# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the quarterly period ended March 31, 2017**

**OR**

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**Commission File Number: 1-36132**

# PLAINS GP HOLDINGS, L.P.
(Exact name of registrant as specified in its charter)

| | |
|---|---|
| **Delaware** | **90-1005472** |
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| **333 Clay Street, Suite 1600, Houston, Texas** | **77002** |
| (Address of principal executive offices) | (Zip Code) |

**(713) 646-4100**
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes o No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☒ Yes o No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | |
|---|---|
| Large accelerated filer ☒ | Accelerated filer o |
| Non-accelerated filer o | Smaller reporting company o |
| (Do not check if a smaller reporting company) | Emerging growth company o |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o Yes o No

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). o Yes ☒ No

As of May 1, 2017, there were 152,280,208 Class A Shares outstanding.

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**TABLE OF CONTENTS**

## PART I. FINANCIAL INFORMATION

### Item 1. UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED BALANCE SHEETS**
**(in millions, except share data)**

| | March 31, 2017 | December 31, 2016 |
|---|---|---|
| | (unaudited) | |
| **ASSETS** | | |
| | | |
| **CURRENT ASSETS** | | |
| Cash and cash equivalents | $ 41 | $ 50 |
| Trade accounts receivable and other receivables, net | 2,218 | 2,279 |
| Inventory | 1,219 | 1,343 |
| Other current assets | 736 | 603 |
| Total current assets | 4,214 | 4,275 |
| | | |
| **PROPERTY AND EQUIPMENT** | 16,509 | 16,261 |
| Accumulated depreciation | (2,432) | (2,371) |
| Property and equipment, net | 14,077 | 13,890 |
| | | |
| **OTHER ASSETS** | | |
| Goodwill | 2,596 | 2,344 |
| Investments in unconsolidated entities | 2,469 | 2,343 |
| Deferred tax asset | 2,221 | 1,876 |
| Linefill and base gas | 883 | 896 |
| Long-term inventory | 131 | 193 |
| Other long-term assets, net | 917 | 286 |
| Total assets | $ 27,508 | $ 26,103 |
| | | |
| **LIABILITIES AND PARTNERS' CAPITAL** | | |
| | | |
| **CURRENT LIABILITIES** | | |
| Accounts payable and accrued liabilities | $ 2,475 | $ 2,590 |
| Short-term debt | 1,341 | 1,715 |
| Other current liabilities | 342 | 361 |
| Total current liabilities | 4,158 | 4,666 |
| | | |
| **LONG-TERM LIABILITIES** | | |
| Senior notes, net of unamortized discounts and debt issuance costs | 9,876 | 9,874 |
| Other long-term debt | 3 | 250 |
| Other long-term liabilities and deferred credits | 644 | 606 |
| Total long-term liabilities | 10,523 | 10,730 |
| | | |
| **COMMITMENTS AND CONTINGENCIES (NOTE 12)** | | |
| | | |
| **PARTNERS' CAPITAL** | | |
| Class A Shareholders (151,779,960 and 101,206,526 shares outstanding, respectively) | 2,604 | 1,737 |
| Noncontrolling interests | 10,223 | 8,970 |
| Total partners' capital | 12,827 | 10,707 |
| Total liabilities and partners' capital | $ 27,508 | $ 26,103 |

The accompanying notes are an integral part of these condensed consolidated financial statements.

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**
**(in millions, except per share data)**

| | Three Months Ended March 31, 2017 | Three Months Ended March 31, 2016 |
|---|---|---|
| | (unaudited) | |
| **REVENUES** | | |
| Supply and Logistics segment revenues | $ 6,395 | $ 3,819 |
| Transportation segment revenues | 138 | 154 |
| Facilities segment revenues | 134 | 138 |
| Total revenues | 6,667 | 4,111 |
| **COSTS AND EXPENSES** | | |
| Purchases and related costs | 5,593 | 3,348 |
| Field operating costs | 288 | 300 |
| General and administrative expenses | 75 | 68 |
| Depreciation and amortization | 122 | 114 |
| Total costs and expenses | 6,078 | 3,830 |
| **OPERATING INCOME** | 589 | 281 |
| **OTHER INCOME/(EXPENSE)** | | |
| Equity earnings in unconsolidated entities | 53 | 47 |
| Interest expense (net of capitalized interest of $6 and $13, respectively) | (129) | (116) |
| Other income/(expense), net | (5) | 5 |
| **INCOME BEFORE TAX** | 508 | 217 |
| Current income tax expense | (10) | (31) |
| Deferred income tax expense | (96) | (9) |
| **NET INCOME** | 402 | 177 |
| Net income attributable to noncontrolling interests | (361) | (141) |
| **NET INCOME ATTRIBUTABLE TO PAGP** | $ 41 | $ 36 |
| **BASIC NET INCOME PER CLASS A SHARE** | $ 0.34 | $ 0.39 |
| **DILUTED NET INCOME PER CLASS A SHARE** | $ 0.34 | $ 0.37 |
| **BASIC WEIGHTED AVERAGE CLASS A SHARES OUTSTANDING** | 120 | 95 |
| **DILUTED WEIGHTED AVERAGE CLASS A SHARES OUTSTANDING** | 120 | 245 |

The accompanying notes are an integral part of these condensed consolidated financial statements.

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**
**(in millions)**

| | Three Months Ended March 31, 2017 | Three Months Ended March 31, 2016 |
|---|---|---|
| | (unaudited) | |
| Net income | $ 402 | $ 177 |
| Other comprehensive income | 36 | 118 |
| Comprehensive income | 438 | 295 |
| Comprehensive income attributable to noncontrolling interests | (392) | (258) |
| Comprehensive income attributable to PAGP | $ 46 | $ 37 |

The accompanying notes are an integral part of these condensed consolidated financial statements.

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN**
**ACCUMULATED OTHER COMPREHENSIVE INCOME/(LOSS)**
**(in millions)**

| | Derivative Instruments | Translation Adjustments | Other | Total |
|---|---|---|---|---|
| | | (unaudited) | | |
| Balance at December 31, 2016 | $ (228) | $ (782) | $ 1 | $ (1,009) |
| Reclassification adjustments | 2 | — | — | 2 |
| Deferred gain on cash flow hedges | 7 | — | — | 7 |
| Currency translation adjustments | — | 27 | — | 27 |
| Total period activity | 9 | 27 | — | 36 |
| Balance at March 31, 2017 | $ (219) | $ (755) | $ 1 | $ (973) |

| | Derivative Instruments | Translation Adjustments | Total |
|---|---|---|---|
| | | (unaudited) | |
| Balance at December 31, 2015 | $ (203) | $ (878) | $ (1,081) |
| Reclassification adjustments | 1 | — | 1 |
| Deferred loss on cash flow hedges | (90) | — | (90) |
| Currency translation adjustments | — | 207 | 207 |
| Total period activity | (89) | 207 | 118 |
| Balance at March 31, 2016 | $ (292) | $ (671) | $ (963) |

The accompanying notes are an integral part of these condensed consolidated financial statements.

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(in millions)**

| | Three Months Ended March 31, 2017 | Three Months Ended March 31, 2016 |
|---|---|---|
| | (unaudited) | |
| **CASH FLOWS FROM OPERATING ACTIVITIES** | | |
| Net income | $ 402 | $ 177 |
| Reconciliation of net income to net cash provided by operating activities: | | |
| Depreciation and amortization | 122 | 114 |
| Equity-indexed compensation expense | 12 | 4 |
| Deferred income tax expense | 96 | 9 |
| (Gain)/loss on foreign currency revaluation | (3) | (3) |
| Equity earnings in unconsolidated entities | (53) | (47) |
| Distributions from unconsolidated entities | 52 | 52 |
| Other | 10 | 7 |
| Changes in assets and liabilities, net of acquisitions | 177 | 318 |
| Net cash provided by operating activities | 815 | 631 |
| **CASH FLOWS FROM INVESTING ACTIVITIES** | | |
| Cash paid in connection with acquisitions, net of cash acquired | (1,254) | (85) |
| Investments in unconsolidated entities | (123) | (75) |
| Additions to property, equipment and other | (275) | (372) |
| Proceeds from sales of assets | 161 | 246 |
| Other investing activities | — | (1) |
| Net cash used in investing activities | (1,491) | (287) |
| **CASH FLOWS FROM FINANCING ACTIVITIES** | | |
| Net borrowings/(repayments) under PAA commercial paper program (Note 8) | 149 | (1,211) |
| Net repayments under PAA senior secured hedged inventory facility (Note 8) | (501) | (300) |
| Net borrowings under AAP senior secured revolving credit facility | — | 34 |
| Repayments of PAA senior notes (Note 8) | (400) | — |
| Net proceeds from the sale of Class A shares (Note 9) | 1,535 | — |
| Net proceeds from the sale of Series A preferred units by a subsidiary | — | 1,570 |
| Net proceeds from the sale of common units by a subsidiary (Note 9) | 129 | — |
| Distributions paid to Class A shareholders (Note 9) | (57) | (55) |
| Distributions paid to noncontrolling interests (Note 9) | (315) | (375) |
| Other financing activities | 127 | (1) |
| Net cash provided by/(used in) financing activities | 667 | (338) |
| Effect of translation adjustment on cash | — | 4 |
| Net increase/(decrease) in cash and cash equivalents | (9) | 10 |
| Cash and cash equivalents, beginning of period | 50 | 30 |
| Cash and cash equivalents, end of period | $ 41 | $ 40 |
| Cash paid for: | | |
| Interest, net of amounts capitalized | $ 92 | $ 88 |
| Income taxes, net of amounts refunded | $ 27 | $ 16 |

The accompanying notes are an integral part of these condensed consolidated financial statements.

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN PARTNERS' CAPITAL**
**(in millions)**

| | Class A Shareholders | Noncontrolling Interests | Total Partners' Capital |
|---|---|---|---|
| | | (unaudited) | |
| Balance at December 31, 2016 | $ 1,737 | $ 8,970 | $ 10,707 |
| Net income | 41 | 361 | 402 |
| Cash distributions to partners | (57) | (315) | (372) |
| Deferred tax asset (Note 9) | 386 | — | 386 |
| Sales of Class A shares (Note 9) | 462 | 1,073 | 1,535 |
| Sales of common units by a subsidiary (Note 9) | 13 | 116 | 129 |
| Other comprehensive income | 5 | 31 | 36 |
| Other | 17 | (13) | 4 |
| Balance at March 31, 2017 | $ 2,604 | $ 10,223 | $ 12,827 |

| | Class A Shareholders | Noncontrolling Interests | Total Partners' Capital |
|---|---|---|---|
| | | (unaudited) | |
| Balance at December 31, 2015 | $ 1,762 | $ 7,472 | $ 9,234 |
| Net income | 36 | 141 | 177 |
| Cash distributions to partners | (55) | (375) | (430) |
| Deferred tax asset | 94 | — | 94 |
| Change in ownership interest in connection with Exchange Right exercises | (17) | 17 | — |
| Sale of Series A preferred units by a subsidiary | — | 1,509 | 1,509 |
| Other comprehensive income | 1 | 117 | 118 |
| Other | — | 3 | 3 |
| Balance at March 31, 2016 | $ 1,821 | $ 8,884 | $ 10,705 |

The accompanying notes are an integral part of these condensed consolidated financial statements.

**PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES**
**NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**
**(unaudited)**

**Note 1—Organization and Basis of Consolidation and Presentation**

***Organization***

Plains GP Holdings, L.P. (“PAGP”) is a Delaware limited partnership formed in July 2013 that has elected to be taxed as a corporation for United States federal income tax purposes. PAGP does not directly own any operating assets; as of December 31, 2016, its principal sources of cash flow are derived from an indirect investment in Plains All American Pipeline, L.P. (“PAA”), a publicly traded Delaware limited partnership. As used in this Form 10-Q and unless the context indicates otherwise (taking into account the fact that PAGP has no operating activities apart from those conducted by PAA and its subsidiaries), the terms “Partnership,” “we,” “us,” “our,” “ours” and similar terms refer to PAGP and its subsidiaries.

