

**CANADIAN SYNCRUDE SUPPLY**

**OVERVIEW**

**COQG MEETING  
NEW ORLEANS  
JANUARY 29, 2004**

**PRESENTER:**

**AARON DILLARD**

**CONOCOPHILLIPS COMPANY**

## **CANADIAN SYNCRUDE SUPPLY**

### **EXAMPLES OF SOME PRODUCTION FACILITIES**

#### → **Syncrude**

- Ft. McMurray, Alberta
- 240M B/D
- Type: Mined Oil Sands with Upgrader
- SSB – Syncrude Sweet Blend
  - 32 Degrees API
- Sulfur = <0.1 wt%

#### → **Suncor**

- Ft McMurray, Alberta
- 220M B/D
- Type: Mined Oil Sands with Upgrader
- ½ of Production is OSA Oil Sands A (Similar to SSB)
  - 32 Degrees API
  - Sulfur = >0.1 wt%
- ½ of production Sour Syncrude which contains
  - Distillates, Naphtha, Gasoil
  - Higher Sulfur
  - Higher Acids

#### → **Athabasca Oil Sands Project (JV with Shell, Chevron/Texaco and Western Oil Sands)**

- Mine Located North of Ft McMurray. Bitumen and sands separated at mine site and bitumen pipelined 493 km to Scotford (Edmonton for Upgrading – 150MBD gross capacity)
- 80M B/D of Heavy Synthetic Blend is the primary product
  - Blended with Wabaca conventional heavy crude
  - 20 Degrees API
  - 2.1 wt% Sulfur
  - 0.3 TAN

#### → **Husky Upgrader**

- Lloydminster, Alberta
- 60M B/D
- HSB – Sweet, high Quality Syncrude
  - 32.3 Degrees API
  - 0.31 wt% Sulfur
  - 0.02 TAN
- Utilize conventional heavy and bitumen as feedstocks

- **Synbit**
  - Blend of synthetic and raw bitumen crude
  - Bitumen usually produced through SAGD technology (reserves are too deep to mine)
  - Raw crude is blended with sweet synthetic
  - Blend Quality
    - 20 Degrees API
    - 2.5 wt% Sulfur
    - 1.7 TAN
  
- **DilSynBit**
  - Producers exploring the possibility of blending existing Cold Lake Blend (Cold Lake Bitumen and condensate) with sweet synthetic to reduce demand for tightly supplied condensate as well as making a more marketable product.

## **CANADIAN SYNCRUDE SUPPLY**

### **OPPORTUNITIES & ISSUES**

#### **Opportunities:**

- New emerging crude supply for North America refiners
- In many cases suppliers can customize a blend to meet buyers/refiners requirements

#### **Issues:**

- Don't behave like virgin crudes (some correlations don't hold true for synthetic crudes which makes predicting properties and behavior more difficult)
- LP's and models have a hard time rationalizing property data that behave differently than expected
- Cracked material in synthetic crudes may be unstable and create concerns for Refinery processing
- Typically these crudes will be heavy, high sulfur, high acid
- Pipeline interfaces between synthetic crudes and naturally produced sweet/sour crudes