



## TRANS ALASKA PIPELINE SYSTEM

The 800-mile-long Trans Alaska Pipeline System (TAPS) is one of the world's largest pipeline systems. Starting in Prudhoe Bay on Alaska's North Slope, TAPS stretches through rugged and beautiful terrain to Valdez, the northernmost ice-free port in North America. Since pipeline startup in 1977, Alyeska - TAPS' operator - has transported more than 15 billion barrels of oil.

In 1968, oil was discovered at Prudhoe Bay in the North Slope, located in northern Alaska between the Brooks Range Mountains and the Beaufort Sea (part of the Arctic Ocean). A consortium of oil companies planning to produce the oil determined that a pipeline offered the best means to transport crude oil from the North Slope to a navigable port in southern Alaska where it could be shipped by tanker to refineries in the continental United States.

## ABOUT ALYESKA PIPELINE SERVICE COMPANY

Alyeska Pipeline Service Company, named after the Aleut word Alyeska meaning mainland, was established in 1970 and charged with designing, constructing, operating, and maintaining TAPS. At the time, construction of the pipeline was the largest privately financed construction project ever attempted, and cost over \$8 billion when completed. Pipeline construction began in March 1975 and was finished in June 1977. Crude oil began flowing in the pipeline on June 20, 1977 and the first tanker filled with North Slope crude oil left Valdez on August 1, 1977.

The consortium of companies that own TAPS today includes: BP Pipelines Alaska (46.93%), ConocoPhillips Transportation Alaska, (28.29%), ExxonMobil Pipeline Company (20.34%), Unocal Pipeline Company (1.36%), and Koch Alaska Pipeline Company, L.L.C., (3.08%).

## PIPELINE FACTS

The 48-inch diameter steel pipeline runs 800 miles and crosses three mountain ranges and 800 rivers or streams. Moving "hot" oil across the permafrost rich soil of Alaska presented a special challenge to pipeline designers. Typical pipeline construction at the time involved burying most pipelines, but because of the permafrost through most of Alaska, large segments of the trans-Alaska pipeline were elevated above ground to keep the permafrost from melting. About half of the 800 mile pipeline is buried in a conventional manner.

More than 16 billion barrels have moved through the Trans Alaska Pipeline System since start up in 1977. The volume of oil flowing through the pipeline has decreased from a peak of 2.1 million barrels per day in 1988 to about 671,000 bpd in 2010. Alaska today supplies nearly 17% of the United States' domestic crude oil production.

Over 19,000 oil tankers have been loaded with Alaska crude oil in Valdez since the pipeline began operation. The Marine Terminal cost \$1.4 billion to build, covers 1,000 acres, and includes 18 oil storage tanks with a total capacity of over 9 million barrels.

## SPILL PREVENTION AND RESPONSE

Alyeska Pipeline spends over \$60 million annually to oil spill prevention and response in Prince William Sound, and has dedicated over 300 personnel to this effort, mostly through its Ship Escort/Response Vessel System (SERVS). Created in July 1989, SERVS is considered one of the best oil spill prevention and response forces in the world. The SERVS mission is three fold: prevention, preparation, and response. Each laden tanker is escorted through Prince William Sound to the Gulf of Alaska by response vessels capable of assisting a distressed tanker. In addition, oil spill response equipment has been pre-stationed throughout the Sound for rapid response.

Between 60-70 drills are held annually so personnel and equipment along all 800 miles of TAPS are ready 24/7 to respond to any contingency.

