

DIRECTIONAL DRILLING DUPLICITY

Directional drilling has been tirelessly touted as a technological success story that would dramatically minimize the impacts of drilling to the Coastal Plains fragile ecosystem. This is just not the case. Facts clearly indicate that the successes of recent drilling technology advances in mitigating environmental concerns have been grossly exaggerated. State of the art drilling practices are often not used due to economic or geological considerations as the ecological footprints of drill sites continue to balloon. The result: broken promises and cumulative harm to the pristine environment.

“With new horizontal drilling, companies make one hole and tap reserves up to 7 miles away.”ⁱ
Interior Secretary Gale Norton (April 5, 2001)

Contrary to Secretary Norton’s claims, no wells have extended out 4 miles on the North Slope. Of more than 4,800 wells drilled on the North Slope to date, only 21 have reached more than 3 miles away.ⁱⁱ For 95% of all North Slope wells, the reach across the landscape was less than 2 miles away from where the drill rig sat. Even at the recently developed Alpine oil field—touted as a model of new technology—the average production well has extended only 1.6 miles laterally from the wellhead.ⁱⁱⁱ

“Smallest footprint ever...we’ll develop Alpine from just two drill sites of less than 115 acres.”
ConocoPhillips (formerly ARCO) “Alpine- Discovering the Future” (1998)

On December 6, 2004, federal agencies approved the industry’s plans to build five more drill sites connecting to the initial Alpine oil field.^{iv} Once these are constructed, the Alpine Project will total 7 drill sites, 33 miles of permanent gravel roads; two airstrips; two gravel mines; and 72 miles of pipelines.^v But that is just the beginning; the Bureau of Land Management shows future long-term oil and gas development for the Alpine Project could include 24 more production drill sites, 122 more miles of roads, 7 more airports, 150 miles of pipeline, and 1262 more acres of tundra smothered by gravel.^{vi}

“The Alpine experience has made us realize how great the differences are between what is planned and what actually happens. -- Community of Nuiqsut, 2002^{vii}

Economic and geological factors greatly inhibit directional drilling. In 2000, BP noted “the company stopped drilling extended reach wells—those which reach out a long distance from the pad—after oil prices crashed in the late 1990’s, because extended-reach drilling is expensive.”^{viii} In 2004, BLM cited economic and geological limitations of directional drilling when it granted ConocoPhillips an exemption from a lease stipulation prohibiting the company from building a drill site for 30 wells, powerplant, road, and other permanent facilities in the sensitive fish and wildlife habitat of Fish Creek.^{ix}

Even if the technology performed as well as its proponents claimed, directional drilling would do little if anything to mitigate the full impacts of oil production in the Arctic Refuge. Permanent gravel roads and busy airports are still used for access, and production well sites must be connected by pipelines. Intrusive, noisy and damaging seismic surveys on the surface are still necessary for exploration. Directional drilling is still dirty business.

ⁱ *Denver Post*. April 5, 2001. “Norton Praises Oil Drilling Practices.”

ⁱⁱ Data analysis by A. Baldivieso, GIS Analyst, Alaska Center for the Environment. February 4, 2005. Well data base obtained from H. Okland, January 13, 2005, Alaska Oil and Gas Conservation Commission (geographic areas: Arctic Foothills, Arctic Ocean, Arctic Slope, Beaufort Sea, Chukchi Sea), supplemented with 27 offshore wells from Alaska Department of Natural Resources, Division of Oil and Gas, (well database, last updated in 2002) (<http://www.dog.dnr.state.ak.us/oil/products/data/wells/wells.htm>; www_well_lat_lon).

Drilling distance was calculated as lateral offset between top-hole and bottom-hole latitude and longitude locations for a total of 4865 wells that have been drilled (wells with insufficient data were excluded; a total of 5119 wells were in the combined database but we excluded those without completion dates for the analysis). Information for all wells was used for charts categorized by miles, and for determining total number greater than 2 or 3 miles away. Chart for average distance by year is based on production wells only (excluding exploratory wells; including all types of production wells –service, injection, ngl, and waste disposal). The average distance for 4865 wells (production and exploration) analyzed was 0.93 miles.

ⁱⁱⁱ Analysis by A. Baldivieso, February 4, 2005, for Alpine wells, defined as encompassing all within the Colville River Unit. Alaska Department of Natural Resources. August 23, 2004.

^{iv} BLM. November 8, 2004. *Alpine Satellite Development Plan Record of Decision*. Signed by Rebecca W. Watson, Assistant Secretary Land and Minerals Management.

U.S. Army Corps of Engineers. December 6, 2004. *Record of Decision, Alpine Satellite Development Project, Satellites CD-3 and CD-4*. Signed by Colonel Timothy J. Gallagher.

^v Initial Alpine: U.S. Army Corps of Engineers. February 13, 1998. *Permit evaluation and decision document*. Application No. 2-960874. Colville River 18. Pp. 1-3. Initial Alpine (ASRC gravel mine): U.S. Army Corps of Engineers Alaska District. June 24, 1997. *Permit Colville River 17 4-960869* to Nuiqsut Constructors.

Alpine Satellites: U.S. Army Corps of Engineers. December 6, 2004. *Record of Decision, Alpine Satellite Development Project, Satellites CD-3 and CD-4*. Signed by Colonel Timothy J. Gallagher. Table 1, P.6.; U.S. Army Corps of Engineers. September 3, 2004. *Public Notice POA-2004-253-2, Colville River*. (ConocoPhillips Alpine satellites CD-3, CD-4). Table 2, (CD-5, CD-6, CD-7).

^{vi} BLM. September 2004. *Alpine Satellite Development Plan. Final Environmental Impact Statement*. Vol. 1, Sec. 2, Tables 2.4.1-6, 2.4.1-7, 2.4.1-8, pp.69-71.

^{vii} Kuukpik Corporation, Native Village of Nuiqsut, City of Nuiqsut, and Kuukpikmiut Subsistence Oversight Panel. March 6, 2002. Letter to U.S. Army Corps of Engineers, Alaska District, on Colville River 26 & 27, 4-2001-0321 CD South (Nanuq) and 4-2001-0322 CD North (Fiord). P.38.

^{viii} *Petroleum News Alaska*. October 2000. “BP plans busy exploration season, both in NPR-A and satellites.”

^{ix} BLM. September 2004. *Alpine Satellite Development Plan. Final Environmental Impact Statement*. Vol. 3. Appendix I, CPAI request for exception to stipulations. ConocoPhillips letter dated April 8, 2004 to BLM. Pp.3-4.