

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Buffalo Field Office  
Buffalo, Wyoming**

**SURFACE USE  
CONDITIONS OF APPROVAL**

POD Name: Blade POD

Operator: Yates Petroleum Corporation

List of Wells:

	<b>Well Name</b>	<b>Well #</b>	<b>Qtr/Qtr</b>	<b>Sec</b>	<b>TWP</b>	<b>RNG</b>	<b>Lease #</b>
1	BLADE CS	1	SWNE	1	43N	77W	WYW129552
2	BLADE CS	2	NENE	1	43N	77W	WYW129552
3	BLADE CS	3	NENE	1	43N	77W	WYW144541
4	BLADE CS	4	SWNE	1	43N	77W	WYW144541
5	BLADE CS	7	NENW	10	43N	77W	WYW144541
6	BLADE CS	10	NESE	10	43N	77W	WYW144541
7	BLADE CS	5	NESE	10	43N	77W	WYW144541
8	BLADE CS	6	SWSE	10	43N	77W	WYW144541
9	BLADE CS	9	SWNE	10	43N	77W	WYW144541
10	BLADE CS	8	SWNW	10	43N	77W	WYW144541
11	BLADE CS	11	NESW	10	43N	77W	WYW144541
12	BLADE CS	13	SWSW	11	43N	77W	WYW144541
13	BLADE CS	14	SWSE	11	43N	77W	WYW144541
14	BLADE CS COM	17	NENW	13	43N	77W	WYW144541
15	BLADE CS	16	NENE	13	43N	77W	WYW144541
16	BLADE CS	18	NESE	13	43N	77W	WYW144541
17	BLADE MIXER CS COM	2	SWNW	19	43N	76W	WYW144541
18	BLADE MIXER CS	1*	SWNW	19	43N	76W	WYW144541
19	BLADE CUISINE CS	1	SWSE	20	43N	76W	WYW130097
20	BLADE CUISINE CS	2	NENW	20	43N	76W	WYW144541
21	BLADE CUISINE CS COM	3	SWSE	20	43N	76W	WYW144541
22	BLADE EBERHART CS	1	NENW	20	43N	77W	WYW130632
23	BLADE EBERHART CS	2	SWNW	20	43N	77W	WYW130632
24	BLADE CS	19	NESE	24	44N	77W	WYW130097
25	BLADE CS	20	SWNE	24	44N	77W	WYW130097
26	BLADE AILERON CS	1	SWSW	33	44N	77W	WYW130622
27	BLADE AILERON CS	2	NESW	33	44N	77W	WYW130622

List of Impoundments:

	<b>IMPOUNDMENT Name / Number</b>	<b>Qtr/Qtr</b>	<b>Sec</b>	<b>TWP</b>	<b>RNG</b>	<b>Capacity (Acre Feet)</b>	<b>Surface Disturbance (Acres)</b>	<b>Lease #</b>
1	Backwards	NESE	19	43	77	15.9	2.60	Private
2	Beach Baby	SWSE	10	43	77	14.4	2.40	WYW144541
3	Best Pick	SWSE	10	43	77	12.2	1.90	WYW144541
4	Border	SWNW	34	44	77	7.1	1.20	WYW51886
5	Bull Pasture #1	SWSW	21	43	77	7.6	1.30	WYW142081
6	Bull Pasture #2	SWNE	20	43	77	8.8	1.50	WYW130097
7	Cans	NWSW	10	43	77	14.1	2.50	WYW144541
8	Colors	SENE	10	43	77	4.3	1.00	WYW144541
9	Cow Bones Draw	SWSW	11	43	77	14	2.10	WYW144541
10	Crowd	SESE	9	43	77	18.5	2.90	WYW146837
11	Double Line	SENE	9	43	77	16.8	2.90	WYW146837
12	False Start	SESE	35	44	77	16.7	2.50	Private
13	Fez	SWSE	2	43	77	7.1	1.50	WYW126409
14	Grey Sky	SESE	15	43	77	11.8	1.80	WYW135921
15	Just Fine	SENE	12	43	77	14.4	2.30	WYW52284
16	Other Hand	NESE	2	43	77	16	2.30	WYW126409
17	Potholes	NENW	2	43	77	14.7	2.50	Private
18	Recycle	NWNE	23	43	77	17.4	2.70	WYW152971
19	Resting Place	SESW	34	44	77	13.5	3.70	WYW140150
20	Stepanek	SENE	13	43	76	11	1.90	WYW144541
21	Surrounded	NESE	32	44	76	7.4	1.40	Private
22	Trailhead	NWSE	2	43	76	19.9	3.30	WYW126409
23	William	NESE	13	43	76	12	1.90	WYW144541
24	Ill Prepared	NWSW	19	43	77	19.5	3.00	Private

List of approved Right-of Ways:

<b>ROW Grant</b>	<b>Type</b>	<b>Sections</b>	<b>TWP/RNG</b>
WYW169694	Gas pipeline total length in right--of-way is 4,257' by 30' wide, acres 2.932	24 SWNW 28 lot 15 33 lots 1, 2,7	T43N, R77W T44N,R77W

**I Programmatic mitigation measures identified in the PRB FEIS ROD**

**Surface Water**

Channel Crossings:

- a) 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.
- b) Channel crossings by pipelines will be constructed so that the pipe is buried at least four feet

below the channel bottom.

