulgated

federal, state and local government rules, regulations and guidelines. All project-related activities involving hazardous materials will be conducted in a manner to minimize potential environmental impacts. In accordance with OSHA requirements, a file will be maintained onsite containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds and/or substances which are used in the course of construction, drilling, completion and production operations.

4. Produced fluids shall be put in test tanks on location during completion work. Produced water will be put in the reserve pit during completion work per Onshore Order #7.

5. The only fluids/waste materials which are authorized to go into the reserve pit are RCRA exempt exploration and production wastes. These include:
   - drilling muds & cuttings
   - rigwash
   - excess cement and certain completion & stimulation fluids defined by EPA as exempt

   It does not include drilling rig waste, such as:
   - spent hydraulic fluids
   - used engine oil
   - used oil filter
   - empty cement, drilling mud, or other product sacks
   - empty paint, pipe dope, chemical or other product containers
   - excess chemicals or chemical rinsate

   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.

6. Reserve pits will be closed as soon as possible, but no later than 90 days from time of drilling/well completion, unless the BLM Authorized Officer gives an extension. Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil. Mud and cuttings left in pit must be buried at least 3-feet below re-contoured grade. The operator will be responsible for re-contouring any subsidence areas that develop.

7. The fluids and mud must be dry in the reserve pit before re-contouring pit area. The operator will be responsible for re-contouring of any subsidence areas that develop from closing a pit before it is completely dry. The plastic pit liner (if any) will be cut off below grade and properly disposed of at a state authorized landfill before beginning to re-contour the site.

8. The operator will be responsible for prevention and control of noxious weeds and weeds of concern on all areas of surface disturbance associated with this project (well locations, roads, water management facilities, etc.) Use of pesticides shall comply with the applicable Federal and State laws.

9. Prior to the use of pesticides on public land, the holder shall obtain from the BLM authorized officer a pesticide use permit (PUP). The PUP must include a 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.

Producing Well

1. Landscape those areas not required for production to the surrounding topography as soon as possible. The fluids and mud must be dry in the reserve pit before re-contouring pit area. The operator will be

responsible for re-contouring and reseeding of any subsidence areas that develop.

2. Any spilled or leaked oil, produced water or treatment chemicals must be reported in accordance with NTL-3A and immediately cleaned up in accordance with BLM requirements. This includes clean-up and proper disposition of soils contaminated as a result of such spills/leaks.

3. Distribute stockpiled topsoil evenly over those areas not required for production (ie.,cut/fill slopes, road ditches, pipelines, etc.) and reseed with approved seed mix.

4. Upgrade and maintain access roads and drainage control (e.g., culverts, drainage dips, ditching, crowning, surfacing, etc.) as necessary and as directed by the BLM Authorized Officer to prevent soil erosion and accommodate safe, environmentally-sound access.

Reclamation/Dry Hole

1. BLM will not release the performance 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.

2. A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.

3. For performance 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.

4. Phased reclamation plans will be submitted to BLM for approval prior to individual POD facility abandonment via a Notice of Intent (NOI) Sundry Notice. Individual facilities, such as well locations, pipelines, discharge points, impoundments, etc. need to be addressed in these plans as they are no longer needed. Individual items that will need to be addressed in reclamation plans include:

    - Configuration of reshaped topography, drainage systems, and other surface manipulations
    - Waste disposal
    - Revegetation methods, including specific seed mix (pounds pure live seed/acre) and soil treatments (seedbed preparation, fertilization, mulching, etc.). On private surface, the landowner should be consulted for the specific seed mix.
    - Other practices that will be used to reclaim and stabilize all disturbed areas, such as water bars, erosion fabric, hydro-mulching, etc.
    - An estimate of the timetables for beginning and completing various reclamation operations relative to weather and local land uses.
    - Methods and measures that will be used to control noxious weeds, addressing both ingress and egress to the individual well or POD.
    - Decommissioning/removal of all surface facilities
    - Closure and reclamation of areas utilized or impacted by produced CBNG water, including discharge points, reservoirs, off-channel pits, land application areas, livestock/wildlife watering facilities, surface discharge stream channels, etc.
    - Refer to *BLM Impoundment Reclamation Guidance* for further information on reclaiming impoundments.
    - Refer to the *Wyoming Reclamation Policy* for further guidance on reclamation.

5. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc will be reclaimed and reseeded within 180 days of well plugging. The

reclamation work must be in accordance with the surface use plan and any pertinent site-specific COAs.

6. Disturbed lands will be re-contoured back to conform with existing undisturbed topography. No depressions will be left that trap water or form ponds.

7. The fluids and mud must be dry in the reserve pit before re-contouring pit area. The operator will be responsible for re-contouring of any subsidence areas that develop from closing a pit before it is completely dry. The plastic pit liner (if any) will be cut off below grade and properly disposed of at a state authorized landfill before beginning to re-contour the site.

8. Before the location has been reshaped and prior to redistributing the topsoil, the operator will rip or scarify the drilling area and access road on the contour to 4" below the compacted layer. The rippers are to be no farther than 24 inches apart.

9. Distribute the topsoil evenly over all disturbed areas. Prepare the seedbed and seed with approved seed mix.

10. Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.

11. Any mulch utilized for reclamation needs to be certified weed free.

12. Waterbars are to 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