

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

**SURFACE USE  
CONDITIONS OF APPROVAL  
EA # WY-070-EA-10-66**

POD Name: Keeline Unit

Operator: Wellstar Corporation

List of Wells:

	Well Name	Well #	Qtr/Qtr	Section	TWP	RNG	Lease #
1	Keeline Unit	4-44	SESE	4	43N	69W	WYW148876
2	Keeline Unit	17-21	NENW	17	43N	69W	WYW148876

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

**1.1. Programmatic mitigation measures, Alternative B**

**1.1.1. 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. 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.

**1.1.2. 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**

### **A. Surface Use: Wells 4-44 and 17-21**

1. To minimize erosion and enhance reclamation, all drilling and construction activities will be stabilized during and within 30 days of the initiation of construction.
2. If well is a producer, all pits will be closed and production tanks will be used on the location.
3. For interim reclamation needs, all topsoil removed, will be re-spread, immediately after construction of wells and roads are done.
4. The access road, on the slope, going to the 4-44 well will be surfaced with gravel before pad construction occurs.
5. 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 project, is Covert Green and Munsell Soil Color Number 18-0617 TPX.
6. The operator will drill seed on the contour, to no more than 0.5 inch deep, followed by cultipaction to compact the seedbed and reduce 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:

See next page

**10-14" Precipitation Zone**

**Shallow Clayey/Clayey Ecological Site Seed Mix for 4-44 location:**

<b>Clayey Ecological Site Seed Mix</b>		
<b>Species</b>	<b>% in Mix</b>	<b>Lbs PLS*</b>
<i>Western Wheatgrass</i> (Pascopyrum smithii)	35	4.2
<i>Green needlegrass</i> (Nassella viridula)	30	4.8
<i>Slender Wheatgrass</i> (Elymus trachycaulus ssp. trachycaulus)	20	1.2
<i>Prairie coneflower</i> (Ratibida columnifera)	5	0.6
<i>White or purple prairie clover</i> (Dalea candidum, purpureum)	5	0.6
<i>Rocky Mountain beeplant</i> (Cleome serrulata)	5	0.6
<b>Totals</b>	<b>100%</b>	<b>12 lbs/acre</b>

**Sandy Ecological Site Seed Mix for the 17-21 location:**

<b>Species</b>	<b>% in Mix</b>	<b>Lbs PLS*</b>
<i>Thickspike Wheatgrass</i> (Elymus lanceolatus ssp. lanceolatus)	30	3.6
<i>Prairie sandreed</i> (Calamovilfa longifolia)	30	3.6
<i>Indian ricegrass</i> (Achnatherum hymenoides)	25	3.0
<i>Prairie coneflower</i> (Ratibida columnifera)	5	0.6
<i>White or purple prairie clover</i> (Dalea candidum, purpureum)	5	0.6
<i>Scarlet Globemallow</i> (Sphaeralcea coccinea) / or <i>Blue flax</i> (Linum lewisii)	5	0.6
<b>Totals</b>	<b>100%</b>	<b>12 lbs/acre</b>

\*PLS = pure live seed. Northern Plains adapted species

Double this rate if broadcast seeding

Slopes too steep for machinery may be hand broadcast and raked with twice the specified amount of seed. Seeding is authorized during spring, summer, fall and winter, as conditions permit. Operators should plan construction and seeding/reclamation activities to ensure surface disturbance is stabilized and reseeded, during and within 30 days of the end construction activities.

## **B. Wildlife**

### **Big Game**

No surface disturbing activity shall occur within identified elk crucial winter range from November 15 to April 30. This timing limitation will affect the Keeline 17-21 well and portion of the access road in sections 8 and 17.

### **Raptors**

The following conditions will alleviate impacts to raptors:

1. 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 both the Keeline 17-21 and Keeline 4-44 wells.
  - 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 0.5 mile timing buffer will be implemented. The timing buffer restricts surface disturbing activities within 0.5 mile of occupied raptor nests from February 1 to July 31.
2. 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.
3. Well metering, maintenance and other site visits within 0.5 miles of raptor nests should be minimized as much as possible during the breeding season (February 1 – July 31).

