

TESTIMONY OF CRAIG HAYMES  
ON PROPOSED HB 2001  
TO THE ALASKA HOUSE SPECIAL COMMITTEE ON OIL & GAS  
OCTOBER 23, 2007

**INTRODUCTION**

Mr. Chairman, members of the committee:

Good morning. For the record, my name is Craig Haymes. I am the Production Manager for ExxonMobil in Alaska, a position I have held since January 2007. I have the pleasure of living in Anchorage with my family. Prior to January this year I was involved with Arctic oil and gas projects on the East coast of Canada for almost five years.

I want to thank the committee for the opportunity to express ExxonMobil's views today regarding the Administration's proposed tax increase.

Let me state upfront, ExxonMobil believes the current PPT tax rate and the increase proposed by the Administration will have a negative impact on resource investments in Alaska. ExxonMobil does not support the proposed tax increase by the Administration.

We believe that Alaska needs to focus on a long-term resource development policy. The policy should encourage increasing investment that is needed to maximize the development of Alaska's resources. Alaska is rich in undiscovered resource potential, yet oil production continues to decline from mature basins. Oil production today is one

third of the peak of over 2 million barrels per day in 1988. Alaska faces a significant challenge. We have a common goal to maximize economic resource development and need to work together; Government, industry, and the people of Alaska, to enhance the development of Alaska's rich resources and the future.

### **EXXONMOBIL IN ALASKA**

ExxonMobil invests all over the world to meet the growing need for energy. Over the last 20 years we have invested close to \$280 billion dollars to search for new supplies of energy, build new production facilities, expand refinery capacity and deploy new, environmentally sound technologies.

ExxonMobil believes technology innovation is the key to meeting the world and Alaska's energy challenges. Technology is the lifeblood of our industry. ExxonMobil currently spends close to \$1 billion per year on research and technology. We have consistently applied our technology in Alaska to unlock and develop resources. We have significant arctic experience around the world.

Some examples of technology applications that we have contributed to Alaska are

- The installation of the ice resistant Granite Point platform in Cook Inlet, which is still producing oil.
- Significant research and engineering for the Prudhoe Bay completion designs for permafrost
- The installation of the first Concrete Island Drilling System (CIDS) to drill exploration wells in ice covered waters in the Alaska Beaufort Sea.

- The first full-field 3-D simulation model of Prudhoe Bay, leading to many enhanced oil recovery and development drilling programs that are still being pursued today.

The application of technology will continue to be a key to the future of Alaska's resource developments.

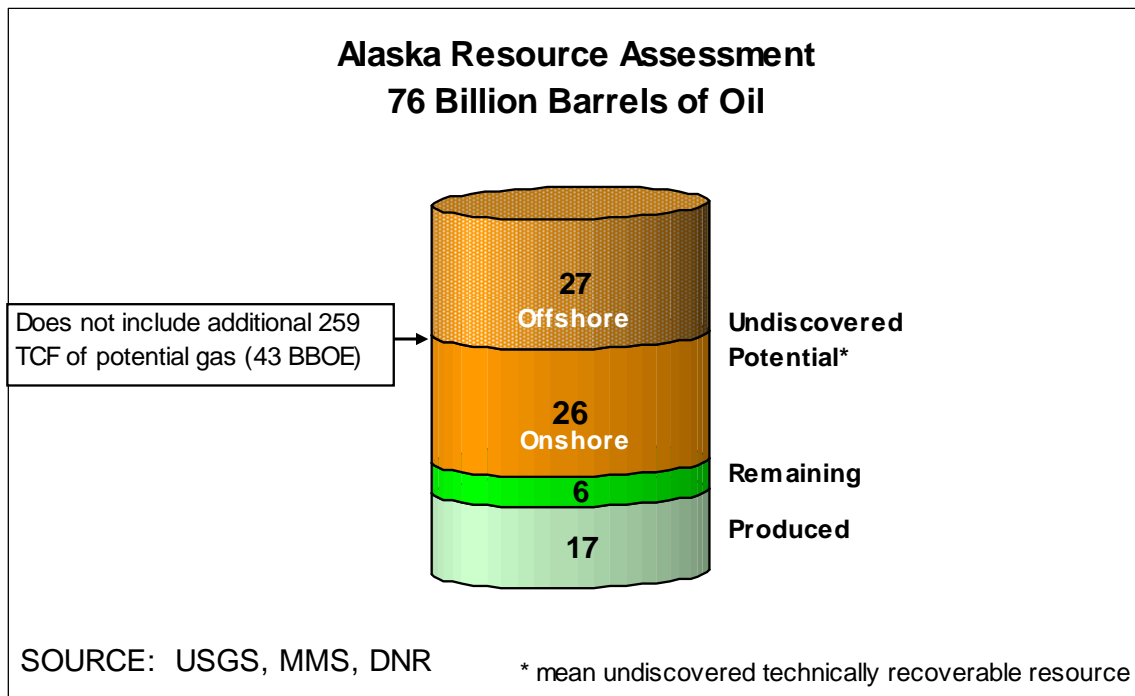
ExxonMobil has had a presence in Alaska for over 50 years and has been a key player in Alaska's oil industry development, spending and investing over \$20 billion dollars. We hold the largest working interest at Prudhoe Bay (36.4%) and our current working interest share of oil production in the state is approximately 150,000 barrels per day. We are also the largest owner of discovered Alaska gas resource.