As of March 31, 2017, our sole assets consisted of (i) a 100% managing member interest in Plains All American GP LLC (“GP LLC”) that has also elected to be taxed as a corporation for United States federal income tax purposes and (ii) an approximate 53% limited partner interest in Plains AAP, L.P. (“AAP”) through our direct ownership of approximately 150.8 million Class A units of AAP (“AAP units”) and indirect ownership of approximately 1.0 million AAP units through GP LLC. GP LLC is a Delaware limited liability company that holds the non-economic general partner interest in AAP. AAP is a Delaware limited partnership that, as of March 31, 2017, directly owned an approximate 37% limited partner interest in PAA represented by approximately 288.3 million PAA common units. AAP is the sole member of PAA GP LLC (“PAA GP”), a Delaware limited liability company that directly holds the non-economic general partner interest in PAA.

PAA is a publicly traded master limited partnership that owns and operates midstream energy infrastructure and provides logistics services for crude oil, natural gas liquids (“NGL”), natural gas and refined products. PAA owns an extensive network of pipeline transportation, terminalling, storage and gathering assets in key crude oil and NGL producing basins and transportation corridors and at major market hubs in the United States and Canada. Our business activities are conducted through three operating segments: Transportation, Facilities and Supply and Logistics. See Note 13 for further discussion of our operating segments.

PAA GP Holdings LLC, a Delaware limited liability company, is our general partner. Our general partner manages our operations and activities and is responsible for exercising on our behalf any rights we have as the sole and managing member of GP LLC, including responsibility for conducting the business and managing the operations of AAP and PAA. GP LLC employs our domestic officers and personnel involved in the operation and management of AAP and PAA.  PAA’s Canadian officers and personnel are employed by our subsidiary, Plains Midstream Canada ULC (“PMC”).

References to the “Plains Entities” include us, our general partner, GP LLC, AAP, PAA GP and PAA and its subsidiaries.

***Simplification Transactions***

On November 15, 2016, the Plains Entities closed a series of transactions and executed several organizational and ancillary documents (the “Simplification Transactions”) that simplified our governance structure and permanently eliminated PAA's incentive distribution rights (“IDRs”) and the economic rights associated with its 2% general partner interest in exchange for the issuance by PAA to AAP of common units and the assumption by PAA of all of AAP’s outstanding debt. As part of the Simplification Transactions, we effected a reverse split of our Class A and Class B shares, in each case, at a ratio of approximately 1-for-2.663. The effect of the reverse split has been retroactively applied to all share and per-share amounts presented in this Form 10-Q. See Note 1 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for additional discussion of the Simplification Transactions.

***Definitions***

Additional defined terms are used in this Form 10-Q and shall have the meanings indicated below:

| | | |
|---|---|---|
| AOCI | = | Accumulated other comprehensive income/(loss) |
| ASC | = | Accounting Standards Codification |
| ASU | = | Accounting Standards Update |
| Bcf | = | Billion cubic feet |
| Btu | = | British thermal unit |
| CAD | = | Canadian dollar |
| CODM | = | Chief Operating Decision Maker |
| EBITDA | = | Earnings before interest, taxes, depreciation and amortization |
| EPA | = | United States Environmental Protection Agency |
| FASB | = | Financial Accounting Standards Board |
| GAAP | = | Generally accepted accounting principles in the United States |
| ICE | = | Intercontinental Exchange |
| LIBOR | = | London Interbank Offered Rate |
| LTIP | = | Long-term incentive plan |
| Mcf | = | Thousand cubic feet |
| NGL | = | Natural gas liquids, including ethane, propane and butane |
| NYMEX | = | New York Mercantile Exchange |
| Oxy | = | Occidental Petroleum Corporation or its subsidiaries |
| PLA | = | Pipeline loss allowance |
| SEC | = | United States Securities and Exchange Commission |
| USD | = | United States dollar |
| WTI | = | West Texas Intermediate |

***Basis of Consolidation and Presentation***

The accompanying unaudited condensed consolidated interim financial statements and related notes thereto should be read in conjunction with our 2016 Annual Report on Form 10-K. The accompanying condensed consolidated financial statements include the accounts of PAGP and all of its wholly owned subsidiaries and those entities that it controls. Investments in entities over which we have significant influence but not control are accounted for by the equity method. We apply proportionate consolidation for pipelines and other assets in which we own undivided joint interests. The financial statements have been prepared in accordance with the instructions for interim reporting as set forth by the SEC. All adjustments (consisting only of normal recurring adjustments) that in the opinion of management were necessary for a fair statement of the results for the interim periods have been reflected. All significant intercompany transactions have been eliminated in consolidation, and certain reclassifications have been made to information from previous years to conform to the current presentation. The condensed consolidated balance sheet data as of December 31, 2016 was derived from audited financial statements, but does not include all disclosures required by GAAP. The results of operations for the three months ended March 31, 2017 should not be taken as indicative of results to be expected for the entire year.

Subsequent events have been evaluated through the financial statements issuance date and have been included in the following footnotes where applicable.

**Note 2—Recent Accounting Pronouncements**

Except as discussed below and in our 2016 Annual Report on Form 10-K, there have been no new accounting pronouncements that have become effective or have been issued during the three months ended March 31, 2017 that are of significance or potential significance to us.

***Accounting Standards Updates Adopted During the Period***

In March 2016, the FASB issued ASU 2016-09, *Compensation — Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which simplified several aspects of the accounting for share-based payment transactions, including the income tax consequences, forfeitures, classification of awards as either equity or liabilities and classification of certain related payments on the statement of cash flows. This guidance was effective for interim and annual periods beginning after December 15, 2016, with early adoption permitted. We adopted the applicable provisions of the ASU on January 1, 2017 and (i) elected to account for forfeitures as they occur, utilizing the modified retrospective approach of adoption, and (ii) will classify units directly withheld for tax-withholding purposes as a financing activity on our Condensed Consolidated Statement of Cash Flows for all periods presented. Our adoption did not have a material impact on our financial position, results of operations or cash flows for the periods presented.

In January 2017, the FASB issued ASU 2017-04, *Intangibles — Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. The amendments within this ASU eliminate Step 2 from the goodwill impairment test, which currently requires an entity to determine goodwill impairment by calculating the implied fair value of goodwill by hypothetically assigning the fair value of a reporting unit to all of its assets and liabilities as if that reporting unit had been acquired in a business combination. Under the amended standard, goodwill impairment will instead be measured using Step 1 of the goodwill impairment test with goodwill impairment being equal to the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying value of goodwill. This guidance is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods, with early adoption permitted. We early adopted this ASU in the first quarter of 2017, and the amendments therein will be applied prospectively to all future goodwill impairment tests performed on an interim or annual basis.

***Accounting Standards Updates Issued During the Period***

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, which improves the guidance for determining whether a transaction involves the purchase or disposal of a business or an asset. This guidance becomes effective for fiscal years and interim periods beginning after December 15, 2017, with early adoption permitted, and prospective application required. We plan to adopt this guidance on January 1, 2018 and will apply the new guidance to applicable transactions occurring after that date.

In February 2017, the FASB issued ASU 2017-05, *Other Income — Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets.* The update includes the following clarifications: (i) nonfinancial assets within the scope of Subtopic 610-20 may include nonfinancial assets transferred within a legal entity to a counterparty, (ii) an entity should allocate consideration to each distinct asset by applying the guidance in Topic 606 on allocating the transaction price to performance obligations and (iii) requires entities to derecognize a distinct nonfinancial asset or distinct in substance nonfinancial asset in a partial sale transaction when it (1) does not have (or ceases to have) a controlling financial interest in the legal entity that holds the asset in accordance with Subtopic 810-10 and (2) transfers control of the asset in accordance with Topic 606. This guidance is effective beginning after December 15, 2017, including interim periods within those periods and must be adopted at the same time as ASC 606. We will adopt this guidance on January 1, 2018 and are currently evaluating the impact of the adoption on our financial position, results of operations and cash flows.

**Note 3—Net Income Per Class A Share**

Basic net income per Class A share is determined by dividing net income attributable to PAGP by the weighted-average number of Class A shares outstanding during the period. Class B shares do not share in the earnings of the Partnership. Accordingly, basic and diluted net income per Class B share has not been presented.

Diluted net income per Class A share is determined by dividing net income attributable to PAGP by the diluted weighted-average number of Class A shares outstanding during the period. For purposes of calculating diluted net income per Class A share, both the net income attributable to PAGP and the diluted weighted-average number of Class A shares outstanding consider the impact of possible future exchanges of (i) AAP units and the associated Class B shares into our Class A shares and

(ii) certain Class B units of AAP (referred to herein as "AAP Management Units") into our Class A shares. In addition, the calculation of the diluted weighted-average number of Class A shares outstanding considers the effect of potentially dilutive awards under the Plains GP Holdings, L.P. Long-Term Incentive Plan (the "PAGP LTIP").

All AAP Management Units that have satisfied the applicable performance conditions are considered potentially dilutive. Exchanges of potentially dilutive AAP units and AAP Management Units are assumed to have occurred at the beginning of the period and the incremental income attributable to PAGP resulting from the assumed exchanges is representative of the incremental income that would have been attributable to PAGP if the assumed exchanges occurred on that date. See Note 9 for information regarding exchanges of AAP units and AAP Management Units. PAGP LTIP awards that are deemed to be dilutive are reduced by a hypothetical share repurchase based on the remaining unamortized fair value, as prescribed by the treasury stock method in guidance issued by the FASB.

For the three months ended March 31, 2017, the possible exchange of any AAP units and certain AAP Management Units would not have had a dilutive effect on basic net income per Class A share. For the three months ended March 31, 2016, the possible exchange of any AAP units and certain AAP Management Units would have had a dilutive effect on basic net income per Class A share. For the three months ended March 31, 2017 and 2016, our PAGP LTIP awards were dilutive; however, there were less than 0.1 million dilutive LTIP awards for each period, which did not change the presentation of weighted average Class A shares outstanding or net income per Class A share. The following table sets forth the computation of basic and diluted net income per Class A share (in millions, except per share data):

| | Three Months Ended March 31, 2017 | Three Months Ended March 31, 2016 |
|---|---|---|
| **Basic Net Income per Class A Share** | | |
| Net income attributable to PAGP | $ 41 | $ 36 |
| Basic weighted average Class A shares outstanding | 120 | 95 |
| Basic net income per Class A share | $ 0.34 | $ 0.39 |
| **Diluted Net Income per Class A Share** | | |
| Net income attributable to PAGP | $ 41 | $ 36 |
| Incremental net income attributable to PAGP resulting from assumed exchange of AAP units and AAP Management Units | — | 54 |
| Net income attributable to PAGP including incremental net income from assumed exchange of AAP units and AAP Management Units | $ 41 | $ 90 |
| Basic weighted average Class A shares outstanding | 120 | 95 |
| Dilutive shares resulting from assumed exchange of AAP units and AAP Management Units | — | 150 |
| Diluted weighted average Class A shares outstanding | 120 | 245 |
| Diluted net income per Class A share | $ 0.34 | $ 0.37 |

**Note 4—Accounts Receivable, Net**

Our accounts receivable are primarily from purchasers and shippers of crude oil and, to a lesser extent, purchasers of NGL and natural gas. To mitigate credit risk related to our accounts receivable, we utilize a rigorous credit review process. We closely monitor market conditions to make a determination with respect to the amount, if any, of open credit to be extended to any given customer and the form and amount of financial performance assurances we require. Such financial assurances are commonly provided to us in the form of advance cash payments, standby letters of credit or parental guarantees. As of March 31, 2017 and December 31, 2016, we had received $81 million and $89 million, respectively, of advance cash payments from third parties to mitigate credit risk. We also received $46 million and $66 million as of March 31, 2017 and December 31, 2016, respectively, of standby letters of credit to support obligations due from third parties, a portion of which applies to future business. Additionally, in an effort to mitigate credit risk, a significant portion of our transactions with counterparties are settled on a net-cash basis. Furthermore, we also enter into netting agreements (contractual agreements that allow us to offset receivables and payables with those counterparties against each other on our balance sheet) for a majority of such arrangements.

