

Testimony to the Long-Range Planning Appropriations Committee Concerning the Petroleum Engineering/Bureau of Mines and Geology Building on the MT Tech Campus

February 15, 2005

Introduction:

Mr. Chairman and Members of the Long-Range Planning Committee:

~~My name is John Evans. I am the Head of the Petroleum Engineering Department. I am seeking funding for a new building on the MT Tech campus to house the Petroleum Engineering Department and the Montana Bureau of Mines and Geology. My remarks address Petroleum Engineering needs.~~

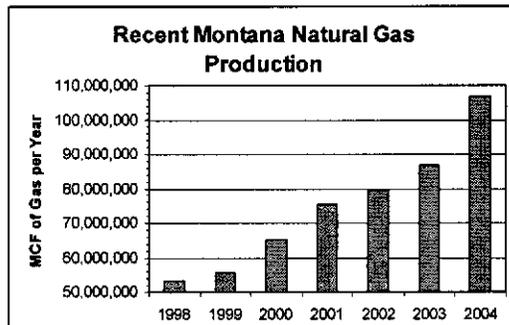
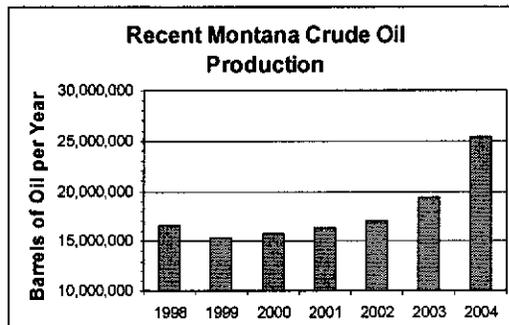
*supplement
HB 540*

Background:

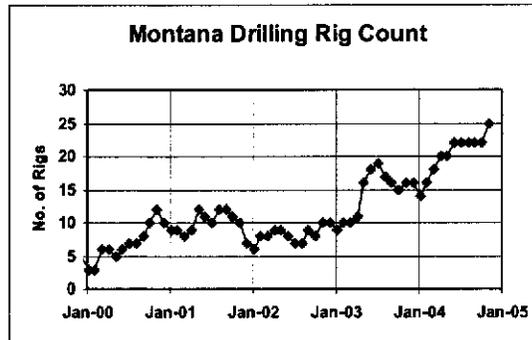
I would like to ^{point out} ~~present background information~~ regarding the importance in Montana of the Oil and Gas Industry and the Petroleum Engineering Department.

Montana has abundant crude oil, natural gas, and coal bed methane resources. At the present time, oil and gas are being produced from 33 Montana counties located in the eastern one-half of the State and along the northern Hi-Line. Statewide oil and gas production has been increasing significantly over the past five years. Since 1999, oil production has increased by 165% and gas production by 180%.

Many of our students come from these counties

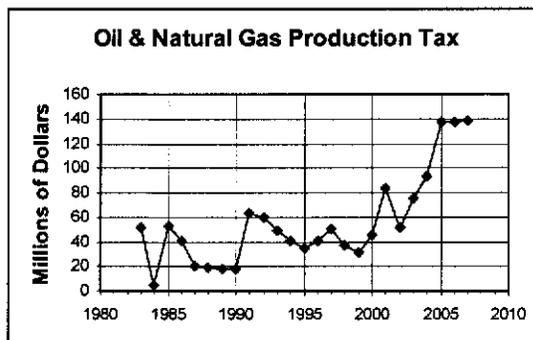


Rotary drilling rig count is up from 3 rigs in January, 2000, to 25 rigs in December, 2004.



When drilling activity increases, the number of seismic crews, pulling units, pipeline spreads, hydraulic fracturing crews, and other services and supply needs grow as well. “Mom-and-pop” establishments that provide food, lodging, gasoline, and other provisions prosper. Good paying jobs are created.

Tax revenue has increased from \$32MM in 1999 to \$93MM in 2004. Taxes are projected to rise to \$135MM in 2005 (MT Legislative Fiscal Report).



Ninety percent of production taxes are allocated to counties and school districts. A significant portion of the projected 2005-2007 budget surplus will be coming from oil and gas tax revenues.

The spectacular growth of tax income is attributable to

- An increase in oil and gas prices.
- An increase in investment, much of which is being fueled by tax relief granted by the 2001-2003 Legislature.
- And the application of advanced technology, including 3-dimensional seismic, horizontal drilling, coiled tubing drilling, coiled tubing hydraulic fracturing, and enhanced oil recovery techniques.

The role of the Petroleum Engineering Department is to graduate qualified engineers and to conduct meaningful research.

The Petroleum Engineering Department at Montana Tech has a long-standing, worldwide reputation for graduating high quality engineers who are accustomed to hard work and are fully prepared contribute their expertise. We celebrated our 50th anniversary in the year 2000, and we are fully accredited and one of only 15 petroleum engineering programs remaining in the US.

Over the past 12 years, we have been the 3rd largest supplier of petroleum engineers in the USA. We currently have the fourth largest undergraduate enrollment in the country. In fact, we estimate that one of every 50 petroleum engineers employed in the USA and Canada is a Montana Tech graduate.

The Department is currently conducting research in the areas of microbial enhanced oil recovery, small diameter tubing and artificial lift for dewatering unconventional gas wells, and hydraulic fracturing for improving production rates and reserves from shallow low-pressure gas wells. We have expertise for conducting research in thermal recovery and carbon dioxide sequestration methods for enhancing oil recovery. All of these research efforts are directed to very real needs in Montana today.

Justification for a New Building:

The Petroleum Department is growing. We expect the undergraduate enrollment to grow from 150 students to 200 students over the next 5 years. The graduate program will grow to 25 students. This is an overall growth of 75 students *in response to industry growth.*

Our research efforts will expand to provide the State and local industry with ideas, innovations, and data needed to help increase production rates and reserves. Higher rates translate to added tax revenue and more jobs.

The Petroleum Building, which we share with Outreach Programs, was built ^{the} in 1950^s. Its lecture halls and laboratories currently serve in excess of 950 students per week from across the campus. We have outgrown the building.

The Petroleum Building is structurally sound, but the interior is poorly designed and not suitable for re-design for our current needs and our expected growth. It is also out-of-compliance with Life Safety Codes, National Fire Protection Association codes, and the Americans with Disabilities Act. The building utility systems are inadequate for modernizing class rooms and laboratories. Cost estimates provided by A & E show that classroom and laboratory space in a new building will be less expensive and more efficient than refurbishing the existing building.

Modern petroleum education requires lecture halls equipped with video and sound equipment for tapes, DVD's and internet programs that graphically demonstrate

processes infinitely better than humans can illustrate verbally and making two dimensional sketches with colored markers on a white board. To house large apparatus used in today's experimental studies and research, laboratories must be larger and have taller ceilings than 50 years ago.

Request:

I ask the Long Range Planning Committee to approve funding for the Petroleum Engineering/Bureau of Mines and Geology Building.

We want to be a partner, as mandated by the Board of Regents, in the future economic development of Montana. Thank you.