



## Office of the Governor

June 3, 2008

Senator Jeff Bingaman, Chairman  
Senator Pete Domenici, Ranking Member  
Senate Energy and Natural Resources Committee  
304 Dirksen Office Building  
Washington, DC 20510

Dear Senator Bingaman and Senator Domenici:

I am writing to express my pleasure with the passage of the Wyoming Range Legacy Act (Act) from your committee and to share a new assessment from the Wyoming State Geological Survey (Survey) on the hydrocarbon-bearing potential of the Wyoming Range withdrawal area. Using the latest, most reliable data from the U.S. Geological Survey (USGS), the Survey estimates the undiscovered natural gas resources at just under 1.1 trillion cubic feet (tcf), a significantly lower figure cited by both me and the BLM in our respective testimony to the Public Lands and Forests Subcommittee on February 28, 2007.

This new and more accurate figure from the Survey settles an important question regarding the Act, which opponents have claimed would jeopardize Wyoming oil and gas production and the nation's overall energy supply. In fact, the Act would likely have a negligible effect on gas production, especially since the majority of these estimated gas reserves, according to USGS figures, underlie some 75,000 acres already leased for development (and not the area that would be addressed in Senator Barrasso's bill). As a result, the Act could still allow access to most of this gas resource - assuming, of course, that adequate environmental safeguards are in place to protect wildlife, air quality and other important resources.

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The reason for the discrepancy between this and prior estimates is that the BLM has been relying on a 2001 report derived from now outdated 1995 USGS data. The number I cited during my February testimony was similarly skewed by old data, which is why I requested that the Survey take another look at the true reserves underlying the Wyoming Range. In the case of the BLM, it would seem that they are holding to the former data, even though their own EPCA Report called the accuracy of the 2001 report into question – and even though the Energy Policy Conservation Acts of 2000 and 2005 mandate that the BLM avail itself of the latest, most up-to-date information.

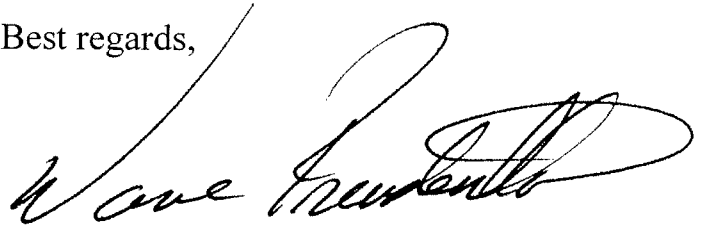
To bring the revised figure into greater perspective, the estimated ultimately recoverable reserves in the nearby Jonah Field and Pinedale Anticline are 12 tcf and 25 tcf of natural gas respectively. The Jonah Field and the Pinedale Anticline are among the top-producing natural gas fields in the world. Compared to these reserves, the amount of gas in the Wyoming Range appears insignificant. There should be no question as to whether Wyoming is contributing substantially to our nation's domestic energy supply. Protecting the Wyoming Range will not detract in any measurable way from the state's mineral production, yet it will ensure that some balance is brought between extensive energy development, wildlife, recreation, open space, and other values.

I would also like to take this opportunity to clarify comments made about the potential to drill directionally into the Wyoming Range from nearby leases held by production. I understand that you were informed that directional drilling is only feasible within distances of one mile or less, leading to specific language being inserted into the Act. I have recently been informed that companies are successfully directionally drilling to distances of three miles, with technology improving every day to reach further. Consequently, it may be appropriate to revisit the language that has been inserted into Section 3(f) of the proposed Act – especially if the change will attract industry support for the legislation. I stand ready to convene a discussion with leaseholders and other industry and conservation stakeholders to achieve consensus in this regard.

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I would like to formally submit the attached report from the Wyoming State Geological Survey as a supplement to my February testimony before the Public Lands and Forests Subcommittee as a more accurate estimated depiction of the undiscovered gas resources underlying the withdrawal area. I trust you will agree that current and accurate data should inform all discussions regarding the Wyoming Range Legacy Act and any proposed oil and gas development in the Wyoming Range.

Best regards,

A handwritten signature in black ink, appearing to read "Dave Freudenthal", written in a cursive style.

Dave Freudenthal  
Governor

DF:pjb

Attachment

c: Dirk Kempthorne, U.S. Secretary of Interior  
Harv Forsgren, Intermountain Regional Forester, U.S. Forest Service  
Senator Ron Wyden  
Senator John Barrasso  
Senator Mike Enzi  
Representative Barbara Cubin  
Senate Energy and Natural Resources Committee Members



## WYOMING STATE GEOLOGICAL SURVEY

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**STATE GEOLOGIST – Ronald C. Surdam**

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May 21, 2008

Attn: Wyoming Range Withdrawal Area

To Whom It May Concern:

The Wyoming Range withdrawal area is part of two different hydrocarbon-bearing geologic provinces, the Thrust Belt Province (TBP) and the Southwestern Wyoming Province (SWP). The Wyoming State Geological Survey (WGS) agrees with the undiscovered resource potential of the (TBP) defined by the USGS (2003) of .918 trillion cubic feet (Tcf) of natural gas for the entire province that spans into Idaho and Utah. The WGS has conducted an independent study using data from the USGS (USGS 2005). The focus of that study was to more accurately address resource potential of the SWP within the Wyoming Range Withdrawal area. This study incorporated the four major petroleum systems within the withdrawal boundary including conventional resources from the Permian Phosphoria Formation and continuous resources from the Cretaceous Mowry, Hillard-Baxter-Mancos, Mesaverde-Lance-Fort Union systems. The USGS data used in the study is based on the premise that the gas is evenly distributed throughout the geologic province that may or may not be the case. However the data used is the best available data and has led to a large decrease in resource potential defined by previous studies.

The WGS has concluded that the SWP portion of the withdrawal area has a mean resource potential of 1.1 Tcf (Table 1) in conventional and continuous petroleum systems. Even in the most optimum case the withdrawal area could yield 1.7 Tcf of natural gas.

Warm Regards,  
Scott Quillinan  
Energy Geologist  
Wyoming State Geological Survey

## Undiscovered natural gas resources of the Southwestern Wyoming Province inside the Wyoming Range Withdrawal area

<b>Producing Formations</b>	<b>Mean Undiscovered Resource (Bcf)</b>	<b>5% Chance of at least this Undiscovered Resource (Bcf)</b>	<b>95% Chance of at least this Undiscovered Resource (Bcf)</b>
Phosphoria (Pp) Conventional	17.1	44.1	2.6
Mowry (Kmr) Continuous	150.9	187.5	119.2
Hillard -- Baxter (Kh Kba) Continuous	208.6	402.9	86.9
Mesaverde -- Lance -- Fort Union (Kmv Kl Tfu) Continuous	712.4	1,081.3	434.7
<b>Total</b>	<b>1,089.0</b>	<b>1,715.8</b>	<b>643.4</b>

Table 1). Describes the resource potential of the of the four petroleum systems located within the withdrawal area.

### Reference:

United States Geological Survey, 2004, Assessment of undiscovered oil and gas resources of the Wyoming Thrust Belt Province, 2003 USGS Fact Sheet 2004-3025.

United States Geological Survey, 2005, National Assessment of Oil and Gas Project: Petroleum Systems and Geologic Assessment of Oil and Gas in the Southwestern Wyoming Province, Wyoming, Colorado, and Utah. USGS Digital Data Series DDS-69-D, version 1.0.