

U.S. Department of the Interior
Bureau of Land Management
Glenwood Springs Energy Office
2425 South Grand Avenue, Suite 101
Glenwood Springs, Colorado 81601

Statutory Categorical Exclusion: CO140-08-090

Project: Proposal to directionally drill four new wells into Federal Lease COC66918 from the existing Hells Gulch North Phase I Pad 23-13. The proposed new wells are as follows: 23-13A, 23-13B, 23-13C, and 23-14C.

Surface Location: NWNW, Section 26, Township 8 South, Range 92 West, Sixth Principal Meridian, Mesa County, Colorado.

Proposal: Plains Exploration and Production Company (PXP) proposes to directionally drill the four new Federal wells listed above from the existing Hells Gulch North Phase I Pad 23-13. The new wells would utilize an existing access road and pipeline corridors would require no new surface disturbance to accommodate drilling of the additional wells.

Lease Stipulations and Conditions of Approval: The lease stipulations attached to Federal Lease COC66918 would apply to the four new wells. Downhole Conditions of Approval (COAs) to be attached to Applications for Permit to Drill (APDs) for the new wells are attached to this document. Surface Use COAs are attached to the Decision Document issued by the U.S. Department of Agricultural, Forest Service (surface landowner). The Forest Service Decision Document for the Surface Use Plan of Operations (SUPO) was signed on June 12, 2008, by Ms. Mary Morgan, Forest Supervisor, White River National Forest.

NEPA Compliance: Category #1 of Section 390 Categorical Exclusions of Oil and Gas Development includes the following criteria: *Individual surface disturbances less than five acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously been completed.* The existing as-built area of disturbance is 3.20 acres. The proposed four new directional wells on the existing 23-13 Pad will result in no new surface disturbance. Therefore, the current total of 20 acres of surface disturbance on Federal Lease COC66918 will not be increased by this decision. The existing 23-13 Pad was analyzed pursuant to the National Environmental Policy Act (NEPA) in the *Laramie Energy Hell's Gulch Natural Gas Exploration Project Environmental Assessment (EA)* dated July 2005.

Approval: It is my decision to approve the proposed action with the terms and conditions referenced above.


Allen B. Crockett, Ph.D., J.D.
Supervisory Natural Resource Specialist

6-24-08
Date

DOWNHOLE CONDITIONS OF APPROVAL
Applications for Permit to Drill

Company/Operator: Plains Exploration and Production Co.

Surface Location: NWNW, Section 23, Township 8 South, Range 92 West, 6th P.M.

<u>Well Name</u>	<u>Well No.</u>	<u>Bottomhole Location</u>	<u>Lease</u>
HG	23-14C	SESW Sec. 26, T. 8S, R. 92W.	COC-66918
HG	23-13B	SWSW Sec. 26, T. 8S, R. 92W.	COC-66918
HG	23-13A	SWSW Sec. 26, T. 8S, R. 92W.	COC-66918
HG	23-13C	SWSW Sec. 26, T. 8S, R. 92W.	COC-66918

The downhole COAs identified in the Laramie Energy, LLC Master APD (Approved February 21, 2007) for the Hells Gulch North Phase II shall apply.

1. In accordance with 43 CFR 3162.4(b), the operator shall submit a complete set of electrical/mechanical logs in .LAS format with standard Form 3160-4, Well Completion or Recompletion Report and LOG. Please contact Karen Conrath at 970-947-5235 or karen_conrath@blm.gov for clarification.
2. Twenty-four hours *prior* to (a) spudding, (b) conducting BOP&E tests, (c) running casing strings, and (d) within twenty-four hours *after* spudding, the GSEO shall be notified. One of the following GSEO's inspectors shall be notified by phone: Steve Ficklin at 970-947-5212, Julie King shall at 970-947-5239, and Todd Seiber at 970-947-5220.
3. A verbal approval will need to be granted prior to commencing remedial work, plugging operations on newly drilled boreholes, changes within the drilling plan, or conducting other operations not specified within the APD. Please contact Dane Geyer at 970-947-5229 (office) or 970-589-6887 (cell) for verbal approvals. As a secondary contact, Marty O'Mara may be contacted at 970-947-5221 (office) or 970-319-5837 (cell).
4. If a well control issue arises (e.g. kick, blowout, or water flow) Dane Geyer shall be notified immediately after the situation is safely controlled.

