

# Dirty Little Secrets

Lifting the Covers on Midstream Energy Company Risk

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### 2017's Dirty Little Secrets

- In the Permian Basin, horizontal wells drilled per month are at a new high and logging initial production rates 47% and 40% higher than 2014 for oil and gas. The degree of uplift across the midstream space will vary significantly.
- The surge of growth in the Permian will usher in a new wave of crude oil expansions, as the region quickly goes from too much to too little capacity in 2017.
- New natural gas pipeline expansions will collide with legacy contract cliffs as the sector nears the verge of yet another shake down.
- Ethane, Ethane, Ethane!!! It's coming, it's in Q4, it's quantifiable and it will likely be joined by another new fractionator.
- LPG Exports are overbuilt in the short term and terminal fees are dropping. If there is a storm, minimum volume commitments (MVCs) provide cover but not shelter.

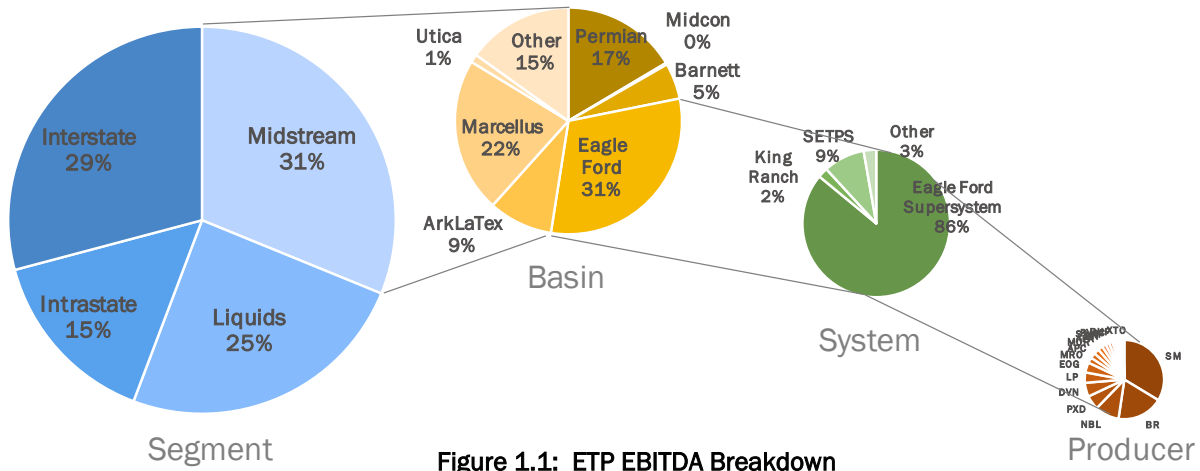
## 1 Introduction

Dissecting the risk behind midstream energy companies is often done with a sword rather than a scalpel. The complex nature of the business typically forces management teams to bucket assets together at a high level, diluting the ability to evaluate the impact of commodity price movements, contract renegotiations or the precise impact of the output from a single well. As a result, correlations at company or segment level with West Texas Intermediate (WTI) or Henry Hub, the crude and natural gas price benchmarks in the US, are used as blunt instruments to evaluate future risk to a company's cash flow. However, perhaps the dirtiest little secret in the midstream energy space is that midstream energy companies, even large cap diversified companies like Energy Transfer Partners (ETP) and Kinder Morgan (KMI), can be dissected at a very granular level. Company reported segments can be subdivided by commodity risk, commodity risk by infrastructure, infrastructure by basin and basin into distinct assets. At its most granular level, assets can even be broken down by contract and counterparty. This report details 23 prominent companies in the midstream space by subdividing them into a detailed asset-level forecast. In doing so, dirty little secrets, both good and bad, come to light in the outlook for 2017 and beyond.

### 1.1 Dirty Little Secrets Highlights

The last two years have been dramatic for the energy space. 2015 began with a bang as the proverbial energy deck was reshuffled following the halving of oil prices from \$100 to \$50 in just five months. Energy players attempted to tread water for the remainder of the year but were dealt another blow at the beginning of 2016 when prices sank below \$30 dollars, sending investors scrambling to quantify counterparty exposure. However, by the end of 2016, WTI has seemingly stabilized above \$50 and horizontal rigs in the Permian have skyrocketed to within 80% of previous highs and the number of horizontal wells drilled in the basin is setting new records. While this dramatic turnaround is driving substantial growth in tier one basins like the Permian, many midstream companies are still fighting a battle in other basins that have declining production. A complex company like ETP, which has substantial positions in the Marcellus, Eagle Ford and Permian, will have some of their growth offset by declines on their ArkLaTex, Ft Worth and Midcontinent systems. By breaking down a company's macro reported gas gathering and processing (G&P) segment by system within a basin, as shown in Figure 1.1, which breaks down ETP's Midstream EBITDA by asset, it reveals a number of dirty little secrets about counterparty risk, minimum volume commitments, declining well profiles and intersegment synergies. For example, the G&P segment of complex midstream companies like ETP, ONEOK (OKS), DCP Midstream (DPM) and others are the engines that drive the revenue profile of downstream assets like the pipeline and fractionation facilities. Thus, understanding how every molecule can traverse through multiple pieces of infrastructure lays the framework for deciphering the upside from every well drilled.

