Oil Industry Segment Market Environment

- Global production exceeds consumption
  - Global production 4Q 2018 102.2 MBPD
  - Global consumption 4Q 2018 100.5 MBPD
  - Global production April 2019 101.4 MBPD
  - Global consumption April 2019 100.8 MBPD
  - Global days of supply April 2019 61.0 Days
    [Source: EIA]

- WTI average price is variable [Source: EIA]
  - Oct $70.75    Nov $56.96    Dec $49.52    Jan $51.38    Feb $54.95    Mar $58.15

- US crude oil production and exports are trending upward [Source: EIA]
  - US production January 11.87 MBPD (avg. 10.96 for 2018 and forecast avg. 12.38 for 2019)
  - US imports January 7.52 MBPD
  - US exports January 2.58 MBPD

- US land rig count trended slightly downward in Q1 [Source: Baker Hughes]
  - March - 2017 = 614 (Texas 60%); 2018 = 787 (Texas 57%); 2019 = 812 (Texas 56%)

- CBR volumes have been trending upward since Q3 2017 [Source: EIA]
  - Annual originated US C/L’s (000’s) – ‘15 410, ‘16 212, ‘17 129, ‘18 152 (est.) [Source: AAR]
Williston Basin Crude Oil Modal Share

<table>
<thead>
<tr>
<th>Date</th>
<th>Average Production/BOPD</th>
<th>Rail/BOPD est.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/2014</td>
<td>1,092,519</td>
<td>644,586</td>
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<tr>
<td>6/2015</td>
<td>1,211,328</td>
<td>569,324</td>
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<td>6/2016</td>
<td>1,027,131</td>
<td>297,868</td>
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<td>6/2017</td>
<td>1,032,873</td>
<td>72,301</td>
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<td>6/2018</td>
<td>1,225,510</td>
<td>232,847</td>
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<tr>
<td>2/2019</td>
<td>1,335,064</td>
<td>226,961</td>
</tr>
</tbody>
</table>

Source: ND Pipeline Authority

February, 2019

PADD 2 Destinations January, 2019

- West Coast: 54.6%
- East Coast: 32.7%
- Gulf Coast: 12.7%

[Source: EIA]
Permian Oil Production

- Frac sand remains in surplus [Source: WSJ]
- Crude oil production volumes continue to grow [Source: EIA]
- April production 4.1 MBPD [Source: EIA]
- Estimated pipeline and local refining capacity 3.6 MBPD [Source: EIA]
- Pipeline capacity being increased to meet demand [Source: EnSys NA Logistics Review]
- Rail market share increased due to lack of available pipe capacity
  - 2nd half 2018 12.2 MB moved within PADD 3 (approximately 17K C/L’s) [Source: EIA]
  - January 2019 2.5 MB moved within PADD 3 (approximately 3.6K C/L’s) [Source: EIA]
  - 2nd half 2018 0.63 MB moved PADD 3 to 5 (approximately 900 C/L’s) [Source: EIA]
- Potential barriers to long term CBR
  - Cost differential
  - Increasing pipeline capacity
  - Limited rail loading terminal capacity
  - Availability of rail unloading capacity depends on market
Summary

- Global crude oil production surpassed demand with the gap closing
- US crude oil production and exports trending upward; imports relatively flat
- Crude oil prices remain volatile but once again increasing
- US land based rig count trended downward slightly during Q1
- Much US onshore E&P growth remains in pipe centric Texas
  - Permian capacity (pipeline and refining)/production gap has narrowed [Source: Goldman Sachs]
- Texas frac sand capacity development has eliminated Permian shortage
- US production trending upward now exceeding 11.9 MBD
- Permian production trending upward now exceeding 4.1 MBD
- Upward trend in Permian CBR started 2nd half 2018; continued in January
- Bakken production trending upward but down slightly in February to 1.3 MBPD
- CBR volumes up during 2nd half of 2018; primarily in the Permian and Bakken