SURFACE USE CONDITIONS OF APPROVAL

Hells Gulch Federal Wells 23-13A, 23-13B, 23-13C and 23-14C

1. **Reclamation:** The reclamation items listed under Master SUPO point 10 (Plans for Restoration of the Surface) are supplemented and/or modified with items 'a through h' below. The specific measures described below shall be followed during interim reclamation of disturbed surfaces associated with well pads, access roads, and pipelines. These measures, except seedbed preparation, shall also apply to temporary reclamation of topsoil storage piles and surfaces that are subject to interim reclamation but not scheduled to undergo interim reclamation until more than 1 year has elapsed following the surface disturbance.

- a. **Seedbed Preparation:** For interim reclamation, all slopes shall be reshaped prior to seedbed preparation. Initial seedbed preparation shall consist of backfilling, leveling, and ripping all areas to be seeded. Ripping shall be to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping shall be conducted in two passes at perpendicular directions. The ripped surfaces shall be smoothed to the final contour and covered evenly with topsoil. Final seedbed preparation shall consist of scarifying (raking or harrowing) the spread topsoil prior to seeding. If more than one season has elapsed between final seedbed preparation and seeding, and if the area is to be broadcast-seeded or hydroseeded, this step shall be repeated no more than one day before seeding to break up any crust that has formed.

Final seedbed preparation in areas for which no topsoil is available shall include discing of the ripped surfaces to smooth the coarse clods, furrows, and windrows. Discing shall be to a depth of 4 to 6 inches and shall be conducted in two passes in perpendicular directions, with the final pass along the contour (across the slope). If more than one season has elapsed between discing and seeding, and if the area is to be broadcast-seeded or hydroseeded, the area shall be scarified (raked or harrowed) no more than one day prior to seeding to break up any crust that has formed.

Seedbed preparation is not required for topsoil storage piles or other areas of temporary reclamation.

Requests for use of soil amendments, including basic product information, shall be submitted to the FS for approval.

- b. **Seed Mixes:** Selection of seed to be used in temporary or interim reclamation shall comply with the menu-based seed mixes in the letter provided to oil and gas operators dated April 16, 2007. For private surfaces, the menu-based seed mixes are recommended, but the surface landowner has ultimate authority over the seed mix to be used in reclamation. The seed shall contain no noxious, prohibited, or restricted weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed may contain up to 2.0 percent of "other crop" seed by weight, including the seed of other agronomic crops and native plants; however, a lower percentage of other crop seed is recommended. Seed tags or other official documentation shall be supplied to the BLM Glenwood Springs Energy Office Ecologist (Beth Brenneman, 970-947-5232 or beth_brenneman@blm.gov) at least 14 days before the date of proposed seeding for acceptance. Seed that does not meet the above criteria shall not be applied to public lands.

Note that temporary reclamation allows use of a seed mix containing sterile hybrid non-native annual species in addition to native perennial species. For both temporary and interim reclamation, the BLM seed mixes no longer include forbs (broadleaf herbaceous species) or shrubs.

- c. Seeding Procedures: Seeding shall be conducted no more than 24 hours following completion of final seedbed preparation. A seed mix consistent with FS standards in terms of species and seeding rate for the specific habitat type shall be used on all NFS lands affected by the project (see Attachments 1 and 2 of the letter provided to operators dated April 16, 2007).

Where practicable, seed shall be installed by drill-seeding to a depth of 0.25 to 0.5 inch. Where drill-seeding is impracticable, seed may be installed by broadcast-seeding at twice the drill-seeding rate, followed by raking or harrowing to provide 0.25 to 0.5 inch of soil cover. Hydroseeding and hydromulching may be used in temporary reclamation or in areas where drill-seeding or broadcast-seeding/raking are impracticable. Hydroseeding and hydromulching must be conducted in two separate applications to ensure adequate contact of seeds with the soil.

If interim revegetation is unsuccessful, the operator shall implement subsequent reseedings until interim reclamation standards are met. Requirements for reseeding of unsuccessful temporary reclamation will be considered on a case-by-case basis.

- d. Mulch: Mulch shall be applied within 24 hours following completion of seeding. In areas of interim reclamation that used drill-seeding or broadcast-seeding/raking, mulch shall consist of crimping certified weed-free straw or certified weed-free native grass hay into the soil. Hydromulching may be used in areas of interim reclamation where crimping is impracticable, in areas of interim reclamation that were hydroseeded, and in areas of temporary reclamation regardless of seeding method.

NOTE: As an exception to this provision, mulch is not required in areas where erosion potential mandates use of a biodegradable erosion-control blanket (straw matting).

