

The Better Than Caspian (BTC) Pipeline

May 27, 2005

On May 25th, the leaders of Azerbaijan, Georgia, Turkey, and Kazakhstan gathered in Baku along with oil company officials to mark the inauguration of oil flowing in the Baku-Tbilisi-Ceyhan (BTC) pipeline. The \$3.2 billion, 42 inch, 1 million bpd capacity pipeline runs 1,090 miles from Baku though Azerbaijan, Georgia, and Turkey to the Mediterranean port of Ceyhan. The pipeline bypasses the congested Bosphorus Strait through which tankers transport oil from the Caspian Pipeline and other Black Sea ports.



The BTC pipeline was developed by an international consortium of 11 partners led by BP as operator with a 30.1% share, the state oil company of Azerbaijan (SOCAR) with a 25% share along with Unocal (8.9%), Statoil 8.71%, TPAO (6.53%), ENI (5%), TotalFinaElf (5%), Itochu (3.4%), INPEX (2.5%),

ConocoPhillips (2.5%), and Amerada Hess (2.36%). The pipeline has a design life of 40 years with two pumping stations in Azerbaijan, two in Georgia, and four in Turkey with a flow speed of 2 meters per second (about 4.5 miles per hour). A new terminal was built in Sangachal, Baku, and a new terminal is near completion at Ceyhan, the terminus of the Iraq-Turkey pipeline. The new Ceyhan terminal will have seven new crude oil storage tanks and a jetty that can load two tankers up to 300,000 dwt simultaneously.

The BTC pipeline project began with the signing of a Production Sharing Agreement to handle a cluster of oil discoveries offshore Caspian known collectively as the Azeri, Chirag, Gunashli (ACG) oil field. The development of this field needed an outlet to the world market. Although upgrading or building a new pipeline to the Black Sea was considered, the end result of five years of technical and commercial studies was the present route bypassing the Bosphorus Strait and its congestion and environmental concerns. Russia objected to the BTC pipeline as it provided an outlet of Caspian crude that did not rely on the Russian pipeline system. Iran wanted a pipeline running straight from the Caspian Sea to an Iranian export port. The United States, however, preferred a pipeline that involved neither Russia nor Iran.

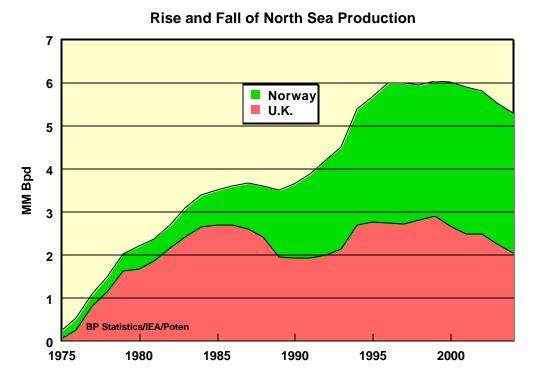
Pipeline construction started in 2003, and in a remarkably short time, was finished in 2005. Filling the pipeline will require about 10 million barrels, about half a billion dollars worth of oil, and may take as long as six months to complete. The pipeline is expected to be in operation during the fourth quarter of 2005. Georgia receives a transit fee for oil passing over its territory in return for ensuring pipeline security. The fee will be a significant source of revenue for the poverty stricken nation adding several percentage points to its GDP. A similar arrangement has been made with Turkey.

Great care was exercised both in terms of environmental considerations and in dealing with local populations (approximately 20,000 landowners were affected by the pipeline). Not all these negotiations went smoothly. In Khaishi, Georgia, shown on the map, 130 families were supposed to receive \$330,000, a small fortune, for pipeline passage through their communal land. Unfortunately the head of the village and his relatives allegedly absconded with the money. As a gentle reminder of the region's fragile political stability, days before the inauguration of the pipeline, protesters in Baku demanded a greater degree of freedom including free elections. Another problem affecting the project was that the reserves of oil eventually discovered offshore Caspian did not live up to earlier expectations. Crude can be made available to keep the pipeline busy by building an extension to oil fields in Kazakhstan. The presence of the president of Kazakhstan at the

inauguration sparked rumors that the BTC pipeline may eventually be expanded in capacity to 1.6 - 1.8 million bpd to accommodate Kazakh crude.

And Where Will the Oil Flow?

Caspian crude is sweet similar to North Sea crude. While the Norwegian sector oil production is currently stable, but maybe not for long, the UK sector crude has been in a decline since 2001. North Sea crude production is falling by a little over 200,000 bpd per year and its aggregate production has already fallen about 725,000 bpd since 2001. One more year of decline will presumably consume the entire output of the BTC pipeline as replacement oil.



Thus the obvious destination of Caspian crude is to replace North Sea crude. Some of the crude may also be shipped to the U.S. and some may be shipped through the reversed trans-Israel pipeline, where it can be loaded on VLCCs for shipment to Asia at its Red Sea terminus at Eilat.

The economies of scale of VLCCs make them a more attractive option than Suezmaxes in moving crude from Ceyhan to northern Europe and the U.S. Depending on the split between Europe and the U.S., we estimate that 15-20 VLCCs would be required to handle the pipeline's output—certainly a boost for tanker owners.