Acquisition of Navigator Energy Services, LLC

April 2017

Forward-Looking Statements

Statements contained in this presentation other than statements of historical fact are forward-looking statements. While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect our current judgment regarding the direction of our business, actual results will likely vary, sometimes materially, from any estimates, predictions, projections, assumptions or other future performance metrics presented or suggested in this presentation. These forward-looking statements can generally be identified by words such as "anticipates," "believes," "expects," "plans," "intends," "estimates," "forecasts," "budgets," "projects," "could," "should," "may," "preliminary" and similar expressions. These statements reflect our current views with regard to future events and are subject to various risks, uncertainties and assumptions.

We undertake no duty to update any forward-looking statement to conform the statement to actual results or changes in the company's expectations. For more information concerning factors that could cause actual results to differ from those expressed or forecasted, see NuStar Energy L.P.'s annual report on Form 10-K and quarterly reports on Form 10-Q, filed with the U.S. Securities and Exchange Commission and available on NuStar's website at www.nustarenergy.com.

We use financial measures in this presentation that are not calculated in accordance with generally accepted accounting principles ("non-GAAP") and our reconciliations of non-GAAP financial measures to GAAP financial measures are located in the appendix to this presentation. These non-GAAP financial measures should not be considered an alternative to GAAP financial measures.

Two Publicly Traded Companies

Other Public Unitholders
33.9 million NSH Units
79.0% Membership Interest

William E. Greehey
9.0 million NSH Units
21.0% Membership Interest

NuStar GP Holdings, LLC
NYSE: NSH

- **G.P. Interest in NS**
- **~13% Common L.P. Interest in NS**
- **Incentive Distribution Rights in NS (IDR)**
- **~13% NS Distribution Take**
- **IPO Date: 7/19/2006**
- **Unit Price (4/07/17): $27.10**
- **Annualized Distribution/Unit: $2.18**
- **Yield (4/07/17): 8.0%**
- **Market Capitalization: $1.2 billion**
- **Enterprise Value: $1.2 billion**

NuStar Energy L.P.
NYSE: NS

- **IPO Date: 4/16/2001**
- **Common Unit Price (4/07/17): $51.21**
- **Annualized Distribution/Common Unit: $4.38**
- **Yield (4/07/17): 8.6%**
- **Market Capitalization: $4.3 billion**
- **Enterprise Value: $7.3 billion**

Credit Ratings

- **Moody's: Ba1/Stable**
- **S&P: BB+/Stable**
- **Fitch: BB/Stable**

Public Unitholders
68.4 million Common
9.1 million Preferred

Note: As of 4/7/2017

Transaction Rationale

- NuStar to acquire Navigator, which owns and operates a leading crude oil gathering, transportation and storage system in the Permian
- Transaction provides a meaningful entry into the Permian and a significant growth platform
- The addition of Navigator, coupled with NuStar’s existing Eagle Ford position, solidifies NuStar's presence in two of the most prolific basins in the U.S.
- Navigator assets consistent with NuStar’s existing crude oil operations, with no first purchasing or gas processing exposure
- Significant growth prospects through volume ramp from existing producers, bolt-on acquisitions and larger takeaway capacity opportunities
- Diversified, high quality producer portfolio with attractive long-term, fee-based contracts
- Purchase price represents an attractive multiple as volumes ramp