- e. Erosion Control: Cut-and-fill slopes shall be protected against erosion with the use of water bars, lateral furrows, or other measures approved by the authorized officer. Biodegradable straw matting, bales or wattles of weed-free straw or weed-free native grass hay, or well-anchored fabric silt fence shall be used on cut-and-fill slopes and along drainages to protect against soil erosion. Additional BMPs shall be employed as necessary to reduce erosion and offsite transport of sediment.
- f. Site Protection: The pad shall be fenced to FS standards to exclude livestock grazing for the first two growing seasons or until seeded species are firmly established, whichever comes later. The seeded species will be considered firmly established when at least 50 percent of the new plants are producing seed. The authorized officer will approve the type of fencing.
- g. Monitoring: The operator shall conduct annual monitoring surveys of reclaimed areas and shall submit an annual monitoring report to the authorized officer by **December 31** of each year. The annual report shall document whether attainment of reclamation objectives appears likely. If one or more objectives appear unlikely to be achieved, the

report shall identify appropriate corrective actions. Upon review and approval of the report by the BLM, the operator shall be responsible for implementing the corrective actions or other measures specified by the authorized officer.

- h. **Deadline for Temporary and Interim Reclamation:** The operator will be allowed to construct the well pad to the maximum expected pad size necessary to drill and complete the number of wells proposed for this location. After 1 year from spudding the initial well, or 1 year after spudding any successive well(s), the operator shall implement and complete the standard interim reclamation practices identified above OR submit proposed best management practices to be approved by the authorized officer that would be implemented on the "open" pad to control stormwater runoff, weed control, wildlife protection, dust abatement, and/or visual resource management. Areas subject to interim reclamation but scheduled to remain in a disturbed condition for more than 1 year shall undergo temporary reclamation, as described above. Contact Beth Brenneman, Glenwood Springs Energy Office Ecologist, at 970-947-5232 or beth_brenneman@blm.gov.
- i. **Reclamation Plan:** The operator shall submit a reclamation plan to the Forest Service describing the requirements in points 'a' through 'h' above as well as the requirements of Onshore Order Number 1 paragraph 4 (Surface Use Plan of Operations) point j (Plans for Surface Reclamation). The plan needs to be site specific and describe in detail the techniques and management practices that will be used in temporary, interim, and final reclamation. The plan must address the practices necessary to reclaim all disturbed areas, including any pad locations, access roads and pipelines. The plan shall be submitted no later than 60 days after APD approval.
2. **Weed Control:** The operator shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the Glenwood Springs Energy Office *Noxious and Invasive Weed Management Plan for Oil and Gas operators*, dated March 2007. Annual weed monitoring reports shall be submitted by **December 31**. Contact Beth Brenneman, Glenwood Springs Energy Office Ecologist, at 970-947-5232 or beth_brenneman@blm.gov.
3. **Big Game Winter Range Timing Limitation:** This COA supersedes Master SUPO point 12.F.3 (Other Information). To minimize impacts to wintering big game, no construction, drilling or completion activities shall occur during a Timing Limitation (TL) period from **December 1 through April 30** annually. To reduce impacts to wintering big game, daily operation and maintenance activities, including well site inspections and removal of produced water, shall be conducted between 9 a.m. and 3 p.m.
4. **Reserve Pits:** This COA modifies Master SUPO point 7 (Methods of Handling Waste Disposal). If a reserve pit is needed for a second season of drilling, all fluids will be removed, the pit will be fenced on all 4 sides, and will be covered with a mesh net material or other appropriate fabric screening to protect wildlife.
5. **Birds-Management Indicator Species:** Brewer's Sparrow nesting surveys will be conducted each spring (annually), no earlier than 15 May, to determine if nesting is occurring in or near areas slated for disturbance. If active nests are identified in areas where ground disturbing activities are scheduled, timing restriction will be implemented from May 1 to June 30. An exception to this COA will be granted if nesting surveys conducted indicate no active Brewer's sparrow nest locations or if ground disturbing activities will be occurring on NFS lands with unsuitable nesting habitat.

6. **Range Management:** Range improvements (fences, gates, reservoirs, pipelines, etc) shall be avoided during development of natural gas resources to the maximum extent possible. If range improvements are damaged during exploration and development, the operator will be responsible for repairing or replacing the damaged range improvements. If a new or improved access road bisects an existing livestock fence, steel frame gate(s) or a cattle guard with associated bypass gate shall be installed across the roadway to control grazing livestock.
7. **Cultural Education/Discovery:** All persons in the area who are associated with this project shall be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

Pursuant to 43 CFR 10.4(g), the authorized officer shall be notified by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), activities shall stop in the vicinity of the discovery, and the discovery shall be protected for 30 days or until notified by the authorized officer to proceed.

