Bakken Crude Oil Unit Trains & Marcellus LPG & Natural Gasoline
Due to Hydraulic Fracturing in North America the rail industry is witnessing a considerable increase in car loads of oil and gas.

### Originated Carloads of Crude Oil on U.S. Class I Railroads

<table>
<thead>
<tr>
<th>Year</th>
<th>Carloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>6,032</td>
</tr>
<tr>
<td>2006</td>
<td>4,729</td>
</tr>
<tr>
<td>2007</td>
<td>5,912</td>
</tr>
<tr>
<td>2008</td>
<td>9,500</td>
</tr>
<tr>
<td>2009</td>
<td>10,840</td>
</tr>
<tr>
<td>2010</td>
<td>29,605</td>
</tr>
<tr>
<td>2011</td>
<td>65,751</td>
</tr>
<tr>
<td>2012</td>
<td>233,698</td>
</tr>
<tr>
<td>2013*</td>
<td>~400,000*</td>
</tr>
</tbody>
</table>

*Estimate based on first three quarters annualized  
Source: AAR
Map of the US Refineries

Operable refinery locations and capacity volumes as of January 1, 2012

Federal Railroad Administration

Operable refinery capacity
thousand barrels per day
- 250 and above
- 110 to 250
- 50 to 110
- less than 50

PADD 1: East Coast
PADD 2: Midwest
PADD 3: Gulf Coast
PADD 4: Rocky Mountain
PADD 5: West Coast
Choke Points In / Out of R2
Crude Oil Trains Across Region 2
East Coast Marcellus & Utica Shale Deposits
Marcellus & Utica Shale Oil & Gas Facilities

• 14 Oil & Gas Producing Facilities in R2 as of 2015
• Located in Eastern OH, Western PA and WV
• Producing up to 180 Tank Car Loads (30K Gallons) Per DAY... Per Facility... Do The Math...
• R2 Partnered w/ PHMSA & PUCO HazMat Inspectors in 2014, 2015 & 2016
• 2016 Inspection Results = High Compliance Rates
LPG...? Think... Hank Hill... “PROPANE” and BUTANES
“Natural Gasoline” a.k.a. Pentane, Hydrocarbons NOS, Petroleum Distillates NOS... Think... Gasoline!
Questions?

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