United States Department of Agriculture
Forest Service
Columbine Ranger District
San Juan National Forest
POB 439
367 Pearl Street
Bayfield, CO 81122
Voice: 970-884-2512
FAX: 970-884-2428
http://www.fs.usda.gov/sanjuan

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Dear Interested Party,

The Columbine Ranger District of the San Juan National Forest is conducting public scoping to gather input for the *Northern Extension Pipeline and associated Fruitland Coal Gas Horizontal Drilling Project* as proposed by Petrox Resources, Inc. The project is located on San Juan National Forest (SJNF), state, and private lands within the eastern HD Mountains of Archuleta County, Colorado. The authorization for the project would involve the approval of one Surface Use Plan of Operation (SUPO) for on-lease pipelines and three Fruitland Coal gas wells, and one Special Use Permit Amendment (SUP Amendment) for off-lease pipelines.

The Columbine Ranger District is preparing environmental analysis documents for the proposed project and we are inviting your input on the scope of issues to be analyzed. See the attached map for proposed project locations.

Purpose and Need for Action

The purpose of the proposed action is to further develop valid and existing federal oil and gas leases in an environmentally responsible way by approving the SUPO and SUP Amendment in a manner consistent with applicable laws, regulations, policies, lease stipulations, the 2013 Land and Resource Management Plan (Forest Plan), the 2007 Northern San Juan Basin Final Environmental Impact Statement (NSJB FEIS), SUPO-specific mitigation measures, and appropriate Best Management Practices.

The Forest Service, as surface manager, and the Bureau of Land Management, as minerals manager, will work together using established inter-agency procedures to determine appropriate conditions of approval, and to authorize the drilling and pipeline construction.

Proposed Action

The proposed action is the construction of a Northern Extension Pipeline on SJNF, state, and private lands; the construction of one new gas well pad and access road on SJNF land; and the re-completion of two existing gas wells located on SJNF. The SJNF will be making decisions for National Forest System land only.

The Northern Extension Pipeline would consist of a buried 16-inch natural gas pipeline and 4-inch produced water pipeline. The route of the pipeline varies by alternative (see below). There would be no on-going disturbance for the pipeline after native vegetation is successfully re-established. Areas that might have to be re-disturbed for pipeline system repairs would be reclaimed as soon as possible.

The proposed FGU #6-1 multi-lateral horizontal well pad would be accessed via an existing private road off of U.S. Highway 160 with a proposed 100-foot access road on SJNF land, resulting in total long-term surface disturbance of approximately 2 acres. A portion of the well pad would be located within the HD Mountains Non-Upper Tier Colorado Roadless Area (CRA).

The multi-lateral horizontal re-completion of the two existing gas wells in Lange Canyon would result in no additional surface disturbance as the re-completion activities would be limited to the existing disturbance footprint of the well pads and access roads (approximately 4 acres existing).

Well pad and pipeline construction, drilling, completion, and reclamation activities could begin during the fall of 2019. During implementation, the proposed project may result in temporary and periodic increased traffic and road closures along National Forest System Road 132 (Lange Canyon Road), National Forest System Road 743 (Relay Station Road), and the northern end of National Forest System Road 613 (Fosset Gulch Road).

Forest Plan 80-acre Infill Scenario vs. Proposed Action Scenario

Eighty-acre infill drilling using new vertical wells to produce Fruitland coal gas was included in the reasonably foreseeable development scenario for the Forest Plan and was analyzed on a resource-by-resource basis for the entire Northern San Juan Basin. The Forest Plan estimated 2.3 acres of long-term access road and pad disturbance per 80-acre infill well and a total of eight wells per square mile.

The proposed action is to produce Fruitland coal gas via multi-lateral horizontal wells from 3 square miles within the northeastern portion of the Northern San Juan Basin. No additional compressor stations are proposed, and facilities for routine pipeline maintenance like pig launchers/receivers would be located on well pads.

The proposed action is preferable to the scenario analyzed in the Forest Plan because it would require approximately 2 acres of new long-term disturbance to achieve the same gas reservoir depletion analyzed in the Forest Plan, which would require approximately 51 acres of new long-term disturbance. Table 1 summarizes the estimated long-term disturbance associated with the Forest Plan and proposed action scenarios.

Table 1. Estimated Long-term Disturbance- Forest Plan vs. Proposed Action

	Forest Plan 80-acre Infill (Vertical Wells)	**Proposed Action (Multi-lateral Horizontal Wells)**
Size of Gas Reservoir Depletion (square miles)	3	3
Number of Well Pads per Square Mile	8	1
Total Number of Well Pads	24	3
Long-term Disturbance per Pad / Access Road (acres)	2.3	2.0
Total Long-term Disturbance* (acres)	**51.2**	**2.0**

* Less 4.0 acres of existing disturbance associated with wells in Lange Canyon.

Preliminary Issues

During internal review, the Columbine District has already identified the following concerns or issues with the proposed action; initial rationale concerning these impacts is included.

- The proposed action would allow for a linear construction zone within the HD Mountains CRA. The location of the proposed pipeline through CRA is the environmentally preferred route because it would follow a mostly pre-existing disturbance corridor (old road bed) through gentle terrain and require minimal clearing and surface disturbance. The buried pipeline would protect roadless values; impose no unacceptable impacts to CRA characteristics; and would be consistent with the Colorado Roadless Rule (36 CFR Part 294.44 (c)(4) and 294.46(d)).

