

January 12, 2006

Mr. Michael J. Blymyer, Field Manager

Bureau of Land Management

P.O. Box 518

Cody, Wyoming 82414

Attention: Clark 3-D Project EA

Dear Mr. Blymyer,

Please accept the following comments on the revised Clark 3-D Geophysical Project Environmental Assessment (EA) from Clark Resource Council, Powder River Basin Resource Council, and the Oil and Gas Accountability Project. We ask that an Environmental Impact Statement (EIS) be implemented to include all areas of exploration and development along the Beartooth Front and in the community of Clark, Wyoming. This beautiful, unique environment deserves protection through adequate and sound mitigation. In addition, this project is causing significant impact to the human environment for the following reasons:

1. As written on page 11 “This analysis is also limited to geophysical exploration operations. Analysis of land availability for oil and gas leasing and the land specific leasing decisions were made in previous decisions by both agencies (Cody RMP and SNF Land & Resource Management Plan) and are therefore outside the scope of this analysis.”

- Resource Management Plans and Shoshone National Forest Plans are both over 10 years old and scheduled to be rewritten. We maintain that the rewritten plans must be completed before any further resource exploration or extraction continues in order to guarantee consideration of all new information about the area.

2. On page 11 “Applications for permits to drill (APDs), or potential development of oil and gas fields and ancillary facilities (i.e. compressor stations, pipelines, etc) in the Clark area are also beyond the scope of this EA and will not be addressed or discussed, as such actions would require separate NEPA analysis.”, and page 28, “Any attempt to predict future development and its effects on socioeconomic factors would be beyond the scope of the EA.”, and on pages 28-31 ISSUE—SOCIOECONOMICS: Throughout this section socioeconomic factors are said to be outside and beyond the scope of analysis of this EA. Also, on page 27, “The scope of this EA is focused on the acquisition of field data relating to the potential likelihood for energy resources in the area. How this data would be used is unknown at this time. An attempt to assess the impacts from possible further energy exploration and development would have to be considered speculation at this time and inappropriate for inclusion in this EA.”

- 35% of this seismic exploration is being proposed on private lands, since public concerns is one of the issues upon which decision on this EA is based, and because impacts have already been felt in the Clark community from Windsor's (employers of Quantum) ongoing exploration, socioeconomics cannot be outside and beyond the scope of analysis of this EA. Impacts to the human environment must be addressed and included on private, as well as public, lands. There are no experts on socioeconomic issues and impacts listed in the EA, or in 5.0 REFERENCES SITED. An Environmental Impact Statement on the entire proposed area of exploration and development must be prepared to assure protection to the natural and human environment. Piecemealing the project into smaller EAs does not fully address the impacts to the natural and human environment.
- The EA continuously states opinions that are not based on scientific study or expert testimony. This consistently shows a pro-industry and pro-development bias by the author. The conclusions and reasons for actions stated in the EA must be backed by facts from scientific studies and expert testimonies. .
- Historically, the cumulative impact of overlapping 3D projects in Clark has resulted in wells being drilled by Windsor Energy Group, (employer of Quantum Geophysical, Inc.). These wells have significantly impacted the Clark community through disruptive and environmentally damaging drilling activity and associated infrastructure (pipelines, gas plants, etc.), subsequently decreasing property values and overall quality of life. These are significant impacts to the human environment of the Beartooth Front and the community of Clark.
- This EA does not adequately address impacts to Clark residents from increased traffic (aerial and vehicular), dust, transient workers, increases in criminal activity, blowing garbage, the spread of noxious weeds and invasive plants, noise, explosive detonations and how these impacts could further diminish property values and quality of life and discourage prospective new residents.
- Liquid wastes from ongoing oil and gas exploration and development in Clark cannot be accepted at landfills in the Big Horn Basin, and as more of this waste is produced there are no plans for its disposal. Windsor (employer of Quantum Geophysical) has illegally disposed of wastes from this exploration and should produce legal plans for further disposal of wastes.
 - 35% of the 45.8 square miles (29,300 acres) in this proposed seismic project is private lands. This proposed 3D seismic and on-going exploration and development in the entire Windsor project area will affect approximately 350 private landowners, most of who are on split estates. Approximately 3,348 points over 139.5 linear miles have been proposed in Alternative 2. Although concerns over who will

take responsibility for any accidents from undetonated charges left in the project area have been voiced on numerous occasions, the concerns have not been addressed in this EA.