We are currently active with our co-owners at Prudhoe Bay, Kuparuk, Duck Island, Granite Point and Point Thomson. Over the last two years we have participated in the drilling of over 70% of the wells on the North Slope - over 130 wells were drilled at Prudhoe Bay alone - this drilling will add 50,000 B/D of oil production in 2007, an important contribution to help mitigate production decline.

We are proud of the role that our company has played in Alaska, which we believe has benefited both the State and the industry, and we look forward to working with Alaska for many years to come.

**ALASKA RESOURCE POTENTIAL IS SIGNIFICANT**

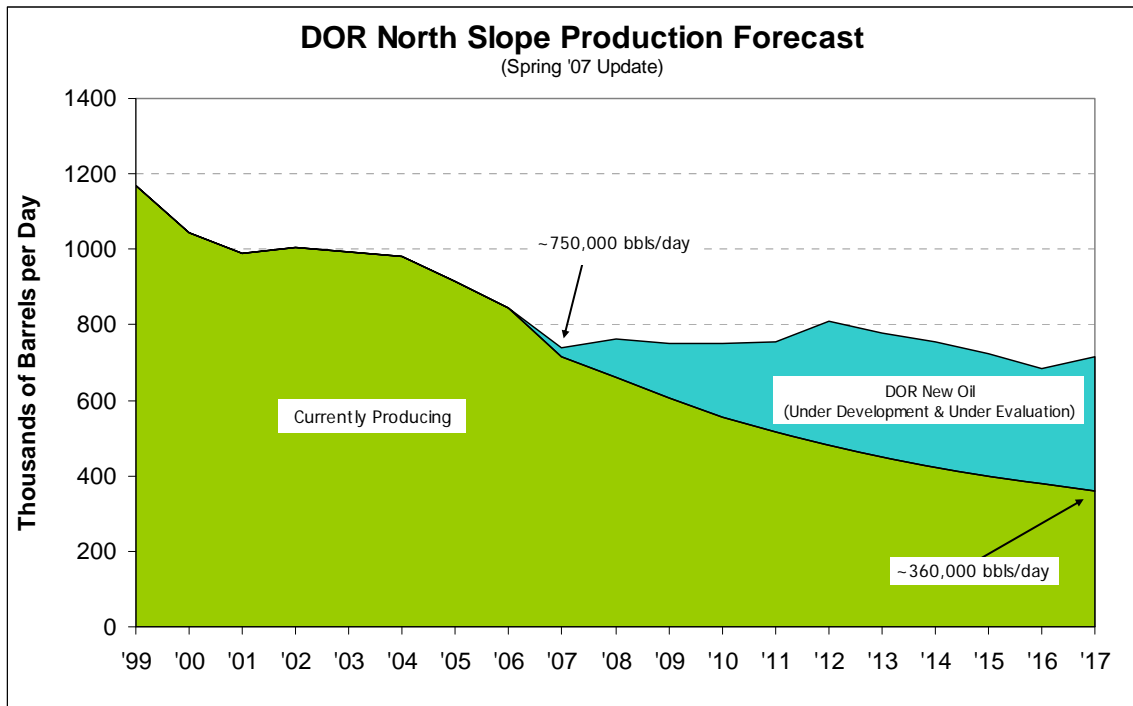
I would like to take a few moments to discuss Alaska's resource opportunities. Alaska has significant oil and gas resources. According to the US Geological Survey and the US Minerals Management Service, Alaska's undiscovered technically recoverable resources are 53 billion barrels of oil. This is in addition to the Department of Natural Resources estimate for known remaining oil resources of 6 billion barrels. To date Alaska has produced close to 17 billion barrels of oil - this is a world class result – but is less than one fourth of the potential total of 76 billion barrels. That is, Alaska still has the potential to produce another 59 billion barrels of oil. The gas resource potential almost doubles this undiscovered potential on an oil equivalent basis.



