

DECISION RECORD
Petrogulf Corporation, Geer Federal 12-41-20H Plan of Development (POD)
Categorical Exclusion 3 (CX3), WY-070-390CX3-12-112
BUREAU OF LAND MANAGEMENT, BUFFALO FIELD OFFICE

DECISION: The BLM approves the application for permit to drill (APD) from Petrogulf Corporation (Petrogulf) to horizontally drill 1 conventional oil well and construct associated infrastructure as described in the CX3 worksheet, WY-070-390CX3-12-112, which BLM incorporates here by reference.

Compliance. This decision complies with:

- Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701); DOI Order 3310.
- 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).
- Buffalo and Powder River Basin (PRB) Final Environmental Impact Statement (FEIS), 1985, 2003.
- Buffalo Resource Management Plan (RMP) 1985, Amendments 2001, 2003, 2011.

A summary of the details of the approval follows. The CX worksheet, WY-070-390CX3-12-112, includes the project description, including site-specific mitigation measures which are incorporated by reference into that worksheet from earlier analysis. The proposed well is 19 miles southwest of Gillette, Campbell County, Wyoming. The Geer Federal 12-41-20H POD proposal had 1 APD to develop and, if proven, produce oil from the Parkman formation of the PRB.

Approvals: BLM approves the following conventional APD and associated infrastructure:

#	Well Name	Well #	QTR	Sec	TWP	RNG	Lease	CX Number
1	Geer Federal	12-41-20H	SWNW	20	47N	73W	WYW128580	WY-070-390CX3-12-112

Limitations: There are no denials or deferrals. Also, see the conditions of approval (COAs).

THE FINDING OF NO SIGNIFICANT IMPACT (FONSI). Congress, the Department of Interior and BLM affirmed there was no significant impact of a like-structured project when they created this CX3 worksheet process and its limiting parameters. The 3 EA's tiered to or incorporated by reference in the CX3 worksheet also resulted in FONSI. Thus a FONSI and an EIS is not required.

COMMENT OR NEW INFORMATION SUMMARY. Since implementation of this CX3 proposal BFO received a new policy on new sage-grouse policy and maintained that policy into the Buffalo RMP.

DECISION RATIONALE. The approval of this project is because:

1. 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. The PRB FEIS analyzed and predicted that the PRB oil and gas development would have significant impacts to the region's sage-grouse population. The impact of this project's development cumulatively contributes to the potential for local extirpation yet its effect is acceptable because it is outside priority habitats and is within the parameters of the PRB FEIS/ROD and current BLM and Wyoming sage-grouse conservation strategies.
2. The approved project conditioned by its design features and COAs, 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 Geer Federal 12-41-20H POD complies with the Energy Policy Act of 2005, Section 390, 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215.

3. 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.
4. The selected alternative will help meet the nation's energy need, revenues, and stimulate local economies by maintaining workforces.

The Operator, in their POD, 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.

5. The project is clearly lacking in wilderness characteristics because it is amidst gas development.
6. 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.
7. Petrogulf certified there is a surface access agreement with the landowner(s).
8. 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 individual 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.

For Field Manager:



Date:

5/23/12

Categorical Exclusion 3 (CX3), WY-070-390CX3-12-112
Section 390, Energy Policy Act of 2005
Petrogulf Corporation, Geer Federal 12-41-20H Plan of Development (POD)
BUREAU OF LAND MANAGEMENT, BUFFALO FIELD OFFICE

Description of the Proposed Action

Petrogulf Corporation (Petrogulf) proposes to horizontally drill 1 conventional oil well. The proposed well, Geer Federal 12-41-20H (12-41-20H), is approximately 19 miles southwest of Gillette, Campbell County, Wyoming (see Table 1.1 for legal descriptions). 12-41-20H well pad will disturb approximately 2.406 acres during well construction and drilling. Once the well has been determined to produce at economic quantities, the pad size will be reduced to 0.789 acre during interim reclamation. The proposed well location is approximately one mile west of Clarkelen Road, accessed off an existing ranch road. Spot graveling along muddy areas and blading to remove rutts are the only road improvements anticipated.

