

Alpine – Colville River Unit

North Slope, Alaska

Field Facts

Operator	ConocoPhillips	
Ownership	ConocoPhillips Alaska	78%
	Anadarko Petroleum	22%
Average Daily Production	46,000 barrels of oil per day (BOPD, average daily net production, 2012)	
Oil Gravity	40° API Oil Gravity	
Discovery	Declared commercial and announced in 1996	
Start Up	November 2000	
Stats	4 drill sites, approximately 175 wells	

Basic Facts

The Colville River Unit (commonly referred to as “Alpine”) is located in the Colville River Delta on Alaska’s Western North Slope, 34 miles west of the Kuparuk River Field (“Kuparuk”) and eight miles north of the Inupiat village of Nuiqsut. Field construction and development took three years, six million man-hours and cost more than \$1.3 billion. This is a roadless development, and in the winter an ice road is built connecting Kuparuk to Alpine to move in supplies for the rest of the operating year. In any given winter season more than 1,500 truckloads of modules, pipeline and equipment are moved to Alpine over the ice road.

More than eight years of environmental studies guided conceptual development of the field, allowing engineers and environmental experts to locate drill sites and facilities in areas where they have had minimal impact on wildlife, waterfowl and the subsistence lifestyle practiced by Nuiqsut residents.

Continued on page 2



Alpine Production

Alpine was the first North Slope field developed exclusively with horizontal well technology to access greater than 50 square miles of subsurface from a single drilling pad. It also employs Enhanced Oil Recovery (EOR) through waterflooding and miscible gas injection. Its one-day production record was 139,000 barrels in 2007. The original Alpine facility was planned as a 97-acre surface development that included stand-alone processing facilities (CD1), a second drilling pad (CD2), and an airstrip/3-mile gravel road connecting the two pads. That original development accessed about 40,000 acres of subsurface area from the original two drill sites.

With additional satellites, the total surface development now encompasses about 165 acres. The first two Alpine satellites – Fiord (CD3) and Nanuq (CD4) - came on line in 2006. CD3, three miles north of the main Alpine facility, is a roadless drill site with an airstrip and has winter-only drilling via an ice road. CD4 is four miles south of the main Alpine facility and is connected by a gravel road. These two satellites represent approximately \$500 million in investment. In July 2008 another oil pool, Qannik, began producing. The Qannik development is an extension of the CD2 drill site two miles west of the main Alpine processing facility.

In December 2011, the U.S. Army Corps of Engineers granted a permit allowing construction of a gravel road, bridge and pipeline crossing over the Nigliq channel of the Colville River for development of a satellite field five miles west of Alpine in the National Petroleum Reserve-Alaska (NPR-A). Terms of the permit were incorporated into the project plan, and the Alpine West/CD5 Project was sanctioned for funding in October. Plans are to complete engineering design work, order materials and equipment, begin fabrication and prepare for construction throughout 2013. Construction is scheduled to begin in the winter of 2014. First production is expected in late 2015. CD5 will represent the first production from the National Petroleum Reserve-Alaska and will result in the new production of 10,000 to 18,000 barrels of oil per day, with peak employment of approximately 400 new direct jobs during the construction and hundreds more support jobs.

After processing, the sales-quality crude oil from Alpine moves to market through an elevated 34-mile, 14-inch pipeline connecting Alpine to the Trans Alaska Pipeline System via the Kuparuk Pipeline System. ConocoPhillips also continues to evaluate further exploration and development potential in the NPR-A area.

