KINDER MORGAN

The Diluent Market

A Midstream Operator's Perspective

Wells Fargo Fundamental Forum

Houston, Texas

Don Lindley

Vice President Business Development

Products Pipelines

April 18, 2013

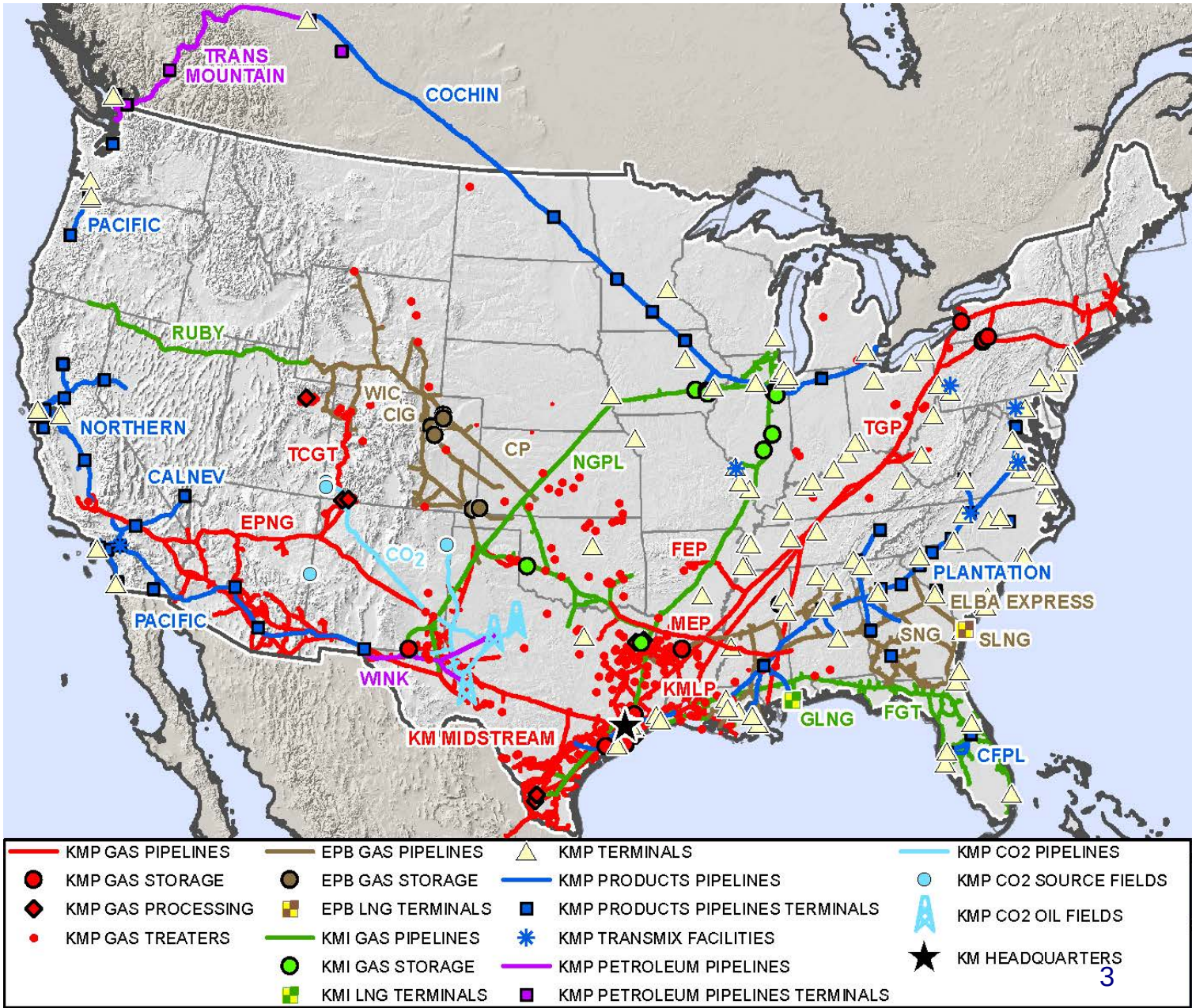
Forward Looking Statements

This presentation contains forward-looking statements. These forward-looking statements are identified as any statement that does not relate strictly to historical or current facts. In particular, statements, express or implied, concerning future actions, conditions or events, future operating results or the ability to generate revenues, income or cash flow or to make distributions or pay dividends are forward-looking statements. Forward-looking statements are not guarantees of performance. They involve risks, uncertainties and assumptions. Future actions, conditions or events and future results of operations of Kinder Morgan Energy Partners, L.P., Kinder Morgan Management, LLC, El Paso Pipeline Partners, L.P., and Kinder Morgan, Inc. may differ materially from those expressed in these forward-looking statements. Many of the factors that will determine these results are beyond Kinder Morgan's ability to control or predict. These statements are necessarily based upon various assumptions involving judgments with respect to the future, including, among others, the ability to achieve synergies and revenue growth; national, international, regional and local economic, competitive and regulatory conditions and developments; technological developments; capital and credit markets conditions; inflation rates; interest rates; the political and economic stability of oil producing nations; energy markets; weather conditions; environmental conditions; business and regulatory or legal decisions; the pace of deregulation of retail natural gas and electricity and certain agricultural products; the timing and success of business development efforts; terrorism; and other uncertainties. There is no assurance that any of the actions, events or results of the forward-looking statements will occur, or if any of them do, what impact they will have on our results of operations or financial condition. Because of these uncertainties, you are cautioned not to put undue reliance on any forward-looking statement. Please read "Risk Factors" and "Information Regarding Forward-Looking Statements" in our most recent Annual Reports on Form 10-K and our subsequently filed Exchange Act reports, which are available through the SEC's EDGAR system at www.sec.gov and on our website at www.kindermorgan.com.

