About MPLX

- Growth-oriented, diversified MLP with high-quality, strategically located assets with leading midstream position
- Two primary businesses
  - Logistics & Storage includes transportation, storage and distribution of crude oil, refined petroleum products and other hydrocarbon-based products
  - Gathering & Processing includes gathering, processing, and transportation of natural gas and the gathering, transportation, fractionation, storage and marketing of NGLs
- Investment-grade credit profile with strong financial flexibility
- MPC as sponsor has interests aligned with MPLX
  - MPLX assets are integral to MPC
  - Growing stable cash flows through continued investment in midstream infrastructure

As of Sept. 1, 2017
See appendix for legend
One of the largest NGL and natural gas midstream service providers

- Gathering capacity of 5.6 Bcf/d
  - ~60% Marcellus/Utica; ~40% Southwest
- Processing capacity of 8.0 Bcf/d*
  - ~70% Marcellus/Utica; ~20% Southwest
- C2 + Fractionation capacity of 567 MBPD**
  - ~90% Marcellus/Utica

Primarily fee-based business with highly diverse customer base and established long-term contracts

*Includes processing capacity of non-operated joint venture  **Includes condensate stabilization capacity
Marcellus/Utica Overview
3.5 Bcf/d Gathering, 5.8 Bcf/d Processing & 491 MBPD C2+ Fractionation Capacity

- BLUESTONE COMPLEX
- HARMON CREEK COMPLEX (currently under construction)
- MAJORSVILLE COMPLEX
- MOBLEY COMPLEX
- SHERWOOD COMPLEX
- CADIZ & SENeca COMPLEXES
- OHIO CONDENSATE
- MarkWest Joint Venture with EMG
- HOPEDALE FRACTIONATION COMPLEX
- MarkWest Joint Venture with EMG
- OHIO CONDENSATE
- MarkWest Joint Venture with Summit Midstream

- ATEX Express Pipeline
- Purity Ethane Pipeline
- NGL Pipeline
- Mariner West Pipeline
- Mariner East Pipeline

Gathering System
Utica Complex
NGL Pipeline
Purity Ethane Pipeline
ATEX Express Pipeline
TEPPCO Product Pipeline
Mariner West Pipeline
Mariner East Pipeline
Marcellus/Utica Processing Capacity
Building infrastructure to support basin volume growth

Currently operate ~66% of processing capacity in Marcellus/Utica Basin

~7.0 Bcf/d processing capacity by end of 2018

- 2013 through 2015 include MarkWest volumes prior to acquisition by MPLX
- *2017 throughput assumes 15% growth rate over prior year
Marcellus/Utica Fractionation Capacity
Building infrastructure to support growing C2 and C3+ demand

Currently operate ~55% of fractionation capacity in Marcellus/Utica Basin

~571 MBPD fractionation capacity by end of 2018

- 2017 expected plant completions
  - Hopedale III C3+ (in service 1Q17)
  - Bluestone C2 (in service 3Q17)
  - Majorsville II C2

- 2018 expected plant completions
  - Harmon Creek C2
  - Sherwood C2

Note: 2013 through 2015 include MarkWest volumes prior to acquisition by MPLX

*2017 throughput assumes 20% growth rate over prior year
What is Wet Gas?
## Typical Wet Gas Composition

<table>
<thead>
<tr>
<th>Component</th>
<th>Mole%</th>
<th>Gallons Per Mcf (GPM)</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methane</td>
<td>74.22</td>
<td></td>
<td>Natural Gas, Pipeline Gas, Residue</td>
</tr>
<tr>
<td>Ethane</td>
<td>15.62</td>
<td>4.17</td>
<td>1/3 Natural Gas, Pipeline Gas, Residue</td>
</tr>
<tr>
<td>Propane</td>
<td>5.46</td>
<td>1.50</td>
<td>NGL or LPG</td>
</tr>
<tr>
<td>Iso Butane</td>
<td>0.655</td>
<td>0.21</td>
<td>NGL or LPG</td>
</tr>
<tr>
<td>Normal Butane</td>
<td>1.437</td>
<td>0.45</td>
<td>NGL or LPG</td>
</tr>
<tr>
<td>Iso Pentane</td>
<td>0.48</td>
<td>0.17</td>
<td>Drip Gas, Condensate or Naptha</td>
</tr>
<tr>
<td>Normal Pentane</td>
<td>0.54</td>
<td>0.19</td>
<td>Drip Gas, Condensate or Naptha</td>
</tr>
<tr>
<td>Hexanes+</td>
<td>1.06</td>
<td>0.46</td>
<td>Drip Gas, Condensate or Naptha</td>
</tr>
<tr>
<td>Inerts (N2, O2, CO2)</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>7.15</td>
<td></td>
</tr>
</tbody>
</table>
How much do we have?
Appalachian Shale Supply vs. Price