We review all outstanding accounts receivable balances on a monthly basis and record a reserve for amounts that we expect will not be fully recovered. We do not apply actual balances against the reserve until we have exhausted substantially all collection efforts. At March 31, 2017 and December 31, 2016, substantially all of our trade accounts receivable (net of allowance for doubtful accounts) were less than 30 days past their scheduled invoice date. Our allowance for doubtful accounts receivable totaled $3 million at both March 31, 2017 and December 31, 2016. Although we consider our allowance for doubtful accounts receivable to be adequate, actual amounts could vary significantly from estimated amounts.

**Note 5—Inventory, Linefill and Base Gas and Long-term Inventory**

Inventory, linefill and base gas and long-term inventory consisted of the following (barrels and natural gas volumes in thousands and carrying value in millions):

| | March 31, 2017 | | | | December 31, 2016 | | | |
|---|---|---|---|---|---|---|---|---|
| | Volumes | Unit of Measure | Carrying Value | Price/ Unit (1) | Volumes | Unit of Measure | Carrying Value | Price/ Unit (1) |
| **Inventory** | | | | | | | | |
| Crude oil | 21,710 | barrels | $ 1,071 | $ 49.33 | 23,589 | barrels | $ 1,049 | $ 44.47 |
| NGL | 5,396 | barrels | 120 | $ 22.24 | 13,497 | barrels | 242 | $ 17.93 |
| Natural gas | 3,630 | Mcf | 10 | $ 2.75 | 14,540 | Mcf | 32 | $ 2.20 |
| Other | N/A | | 18 | N/A | N/A | | 20 | N/A |
| Inventory subtotal | | | 1,219 | | | | 1,343 | |
| **Linefill and base gas** | | | | | | | | |
| Crude oil | 12,679 | barrels | 729 | $ 57.50 | 12,273 | barrels | 710 | $ 57.85 |
| NGL | 1,646 | barrels | 46 | $ 27.95 | 1,660 | barrels | 45 | $ 27.11 |
| Natural gas | 24,976 | Mcf | 108 | $ 4.32 | 30,812 | Mcf | 141 | $ 4.58 |
| Linefill and base gas subtotal | | | 883 | | | | 896 | |
| **Long-term inventory** | | | | | | | | |
| Crude oil | 2,345 | barrels | 101 | $ 43.07 | 3,279 | barrels | 163 | $ 49.71 |
| NGL | 1,418 | barrels | 30 | $ 21.16 | 1,418 | barrels | 30 | $ 21.16 |
| Long-term inventory subtotal | | | 131 | | | | 193 | |
| **Total** | | | $ 2,233 | | | | $ 2,432 | |

(1) Price per unit of measure is comprised of a weighted average associated with various grades, qualities and locations. Accordingly, these prices may not coincide with any published benchmarks for such products.

**Note 6—Acquisitions and Dispositions**

***Acquisitions***

The following acquisitions were accounted for using the acquisition method of accounting and the determination of the fair value of the assets and liabilities acquired has been estimated in accordance with the applicable accounting guidance.

*Alpha Crude Connector Acquisition*

On February 14, 2017, we acquired all of the issued and outstanding membership interests in Alpha Holding Company, LLC for cash consideration of approximately $1.217 billion, subject to working capital and other adjustments (the “ACC Acquisition”). The ACC Acquisition was initially funded through borrowings under PAA's senior unsecured revolving credit facility. Such borrowings were subsequently repaid with proceeds from PAA's March 2017 issuance of its common units to AAP pursuant to the Omnibus Agreement and in connection with our underwritten equity offering. See Note 9 for additional information.

Upon completion of the ACC Acquisition, we became the owner of a crude oil gathering system known as “Alpha Crude Connector” (the “ACC System”) located in the Northern Delaware Basin in Southeastern New Mexico and West Texas. The ACC System comprises 515 miles of gathering and transmission lines and five market interconnects, including to our Basin Pipeline at Wink. We intend to make additional interconnects to our existing Northern Delaware Basin systems as well as additional enhancements intended to increase the ACC System capacity to approximately 350,000 barrels per day, depending on the level of volume at each delivery point. The ACC System is supported by acreage dedications covering approximately 315,000 gross acres, and include a significant acreage dedication from one of the largest producers in the region. The ACC System complements our other Permian Basin assets and enhances the services available to the producers in the Northern Delaware Basin.

The determination of the acquisition-date fair value of the assets acquired and liabilities assumed is preliminary. We expect to finalize our fair value determination in 2017. The following table reflects the preliminary fair value determination (in millions):

| **Identifiable assets acquired and liabilities assumed:** | **Estimated Useful Lives (Years)** | **Recognized amount** |
|---|---|---|
| Property and equipment | 3 - 70 | $ 299 |
| Intangible assets | 20 | 641 |
| Goodwill | N/A | 278 |
| Other (including $4 million of cash acquired) | N/A | (1) |
| | | $ 1,217 |

Intangible assets are included in “Other long-term assets, net” on our Condensed Consolidated Balance Sheets. The preliminary determination of fair value to intangible assets above is comprised of five acreage dedication contracts and associated customer relationships that will be amortized over a remaining weighted average useful life of approximately 20 years. The value assigned to such intangible assets will be amortized to earnings using methods that closely resemble the pattern in which the economic benefits will be consumed. Amortization was approximately $1 million for the period ended March 31, 2017, and the future amortization is estimated as follows for the next five years (in millions):

| | |
|---|---|
| Remainder of 2017 | $ 9 |
| 2018 | $ 25 |
| 2019 | $ 34 |
| 2020 | $ 42 |
| 2021 | $ 48 |

Goodwill is an intangible asset representing the future economic benefits expected to be derived from other assets acquired that are not individually identified and separately recognized. The goodwill arising from the ACC Acquisition, which is tax deductible, represents the anticipated opportunities to generate future cash flows from undedicated acreage and the synergies created between the ACC System and our existing assets. The assets acquired in the ACC Acquisition, as well as the associated goodwill, are primarily included in our Transportation segment.

During the three months ended March 31, 2017, we incurred approximately $5 million of acquisition-related costs associated with the ACC Acquisition. Such costs are reflected as a component of general and administrative expenses in our Condensed Consolidated Statement of Operations.

Pro forma financial information assuming the ACC Acquisition had occurred as of the beginning of the calendar year prior to the year of acquisition, as well as the revenues and earnings generated during the period, were not material for disclosure purposes.

*Other Acquisitions*

In February 2017, we acquired a propane marine terminal for cash consideration of approximately $41 million. The assets acquired are included in our Facilities segment. We did not recognize any goodwill related to this acquisition.

***Investment Acquisition***

On April 3, 2017, we and an affiliate of Noble Midstream Partners LP ("Noble") completed the acquisition of Advantage Pipeline, L.L.C. ("Advantage") for a purchase price of $133 million through a newly formed 50/50 joint venture (the "Advantage Joint Venture"). For our 50% share ($66.5 million), we contributed approximately 1.3 million PAA common units and approximately $26 million in cash.

Advantage owns a 70-mile, 16-inch crude oil pipeline located in the southern Delaware Basin (the "Advantage Pipeline"). Noble will serve as operator and will construct a pipeline to deliver crude oil to the Advantage Pipeline from its central gathering facility in the southern Delaware Basin. We will construct a pipeline to connect our Wolfbone Ranch facility to the Advantage Pipeline near Highway 285 in Reeves County, Texas. The connections are estimated to be completed in 2017. The Advantage Pipeline is contractually supported by a third-party acreage dedication and a volume commitment from our wholly-owned marketing subsidiary.

***Dispositions and Divestitures***

During the three months ended March 31, 2017, we sold certain non-core assets for proceeds of approximately $161 million. These sales primarily included (i) a non-core pipeline segment located in the Midwestern United States and (ii) a 40% undivided interest in a segment of our Red River Pipeline extending from Cushing, Oklahoma to the Hewitt Station near Ardmore, Oklahoma (the "Hewitt Segment") for our net book value. We retained a 60% undivided interest in the Hewitt Segment and a 100% interest in the remaining portion of the Red River Pipeline that extends from Ardmore to Longview, Texas. We recognized a net gain of $36 million related to the sale of the non-core pipeline segment, including the write-off of a portion of the remaining book value, which is included in "Depreciation and amortization" on our Condensed Consolidated Statement of Operations.

*Assets Held for Sale*

As of March 31, 2017, we classified approximately $490 million of assets as held for sale on our Condensed Consolidated Balance Sheet (in "Other current assets") primarily related to definitive agreements to sell non-core assets, including certain of our West Coast terminal assets and our Bluewater natural gas storage facility located in Michigan. The assets held for sale are primarily property and equipment and are included in our Facilities segment. We expect these transactions to close in the second quarter or early in the third quarter of 2017, subject to customary closing conditions, including the receipt of regulatory approvals. During the three months ended March 31, 2017, we recognized an impairment loss of $31 million related to assets held for sale. This impairment loss is included in "Depreciation and amortization" on our Condensed Consolidated Statement of Operations.

**Note 7—Goodwill**

Goodwill by segment and changes in goodwill are reflected in the following table (in millions):

| | Transportation | Facilities | Supply and Logistics | Total |
|---|---|---|---|---|
| Balance at December 31, 2016 | $ 806 | $ 1,034 | $ 504 | $ 2,344 |
| Acquisitions [1] | 278 | — | — | 278 |
| Foreign currency translation adjustments | 2 | 1 | — | 3 |
| Dispositions and reclassifications to assets held for sale | — | (29) | — | (29) |
| Balance at March 31, 2017 | $ 1,086 | $ 1,006 | $ 504 | $ 2,596 |

(1) Goodwill is recorded at the acquisition date based on a preliminary fair value determination. This preliminary goodwill balance may be adjusted when the fair value determination is finalized.

**Note 8—Debt**

Debt consisted of the following (in millions):

| | March 31, 2017 | December 31, 2016 |
|---|---|---|
| **SHORT-TERM DEBT** | | |
| PAA commercial paper notes, bearing a weighted-average interest rate of 1.9% and 1.6%, respectively [(1)] | $ 958 | $ 563 |
| PAA senior secured hedged inventory facility, bearing a weighted-average interest rate of 2.0% and 1.8%, respectively [(1)] | 250 | 750 |
| PAA senior notes: | | |
| 6.13% senior notes due January 2017 | — | 400 |
| Other | 133 | 2 |
| Total short-term debt [(2)] | 1,341 | 1,715 |
| | | |
| **LONG-TERM DEBT** | | |
| PAA senior notes, net of unamortized discounts and debt issuance costs of $74 and $76, respectively | 9,876 | 9,874 |
| PAA commercial paper notes, bearing a weighted-average interest rate of 1.6% [(3)] | — | 247 |
| Other | 3 | 3 |
| Total long-term debt | 9,879 | 10,124 |
| Total debt [(4)] | $ 11,220 | $ 11,839 |

(1) We classified these PAA commercial paper notes and credit facility borrowings as short-term as of March 31, 2017 and December 31, 2016, as these notes and borrowings were primarily designated as working capital borrowings, were required to be repaid within one year and were primarily for hedged NGL and crude oil inventory and NYMEX and ICE margin deposits.

