

2009 SENATE NATURAL RESOURCES

SCR 4020

## 2009 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. 4020

Senate Natural Resources Committee

Check here for Conference Committee

Hearing Date: February 12, 2009

Recorder Job Number: 9398

Committee Clerk Signature

*Kat*

Minutes:

**Senator Lyson** Opened the bill up for discussion.

**Tyler Rupp**, North Dakota Petroleum Company, testified in favor of the bill (see attached testimony #1).

**Bruce Hicks**, Assistant Director of the Oil and Gas Division, spoke in favor of the bill (see attached handouts #2). Hydraulic fracturing has never been considered to be underground injection and that is why it was given the exemption in the first place. Some environmental activists are attempting to appeal this rule. If this happens it is going to cause us to go through rule making and it could halt hydraulic fracturing in that interim. Hydraulic fracturing is a necessity to get the oil out of the reservoir. There are three levels of protection when they hydraulically fracture these wells. The EPA did a study and did not find any evidence where it contaminated ground water. Today we have about 700 Bakken wells producing which is about 17% of the states wells. 56% of the states production is from the Bakken wells.

**Senator Lyson** closed the hearing on SCR 4020.

# 2009 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. 4020

Senate Natural Resources Committee

Check here for Conference Committee

Hearing Date: February 12, 2009

Recorder Job Number: 9399

Committee Clerk Signature

*Kat*

Minutes:

**Senator Lyson** Opens the discussion on SCR 4020.

**Senator Triplett** I move a do pass on SCR 4020.

**Senator Freborg** seconds the motion.

The bill received a do pass on a vote of 7 to 0.

Date: Feb-12-09

Roll Call Vote #: 4020

**2009 SENATE STANDING COMMITTEE ROLL CALL VOTES**  
**BILL/RESOLUTION NO. "Click here to type Bill/Resolution No."**

Senate Natural Resources Committee

Check here for Conference Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken  Do Pass  Do Not Pass

Motion Made By Sen. Triplett Seconded By Sen. Freborg

Senators	Yes	No	Senators	Yes	No
Senator Stanley W. Lyson, Chairman	/		Senator Jim Pomeroy	/	
Senator David Hogue, Vice Chairman	/		Senator Mac Schneider	/	
Senator Robert S. Erbele	/		Senator Constance Triplett	/	
Senator Layton W. Freborg	/				

Total (Yes) 7 No 0

Absent \_\_\_\_\_

Floor Assignment Sen. Freborg

If the vote is on an amendment, briefly indicate intent:

**REPORT OF STANDING COMMITTEE (410)**  
February 13, 2009 2:21 p.m.

**Module No: SR-29-2721**  
**Carrier: Freborg**  
**Insert LC: . Title: .**

**REPORT OF STANDING COMMITTEE**

**SCR 4020: Natural Resources Committee (Sen. Lyson, Chairman) recommends DO PASS (7 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SCR 4020 was placed on the Eleventh order on the calendar.**

2009 HOUSE NATURAL RESOURCES

SCR 4020

## 2009 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. 4020

House Natural Resources Committee

Check here for Conference Committee

Hearing Date: 3-13-09

Recorder Job Number: 10923

Committee Clerk Signature

*Nancy S. Gerhardt*

Minutes:

Chairman Porter – Open the hearing of SCR 4020.

Senator O'Connell – The injection of fluids for hydraulic fracturing a coal bed causes no hazard to underground sources of drinking water. Approximately 35,000 wells have gone through this and close to 1 million wells throughout the nation and there has been no known contamination to ground water.

Tyler Rupp – ND Petroleum Council – See **Attachment # 1**.

Rep. Hofstad – Help me understand what kind of restrictions and complications the state water drinking act places on the industry.

Mr. Rupp – Any kind of EPA oversight that would slow down the process or potentially limit the amount of water that could be used for fracing would be extremely detrimental for our industry. I don't feel qualified to answer your question as far as what they may institute. I'd rather testify to the fact it would be detrimental to our industry.

Rep. Hofstad – Are there issues now that limit things you can do? Are you constricted by the act right now?

Mr. Rupp – Right now the safe drinking water excludes hydraulic fracturing. At this point NO. This resolution is to urge congress not to remove that exemption.

Rep. Kelsh – Prior to the resolution states this was enacted in 2004, this amendment is that correct? Prior to that was the industry operating under the old rule without an exemption that you had to comply with?

Mr. Rupp – To be honest, I'm not sure, there will be others following me that might be able to answer that question.