1. 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.
2. The operator will supply a copy of the complete approved SW-4, SW-3, or SW-CBNG permits to BLM as they are issued by WSEO for impoundments.

#### **Soils**

1. The Companies, on a case by case basis depending upon water and soil characteristics, will test sediments deposited in impoundments before reclaiming the impoundments. Tests will include the standard suite of cations, ions, and nutrients that will be monitored in surface water testing and any trace metals found in the CBNG discharges at concentrations exceeding detectable limits.

#### **Wetland/Riparian**

1. Wetland areas will be disturbed only during dry conditions (that is, during late summer or fall), or when the ground is frozen during the winter.
2. No waste material will be deposited in riparian areas, flood plains or in natural drainage ways.
3. Soil or other material stockpiles will be located outside the active floodplain.
4. Disturbed channels will be re-shaped to their approximate original configuration or stable geomorphological configuration and properly stabilized.
5. Reclamation of disturbed wetland/riparian areas will begin immediately after project activities are complete.

#### **Wildlife**

1. For any surface-disturbing activities proposed in sagebrush shrublands, the Companies will conduct clearance surveys for sage grouse breeding activity during the sage grouse's breeding season before initiating the activities. The surveys must encompass all sagebrush shrublands within 0.5 mile of the proposed activities.
2. The Companies will locate facilities so that noise from the facilities at any nearby sage grouse or sharp-tailed grouse display grounds does not exceed 49 decibels (10 dBA above background noise) at the display ground.
3. The Companies will locate aboveground power lines, where practical, at least 0.5 mile from any sage grouse breeding or nesting grounds to prevent raptor predation and sage grouse collision with the conductors. Power poles within 0.5 mile of any sage grouse breeding ground will be raptor-proofed to prevent raptors from perching on the poles.
4. Containment impoundments will be fenced to exclude wildlife and livestock. If they are not fenced, they will be designed and constructed to prevent entrapment and drowning.
5. All stock tanks shall include a ramp to enable trapped small birds and mammals to escape. See Idaho BLM Technical Bulletin 89-4 entitled Wildlife Watering and Escape Ramps on Livestock Water Developments: Suggestions and Recommendations.

## **Threatened, Endangered, or Sensitive Species**

### **Bald Eagle**

1. Site-specific project areas will be evaluated for suitable bald eagle nesting and roosting habitat prior to permit approval. Suitable nesting habitat is any mature stand of conifer or cottonwood trees in association with rivers, streams, reservoirs, lakes or any significant body of water. Suitable roosting habitat is defined as any mature stands of conifer or cottonwood trees.
2. Special habitats for raptors, including wintering bald eagles, will be identified and considered during the review of the APD/POD or Sundry Notices.
3. Surveys for active bald eagle nests and winter roost sites will be conducted within suitable habitat by a BLM approved biologist. Surface disturbing activities will not be permitted within one mile of suitable habitat prior to survey completion.
4. A disturbance-free buffer zone of 0.5 mile (i.e., no surface occupancy) will be established year-round for all bald eagle nest sites. A seasonal minimal disturbance buffer zone of one mile will be established for all bald eagle nest sites (February 15 – August 15).
5. A disturbance-free buffer zone of 0.5 mile (i.e., no surface occupancy) will be established year-round for all bald eagle winter roost sites. A seasonal minimal disturbance buffer zone of 1 mile will be established for all bald eagle winter roost sites (November 1 – April 1). These buffer zones and timing may be adjusted based on site-specific information through coordination with, and written approval from, the USFWS.
6. Within ½ mile of bald eagle winter roost sites additional measures such as remote monitoring and restricting maintenance visitation to between 9:00 and 3:00 may be necessary to prevent disturbance (November 1 – April 1).
7. Additional mitigation measures may be necessary if the site-specific project is determined by a BLM biologist to have adverse effects to bald eagles or their habitat.

### **Black-footed Ferret**

1. Prairie dog colonies will be avoided wherever possible.
2. If any black-footed ferrets are located, the USFWS will be consulted. Absolutely no disturbance will be allowed within prairie dog colonies inhabited by black-footed ferrets.
3. Additional mitigation measure may be necessary if the site-specific project is determined by a BLM biologist to have adverse effects to black-footed ferrets or their habitat. In the event that a mountain plover is located during construction or operation, the USFWS' Wyoming Field Office (307-772-2374) and the USFWS' Law Enforcement Office (307-261-6365) will be notified within 24 hours.