## **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. Please contact Dan Sellers, Natural Resource Specialist, at (307) 684-1132, Bureau of Land Management, Buffalo, if there are any questions concerning the following surface use COAs.

## **B. Construction**

1. 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.
2. Remove all available topsoil (depths vary from 1 inch on ridges to 12+ inches in bottoms) from constructed well locations including areas of cut and fill, and stockpile at the site. Topsoil will be salvaged for use in both interim and final reclamation in all areas of surface disturbance (roads, pipelines, etc.). Clearly segregate topsoil from excess spoil material.
3. 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.
4. 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.
5. 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.
6. To minimize electrocution potential to birds of prey, all overhead electrical power lines will be constructed to standards identified by the Avian Power Line Interaction Committee (1996).
7. Reserve pit will be adequately fenced during and after drilling operations until reclaimed so as to effectively keep out wildlife and livestock. This requires that it be fenced on the three nonworking sides prior to drilling and on the remaining side immediately following rig release. Fencing will be constructed in accordance with BLM specifications. (Plastic snow fence is not acceptable fencing material for conventional wells.)
8. 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.
9. 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<sup>-7</sup> 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.
10. The reserve pit will be constructed so that at least half of its total volume is in solid cut material (below natural ground level).

11. Culverts will be placed on road/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.
12. The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.
13. Construction and other project-related traffic will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
14. Maximum design speed on all operator constructed and maintained roads will not exceed 25 miles per hour.
15. 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.
16. Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization and reclamation.
17. During construction, emissions of particulate matter from well pad and road construction would be minimized by application of water or other non-saline dust suppressants with at least 50 percent control efficiency. Dust inhibitors (surfacing materials, non-saline dust suppressants, and water) will be used as necessary on unpaved roads that present a fugitive dust problem. The use of chemical dust suppressants on public surface will require prior approval from the BLM Authorized Officer.
18. Operators are required to obtain a National Pollution Discharge Elimination System (NPDES) Storm Water Permit from the Wyoming DEQ for any projects that disturb one acre or more. 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.
19. 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.

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

1. Confine all equipment and vehicles to the access roads, pads, and areas specified in the approved APD or POD.
2. 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.
3. 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.

4. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.
5. 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 this well 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.
6. 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.
7. 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
8. 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.
9. 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.
10. 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 while in the field.

**D. Dry Hole/Reclamation**

1. Disturbed lands will be recontoured back to conform with existing undisturbed topography. No depressions will be left, that trap water or form ponds.
2. The fluids and mud must be dry in the reserve pit before recontouring pit area. The operator will be responsible for recontouring 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 recontour the site.
3. 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. (Note: rip the location only. Do not topsoil and subsoils).
4. 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.
5. 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

6. BLM will not release the performance bond until the area has 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.
7. A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.
8. 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.
9. Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.
10. Any mulch utilized for reclamation needs to be certified weed free.

**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 recontouring pit area. The operator will be responsible for recontouring 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. A dike will be constructed completely around the production facilities (i.e. production tanks, water tanks, and heater-treater). The dikes for the production facilities must be constructed of impermeable soil, hold 110% of the capacity of the largest tank plus 1-foot of freeboard, and be independent of the back cut.
5. Any chemicals used in treating the wells (e.g., corrosion inhibitor, emulsion breaker, etc.) will be in a secure, fenced-in area with appropriate secondary containment structure (dikes, catchment pan, etc.).
6. The load out line coming from the oil/condensate tank(s) will have a suitable containment structure to capture and recycle any oil spillage that might occur.
7. Individual production facilities (tanks, treaters, etc.) will be adequately fenced off (if entire facility not already fenced off).
8. Any spilled or leaked oil, produced water or treatment chemicals must be reported in accordance with NTL-2A 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.
9. Distribute stockpiled topsoil evenly over those areas not required for production and reseed as recommended.
10. 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.
11. 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.
12. 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.
13. Waterbars shall be installed on all reclaimed pipeline corridors per the guidelines in D#5.