Bruce Hicks – Oil & Gas Division, Dept of Mineral Resources, ND Industrial Commission – See

**Attachment # 2.** This is adapted from a resolution from 38 producing states. It is an interstate oil and gas compact commission that originally came up with a resolution to preserve the exemption that we presently have. Hydraulic fracturing had never been considered underground injection under the safe drinking water act. There is some talk about congress now taking that exemption away and requiring additional regulation for underground

Injection and treating hydraulic fracturing such as that. The problem is underground injection has never included hydraulic fracturing. When you go in and do a hydraulic fracc you are wanting to recover those fluids again, only thing you leave in place is the ???? To keep the rock cracked open. The hydraulic fracturing system itself, you go in and hit the reservoir with pressure, you use some medium to get the sand out into the cracks you created and then when you relieve that pressure, the rock will close on the sand particles and keep the crack open. Then you produce that fluid back. In a sense, it's like acidizing a well, trying to improve the efficiency of the reservoir to produce. You're not trying to inject and get rid of fluid and never see it again. That's a huge dissimilarity between injections. We are, like I said, trying to preserve the exemption. I won't go through all the resolutions, although, there are some very important parts to it. ND, as the other 38 states, already regulates hydraulic fracturing in their states and they do very good job at it. There are rules in place to handle all of this. What EPA might end up doing, if congress goes through and takes this exemption away, they're going to

require the ?????? Of rules to handle underground injection for this practice. If that happens it would essentially shut down oil and gas development in our state. We have 50 rigs running right now, 39 of those are drilling Bakken wells. Essentially all of the Bakken wells are fractured. If you shut down that system until you get rules in place, it could be anywhere from 6 to 9 months where you would have to go through that rule making process. It would be extremely onerous to our state and the Oil & Gas industry within it. Explanation of pictures of Attachment # 2. We have a lot of potential for coal bed methane in this state. There is currently a study in Burk Co. as we speak. We also have some shallow gas production, mainly in Bowman Co. There's also a lot of potential in Eastern ND and through our geological survey we're trying to promote that. You can't take a big wide ?????? And say these rules should cover everything in ND. We've got regulations in place now, we've got personnel in place now, and under our current rules, we can decipher and decide what rules should apply to different areas. When you go in and fracture shallow gas wells, such as we have in Bowman, we've got hundreds of wells that have been stimulated, and they're very near the surface of the ground. These are very expensive operations to conduct. The operators will go out there and design these with the surface companies so they keep these fractures in place where they need them within the reservoir. They don't want these to grow out, so they're watched very closely and we have had no contamination of any portable waters down in Bowman or in any of the other zones they have injected to do their hydraulic stimulation. Questions?

Chairman Porter – Further testimony in support of SCR 4020? Opposition?

Cindy Klein – Dakota Resource Council – Oil & Gas Taskforce – See **Attachment # 3**. In the resolution on line 15, it says the Energy Policy Act of 2004, that's incorrect, that passed in 2005. Questions?

Rep. Nottestad – Most of your testimony has to do with coal bed fracking, yet this bill is not about that topic. Since you brought this in as testimony, how much coal bed fracking is taking place in ND now?

Ms. Klein – None that I know of, but there is a potential for coal bed methane development in ND.

Chairman Porter - Any further testimony in opposition to SCR 4020? Seeing none we will close the hearing on SCR 4020.

## 2009 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. 4020

House Natural Resources Committee

Check here for Conference Committee

Hearing Date: 3-13-09

Recorder Job Number: 10926

Committee Clerk Signature

*Nancy J. Gerhardt*

Minutes:

Chairman Porter - Pull out SCR 4020.

Rep. Keiser – Do we need an amendment on line 15 to change the date of 2004 to 2005 to make it accurate?

Chairman Porter – It's kind of symantics. Was it the act of 2004 and passed in 2005? Or was it the act of 2005 passed in 2005? Mr. Helms, do you know the answer?

Mr. Lynn Helms – I think the amendment would be appropriate to change the 2004 to 2005.

That's what it is known as in all the circles. I'm not sure how those two years got the same.

The EPA study was in 04. The Energy policy act was in 05. I think it would be appropriate to change 2004 to 2005.

Rep. Keiser – I would move that amendment.

Chairman Porter – We have a motion from Rep. Keiser.

Rep. Hofstad – 2<sup>nd</sup>.

Chairman Porter – 2<sup>nd</sup> from Rep. Hofstad, on line 15 to overstrike "4" and insert "5". It would read "the Energy Policy Act of 2005". Discussion? Seeing none all in favor Yea – unanimous

voice vote – Opposed – none – motion carries.