(2) As of March 31, 2017 and December 31, 2016, balance includes borrowings of $95 million and $410 million, respectively, for cash margin deposits with NYMEX and ICE, which are associated with financial derivatives used for hedging purposes.

(3) At December 31, 2016, we classified a portion of our commercial paper notes as long-term based on our ability and intent to refinance such amounts on a long-term basis.

(4) PAA's fixed-rate senior notes (including current maturities) had a face value of approximately $9.9 billion and $10.3 billion as of March 31, 2017 and December 31, 2016, respectively. We estimated the aggregate fair value of these notes as of March 31, 2017 and December 31, 2016 to be approximately $10.1 billion and $10.4 billion, respectively. PAA's fixed-rate senior notes are traded among institutions, and these trades are routinely published by a reporting service. Our determination of fair value is based on reported trading activity near the end of the reporting period. We estimate that the carrying value of outstanding borrowings under the credit facilities and the PAA commercial paper program approximates fair value as interest rates reflect current market rates. The fair value estimates for the PAA senior notes, the credit facilities and the PAA commercial paper program are based upon observable market data and are classified in Level 2 of the fair value hierarchy.

***Borrowings and Repayments***

Total borrowings under the credit facilities and the PAA commercial paper program for the three months ended March 31, 2017 and 2016 were approximately $18.8 billion and $10.8 billion, respectively. Total repayments under the credit facilities and the PAA commercial paper program were approximately $19.2 billion and $12.3 billion for the three months ended March 31, 2017 and 2016, respectively. The variance in total gross borrowings and repayments is impacted by various business and financial factors including, but not limited to, the timing, average term and method of general partnership borrowing activities.

***Letters of Credit***

In connection with our supply and logistics activities, we provide certain suppliers with irrevocable standby letters of credit to secure our obligation for the purchase of crude oil, NGL and natural gas. Additionally, we issue letters of credit to support insurance programs, derivative transactions and construction activities. At March 31, 2017 and December 31, 2016, we had outstanding letters of credit of $77 million and $73 million, respectively.

***Senior Notes Repayments***

PAA's $400 million, 6.13% senior notes were repaid in January 2017. We utilized cash on hand and available capacity under PAA's commercial paper program and credit facilities to repay these notes.

**Note 9—Partners' Capital and Distributions**

***Shares Outstanding***

The following tables present the activity for our Class A shares, Class B shares and Class C shares:

| | Class A Shares | Class B Shares | Class C Shares |
|---|---|---|---|
| Outstanding at December 31, 2016 | 101,206,526 | 138,043,486 | 491,910,863 |
| Conversion of AAP Management Units [1] | — | 276,405 | — |
| Exchange Right exercises [1] | 479,298 | (479,298) | — |
| Redemption Right exercises [1] | — | (3,454,374) | 3,454,374 |
| Sales of Class A shares | 50,086,326 | — | — |
| Sales of common units by a subsidiary | — | — | 4,033,567 |
| Issuance of Series A preferred units by a subsidiary | — | — | 1,287,773 |
| Other | 7,810 | — | 82,872 |
| Outstanding at March 31, 2017 | 151,779,960 | 134,386,219 | 500,769,449 |

| | Class A Shares | Class B Shares |
|---|---|---|
| Outstanding at December 31, 2015 | 86,099,037 | 141,485,588 |
| Conversion of AAP Management Units [1] | — | 6,742,383 |
| Exchange Right exercises [1] | 14,065,812 | (14,065,812) |
| Issuance of Class A shares under LTIP | 7,811 | — |
| Outstanding at March 31, 2016 | 100,172,660 | 134,162,159 |

(1) See Note 11 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for additional discussion regarding conversions of AAP Management Units, Exchange Rights and Redemption Rights.

***Distributions***

The following table details the distributions paid to our Class A shareholders during or pertaining to the first three months of 2017 (in millions, except per share data):

| Distribution Payment Date | Distributions to Class A Shareholders | Distributions per Class A Share |
|---|---|---|
| May 15, 2017 [1] | $ 84 | $ 0.55 |
| February 14, 2017 | $ 57 | $ 0.55 |

(1) Payable to shareholders of record at the close of business on May 1, 2017 for the period January 1, 2017 through March 31, 2017.

***Sales of Class A Shares***

The following table summarizes our sales of Class A shares during the three months ended March 31, 2017 (net proceeds in millions):

| Type of Offering | Class A Shares Issued | Net Proceeds [1] |
|---|---|---|
| Continuous Offering Program | 1,786,326 | $ 61 [2] |
| Underwritten Offering | 48,300,000 | 1,474 |
| | **50,086,326** | **$ 1,535** |

[1] Amounts are net of costs associated with the offerings.

[2] We pay commissions to our sales agents in connection with issuances of Class A shares under our Continuous Offering Program. We paid $1 million of such commissions during the three months ended March 31, 2017.

Pursuant to the Omnibus Agreement entered into by the Plains Entities in connection with the Simplification Transactions, we used the net proceeds from the sale of our Class A shares, after deducting the sales agents' commissions and offering expenses, to purchase from AAP a number of AAP units equal to the number of Class A shares sold in such offering at a price equal to the net proceeds from such offering. Also pursuant to the Omnibus Agreement, immediately following such purchase and sale, AAP used the net proceeds it received from such sale of AAP units to us to purchase from PAA an equivalent number of common units of PAA. See "—Subsidiary Sales of Common Units" below.

The cash purchase by PAGP of additional units issued by AAP and corresponding cash purchase by AAP of additional common units issued by PAA results in the allocation of the fair value of the proceeds between controlling and noncontrolling interests in AAP and PAA based on their respective ownership percentages. Additionally, in accordance with ASC 810, an adjustment in partners' capital based on historical carrying value is recognized by PAGP's Class A shareholders on their increase in ownership of subsidiary entities and a corresponding adjustment is recognized in partners' capital by PAGP's noncontrolling interests due to the dilution of their ownership interest. The allocation to noncontrolling interests results from the difference between the fair value per unit of the additional units issued and the historical carrying value per unit. Such amounts are reflected in "Sales of Class A shares" on our Condensed Consolidated Statements of Changes in Partners' Capital.

***Consolidated Subsidiaries***

**Noncontrolling Interests in Subsidiaries**

As of March 31, 2017, noncontrolling interests in our subsidiaries consisted of (i) a 63% limited partner interest in PAA, (ii) an approximate 47% limited partner interest in AAP and (iii) a 25% interest in SLC Pipeline LLC.

**Subsidiary Sales of Common Units**

*Continuous Offering Program.* During the three months ended March 31, 2017, PAA issued an aggregate of approximately 4.0 million common units under its continuous offering program, generating proceeds of $129 million, net of $1 million of commissions paid to its sales agents.

The proceeds from the issuance of PAA common units were allocated among all of PAA's common unitholders, including AAP, based on their percentage ownership of common units. Additionally, PAA's capital attributable to AAP was adjusted based on historical carrying value, in accordance with ASC 810, to reflect the dilution of its interest in PAA as a result of the issuance of additional common units to the public unitholders. These adjustments were recognized by PAGP in proportion to PAGP's ownership interest in AAP, which resulted in a net increase in partners' capital attributable to PAGP resulting from the difference between the fair value per unit of the additional units issued and the historical carrying value per unit. Such amounts are reflected in "Sales of common units by a subsidiary" on our Condensed Consolidated Statements of Changes in Partners' Capital.

*Omnibus Agreement.* During the three months ended March 31, 2017, pursuant to the Omnibus Agreement discussed above, PAA sold (i) approximately 1.8 million common units to AAP in connection with our issuance of Class A shares under our Continuous Offering Program and (ii) 48.3 million common units to AAP in connection with our underwritten offering.

### Subsidiary Distributions

*PAA Cash Distributions.* The following table details the distributions to PAA's partners paid in cash during or pertaining to the first three months of 2017 (in millions, except per unit data):

| | Distributions | | | |
|---|---|---|---|---|
| | Common Unitholders | | | |
| Distribution Payment Date | Public | AAP | Total Cash Distribution | Cash Distribution per Common Unit |
| May 15, 2017 [(1)] | $ 240 | $ 159 | $ 399 | $ 0.55 |
| February 14, 2017 | $ 237 | $ 134 | $ 371 | $ 0.55 |

(1) Payable to unitholders of record at the close of business on May 1, 2017 for the period January 1, 2017 through March 31, 2017.

*PAA In-Kind Distributions*. On February 14, 2017, PAA issued 1,287,773 Series A preferred units in lieu of a cash distribution of $34 million on PAA's Series A preferred units outstanding as of the record date for such distribution. On May 15, 2017, PAA will issue 1,313,527 Series A preferred units in lieu of a cash distribution of $34 million on PAA's Series A preferred units outstanding as of the record date for such distribution.

*AAP Distributions.* The following table details the distributions paid to AAP's partners during or pertaining to the first three months of 2017 from distributions received from PAA (in millions):

| | Distribution to AAP's Partners | | |
|---|---|---|---|
| Distribution Payment Date | Noncontrolling Interests | PAGP | Total Cash Distributions |
| May 15, 2017 [(1)] | $ 75 | $ 84 | $ 159 |
| February 14, 2017 | $ 77 | $ 57 | $ 134 |

(1) Payable to unitholders of record at the close of business on May 1, 2017 for the period January 1, 2017 through March 31, 2017.

*Other Distributions.* During the three months ended March 31, 2017, distributions of $1 million were paid to noncontrolling interests in SLC Pipeline LLC.

***Deferred Tax Asset Impact from the Sale of Subsidiary Units***

In connection with the sales of AAP units and PAA common units referenced above, a deferred asset was created. The tax basis of PAGP's purchase of the additional units was accounted for at fair market value for U.S. federal income tax purposes, but the GAAP basis was impacted by the adjustments that are based on historical carrying value. The resulting basis difference resulted in a deferred tax asset that was recorded as a component of partner's capital as it results from transactions with shareholders.

### Note 10—Derivatives and Risk Management Activities

We identify the risks that underlie our core business activities and use risk management strategies to mitigate those risks when we determine that there is value in doing so. Our policy is to use derivative instruments for risk management purposes and not for the purpose of speculating on hydrocarbon commodity (referred to herein as "commodity") price changes. We use various derivative instruments to manage our exposure to (i) commodity price risk, as well as to optimize our profits, (ii) interest rate risk and (iii) currency exchange rate risk. Our commodity price risk management policies and procedures are designed to help ensure that our hedging activities address our risks by monitoring our derivative positions, as well as physical volumes, grades, locations, delivery schedules and storage capacity. Our interest rate and currency exchange rate risk management policies and procedures are designed to monitor our derivative positions and ensure that those positions are consistent with our objectives and approved strategies. When we apply hedge accounting, our policy is to formally document all relationships between hedging instruments and hedged items, as well as our risk management objectives for undertaking the hedge. This process includes specific identification of the hedging instrument and the hedged transaction, the nature of the risk being hedged and how the hedging instrument's effectiveness will be assessed. Both at the inception of the hedge and throughout the hedging relationship, we assess whether the derivatives employed are highly effective in offsetting changes in cash flows of anticipated hedged transactions.

***Commodity Price Risk Hedging***

Our core business activities involve certain commodity price-related risks that we manage in various ways, including through the use of derivative instruments. Our policy is to (i) only purchase inventory for which we have a market, (ii) structure our sales contracts so that price fluctuations do not materially affect our operating income and (iii) not acquire and hold physical inventory or derivatives for the purpose of speculating on commodity price changes. The material commodity-related risks inherent in our business activities can be divided into the following general categories:

*Commodity Purchases and Sales* — In the normal course of our operations, we purchase and sell commodities. We use derivatives to manage the associated risks and to optimize profits. As of March 31, 2017, net derivative positions related to these activities included:

- A net long position of 2.6 million barrels associated with our crude oil purchases, which was unwound ratably during April 2017 to match monthly average pricing.
- A net short time spread position of 4.6 million barrels, which hedges a portion of our anticipated crude oil lease gathering purchases through July 2018.
- A crude oil grade basis position of 42.1 million barrels through December 2019. These derivatives allow us to lock in grade basis differentials.
- A net short position of 3.5 Bcf through April 2017 related to anticipated sales of natural gas inventory.
- A net short position of 24.0 million barrels through December 2019 related to anticipated net sales of our crude oil and NGL inventory.

