

DECISION RECORD
Ballard Petroleum Holdings, LLC, GDU Federal 11-9 HP
Categorical Exclusion 3 (CX3), WY-070-390CX3-12-013
BUREAU OF LAND MANAGEMENT, BUFFALO FIELD OFFICE

DECISION. The BLM approves Ballard Petroleum Holdings, LLC’s 1 application for permit to drill (APD) for the GDU Federal 11-9 HP well and construct associated infrastructure as described in the CX3 worksheet, WY-070-390CX3-12-013, which is incorporated here by reference.

Compliance. This decision complies with:

- Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701).
- National Environmental Policy Act of 1969 (NEPA) (42 USC 4321).
- National Historic Preservation Act of 1966 (16 USC 470).
- Endangered Species Act of 1974 (16 USC 1531).
- Energy Policy Act of 2005, 119 Stat. 748 Public Law 109-58.
- Buffalo and Powder River Basin (PRB) Final Environmental Impact Statement (FEISs), 1985, 2003.
- Buffalo Resource Management Plan (RMP) 1985, Amendments 2001, 2003, 2011.
- Interior Department Order 3310.

Consultation. This decision considered:

- BLM Instruction Memorandum No. 2009-078, Processing Oil and Gas Application for Permit to Drill for Directional Drilling into Federal Mineral Estate from Multiple-Well Pads on Non-Federal Surface and Mineral Locations, 2009.
- Wyoming BLM State Director Review, SDR No. WY-2011-010, EOG Resources, Inc. v. Pinedale Field Office, 2011.

DECISION. The BLM approves the application for permit to drill (APD) from Ballard Petroleum to drill 1 horizontal oil well and construct associated infrastructure as described in the CX3 worksheet, WY-070-390CX3-12-013, which is incorporated here by reference.

A summary of the details of the approval follows. The CX worksheet, WY-070-390CX3-12-013 includes the project description, including site-specific mitigation measures which are incorporated by reference into that worksheet from earlier analysis. The proposed well is approximately 10 miles south of Gillette in Campbell County, Wyoming. The GDU Federal 11-9HP proposal had 1 APD to develop and produce oil and natural gas from the coal formations of the Powder River Basin (PRB).

Approvals. BLM approves the following 1 APD and associated infrastructure:

#	Well Name	Well #	QTR	Sec	TWP	RNG	Lease	CX Number
1	GDU Federal	11-9HP	NWNW	9	47N	73W	WYW80554	WY-070-390CX3-12-013

Limitations. There are no deferrals or denials.

THE FINDING OF NO SIGNIFICANT IMPACT (FONSI). Congress, the Interior Department, and BLM affirmed there was no significant impact of a like-structured project in creating this CX3 worksheet process and its limiting parameters, thus a FONSI, EIS, and environmental assessment are not required.

COMMENT OR NEW INFORMATION SUMMARY. BLM received no public comments from posting the APD for the required 30 day period.

DECISION RATIONALE. The approval of this project is because:

1. **The approved well must be spudded by September 7, 2016, or 2 year administrative APD, whichever is less. If the individual well is not spudded by September 7, 2016, or 2 year administrative APD, whichever is less, the individual APD approval will expire and the operator is to cease all operations related to preparing to drill that individual well.**
2. Mitigation measures and conditions of approval (COAs), analyzed in the CX3 worksheet, in environmental impact statements or environmental analysis to which the CX3 worksheet tiers or incorporates by reference, will reduce environmental impacts while meeting the project's need. For a complete description of all site-specific COAs associated with this approval, see the COAs, including the recommended surface COAs.
3. The approved project conditioned by its design features and COAs (including the drilling and surface use plans incorporated here by reference), will not result in any undue or unnecessary environmental degradation. There are no conflicts anticipated or demonstrated with current uses in the area. This decision approving the GDU Federal 11-9HP complies with the Energy Policy Act of 2005, Section 390, 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215.
4. Approval of this project conforms to the terms and the conditions of the 1985 Buffalo RMP (BLM 1985) and subsequent update (BLM 2001) and amendments (BLM 2003, 2011). This project complies with the breadth and constraints of CX3, Energy Policy Act of 2005, and subsequent policy.
5. The selected alternative will help meet the nation's energy need, revenues, and stimulate local economies by maintaining workforces.
6. The Operator shall:
 - Comply with all applicable federal, state, and local laws and regulations.
 - The operator incorporated several measures to alleviate resource impacts into their surface use plan and drilling plan submitted.
7. The project is clearly lacking in wilderness characteristics because it is amidst gas development.
8. This decision does not foreclose the lessee or operator to propose a new or supplementary plan for developing the federal oil and gas lease(s) in this project area, including submission of additional APDs to drain minerals in accord with lease rights and law. This decision does not foreclose the lessee or operator to propose using external pumping units via a sundry application process.
9. Ballard Petroleum certified there is a surface use agreement with the landowners. The operator provided the BLM a true and complete copy of a document in which the owner of the surface authorizes the operator to drill a federal well from non-federal lands, and in which the surface owner or representative guarantees the Department of the Interior (Department), including BLM, access to the non-federal lands to perform all necessary surveys and inspections. (See also, Instruction Memorandum No. 2009-078, p. 2, para 6).

10. This approval is subject to adherence with all of the operating plans, design features, and mitigation measures contained in the Surface Use Plan of Operations, Drilling Plan, and information in the APD.

ADMINISTRATIVE APPEAL: This decision is subject to administrative appeal in accord with 43 CFR 3165. Request for administrative appeal must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, P.O. Box 1828, Cheyenne, Wyoming 82003, no later than 20 business days after this Decision Record is received or considered to have been received. Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

Field Manager:  Date: 12/6/11

Categorical Exclusion 3 (CX3), WY-070-390CX3-12-013
Section 390, Energy Policy Act of 2005
Ballard Petroleum Holdings, LLC, GDU Federal 11-9HP APD
BUREAU OF LAND MANAGEMENT, BUFFALO FIELD OFFICE

Description of the Proposed Action

Ballard Petroleum proposes to drill one horizontal oil and gas well and construct associated infrastructure as follows:

Table 1.1. Proposed Well

#	Well Name	Well #	QTR	Sec	TWP	RNG	Lease	CX Number
1	GDU Federal	11-9HP	NWNW	9	47N	73W	WYW80554	WY-070-390CX3-12-013

The proposed well is within the Gaither Draw Unit (GDU), which includes an area of approximately 10,471 acres. The project area is located approximately 10 miles south of Gillette, Wyoming, and in southwestern Campbell County. Topography in the project area contains broken ridgelines, moderately incised arroyos along ephemeral dendritic drainages. Elevations average 4,500 feet above sea level. Cabello Creek, an ephemeral drainage, and South Prong Creek are adjacent to the project area. Land uses and other disturbances occurring in the project area include wildlife habitat, livestock grazing, ranching, dry land farming, extensive mineral development (conventional oil and CBNG), and improved and unimproved roads.

The Gaither Draw Unit Environmental Assessment (WY-070-EA11-256, approved September 7, 2011), on page 6 states that reasonably foreseeable development in this unit and its locality to include but not limited to the approved Gaither Draw Unit APDs will fill-in to 80-acre spacing. This comports with the PRB development anticipated in the PRB FEIS, (see narrative in Section 2, No Action Alternative).

Surface owners: Gerald Geis, Geis Trust

The proposed action is to explore by drilling for, and possibly develop, oil reserves in geologic mineral formations leased by Ballard Petroleum. Ballard Petroleum proposes drilling and developing 1 horizontal oil well into federal mineral estate from a well pad on a non-federal location. The primary objective is to drill to the Parkman Formation at 6,507 feet, Total Vertical Distance (TVD).