Whilst Alaska's resource potential is high, the Oil and Gas Journal and Energy Information Administration report that its world ranking of proved reserves has declined from 14<sup>th</sup> in 1977 to a position closer to 30<sup>th</sup> today.

**ALASKA's FUTURE OIL PRODUCTION**

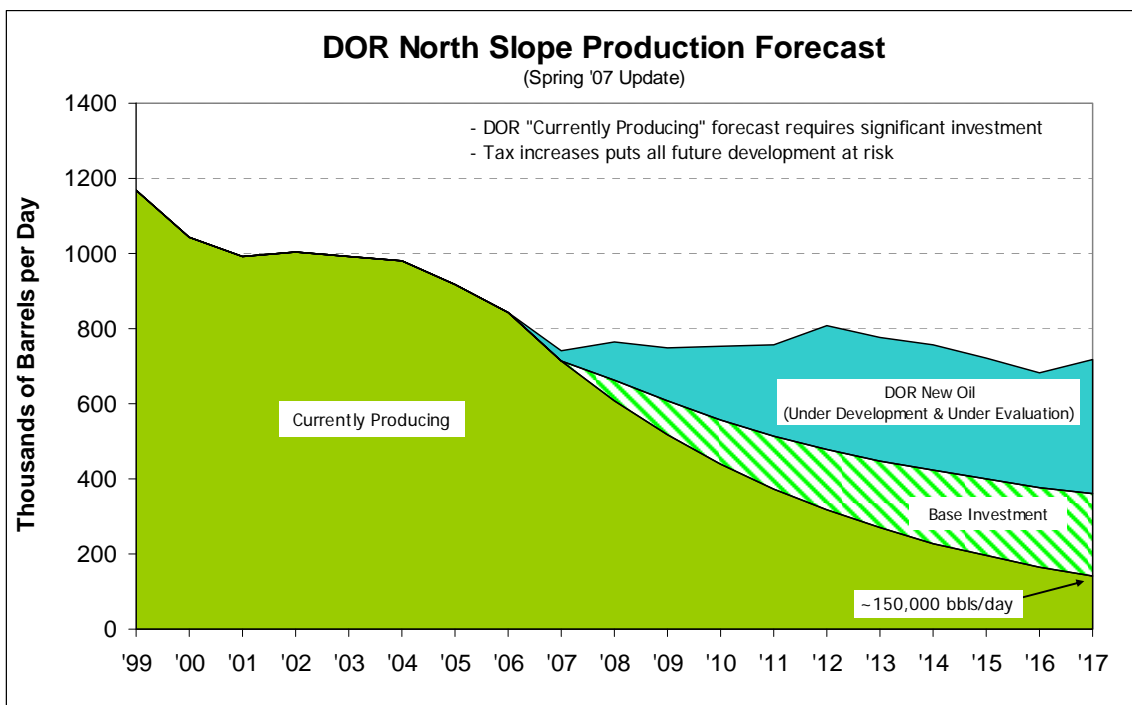
Today Alaska is producing approximately 750,000 barrels of oil per day from the North Slope, one third of its peak production. The Department of Revenue's production outlook, from their Spring Revenue Sources Book, shows that they estimate a 9% annual decline in Alaska's current base production. As the chart illustrates, at this decline rate, over the next ten years Alaska's current base production, shown in green, will drop to around 360,000 barrels per day. That is a production level of less than half of today's.