KINDER MORGAN INC.

Kinder Morgan at a glance

- **Largest midstream and third largest energy company in North America with a combined enterprise value of approximately $110 billion**
- **Focus on stable, fee-based assets that are core to North American energy infrastructure**
- **Unparalleled footprint of diversified and strategically located assets**
- **Kinder Morgan owns or operates approximately 75,000 miles of pipelines and 180 terminals**



Diluent

a light liquid hydrocarbon primarily used to dilute bitumen (a highly viscous oil) for the purpose of reducing its viscosity to facilitate transportation.

Example Quality Specifications for Component Streams to the CRW (Condensate Blend) Pool

Property	Min	Max
Density	600 kg/m3 (104°API)	775 kg/m3 (51°API)
Kinematic Viscosity (7.5 °C)		2.0 cSt
Sulfur, total		0.5 wt%
Reid Vapour Pressure		103 kPa (14.9 psi)
Benzene		1.6 vol%
Aromatics, total (BTEX)	2.0 vol%	

Bitumen & diluent mixtures can be identified by different names:

"Raw bitumen" contains no diluent, and requires insulated rail cars with steam coils for transportation

"Railbit" contains ~15% diluent and is transported by insulated rail cars

"Dilbit" contains ~30% diluent and is transported by pipeline

Source: Kinder Morgan Cochin LLC

Diluent

From the Midstream perspective there are two main sources of diluent, Natural Gasoline and Condensate.

Both products contain mostly pentanes and heavier (C5+), and are liquids at ambient temperature and pressure.

Property	Natural Gasoline (Mt Belvieu spec)	Condensate (KMCC Spec)	n-Butane (nC4)	n-Pentane (nC5)	n-Decane (nC10)
Density	75-90 °API	45-75 °API	~ 110 °API	~ 94 °API	~ 62 °API
Kinematic Viscosity (7.5 °C)			<0.2 cSt	~ 0.4 cSt	~ 1.7 cSt
Reid Vapour Pressure	< 14 psi	< 11 psi	~ 52 psi	~ 15.5 psi	< 1 psi
Boiling End Point	< 375 °F	<900 °F	30 °F	97 °F	345 °F

1 Year Average Properties Source: http://www.crudemonitor.ca/	Fort Saskatchewan Condensate (CFT)	Rangeland Condensate (CRL)	Edmonton Condensate Blend (CRW)
Density	680 kg/m3 (76°API)	760 kg/m3 (54°API)	715 kg/m3 (66°API)
Kinematic Viscosity (7.5 °C)	0.56 cSt	1.57 cSt	0.82 cSt
Sulfur, total	0.04 wt%	0.26 wt%	0.13 wt%
Reid Vapour Pressure	82 kPa (12 psi)	73 kPa (10.6 psi)	81 kPa (11.7 psi)
Benzene	0.85 vol%	0.81 vol%	0.82 vol%
Aromatics, total (BTEX)	2.70 vol%	4.59 vol%	3.81 vol%

All things being Equal

Due to the broad range of material that can be used as “diluent” the Canadian market has defined an Equalization Practice which, in the simplest terms possible, financially compensates (or penalizes) each diluent shipper based upon the difference in the product quality delivered into and received from the pipeline (or blend pool).

Detailed information about this practice is available at www.capp.ca/library/relatedLinks/Pages/EqualizationSteeringCommittee.aspx

This Equalization Practice is presided over and maintained by the Industry Equalization Steering Committee which is comprised of experts with three distinct perspectives of the industry (Producers, Marketers, and Refiners).

The committee's mandate is to establish and govern the equalization process by:

- Ensuring that the principles of equalization are maintained
- Ensuring that the data to recalculate the scales are maintained and that the procedures for updating the scales are performed and maintained
- Ensuring that shipper and pipeline concerns/issues are addressed

The current Industry Equalization Steering Committee is comprised of members from the following companies:

Cenovus	Tidal	Advantage Insight
Imperial	BP	Inter Pipeline Fund
Keyera	Canadian Natural Resources	Pembina Pipeline
Nexen	CAPP	

Equalization Overview

The equalization practice simply equalizes each product stream relative to all other received and delivered product streams.

So, if all the streams received by and delivered from a particular pipeline are of similar quality, then the penalty or credit issued to each shipper is small.

Reference density is set at 750 kg/m3 (or 57 API)

- Density penalty factor is set each month based upon the relative value of crude and condensate each month
- Heavier streams are penalized, while lighter streams receive credits
- 2012 Enbridge CRW receipt monthly avg. density: 697-721 kg/m3 (or 72-65 API)

Maximum sulfur content is 0.5 wt%

- Sulfur penalty factor is set equal to the crude scale sulfur penalty
- Higher sulfur streams are penalized and lower sulfur streams receive credits

Target “Deemed C4- Content” is now <5.0 vol%

- Equalization methodology was revised effective February 2013 because the Equalization Steering Committee identified a gradual increase in the light ends content of certain streams entering the CRW condensate pool

Butane blending

In general, the volume of butane and lighter components blended into the diluent stream is restricted by RVP specification limits.

Changes have recently been made to the equalization practice to further discourage blending of lighter components.