### **Mountain Plover**

1. A mountain plover nesting survey shall be conducted following U.S. Fish and Wildlife Service protocol within occupied black-tailed prairie dog colonies prior to permit authorization.

Outside of occupied black-tailed prairie dog colonies, a mountain plover nesting survey following U.S. Fish and Wildlife Service protocol is encouraged prior to construction initiation, as project modifications can be made if necessary to protect nesting plovers and natural gas production. If requested in writing, then authorization may be granted for construction activities to occur

between August 1 and March 15, outside the mountain plover breeding season. A mountain plover nesting survey following U.S. Fish and Wildlife Service protocol shall be conducted during the first available survey period (May 1 – June 15). Additional measures such as monitoring and activity restrictions may be applied if mountain plovers are documented.

2. A disturbance-free buffer zone of 0.25 mile will be established around all occupied mountain plover nesting habitat between March 15 and July 31.
3. Project-related features that encourage or enhance the hunting efficiency of predators of mountain plover will not be constructed within ¼ mile of occupied mountain plover nesting habitat.
4. Construction of ancillary facilities (for example, compressor stations, and processing plants) will not be located within ½ mile of known nesting areas. The threats of vehicle collision to adult plovers and their broods will be minimized, especially within breeding aggregation areas.
5. Work schedules and shift changes will be set to avoid the periods from 30 minutes before to 30 minutes after sunrise and sunset during June and July, when mountain plovers and other wildlife are most active.
6. Creation of hunting perches or nest sites for avian predators within 0.5 mile of identified nesting areas will be avoided by burying power lines, using the lowest possible structures for fences and other structures and by incorporating perch-inhibiting devices into their design.
7. When above ground markers are used on capped and abandoned wells they will be identified with markers no taller than four feet with perch inhibiting devices on the top to avoid creation of raptor hunting perches within 0.5 mile of nesting areas.
8. Reclamation of areas of previously suitable mountain plover habitat will include the seeding of vegetation to produce suitable habitat for mountain plover.

#### **Ute Ladies'-tresses Orchid**

1. If suitable habitat for Ute ladies'-tresses cannot be avoided, surveys will be conducted in compliance with USFWS standards (USFWS 1995) by a BLM approved biologist or botanist. Surveys can only be conducted between July 20 and August 31.
2. Moist soils near wetlands, streams, lakes, or springs in the project area will be promptly revegetated if construction activities impact the vegetation in these areas. Revegetation will be designed to avoid the establishment of noxious weeds.
3. Companies operating in areas identified with weed infestations or suitable Ute ladies'-tresses orchid habitat will be required to submit an integrated pest management plan prior to APD approval. Mitigation will be determined on a site-specific basis and may include such measures as spraying herbicides prior to entering areas and washing vehicles before leaving infested areas. Infestation areas of noxious weeds have been identified through the county Weed and Pest Districts and are available at the Buffalo BLM office.

#### **Visual Resources**

1. The Companies will mount lights at compressor stations and other facilities on a pole or building and direct them downward to illuminate key areas within the facility while minimizing the amount of light projected outside the facility.

### **Noise**

1. Noise mufflers will be installed on the exhaust of compressor engines to reduce the exhaust noise.
2. Where noise impacts to existing sensitive receptors are an issue, noise levels will be required to be no greater than 55 decibels measured at a distance of one-quarter mile from the appropriate booster (field) compressor. When background noise exceeds 55dBA, noise levels will be no greater than 5dBA above background. This may require the installation of electrical compressor motors at these locations.

### **Air Quality**

1. During construction, emissions of particulate matter from well pad and resource road construction will be minimized by application of water, or other dust suppressants, with at least 50 percent control efficiency. Roads and well locations constructed on soils susceptible to wind erosion could be appropriately surfaced or otherwise stabilized to reduce the amount of fugitive dust generated by traffic or other activities, and dust inhibitors (surfacing materials, non-saline dust suppressants, and water) could be used as necessary on unpaved collector, local and resource roads that present a fugitive dust problem. The use of chemical dust suppressants on BLM surface will require prior approval from the BLM authorized officer.

## **II Site Specific Conditions of Approval**

All changes made at the onsite will be followed. They have all been incorporated into the operator's POD.