The Department of Revenue also forecasts that this base production decline will be partially mitigated with the development and production of oil in categories called "Under Development and Under Evaluation", shown in blue on the chart. These categories include future investments, such as development drilling, satellite developments, and enhanced oil recovery from existing fields. Based on this forecast, over 50% of the

projected oil production in 10 years will come from new investments. Let me say that again, 50% of future oil production in 10 years is not even developed or producing today. Considering that most new projects take at least 5-7 years to bring to production on the North Slope, investment decisions for these activities, particularly in the near term, will be critical to underpin the future of Alaska's oil production.

As I mentioned earlier, the Department of Revenue forecast is based on a 9% annual decline in Alaska's current base production. However, this decline assumes that production enhancement investments at the core Prudhoe Bay, Kuparuk and Alpine areas continue. The Department of Revenue forecast, as shown, does not highlight that this activity requires investment decisions that are no different from the "Under Development and Under Evaluation" categories. As such, a more accurate representation of the future oil production and investment levels required to achieve the Department of Revenue forecast is illustrated in the following chart.



As this chart shows, Alaska's oil production from the North Slope could be as low as 150,000 barrels per day within 10 years, (assuming 15% decline, which is typical for large oil fields such as Prudhoe Bay), without ongoing and increasing investment. Based on this forecast, within 10 years, 75% of production will come from new investments.

Conservatively, we estimate that at least \$30-40 billion of investment is required within the next 10 years to achieve the Department of Revenue forecast. This does not include the billions of dollars of additional operating expenditures that would be required to support the developments once they are producing. This is a significant level of future investment and spending.

The high tax rate in PPT and the proposed tax increase put this investment at significant risk. Alaska needs to encourage the increasing investments required, not only in exploration activities, but also in the ongoing development of existing and new fields.

**ALASKA IS A HIGH COST REGION**

Complicating the significant future investments required to mitigate Alaska's production decline is its high costs. Alaska has unique challenges resulting in a high cost environment for exploration and development and very mature producing fields with growing unit costs. Many factors contribute to Alaska's higher costs including:

- Severe arctic conditions, placing limitations on when drilling and other operations can be undertaken
- A sensitive environment, requiring significant and due diligence measures to protect it
- Remote location of the resource and distance to market
- Current restrictions for future exploration opportunities

All combine to create a unique and high cost environment for Alaska.



**ALASKA'S SO-CALLED LEGACY FIELDS**

The two largest oil fields in Alaska - Prudhoe Bay and Kuparuk, have been producing since 1977 and 1981, respectively. Today these two fields account for over 70% of the State's North Slope oil production. Assuming that exploration and investment activity continues in these fields, they could remain at this level of production contribution for the next decade.

These so called legacy fields require continuous investment to keep the oil flowing and the facilities operating at capacity. This is the same for any oil field in the world. During the production phase there are many changes in operating parameters, such as reservoir pressure changes, oil, gas and water production changes, changes in operating conditions, and ongoing technical challenges. In order to keep the oil flowing, these changes require additional investments, such as the addition of water and gas injection and gas compression facilities, which are historical significant investments at Prudhoe Bay.

Currently, the owners spend over \$2 billion dollars to optimize and enhance production from Prudhoe Bay and Kuparuk. These spending levels are in addition to the capital investments pursuing new wells, projects, and enhanced oil recovery opportunities. These operating expenditures are essential to mitigate production decline at these significant fields, which are critical to the future of Alaska's North Slope oil production.

Many of today's exploration and development activities are occurring in and around Prudhoe Bay and Kuparuk.