Rep. Hofstad – I move a Do Pass As Amended

Rep. Keiser – 2<sup>nd</sup>.

Chairman Porter – We have a motion from Rep. Hofstad for a Do Pass As Amended to be placed on the consent calendar and a 2<sup>nd</sup> from Rep. Keiser. Discussion? We will try a voice vote. All those in favor – YEA – Unanimous voice vote ---- opposed – none. Anyone want to babysit that?

Rep. Hofstad – I'll carry it.

March 13, 2009

VR  
3/13/09

PROPOSED AMENDMENTS TO SENATE CONCURRENT RESOLUTION NO. 4020

Page 1, line 15, replace "2004" with "2005"

Renumber accordingly

Date: 3-13-2009

Roll Call Vote #: \_\_\_\_\_

**2009 HOUSE STANDING COMMITTEE ROLL CALL VOTES**  
**BILL/RESOLUTION NO. 4020**

**House Natural Resources Committee**

Check here for Conference Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken  Do Pass  Do Not Pass  As Amended

Motion Made By Hofstad Seconded By Keiser

Representatives	Yes	No	Representatives	Yes	No
Chairman Porter			Rep Hanson		
Vice Chairman Damschen			Rep Hunskor		
Rep Clark			Rep Kelsh		
Rep DeKrey			Rep Myxter		
Rep Drovdal			Rep Pinkerton <u>A</u>		
Rep Hofstad					
Rep Keiser					
Rep Nottestad					

*Unanimous  
Voice  
Vote*

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent \_\_\_\_\_

Floor Assignment Hofstad

If the vote is on an amendment, briefly indicate intent:

*consent  
Calendar*

REPORT OF STANDING COMMITTEE (410)  
March 16, 2009 3:38 p.m.

Module No: HR-46-5001  
Carrier: Hofstad  
Insert LC: 93082.0101 Title: .0200

**REPORT OF STANDING COMMITTEE**

**SCR 4020: Natural Resources Committee (Rep. Porter, Chairman) recommends AMENDMENTS AS FOLLOWS and when so amended, recommends DO PASS and BE PLACED ON THE CONSENT CALENDAR (12 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). SCR 4020 was placed on the Sixth order on the calendar.**

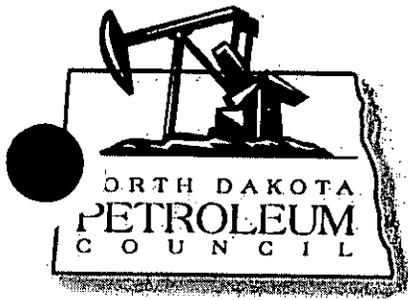
Page 1, line 15, replace "2004" with "2005"

Renumber accordingly

2009 TESTIMONY

SCR 4020

71



**Ron Ness**  
President

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Phone: 701-223-6380 • Fax: 701-222-0006 • Email: ndpc@ndoil.org

**Marsha Reimnitz**  
Office Manager

**Senate Concurrent Resolution 4020**

**Senate Natural Resources**

**February 12, 2009**

*same given to the House*

Chairman Lyson and members of the Committee. My name is Tyler Rupp. I am here on behalf of the North Dakota Petroleum Council. We represent 160 companies involved in all aspects of the oil and gas industry in North Dakota, South Dakota, and the Rocky Mountain region.

This resolution urges Congress to exempt hydraulic fracturing from the Safe Drinking Water

Act. **The Petroleum Council supports SCR 4020** for many reasons, to include:

1. The oil and gas industry continually implements safety measures to protect underground water reservoirs.
2. Our state agencies already closely monitor the drilling process and protection of underground water is among their top concerns.
3. Any regulation that could potentially limit or remove the industry's ability to use hydraulic fracturing would have severe impacts on the Bakken Shale oil production and the state as a whole.

Currently, operators are required to set surface casing to depths well below groundwater reservoirs, and it must be cemented into place. Production casing cemented inside of that provides additional protection, and then, in cases where tubing is used inside of that, a third layer of protection is provided. In June 2004, the Environmental Protection

Agency released a study, which determined that fracture stimulation poses no threat to underground sources of drinking water. This study, along with numerous others, found no evidence that fracture stimulation poses any threat to groundwater, despite its having been used more than a million times since its discovery.

Fracture stimulation is already comprehensively and effectively regulated by local, state and federal laws. Establishing the location of underground water reserves is already part of the state permitting process each well undergoes prior to drilling. In spite of alarmist claims by some environmental groups, no evidence exists today that additional regulations are needed.