Exhibit 5. Marcellus-Utica: Supply Versus Local Demand And Pipeline Takeaway

Assumed Production Scenarios:
- High case (gas price averages $3.50/MMBtu)
- Base case (gas price averages $3.00/MMBtu)
- Low case (gas price averages $2.50/MMBtu)

Source: Company data, EIA, and Wells Fargo Securities, LLC estimates
Total U.S. natural gas supply is forecasted to grow by ~20 Bcf/d from 2017 to 2027.

MPLX well-positioned as largest processor in Northeast with growing backlog of projects in Marcellus/Utica and other prolific basins.

~43% of total U.S. growth is expected to occur in Northeast.

Incremental Natural Gas Production Growth from 2017 to 2027

Source: Bentek Market Call: North American NGLs – August 21, 2017
Northeast NGL supply is Rapidly Increasing

Northeast NGL production is forecasted to account for 24% of total U.S. NGL production in 2020

Incremental NGL Production Growth from 2015 to 2020 (prior to ethane rejection)

Source: Bentek Market Call: North American NGLs - 7.28.15, EIA
The U.S. is the Critical LPG Supply
Economics
Manufacturing Opportunities in a Low-Price Gas Environment

Methane

- Heating Fuel
- Electricity-Combustion Turbines
- Steel - Direct Reduction Iron (DRI)
- Ammonia - Fertilizer
- Ammonia - Explosives
- Aluminum
- Cement
- Glass

Ethane, Propane, Butane, and Condensate

- Ethylene Oxide
- Ethylene Glycol
- Polyethylene
- Propylene Oxide
- Propylene Glycol
- Polypropylene
- Butylene
- Iso-butane
- Diluent
- Jet Fuel
- Gasoline
- Light and Heavy Naptha
- Lubricants
The World Needs U.S. LPG Supply

Global Demand: Ethane and LPG

- Strong global LPG demand this decade
  - 2010-2014 – 3.4%
  - 2015-2020 – 3.1%

- Global ethane demand accelerating, led by the U.S.
  - 2010-2014 – 6.5%
  - 2015-2020 – 7.6%
**Implied Appalachian Ethane Price-cents per Gallon (cpg)-Producers Perspective**

<table>
<thead>
<tr>
<th></th>
<th>Appalachia</th>
<th>Mt. Belvieu, TX</th>
<th>Sarnia, Ontario</th>
<th>Philly, PA Marcus Hook</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTI S. Point Price-$/Dth (Winter Strip)</td>
<td>$2.69</td>
<td>$2.69</td>
<td>$2.69</td>
<td>$2.69</td>
</tr>
<tr>
<td>DTI S. Point-cpg</td>
<td>17.9</td>
<td>17.9</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>C2 Value</td>
<td>17.9</td>
<td>26*</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>ATEX</td>
<td>(15)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mariner</td>
<td></td>
<td>(15)</td>
<td>(15)</td>
<td>(20)</td>
</tr>
<tr>
<td>Netback</td>
<td>17.9</td>
<td>11.0</td>
<td>2.9</td>
<td>(2.1)</td>
</tr>
<tr>
<td>Netback-$/Dth</td>
<td>$2.69</td>
<td>$1.65</td>
<td>$0.44</td>
<td>($0.32)</td>
</tr>
</tbody>
</table>

**Transportation Rates**

- Appalachian to Marcus Hook = 20 cpg (ME1-2)
- Appalachian to Sarnia via Mariner West = 15 cpg.
- Appalachian to MTB via ATEX = 15-25 cpg.
- Marcus Hook to ARA = 5-10 cpg.
- MTB to ARA = 5-10 cpg.