### **Surface Use**

1. Due to proximity to nearby drainage on the Aileron 1 well site, Yates will keep a 20' vegetated border between well disturbance and the drainage.
2. The Eberhart 1 well is within sage grouse habitat. Keep disturbance of sagebrush to a minimum on the west side of the well and on the access road.
3. To prevent further erosion of soils on the west side of the Blade 7 site, keep traffic to the east side of this well location.
4. Due to proximity to nearby drainage on the Blade 11, Yates will keep a 20' vegetated border between well disturbance and the drainage.
5. Due to slope and blind curve on the access road to the Blade 13 well, Yates will work with Williams Production to post a warning sign on the access and add water mitigation to the approach to the well from the shared access road.
6. All pits near drainages will be lined.
7. If storage becomes necessary beyond typical construction timeframes, a sundry will be submitted to designate this area for long term storage.
8. If there are no site specific conflicts with production and/or development, then interim reclamation will include seeding up to the well housing.
9. The operator will drill seed on the contour to a depth of 0.5 inch, followed by cultipaction to compact the seedbed, preventing soil and seed losses. To maintain quality and purity, the current years tested, certified seed with a minimum germination rate of 80% and a minimum purity of 90% will be used. On BLM surface or in lieu of a different specific mix desired by the surface owner, use the following:

<b>Species</b>	<b>% in Mix</b>	<b>Lbs PLS*</b>
<i>Thickspike Wheatgrass</i> ( <i>Elymus lanceolatus</i> ssp. <i>lanceolatus</i> )	50	6.0
<i>Bluebunch wheatgrass</i> ( <i>Pseudoroegneria spicata</i> ssp. <i>Spicata</i> )	35	4.2
<i>Prairie coneflower</i> ( <i>Ratibida columnifera</i> )	5	0.6
<i>White or purple prairie clover</i> ( <i>Dalea candidum, purpureum</i> )	5	0.6
<i>Rocky Mountain beeplant</i> ( <i>Cleome serrulata</i> ) /or <i>American vetch</i> ( <i>Vicia americana</i> )	5	0.6
<b>Totals</b>	<b>100%</b>	<b>12 lbs/acre</b>

10. The operator will follow the guidance provided in the Wyoming Policy on Reclamation (IM WY-90-231) specifically the following:  
Reclamation Standards:
- C. 3 The reclaimed area shall be stable and exhibit none of the following characteristics:
    - a. Large rills or gullies.
    - b. Perceptible soil movement or head cutting in drainages.
    - c. Slope instability on, or adjacent to, the reclaimed area in question.
  - C.4. The soil surface must be stable and have adequate surface roughness to reduce runoff and capture rainfall and snow melt. Additional short-term measures, such as the application of mulch, shall be used to reduce surface soil movement.
  - C.5. Vegetation canopy cover (on unforested sites), production and species diversity (including shrubs) shall approximate the surrounding undisturbed area. The vegetation shall stabilize the site and support the planned post disturbance land use, provide for natural plant community succession and development, and be capable of renewing itself. This shall be demonstrated by:
    - a. Successful onsite establishment of species included in the planting mixture or other desirable species.
    - b. Evidence of vegetation reproduction, either spreading by rhizomatous species or seed production.
  - C.6. The reclaimed landscape shall have characteristics that approximate the visual quality of the adjacent area with regard to location, scale, shape, color and orientation of major landscape features and meet the needs of the planned post disturbance land use.
11. Please contact Jennifer Spegon Natural Resource Specialist, @ (307) 684-1059, Bureau of Land Management, Buffalo, if there are any questions concerning these surface use COAs.

**Wildlife**

1. The Record of Decision for the Powder River Basin EIS includes a programmatic mitigation measure that states, “The companies will conduct clearance surveys for threatened and endangered or other special-concern species at the optimum time” (M32). The measure requires companies to coordinate with the BLM before November 1 annually to review the potential for disturbance and to agree on inventory parameters. Should this project not be completed by November 1, Yates will coordinate with the BLM to determine if additional resurveys will be required.
2. The contract biologist shall contact the BLM prior to initiating any wildlife surveys.
3. No surface disturbing activities are permitted in suitable mountain plover habitat i.e. prairie dog colonies from March 15-July 31 annually; unless a mountain plover survey has been conducted during the current breeding season. **This timing limitation will affect the “Entire project area”**. This condition will be implemented on an annual basis for the duration of surface disturbing activities. The surveys will be conducted throughout the entire project area.
  - a. Mountain plover surveys shall be conducted by a biologist following the most current U.S. Fish and Wildlife Service Mountain Plover Survey Guidelines (the survey period is May 1-June 15). All survey results must be submitted in writing to the BFO and approved prior to initiation of surface disturbing activities.
  - b. If occupied mountain plover habitat is identified, then a seasonal disturbance-free buffer of ¼ mile shall be maintained between March 15 and July 31. If no mountain plovers are identified, then surface disturbing activities may be permitted within suitable habitat until the following breeding season (March 15).
4. No surface disturbing activity shall occur within ½ mile of all identified raptor nests from February 1 through July 31, annually, prior to a raptor nest occupancy survey for the current breeding season. This condition will be implemented on an annual basis for the duration of surface disturbing activities. This timing limitation will affect the following proposed wells and their associated infrastructure:

<i>Township/Range</i>	<i>Section</i>	<i>Affected Wells and Infrastructure</i>
T43N, R76W	17	Gas and water lines
T43N, R76W	18	Gas and water lines
T43N R76W	19	Mixer 1 & 2 wells and infrastructure; Backwards & Well Prepared reservoirs; access gas & water lines.
T43N R76W	20	Cuisine wells 1, 2 & 3 and infrastructure; Bull Pasture 2 reservoir and infrastructure
T43N R76W	21	Bull Pasture 1 reservoir and infrastructure
T43N R76W	29	Roads, water and gas lines
T43N R77W	23	Recycle reservoir
T43N R77W	24	Blade 19 and infrastructure
T43N R77W	13	Access Blade 17 well; Blade 18 well and infrastructure; William reservoir; Gas and water lines.
T43N R77W	14	Cow Bones Draw reservoir
T43N R77W	9	Double Line reservoir and monitor well; Crowd Reservoir and monitor well
T43N R77W	10	Blade 7 & 8 wells and infrastructure; Colors reservoir
T43N R77W	11	Blade 13 & 14 wells and infrastructure; Fez reservoir
T43N R77W	12	Just Fine reservoir; Pump station; Water and gas lines
T44N R77W	34	Resting Place reservoir
T44N R77W	33	Aileron 2 and infrastructure
T44N R77W	32	Surrounded Reservoir
T44N R77W	20	Gas and Water lines

- a. Surveys to document nest occupancy shall be conducted by a biologist following BLM protocol, between April 15 and June 30. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities. Surveys outside this window may not depict nesting activity. If a survey identifies active raptor nests, a ½ mile timing buffer will be implemented. The timing buffer restricts surface disturbing activities within ½ mile of occupied raptor nests from February 1 to July 31.
- b. Nest occupancy and productivity checks shall be completed for nests within a ½ mile of any surface disturbing activities (e.g., well drilling, pipeline installation, or road improvements) across the entire POD for as long as the POD is under construction. Once construction of the POD has ceased, nest occupancy and productivity checks shall continue for the first five years on all nests that are within a ½ mile of locations where any surface-disturbing activities took place.
- c. Productivity checks shall be completed only on those nests that were verified to be occupied during the initial occupancy check. The productivity checks shall be conducted no earlier than June 1 or later than June 30 and any evidence of nesting success or production shall be recorded. Survey results shall be submitted to a Buffalo BLM biologist in writing no later than July 31 or each survey year.

<b>BLM ID#</b>	<b>UTM</b>	<b>LEGAL</b>
1974	413180E 4837240N	NWSE 23 43:77
2834	409752E 4843890N	SENE 33, 44:77
2835	409999E 4841005N	SWNE 9, 43:77
2836	410090E 4840782N	NWSE 9, 43:77
2839	415425E 4837753N	SENE 24, 43:77
2840	415274E 4837238N	NESE 24, 43:77
2841	409772E 4843884N	SENE 33, 44:77
2853	413948E 4838790N	NWSW13, 43:77
2855	414626E 4838790N	NESW 13, 43:77
2856	414678E 4838698N	NESW 13, 43:77
4496	409823E 4843525N	NESW 33, 44:77
4497	418438E 4838503N	SESE 17, 43:76
4500	418591E 4837803N	NENE 20, 43:76
4501	415301E 4837508N	SENE 24, 43:77
4502	416604E 4837147N	NWSE 19, 43:76

4503	418480E 4836380N	NENE 29, 43:76
4504	415295E 4836320N	NENE 25, 43:77
5035	413653E 4839933N	NENE 14, 43:77
5037	412553E 4840857N	SWNW 11, 43:77
5038	412616E 4840710N	NWSW 11, 43:77
5039	413313E 4841050N	SWNE 11, 43:77
5040	413253E 4840486N	NWSE 11, 43:77
New	413467E 4840184N	SWSE 11, 43:77
New	414778E 4840184N	NWSE 13, 43:77

- d. 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 and timing limitations will be applied.
  - e. Well metering, maintenance and other site visits within 0.5 miles of raptor nests shall be minimized as much as possible during the breeding season (February 1 – July 31), and restricted to between 0900 and 1500 hours.
5. No surface disturbing activities are permitted within 2 miles of the following sage-grouse leks: Beecher Draw, Beecher Draw North, Bushwhacker Creek 1, Cottonwood Creek 1, Cottonwood Creek 2, and Mengel, between March 1 and June 15, prior to completion of a greater sage-grouse lek survey. This timing limitation will affect the following wells and infrastructure:

<b><i>Township/Range</i></b>	<b><i>Section</i></b>	<b><i>Affected Wells and Infrastructure</i></b>
<i>T43N, R76W</i>	21	Bull Pasture reservoir #1
<i>T43N, R76W</i>	20	Cuisine 2 & 3 wells and infrastructure
<i>T43N, R76W</i>	29	Gas, electrical and water lines
<i>T43N, R77W</i>	24	All of Section 24
<i>T43N, R77W</i>	23	All of Section 23
<i>T43N, R77W</i>	22	All of Section 22
<i>T43N, R77W</i>	15	All of Section 15
<i>T43N, R77W</i>	14	All of Section 14
<i>T43N, R77W</i>	13	Blade 17 & 18 wells and infrastructure; Williams reservoir; Gas, water and electric lines
<i>T43N, R77W</i>	12	Just Fine reservoir; Gas and water lines
<i>T43N, R77W</i>	11	All of Section 11
<i>T43N, R77W</i>	10	All of Section 10
<i>T43N, R77W</i>	09	All of Section 09
<i>T43N, R77W</i>	03	All of Section 03
<i>T43N, R77W</i>	02	All of Section 02
<i>T43N, R77W</i>	01	All of Section 01

<i>T44N, R77W</i>	36	All of Section 36
<i>T44N, R77W</i>	35	All of Section 35
<i>T44N, R77W</i>	34	All of Section 34
<i>T44N, R77W</i>	33	All of Section 33
<i>T44N, R77W</i>	28	All of Section 28
<i>T44N, R77W</i>	20	All of Section 20
<i>T44N, R77W</i>	21	All of Section 21

- a. If an active sage grouse lek is identified during the survey, the 2 mile timing restriction (March 1-June 15) will be applied and surface disturbing activities will not be permitted until after the nesting season. If surveys indicate that the identified lek is inactive during the current breeding season, surface disturbing activities may be permitted within the 2 mile buffer until the following breeding season (March 1). The required sage grouse survey will be conducted by a biologist following the most current WGFD protocol. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.
- b. Creation of raptor hunting perches will be avoided within 0.5 mile of documented sage grouse and sharp-tailed grouse lek sites. Perch inhibitors will be installed to deter avian predators from preying on sage grouse.
6. If a new sharp-tailed grouse lek is identified during the survey, the 0.67 mile timing restriction (April 1 to May 31) will be applied and surface disturbing activities will not be permitted until after the nesting season. If surveys indicate that the identified lek is inactive during the current breeding season, surface disturbing activities may be permitted within the buffer until the following breeding season. The required survey will be conducted by a biologist following the most current WGFD protocol. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.
7. No surface disturbing activity shall occur within 1 mile of bald eagle roosting habitat from November 1 through April 1, annually, prior to a bald eagle roost survey (CM9). No surface disturbing activity shall occur within 1 mile of bald eagle nesting habitat from February 1 through August 15 (CM8) prior to a bald eagle nest survey. This condition will be implemented on annual basis for the duration of the surface disturbing activities.

This timing limitation will affect the following wells and infrastructure:

- a. If bald eagles are observed using the area on a consistent basis, all activity will stop and the 1 mile timing limitation will apply. “Consistent use” is defined as one or more bald eagles (adult or immature) using the same general area multiple times in the same year or in consecutive years. According to the BLM and Wyoming Game and Fish Department databases, bald eagles use area around the Blade project area on a regular basis for winter roosting and foraging.
- b. If a roost is identified and construction has not been completed, a year round disturbance-free buffer zone of 0.5 mile and a seasonal (November 1 - April 1) minimal disturbance buffer zone of 1 mile will be established for all bald eagle winter roost sites. Additional measures such as remote monitoring and restricting maintenance visitation to between 9:00 AM and 3:00 PM may be necessary to prevent disturbance.
- c. If a nest is identified and construction has not been completed, a disturbance-free buffer zone of 0.5 mile (i.e., no surface occupancy) would be established year round for all bald eagle nests. A seasonal minimum disturbance buffer zone of 1-mile will be established for all bald eagle nest sites (February 1 - August 15).
- d. Additional mitigation measures may be necessary if the site-specific project is determined by a Bureau biologist to have an adverse affect to bald eagles or their habitat.