A study of 2007 oil and gas production showed the oil and gas industry in North Dakota to be an \$8.22 billion industry. 2,500 new jobs were created over the last few years and more than \$500 million was paid to the state in taxes in 2007 alone. Bakken Shale activity in the state is responsible for more than 50% of the state's oil production and all but one drilling rig operating in the state today are drilling in the Bakken formation. These Bakken wells are heavily dependent on the use of fracture stimulation to see the production necessary to make the expensive wells commercially economical. In fact, nearly all of Bakken wells in the state today have been fraced during their lifetime.

In closing, let this resolution be a reminder to Congress that **choosing between safe drinking water and a vitally important oil industry is not necessary.** An Interstate Oil and Gas Compact Commission survey of oil and gas producing states did not find a single documented instance of ground water contamination associated with hydraulic fracturing and the oil and gas industry in North Dakota will do its part in continuing this precedent.

With that, I would be happy to answer any questions.

**Senate Concurrent Resolution 4020**

**February 12, 2009**

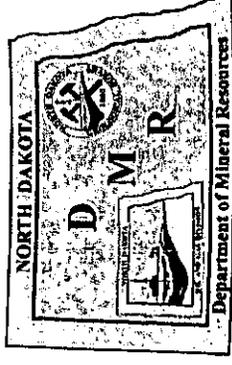
