

	Twp	Rng	Sec	Well Name	Well#	Qtr	Lease
33	43N	76W	12	ALL DAY ENDLESS CS	4	SWSE	WYW130096
34	43N	76W	13	ALL DAY ENDLESS CS	5	NENE	WYW130096
35	43N	76W	13	ALL DAY ENDLESS CS	7	NESE	WYW130096

List of Impoundments:

	IMPOUNDMENT Name / Number	Qtr/Qtr	Section	TWP	RNG	Capacity (Acre Feet)	Surface Disturbance (Acres)	Lease #
1	City Bowl	NWSW	14	42	75	14.5	4.3	WYW159992
2	Claus	SENE	6	42	74	3.42	2.1	WDEQ
3	Cosner	NWNW	12	42	75	16	4.1	WYW142823
4	Drilling	SWSE	17	42	74	19.4	6.5	WYW131722
5	East Eychaner	SENE	14	42	75	19	2.9	WYW138135
6	East Pasture #2	SWNE	3	42	75	12.2	1.8	WYW128603
7	East Pasture #3	NWSW	3	42	75	19	4.6	WYW128603
8	East Pasture #4	NWNE	2	42	75	15.1	2.7	WDEQ
9	East Pasture #6	NENE	36	42	75	6.8	1.7	WDEQ
10	Enl of Dangel	SENE	24	42	75	19.9	3	WDEQ
11	Enl T-Chair 41-1-4275	NENE	1	42	75	8.8	2	WDEQ
12	North Dump	NESE	13	42	76	18.9	2.8	WYW130096
13	North Pinnacle	SESE	14	42	75	19.9	3.8	WYW142078
14	Ox Bar	NESW	18	42	75	6.3	1.3	WYW153068
15	Snow Fence	NWNW	17	42	74	19.9	2.8	WYW131722
16	South Dry Willow #1	NESW	7	42	75	15.6	2.4	WDEQ
17	South Dry Willow #2	NWSE	7	42	75	8.1	1.4	WDEQ
18	South Pinnacle	NESE	23	42	75	4.2	0.9	WYW159992
19	Wagoneer	NWSW	6	42	74	18.2	3.7	WYW141222

List of approved Right-of Ways:

Right-of-Way	Qtr/Qtr	Sec	TWP	RNG	Use/Type	Surface Disturbance (Acres)
WYW-170032	SENE	3	43N	75W	Access Road	2

I Programmatic mitigation measures identified in the PRB FEIS ROD

Water Management

Groundwater

1. In order to address the potential impacts from infiltration on shallow ground water, the Wyoming DEQ has developed a guidance document, "Compliance Monitoring and Siting Requirements for Unlined Coalbed Methane Produced Water Impoundments" which was approved September, 2006. For WYPDES permits received by DEQ after the August 1st effective date, the BLM requires that operators comply with the current approved DEQ compliance monitoring guidance document prior to discharge of federally-produced water into newly constructed or upgraded impoundments.

Surface Water

1. Concerns regarding the quality of the discharged CBNG water on downstream irrigation use may

require operators to increase the amount of storage of CBNG water during the irrigation months and allow more surface discharge during the non-irrigation months.

2. The operator will supply two copies of the complete approved SW-4, SW-3, or SW-CBNG permits to BLM as they are issued by WSEO for impoundments.
3. The operator will supply two copies of the WYPDES permits to the BLM for this POD as soon as they are available from WDEQ and before discharging CBNG production water from this POD.

Wetland/Riparian

1. No waste material will be deposited in riparian areas, flood plains, or in natural drainage ways.
2. Soil and other material stockpiles will be located outside the active floodplain.
3. Disturbed channels will be re-shaped to their approximate original configuration or stable geomorphological configuration and properly stabilized.
4. Reclamation of disturbed wetland/riparian areas will begin immediately after project activities are complete.