If in connection with operations under this contract, the operator, its contractors, their subcontractors, or the employees of any of them discovers, encounters, or becomes aware of any objects or sites of cultural value or scientific interest such as historic ruins or prehistoric ruins, graves or grave markers, fossils, or artifacts, the operator shall immediately suspend all operations in the vicinity of the cultural resource and shall notify the Forest Service of the findings (16 USC 470h-3, 36 CFR 800.112). Operations may resume at the discovery site upon receipt of written instructions and authorization by the Forest Service. Approval to proceed will be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the Forest Service from a Federal agency insofar as practicable. When not practicable, the operator shall bear the cost of the services of a non-Federal professional.

Within five working days, the Forest Service will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- what mitigation measures the holder will likely have to undertake before the site can be used (assuming that *in-situ* preservation is not necessary)
- the timeframe for the Forest Service to complete an expedited review under 36 CFR 800.11, or any agreements in lieu thereof, to confirm through the SHPO State Historic Preservation Officer that the findings of the Forest Service are correct and that mitigation is appropriate

The operator may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately cleared of resources and the exposed materials are recorded and stabilized. Otherwise, the operator shall be responsible for mitigation costs. The Forest Service will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the Forest Service that the required mitigation has been completed, the operator will be allowed to resume construction.

Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or indirectly, by the proposed action shall also be included in this evaluation or

mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the operator's cost, including the cost of consultation with Native American groups.

Any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361).

8. **Visual Resources:** Above-ground facilities shall be painted a natural color selected to minimize contrast with adjacent vegetation or rock outcrops. The color shall be Federal Color 34095.

9. **Fire, Health and Safety:**

- a. **Fire Restrictions.** The operator will comply with any fire restrictions in effect at the time of proposed operations. The Forest Service reserves the right to suspend operations during periods of high fire potential. Forest Service will provide the operator as much advance notice of anticipated closure orders as possible.
- b. **Fire Prevention.** Fire prevention measures for all equipment will be in place prior to operations. The operator will have water available, and provide a means for pumping for fire suppression. Fire extinguishers, at least 5 lbs. ABC with an Underwriters Laboratory rating of 3A-40BC, or greater will be on or near each internal combustion engine. Fire suppression equipment must be available to all personnel working at the project site. Equipment must include at least one hand tool per crewmember (e.g. shovel).
- c. **Spark Arresters.** All gasoline, diesel and steam-powered equipment must be equipped with effective spark arresters or mufflers. Spark arresters must meet Forest Service specifications discussed in the *General Purpose and Locomotive (GP/L) Spark Arrester Guide, Volume 1, April, 1988*; and *Multi-position Small Engine (MSE) Spark Arrester Guide, April, 1989*. In addition, all electrical equipment must be properly insulated to prevent sparks.
- d. **Fire Reporting.** The operator shall be held responsible for damage and suppression costs for fires started as a result of operations to the extent permitted by state and federal law. Fires shall be reported to the Forest Service as soon as possible.

10. **Access Roads:**

- a. **Gates.** Single-use well access roads shall be used for industry related activity only, gated, and closed to the general public. All road closure devices and signs shall meet the Manual of Uniform Traffic Control Devices (MUTCD) and Forest Service sign standards.
- b. **Traffic Control.** The Forest Service maintains the right to require the use of state certified flaggers for traffic control along all roads into and out of the project to maintain public health and safety.
- c. **Design Criteria and Construction Plans.** All road construction, reconstruction, improvement, maintenance and reclamation requirements on all Forest Service roads

shall be performed in accordance with the project road design criteria and road construction plans as approved by the Forest Service.

- d. Weather Delays. During new construction weather delays and shut downs shall be planned for. To prevent unnecessary resource damage, all work, including excavation, blading, topsoil stripping, backfilling and reclamation, activities shall be allowed only when soils are sufficiently dry and not frozen as determined by the Forest Service. A general guideline is not excessively wet below 3 inches or frozen below 6 inches.
- e. Surfacing. To prevent road and resource damage, all road construction, reconstruction, maintenance and surfacing placement shall be completed prior to the movement of heavy equipment, such as drilling and completion equipment, unless approved otherwise by the Forest Service. Rock replacement and turnout construction along FSR 816 shall be completed as directed by the Forest Service.
- f. Permits. Road use and over-legal permits are required for all project vehicles traveling on FSR 816 and FSR 270. The road use and over-legal permitting requirements are outlined in an information packet sent to oil and gas operators in April 2008. Additional copies of this information packet are available upon request.
- g. Traffic Signs. All traffic signs meet the Manual of Uniform Traffic Control Devices (MUTCD) and Forest Service sign specifications.
- h. Dust Abatement. Travelway preparation and dust abatement application shall meet the requirements of Section 310 and applicable subsections of the "Forest Service Specifications for Construction of Roads and Bridges", EM-7720-100, Revised August 1996 (Black Hills English Edition). This reference has been provided to the operator.
- i. Snow Removal. Snow removal shall be done in a manner to maintain and protect the integrity of the roads. The intent is to insure safe and efficient transportation and to prevent unacceptable resource damage to roads, streams, and adjacent lands.