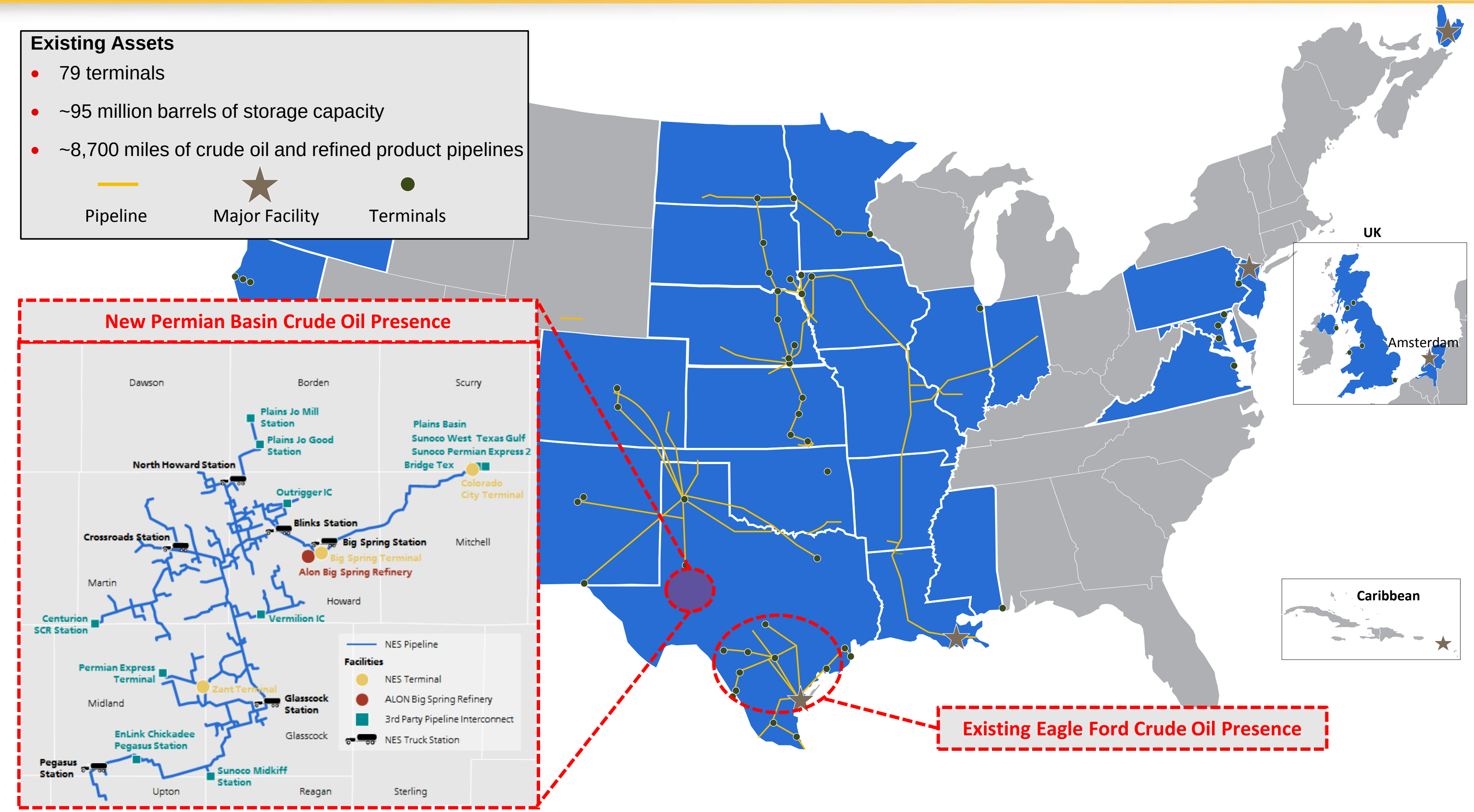
Acquisition Overview

- NuStar has executed a definitive agreement to acquire 100% of the membership interests in Navigator from First Reserve Energy Infrastructure Fund for $1.475 billion in cash
  - NuStar has committed bridge financing for 100% of the purchase price
- Purchase price expected to be funded by a combination of equity and debt offerings, which is consistent with NuStar's targeted credit profile
- To demonstrate its strong support for the transaction, NuStar GP Holdings, LLC (NYSE: NSH) has agreed to forgo all IDR cash distributions to which it would be entitled from any NuStar Energy L.P. common equity issued after signing the acquisition agreement for a period of ten (10) quarters (capped at $22 million in the aggregate) from the date of the acquisition closing
- Transaction expected to close in Q2 2017, subject to regulatory approvals and customary closing conditions