3. The following safety issues surrounding 3D Geophysical operations in rural residential areas and subdivisions are not properly addressed in the EA:

A. Page 51. Description of explosives magazine in staging area does not comply with OSHA 29CFR 1910.109

B. Page 56. Under Fire Prevention and Reporting Measures-Item 1, "appropriate fire response agencies" are not identified.

- Requirement and verification of a level of training specifically for and peculiar to explosives incidents is not included.
- Is there a Haz-Mat team or Emergency Response Unit with such incident specific training available to the Clark Community and members of the public in the project area?
- Are the BLM or FS line officers or his/her designated representatives, who are to coordinate the response, trained for emergencies involving fires where explosives are involved?

C. Page 68 & 69 Table 4. Safety issues, for public and employees, are not included in the comparison of effects of alternatives.

D. Where will staging areas for explosives, equipment, and vehicles be located?

- What specification for safety plans will be used at these areas?
- How will safety plans be shared with the public?

In August of 2004, President Bush signed the Executive Order Facilitation of Cooperative Conservation, which states in Section 3. Federal Activities. To carry out the purpose of this order, the Secretaries of the Interior, Agriculture, Commerce, and Defense and the Administrator of the Environmental Protection Agency shall, to the extent permitted by law and subject to the availability of appropriations and in coordination with each other as appropriate:

(a) carry out the programs, projects, and activities of the agency that they respectively head that implement laws relating to the environment and natural resources in a manner that: (ii) takes appropriate account of and respects the interests of persons with ownership or other legally recognized interests in land and other natural resources. (iii)

properly accommodates local participation in Federal decision making; and (iv) provides that the programs, projects, and activities are consistent with protecting public health and safety.

For the above reasons the human environment will be severely impacted unless an EIS of the entire project area is implemented, and socio-economic impacts from this proposed 3D Seismic Exploration and further development across the Beartooth Front and in the community of Clark, Wyoming are thoroughly analyzed.

4. As Stated in Wyoming Oil and Gas Conservation Commission's Rules and Regulations in (Chapter 4, Section 6 (r)(i)), Seismic shothole operations will not be conducted within one-quarter (1/4) mile of any building or water well, flowing spring, or stock water pipeline. The provisions of this subsection may be modified by any reasonable written agreement between the geophysical/seismic company and the surface owner. This rule must apply to all public and private lands.

Page 45. "The applicant is responsible for obtaining approvals and permits from landowners prior to commencement of activities. Many of these tasks have been underway for some time."

- "Accepted Industry standards" as stated in Table 3: page 46, states that 10# charges are setback 700 feet from water wells. This is far less than the mile (1,320 feet) WOGCC rules and regulations require. Quantum Geophysical, Inc. contracts already negotiated in the proposed project area, offered private land owners even less than industry standards. Quantum offered a 500 foot setback from water wells with source points (see attached contracts). Landowners were not advised of the above WOGCC rule and therefore did not enter into a reasonable written agreement. All contracts already negotiated between Quantum/Windsor and private land owners should be voided and land owners should be advised of the WOGCC rules and regulations stated above before entering into any contracts for seismographic survey.

