North Dakota Pipeline Authority
2012 Governor’s Pipeline Summit
June 14, 2012 – Bismarck, ND
North Dakota Crude Oil
Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.
Forecasting Williston Basin Oil Production, BOPD

Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.
Challenges*

1) Moving oil out of the Williston Basin
2) Moving oil within the Williston Basin

*Modified from Bridger and Belle Fourche Pipelines
Williston Basin Oil Transportation

March 2009
- Pipeline Export: 75%
- Tesoro Refinery: 19%
- Truck to Canadian Pipelines: 4%
- Estimated Rail: 2%

March 2010
- Pipeline Export: 74%
- Tesoro Refinery: 16%
- Truck to Canadian Pipelines: 8%
- Estimated Rail: 2%

March 2011
- Pipeline Export: 68%
- Tesoro Refinery: 12%
- Truck to Canadian Pipelines: 6%
- Estimated Rail: 14%

March 2012
- Pipeline Export: 56%
- Tesoro Refinery: 28%
- Truck to Canadian Pipelines: 6%
- Estimated Rail: 10%
BNSF Crude Rail Locations

**Existing**

1. Dore – Musket - Unit
2. Trenton – Savage – Manifest/Unit
4. Tioga – Hess - Unit
5. Manitou – Plains - Unit
6. Ross – Bakken Transload - Manifest
7. Stanley – EOG - Unit
8. Minot – ND Port Services- Manifest
9. Zap/Republic – Basin Transload - Unit
10. Eland – BOE - Unit
11. Dickinson – Centennial - Manifest
12. Gascoyne – Enserco – Manifest/Unit

**Planned**

1. Epping – Rangeland – Unit (June 2012)
2. Berthold – Enbridge - Unit
3. Fryburg – Great Northern - Unit
CP Crude Rail Locations

Existing

1) Stampede – US Development
2) Donnybrook - Centennial
3) New Town – Dakota Plains
4) Van Hook – US Development
Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.

*Projects still in the proposed or internal review process*
Projects still in the proposed or internal review process

Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.

*Projects still in the proposed or internal review process
High-Low Rail Estimate, BOPD
Challenges*
1) Moving oil out of the Williston Basin
2) Moving oil within the Williston Basin
North Dakota Crude Gathering

Pie Charts
Truck = Red
Pipeline = Blue
PADD II Decrease In Light Demand

BP
Whiting, IN
-260 MBOPD
2013

ConocoPhillips
Wood River, IL
-130 MBOPD
2011

Marathon
Detroit, MI
-65 MBOPD
2013

Source: Enbridge
Challenge #4???

North American shale plays
(as of May 2011)

- Current shale plays
- Stacked plays:
  - Shallowest / youngest
  - Intermediate depth / age
  - Deepest / oldest
- Mixed shale & chalk play
- Mixed shale & limestone play
- Mixed shale & tight dolostone-siltstone-sandstone play

- Prospective shale plays
- Basins

[Map of North American shale plays showing various geological formations and plays.]
Natural Gas Projects
ND Gas Facility/System Intake

Four New/Expanded Plants in Next 12-18 months

ONEOK Stateline I & II
Hess Tioga
Plains Ross
ND Gas Gathering Statistics
First Time Gas Sales Per Month
Homes Heated By ND Natural Gas

Based on Average US Home Natural Gas Consumption
Natural Gas Study
Montana Bakken Production

Source: EPRINC – Left Axis Oil, BOPD – Right Axis Gas, MCFD
HPDI Data
North Dakota Pipeline Authority

600 E. Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840

Phone: (701)220-6227
Fax: (701)328-2820
E-mail: jjkringstad@ndpipelines.com

Websites:
www.pipeline.nd.gov
www.ndpipelines.wordpress.com