The Surface Hole Location is on private surface located over private minerals at 1237 feet FNL, 337 feet FWL, NWNW, Lot 4, Sec. 9, T47N, R73W. The Bottom Hole Location is 660 feet FSL and 660 feet FEL, Lot 20, Section 4, T47N, R73W. The horizontal section is 4,428 feet long. As shown in Figure 1.1 below, the surface hole location is on private surface over private oil and gas mineral estate, with the horizontal bore terminating at the bottom hole location in federal lease WYW80554.

inspection and enforcement authority and responsibility would include compliance with any mitigation or other conditions established for approval of the APD as a result of the NHPA and ESA consultation process. Cultural mitigation is in the Conditions of Approval for Conventional Application for Permit to Drill, Appendix B.

It is the BLM’s responsibility and obligation to analyze the full effects of the action, and identify mitigation measures, regardless of the BLM’s authority to enforce the mitigation. The BLM needs to identify mitigation measures that would reduce or eliminate the effects of a non-federal action when it is a connected action to the BLM proposed action (see the NEPA handbook, section 6.8.2.1.1, connected Non-federal Actions). Identifying mitigation outside of the BLM’s jurisdiction serves to alert the other agencies that can implement the mitigation. The probability of the other agencies implementing the mitigation measures is likely to occur, although these agencies may vary specific parameters recommended by the BLM.

Full effects of the action and recommended mitigation measures are in the GDU Federal 11-9 HT Surface Use Plan, Gaither Draw Unit Environmental Assessment WY-070-EA11-256, and BLM *Recommended* Conditions of Approval for Conventional Application for Permit to Drill attached as Appendix A, and Conditions of Approval for Conventional Application for Permit to Drill attached as Appendix B.

Drilling, Construction & Production design features include:

- Ballard Petroleum anticipates completing drilling and construction in 2 years. Drilling and construction is year-round in the region. Weather may cause delays but delays rarely last multiple weeks. Timing limitations in the form of conditions of approval (COAs) and/or agreements with surface owners may impose longer temporal restrictions.
- A road network consisting of existing improved roads and one proposed improved access road.
- An existing and proposed above ground powerline.
- Production facilities will include a pumping unit and ‘dead-man’ anchors only.
- No load-out lines will be used at this well site.
- Installation of a 16 foot wide cattle guard set on concrete supports at existing fence gate access.
- There will be a reserve pit at this oil well location during drilling and completion.
- After completion and authorization by the Wyoming Oil & Gas Conservation Commission, this well will be operated as a water flood injection well. Injection fluid will flow from a 3 inch pipeline into an existing pipeline infrastructure back to the central tank battery location in SESW Sec. 34, T48N, R73W.

Additionally, GDU Federal 11-9HP well will use Ballard Petroleum infrastructure for Gaither Draw Unit wells. For a detailed description of design features and construction practices associated with the proposed project, refer to the surface use plan (SUP) and drilling plan included with the APD. Also see the subject APD for maps showing the proposed well location and associated facilities described above.

Table 1.2. Disturbance Summary for GDU Federal 11-9 HP well:

Facility	Number or Miles	Factor	Disturbance
Engineered Pad	1 350 ft x 380 ft	133,000 sq ft	3.05 acres
Engineered Pad Cut & Fill	varies	varies	0.32 acres
Proposed Improved Roads No Corridor	0.15 mile	30 ft	0.54 acres
Pipeline Connection tie-in	200 ft	30 ft	0.13 acres

Facility	Number or Miles	Factor	Disturbance
Proposed Overhead Power	0.15 mile	30 ft	0.54 acres
Total Surface Disturbance			4.58 acres

Total surface disturbance for the proposed action is 4.58 acres.

The operator provided the BLM a true and complete copy of a document in which the owner of the surface authorizes the operator to drill a federal well from non-federal lands, and in which the surface owner or representative guarantees the Department of the Interior (Department), including BLM, access to the non-federal lands to perform all necessary surveys and inspections. (See also, Instruction Memorandum No. 2009-078, p. 2, para 6).