Diversifies and Transforms NuStar's Crude Oil Operations

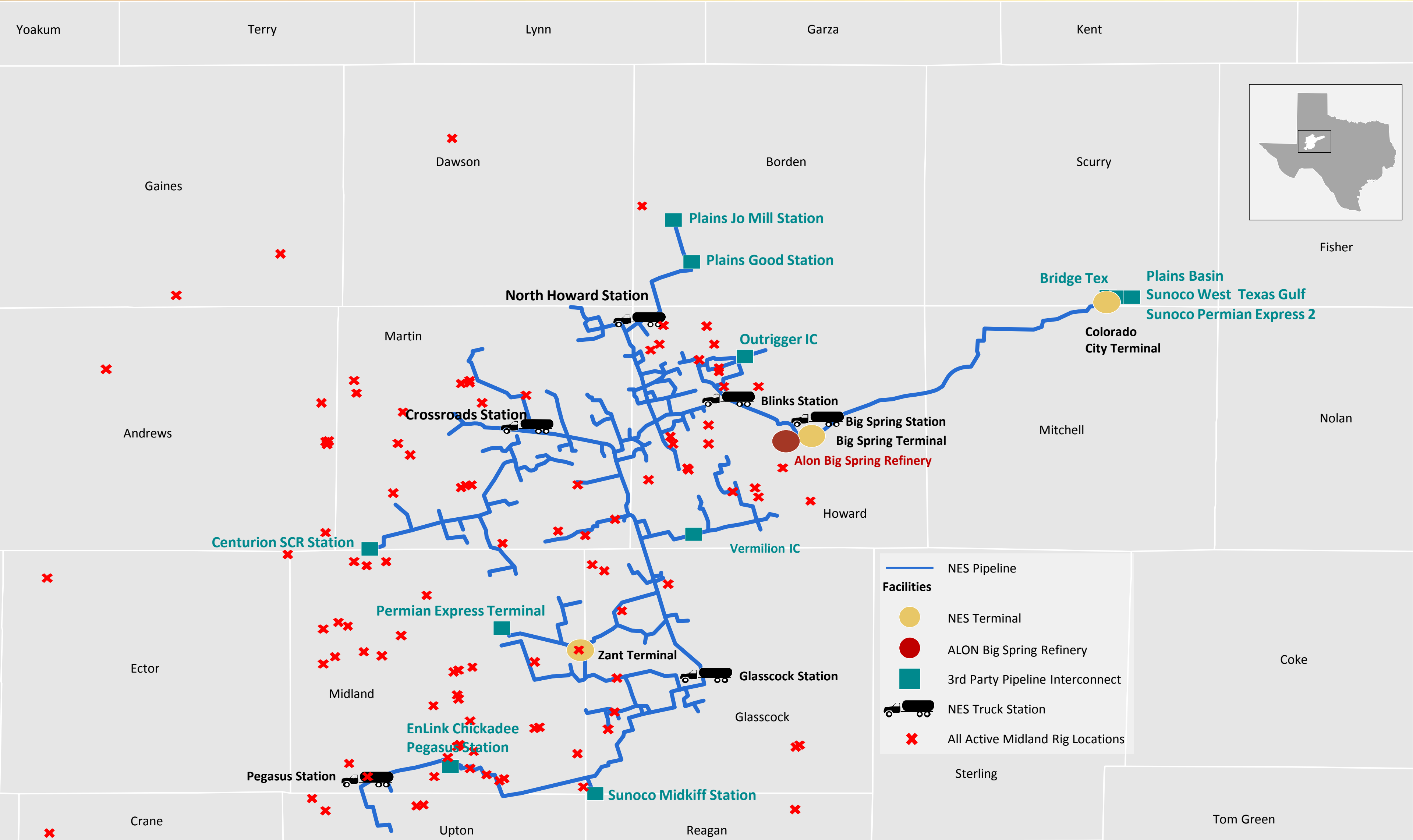
Existing Assets
- 79 terminals
- ~95 million barrels of storage capacity
- ~8,700 miles of crude oil and refined product pipelines

Pipeline
Major Facility
Terminals



The Navigator acquisition provides NuStar with a strong presence in two of the most prolific crude oil basins in the U.S.