As an example, since the year 2000 there have been multiple Prudhoe Bay satellite fields developed - Aurora, Borealis, Midnight Sun, Polaris, and Orion - which are currently contributing over 40,000 B/D of oil production. These developments would not have been possible without the infrastructure and facility sharing of Prudhoe Bay, which reduced the development and operating costs of these satellites. As satellite fields are developed it reduces exploration and development costs for future new projects, as the infrastructure on the North Slope expands.

If the major Prudhoe Bay and Kuparuk developments did not exist these satellite fields would not have been economic to develop.

As another example, for the past seven years over 900 new wells have been drilled in Prudhoe Bay and Kuparuk. The drilling of these new wells has slowed the overall production decline from 12-15% to an estimated 6-9%. Almost 40% of Prudhoe Bay's production today is from these new wells.

For the past two years, development drilling at Prudhoe Bay has achieved the equivalent of the important Ooguruk development. This example highlights the importance of exploring for and developing new oil in and around the Prudhoe Bay and Kuparuk fields – all are important to the economic benefit and future of Alaska.

Let me re-emphasize that Prudhoe Bay and Kuparuk have the potential to continue to be critical contributors to Alaska's oil production. They have the potential to remain key hubs and enablers for exploration and development of heavy or viscous oil, light oil and gas. Encouraging increasing investment at these key fields is as important as encouraging investment in exploration and development of new fields. Without these two hubs, Alaska will be severely challenged to realize the full potential of its resources.

Progressing a tax policy that singles out and penalizes these fields will discourage investment not only at these fields but will also impact future investment attractiveness to explore and develop other Alaska oil and gas resources.

### **PROPOSED TAX INCREASE MORE COMPLICATED**

In analyzing the Administration's tax proposal, we found that virtually all of the provisions are simply tax rate increases or further increases in complexity.

As an example, under the Administrations proposed tax increase the two so-called Legacy Fields, Prudhoe Bay and Kuparuk, would have a separate 10% gross minimum tax and be segregated from each other and all other North Slope fields. This gross tax would be in addition to the base royalty payments. With this minimum gross tax the State would be insulated from price and cost risks, whilst retaining the upside potential from the progressivity element. The Administration is simply proposing to increase its take while shifting the development risks to the producers. Essentially, at low price, producers are penalized.

Companies are willing to accept the risks of long-term, capital intensive investments when there is a corresponding opportunity for upside potential and a sharing of risk should prices fall. Under the Administration's proposed tax increase, investors will need to assume a higher economic risk when making funding decisions for future investments and spending.

The Administration has also proposed that all revenues and expenses for the Legacy Fields will have to be accounted for separately, with separate taxes paid for each unit and their satellites. This would include Alaska's heavy or viscous oil reserves produced from those Legacy Fields - a resource that already has significant economic and technical hurdles to overcome. No other fields, units or regions within the state would be subjected to these administrative burdens.

The ring-fencing of the Prudhoe Bay and Kuparuk Units makes the tax proposal more complex than the existing PPT.

**EXXONMOBIL POSITON ON THE ENACTED PPT**

I believe it is important that I clarify ExxonMobil's position on the current PPT.

ExxonMobil did not support the PPT that was enacted last year. As we testified last year, we supported the concept of a net based tax but stated that the proposed 20% tax rate, in the original PPT bill, would not encourage the full development of Alaska's resources. We agreed with the 20% tax rate in order to support the progression of a gas pipeline project.

The PPT that was ultimately enacted increased the already high 20% base tax rate to 22.5% with progressivity - more than doubling industry's taxation. Alaska's current PPT tax rate is too high. When combined with the gross royalties and the high development and operating costs, it makes Alaska one of the most expensive regions to invest.

There has been a lot of discussion recently on PPT revenues and forecasts, which has been used in part to support the Administrations proposal to increase taxes. PPT has only been in existence for slightly more than one year. The Department of Revenue has not completed its PPT regulations or started any PPT audit. ExxonMobil, like a number of the other producers, met with the Department of Revenue several months ago to discuss ways to help the State better forecast its expected PPT revenues and we are willing to continue those efforts. We are also willing to work with DOR auditors to improve their understanding of joint interest billings.