Description. Snow removal work by the operator or their sub contractor shall include:

- Removal of snow from the entire road surface width including turnouts.
- Removal of snow slides, earth slides, fallen timber and boulders that obstruct normal road surface width including turnouts.
- Removal of snow, ice, and debris from culverts so that the drainage system will function efficiently at all times.

Performance. All items of snow removal shall be done as necessary to insure safe, efficient transportation. Work shall be done in accordance with the following minimum standards of performance.

1. All debris, except snow and ice, which is removed from the road surface and ditches, shall be deposited away from stream channels at agreed too locations with the Forest Service. Spoil or wasted snow shall be stockpiled at pre-approved locations on NFS lands.

2. During snow removal operations, banks shall not be undercut nor shall gravel or other selected surfacing material be bladed off the roadway surface.
3. Ditches and culverts shall be kept functional during and following roadway use.
4. Snow berms shall not be left on the road surface. Berms left on the shoulder of road shall be removed and/or drainage holes shall be opened and maintained. Drainage holes shall be spaced as required to obtain satisfactory surface drainage without discharge on erodible fills.
5. Dozers and other large equipment shall not be used to plow snow on Forest Service system roads without approval from the Forest Service. Upon approval, equipment must be equipped with shoes or runners to keep the plow blade a minimum of 3-4 inches above the road surface unless specifically removed from the requirements in writing. Shoes shall be attached to blades on snow removal equipment.
6. Snow must not be removed to the road surface. A minimum three to four inch depth must be left to protect the roadway.
7. The operator or sub contractor damage from, or as a result of, snow removal shall be restored once conditions allow for repair.
8. Deposit plowed snow past the edge of the road shoulder.
9. Do not push snow outside the clearing limits.
10. The operator or sub contractor shall be responsible for flagging or staking drainage structures, as well as the inlets & outlets of culverts, crests and outlet ditches of cross drainages.
11. The crest portion of rolling dips shall not be bladed off.
12. The outlet ditch shall be free draining to at least the clearing limits.
13. Culvert inlets and outlets shall be flagged or staked to ensure protection against damage.
14. Do not remove compacted snow on roadway surface and drainages in turn around areas.
15. There shall not be any damage to trees when removing or plowing snow off the road.
16. When operations have ceased for the winter the following must occur:
 - All drainage structures will function effectively.
 - Snow berms (if any) shall be spread back across the roadway to facilitate filling in of snow.
 - If the road can not be protected by constructing a closure berm, constructed of snow or using a permanent road closure device, then the operator or sub contractor shall be responsible for placing temporary road closure devices

(Type III movable barricades) to prevent wheeled vehicle traffic from using the road.

- Road closure devices shall meet the requirements of MUTCD.

11. Vehicle Inspections: During drilling, completion, and operations and maintenance activities, all vehicles and equipment that have extensive contact with the ground (e.g., fracing trailers) would require power washing prior to entering the project area the first time, and as necessary (i.e., if they acquire new dirt or mud while off the National Forest) prior to subsequent trips.

12. Bonding: The operator shall submit a reclamation bond to USDA Forest Service, White River National Forest, or increase their statewide bond with the BLM, in an amount as determined by the Forest Service to account for the total cost of reclamation.

This bonding requirement is in addition to the required state-wide bond and shall be in place within 60 days of drilling and completion operations ending. The bond will be reviewed and updated every 5 years or any time the Forest determines the financial instrument held by the BLM is not adequate to ensure complete and timely reclamation and restoration and the bond remains commensurate with current costs. This bond is required since the cost to reclaim lease roads and pads exceeds the present bond amount (36 CFR 228.109).

13. Miscellaneous:

- a. Project employees shall be prohibited from carrying firearms or bringing dogs to the project area.
- b. The earthwork contractor foreman shall have copies of the road construction plans, conditions of approval and surface use plan of operations on hand at all times.