Wildlife

1. 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.
2. The Companies will construct power lines to minimize the potential for raptor collisions with the lines. Potential modifications include burying the lines, avoiding areas of high avian use (for example, wetlands, prairie dog towns, and grouse leks), and increasing the visibility of the individual conductors.
3. 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. Special habitats for raptors, including wintering bald eagles, will be identified and considered during the review of the APD/POD or Sundry Notices.
2. 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).
3. 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.
4. 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).
5. 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.

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.

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. At the onsite BLM required minimization of disturbance corridors through sagebrush. Brush hogging/mowing will be limited to a 35' radius around wells and 30' width on the access roads and corridors as stated below:

ALL DAY CS	7	SWSW	WYW131722	Reduced brush hogging/mowing to 35' radius around well and 30' on the access
ALL DAY MARAUDER CS	2	SWNE	WYW142823	Reduced brush hogging/mowing to 35' radius around well and 30' on the access
ALL DAY CINNABAR CS	15	SWSW	WYW130608	Reduced brush hogging/mowing to 35' radius around well and 30' on the access
ALL DAY FOREVER CS	8	SWNW	WYW142078	Reduced brush hogging/mowing to 35' radius around well and 30' on the access
ALL DAY PEPPERSTONE CS	5	SWNW	WYW141656	Reduced brush hogging/mowing to 35' radius around well and 30' on the access

1. All permanent above-ground 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 POD is Covert Green 18-0617 TPX.
2. Topsoil will be salvaged for use in reclamation on all areas of surface disturbance (roads, pipelines, etc.). Clearly segregate topsoil from excess spoil material. Proposed disturbance areas shall be stabilized in a manner which eliminates accelerated erosion until a self-perpetuating non-weed, native plant community has stabilized the site in accordance with the Wyoming Reclamation Policy.
3. Any mulch utilized for reclamation needs to be certified weed free.
4. 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.
5. If storage of construction equipment on well locations becomes necessary beyond typical construction timeframes, a sundry will be submitted to designate this area for long term storage.
 6. If there are no site specific conflicts with production and/or development, then interim reclamation will include seeding up to the well housing.
 7. 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:

Species - Cultivar	% in Mix	Lbs PLS
Western Wheatgrass - <i>Rosana</i>	30	3.6
Bluebunch Wheatgrass – <i>Secar or P-7</i>	10	1.2
Green needlegrass - <i>Lodorm</i>	25	3.0
Slender Wheatgrass	20	2.4
White – <i>Antelope</i> or Purple Prairie Clover – <i>Bismarck</i>	5	0.6
Prairie coneflower	5	0.6
Rocky Mountain beeplant	5	0.6
Totals	100%	12 lbs/acre

This is a recommended seed mix based on the native plant species listed in the NRCS Ecological Site descriptions, U.W. College of Ag. and seed market availability.

Wildlife

Bald Eagles

The following conditions will alleviate impacts to bald eagles:

- No project related actions shall occur within 1.0 mile of the bald eagle roost located within the SWSW of Section 6, T43N, R75W, annually from November 1 through April 1 for the life of the project, to include reclamation. Exceptions to this stipulation must be approved by the BLM and may include routine monitoring and maintenance activities of duration less than two hours and occurring between the hours of 9a.m. to 3p.m. This includes the following wells and their associated infrastructure:

Township/Range/Section	Wells and Infrastructure
T43N R76W Section 12	2 and 3 Endless Wells and associated corridors in the NE of section 12

- No project related actions shall occur within one mile of Dry Willow Creek annually from November 1 through April 1, prior to a winter roost survey or from February 1 through August 15 prior to a nesting survey. All survey results must be submitted in writing to the BFO and approved prior to initiation of surface disturbing activities. This timing limitation will be in effect unless surveys determine the nest/roost to be inactive. This affects the following wells and infrastructure:

Township/Range/Section	Wells and Infrastructure
T43N R75W Sections 7, 12	2 Endless, 3 Endless, South Dry Willow Reservoir 1 and 2.