5. On page 14 & 15. "Impacts to the entire proposed area, including state and private lands, have been considered; however, BLM and FS authority for entry and occupancy is limited to federal lands. Required Project Design Features (protective measures, best management practices (BMPs), or Conditions of Approval of the NOI relative to the BLM and FS) pertain to protection of all lands that may be potentially affected by the activity on federal lands. As an example, offsets from springs, wells, or other water sources would be required even if the sources are on adjacent non-federal land.", and page 20. "No charges would be detonated within one-quarter (1/4) mile of groundwater wells,"

- Will mile offsets from springs, wells, or other water sources be honored on all private land under these required project design features?
- What are the BMPs and protective measures?

6. The applicant states that they will test the flow of wells “upon request”. It is important that the applicant be required to inform local property owners and lease holders that they offer this test. After this test, the applicant states that a post-activity testing will be done to compare to the pre-seismic test.

- How will adjacent property owners know of these offers?
- Will testing for water contamination be done?
- What is the next step if it is found that a well has been impaired or contaminated after seismic activity?
- Will the seismic company pay for these tests?

7. Passive Seismic, a proven, reliable technology should not be dismissed. This technology should be more thoroughly considered to insure safety and least possible impact to the human and natural environment. Additional costs of conducting passive seismic surveys should be part of doing business in areas where the human environment could be negatively impacted by conventional seismic operations using explosives.

8. Future designation of the Clark’s Fork of the Yellowstone River as a Wild and Scenic River within the project area is a real possibility. Not only are segments of the river that lie within the project area in pristine wilderness, they are also adjacent to the newly-identified Native American cultural areas that were not previously evaluated.

9. Page 34-35. ISSUE-ROADLESS AREA PROTECTION: Proposed geophysical exploration operations would not degrade roadless character within the inventoried roadless area, as no significant land disturbance would occur, no roads would be constructed or reconstructed, and no trees would be cut. Therefore, as roadless area characteristics would not be adversely affected, the issue of roadless area protection was eliminated from further analysis. The EA states that existing roads and open two-track trails were (page 46) and will be used, when possible.

- Will vehicles used for the seismic exploration be using trails and roads that have been created legally or illegally?
- Who will determine the legality of these trails and roads?
- How will the determinations be communicated to the people in the field?
- How will trails and roads established from the proposed seismic survey be addressed?
- Who will regulate these new roads and tracks when Quantum/Windsor finishes the seismic survey?

- If recreational vehicles use tracks that have been established by the seismic survey, who will be responsible for the restoration needed to shut the tracks down?
- Who will assure recreational vehicles do not introduce noxious weeds into areas where tracks have been established by the seismic survey?
- How can these roadless area protections be eliminated from further analysis?

10. Page 51. “Crew members would travel the lines, picking up all cable, geophones, project markers (lathe, ribbon, etc.), and other refuse and depositing the items into cache bags. The cache bags would be transported out of the project area via helicopter. All trash would be disposed of properly at a Wyoming DEQ approved disposal site.”

- In previous survey operations by Quantum no such trash removal took place. How will these clean up plans be enforced in the future??

11. Page 52. Bonding. “A bond to insure rehabilitation and protect against damage would be required.”

- How much would these bonds be?
- Do these bonds apply to federal lands only?
- What would be in place for private land within the project area?

12. Page 22. “an unnamed creek which runs from Hogan’s Reservoir to Paint Creek” is listed. There are no unnamed creeks in that part of the project area. This shows a lack of knowledge of the project area by the author of the EA.

13. Page 23. “No drilling and no vehicle use off open roads would be allowed within 500 feet of the Clark’s Fork of the Yellowstone River and/or within 150 feet of the high water mark of all other live waters in the project area. All placement of recording equipment and cables would be conducted on foot with helicopter support within these sensitive areas.”

- What is live water?
- The above statement is confusing; is Quantum/Windsor proposing to drill within 500 feet of the Clark’s Fork and/or within 150 feet of the high water mark of all other live waters in the project area?
- What constitutes sensitive areas where placement of recording equipment and cables would be conducted on foot with helicopter support?