**Senate Natural Resources**

**Bruce E. Hicks, Assistant Director**

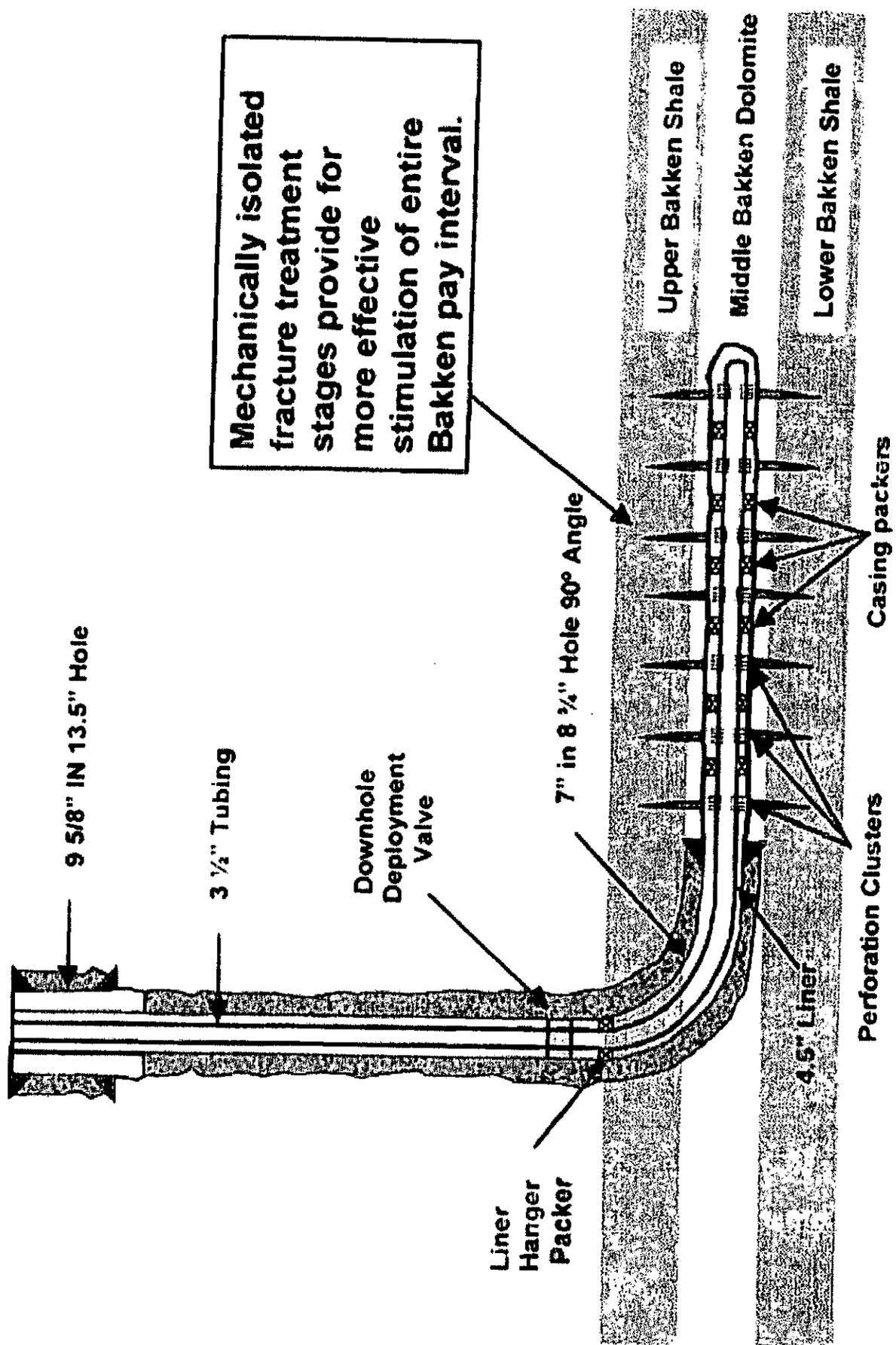
**Oil and Gas Division**

**Department of Mineral Resources**

**North Dakota Industrial Commission**



#2



9 5/8" IN 13.5" Hole

3 1/2" Tubing

Downhole Deployment Valve

7" in 8 3/4" Hole 90° Angle

Liner Hanger Packer

4.5" Liner

Perforation Clusters

Casing packers

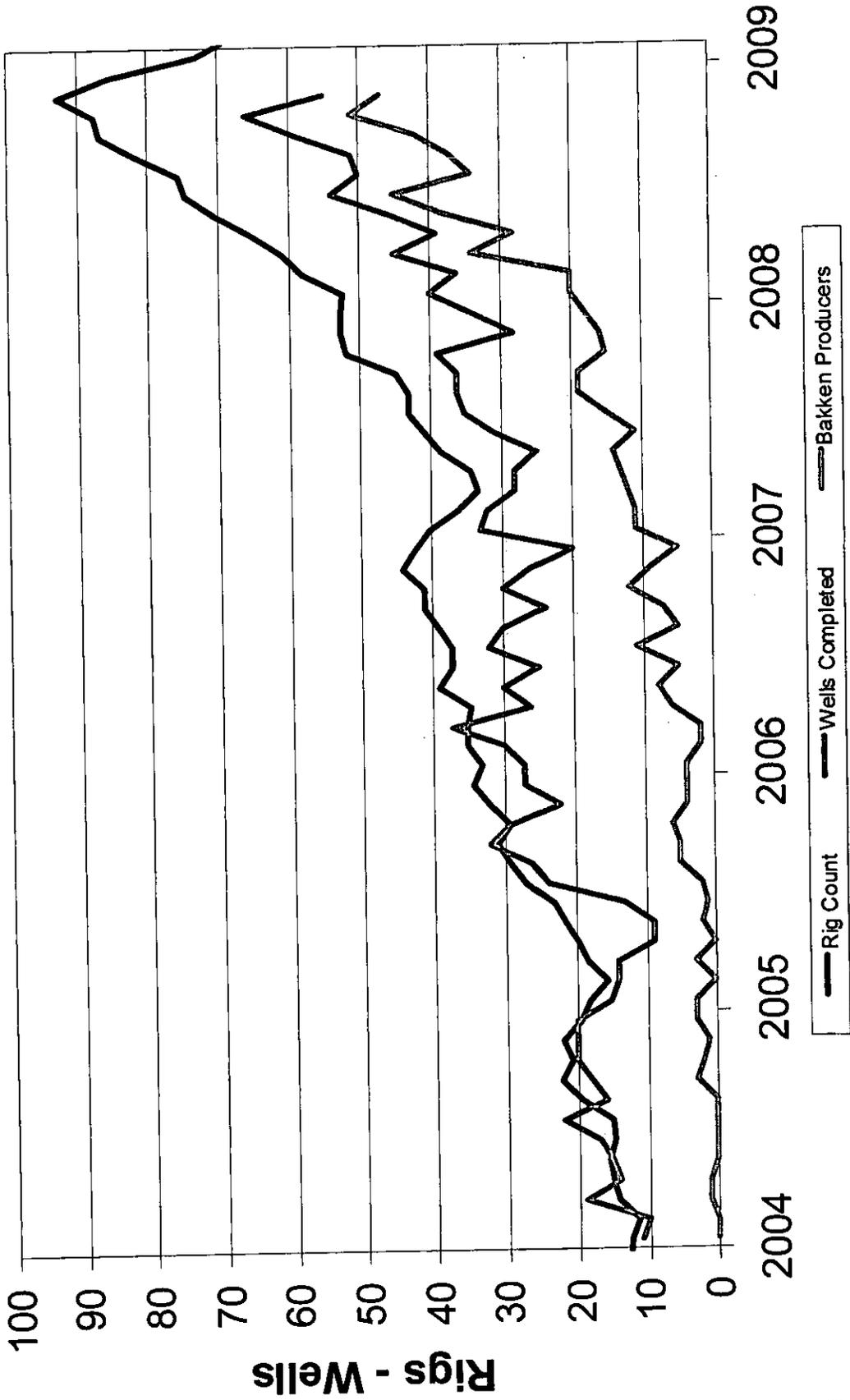
Upper Bakken Shale

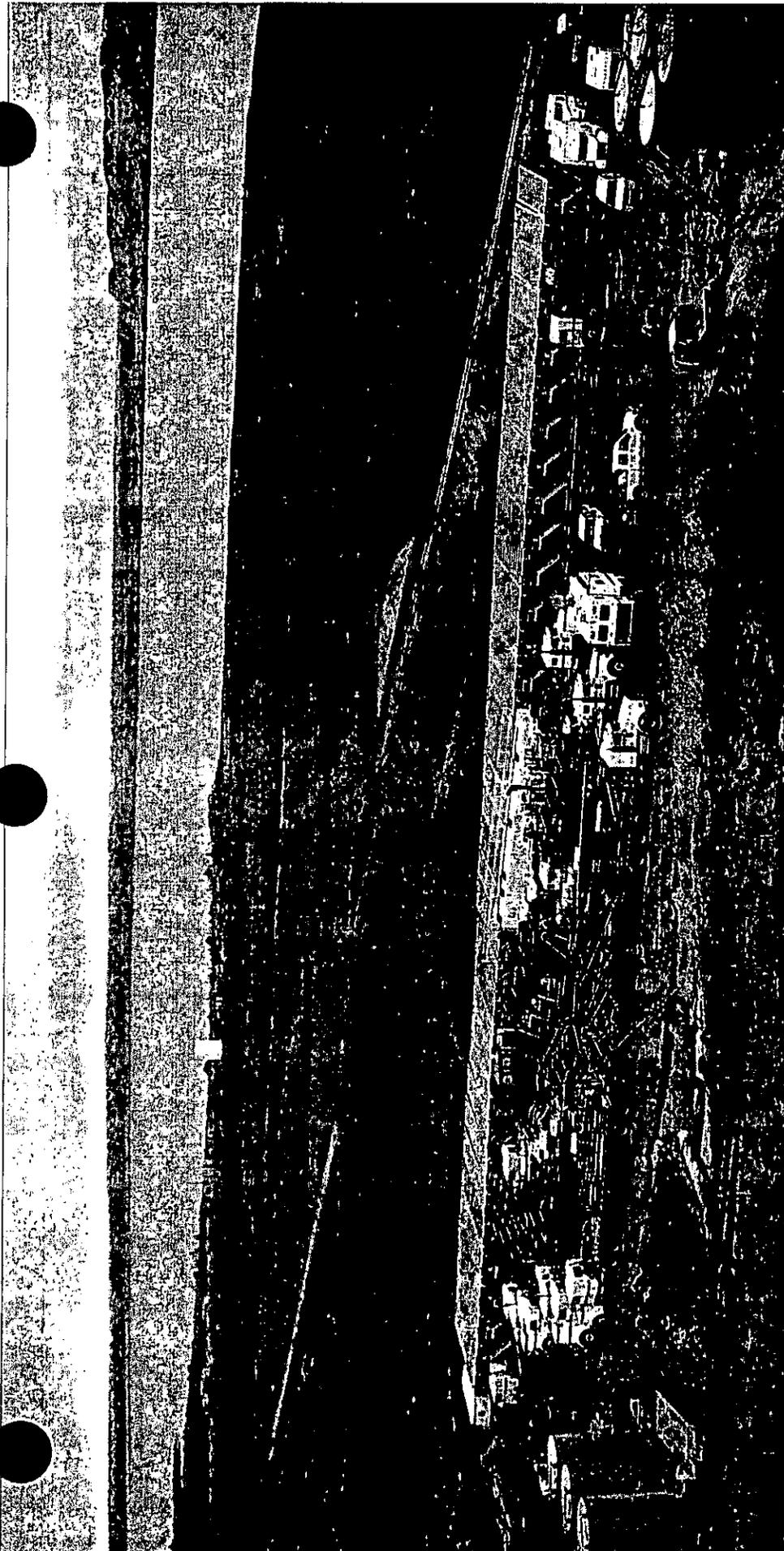
Middle Bakken Dolomite

Lower Bakken Shale

Mechanically isolated fracture treatment stages provide for more effective stimulation of entire Bakken pay interval.