Elevations range from 3,000 to 5,000 feet above sea level. Topography also varies within the area, from broad flat meadows to gentle rolling slopes. The drainage relief varies from broad grassy swales to deep, incised channels in the uplands. Land use and other disturbances in the area include livestock grazing, ranching, dry land farming, extensive mineral development documented with environmental assessments (EAs), wildlife habitat, and improved and unimproved roads. The area is in the 15-17 inch precipitation zone, with most of the precipitation falling during late winter and spring.

Table 1.1. Proposed Well

#	Well Name	Well #	QTR	Sec	TWP	RNG	Lease	CX Number
1	Geer Federal	12-41-20H	SWNW	20	47N	73W	WYW128580	WY-070-390CX3-12-112

Surface owner: Kenneth B. Geer.

The proposed action is to explore by drilling for, and possibly develop, oil reserves in geologic mineral formations leased by Petrogulf. Petrogulf proposes drilling and developing 1 horizontal oil well into federal mineral estate (WYW128580) from a well pad on a non-federal location. The primary objective is to drill to the Parkman Formation at 6,700 feet, total vertical distance (TVD).

Petrogulf submitted the 12-41-20H POD as a notice of staking (NOS) on March 4, 2011 to the BLM. After onsites on June 7, 2011 the NOS was converted to application for permit to drill (APD). Onsites evaluated the proposal and modified it as necessary to mitigate environmental impacts. The BLM sent a post-on-site deficiency letter to Petrogulf on January 27, 2012. After several ongoing conversations between Petrogulf's designated agent and BLM, deficiencies were considered complete on April 12, 2012.

Drilling and producing mitigation are in the conditions of approval (COAs) for Conventional APD, Appendix A.

Full effects of the action and recommended mitigation measures are in the Geer Federal 12-41-20H Surface Use Plan, this document, and COAs attached as Appendix A.

Drilling, Construction and Production design features include:

- Horizontal drilling of 1 federal conventional oil well into the Parkman formation to depths of approximately 6,700 feet. The well location will be established on a constructed well pad.
- Petrogulf anticipates completing drilling and construction within 2 years. Drilling and construction

occurs year-round in the PRB. Weather may cause delays lasting several days but rarely do delays last multiple weeks. Timing limitations in the form of COAs and/or agreements with surface owners may impose longer temporal restrictions.

- Pump trucks will haul gel, additives and sands needed for hydraulic fracturing.
- Water needed for drilling and cementing will come from an existing stock pond, approximately 3 miles north from the Geer Fed 12-41-20H well. Trucks, using about 500 round trips, will haul the water and Petrogulf will store it in large tanks on location. Petrogulf will use approximately 60,000 barrels of water to complete the well.
- There will be a reserve pit at this oil well location during drilling and completion.
- Installation of a cattle guard at the fenceline at the access from Clarkelen Road onto the proposed access route. No low water crossings will be necessary.
- A road network consisting of 1.17 miles of existing access route that will be minimally improved to remove rutting and graveled in low/muddy spots where needed.
- The access road will have a running surface of 18 feet, maximum grade approximately 3% and cut and fills will be less than 1 foot in depth.
- To prevent perching and nesting of birds, a cone will be placed on the separator exhaust.
- Once the well has been proven to produce at economic quantities, additional information, via sundry, concerning permanent production facilities and related infrastructure will be submitted to the BLM authorized officer, see attached COAs, Appendix A.

Drilling and Completion Water Sources and Amounts

The proposed project is to drill and develop one oil well into the Parkman formation. The operator plans hydraulic fracturing for this well's completion (see the drilling and surface use plan). The project would be subject to the COAs for drilling of an oil well in the BFO jurisdiction. Petrogulf proposes using fresh water for drilling and cementing obtained from a stock reservoir located in NENE section 5, T47N R73W. Water will be hauled to location by transport trucks using the existing roads shown on the Water Source Map, attached with the APD package. No water wells are to be drilled, and all necessary permits will be filed with the Wyoming State Engineer's Office (WSEO) for use of this water source, by the water hauler. The operator estimated ten-400 barrel frac tanks will be located on the well pad. The frac tanks will be filled with fresh water. The water will be mixed with gel, additives and sand in a pump truck. The fluid will be pumped into the wellbore under pressure. Any recovered frac fluids will be produced back into the frac tanks and hauled to an approved disposal site.