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**Figure 1.1: ETP EBITDA Breakdown**

Downstream of the G&P systems sits a complex array of natural gas pipelines that crisscross the country carrying methane to its final end use destination. Often overlooked due to the extended take-or-pay nature of the contract structure with shippers, the natural gas pipeline sector is filled with dirty little secrets regarding contract risk, legacy system declines and expansion upside. For instance, over 75 Bcf/d of pipeline capacity was built between 2007 and 2009, much of which was under 10 to 15 year contracts that are about to come up for renewal. Given the dramatic shift in the industry since these systems were built (don't forget, gas prices were above \$6.50 back then), many of these pipelines will see rates cut or contracts eliminated. Thus, the cash flow they have been generating this whole time to pay distributions and feed capex budgets will go away. Additionally, this year the Marcellus and Utica will begin to break free from the shackles of capacity constraints pushing new supply out into the market. New Marcellus/Utica long haul expansions are substantially beneficial for several midstream companies (Williams Pipeline Partners (WPZ), Spectra Energy Partners (SEP), Boardwalk Pipeline Partners (BWP), ETP), but need to be viewed in light of contract attrition and revenue decline on legacy systems.

On the other side of the natural gas system is a somewhat less extensive, but in many ways more complex natural gas liquids (NGL) sector. NGL pipelines move y-grade (mixed) NGLs from processing plants to downstream fractionators where NGLs are separated into purity products (ethane, butane, propane and natural gasoline) for commercial use. Ethane, which represents 40-60% of the NGL mix, has been a hot topic of late due to the potential that demand from new steam crackers will spur additional recovery of ethane that today is left in the natural gas stream. There is upside for ethane in 2017, but the dirty little secret is that it will not come until the tail end of the year. More importantly, since each midstream company is just a series of rates on different infrastructure types, when broken down at an asset level, the calculation of that potential upside can be laid out in a simple matrix by basin. For instance, OKS owns a series of pipelines and fractionation facilities. By breaking down OKS at an asset level, a rate can be determined for each component of the system, that when aggregated provides a metric for determining the value of every incremental molecule recovered. Major midstream players with NGL assets, including DPM, ETP, MPLX, OKS, Targa (TRGP), and Enterprise Product Partners (EPD) will experience varying degrees of uplift from increased ethane recovery on their systems depending on numerous factors including utilization and location.

It is no secret that in the US, we tend to go big, often overbuilding to the point that we are our own worst enemy. In the NGL space the dirty little secret is that global demand is not likely to keep pace with US export growth. In the short term, US exporters are relying on the global petrochemical market to absorb LPG barrels. This market has both upside and downside risks in 2017. A little volatility in the export space can be concerning but companies will feel varying degrees of impact depending on their exposure to the export market. A bump in the road could turn into a mountain for a company like TRGP who has the most risk exposure from LPG exports in 2017, as their terminal makes up almost 20% of total company EBITDA.

In the crude transportation space, a lot has been made of the regulatory issues regarding the approval of infrastructure like the Dakota Access Pipeline (DAPL). However, delving into the dirty little secrets in Washington DC may be a little too dirty for this paper. Fundamentally, the Permian, a basin that has defined the recovery in the second half of 2016, will have a lot to tell about where the market will go in 2017. Several midstream companies have already announced

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processing expansions in the basin but new fractionation and oil takeaway projects will define the next round of major announcements. Oil takeaway capacity constraints prior to EPD's Midland-to-Sealy pipeline are expected to be the catalyst for a series of initial announcements that will likely be followed by another wave after Midland-to-Sealy goes into service.

Analysts spend a lot of time examining SEC filings, company presentations and press releases. These documents provide a tremendous amount of valuable information and can often set a bar that management teams are held to. However, they are also well crafted works of art, providing just enough information to feel comfortable with risk, but not so much that they give away competitive advantages or conclusively guide analysts about an uncertain future. While a forecast is just that, a forecast, lifting the covers by quantifying exposure to markets asset by asset provides the basic tools for understanding a company's true risk components. Section 8 of this report does just that, breaks down each company to reveal what an asset by asset forecast indicates about the risk to a company's future performance.

### 1.2 About East Daley

East Daley Capital is an energy asset research firm that exposes the complex risks in the midstream energy market. In addition to using top-level financial data to forecast a company's performance, East Daley delivers asset-level analysis that provides comprehensive, fact-based intelligence. Supported by a team of unbiased, experienced research analysts, East Daley provides its clients unparalleled insight into how midstream companies operate and generate cash flow. East Daley uses publicly available fundamental data and intersects that data with a company's reported financials to break midstream companies down to asset-level cash flows. The result allows for more informed portfolio decisions.

## Exclusive Consultation

### Dirty Little Secrets – Lifting the Covers on Midstream Energy Company Risk

For subscribers, in addition to this report, East Daley will provide an in-person or Webex presentation for organizations interested in the findings discussed in this analysis. This presentation is generally 1-2 hours with several of the analysts available to answer any questions you have. For more information, contact:

Justin Carlson | [insight@eastdaley.com](mailto:insight@eastdaley.com) | 303-499-5940

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