Plan Conformance, Compliance, and Justification with the Energy Policy Act of 2005

The Energy Policy Act of 2005, Section 390(a) subjects oil or gas exploration or development to a rebuttable presumption that the use of a categorical exclusion under the National Environmental Policy Act (NEPA) applies. Thus BLM must use an Energy Policy Act, Section 390(b), CX unless BLM rebuts the presumption. This CX worksheet is NEPA compliance categorically excluded from an EA or EIS or their analysis; it is not an exclusion from all analysis. (40 CFR 1508.4 and BLM H-1790, p. 17.) The proposed action conforms with the terms and conditions of the Approved Resource Management Plan (RMP) for the public lands administered by the BLM, BFO, 1985, the PRB FEIS, January 2003, and the Record of Decision (ROD) and Resource Management Amendments for the Powder River Oil and Gas Project, Amendments of 2001, 2011 as required by 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215. The GDU Federal 11-9HP APD and area are clearly lacking in wilderness characteristics as they are amidst extensive natural gas development with miles of mechanically maintained improved roads, (DOI Order 3310). BLM finds that the conditions and environmental effects found in the senior EA and PRB FEIS remain valid.

The applicable categorical exclusion from the Energy Policy Act of 2005, Section 390, is exclusion number (b)(3) which is *drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed such drilling as a reasonably foreseeable activity, so long as such plan or document was approved within 5 years prior to the date of spudding the well.*

BLM has 3 requirements to use a Section 390 CX3, (BLM H-1790, Appendix 2, #3, p. 143):

- 1) The proposed APD is in a developed oil or gas field (any field with a completed confirmation well).

Table 1.3 is a list of existing/approved PODs that are within or adjacent to the GDU Federal 11-9HP well. This information is provided for informational use and shows the reader that BLM conducted analysis.

Table 1.3. Adjacent or Overlapping Oil Well POD Development by Decision Date

#	POD Name	Environmental Assessment #	Number of Approved or Producing Wells	Decision Date
1	Gaither Draw Unit	WY-070-EA11-256	4	September 7, 2011
2	GDU Federal 43-4	WY-070-EA11-266	1	September 7, 2011
3	Drake Federal 31-29 HT	WY-070-EA11-253	1	October 6, 2011

- 2) There is an existing NEPA document (and the RMP) containing reasonably foreseeable development scenario for this action. There are several existing NEPA documents that reasonably foresaw development to spud additional wells to fill in 80 acre well-spacing. BLM reviewed these documents and determined they considered the potential environmental effects associated with the proposed activity at a site specific level. In addition, all approved EAs tier into the PRB FEIS (2003). The PRB EIS analyzed foreseeable development in the PRB. The PRB foreseeable development included 3,200 oil wells and drilling CBNG wells on 80 acre-spacing resulting in about 51,000 CBNG wells and over 3,000 oil wells. The GDU Federal 11-9HP well is in the foreseeable development scenario of 80 acre well-spacing that was analyzed in EAs in Table 1.4 and in the PRB FEIS's Appendix A.

Table 1.4. EAs Which Account for Reasonably Foreseeable Development Scenario

#	POD Name	Environmental Assessment #	Number of Approved or Producing Wells	Decision Date
1	Gaither Draw Unit	WY-070-EA11-256	4	September 7, 2011

- 3) The tiered NEPA document was finalized or supplemented within 5 years of spudding (drilling) the proposed well.

The GDU Federal 11-9HP CX3s tier to the following approved EA listed below in Table 1.5.

