

Oil and Gas Seismic, Well and Lease Data Acquisition**FY2006 Request:****\$285,000****Reference No:****33977****AP/AL:** Appropriation**Project Type:** Planning**Category:** Development**Location:** Statewide**Contact:** Mark Myers**House District:** Statewide (HD 1-40)**Contact Phone:** (907)269-8800**Estimated Project Dates:** 07/01/2005 - 06/30/2006**Brief Summary and Statement of Need:**

This project requires funding to acquire, analyze, preserve, protect, and distribute oil and gas exploration and development data; provide the geoscientific and engineering skills and applications to do so, and; would distribute appropriate technical and leasing data to the public. The project will encourage and accelerate additional development of the state's petroleum resources while protecting the confidential nature of much of that information. Proper management and oversight of petroleum exploration, leasing, and development on state lands requires that the Division maintain technical parity with explorers, lessees, and operators when it comes to its information base.

Funding:	<u>FY2006</u>	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>	<u>Total</u>
Gen Fund	\$285,000	\$205,000	\$190,000	\$190,000	\$190,000	\$190,000	\$1,250,000
Total:	\$285,000	\$205,000	\$190,000	\$190,000	\$190,000	\$190,000	\$1,250,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Additional Information / Prior Funding History:

SLA04/CH159 - \$250,000 (Seismic, Well, and Lease Data Acquisition)

SLA03/CH82 - \$250,000 (Seismic, Well, and Lease Data Acquisition and Interpretation)

SSSLA02/CH1 - \$155,000 (Seismic Data Acquisition and Interpretation)

SLA01/CH61 - \$138,000 (Seismic Data Acquisition and Interpretation)

SLA93/CH79 - \$450,000 (Seismic Data Acquisition and Evaluation)

Project Description/Justification:

In order to accomplish the Division's mission of maximizing responsible oil and gas development revenues for the benefit of the state's citizens, the Division must acquire: (1) exploration data (2-D and 3-D seismic data, digital well logs); (2) reservoir engineering data for proper allocation of reserves and reservoir performance modeling; (3) staff training, state-of-the-art hardware, and interpretive/analytical software to maintain proficiency to industry standards; (4) data processing and reprocessing services when necessary; and (5) implementation of internet security measures commensurate with state policy standards. These data, skills and capabilities are the tools used by the Division to ascertain the hydrocarbon potential of state lands offered for lease, to determine the economic value of unit and participating area proposals submitted by industry, to properly monitor field development and production procedures, to properly quantify and evaluate the extracted resource and to ensure that the state and other stakeholders receive their

equitable shares of resulting revenue. In addition, because of the immense monetary value of the large quantity of confidential industry data and information archived in Division databases and because the Division is actively promoting Alaska oil and gas opportunities on the public internet environment, it is imperative that the Division continue with its effort to adopt the State of Alaska Online Security Policy standards.

Task 1: Although explorers are acquiring less seismic and well data on state lands than in the past, the Division continues its effort to obtain seismic data acquired by explorers in past years. Such data acquired on state lands under state permit are available for the cost of reproduction. If modern data from federal lands such as the NPR-A and the Outer Continental Shelf (OCS) portions of the Beaufort Sea, Bristol Bay, and Lower Cook Inlet are needed to evaluate nearby state lands they must be purchased at market value. (Pursuant to federal regulations, seismic data acquired on the federal OCS are released after a 25-year confidentiality term. Such data are now becoming available for essentially the cost of reproduction and will prove to be of value to the state and to second-generation explorers).

The Division must also continue the project of converting its inventory of older hardcopy geophysical data to digital format through modern scanning methods. This is beneficial in two ways: (1) through optical scanning, prints of seismic data are converted to industry-standard digital format compatible with the interactive interpretive software utilized by the Division; (2) hardcopy data now deteriorating in bulky files are preserved on disk or tape, can be backed up electronically and require much less storage space.

Having initiated an outreach program during FY05 to promote the administration's policy of expediting renewed exploration we have learned that there is a dearth of information in the public domain regarding the geology and petroleum potential of Alaska's petroliferous basins. To that end, the Division will attempt to purchase or otherwise acquire publication rights from the private sector to utilize seismic data as illustrations in various publications. The U.S. Geological Survey has such a contract with a major geophysical contractor and the Division hopes to arrive at a similar agreement.