*Pipeline Loss Allowance Oil* — As is common in the pipeline transportation industry, our tariffs incorporate a loss allowance factor that is intended to, among other things, offset losses due to evaporation, measurement and other losses in transit. We utilize derivative instruments to hedge a portion of the anticipated sales of the loss allowance oil that is to be collected under our tariffs. As of March 31, 2017, our PLA hedges included a long call option position of 0.8 million barrels through December 2018.

*Natural Gas Processing/NGL Fractionation* — We purchase natural gas for processing and operational needs. Additionally, we purchase NGL mix for fractionation and sell the resulting individual specification products (including ethane, propane, butane and condensate). In conjunction with these activities, we hedge the price risk associated with the purchase of the natural gas and the subsequent sale of the individual specification products. As of March 31, 2017, we had a long natural gas position of 56.7 Bcf which hedges our natural gas processing and operational needs through December 2018. We also had a short propane position of 10.1 million barrels through December 2018, a short butane position of 3.1 million barrels through December 2018 and a short WTI position of 1.0 million barrels through December 2018. In addition, we had a long power position of 0.4 million megawatt hours, which hedges a portion of our power supply requirements at our Canadian natural gas processing and fractionation plants through December 2018.

Physical commodity contracts that meet the definition of a derivative but are ineligible, or not designated, for the normal purchases and normal sales scope exception are recorded on the balance sheet at fair value, with changes in fair value recognized in earnings. We have determined that substantially all of our physical commodity contracts qualify for the normal purchases and normal sales scope exception.

***Interest Rate Risk Hedging***

We use interest rate derivatives to hedge the benchmark interest rate risk associated with interest payments occurring as a result of debt issuances. The derivative instruments we use to manage this risk consist of forward starting interest rate swaps and treasury locks. These derivatives are designated as cash flow hedges. As such, changes in fair value are deferred in AOCI and are reclassified to interest expense as we incur the interest payments associated with the underlying debt.

The following table summarizes the terms of our outstanding interest derivatives as of March 31, 2017 (notional amounts in millions):

| Hedged Transaction | Number and Types of Derivatives Employed | Notional Amount | Expected Termination Date | Average Rate Locked | Accounting Treatment |
|---|---|---|---|---|---|
| Anticipated interest payments | 8 forward starting swaps (30-year) | $ 200 | 6/15/2017 | 3.14% | Cash flow hedge |
| Anticipated interest payments | 8 forward starting swaps (30-year) | $ 200 | 6/15/2018 | 3.20% | Cash flow hedge |
| Anticipated interest payments | 8 forward starting swaps (30-year) | $ 200 | 6/14/2019 | 2.83% | Cash flow hedge |

***Currency Exchange Rate Risk Hedging***

Because a significant portion of our Canadian business is conducted in CAD and, at times, a portion of our debt is denominated in CAD, we use foreign currency derivatives to minimize the risk of unfavorable changes in exchange rates. These instruments include foreign currency exchange contracts and forwards.

As of March 31, 2017, our outstanding foreign currency derivatives include derivatives we use to hedge currency exchange risk (i) associated with USD-denominated commodity purchases and sales in Canada and (ii) created by the use of USD-denominated commodity derivatives to hedge commodity price risk associated with CAD-denominated commodity purchases and sales.

The following table summarizes our open forward exchange contracts as of March 31, 2017 (in millions):

| | | USD | CAD | Average Exchange Rate USD to CAD |
|---|---|---|---|---|
| **Forward exchange contracts that exchange CAD for USD:** | | | | |
| | 2017 | $ 175 | $ 234 | $1.00 - $1.34 |
| | | | | |
| **Forward exchange contracts that exchange USD for CAD:** | | | | |
| | 2017 | $ 428 | $ 569 | $1.00 - $1.33 |

***Preferred Distribution Rate Reset Option***

A derivative feature embedded in a contract that does not meet the definition of a derivative in its entirety must be bifurcated and accounted for separately if the economic characteristics and risks of the embedded derivative are not clearly and closely related to those of the host contract. The Preferred Distribution Rate Reset Option of the PAA Series A preferred units is an embedded derivative that must be bifurcated from the related host contract, the PAA partnership agreement, and recorded at fair value on our Condensed Consolidated Balance Sheets. Corresponding changes in fair value are recognized in “Other income/(expense), net” in our Condensed Consolidated Statement of Operations. At March 31, 2017, the fair value of this embedded derivative was a liability of approximately $36 million. We recognized a loss of approximately $4 million during the three months ended March 31, 2017. See Note 11 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for additional information regarding the Preferred Distribution Rate Reset Option.

***Summary of Financial Impact***

We record all open derivatives on the balance sheet as either assets or liabilities measured at fair value. Changes in the fair value of derivatives are recognized currently in earnings unless specific hedge accounting criteria are met. For derivatives that qualify as cash flow hedges, changes in fair value of the effective portion of the hedges are deferred in AOCI and recognized in earnings in the periods during which the underlying physical transactions are recognized in earnings. Derivatives that do not qualify for hedge accounting and the portion of cash flow hedges that are not highly effective in offsetting changes in cash flows of the hedged items are recognized in earnings each period. Cash settlements associated with our derivative activities are classified within the same category as the related hedged item in our Condensed Consolidated Statements of Cash Flows.

A summary of the impact of our derivative activities recognized in earnings is as follows (in millions):

| | Three Months Ended March 31, 2017 | | | Three Months Ended March 31, 2016 | | |
|---|---|---|---|---|---|---|
| **Location of Gain/(Loss)** | **Derivatives in Hedging Relationships** | **Derivatives Not Designated as a Hedge** | **Total** | **Derivatives in Hedging Relationships** | **Derivatives Not Designated as a Hedge** | **Total** |
| **Commodity Derivatives** | | | | | | |
| Supply and Logistics segment revenues | $ — | $ 96 | $ 96 | $ 1 | $ 31 | $ 32 |
| Transportation segment revenues | — | — | — | — | 2 | 2 |
| Field operating costs | — | (3) | (3) | — | (2) | (2) |
| **Interest Rate Derivatives** | | | | | | |
| Interest expense, net | (2) | — | (2) | (2) | — | (2) |
| **Foreign Currency Derivatives** | | | | | | |
| Supply and Logistics segment revenues | — | 2 | 2 | — | 6 | 6 |
| **Preferred Distribution Rate Reset Option** | | | | | | |
| Other income/(expense), net | — | (4) | (4) | — | — | — |
| **Total Gain/(Loss) on Derivatives Recognized in Net Income** | $ (2) | $ 91 | $ 89 | $ (1) | $ 37 | $ 36 |

The following table summarizes the derivative assets and liabilities on our Condensed Consolidated Balance Sheet on a gross basis as of March 31, 2017 (in millions):

| | Asset Derivatives | | Liability Derivatives | |
|---|---|---|---|---|
| | Balance Sheet Location | Fair Value | Balance Sheet Location | Fair Value |
| **Derivatives designated as hedging instruments:** | | | | |
| Commodity derivatives | | $ — | Other current assets | $ — |
| Interest rate derivatives | | — | Other current liabilities | (20) |
| | | | Other long-term liabilities and deferred credits | (23) |
| Total derivatives designated as hedging instruments | | $ — | | $ (43) |
| **Derivatives not designated as hedging instruments:** | | | | |
| Commodity derivatives | Other current assets | $ 79 | Other current assets | $ (81) |
| | Other long-term assets, net | 13 | Other long-term assets, net | (8) |
| | Other current liabilities | 2 | Other current liabilities | (7) |
| | | | Other long-term liabilities and deferred credits | (4) |
| Foreign currency derivatives | Other current assets | 1 | Other current liabilities | (4) |
| | Other current liabilities | 1 | | |
| Preferred Distribution Rate Reset Option | | — | Other long-term liabilities and deferred credits | (36) |
| Total derivatives not designated as hedging instruments | | $ 96 | | $ (140) |
| Total derivatives | | $ 96 | | $ (183) |

The following table summarizes the derivative assets and liabilities on our Condensed Consolidated Balance Sheet on a gross basis as of December 31, 2016 (in millions):

| | Asset Derivatives | | Liability Derivatives | |
|---|---|---|---|---|
| | Balance Sheet Location | Fair Value | Balance Sheet Location | Fair Value |
| **Derivatives designated as hedging instruments:** | | | | |
| Commodity derivatives | | $ — | Other current assets | $ — |
| Interest rate derivatives | | — | Other current liabilities | (23) |
| | | | Other long-term liabilities and deferred credits | (27) |
| Total derivatives designated as hedging instruments | | $ — | | $ (50) |
| **Derivatives not designated as hedging instruments:** | | | | |
| Commodity derivatives | Other current assets | $ 101 | Other current assets | $ (344) |
| | Other long-term assets, net | 2 | Other long-term assets, net | (1) |
| | Other long-term liabilities and deferred credits | 2 | Other current liabilities | (14) |
| | | | Other long-term liabilities and deferred credits | (34) |
| Foreign currency derivatives | Other current liabilities | 3 | Other current liabilities | (6) |
| Preferred Distribution Rate Reset Option | | — | Other long-term liabilities and deferred credits | (32) |
| Total derivatives not designated as hedging instruments | | $ 108 | | $ (431) |
| Total derivatives | | $ 108 | | $ (481) |

Our derivative transactions are governed through ISDA (International Swaps and Derivatives Association) master agreements and clearing brokerage agreements. These agreements include stipulations regarding the right of set off in the event that we or our counterparty default on performance obligations. If a default were to occur, both parties have the right to net amounts payable and receivable into a single net settlement between parties.

Our accounting policy is to offset derivative assets and liabilities executed with the same counterparty when a master netting arrangement exists. Accordingly, we also offset derivative assets and liabilities with amounts associated with cash margin. Our exchange-traded derivatives are transacted through clearing brokerage accounts and are subject to margin requirements as established by the respective exchange. On a daily basis, our account equity (consisting of the sum of our cash balance and the fair value of our open derivatives) is compared to our initial margin requirement resulting in the payment or return of variation margin. The following table provides the components of our net broker receivable/(payable):

| | March 31, 2017 | December 31, 2016 |
|---|---|---|
| Initial margin | $ 92 | $ 119 |
| Variation margin posted/(returned) | 3 | 291 |
| Net broker receivable/(payable) | $ 95 | $ 410 |

The following table presents information about derivative financial assets and liabilities that are subject to offsetting, including enforceable master netting arrangements (in millions):

| | March 31, 2017 | | December 31, 2016 | |
|---|---|---|---|---|
| | Derivative Asset Positions | Derivative Liability Positions | Derivative Asset Positions | Derivative Liability Positions |
| **Netting Adjustments:** | | | | |
| Gross position - asset/(liability) | $ 96 | $ (183) | $ 108 | $ (481) |
| Netting adjustment | (92) | 92 | (350) | 350 |
| Cash collateral paid/(received) | 95 | — | 410 | — |
| Net position - asset/(liability) | $ 99 | $ (91) | $ 168 | $ (131) |
| | | | | |
| **Balance Sheet Location After Netting Adjustments:** | | | | |
| Other current assets | $ 94 | $ — | $ 167 | $ — |
| Other long-term assets, net | 5 | — | 1 | — |
| Other current liabilities | — | (28) | — | (40) |
| Other long-term liabilities and deferred credits | — | (63) | — | (91) |
| | $ 99 | $ (91) | $ 168 | $ (131) |

As of March 31, 2017, there was a net loss of $219 million deferred in AOCI. The deferred net loss recorded in AOCI is expected to be reclassified to future earnings contemporaneously with (i) the earnings recognition of the underlying hedged commodity transaction or (ii) interest expense accruals associated with underlying debt instruments. Of the total net loss deferred in AOCI at March 31, 2017, we expect to reclassify a net loss of $8 million to earnings in the next twelve months. The remaining deferred loss of $211 million is expected to be reclassified to earnings through 2049. A portion of these amounts is based on market prices as of March 31, 2017; thus, actual amounts to be reclassified will differ and could vary materially as a result of changes in market conditions.