8. No surface disturbing activities are permitted in suitable burrowing owl habitat (i.e. prairie dog colonies) from April 15 to August 31, annually, unless a burrowing owl survey has been conducted during the current breeding season. Survey period is April 15 to June 15. This condition will be implemented on an annual basis for the duration of surface disturbing activities. **This timing limitation will affect all prairie dog colonies within project area.** The surveys will be conducted in active and inactive prairie dog colonies throughout the entire project area.
  - a. If a burrowing owl is identified, then a seasonal disturbance-free buffer of ¼ mile shall be maintained between April 15 and August 31. If no burrowing owls are identified, then surface disturbing activities may be permitted within suitable habitat until the following breeding season.
9. No surface disturbing activities are permitted in suitable swift fox habitat from March 1 to August 31, annually, unless a survey for swift foxes has been conducted during the current breeding season. Survey period is April 15 to June 15. This condition will be implemented on an annual basis for the duration of surface disturbing activities. **This timing limitation will affect all prairie dog colonies within the project area.** The surveys will be conducted in active and inactive prairie dog colonies throughout the entire project area.
  - a. If a swift fox den is identified, then a seasonal disturbance-free buffer of ¼ mile shall be maintained between March 1 to August 31. If no swift fox dens are identified, then surface disturbing activities may be permitted within suitable habitat until the following breeding season (March 1).

### III Standard Conditions of Approval

#### A. General

1. 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.
2. 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.

3. The operator shall restrict travel on unimproved two-track roads during periods of inclement weather or spring thaw when the possibility exists for excessive surface resource damage (e.g., rutting in excess of 4-inches, travel outside two-track roadway, etc.).
4. 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.
5. By November 1 each year, companies will provide 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 where construction and development have been completed.
6. 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.
7. Wildlife species are dynamic and new individuals may have moved into the Blade POD area after the initial wildlife surveys were completed. The Record of Decision for the PRB FEIS includes a programmatic mitigation measure that states, "The companies will conduct clearance surveys for threatened and endangered or other special-concern species at the optimum time". The measure requires companies to coordinate with the BLM before November 1 annually to review the potential for disturbance and to agree on inventory parameters. Should this project not be completed by January 15, and surface disturbance is planned for that year, a Yates company representative will coordinate with the BLM to discuss required surveys.
8. All other conservation measures and terms and conditions identified in the Powder River Basin Oil and Gas Project Biological Opinion (WY07F0075) shall be complied with.
9. 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.
10. All contractors will have a copy of the pod map and conditions of approval with them at all times.

## **B. Construction**

1. 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 Jennifer

Spagon @ 307-684-1059 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.

2. The operator will limit vegetation removal and the degree of surface disturbance wherever possible. Where surface disturbance cannot be avoided, all practicable measures will be utilized to minimize erosion and stabilize disturbed soils.
3. Construction and drilling activity will not be conducted using frozen or saturated soil material during periods when watershed damage or excessive rutting is likely to occur.
4. Remove all available topsoil (depths vary from 4 inches on ridges to 12+ inches in bottoms) from constructed well locations including areas of cut and fill, and stockpile at the site. Topsoil will also be salvaged for use in reclamation on all other areas of surface disturbance (roads, pipelines, etc.). Clearly segregate topsoil from excess spoil material. Any topsoil stockpiled for one year or longer will be sown and stabilized with annual ryegrass or other suitable cover crop.
5. 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.
6. Construct the backslope no steeper than 1½:1, and construct the foreslope no steeper than 2:1, unless otherwise directed by the BLM Authorized Officer.
7. Maintain a minimum 20-foot undisturbed vegetative border between toe-of-fill of pad and/or pit areas and the edge of adjacent drainages, unless otherwise directed by the BLM Authorized Officer.
8. With the overall objective of minimizing surface disturbance and retaining land stability and productivity, the operator shall utilize equipment that is appropriate to the scope and scale of work being done for roads and well pads (utilize equipment no larger than needed for the job).
9. To minimize electrocution potential to raptors, all overhead electrical power lines will be constructed to Avian Power Line Interaction Committee (1996) standards and additional standards identified in the PRB FEIS Biological Opinion (Volume 3, Appendix K, page 43).
10. The operator shall utilize wheel trenchers or ditchers to construct all pipeline trenches, except where extreme topography or other environmental factors preclude their use.
11. 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:
  - 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.
  - 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.

12. 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.
13. The reserve pit will be lined with an impermeable liner if permeable subsurface material is encountered. An impermeable liner is any liner having a 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.
14. The reserve pit will be constructed so that at least half of its total volume is in solid cut material (below natural ground level).
15. Culverts will be placed on channel bottoms on firm, uniform beds, which have been shaped to accept them, and aligned parallel to the channel to minimize erosion. Backfill will be thoroughly compacted.
16. The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.
17. Construction and other project-related traffic will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
18. Maximum design speed on all operator-constructed and maintained roads will not exceed 25 miles per hour.
19. Pipeline construction shall not block nor change the natural course of any drainage. Pipelines shall cross perpendicular to drainages. Pipelines shall not be run parallel in drainage bottoms. Suspended pipelines shall provide adequate clearance for maximum runoff.
20. Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization and reclamation.
21. 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.
22. Operators are required to obtain a National Pollution Discharge Elimination System (NPDES) Storm Water Permit from the Wyoming DEQ for any projects that disturb five or more acres (changing to one acre in March 2005). This general construction storm water permit must be obtained from WDEQ prior to any surface disturbing activities and can be obtained by following directions on the WDEQ website at <http://deq.state.wy.us>. Further information can be obtained by contacting Barb Sahl at (307) 777-7570.
23. The operator shall submit a Sundry Notice (Form 3160-5) to BLM for approval prior to construction of any new surface disturbing activities that are not specifically addressed in the

approved APD or POD Surface Use Plan.