Navigator is an Integrated Crude System



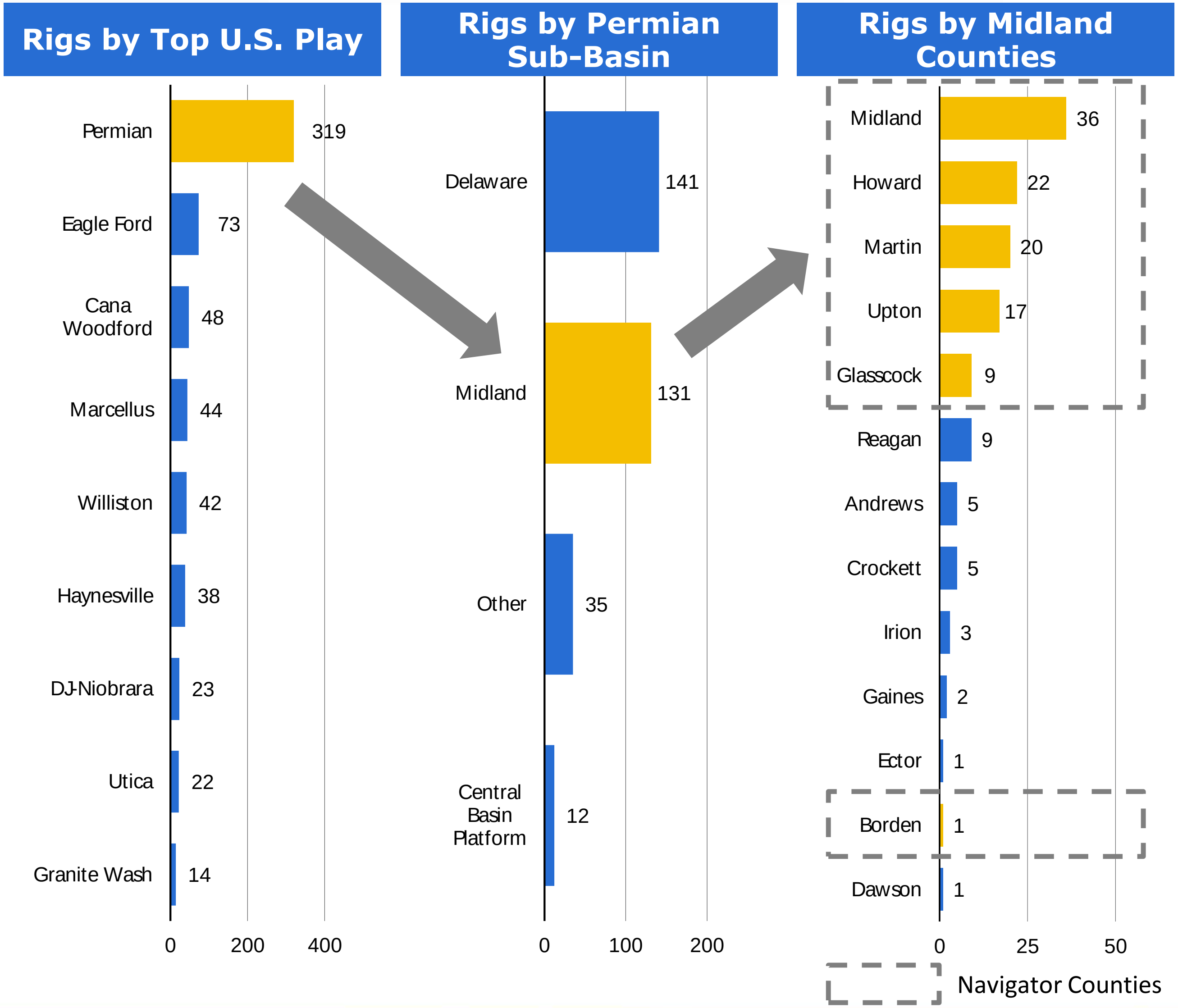
Source: Rig count per Baker Hughes data as of 3/31/2017

Navigator is in the Most Active Areas of the Midland

- Permian Basin has 319 rigs operating, representing ~40% of all U.S. onshore rig activity
  - 2.8x the rig count in the Bakken / Eagle Ford combined

Navigator Overview:

- Fully-integrated crude platform
  - 520 miles of pipeline with 412,000 bbls/d of current capacity
  - 1 million bbls of storage capacity
- Pipeline gathering with over 500,000 dedicated acres
  - Nearly 5 million acres of Areas of Mutual Interest ("AMI")
- Delivery points into Midland, Colorado City and Big Spring



