

## DECLARATION FROM KEN KRECKEL

1. My name is Kenneth Kreckel, I am 54 years of age, am a citizen of the United States, and reside in Casper, Wyoming at 3670 Placid Drive. I have resided in Wyoming a total of 15 years, most recently the last 5 years.
2. I am a professional geo-scientist with over thirty years experience in the exploration and development of oil and gas reserves in North America and Europe. During much of that time I supervised the exploration and development efforts of Marathon Oil Company in various producing basins, including many years in the Rocky Mountain region.
3. I have managed the company's participation in hundreds of wells, many in tight gas sand formations similar to the Lance at Jonah. In addition, I proposed and managed the drilling of many directional wells, including over fifty horizontal wells.
4. At the request of Biodiversity Conservation Alliance I have reviewed several reports on the technical and economic feasibility of directional drilling in the Jonah Field. My analysis is attached to this Declaration as Attachment A.
5. Both vertical and directional drilling can achieve the 5- to 10-acre downhole [subsurface] spacing that is proposed for the full development of the Jonah Field's gas resources. Both industry and conservation groups agree that directional drilling through clustering multiple wells on a single pad would require much less surface disturbance and leave most of the remaining habitat in the Jonah Field untouched.
6. There is no technical reason directional drilling technology cannot be used at Jonah. The engineering parameters involved are well within industry capabilities. Encana, a major operator of the field, has employed it on numerous wells. Questar, in the nearby Pinedale Anticline, is utilizing the technology to develop reserves in the Lance formation, the same tight gas producing formation at Jonah. Although the Lance at Pinedale is deeper, Questar's development employs directional wells of longer reach than that used at Jonah. As a result, directional wells in both fields have comparable build profiles.
7. Encana's consultant, Reservoir Management Services, Inc. [RMS], has overstated the effect of the incremental cost of their directional drilling program:
  - Their data suggests their directional wells cost an average of 12% more to drill and complete than vertical wells. These costs are not unusual. Other operators, such as Questar at Pinedale, have experienced similar incremental costs but nevertheless continue their development.
  - Encana's experience of an unusual 'inverted learning curve', that is, their directional well costs are getting worse with time, suggests their higher costs of directional drilling are due to temporary manpower and equipment problems currently plaguing the industry.
  - Costs are likely to decrease with time, as a normal learning curve asserts itself.
  - There was no accounting for cost savings associated with directional drilling. By clustering multiple wells on a single pad, infrastructure costs are significantly reduced. This cost savings for directional drilling reduces the overall cost difference between vertical and directional drilling.

8. RMS's [Encana's] argument that substantial reserves would be left undeveloped under a directional well alternative is unsupported and unreasonable.
  - An analysis of RMS's assertion that production from the bottom of the directional wells would be left untapped reveals it actually entails only a small percentage of the overall production, and even that will likely be recovered through remedial actions. Furthermore, once a normal learning curve is established through drilling, the problem of missed reserves near the bottom of the well will likely disappear.
  - RMS's assertion that 1905 infill wells, if drilled directionally, will be uneconomic is unsupported.
  - The above assertion can be shown to be unreasonable under a variety of analyses:
    1. Biodiversity Conservation Alliance has provided a sound analysis in their comments, concluding that the number of uneconomic wells is vastly overstated.
    2. Development cost per mcf, a measurement which is unreasonably high when calculated from the RMS data, strongly suggest the data are flawed.
  
9. The effect of rising price of natural gas was not taken into account:
  - Jonah Field is currently being developed because gas prices have risen over the past several years
  - Economic analysis done by Wyoming state agencies and others predict rising product prices over the proposed development period.
  - Rising gas prices will allow even the currently uneconomic wells presented by Encana to be drilled in the future. That is, even if one agrees with Encana that some directional wells are currently uneconomic, it is likely they will become economic in the near future.
  
10. The immense net proceeds of the proposed infill development of the Jonah Field are much greater than the costs of the vertical and the slightly higher costs of directional drilling. The infill program is economic for either program. In the light of the income that is to be expected under a variety of gas price scenarios, either method should be quite profitable and should produce an equivalent percentage of the known reserves in a full-field development scenario.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge, in accordance with 28 U.S.C. § 1746.

Dated: April 10, 2006.

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Kenneth Kreckel