The following table summarizes the net deferred gain/(loss) recognized in AOCI for derivatives (in millions):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2017 | 2016 |
| Interest rate derivatives, net | $ 7 | $ (90) |

At March 31, 2017 and December 31, 2016, none of our outstanding derivatives contained credit-risk related contingent features that would result in a material adverse impact to us upon any change in our credit ratings. Although we may be required to post margin on our cleared derivatives as described above, we do not require our non-cleared derivative counterparties to post collateral with us.

***Recurring Fair Value Measurements***

**Derivative Financial Assets and Liabilities**

The following table sets forth by level within the fair value hierarchy our financial assets and liabilities that were accounted for at fair value on a recurring basis (in millions):

| | Fair Value as of March 31, 2017 | | | | Fair Value as of December 31, 2016 | | | |
|---|---|---|---|---|---|---|---|---|
| **Recurring Fair Value Measures** [(1)] | Level 1 | Level 2 | Level 3 | Total | Level 1 | Level 2 | Level 3 | Total |
| Commodity derivatives | $ (6) | $ — | $ — | $ (6) | $ (113) | $ (171) | $ (4) | $ (288) |
| Interest rate derivatives | — | (43) | — | (43) | — | (50) | — | (50) |
| Foreign currency derivatives | — | (2) | — | (2) | — | (3) | — | (3) |
| Preferred Distribution Rate Reset Option | — | — | (36) | (36) | — | — | (32) | (32) |
| Total net derivative asset/(liability) | $ (6) | $ (45) | $ (36) | $ (87) | $ (113) | $ (224) | $ (36) | $ (373) |

(1) Derivative assets and liabilities are presented above on a net basis but do not include related cash margin deposits.

***Level 1***

Level 1 of the fair value hierarchy includes exchange-traded commodity derivatives such as futures and options. The fair value of exchange-traded commodity derivatives is based on unadjusted quoted prices in active markets.

***Level 2***

Level 2 of the fair value hierarchy includes exchange-cleared commodity derivatives and over-the-counter commodity, interest rate and foreign currency derivatives that are traded in active markets. In addition, it includes certain physical commodity contracts. The fair value of these derivatives is based on broker price quotations which are corroborated with market observable inputs.

***Level 3***

Level 3 of the fair value hierarchy includes certain physical commodity contracts and the Preferred Distribution Rate Reset Option contained in PAA's partnership agreement which is classified as an embedded derivative.

The fair value of our Level 3 physical commodity contracts is based on a valuation model utilizing broker-quoted forward commodity prices, and timing estimates, which involve management judgment. The significant unobservable inputs used in the fair value measurement of our Level 3 derivatives are forward prices obtained from brokers. A significant increase or decrease in these forward prices could result in a material change in fair value to our physical commodity contracts. We report unrealized gains and losses associated with these physical commodity contracts in our Condensed Consolidated Statements of Operations as Supply and Logistics segment revenues.

The fair value of the embedded derivative feature contained in PAA's partnership agreement is based on a valuation model that estimates the fair value of the PAA Series A preferred units with and without the Preferred Distribution Rate Reset Option. This model contains inputs, including PAA's common unit price, ten-year U.S. treasury rates, default probabilities and timing estimates which involve management judgment. A significant increase or decrease in the value of these inputs could result in a material change in fair value to this embedded derivative feature. We report unrealized gains and losses associated with this embedded derivative in our Condensed Consolidated Statements of Operations as "Other income/(expense), net."

To the extent any transfers between levels of the fair value hierarchy occur, our policy is to reflect these transfers as of the beginning of the reporting period in which they occur.

***Rollforward of Level 3 Net Asset/(Liability)***

The following table provides a reconciliation of changes in fair value of the beginning and ending balances for our derivatives classified as Level 3 (in millions):

| | Three Months Ended March 31, 2017 | Three Months Ended March 31, 2016 |
|---|---|---|
| Beginning Balance | $ (36) | $ 11 |
| Net losses for the period included in earnings | (3) | (1) |
| Settlements | 3 | (9) |
| Derivatives entered into during the period | — | (60) |
| Ending Balance | $ (36) | $ (59) |
| | | |
| Change in unrealized gains/(losses) included in earnings relating to Level 3 derivatives still held at the end of the period | $ (2) | $ (1) |

**Note 11—Related Party Transactions**

See Note 15 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for a complete discussion of our related party transactions.

***Transactions with Oxy***

As of March 31, 2017, Oxy had a representative on the board of directors of our general partner and owned approximately 10% of the limited partner interests in AAP. During the three months ended March 31, 2017 and 2016, we recognized sales and transportation revenues and purchased petroleum products from Oxy. These transactions were conducted at posted tariff rates or prices that we believe approximate market. Included in these transactions was a crude oil buy/sell agreement that includes a multi-year minimum volume commitment. The impact to our Condensed Consolidated Statements of Operations from those transactions is included below (in millions):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2017 | 2016 |
| Revenues | $ 234 | $ 112 |
| Purchases and related costs [1] | $ (40) | $ (46) |

[1] Purchases and related costs include crude oil buy/sell transactions that are accounted for as inventory exchanges and are presented net in our Condensed Consolidated Statements of Operations.

We currently have a netting arrangement with Oxy. Our gross receivable and payable amounts with Oxy were as follows (in millions):

| | March 31, 2017 | December 31, 2016 |
|---|---|---|
| Trade accounts receivable and other receivables | $ 872 | $ 789 |
| Accounts payable | $ 818 | $ 836 |

**Note 12—Commitments and Contingencies**

***Loss Contingencies — General***

To the extent we are able to assess the likelihood of a negative outcome for a contingency, our assessments of such likelihood range from remote to probable. If we determine that a negative outcome is probable and the amount of loss is reasonably estimable, we accrue an undiscounted liability equal to the estimated amount. If a range of probable loss amounts can be reasonably estimated and no amount within the range is a better estimate than any other amount, then we accrue an undiscounted liability equal to the minimum amount in the range. In addition, we estimate legal fees that we expect to incur associated with loss contingencies and accrue those costs when they are material and probable of being incurred.

We do not record a contingent liability when the likelihood of loss is probable but the amount cannot be reasonably estimated or when the likelihood of loss is believed to be only reasonably possible or remote. For contingencies where an unfavorable outcome is reasonably possible and the impact would be material to our consolidated financial statements, we disclose the nature of the contingency and, where feasible, an estimate of the possible loss or range of loss.

***Legal Proceedings — General***

In the ordinary course of business, we are involved in various legal proceedings, including those arising from regulatory and environmental matters. Although we are insured against various risks to the extent we believe it is prudent, there is no assurance that the nature and amount of such insurance will be adequate, in every case, to fully protect us from losses arising from current or future legal proceedings.

Taking into account what we believe to be all relevant known facts and circumstances, and based on what we believe to be reasonable assumptions regarding the application of those facts and circumstances to existing laws and regulations, we do not believe that the outcome of the legal proceedings in which we are currently involved (including those described below) will, individually or in the aggregate, have a material adverse effect on our consolidated financial condition, results of operations or cash flows.

***Environmental — General***

Although over the course of the last several years we have made significant investments in our maintenance and integrity programs, and have hired additional personnel in those areas, we have experienced (and likely will experience future) releases of hydrocarbon products into the environment from our pipeline, rail, storage and other facility operations. These releases can result from accidents or from unpredictable man-made or natural forces and may reach surface water bodies, groundwater aquifers or other sensitive environments. Damages and liabilities associated with any such releases from our existing or future assets could be significant and could have a material adverse effect on our consolidated financial condition, results of operations or cash flows.

We record environmental liabilities when environmental assessments and/or remedial efforts are probable and the amounts can be reasonably estimated. Generally, our recording of these accruals coincides with our completion of a feasibility study or our commitment to a formal plan of action. We do not discount our environmental remediation liabilities to present value. We also record environmental liabilities assumed in business combinations based on the estimated fair value of the environmental obligations caused by past operations of the acquired company. We record receivables for amounts recoverable from insurance or from third parties under indemnification agreements in the period that we determine the costs are probable of recovery.

Environmental expenditures that pertain to current operations or to future revenues are expensed or capitalized consistent with our capitalization policy for property and equipment. Expenditures that result from the remediation of an existing condition caused by past operations and that do not contribute to current or future profitability are expensed.

At March 31, 2017, our estimated undiscounted reserve for environmental liabilities (including liabilities related to the Line 901 incident, as discussed further below) totaled $139 million, of which $59 million was classified as short-term and $80 million was classified as long-term. At December 31, 2016, our estimated undiscounted reserve for environmental liabilities (including liabilities related to the Line 901 incident) totaled $147 million, of which $61 million was classified as short-term and $86 million was classified as long-term. The short- and long-term environmental liabilities referenced above are reflected in “Accounts payable and accrued liabilities” and “Other long-term liabilities and deferred credits,” respectively, on our Condensed Consolidated Balance Sheets. At March 31, 2017, we had recorded receivables totaling $47 million for amounts probable of recovery under insurance and from third parties under indemnification agreements, of which $34 million was reflected in “Trade accounts receivable and other receivables, net” and $13 million was reflected in “Other long-term assets, net” on our Condensed Consolidated Balance Sheet. At December 31, 2016, we had recorded $56 million of such receivables, of which $39 million was reflected in “Trade accounts receivable and other receivables, net” and $17 million was reflected in “Other long-term assets, net” on our Condensed Consolidated Balance Sheet.

In some cases, the actual cash expenditures associated with these liabilities may not occur for three years or longer. Our estimates used in determining these reserves are based on information currently available to us and our assessment of the ultimate outcome. Among the many uncertainties that impact our estimates are the necessary regulatory approvals for, and potential modification of, our remediation plans, the limited amount of data available upon initial assessment of the impact of soil or water contamination, changes in costs associated with environmental remediation services and equipment and the possibility of existing or future legal claims giving rise to additional liabilities. Therefore, although we believe that the reserve is adequate, actual costs incurred (which may ultimately include costs for contingencies that are currently not reasonably estimable or costs for contingencies where the likelihood of loss is currently believed to be only reasonably possible or remote) may be in excess of the reserve and may potentially have a material adverse effect on our consolidated financial condition, results of operations or cash flows.

***Specific Legal, Environmental or Regulatory Matters***

*Line 901 Incident*. In May 2015, we experienced a crude oil release from our Las Flores to Gaviota Pipeline (Line 901) in Santa Barbara County, California. A portion of the released crude oil reached the Pacific Ocean at Refugio State Beach through a drainage culvert. Following the release, we shut down the pipeline and initiated our emergency response plan. A Unified Command, which includes the United States Coast Guard, the EPA, the California Office of Spill Prevention and Response and the Santa Barbara Office of Emergency Management, was established for the response effort. Clean-up and remediation operations with respect to impacted shoreline and other areas has been determined by the Unified Command to be complete, and the Unified Command has been dissolved. Our estimate of the amount of oil spilled, based on relevant facts, data and information, is approximately 2,934 barrels; of this amount, we estimate that 598 barrels reached the Pacific Ocean.