Source: Rig count per Baker Hughes data as of 3/31/2017

Navigator Highlights

"Core" of the Midland Basin	▪ Navigator system located in 5 of the 6 most active counties in the Midland Basin ▪ Midland is one of the most economic, resilient and fastest growing basins in the U.S. – Permian, in aggregate, represents ~40% of all U.S. onshore rig activity ▪ Permian has unparalleled resource potential – Decades of drilling inventory with breakeven economics at $35 - $45/bbl
Significant Volume Growth	▪ Rapid volume growth expected in 2017, 2018 and beyond, driven by existing producers with more than 500,000 dedicated acres on the system ▪ Further potential upside from undedicated producers, AMI acreage and improved drilling results / technology
Growth Platform for NuStar	▪ Potential to expand the system organically ▪ Numerous bolt-on acquisition opportunities ▪ Platform enhances ability to develop larger takeaway capacity projects
Newly Constructed / Well Designed System	▪ Fully integrated crude system centered around transportation, providing customers with excellent access to multiple downstream end markets – Connection to nearly all destinations in Big Spring, Midland and Colorado City ▪ Newly-built assets with minimal annual maintenance capex expected
Stable Cash Flow	▪ System structured with long-term, fixed-fee contracts – Mainline transportation with ~74,000 bbl/d of ship-or-pay volume commitments and nearly 7 year average contract life – Pipeline gathering contract portfolio with an average life of over 10 years – 440,000 bbls of storage contracted with an average life of nearly 7 years ▪ Well-diversified customer base, including 16 upstream producers with a meaningful and active presence in the Midland Basin

Preliminary Q1 2017 Earnings

- The following table indicates NuStar's Net Income, EBITDA and DCF based on preliminary financial results for the three months ended March 31, 2017:

($ in thousands):	Three Months Ended March 31, 2017	
	Low	High
Net income	$ 55,000	$ 62,000
Interest expense, net	36,000	37,000
Income tax expense	2,000	3,000
Depreciation and amortization expense	56,000	57,000
EBITDA	149,000	159,000
Interest expense, net	(36,000)	(37,000)
Reliability capital expenditures	(5,000)	(6,000)
Income tax expense	(2,000)	(3,000)
Mark-to-market impact of hedge transactions (a)	(2,000)	(3,000)
Unit-based compensation (b)	2,000	2,500
Preferred unit distributions	(4,800)	(4,800)
Other items (c)	(500)	500
DCF	$ 100,700	$ 108,200
Less DCF available to general partner	12,900	12,900
DCF available to common limited partners	$ 87,800	$ 95,300
Distributions applicable to common limited partners (e)	$ 86,172	$ 86,172
Distribution coverage ratio (d) (e)	1.02x	1.11x

(a) DCF excludes the impact of unrealized mark-to-market gains and losses that arise from valuing certain derivative contracts, as well as the associated hedged inventory. The gain or loss associated with these contracts is realized in DCF when the contracts are settled.
(b) In connection with the employee transfer from NuStar GP, LLC on March 1, 2016, we assumed obligations related to awards issued under a long-term incentive plan, and we intend to satisfy the vestings of equity-based awards with the issuance of our common units. As such, the expenses related to these awards are considered non-cash and added back to DCF. Certain awards include distribution equivalent rights (DERs). Payments made in connection with DERs are deducted from DCF.
(c) Other items primarily consist of adjustments for throughput deficiency payments and construction reimbursements for all periods presented.
(d) Distribution coverage ratio is calculated by dividing DCF available to common limited partners by distributions applicable to common limited partners.
(e) The distribution applicable to common limited partners and the distribution coverage ratio do not reflect distributions that will be paid on the common units that may be issued for cash to pay a portion of the consideration for the proposed acquisition. Assuming an estimated distribution per unit of $1.095 paid to the common units that may be issued, distributions applicable to common limited partners would be higher by $11,497,500 and the distribution coverage ratio would be lower by 0.14x

Note: Preliminary management estimates have not been reviewed by our auditors and may differ from results to be reported in our Form 10-Q for Q1 2017.