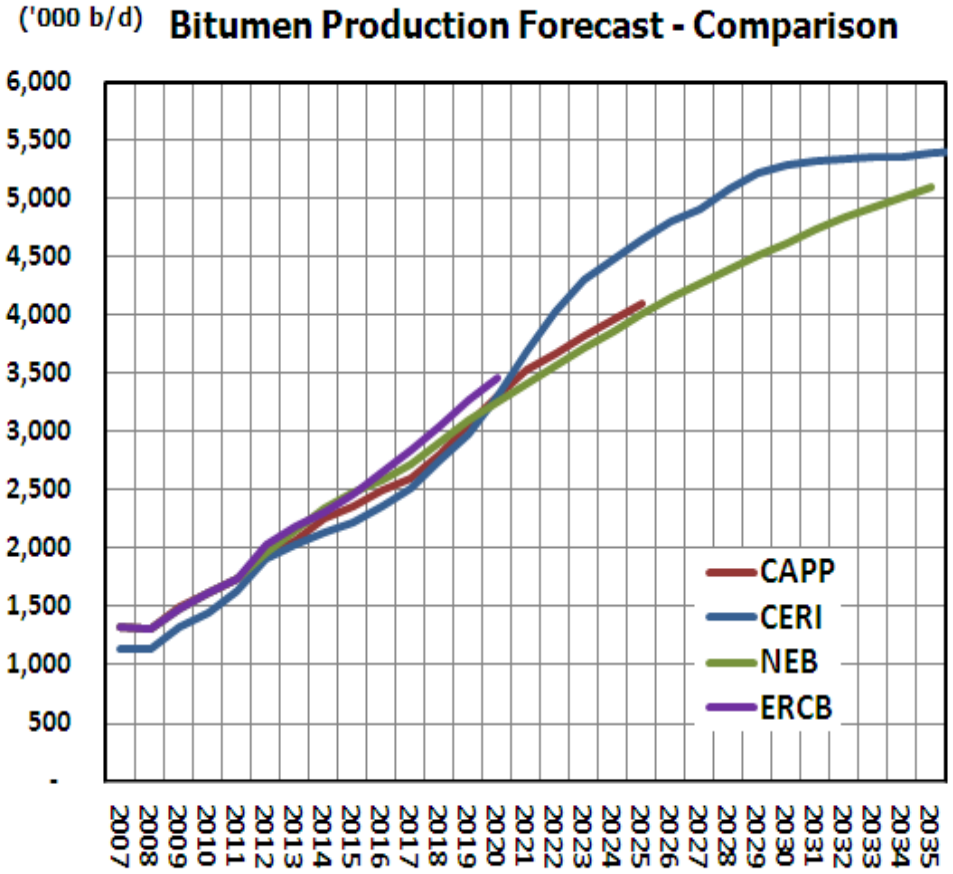
Previous equalization process:

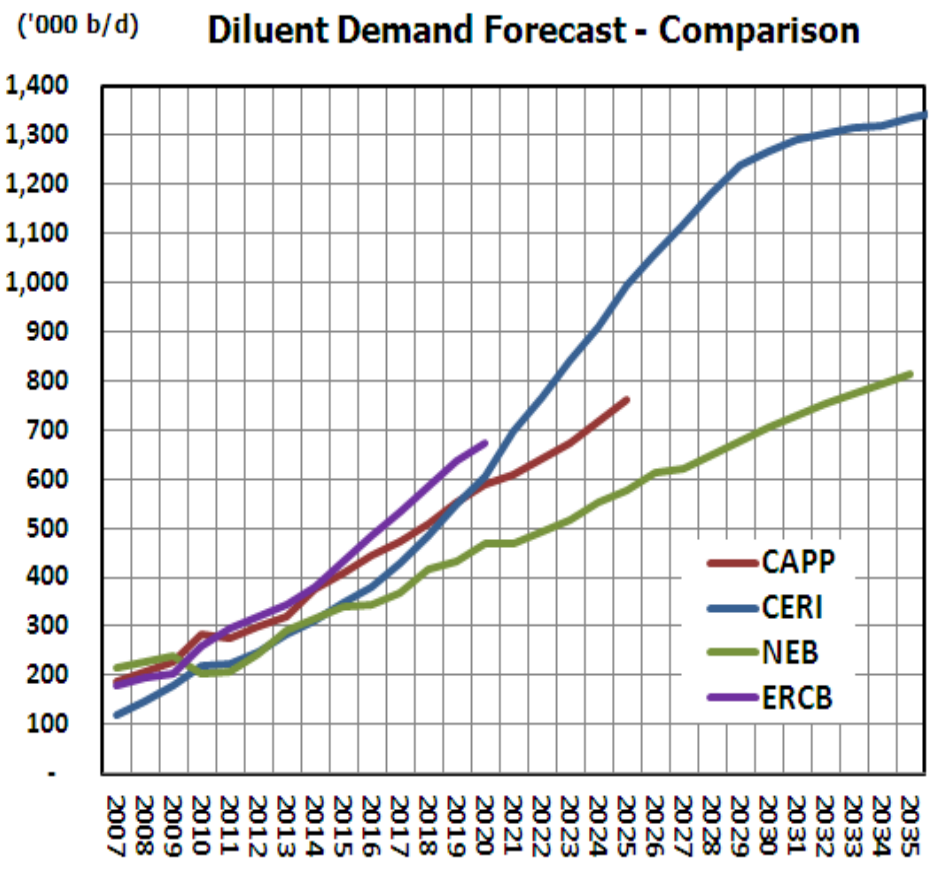
- All light ends (butane and lighter; or C_4-) were weighted equally
- If the C_4- content was less than or equal to 5 vol%, there was no penalty
- C_4- content between 5 & 7% was valued at 50% of the Edmonton butane price
- If the C_4- content was >7 vol%, the excess volume was given zero value