- The proposed action would allow for construction of a pipeline gathering system within federal lease COC 064935, which contains a No Surface Occupancy (NSO) stipulation for the protection of seven resource values specific to the lease. If these resource values can be shown to be protected or avoided, an exception to the NSO stipulation can be granted by the Forest Service.

- The proposed action would develop coalbed methane from the Fruitland Formation, which has the potential to exacerbate methane seepage at the Fruitland Formation outcrop under certain geologic conditions. On-going monitoring wells near the eastern portion of the outcrop where the project is located have confirmed that there is no natural pre-existing gas seepage in the vicinity, and development to date has not created any new seepage. Monitoring will continue under the guidance of a technical working group.

Preliminary Alternatives

Alternatives are generated to address project-related issues. Other alternatives may be generated as the analysis proceeds. The following alternatives have been preliminarily identified (see map):

- Alternative 1. No Action Alternative. The proposed project as described above would not occur. Valid existing rights would not be developed.

- Alternative 2. Cross CRA and NSO (Proposed Action). Of the total 8.6-mile pipeline length, about 4.7 miles of the route would be located on National Forest System land, with 0.8 miles (approx. 3 acres) within the CRA. Approximately 1 acre of the well pad would be in the CRA.

- Alternative 3. Highway Corridor. This alternative would be about 0.3 miles longer and require a spur pipeline to produce two proposed wells on state land. The corridor along U.S. Highway 160 has rugged topography, perennial water, and riparian vegetation. Petrox reports that Colorado Department of Transportation will not allow a gas pipeline in the highway corridor. This would also cause a higher safety risk by putting a pipeline adjacent to a high volume of traffic on the highway. Additionally, the location on private land has not been investigated and would require landowner consent.

- Alternative 4. Two Pipeline Systems (northbound and southbound from outside the CRA). The ends of two systems would be located outside the CRA boundary, requiring approximately 2 more miles of pipeline corridor to connect a northern system to the existing pipeline system in the Sauls Creek area operated by BP. Petrox reports that BP will not accept third-party gas and water in their pipeline system, which is already at capacity. Managing a two-pipeline system to produce gas and water from the Northern Fosset Gulch Unit would present additional operational and financial challenges.

- Alternative 5. Bore Under CRA. Boring costs are generally five to ten times greater than trenching and burying costs. A bored pipeline would require about 5-10 additional acres of surface disturbance on private and state lands for the entry and exit points. Extensive, unplanned surface disturbance in the CRA could be required upon failure of boring operations. The bored gas and water pipelines could be 10-60 feet below the surface and any maintenance or repair work would require greater disturbance.

- Alternative 6. Skirt CRA to the East. The topography and resource values east of the CRA are rugged and challenging and include erosive soils and steep north facing slopes with areas of soil instability or thick timber. The potential impacts from such a corridor would not be consistent with the NSO stipulation on lease COC 064935. The reclamation challenges would be almost insurmountable, and an NSO exception could not be granted. Additionally, this alternative would result in a large scar next to the CRA.

- Alternative 7. Avoid Pole Creek. Minimize impacts to mature trees and drainages by locating the pipeline corridor along an old road bed adjacent to Little Squaw Creek that leads to the old Yellowjacket Guard Station site at the northern end of Fosset Gulch Road, then continuing along Fosset Gulch Road. This alternative would add approximately 0.8 miles of pipeline and present construction challenges, including:

    - multiple areas of surface bedrock in the roads,
    - additional costs to meet road design, compaction, and re-surfacing requirements, and
    - disruptions to Fosset Gulch Road traffic during pipeline construction, maintenance, and repair.

- Alternative 8. Well Pad Outside CRA. Forest Service staff reviewed the lease area and determined that the location of the well pad as proposed in Alternative 2 is the preferred location because it minimizes impacts to the private landowner (visual and auditory), mature timber, drainages, and meadows. Additionally, the proposed well pad location minimizes the cut-and-fill slopes and volumes necessary for pad construction as compared to locations adjacent to the CRA.

How to Provide Input

We are informing you of a 30-day scoping period for the proposed action in order to ensure that all issues are identified for consideration. It would be helpful if you concentrate your reply on issues or impacts other than those already identified or provide alternatives or suggestions for mitigating impacts or issues.

Written input may be submitted on or before September 28, 2018, by:

- US Postal Service: San Juan National Forest Headquarters Office, 15 Burnett Court, Durango, CO, 81301, Attention: Walt Brown
- FAX: (970) 375-2331
- Email: wabrown@fs.fed.us.
- Hand delivery: San Juan National Forest Headquarters Office, 15 Burnett Court, Durango, CO, 81301, Attention: Walt Brown. Hand delivered comments will be accepted on weekdays between 8:00 am and 4:30 pm, excluding holidays.

Input received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record and will be available for public inspection.

This letter also requests your input, if any, on the potential effects to historic properties. This request is made to satisfy consultation requirements with local governments pursuant to Section 106 of the National Historic Preservation Act.

The Columbine District will consider all input received to determine the appropriate level of environmental documentation needed. A future public comment period will be offered on the pre-decisional environmental analysis document. It should be noted that impacts from the proposed actions have been included at the programmatic level in previous analyses of the NSJB FEIS and the Forest Plan.

If you have any questions related to this project, please contact Walt Brown at (970) 385-1372 or Matt Janowiak at (970) 884-1438.

Sincerely,

Matt Janowiak
Columbine District Ranger

Attachment: Project Alternatives Map dated 7/30/18