14. In the Wildlife section it is unclear how sage grouse habitat will be protected.

- Who will determine sage grouse habitat when setting shotholes?
- Will survey crews be trained to recognize sagebrush that support sage grouse and their habitat?

15. Throughout the document Best Management Practices (BMP) are listed as a means to ensure protection of the public and private lands, but no specific practices are detailed. A more clear and detailed list of BMPs is needed.

16. The BLM and Forest Service are listed as agencies who will conduct regular compliance inspections to monitor environmental concerns, yet there is no explanation of how the inspections will be done.

- How often will inspections be done?
- Which agency will do inspections?
- How much personnel will be needed to monitor environmental concerns?

17. Page 29. “According to the Park County Sheriff’s Department, historically the majority of major criminal activity within the county has been associated with the local populace, even during the previous periods when major energy booms have occurred.”

- What studies are these statements from and what statistics are being referenced?
- Who are the experts that wrote the studies?

18. Page 29. “This project has been designed with safety, resource protection, and watershed protection in mind.”

- Where are the plans that specifically state the safety, resource protection, and watershed protections?

19. On page 31, 32, and 33. ISSUE-GEOLOGY AND MINERALS: “The proposed Clark 3D project lies within the Bighorn Basin, an area notable for a high potential for hydrocarbons.”

- Although the Bighorn Basin has a history of oil and gas development, those areas of production have been in the bottom of the basin, rather than along the Beartooth Front, what studies have been referenced to note that high potential for hydrocarbons are likely along the Beartooth Front?

“There are several producing wells adjacent to the project area, and one rig is presently drilling on non-federal land within the project area on Bennett Creek.

- There are no drilling rigs presently in operation within the project area on Bennett Creek. This shows a lack of knowledge of the area by the author of the EA.

Projections of future development as a result of the proposed action are remote and speculative. The BLM has not received any concrete proposals for development of wells within the Clark 3D project area; therefore, there will be no attempt to analyze impacts of potential development within this EA other than a broad-based, generalized discussion provided in the Cumulative Impacts Section (see Section 3.9) of this document.

- Quantum/Windsor will spend a substantial amount of money to conduct this 3D exploration. Furthermore, Windsor is planning infrastructure for developing gas in the Clark area and along the Beartooth Front (pipelines and production facilities). This is concrete development which is already underway by Windsor. Therefore, there should be an attempt to analyze impacts of concrete development already underway in the form of an EIS which will explore the impacts to the human and natural environment.

20. Throughout the document the applicant has used the words "should" and "would" to describe actions to be taken. The correct term to describe actions to be taken is "will."

21. Page 35. "users in the area would be notified of operations, the daily operating period is restricted, staging areas are designated, and other PDFs assure that the safety hazard would be minimal."

- Who are users in the area?
- Will private land owners be notified?
- How would users in the area be notified?
- What are other PDFs?

22. Page 37. "Hazardous substances could contaminate natural resources, if spilled. With implementation of proper waste disposal and spill clean-up project design features, and an approved emergency response plan, no adverse impact is foreseen."

- What are proper waste disposal and spill clean-up project design features?
- What is the emergency response plan?
- Who will implement the above plans and clean-ups, and how will they be trained?

23. ISSUE—EMERGENCY RESPONSE PLAN: "An emergency response plan relative to fires is required as specified in Section 2.3.2. In addition, any of the PDFs in Section 2.3.2. address contingencies and response requirements relating to health and safety, hazardous spills, etc.

- The emergency plans referenced above are vague and not listed in detail. They are not specific to who will be covered, who will implement the plans, and how they will be trained. Because humans live in the project area, these plans must be detailed and an EIS must be implemented to assure there will be no significant impact to the human environment.

24. “Based on discussion with people having knowledge and experience with previous geophysical exploration surveys in the intermountain west, and review of the literature, the proposed scheduling is adequate to complete this action.”

“This option is environmentally undesirable and not economically justifiable.

