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Arctic National Wildlife Refuge (ANWR) *Advanced Technology Balances our Need for Energy & Our Concern for the Environment*

America's energy crisis can't be solved through conservation alone; our nation needs to produce more domestic energy to reduce our reliance on foreign oil, including oil from Iraq. Of course, Americans want to balance energy production with a concern for the environment. Thanks to new technology, balancing the environment and energy production is a reality.

Today, advanced technology is dramatically reducing the amount of land impacted by new oil exploration and development--and land being impacted is being treated with greater respect.

On Alaska's North Slope, technology succeeds not only in extracting oil, but also in protecting the environment. North Slope drillers now routinely bore directional wells that reach out four miles from the surface location of the rig. That means one production pad on the surface can drain 64 square miles of subsurface. If it were necessary, rigs on the slope could drill as far as five miles. With bigger rigs, they could go even further.

Companies have also learned to develop fields with more compact facilities and without permanent roads. Badami, a new field, is being produced from only one production pad; Alpine, another new field, will produce from just two pads. Northstar, an offshore field, will produce from one five-acre production island. In the large Prudhoe Bay field, pads, roads and pipelines take up just 2% of the field's 250 square miles. If Prudhoe Bay were coming on line with today's technologies, the field would affect an area of land 64% smaller.

MULTI-LATERAL OIL WELLS: CONSERVING SURFACE RESOURCES

An exciting new technology pioneered on the North Slope involves "multi-lateral" wells, or several new wells drilled underground from the vertical hole of a single well. This conserves resources used on the surface, since one pad and pipeline could serve many underground wells instead of one.

3-D SEISMIC: PINPOINTING OIL REDUCES EXPLORATION

New seismic technologies, aided by the powerful computers available today, more precisely and efficiently pinpoint promising oil and gas targets. "Three-dimensional" seismic, a new technique involves geophysical seismic surveys on a grid rather than on parallel two-dimensional lines. Increased efficiency allows seismic crews to spend less time on the ground, and more time pinpointing targets. The result is fewer exploration wells are drilled.

ANWR: AMERICA'S BEST POTENTIAL FOR A MAJOR SOURCE OF NEW OIL

Most geologists think that the 1.5 million-acre Coastal Plain in the Arctic National Wildlife Refuge (ANWR) has the best prospects for new, major contributions to America's domestic oil supply—upwards of 16 million barrels of recoverable oil over a thirty-year period. Congress set the Coastal Plain aside in 1980 expressly for further study of its petroleum potential.

The Arctic National Wildlife Refuge (ANWR) is comprised of 19.6 million acres, which is about the size of South Carolina. The Coastal Plain lies along the Beaufort Sea in the extreme northeast corner of Alaska. Once oil is pinpointed, actual production will require less than 2,000 acres, or .0001% of the refuge.

Though the Coastal Plain was reserved for oil study, a further act of Congress is required to proceed. Passage of the National Energy Security Act of 2001 would enable energy exploration and production to begin.

ANWR FACTS:

- Refuge totals 19.6 million acres
- 8 million acres designated as Wilderness
- Congress set aside 1.5 million acres in the Coastal Plain, 1.5 million acres, for the study of oil potential.
- Only a tiny fraction of the Coastal Plain, less than 2,000 acres, would be impacted by oil development.

THE COASTAL PLAIN IS NOT PRISTINE

A community, Kaktovik, exists in the Coastal Plain; military installations operate in the plain now and in the past; 40 outdoors and recreation guide companies operate there.