Fort McMurray and the Athabasca Tar Sands - I

250 years of a most unique history

CEE Think Day — 03.09.06
Background

- This was the first of three talks I have given at the Pioneer Oil Producers Society (POPS) of Houston on the Tar Sands.
- Since this was also the first talk I have given at POPS, as their Historian for 2005 – 2006, I sought a means to gain their confidence that I was a legitimate historian, and that I knew my history.
- Hence the next slide.
Rivers of the Canadian West

• Rivers were dominant in the development of the Canadian west.
• These were the *highways* of the west and the northwest. Fort McMurray (the Fort) was one of the central hubs of this river *highway*.
• Two slides follow that highlight key Canadian Rivers, then two more slides follow that highlight the routes the explorers/voyageurs took to get to the Fort & to the furs.
The Route of the Explorers & Voyageurs - I

Grand Portage: L. Superior, Rainy River
Route of the Explorers & Voyageurs - II

Methye Portage: Churchill, Clear-Water Rivers

Frog Portage: Saskatchewan, Churchill Rivers
The role of Alexander Mackenzie

• The main highway led up the Churchill River, and via the Methye Portage to the Clearwater and Athabasca Rivers.
• As one moved north through the forest, on this 12 mile portage, one would suddenly break into the clear at the rim of the Clearwater canyon. Mackenzie wrote “that from this precipice, which rises upwards of a 1000 feet, commands a most extensive, romantic and ravishing prospect.”
• From the Athabasca, Mackenzie discovered the river named after him (1789) and a route to the Pacific (1793), 300 miles north of Vancouver, and 12 years ahead of Lewis & Clark.
Discovery of the Tar Sands

• 1719: Cree Indians showed tar in their canoes to the English at a Hudson Bay post, on Hudson Bay.
• The explorer, Peter Pond, noted these sands in 1778.
• Mackenzie is frequently given credit for the Tar Sands discovery in 1779. However, this was really because he gave the best report on this resource. Mackenzie wrote: “the presence of bituminous fountains in to which a pole of 20 feet long may be inserted without the least resistance.”
• Discovery is also not the right word, as this resource lay visible for 118 miles along the Athabasca River.
Transportation Development

• The Methye Portage route served as the entry into the Athabasca valley for nearly 100 years.
• However, the Hudson Bay Company started steamboat service on the N. Saskatchewan River in 1875, and the CPR started service to Calgary in 1883, and Edmonton by 1892. Freight started to move south.
• Other changes included a trail from Edmonton to Athabasca Landing in 1877; steamboats on the Athabasca from their to Grand Island in 1888; a tramway on Grand Island in 1889 to carry freight around the Grand Rapids on the Athabasca River and an upgrade of the trail to the status of a wagon road.
• A railroad finally reached Fort McMurray by 1922.
Tar Sands Development

• First attempt was based on conventional wells. Several wells were drilled from 1906-30. None were successful.

• Almost in parallel, efforts started on how to treat or extract bitumen from the sands. Several semi-plants were built from 1930 into the 1950s. Processes performed reasonably well, but not economical.

• In 1953 Sun Oil formed Great Canadian Oil Sands. GCOS granted first production permit in 1962, with production starting in 1967.

• In 1974 Syncrude, a consortium of several companies—some who had been active on the earlier plants, was granted a production permit. Syncrude output started in 1978.
A long and adventurous history

- 1964—Syncrude incorporates
- 1974—Construction begins
- 1978—First barrel of oil is shipped
- 1994—New Syncrude Research Centre opens
- 1998—Billionth barrel of SSB is shipped
A remote but vibrant community

- Syncrude headquartered in Fort McMurray in northern Alberta
- Mines north of city
- Syncrude and other developers to invest on the order of $90 billion over next ten years
A New Boom Town

• Fortune Magazine, 09.19.05: noted area was hiring oil people, globally. Will need 30,000 new hires.

Fort McMurray population, in thousands:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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</thead>
<tbody>
<tr>
<td>1961</td>
<td>~1</td>
</tr>
<tr>
<td>1996</td>
<td>36</td>
</tr>
<tr>
<td>2005</td>
<td>61</td>
</tr>
<tr>
<td>2011</td>
<td>~100</td>
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This is a growth of about 10%/year. It would appear that the future for this area will be as interesting and exciting as it’s past.