Table 1.5. NEPA Document Finalized Within Anticipated Spud Date of GDU Federal 11-9HP Well

#	POD Name	Environmental Assessment #	Number of Approved or Producing Wells	Decision Date
1	Gaither Draw Unit	WY-070-EA11-256	4	September 7, 2011
2	GDU Federal 43-4	WY-070-EA11-266	1	September 7, 2011
3	Drake Federal 31-29 HT	WY-070-EA11-253	1	October 6, 2011

In summary the EAs in Tables 1.3 to 1.5 analyzed in detail the anticipated direct, indirect, residual, and cumulative effects that would result from the approval of these APDs and associated support structure in GDU Federal 11-9HP well is similar to both the qualitative and quantitative analysis in the above mentioned EAs. The BFO reviewed the EA and found that the EA considered potential environmental effects associated with the proposed activity at a site specific level. Additionally, GDU Federal 11-9HP well will use Ballard Petroleum infrastructure for Gaither Draw Unit wells. Confirmation wells for GDU Federal 11-9HP will be those wells drilled and completed in Gaither Draw Unit approved on September 7, 2011. The APD's master surface use plan and drilling plan are incorporated here by reference and show adequate protection of surface lands and ground water, including the Fox Hills formation.

Plan of Operations

The proposal conforms to all Bureau standards and incorporates appropriate best management practices, required and designed mitigation measures determined to reduce the effects on the environment. BLM reviewed and approved a surface use plan of operations describing all proposed surface-disturbing activities pursuant to Section 17 of the Mineral Leasing Act, as amended. This CX3 worksheet also incorporates and analyzes the implementation of committed mitigation measures contained in the SUP, drilling plan, in addition to the Standard COAs found in the PRB FEIS ROD, Appendices A and B.

Wildlife

A BLM wildlife biologist reviewed the proposed APD. The wildlife biologist determined that the proposed APD, combined with the COAs, is: (1) consistent with the FEIS and its supplements, the RMP

and its Amendments, and the above tiered EAs; and (2) consistent with the programmatic biological opinion (ES-6-WY-07-F012), which is an update from the PRB FEIS, Appendix K.

Effects to wildlife are anticipated to be similar to those discussed in the following EAs: Ballard Petroleum Holdings, LLC, GDU Federal 43-4 WY-070-EA11-266, Gaither Draw Unit WY-070-EA11-256, and Drake Federal 31-29 HT WY-070-EA11-253.

Cultural

A previously reviewed and accepted Class III cultural resource inventory (BFO # 70990318) adequately covered the proposed project area. No cultural resources are in the area of potential effect. On December 12, 2011, Ardeth Hahn, BLM Archaeologist, electronically notified the Wyoming State Historic Preservation Office (SHPO) following section VI(A)(1) of the Wyoming State Protocol, of a finding of no effect for the proposed project. If any cultural values [sites, artifacts, human remains (Appendix L PRB FEIS and ROD)] are observed during operation of this lease/permit/right-of-way, they will be left intact and the Buffalo Field Manager notified. Further discovery procedures are in the Standard COA (General)(A)(1).

Decision and Rationale on Action

The COAs provide mitigation and further the justification for this decision and may not be segregated from project implementation without further NEPA review. I reviewed the plan conformance statement and determined that the proposed GDU Federal 11-9HP CX3 APD and infrastructure conform to the applicable land use plans. I reviewed the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 is correct. It is my determination that there is no requirement for further environmental analysis.

Implementation Date and Expiration to Spud

Ballard Petroleum may implement this project on or after the below signature date.

The approved well must be spudded by September 7, 2016, or 2 year administrative APD, whichever is less. If the individual well is not spudded by September 7, 2016, or 2 year administrative APD, whichever is less, the individual APD approval will expire and the operator is to cease all operations related to preparing to drill that individual well.



Duane Spencer
Field Manager



Signature Date

Note: The CX3's approval requires a separate decision record (DR) and the DR must include appropriate appeal language that comports to the appropriate 43 CFR part authorizing the project. There is decision space in the CX3 and in the DR to apply limitations, mitigation, and conditions of approval – however mitigation and COAs must comply with those published in the 2003 ROD or thoroughly analyzed in an EA this CX3 worksheet tiers to or incorporates an analysis here by reference or is supported in this CX3 worksheet with an analysis.