As a result of the Line 901 incident, several governmental agencies and regulators initiated investigations into the Line 901 incident, various claims have been made against us and a number of lawsuits have been filed against us. We may be subject to additional claims, investigations and lawsuits, which could materially impact the liabilities and costs we currently expect to incur as a result of the Line 901 incident. Set forth below is a brief summary of actions and matters that are currently pending:

On May 21, 2015, we received a corrective action order from the United States Department of Transportation's Pipeline and Hazardous Materials Safety Administration ("PHMSA"), the governmental agency with jurisdiction over the operation of Line 901 as well as over a second stretch of pipeline extending from Gaviota Pump Station in Santa Barbara County to Emidio Pump Station in Kern County, California (Line 903), requiring us to shut down, purge, review, remediate and test Line 901. The corrective action order was subsequently amended on June 3, 2015; November 13, 2015; and June 16, 2016 to require us to take additional corrective actions with respect to both Lines 901 and 903 (as amended, the "CAO"). Among other requirements, the CAO also obligates us to conduct a root cause failure analysis with respect to Line 901 and present remedial work plans and restart plans to PHMSA prior to returning Line 901 and 903 to service; the CAO also imposes a pressure restriction on the section of Line 903 between Pentland Pump Station and Emidio Pump Station and requires us to take other specified actions with respect to both Lines 901 and 903. We intend to continue to comply with the CAO and to cooperate with any other governmental investigations relating to or arising out of the release. Excavation and removal of the affected section of the pipeline was completed on May 28, 2015. Line 901 and Line 903 have been purged and are not currently operational. No timeline has been established for the restart of Line 901 or Line 903. On February 17, 2016, PHMSA issued a Preliminary Factual Report of the Line 901 failure, which contains PHMSA's preliminary findings regarding factual information about the events leading up to the accident and the technical analysis that has been conducted to date. On May 19, 2016, PHMSA issued its final Failure Investigation Report regarding the Line 901 incident. PHMSA's findings indicate that the direct cause of the Line 901 incident was external corrosion that thinned the pipe wall to a level where it ruptured suddenly and released crude oil. PHMSA also concluded that there were numerous contributory causes of the Line 901 incident, including ineffective protection against external corrosion, failure to detect and mitigate the corrosion and a lack of timely detection and response to the rupture. The report also included copies of various engineering and technical reports regarding the incident. By virtue of its statutory authority, PHMSA has the power and authority to impose fines and penalties on us and cause civil or criminal charges to be brought against us. While to date PHMSA has not imposed any such fines or penalties or any such civil or criminal charges with respect to the Line 901 release, their investigation is still open and we may have fines or penalties imposed upon us, or civil or criminal charges brought against us, in the future.

On September 11, 2015, we received a Notice of Probable Violation and Proposed Compliance Order from PHMSA arising out of its inspection of Lines 901 and 903 in August, September and October of 2013 (the "2013 Audit NOPV"). The 2013 Audit NOPV alleges that the Partnership committed probable violations of various federal pipeline safety regulations by failing to document, or inadequately documenting, certain activities. On October 12, 2015, the Partnership filed a response to the 2013 Audit NOPV. To date, PHMSA has not issued a final order with respect to the 2013 Audit NOPV, nor has it assessed any fines or penalties with respect thereto; however, we cannot provide any assurances that any such fines or penalties will not be assessed against us.

In late May of 2015, the California Attorney General's Office and the District Attorney's office for the County of Santa Barbara began investigating the Line 901 incident to determine whether any applicable state or local laws had been violated. On May 16, 2016, PAA and one of its employees were charged by a California state grand jury, pursuant to an indictment filed in California Superior Court, Santa Barbara County (the "May 2016 Indictment"), with alleged violations of California law in connection with the Line 901 incident. The indictment included a total of 46 counts, 36 of which were misdemeanor charges relating to wildlife allegedly taken as a result of the accidental release. The remaining 10 counts (currently three felony and seven misdemeanor charges) relate to the release of crude oil or reporting of the release. PAA believes that the criminal charges are unwarranted and that neither PAA nor any of its employees engaged in any criminal behavior at any time in connection with this accident. PAA intends to continue to vigorously defend itself against the charges. On July 28, 2016, at an arraignment hearing held in California Superior Court in Santa Barbara County, PAA pled not guilty to all counts.

Also in late May of 2015, the United States Attorney for the Department of Justice, Central District of California, Environmental Crimes Section ("DOJ") began an investigation into whether there were any violations of federal criminal statutes in connection with the Line 901 incident, including potential violations of the federal Clean Water Act. We are cooperating with the DOJ's investigation by responding to their requests for documents and access to our employees. The DOJ has already spoken to several of our employees and has expressed an interest in talking to other employees; consistent with the terms of our governing organizational documents, we are funding our employees' defense costs, including the costs of separate counsel engaged to represent such individuals. On August 26, 2015, we received a Request for Information from the EPA relating to Line 901. We have provided various responsive materials to date and we will continue to do so in the future in cooperation with the EPA. While to date no civil or criminal charges with respect to the Line 901 release, other than those brought pursuant to the May 2016 Indictment, have been brought against PAA or any of its affiliates, officers or employees by PHMSA, DOJ, EPA, the California Attorney General, the Santa Barbara District Attorney or the California Department of Fish and Wildlife, and no fines or penalties have been imposed by such governmental agencies, the investigations being conducted by such agencies are still open and we may have fines or penalties imposed upon us, our officers or our employees, or civil or criminal charges brought against us, our officers or our employees in the future, whether by those or other governmental agencies.

Shortly following the Line 901 incident, we established a claims line and encouraged any parties that were damaged by the release to contact us to discuss their damage claims. We have received a number of claims through the claims line and we are processing those claims for payment as we receive them. In addition, we have also had nine class action lawsuits filed against us, six of which have been administratively consolidated into a single proceeding in the United States District Court for the Central District of California. In general, the plaintiffs are seeking to establish different classes of claimants that have allegedly been damaged by the release, including potential classes such as commercial fishermen who landed fish in certain specified fishing blocks in the waters adjacent to Santa Barbara County or from persons or businesses who resold commercial seafood landed in such areas, retail businesses located in and around Santa Barbara, certain owners of oceanfront and/or beachfront property on the Pacific Coast of California, and other classes of individuals and businesses that were allegedly impacted by the release. To date, only the commercial fisherman and seafood reseller class has been certified by the court. We are also defending a separate class action lawsuit proceeding in the United States District Court for the Central District of California brought on behalf of the Line 901 and Line 903 easement holders seeking injunctive relief as well as compensatory damages.

There have also been two securities law class action lawsuits filed on behalf of certain purported investors in PAA and/or PAGP against PAA, PAGP and/or certain of their respective officers, directors and underwriters. Both of these lawsuits have been consolidated into a single proceeding in the United States District Court for the Southern District of Texas. In general, these lawsuits allege that the various defendants violated securities laws by misleading investors regarding the integrity of PAA's pipelines and related facilities through false and misleading statements, omission of material facts and concealing of the true extent of the spill. The plaintiffs claim unspecified damages as a result of the reduction in value of their investments in PAA and PAGP, which they attribute to the alleged wrongful acts of the defendants. PAA and PAGP, and the other defendants, denied the allegations in, and moved to dismiss these lawsuits. On March 29, 2017, the Court ruled in our favor dismissing all claims against all defendants. Plaintiffs may appeal or refile. Consistent with and subject to the terms of our governing organizational documents (and to the extent applicable, insurance policies), we are indemnifying and funding the defense costs of our officers and directors in connection with these lawsuits; we are also indemnifying and funding the defense costs of our underwriters pursuant to the terms of the underwriting agreements we previously entered into with such underwriters.

In addition, four unitholder derivative lawsuits have been filed by certain purported investors in PAA against PAA, certain of its affiliates and certain officers and directors. Two of these lawsuits were filed in the United States District Court for the Southern District of Texas and were administratively consolidated into one action and later dismissed on the basis that Plains Partnership agreements require that derivative suits be filed in Delaware Chancery Court. Following the order dismissing the Texas Federal Court suits, a new derivative suit brought by different plaintiffs was filed in Delaware Chancery Court. The other remaining lawsuit was filed in State District Court in Harris County, Texas. In general, these lawsuits allege that the various defendants breached their fiduciary duties, engaged in gross mismanagement and made false and misleading statements, among other similar allegations, in connection with their management and oversight of PAA during the period of time leading up to and following the Line 901 release. The plaintiffs in the two remaining lawsuits claim that PAA suffered unspecified damages as a result of the actions of the various defendants and seek to hold the defendants liable for such damages, in addition to other remedies. The defendants deny the allegations in these lawsuits and have responded accordingly. Consistent with and subject to the terms of our governing organizational documents (and to the extent applicable, insurance policies), we are indemnifying and funding the defense costs of our officers and directors in connection with these lawsuits.

We have also had two lawsuits filed against us wherein the respective plaintiffs seek to compel the production of certain books and records that purportedly relate to the Line 901 incident, our alleged failure to comply with certain regulations and other matters. These lawsuits have been consolidated into a single proceeding in the Chancery Court for the State of Delaware.

We have also received several other individual lawsuits and complaints from companies and individuals alleging damages arising out of the Line 901 incident. These lawsuits and claims generally seek compensatory and punitive damages, and in some cases permanent injunctive relief.

In addition to the foregoing, as the “responsible party” for the Line 901 incident we are liable for various costs and for certain natural resource damages under the Oil Pollution Act, and we also have exposure to the payment of additional fines, penalties and costs under other applicable federal, state and local laws, statutes and regulations. To the extent any such costs are reasonably estimable, we have included an estimate of such costs in the loss accrual described below.

Taking the foregoing into account, as of March 31, 2017, we estimate that the aggregate total costs we have incurred or will incur with respect to the Line 901 incident will be approximately $280 million, which estimate includes actual and projected emergency response and clean-up costs, natural resource damage assessments and certain third party claims settlements, as well as estimates for fines, penalties and certain legal fees. We accrued such estimate of aggregate total costs to “Field operating costs” primarily during 2015. This estimate considers our prior experience in environmental investigation and remediation matters and available data from, and in consultation with, our environmental and other specialists, as well as currently available facts and presently enacted laws and regulations. We have made assumptions for (i) the duration of the natural resource damage assessment process and the ultimate amount of damages determined, (ii) the resolution of certain third party claims and lawsuits, but excluding claims and lawsuits with respect to which losses are not probable and reasonably estimable, and excluding future claims and lawsuits, (iii) the determination and calculation of fines and penalties, but excluding fines and penalties that are not probable and reasonably estimable and (iv) the nature, extent and cost of legal services that will be required in connection with all lawsuits, claims and other matters requiring legal or expert advice associated with the Line 901 incident. Our estimate does not include any lost revenue associated with the shutdown of Line 901 or 903 and does not include any liabilities or costs that are not reasonably estimable at this time or that relate to contingencies where we currently regard the likelihood of loss as being only reasonably possible or remote. We believe we have accrued adequate amounts for all probable and reasonably estimable costs; however, this estimate is subject to uncertainties associated with the assumptions that we have made. For example, the amount of time it takes for us to resolve all of the current and future lawsuits, claims and investigations that relate to the Line 901 incident could turn out to be significantly longer than we have assumed, and as a result the costs we incur for legal services could be significantly higher than we have estimated. In addition, with respect to fines and penalties, the ultimate amount of any fines and penalties assessed against us depends on a wide variety of factors, many of which are not estimable at this time. Where fines and penalties are probable and estimable, we have included them in our estimate, although such estimates could turn out to be wrong. Accordingly, our assumptions and estimates may turn out to be inaccurate and our total costs could turn out to be materially higher; therefore, we can provide no assurance that we will not have to accrue significant additional costs in the future with respect to the Line 901 incident.