Revised equalization process:

- Propane and lighter (C_3-) content is multiplied by 3 and then added to the butane content to arrive at the “Deemed C4- Content”
- If the Deemed C4- Content is less than or equal to 5 vol%, there is no penalty
- If the Deemed C4- Content is >5 vol%, the excess volume is given zero value

Canadian Forecast Comparisons





Source: CERI, ERCB, CAPP, NEB

Canadian Diluent Demand:

- **2010: 200-280 kbpd**
- **2014: 310-380 kbpd**
- **2020: 470-670 kbpd**

Current Canadian Diluent Supply



Local Canadian Supply 150 kbpd

Projected to remain flat or decline through 2020



Rail Supply 30 kbpd (as of 9/2012)

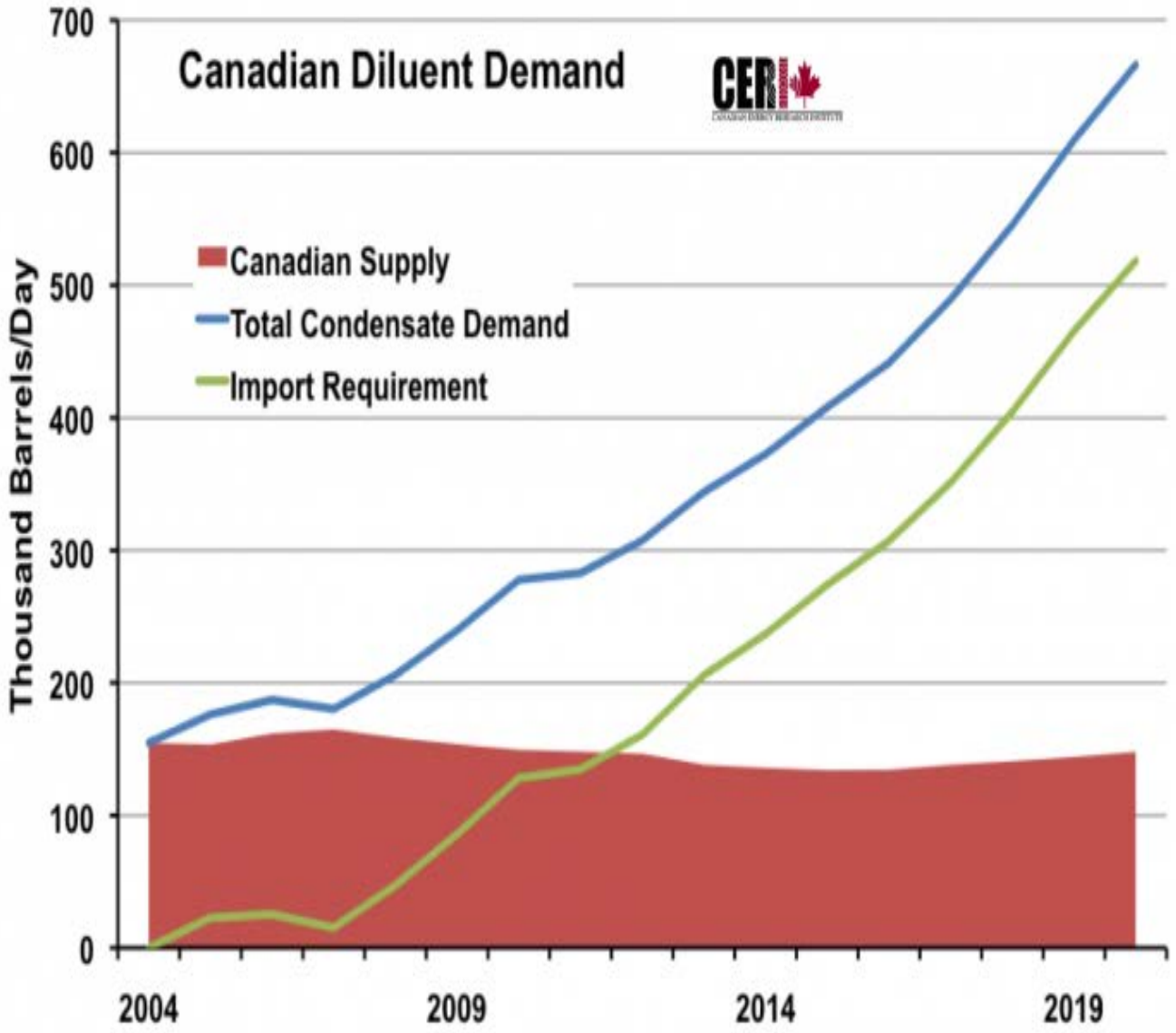


Pipeline Capacity 275 kbpd

Southern Lights 180 kbpd

Cochin 95 kbpd (estimated in service July 2014)

