



## PETROLEUM SOCIETY

CANADIAN INSTITUTE OF MINING, METALLURGY & PETROLEUM

Lloydminster & District Heavy Oil Section

### May 17, 2006 CIM Lunch 'n Learn Bonnyville, Alberta

#### Keith Scheidt, Operations Leader Tucker Lake Thermal Project - Husky Energy

##### BIOGRAPHY:

- Over 20 years working in primary, thermal heavy oil and sweet shallow gas fields in the Lloydminster and Cold Lake regions.
- B Sc Mechanical Engineering from the University of Saskatchewan
- Currently the Operations Leader for the Husky Oil Operations Limited Tucker Thermal Project.

##### ABSTRACT:

The oil sands of northern Alberta are one of Husky's long-term growth areas. The Company has more than 425,000 acres in the Athabasca, Cold Lake and Peace River areas that contain over 33 billion barrels of bitumen in place. Our first two projects are Tucker and Sunrise.

The presentation will include an overview of Husky Oil Operations Limited Tucker Thermal Project. The Tucker Thermal Project will use horizontal wells to recover bitumen over bottom water from the Clearwater formation. Located just south of Imperial Oil's Cold Lake Operations, the Tucker Plant is designed to process 30,000 bbl/d of dry bitumen and 90,000 bbl/d of dry steam from 32 well pairs. Initial steam injection is planned for the end of July 2006 with bitumen production expected to follow about after 90 days.

##### Production Technology:

- Husky will use steam assisted gravity drainage technology (SAGD) to recover the bitumen. With 30 to 50 metres of continuous clean sand, the Clearwater formation at Tucker is particularly suited to the application of SAGD technology.
- Steam is continuously injected through the upper well into the reservoir. A steam chamber forms heating the bitumen and enabling it to flow. The bitumen and condensed steam, under the influence of gravity, drain to the lower horizontal well. These fluids are then produced through the wellbore to the surface.
- Natural gas or pumps may be used to assist in lifting the produced fluid in the wellbore to the surface.
- Husky announced corporate approval to proceed with commercial development of our Tucker Oil Sands Project, 30 kilometres northwest of Cold Lake, Alberta, in July 2004. During the 35-year project life we expect to recover 352 million barrels using a steam assisted gravity drainage (SAGD) process.
- Construction began in the fall of 2004 and facility commissioning is anticipated in late 2006. First oil production will commence within three to six months thereafter. Production from the project is expected to be 30,000 barrels per day or more.

##### Tucker Project Summary

Tucker Working Interest	100 percent
Expected first production	2007
Possible and probable reserves	352 million bbls
Peak production	30,000 - 35,000bbls/day
Capital cost to first oil	\$500 million