24. Weed educational material will be reviewed with operators during pre-construction on-site meetings with operators, subcontractors, and landowners and will also be attached to approved APDs and PODs.
25. Companies will contact the counties to pursue development of maintenance agreements to ensure county roads are adequately maintained for the projected increase in use.

### **C. Operations/Maintenance**

1. 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.
2. If in the process of air drilling the wells there is a need to utilize mud, all circulating fluids will be contained either in an approved pit or in an aboveground containment tank. The pit or containment tank will be large enough to safely contain the capacity of all expected fluids without danger of overflow. Fluid and cuttings will not be squeezed out of the pit, and the pit will be reclaimed in an expedient manner.
3. Confine all equipment and vehicles to the access road(s), pad(s), and area(s) specified in the approved APD or POD.
4. 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. All state and local laws and regulations pertaining to disposal of human and solid waste will be complied with.
5. Rat and mouse holes shall be filled and compacted from the bottom to the top immediately upon release of the drilling rig from the location.
6. 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. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of Interior. Prior to the use of pesticides on public land, the holder shall 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.
7. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.
8. 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.
9. 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.

10. 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.

11. 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. Squeezing of pit fluids and cuttings is prohibited. 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 from closing a pit before it is sufficiently dry.

12. Operators are advised that prior to installation of any oil and gas well production equipment which has the potential to emit air contaminants, the owner or operator of the equipment must notify the Wyoming Department of Environmental Quality, Air Quality Division (phone 307-777-7391) to determine permit requirements. Examples of pertinent well production equipment include fuel-fired equipment (e.g., diesel generators), separators, storage tanks, engines and dehydrators.

13. If this well is drilled during the fire season (June-October), the operator shall institute all necessary precautions to ensure that fire hazard is minimized, including but not limited to mowing vegetation on the access route(s) and well location(s), keeping fire fighting equipment readily available when drilling, etc.

#### **D. Dry Hole/Reclamation**

1. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc will be expediently reclaimed and reseeded in accordance with the surface use plan and any pertinent site-specific COAs.
2. Disturbed lands will be re-contoured back to conform with existing undisturbed topography. No depressions will be left that trap water or form ponds.
3. 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.

4. Before the location has been reshaped and prior to redistributing the topsoil, the operator will rip or scarify the drilling platform and access road on the contour, to a depth of at least 12 inches. The rippers are to be no farther than 24 inches apart.
5. Distribute the topsoil evenly over the entire location and other disturbed areas. Prepare the seedbed by disking to a depth of 4-to-6 inches following the contour.
6. 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:
  - Pit closure (Close ASAP after suitably dry, but no later than 90 days from time of drilling unless an extension is given by BLM Authorized Officer.) BLM may require closure prior to 90 days in some cases due to land use or environmental concerns.
  - 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 CBM water, including discharge points, reservoirs, off-channel pits, land application areas, livestock/wildlife watering facilities, surface discharge stream channels, etc
7. 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.
8. A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.
9. 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.
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

### **E. 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 from closing a pit before it is completely dry.
2. Reduce the backslope to 2:1 and the foreslope to 3:1, unless otherwise directed by the BLM Authorized Officer. Reduce slopes by pulling fill material up from foreslope into the toe of cut slopes.
3. Production facilities (including dikes) must be placed on the cut portion of the location and a minimum of 15 feet from the toe of the back cut unless otherwise approved by the BLM Authorized Officer.
4. 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.
5. Distribute stockpiled topsoil evenly over those areas not required for production and reseed as recommended.
6. 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.
7. Prior to construction of production facilities not specifically addressed in the APD/POD, the operator shall submit a Sundry Notice to the BLM Authorized Officer for approval.
8. If not already required prior to constructing and drilling the well location, the operator shall immediately upgrade the entire access road to BLM standards (including topsoiling, crowning, ditching, drainage culverts, surfacing, etc.) to ensure safe, environmentally-sound, year-round access. This requirement does not supercede or apply where specific road requirements are addressed in the APD/POD surface use plan (e.g., two track road, spot upgrade, etc.)
9. Waterbars shall be installed on all reclaimed pipeline corridors per the guidelines in D #12.