New Opportunity



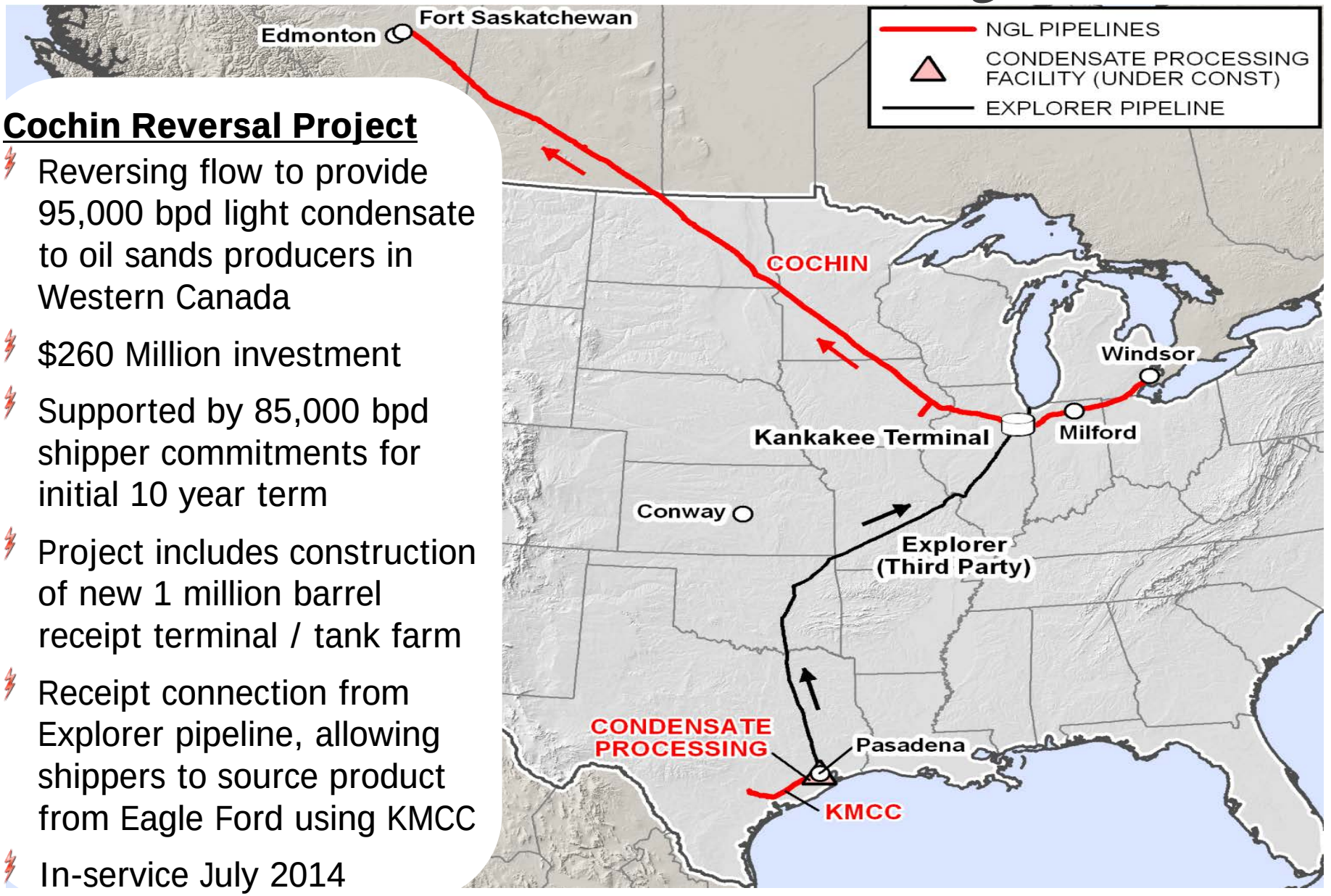
Source: Canadian Energy Research Institute Forecast

- Canadian import requirement for diluent forecast to expand
  - **2013: 200,000 bpd**
  - **2020: >500,000 bpd**
- Western Canada is a logical outlet for the increasing condensate production in the U.S.
- Conversion of the underutilized Cochin pipeline opens up access to this growing condensate market