For a detailed description of design features and construction practices associated with the proposed action, refer to the surface use plan (SUP) and drilling plan included in the APD. Also see the subject APD for maps showing the proposed well location and associated facilities described above.

Petrogulf provided the BLM a copy of a document in which the owner of the surface authorizes Petrogulf to drill a federal well from non-federal lands.

Total surface disturbance for the proposed action is 6.668 acres; 2.406 acres for well site disturbance and 4.262 acres for potential access road disturbance. As mentioned above, access road disturbance is minimal, to include blading the ruts and graveled low/muddy areas where needed. Interim reclamation will reduce the initial disturbance to 0.789 acres. See Table 1.2 for anticipated disturbance values.

Table 1.2. Construction Disturbance Associated with Geer Federal 12-41-20H APD

Facility	Disturbance (Acres)
Number of oil well(s)	1
Engineered Pad	(2.406)
Road improvement (as needed)	(4.626)
Stand-alone Utilities (flow line, pipeline)	(pending proven production)
Power Drops	(pending proven production)
Overhead Power	(pending proven production)
Total Disturbance	(6.668)
Total Disturbance during Interim Reclamation	(0.789)

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, Buffalo Field Office (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 Geer Federal 12-41-20H APD and area are clearly lacking in wilderness characteristics as it is amidst extensive conventional and natural gas development with miles of mechanically maintained roads, (DOI Order 3310). BLM finds that the conditions and environmental effects found in the senior EA, below, 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 12-41-20H well. This information is provided for informational use and shows the reader that BLM conducted analysis.

Table 1.3. Adjacent or Overlapping Conventional POD Development NEPA, Accounting for Reasonably Foreseeable Development, and Finalized Within Anticipated Spud Date of this Project

#	POD Name	Environmental Assessment #	# of Approved or Producing Wells	Decision Date
1	Gaither Draw Unit	WY-070-EA11-256	4	9/7/2011
2	GDU Federal 43-4	WY-070-EA11-266	1	9/7/2011
3	Heiland Federal 12-4HP	WY-070-08-155	1	8/28/2008

* Contains a confirmation well. BLM incorporates the all EAs by reference into this CX3, tiering to the 3rd EA.

- 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. The Geer Federal 12-41-20H well is in the foreseeable development scenario of 80 acre well-spacing that was analyzed in EAs in Table 1.3.
- 3) The tiered NEPA document was finalized or supplemented within 5 years of spudding (drilling) the proposed wells.

The Geer Federal 12-41-20H POD CX3 tiers to the approved EAs listed in Table 1.3.

In summary, the EAs in Table 1.3 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 the Geer Federal 12-41-20H APD. Geer Federal 12-41-20H APD is similar to both the qualitative and quantitative analysis in the above mentioned EAs. The BFO reviewed these EAs and found that the EAs considered potential environmental effects associated with the proposed activity at a site specific level. The APD's 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 and drilling plan, in addition to the Standard COAs found in the PRB FEIS ROD, Appendices A and B.

Water Resources

The historical use for groundwater in this area was for stock water or domestic purposes. A search of the WSEO Ground Water Rights Database showed there are 5 registered stock wells, ranging in depth from 120 to 525 feet, within 1 mile of the proposed well in the project area, see Table 1.4. For additional information on groundwater, refer to the PRB FEIS (2003), Affected Environment, pp. 3-1 to 3-36.

Table 1.4. WSEO Ground Water Rights within 1-mile of Geer Federal 12-41-20H.