**FISCAL PREDICTABILITY IS IMPORTANT**

I would now like to address another important element of the business environment - fiscal predictability. ExxonMobil, and I believe the industry, values a predictable fiscal environment in which to make long term investment decisions. Our investments are capital intensive and are evaluated over timeframes of decades. Any change in the fiscal regime has a direct impact on how we view predictability of the Alaskan fiscal environment, which in turn directly impacts how we evaluate on a risk basis future investment decisions. Let me reemphasize this point. Because of the nature and magnitude of the risks associated with any oil or gas investment, coupled with the amount of time required to recoup that investment, fiscal terms that are predictable are key to any investment decision.

The Administrations proposed tax increase would represent the third significant change to Alaska's fiscal terms in the past three years. Changing the fiscal environment for capital intensive projects, that take many years to generate a return, can only reduce the attractiveness of future investments. Each time taxes are raised, the attractiveness of any prospective well or project diminish and the likelihood of it not being funded increases. For every well or project not progressed, additional production and State revenues are lost. As mentioned earlier, to mitigate oil production decline Alaska needs to increase investment. The Administration's proposed tax increase will reduce investment.

ExxonMobil expects to be involved in Alaska for many years to come. The policies established today and in the future will impact the attractiveness of future potential projects and the future of Alaska.

**ALASKA NEEDS A LONG-TERM RESOURCE DEVELOPMENT POLICY**

As I mentioned earlier, Alaska has significant resource potential, but with many unique cost challenges. It will take significant resources, technology, investment and teamwork from everyone to realize the full potential. Alaska and industry collaboratively need to create a resource development policy that encourages investment for long-term production and growth. This is a complex issue and needs significant time and effort from all parties. It is beneficial to look at what others have done.

The Canadian province of Alberta has enormous unconventional crude oil resources. Alberta's oil sands represent the potential of over 170 billion barrels of crude, and, like Alaska's resources, are located in higher cost, remote arctic regions that require significant investments to develop.

Alberta adopted a resource development policy approach, designed to increase industry investment and production. Their approach has proven successful due to a number of key factors:

- Collaborative pursuit of resource development objectives
- Development of technologies jointly with industry to reduce costs, increase oil recovery, and upgrade viscous oil to marketable products
- Creation of a level playing field for all projects
- Sharing risks with the investors by maintaining a lower gross revenue based tax, that is, lowering royalties significantly
- Providing long term fiscal predictability

Alberta's success suggests that Alaska should seriously consider what other regions are doing to encourage investment.

A long-term sustainable resource development policy is required to enable Alaska to maximize its oil and gas resource. There are many factors that need to be considered.

It is a complex issue. I hope that key points addressed in my testimony are considered:

- Alaska has significant resource potential, but it is in a high cost environment
- Oil production is already one third of its peak, yet we have only produced one fourth of the oil resource potential
- In 10 years, 75% of Alaska's future oil production needs over \$30-40 billion of new investments - investments that are needed sooner than 10 years.
- Prudhoe Bay and Kuparuk are the "hub" of the North Slope, they
  - Represent 70% of North Slope oil production for the next 10+ years
  - Can be the backbone for future exploration and economic developments, whether it is existing production, future light oil, heavy oil, or gas
  - Need increasing investments to achieve their potential
- Development drilling at Prudhoe Bay and Kuparuk over the last 2 years has added 50,000 B/D of new oil production in 2007

We propose a collaborative approach to develop a sustainable long term resource policy that will encourage the needed increasing investments and build the future of Alaska for many generations to come. ExxonMobil looks forward to working with the Administration, the legislators, industry and the people of Alaska in the future pursuit and development of its oil and gas resources.



To encourage full development of Alaska's resources, the PPT tax rate needs to be lowered, and should not include a gross revenue based component. Increasing investment fuels the economy.

Thank you again Mister Chairman for the opportunity to testify today.