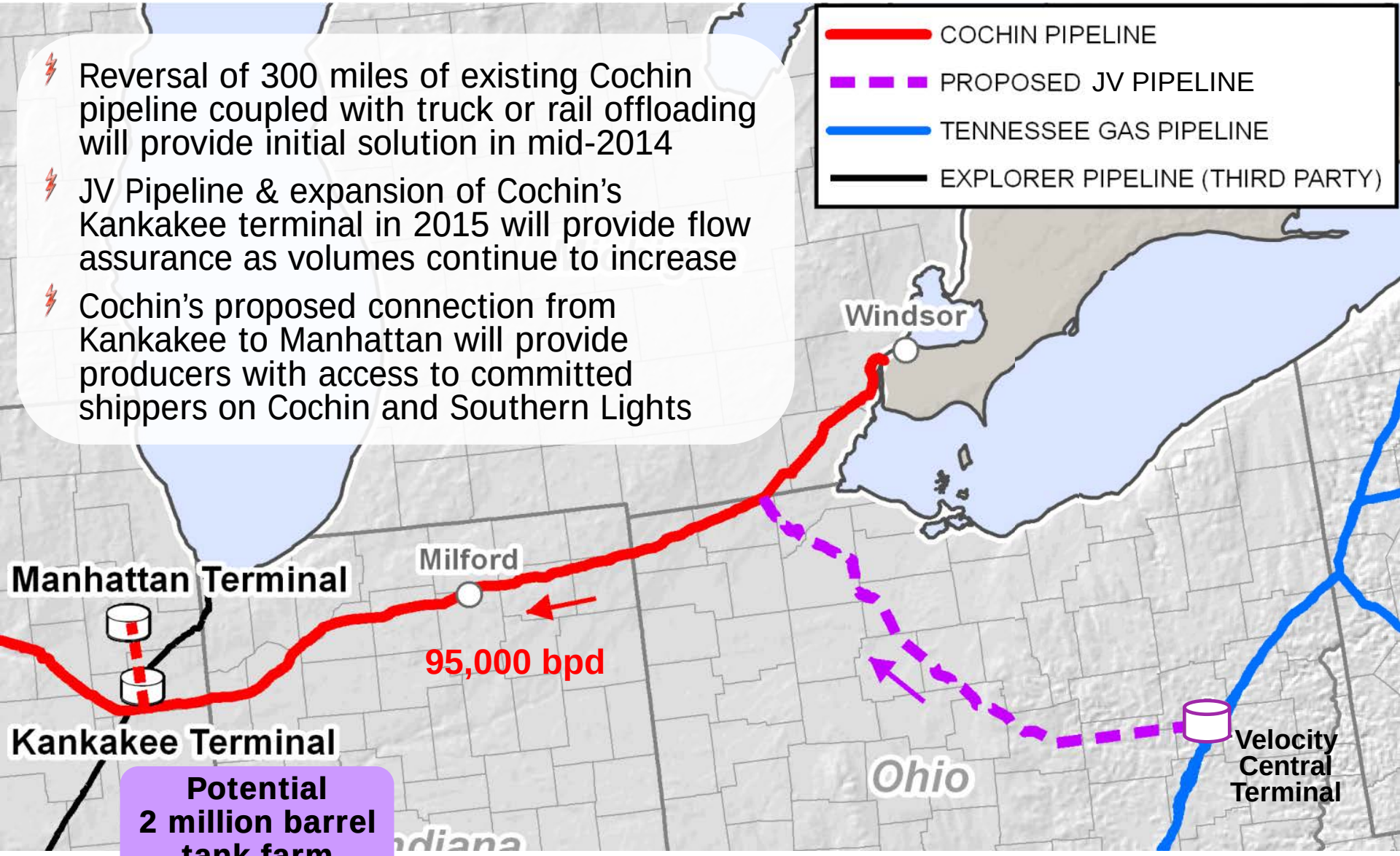
Reversing the flow

Cochin Reversal Project

- Reversing flow to provide 95,000 bpd light condensate to oil sands producers in Western Canada
- $260 Million investment
- Supported by 85,000 bpd shipper commitments for initial 10 year term
- Project includes construction of new 1 million barrel receipt terminal / tank farm
- Receipt connection from Explorer pipeline, allowing shippers to source product from Eagle Ford using KMCC
- In-service July 2014