TWN	RNG	SEC	QQ	Permit #	Name	Use	Yield Actual	Well Depth
47N	73W	17	SESW	P18739P	HANNUM #8	Stock	7 gpm	120 feet
47N	73W	19	NENW	P18740P	WEST HOE #9	Stock	10	170
47N	73W	19	NENW	P57770W	WEST HOE #9A	Stock	25	525
47N	73W	20	NESE	P183024W	GEER #2	Stock	0	363
47N	73W	29	NWNE	P18734P	NICHOLS #3	Stock	5	120

Adherence to the drilling COAs, the setting of casing at appropriate depths, following safe remedial procedures in the event of casing failure, and using proper cementing procedures should protect any fresh water aquifers above the target coal zone. This will ensure that ground water will not be adversely impacted by well drilling and completion operations.

At the time of permitting, the volume of water that will be produced in association with these federal minerals is unknown. The operator will have to produce the well for a time to be able to estimate the water production. In order to comply with the requirements of Onshore Order #7, Disposal of Produced Water, the operator will submit a Sundry to the BLM within 90 days of first production which includes a representative water analysis as well as the proposal for water management.

Historically, the quality of water produced in association with conventional oil and gas has been such that surface discharge would not be possible without treatment. Initial water production is quite low in most cases. There are three common alternatives for water management: Re-injection, deep disposal or disposal into pits. All alternatives would be protective of groundwater resources when performed in compliance with State and Federal regulations.

Wildlife

BLM wildlife biologist reviewed the proposed APD and completed a wildlife inventory field inspection on April 16, 2012. The wildlife biologist determined that the proposed APDs, combined with the COAs are: (1) consistent with the FEIS (WY-070-02-065) and its supplements, to include biological opinion (ES-6-WY-02-F006), the RMP and its Amendments, and the above tiered EAs; and (2) consistent with the effects analyzed in the site specific Endangered Species Act section 7 consultation and does not change the determinations in that consultation.

New information regarding sage-grouse includes the 2012 BLM-contracted population viability analysis for the Northeast Wyoming sage-grouse. That study found that there remains a viable population of sage-grouse in the PRB (Taylor et al. 2012); however threats from energy development and West Nile Virus (WNV) are impacting future viability (Taylor et al. 2012). The study indicated that effects from energy development, as measured by male lek attendance, are discernible out to a distance of 12.4 miles. Gaither Draw Unit (WY-070-EA11-256) contains the affected environment information concerning sage-grouse.

The PRB FEIS predicted that the PRB oil and gas development would have significant impacts to the sage-grouse population. The impact of the Geer Fed 12-41-20H development may cumulatively contribute to the potential for local extirpation yet its effect is acceptable because it is outside priority habitats and is within the parameters of the PRB FEIS/ROD and current BLM and Wyoming sage-grouse conservation strategies.

Cultural

A class III cultural resource inventory was performed for the Geer Federal 21-41-20H prior to on-the-ground project work (BFO project no. 70110060). BLM received from Petrogulf a class III cultural resource inventory following the Archeology and Historic Preservation, Secretary of the Interior's Standards and Guidelines (48CFR190) and the *Wyoming State Historic Preservation Office Format, Guidelines, and Standards for Class II and III Reports*. Seth Lambert, BLM Archaeologist, reviewed the report for technical adequacy and compliance with BLM standards and determined it to be adequate. The following resources are in or near the project area.

Site Number	Site Type	Eligibility
48CA3292	Prehistoric	NE

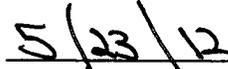
There are no eligible sites within the area of potential effects (APE) of the proposed project. Following the Wyoming State Protocol Section VI(A)(1) the BLM electronically notified the Wyoming State Historic Preservation Officer (SHPO) on September 5, 2011 that no historic properties exist in the APE.

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 Geer Federal 12-41-20H 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.



Field Manager



Signature Date

Contact Person: For additional information concerning this decision, contact Raymond Stott, Natural Resource Specialist Buffalo Field Office 1425 Fort Street Buffalo WY 82834 307-684-1100