The interpretive software utilized by the Division requires that well logs and associated information be in industry-standard digital format(s) and that the subsurface borehole tracks of deviated and horizontal wells be precisely surveyed. Many key exploration wells, especially those drilled prior to 1986, are not available in complete digital format from any state agency. Unavailability of this key information is the most common complaint of explorationists interested in assessing Alaska's petroleum potential and continues to be a handicap for Division staff. Consequently, the digital data must be acquired from a commercial vendor that has digitized the logs or must be digitized by the Division or other state agency (preferably under contract since the process is extremely time consuming). A U.S. Department of Energy grant is available to partially offset the cost of acquisition of the digital well data. The Division is currently (FY05) negotiating purchase of a vendor's off-the-shelf digital well log inventory, but the result is uncertain inasmuch as the state terms are that the basic data can be disclosed to the public. The vendor may not be willing to surrender that market value. If not, this task will be continued into FY06, in all likelihood requiring that the log curves will have to be digitized from the original hardcopy images. If so, a temporary employee or student intern will be required to coordinate the project which might last several years.

Task 2: The Division will be required to determine the final tract allocations for two major producing fields (Alpine, Northstar) during the first half of FY06. Although agreements with the operators (ConocoPhillips, British Petroleum) allow the lessors (State of Alaska, Arctic Slope Regional Corporation, Minerals Management Service) limited access to the operators' reservoir simulation applications and technical staff, the Division will need to compile and independently analyze geological, well log, and production data in preparation for the allocation determinations. This decision is critical for all stakeholders in that the allocation is the basis upon which past and future revenue is distributed. Similar efforts, although not for the determination of resource allocation, might be required to continue the review of the Point Thomson field as possible production scenarios are considered to determine that most beneficial to the stakeholders.

Task 3: On occasion the Division might have need for problem-specific processing applications beyond its in-house capability. For example, analysis of certain attributes of 3-D seismic data representing reservoir properties might need to be outsourced to ascertain possible fluid type; to correctly define field limits; to monitor reservoir performance and to properly allocate reserves, production and royalties to the state, other lessors and lessees.

Task 4: Completion of the process initiated in FY05 of the upgrade of the Division's database security system to meet the requirements of the State of Alaska Online Security Policy to ensure, in our increasingly web-interfaced environment, protection of confidential data and information held by the division. To do so will require contracted consultant support and the probable purchase of necessary hardware and software.

Why is this Project Needed Now:

- ? To provide the information and data necessary to maintain the Division's role of managing the state's petroleum resources for the benefit of the citizens of the state.
- ? Accelerated capitalization of the state's petroleum resources by providing web-based land, lease, exploration, development and production information to companies interested in seeking entry to Alaska's petroleum sector.
- ? To ensure equitable allocation of resource and revenue shares from oil and gas production to state, federal, Native, and private stakeholders.
- ? To maintain technical and professional parity with industry in an information-transfer environment while properly protecting confidential industry data and information entrusted to the state.
- ? To provide leverage in matters arising from Department and Division decisions regarding oil and gas resource management programs.
- ? For continued protection from litigation.

Specific Spending Detail:

Line Item Expenditures	FY06	FY07	FY08	FY09	FY10
71000 Personal Services	\$0	\$0	\$0	\$0	\$0
72000 Travel: training, outreach at conventions, per-diem, interagency consultations	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
73000 Services: data purchases, seismic publication rights, analog-to-digital conversion, security consultant, licensing fees, student intern.	\$260,000	\$180,000	\$165,000	\$165,000	\$165,000
74000 Commodities	\$0	\$0	\$0	\$0	\$0
75000 Capital Outlay: computers, printers, plotters, software.	\$0	\$0	\$0	\$0	\$0
TOTAL	\$285,000	\$205,000	\$190,000	\$190,000	\$190,000

Project Support:

This project is likely to be supported by virtually all agencies dependent upon oil and gas revenue, Native groups, oil and gas explorers and producers, and supporting industries and associations.

Project Opposition:

None expected.