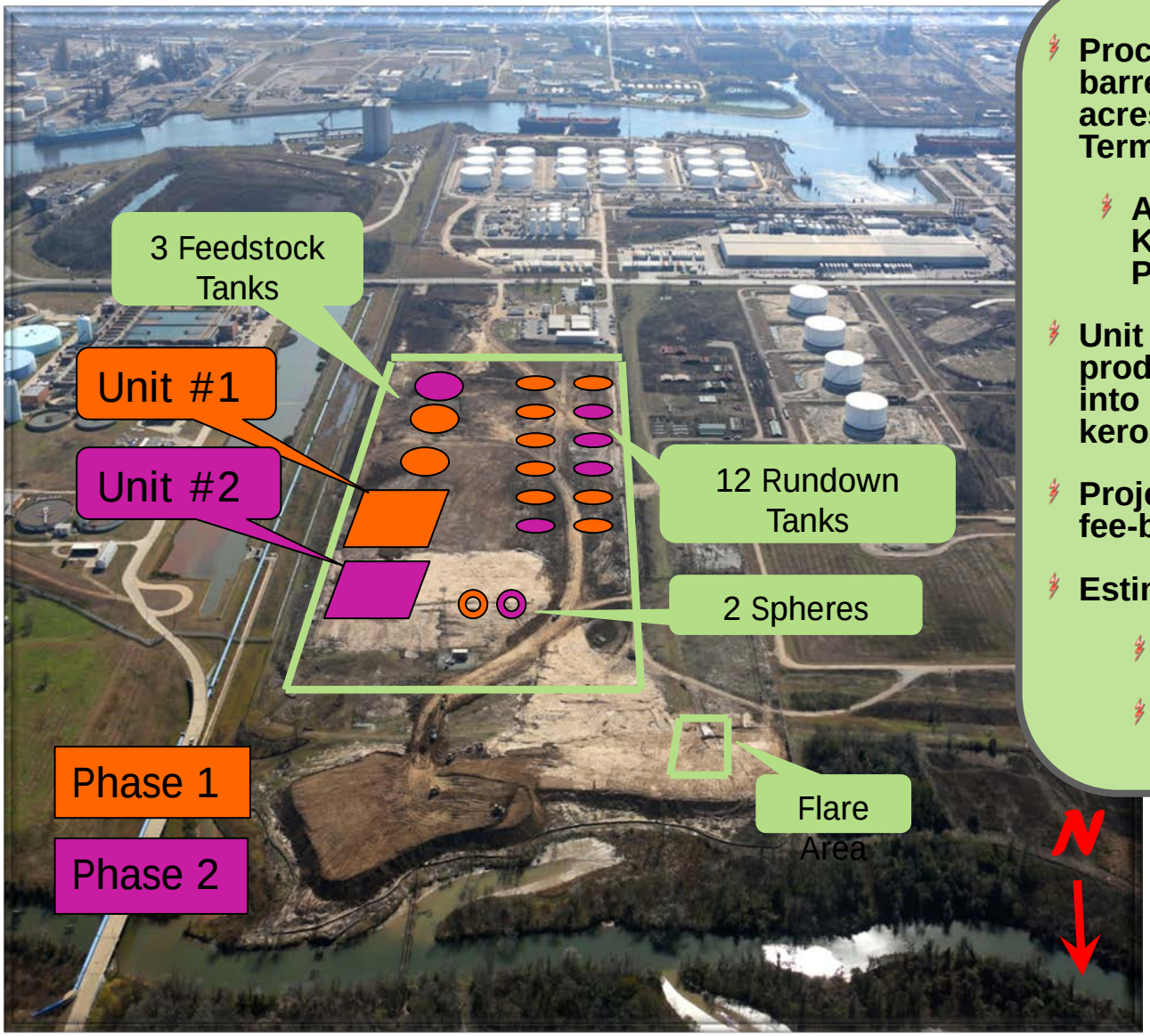


Kinder Morgan Utica Pipeline



- Reversal of 300 miles of existing Cochin pipeline coupled with truck or rail offloading will provide initial solution in mid-2014
- JV Pipeline & expansion of Cochin's Kankakee terminal in 2015 will provide flow assurance as volumes continue to increase
- Cochin's proposed connection from Kankakee to Manhattan will provide producers with access to committed shippers on Cochin and Southern Lights