# North Dakota Average Rig Count, Completions and Bakken Producers





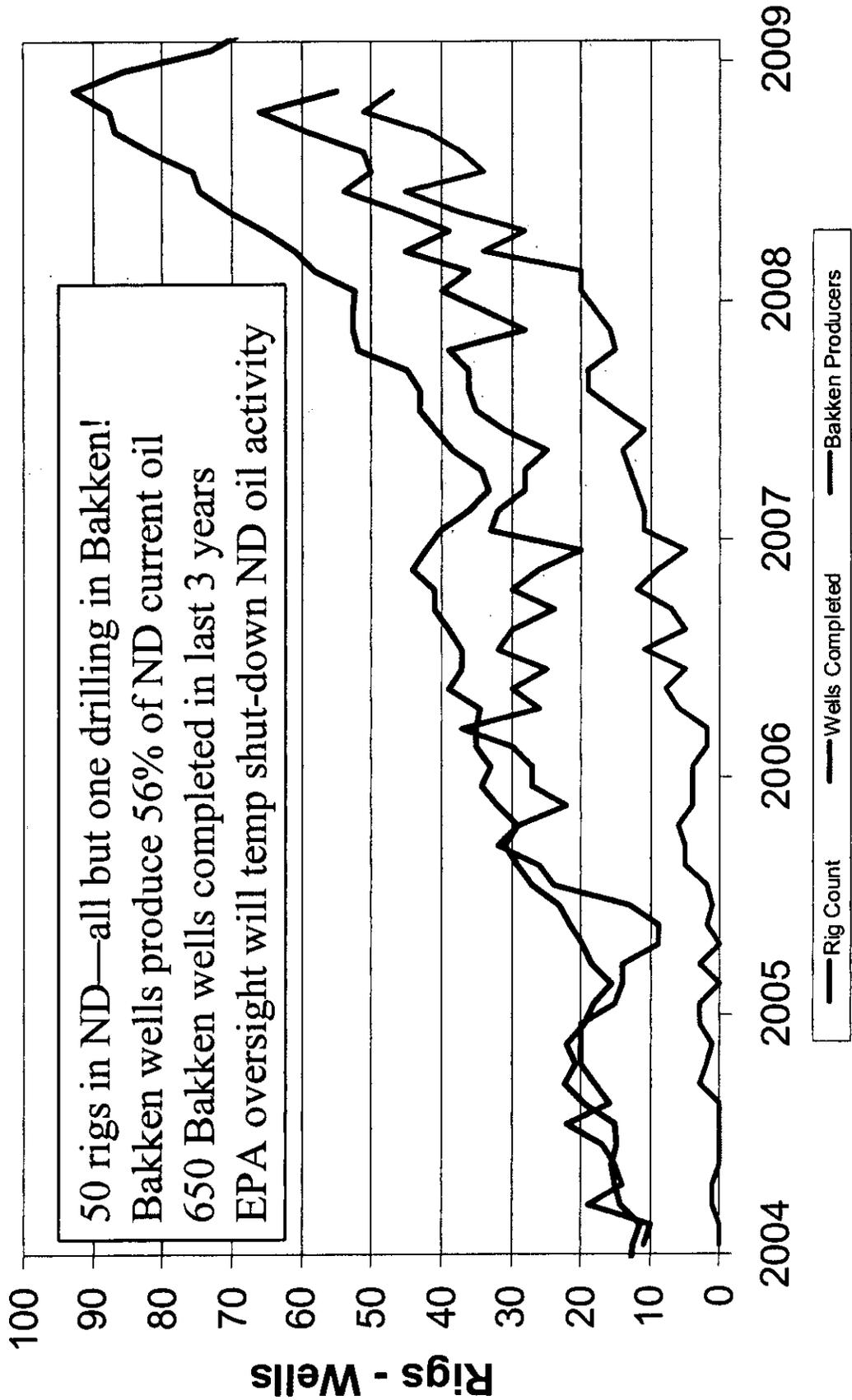
Performing hydraulic fracture stimulation south of Tioga

- all Bakken wells must be hydraulically fractured to produce
- 36 tanks moved to location
- 300,000 pounds of sand moved to location
- cost >\$500,000 to hydraulically fracture well
- services provide ND with many jobs and revenue



## North Dakota Average Rig Count, Completions and Bakken Producers

50 rigs in ND—all but one drilling in Bakken!  
Bakken wells produce 56% of ND current oil  
650 Bakken wells completed in last 3 years  
EPA oversight will temp shut-down ND oil activity