- If a roost is identified and construction has not been completed, a year-round disturbance-free buffer zone of 0.5 mile will be established for all bald eagle winter roost sites. A seasonal minimum disturbance buffer zone of 1 mile will be established for all bald eagle roost sites (November 1 - April 1). 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.
 - 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).
- Additional mitigation measures may be necessary if the site-specific project is determined by a BLM biologist to have an adverse affect to bald eagles or their habitat.

Raptors

The following conditions will alleviate impacts to raptors:

- No surface disturbing activity shall occur within 0.5 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 timing limitation will affect the following:

BLM ID	Infrastructure
2409	1, 2, 3, and 4 Marauder wells
2410	4, and 5 Marauder wells
3132	Ox Bar Reservoir
3133	Ox Bar Reservoir
3398	1 All Day well
4228	4 Endless well
4249	2 Endless well, 3 Endless well, 4 Endless well.
4530	14 Cinnabar well
4531	South Dry Willow Reservoirs #1 and #2.
4532	16 Cinnabar well
4533	5 Endless well, South Dry Willow Reservoir #1, Access corridor
4534	Access corridor section 17 T43NR75W
4536	4, and 5 Endless wells
4538	Access corridor NE section 16 T43NR75W
4541	1,2,7 Forever wells
4546	4 Forever well, City Bowl Reservoir
4553	6 Pepperstone well
4556	Access Corridor, Section 36, SE section 35 T43NR75W
4557	7 Pepperstone well, East Pasture 4 Reservoir
4559	4 Vindicator well
4560	East Pasture 3 Reservoir, 4 Vindicator well

BLM ID	Infrastructure
4561	1 Marauder well, Cosner Reservoir
4562	1, 2 Marauder well
4696	4 Pepperstone well
5219	4 Pepperstone well
5220 (6339)	Section 10, near proposed location of the 9 All Day
6156	East Pasture Reservoir 4
6185	5 and 6 Endless wells
6200	5, 6, and 7 Endless well
6499	6 Forever well
6504	4, 5, Endless well
6518	South Dry Willow #2 Reservoir
6519	Oxbow Reservoir
6521	South Dry Willow #2 Reservoir
6522	South Dry Willow #2 Reservoir
6523	South Dry Willow #2 Reservoir
6524	South Dry Willow #2 Reservoir
6525	South Dry Willow #2 Reservoir, access corridor in section 17 T43NR75W
6529	Oxbow Reservoir
6534	South Dry Willow # 2
6535	South Dry Willow # 2
6541(6503)	4, 5, 6 Forever wells, and corridor in section 23 T43NR75W
6542	Corridor in SE 35, SW 36, T43NR74W

Greater Sage-grouse

The following conditions will alleviate impacts to sage-grouse:

1. Maximum design speed on all operator-constructed and maintained roads (except county roads) will not exceed 25 miles per hour except travel along roads within 1/2 mile of sage grouse leks will be posted (with signs shorter than four feet) by the operator at 10 mph during daylight hours between March 1-June 15.
2. 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.
3. To further minimize impacts to sage-grouse using habitat affected by the proposed action, surface-disturbing activities will be restricted during sage-grouse breeding and nesting periods (March 1 to June 15) for project components located in sage-grouse habitat for the life of the project. These restrictions will affect the entire POD with the exception of Cosner, Snow Fence, Drilling, End of T-Chair, East Pasture reservoirs, 2, 3, 4, 5, 6, 7, 8, All Day wells, and the Mara Wells.
 - a. A sage-grouse lek survey will be conducted for all known leks within 2 miles of the POD 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.
4. Well metering, maintenance and other site visits will be allowed monthly, 3 per week for the first six months after the wells are completed. The company will be required to monitor frequency of site visits along with repairs made and problems identified resulting from the visits. Reports containing results of this monitoring will be submitted to BLM at the end of every month. The BLM will use this data to determine the necessity of multiple monthly site visits during the sage-grouse breeding and nesting periods (March 1 to June 15).

