NEAUPG FALL MEETING
Agenda:

• Crude Slates

• Refining Process

• Refining Economics
Crude Slates:

Grades of Crude Oil

Source: The International Crude Oil Market Report
Crude Slates:

Source: CAPP
Crude Slates:

- Boscan Venezuela: 58% Bitumen Residuals, 26% Gasoline, 7% Kerosene, 3% Heavy Gas Oil, 21% Light Gas Oil, 6% Non-Vacuum Residuals
- Arabian Heavy: 27% Bitumen Residuals, 10% Gasoline, 14% Kerosene, 28% Heavy Gas Oil, 33% Light Gas Oil
- Nigerian Light: 30% Bitumen Residuals, 16% Gasoline, 20% Kerosene, 33% Heavy Gas Oil, 1% Light Gas Oil

Source: CAPP
Refining Process:

- Finished products are shown in blue.
- Sour waters are derived from various distillation tower reflux drums in the refinery.
- The "other gases" entering the gas processing unit includes all the gas streams from the various process units.
Refining Process:

Main Bitumen Refinery Processes

- Furnace
- Atmospheric Distillation Column
- Furnace
- Vacuum Distillation Column

Source: GPB
Refining Economics:

Brent Crude - $82.60/barrel

Gases: Propane or Butane
Propane: $1.07/GAL or $44.94 per barrel

Gasoline: $2.14/GAL or $89.78 per barrel

Distillates: Diesel, Heating Oil, Kerosene, Jet fuel
Heating Oil: $2.42/GAL or $101.64 per barrel

Asphalt: $495/ST ($2.13/gal) or $90 per barrel

Prices reflect 10/16/2014 indexes: Mt. Belvieu, NYMEX prompt, P&P