ATTACHMENT #3

**Dakota Resource Council**  
"Organizing North Dakotans Since 1978"  
P.O. Box 1095 ~ Dickinson, ND ~ 58602-1095  
701-483-2851  
www.drcinfo.com

**DAKOTA RESOURCE COUNCIL TESTIMONY: SCR 4020**

**MARCH 13, 2009**

**Good morning chairman Porter and members of the House Natural Resources Committee.**

**My name is Cindy Klein and I am here today to speak on behalf of the members of Dakota Resource Council and more specifically, the members of our oil and gas task force.**

**First of all, let me be clear that we are not asking for any stoppage of hydraulic fracturing. We understand that it is an important part of our current technology for extracting oil and gas in North Dakota as well as other states.**

**I am here today to talk to you about the history of the Safe Drinking Water Act exemption for hydraulic fracturing and to ask you to think about what this exemption is really about.**

**In 1997, the U.S. Court of Appeals for the 11th Circuit (Atlanta) ordered the EPA to regulate hydraulic fracturing under the *Safe Drinking Water Act*. This decision followed a 1989 CBM fracturing operation in Alabama that resulted in the contamination of a residential water well.**

**In 2000, in response to the 1997 court decision, the EPA initiated a study of the threats to water supplies associated with the fracturing of coal seams for methane production. The primary goal of the study was to assess the potential for fracturing to contaminate underground drinking water supplies. The EPA completed its study in 2004, finding that fracturing "poses little or no threat" to drinking water. The EPA also concluded that no further study of hydraulic fracturing was necessary.**

**Meanwhile, in 2001, a special task force on energy policy convened by then-Vice President Dick Cheney recommended that Congress exempt hydraulic fracturing from the *Safe Drinking Water Act*. The Energy Policy Act of 2005 included this exemption.**

**The energy bill passed with the exemption intact meaning states, municipalities and individual property owners would have to bear the burden of the cleanup costs, health risks and loss of property values associated with any ground water contamination caused by hydraulic fracturing.**

**The 2004 EPA study has been called "scientifically unsound" by EPA whistleblower Weston Wilson. In an October 2004 letter to Colorado's congressional delegation, Wilson recommended that EPA continue investigating hydraulic fracturing and form a new peer**

review panel that would be less heavily weighted with members of the regulated industry.

In March of 2005, EPA Inspector General Nikki Tinsley found enough evidence of potential mishandling of the EPA hydraulic fracturing study to justify a review of Wilson's complaints.

However, Congress passed the exemption according to Tinsley, no further studies were deemed necessary.

Approximately half of the water that Americans rely on for drinking comes from underground sources. It is in the public interest to ensure—with a very high degree of certainty—that any substances that are injected underground do not pose a threat to drinking water quality and human health.

The EPA study does not provide adequate scientific proof that hydraulic fracturing does not pose a threat to drinking water.

The EPA stated that many chemicals in hydraulic fracturing fluids are linked to human health effects. These effects include cancer; liver, kidney, brain, respiratory and skin disorders; birth defects; and other health problems. The draft EPA study included calculations showing that even when diluted with water at least nine hydraulic fracturing chemicals may be injected into USDWs at concentrations that pose a threat to human health. These chemicals are: benzene, phenanthrenes, naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, fluorenes, aromatics, ethylene glycol and methanol. This important information was removed from the final study.

There HAVE been cases where fracturing has been blamed for contamination but it is really hard to know what to test wells for when you don't even know what is in the fluids. The content of the fracturing fluids are, at this time, considered proprietary information and are not disclosed. In Alabama, Colorado, New Mexico, Virginia, West Virginia and Wyoming, incidents have been recorded in which residents have reported changes in water quality or quantity following fracturing operations of gas wells near their homes. Natural gas development is booming in the U.S., particularly coalbed methane (CBM) development; hundreds of companies are looking to drill for CBM wherever there are viable deposits of coal. In at least ten states (Alabama, Arkansas, Colorado, Kansas, Montana, New Mexico, Virginia, Washington, West Virginia and Wyoming), these coal formations contain drinking water aquifers.

How can we say we should have an exemption for this process when we don't know what we are dealing with?

At the very minimum we should be asking for full disclosure of what chemicals are being used, at least to the surface owner.

I ask you today to think about this resolution and the message that it sends to our nation's capitol. Do you want that message to read we don't care about keeping America's safe drinking water? Well, I happen to think that you do care. Because of that, I ask you to reject this resolution.