Contact Person, Debby Green, Natural Resource Specialist, Buffalo Field Office, 1425 Fort Street, Buffalo WY 82834, 307-684-1100

APPENDIX A

BLM RECOMMENDED CONDITIONS OF APPROVAL FOR CONVENTIONAL APPLICATION FOR PERMIT TO DRILL

Ballard is under no obligation to abide by the following recommended measures.
GDU Federal 11-9 HP, supported by Categorical Exclusion CX, WY-070-390CX3-12-013

Operator: Ballard Petroleum Holdings, LLC

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

Office Telephone Number: 307-684-1100

List of Wells:

Well Name & Number	QTR	Sec.	T	R	Lease #
GDU Federal 11-9 HP	NWNW	9	47N	73W	WYW80554

SITE SPECIFIC

Surface

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 project, is Covert Green (18-0617 TPX).
2. 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:

**10-14” Precipitation Zone
 Loamy Ecological Site Seed Mix**

Species	% in Mix	Lbs PLS*
<i>Western Wheatgrass</i> (Pascopyrum smithii)/ <i>Thickspike Wheatgrass</i> (Elymus lanceolatus ssp. lanceolatus)	30	4.8
<i>Bluebunch Wheatgrass</i> (Pseudoroegneria spicata ssp. Spicata)	10	1.2
<i>Green needlegrass</i> (Nassella viridula)	25	3.0
<i>Slender Wheatgrass</i> (Elymus trachycaulus ssp. trachycaulus)	20	1.2
<i>Prairie coneflower</i> (Ratibida columnifera)	5	0.6

Species	% in Mix	Lbs PLS*
<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
Totals	100%	12 lbs/acre

*PLS = pure live seed. Northern Plains adapted species
Double this rate if broadcast seeding

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. A site-specific inventory will allow the resource specialist to suggest the most appropriate species, percent composition, and seeding rate for reclamation purposes.

Slopes too steep for machinery may be hand broadcast and raked with twice the specified amount of seed.

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. No surface disturbing activity shall occur in suitable breeding habitat for migratory birds from February 1 through July 31, annually, prior to a nesting survey for the current breeding season. Surveys shall be conducted according to BLM protocol, between April 15 and June 15. If an active nest is located, the operator will contact the USFWS for recommendations on how to proceed with project construction.
3. No surface disturbing activities shall occur during sage-grouse breeding and nesting periods (March 15 – June 30), for the GDU Federal 11-9 HP well and associated infrastructure.
4. A 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 no later than July 31 of the current year. This condition will be implemented on an annual basis for the duration of surface disturbing activities.
 - a. If a previously unknown lek is identified during surveys (April 1-May 7), a Buffalo BLM biologist shall be notified.

STANDARD

General

1. Temporarily fence reseeded areas, as requested, for at least two complete growing seasons to insure reclamation success on problematic sites (e.g. close to livestock watering source, erosive soils etc.).

Construction

1. Construction and drilling activity will not be conducted using frozen or saturated soil material during periods when excessive rutting is likely to occur.
2. 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.

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 ½:1, 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 (2006).
7. 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.
8. Reserve pits will be adequately fenced during and after drilling operations until pit 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 for conventional wells.)
9. The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.
10. Construction and other project-related traffic will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
11. Maximum design speed on all operator constructed and maintained roads will not exceed 25 miles per hour.
12. 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.
13. Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization and reclamation.
14. 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.
15. 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.

16. 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.

Operations/Maintenance

1. Confine all equipment and vehicles to the access road(s), pad(s), and area(s) specified in the approved APD.
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. 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.
4. 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.
5. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.
6. 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.
7. 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.

DryHole/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 recontoured 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 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.
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 following the contour.
6. 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

7. 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.
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.

