From the Badlands to the Maritimes

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The Badlands

The Bakken Formation

A Phantom Resource







I. The Badlands

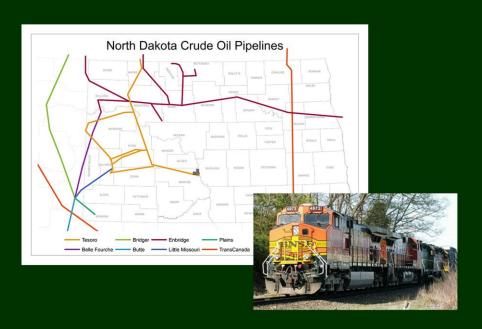
- From the French, mauvais terres a traverser (bad lands to cross) in Western North Dakota
- A "phantom resource" geologists had known for years of the Bakken formation but only in the 21st century was it considered recoverable.

Transporting the Product

Railroads

Pipelines
Above ground
Underground

Other means



II. Transporting the Product

- Full of environmental peril no matter how you do it
- · No pipeline in place--one would have to be constructed
- · The railroad is right there and ready to go
- Impractical to ship by truck and nowhere near navigable rivers for barges.

The Destinations

U. S. Refineries

The Maritimes

Overseas

III. The Destinations

- · US Refineries in the midwest and South
- Canada--the Atlantic provinces (largely controlled by Irving Oil)
- Overseas--final destination for US and Canadian oil

The Carriers

BNSF

Canadian Pacific

Canadian National

Montreal, Maine & Atlantic









IV. The Carriers

- BNSF--both the ex-Northern Pacific and ex-Great Northern lines in North Dakota
- Canadian Pacific--took over the Soo Line trackage in North Dakota
- Canadian National--interchanges with ND traffic at Portal and Winnipeg
- Montreal Maine and Atlantic, former CP line, then Rail World (Ed Burkhardt)

The Siege of Lac-Megantic

One-man Crew

Train left unattended Fire Casualties



V. The Siege of Lac-Megantic, Quebec

- Although most trains have an engineer and conductor, MM&A had a lone wolf in the cab
- Engineer left, train left unattended on the main line.
- Town set on fire, over 40 dead, many more injured.

Aftermath

Mr. Ed goes to Lac-Megantic

End of the MM&A

Response of Canada and the US governments

Emergence of Central Maine & Quebec

VI. Aftermath

- Ed Burkhardt, who spoke no French, arrives at scene of the disaster
- Attacked by politicians and press of both nations
- End of the MMA--lost operating rights and discharged in bankruptcy
- Repercussions against MM&A
- Responses, both regulatory and criminal in Canada, less so in the US
- USDOT calls for minimum crew size, probes safety of old tank cars
- A new carrier with new ownership---Central Maine & Quebec