ARA = Amsterdam, Rotterdam, Antwerp

*C2 Value at Mt. Belvieu, TX
## C2 Cracker Expansions Add 800 MBPD of Demand

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Ethane Demand-MBPD</th>
<th>In Service - Start-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>LyondellBassell</td>
<td>Corpus Christi, TX</td>
<td>22.4</td>
<td>Q1 2017</td>
</tr>
<tr>
<td>Dow</td>
<td>Plaquemine, LA</td>
<td>12.3</td>
<td>Q1 2017</td>
</tr>
<tr>
<td>OxyChem JV*</td>
<td>Ingleside, TX</td>
<td>33.6</td>
<td>Q1 2017</td>
</tr>
<tr>
<td>Dow*</td>
<td>Freeport, TX</td>
<td>92.7</td>
<td>H2 2017</td>
</tr>
<tr>
<td>Indorama*</td>
<td>Lake Charles, LA</td>
<td>16.1</td>
<td>H2 2017</td>
</tr>
<tr>
<td>Exxon Mobil*</td>
<td>Baytown, TX</td>
<td>92.7</td>
<td>H2 2017</td>
</tr>
<tr>
<td>Conoco Phillips*</td>
<td>Cedar Bayou, TX</td>
<td>92.7</td>
<td>Q1 2018</td>
</tr>
<tr>
<td>Shintech*</td>
<td>Plaquemine, LA</td>
<td>30.8</td>
<td>Q2 2018</td>
</tr>
<tr>
<td>Sasol*</td>
<td>Lake Charles, LA</td>
<td>92.7</td>
<td>Q4 2018</td>
</tr>
<tr>
<td>Westlake/Lotte*</td>
<td>Lake Charles, LA</td>
<td>61.6</td>
<td>Q1 2019</td>
</tr>
<tr>
<td>Formosa*</td>
<td>Point Comfort, TX</td>
<td>98.0</td>
<td>Q2 2019</td>
</tr>
<tr>
<td>Total, Nova, Borealis</td>
<td>Port Arthur, TX</td>
<td>61.6</td>
<td>Q1 2021</td>
</tr>
<tr>
<td>Shell Appalachia</td>
<td>Monaca, PA</td>
<td>100.0</td>
<td>TBD</td>
</tr>
</tbody>
</table>

*New Plant

Source: Evantage
## Value Added Manufacturing Deficiencies

<table>
<thead>
<tr>
<th></th>
<th>Appalachia</th>
<th>Mt. Belvieu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NGL Liquid Trading Point</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Underground NGL Storage-Barrels</strong></td>
<td>0</td>
<td>213,000,000</td>
</tr>
<tr>
<td><strong>Fractionation-Barrels/day</strong></td>
<td>550,000</td>
<td>1,623,000</td>
</tr>
<tr>
<td><strong>Steam Crackers-C2-Barrels</strong></td>
<td>0 going to 0.146 MM in 2021</td>
<td>1.1MM going to 1.5 MM in 2018</td>
</tr>
<tr>
<td><strong>Propane Dehydrogenation Units-PDH-Barrels/day</strong></td>
<td>0</td>
<td>35,000</td>
</tr>
<tr>
<td><strong>Condensate Splitters-Barrels/day</strong></td>
<td>60,000 (Marathon-Canton, Catlettsburg)</td>
<td></td>
</tr>
</tbody>
</table>

42 gallons = 1 Barrel
Summary

- The Appalachian Basin produces 33% of total US natural gas.
- The US Produces 50-60% of the world’s NGL’s.
- Appalachia produces 20% of US NGL’s including C2 by 2020.
- The lowest cost natural gas and NGL are in the Appalachian Basin for the foreseeable future.
- Appalachian manufacturer’s of base and derivative products have a significant price advantage.
- Lack of a Liquid NGL and C2 trading hub forces producers’/manufactures’ take on expensive, long term transportation contracts to get to market.
- NGL storage is the first step in an Appalachian manufacturing renaissance.