Water Management

1. Impoundments constructed over Federal minerals or on Federal surface to manage CBNG-produced water must be reclaimed when the production phase concludes. In order to establish soil chemistry goals for reclamation, baseline soil samples will be collected from all impoundments carrying water from this federal action. Following the instructions below:

Samples will be taken from the approximate proposed deepest point in the pool area prior to any construction. The recommended location is 10 feet upstream of the proposed low level outlet within the reservoir pool. Discrete samples will be taken from 0 to 6 inches, 6 to 24 inches and 24 to 48 inches for analysis for the following 10 parameters:

- Texture, pH, EC, Soluble Ca, Soluble Mg, Soluble Na, Soluble K, SAR, Total Organic Carbon (TOC), Total metals including: Al, Ba, B, Cd, Cu, Fe, Mn, , Mo, Ra-226, Se and Zn.
- Standard soil sampling protocol will be used. Analysis results will be sent to the BLM BFO Authorized Officer.
- After the construction of the impoundment, an additional surface sample will be taken from 0 to 6 inches at the lowest point in the pool area and analyzed for the same parameters.
- This baseline analysis will characterize existing soil chemistry and set reclamation target ranges. If the operator does not establish baseline parameters prior to impoundment construction, it would be required to do so at the time of reclamation by sampling a location upstream of the facility.

Cultural

1. 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 due to the presence of alluvial deposits or the presence of nearby historic properties with buried components. If any cultural resources are discovered during monitoring, work must be halted and the BLM must be notified. Submission of two copies of a monitoring report to BFO is required within 30 days of the completion of all monitoring work. Exact monitored areas must be plotted on a map provided with the monitoring report.
 - a) All surface disturbing activity associated with the construction of the any facilities in alluvial deposits near the North Fork of Cottonwood Creek including:
 - i) All surface disturbing activities in and within 100 feet of eligible sites 48CA6644, 48CA6646, 48CA6650, 48CA6908, 48CA6910.
 - ii) All utility corridors within ¼ mile of North Fork of Cottonwood 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.
 - iii) All surface disturbing activities associated with the construction of the Little Black Butte #1 reservoir. Some portions of the monitoring area may lie outside alluvial deposits and exact monitoring area is left to the discretion of the archeological monitor.
 - b) All surface disturbing activity associated with the construction of the South Pinnacle Reservoir and any surface disturbing activity within 100 feet of eligible site 48CA5225.
 - c) All surface disturbing activity associated with the construction of the utility corridor in and within 100 feet of eligible site 48CA6488.
 - d) All surface disturbing activity associated with the construction of the Forever 4 well and the utility corridor in and within 100 feet of eligible site 48CA6441. No surface disturbance is authorized on the west side of the existing two track during construction of the well and utility corridor.

- e) All surface disturbing activity associated with the construction of the utility corridor within 300 feet of eligible site 48CA6658.
 - f) All surface disturbing activity associated with the construction of the utility corridor within 100 feet of eligible site 48CA6665.
2. Due to cultural issues surrounding Forever 4 well the operator will surface the road with rock before construction begins. Due to sensitive cultural issues, the operator must use rock that blends with the natural colors, do not use scoria, use Crazy Woman gravel or other gravel that blends with soil.

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 All Day 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 (ES-6-WY-07-F012) 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 Spegon @ 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 signed 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. All overhead power lines shall be built to protect raptors, including bald eagles, from accidental electrocution using the most recent edition of “Suggested Practices for Raptor Protection” by the Avian Power Line Interaction Committee (2006 edition or most recent edition) and any additional practices provided by the FWS. It should be noted that raptor protection can be achieved through insulation and/or wire spacing and that there are multiple configurations capable of protecting raptors.
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. 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.
6. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.
7. 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.

8. 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.
9. 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 exemptIt 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.

10. 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.
11. 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.
12. 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 firefighting 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. 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 reseeded 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.