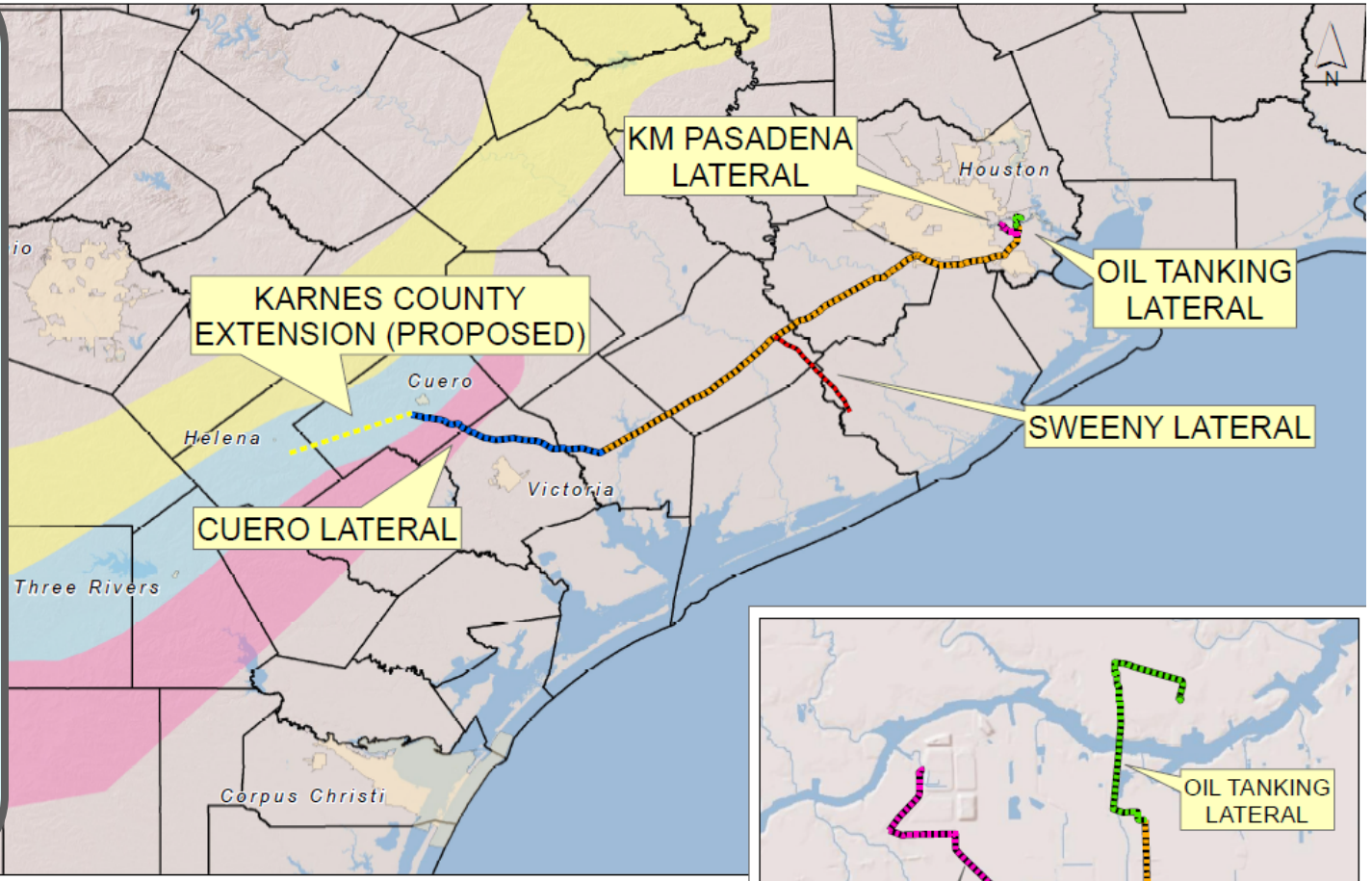
Kinder Morgan Condensate Processing

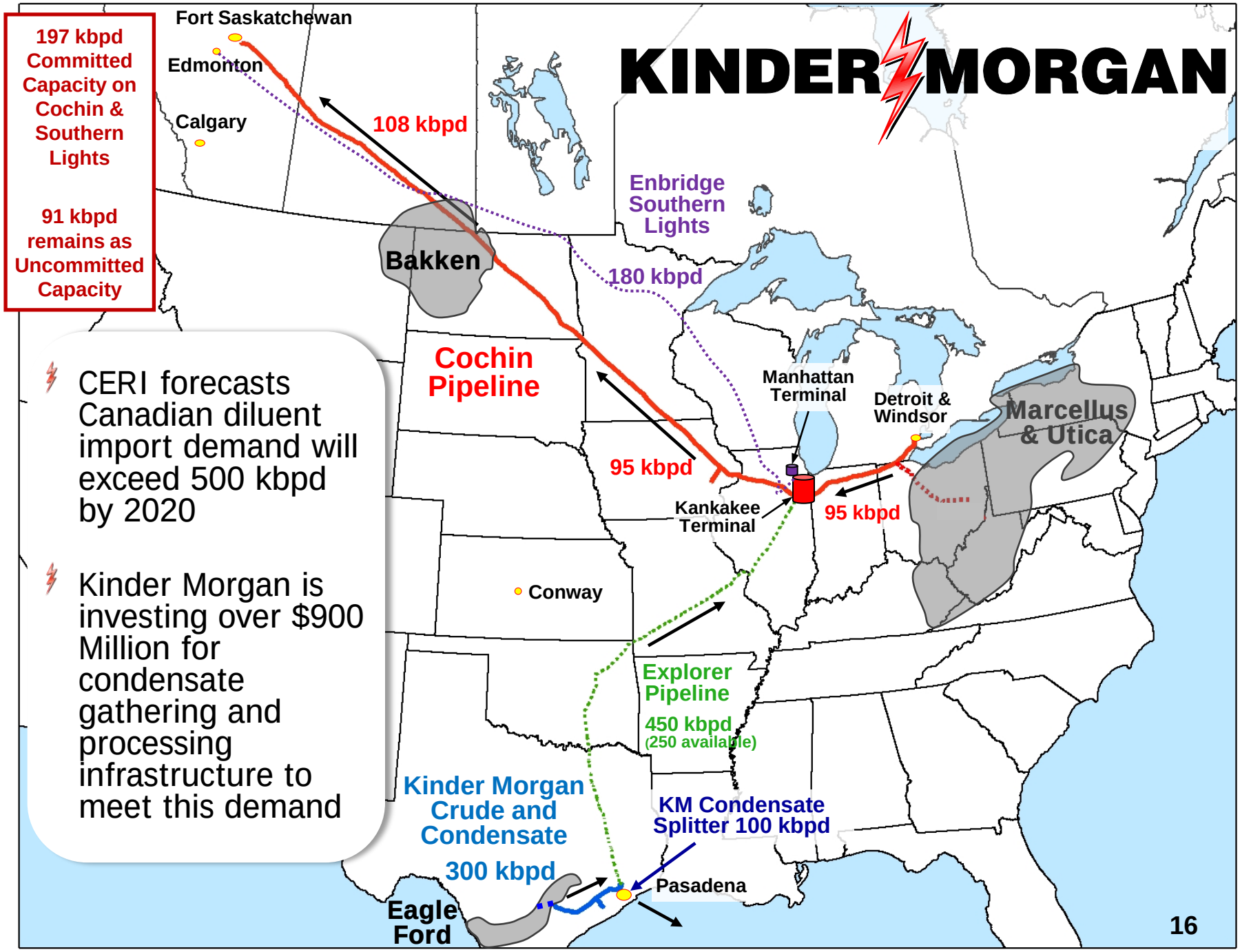


- **Processing Unit and 1.9 Million barrels of new tankage on 60 acres within KM's Galena Park Terminal**
  - **Access to feedstock from KMCC pipeline through KM's Pasadena terminal**
- **Unit engineered for Eagle Ford production; Splits condensate into light and heavy naphthas, kerosene, and gas oil**
- **Project supported by fee-based contract with BP**
- **Estimated in-service:**
  - **April 2014 – 50,000 bpd**
  - **1Q 2015 – 100,000 bpd**

Kinder Morgan Crude & Condensate (KMCC)

- Batched system delivering crude & condensate from Eagle Ford (Dewitt) to Houston Ship Channel
- Completed June 2012
- 300,000 bpd capacity
- Provides producers with access to condensate market via Explorer/Cochin and Beaumont/LA Refining market through KMCC Houston Ship Channel delivery points
- Sweeny Lateral to Phillips 66 Refinery under construction; Est. In-service Q4 2013




197 kbpd Committed Capacity on Cochin & Southern Lights
91 kbpd remains as Uncommitted Capacity
Fort Saskatchewan
Edmonton
Calgary
108 kbpd
Bakken
Enbridge Southern Lights
180 kbpd
Cochin Pipeline
95 kbpd
Manhattan Terminal
Detroit & Windsor
Marcellus & Utica
Kankakee Terminal
95 kbpd
Conway
Explorer Pipeline
450 kbpd
(250 available)
Kinder Morgan Crude and Condensate
300 kbpd
KM Condensate Splitter 100 kbpd
Pasadena
Eagle Ford
CERI forecasts Canadian diluent import demand will exceed 500 kbpd by 2020
Kinder Morgan is investing over $900 Million for condensate gathering and processing infrastructure to meet this demand

KINDER MORGAN

The Diluent Market

A Midstream Operator's Perspective

Questions