- Scientific studies and expert testimonies should determine scheduling adequacy, environmental impacts, and then economic justifications should be determined from the information. These studies and testimonies should be listed. Economics should be addressed through more studies from the implementation of an EIS on the entire proposed project area, including exploration and development outside the proposed 3D Seismic area.

25. “The BLM and the Forest Service would conduct regular compliance inspections to monitor environmental concerns and adherence to project design features. In addition, the BLM and the Forest Service would conduct a post-project assessment to determine if any restoration/rehabilitation is necessary within the project area. Should the agencies identify areas requiring restoration/rehabilitation (i.e., trails created as a result of operations), a restoration/rehabilitation plan would be developed by the agencies and be implemented by the applicant.”

- As questioned earlier in these comments, which agency will be in charge of these monitoring programs?
- Will private lands be monitored, and who will do the monitoring?
- How will these restoration/rehabilitation plans be funded?

26. Page 44. “Rougher terrain and lack of access would dictate the use of heliportable drills in the steeper slopes of the Beartooth Mountain foothills on the western boundary of the project, as well as near riparian or other sensitive areas.”

- This needs to be more specific. Will slopes of 25% or more be done by helicopter?
- What does riparian or other sensitive areas mean?
- Does this apply to private land?
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27. Page 47. “Each shothole would be drilled to a depth of 30 feet and loaded with a ten-pound charge, composed of Seis-Gel.”

- On March 16, 2005 Quantum Representatives Bruce Fulker and Mark Kelly, Austin Powder Company, presented information at a public meeting in Clark. At that meeting the Quantum reps said an alternative blasting product “envirosize”, a combination of ammonium nitrate, sodium nitrate and mineral oils, would be used in the Clark 3D Geophysical Project instead of Seis-Gel. They stated that environmental hazards would be less when using this product.
- Is this product, “envirosize”, still being considered? If not, why not?
- Why was it not addressed in the EA, when Quantum reps have offered it as a superior product to Clark private land owners, the public, and Governor Freudenthal’s policy analyst, Ryan Lance.
- In the same meeting, these reps stated that they would document, map, and notify all interested parties of the location of any undetonated charges. Why is this not listed in the EA?

28. Page 48. “Very little water, if any, would be required to drill to the required 30-foot depth, and necessary water would either be lowered in by helicopter to the drill location or pumped from a nearby, agency-approved source.”

- What is the agency-approved source for water?
- Which agency would approve the source?

29. Page 52. “The applicant or their designated representative would be present on the premises at all times when the operations are being conducted on federal lands.”

- Will this apply to private land?
- Who will the designated representative be?
- Will all other items listed under General Conditions apply to private land?
- How much will bonds be set at, and how will they be determined?
- Who will appropriate BLM and Forest Service line officers be?

30. Page 56. “The applicant would coordinate project activities with appropriate fire-response agencies.”

- Who are these agencies?
- Will the Fire Prevention and Reporting Measures apply to private land?

31. The project area contains important habitat for many different species of wildlife and also supplies economic and aesthetic value from hunting, fishing, and other quality recreation opportunities. The tracks and roads left by off road vehicles in many areas of the proposed seismic exploration would last for decades, have serious effects on wildlife,

increase the spread of noxious weeds and encourage illegal use from future off road vehicle traffic. We ask that before any seismic permits are granted an EIS be prepared to study the impacts stated above.

In closing, we would like to clarify that we are not against seismic work being conducted in the Clark area and we acknowledge that the information gathered from seismic exploration can reduce the need for the drilling of wildcat rigs. We do see the potential for significant impact to the human environment from this exploration as is being proposed in this EA. We also see the need for an EIS to include all areas of oil and gas exploration and development across the Beartooth Front and in the community of Clark, to assure that all impacts are studied, and that the impacts to the human environment are addressed.

Thank you for your prudent review.

Donald J. Smith

Chair

Clark Resource Council

Bob LeResche

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Powder River Basin Resource Council

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