APPENDIX B

**CONDITIONS OF APPROVAL FOR CONVENTIONAL APPLICATION
FOR PERMIT TO DRILL**

GDU Federal 11-9 HP, supported by Categorical Exclusion CX, WY-070-390CX3-12-013

Operator: Ballard Petroleum Holdings, LLC

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

Office Telephone Number: 307-684-1100

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

Spud Notice Site:

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

List of Wells:

Well Name & Number	QTR	Sec.	T	R	Lease #
GDU Federal 11-9 HP	NWNW	9	47N	73W	WYW080554

STANDARD

Construction

1. 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.
2. 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.
3. The reserve pit will be constructed so that at least half of its total volume is in solid cut material (below natural ground level).

Operations/Maintenance

1. 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.

2. 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.

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-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.
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 ditches, 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 A.4.2.4 #6.

DRILLING AND PRODUCTION OPERATIONS

1. Verbal notification shall be given to the Authorized Officer at least 24 hours before formation tests, BOP tests, running and cementing casing, and drilling over lease expiration dates.
2. New hard-band drill pipe shall not be rotated inside any casing. Hard-band drill pipe shall be considered new until it has been run at least once.
3. All Blow Out Prevention Equipment tests shall include a 5 minute low pressure test between 250 psi and 500 psi with no drop in pressure with the only exception being the chokes. The chokes are only required to have the high pressure test held for a minimum length of time necessary to verify their functional integrity.
4. All operations must be conducted in accordance with all applicable laws and regulations: with the lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the Authorized Officer, unless a variance has been granted in writing by the Authorized Officer.
5. The Operator shall install an identification sign consistent with the requirements of 43 CFR 3162.6 immediately upon or before the completion of the well pad construction operations.
6. All Blow Out Prevention Equipment rated 5M or greater shall be isolated from the casing and tested to stack working pressure. All Blow Out Prevention Equipment tests shall be performed by a suitable test pump, not the rig-mud pumps and recorded on a chart. The chart shall be submitted to the Buffalo Field Office.
7. Low test on Blow Out Prevention Equipment shall be performed and passed before moving onto the high test for each component.
8. If there are indications of inadequate primary cementing of the surface, intermediate, or production casing strings; such as but not limited to no returns to surface, cement channeling, fallback or mechanical failure of equipment, the operator will evaluate the adequacy of the cementing operations. This evaluation will consist of running a cement bond log (CBL) or an alternate method approved by the Authorized Officer (AO) no sooner than 12 hours and no later than 24 hours from the time the cement was first pumped.
9. If there are indications of inadequate primary cementing of the surface, intermediate, or production casing strings; such as but not limited to no returns to surface, cement channeling, fallback or mechanical failure of equipment, the operator will evaluate the adequacy of the cementing operations.

This evaluation will consist of running a cement bond log (CBL) or an alternate method approved by the Authorized Officer (AO) no sooner than 12 hours and no later than 24 hours from the time the cement was first pumped.

10. If the evaluation indicates inadequate cementing, the operator shall contact a BLM Buffalo Field Office Petroleum Engineer for approval of remedial cementing work.
11. The adequacy of the remedial cementing operations shall be verified by a cement bond log (CBL) or an alternate method approved by the Authorized Officer (AO). All remedial work shall be completed and verified prior to drilling out the casing shoe or perforating the casing for purposes other than remedial cementing.
12. The cement mix water used must be of the same water quality used to develop the cement program.
13. All oil and gas operations shall be conducted in a manner to prevent the pollution of all freshwater resources. All fresh waters and waters of present or probable future value for domestic, municipal, commercial, stock or agricultural purposes will be confined to their respective strata and shall be adequately protected. Special precautions will be taken to guard against any loss of artesian water from the strata in which it occurs and the contamination of fresh water by objectionable water, oil, condensate, gas or other deleterious substance to such fresh water.
14. Any changes to the approved drilling plan and/or these conditions of approval shall be approved by the BLM-Buffalo Field Office Petroleum Engineer prior to being implemented.

After hour's numbers:

Supervisory Petroleum Engineer: Matthew Warren Cell Telephone: 307-620-0103

STANDARD

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.