As of March 31, 2017, we had a remaining undiscounted gross liability of $68 million related to this event, of which approximately $48 million is presented as a current liability in “Accounts payable and accrued liabilities” on our Condensed Consolidated Balance Sheet, with the remainder presented in “Other long-term liabilities and deferred credits”. We maintain insurance coverage, which is subject to certain exclusions and deductibles, in the event of such environmental liabilities. Subject to such exclusions and deductibles, we believe that our coverage is adequate to cover the current estimated total emergency response and clean-up costs, claims settlement costs and remediation costs and we believe that this coverage is also adequate to cover any potential increase in the estimates for these costs that exceed the amounts currently identified. Through March 31, 2017, we had collected, subject to customary reservations, $156 million out of the approximate $197 million of release costs that we believe are probable of recovery from insurance carriers, net of deductibles. Therefore, as of March 31, 2017, we have recognized a receivable of approximately $41 million for the portion of the release costs that we believe is probable of recovery from insurance, net of deductibles and amounts already collected. Of this amount, approximately $29 million is recognized as a current asset in “Trade accounts receivable and other receivables, net” on our Condensed Consolidated Balance Sheet, with the remainder in “Other long-term assets, net”. We have completed the required clean-up and remediation work as determined by the Unified Command and the Unified Command has been dissolved; however, we expect to make payments for additional costs associated with restoration of the impacted areas, as well as natural resource damage assessment and compensation, legal, professional and regulatory costs, in addition to fines and penalties, during future periods.

*In the Matter of Bakersfield Crude Terminal LLC et al.* On April 30, 2015, the EPA issued a Finding and Notice of Violation (“NOV”) to Bakersfield Crude Terminal LLC, our subsidiary, for alleged violations of the Clean Air Act, as amended. The NOV, which cites 10 separate rule violations, questions the validity of construction and operating permits issued to our

Bakersfield rail unloading facility in 2012 and 2014 by the San Joaquin Valley Air Pollution Control District (the "SJV District"). We believe we fully complied with all applicable regulatory requirements and that the permits issued to us by the SJV District are valid. To date, no fines or penalties have been assessed in this matter; however, it is possible that fines and penalties could be assessed in the future.

*Mesa to Basin Pipeline*. On January 6, 2016, PHMSA issued a Notice of Probable Violation and Proposed Civil Penalty relating to an approximate 500 barrel release of crude oil that took place on January 1, 2015 on our Mesa to Basin 12" pipeline in Midland, Texas. PHMSA conducted an accident investigation and reviewed documentation related to the incident, and concluded that we had committed probable violations of certain pipeline safety regulations. In the Notice, PHMSA maintains that we failed to carry out our written damage prevention program and to follow our pipeline excavation/ditching and backfill procedures on four separate occasions, and that such failures resulted in outside force damage that led to the January 1, 2015 release. In early March 2017, PHMSA issued a final order that concluded that we followed our pipeline excavation/ditching and backfill procedures, but maintained that we failed to carry out our written damage prevention program and imposed a civil penalty of $184,300.

**Note 13—Operating Segments**

We manage our operations through three operating segments: Transportation, Facilities and Supply and Logistics. Our CODM (our Chief Executive Officer) evaluates segment performance based on measures including segment adjusted EBITDA (as defined below) and maintenance capital investment.

We define segment adjusted EBITDA as revenues and equity earnings in unconsolidated entities less (a) purchases and related costs, (b) field operating costs and (c) segment general and administrative expenses, plus our proportionate share of the depreciation and amortization expense of unconsolidated entities, and further adjusted for certain selected items including (i) gains or losses on derivative instruments that are related to underlying activities in another period (or the reversal of such adjustments from a prior period), gains and losses on derivatives that are related to investing activities (such as the purchase of linefill) and inventory valuation adjustments, as applicable, (ii) long-term inventory costing adjustments, (iii) charges for obligations that are expected to be settled with the issuance of equity instruments, (iv) amounts related to deficiencies associated with minimum volume commitments, net of the applicable amounts subsequently recognized into revenue and (v) other items that our CODM believes are integral to understanding our core segment operating performance.

Segment adjusted EBITDA excludes depreciation and amortization. Maintenance capital consists of capital expenditures for the replacement of partially or fully depreciated assets in order to maintain the operating and/or earnings capacity of our existing assets.

The following tables reflect certain financial data for each segment (in millions):

| Three Months Ended March 31, 2017 | Transportation | Facilities | Supply and Logistics | Intersegment Adjustment [1] | Total |
|---|---|---|---|---|---|
| Revenues: | | | | | |
| External customers | $ 225 | $ 134 | $ 6,395 | $ (87) | $ 6,667 |
| Intersegment [2] | 164 | 159 | 5 | 87 | 415 |
| Total revenues of reportable segments | $ 389 | $ 293 | $ 6,400 | $ — | $ 7,082 |
| Equity earnings in unconsolidated entities | $ 53 | $ — | $ — | | $ 53 |
| Segment adjusted EBITDA | $ 273 | $ 188 | $ 51 | | $ 512 |
| Maintenance capital | $ 29 | $ 27 | $ 3 | | $ 59 |

| Three Months Ended March 31, 2016 | Transportation | | Facilities | | Supply and Logistics | | Intersegment Adjustment [1] | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Revenues: | | | | | | | | | | |
| External customers | $ | 241 | $ | 138 | $ | 3,819 | $ | (87) | $ | 4,111 |
| Intersegment [2] | | 142 | | 127 | | 2 | | 87 | | 358 |
| Total revenues of reportable segments | $ | 383 | $ | 265 | $ | 3,821 | $ | — | $ | 4,469 |
| Equity earnings in unconsolidated entities | $ | 47 | $ | — | $ | — | | | $ | 47 |
| Segment adjusted EBITDA | $ | 281 | $ | 167 | $ | 184 | | | $ | 632 |
| Maintenance capital | $ | 35 | $ | 9 | $ | 3 | | | $ | 47 |

(1) Transportation revenues from external customers include inventory exchanges that are substantially similar to tariff-like arrangements with our customers. Under these arrangements, our Supply and Logistics segment has transacted the inventory exchange and serves as the shipper on our pipeline systems. See Note 2 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for a discussion of our related accounting policy. We have included an estimate of the revenues from these inventory exchanges in our Transportation segment revenue presented above and adjusted those revenues out such that Total revenue from External customers reconciles to our Condensed Consolidated Statements of Operations. This presentation is consistent with the information provided to our CODM.

(2) Segment revenues include intersegment amounts that are eliminated in Purchases and related costs and Field operating costs in our Condensed Consolidated Statements of Operations. Intersegment sales are conducted at posted tariff rates, rates similar to those charged to third parties or rates that we believe approximate market at the time the agreement is executed or renegotiated.

***Segment Adjusted EBITDA Reconciliation***

The following table reconciles segment adjusted EBITDA to net income attributable to PAGP (in millions):

| | Three Months Ended March 31, | | | |
|---|---|---|---|---|
| | 2017 | | 2016 | |
| Segment adjusted EBITDA | $ | 512 | $ | 632 |
| Adjustments [1]: | | | | |
| Depreciation and amortization of unconsolidated entities [2] | | (14) | | (12) |
| Gains/(losses) from derivative activities net of inventory valuation adjustments [3] | | 289 | | (122) |
| Long-term inventory costing adjustments [4] | | (7) | | (23) |
| Deficiencies under minimum volume commitments, net [5] | | (11) | | (27) |
| Equity-indexed compensation expense [6] | | (3) | | (4) |
| Net gain/(loss) on foreign currency revaluation [7] | | 4 | | (1) |
| Significant acquisition-related expenses [8] | | (5) | | — |
| Unallocated general and administrative expenses | | (1) | | (1) |
| Depreciation and amortization | | (122) | | (114) |
| Interest expense, net | | (129) | | (116) |
| Other income/(expense), net | | (5) | | 5 |
| Income before tax | | 508 | | 217 |
| Income tax expense | | (106) | | (40) |
| Net income | | 402 | | 177 |
| Net income attributable to noncontrolling interests | | (361) | | (141) |
| Net income attributable to PAGP | $ | 41 | $ | 36 |

(1) Represents adjustments utilized by our CODM in the evaluation of segment results.

(2) Includes our proportionate share of the depreciation and amortization of equity method investments.

(3) We use derivative instruments for risk management purposes and our related processes include specific identification of hedging instruments to an underlying hedged transaction. Although we identify an underlying transaction for each derivative instrument we enter into, there may not be an accounting hedge relationship between the instrument and the underlying transaction. In the course of evaluating our results, we identify the earnings that were recognized during the period related to derivative instruments for which the identified underlying transaction does not occur in the current period and exclude the related gains and losses in determining segment adjusted EBITDA. In addition, we exclude gains and losses on derivatives that are related to investing activities, such as the purchase of linefill. We also exclude the impact of corresponding inventory valuation adjustments, as applicable.

(4) We carry crude oil and NGL inventory that is comprised of minimum working inventory requirements in third-party assets and other working inventory that is needed for our commercial operations. We consider this inventory necessary to conduct our operations and we intend to carry this inventory for the foreseeable future. Therefore, we classify this inventory as long-term on our balance sheet and do not hedge the inventory with derivative instruments (similar to linefill in our own assets). We exclude the impact of changes in the average cost of the long-term inventory (that result from fluctuations in market prices) and writedowns of such inventory that result from price declines from segment adjusted EBITDA.

(5) We have certain agreements that require counterparties to deliver, transport or throughput a minimum volume over an agreed upon period. Substantially all of such agreements were entered into with counterparties to economically support the return on our capital expenditure necessary to construct the related asset. Some of these agreements include make-up rights if the minimum volume is not met. We record a receivable from the counterparty in the period that services are provided or when the transaction occurs, including amounts for deficiency obligations from counterparties associated with minimum volume commitments. If a counterparty has a make-up right associated with a deficiency, we defer the revenue attributable to the counterparty’s make-up right and subsequently recognize the revenue at the earlier of when the deficiency volume is delivered or shipped, when the make-up right expires or when it is determined that the counterparty’s ability to utilize the make-up right is remote. We include the impact of amounts billed to counterparties for their deficiency obligation, net of applicable amounts subsequently recognized into revenue, as a selected item impacting comparability. Our CODM views the inclusion of the contractually committed revenues associated with that period as meaningful to segment adjusted EBITDA as the related asset has been constructed, is standing ready to provide the committed service and the fixed operating costs are included in the current period results.

(6) Includes equity-indexed compensation expense associated with awards that will or may be settled in PAA common units.

(7) Includes gains and losses from the revaluation of foreign currency transactions and monetary assets and liabilities.

(8) Includes acquisition-related expenses associated with the ACC Acquisition. See Note 6 for additional discussion. An adjustment for these non-recurring expenses is included in the calculation of segment adjusted EBITDA for the three months ended March 31, 2017 as our CODM does not view such expenses as integral to understanding our core segment operating performance. Acquisition-related expenses for the 2016 period were not significant to segment adjusted EBITDA.

## Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Introduction

The following discussion is intended to provide investors with an understanding of our financial condition and results of our operations and should be read in conjunction with our historical Consolidated Financial Statements and accompanying notes and Management's Discussion and Analysis of Financial Condition and Results of Operations as presented in our 2016 Annual Report on Form 10-K. For more detailed information regarding the basis of presentation for the following financial information, see the Condensed Consolidated Financial Statements and related notes that are contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Our discussion and analysis includes the following:

- Executive Summary
- Acquisitions and Capital Projects
- Results of Operations
- Outlook
- Liquidity and Capital Resources
- Off-Balance Sheet Arrangements
- Recent Accounting Pronouncements
- Critical Accounting Policies and Estimates
- Forward-Looking Statements

### Executive Summary

*Company Overview*

We are a Delaware limited partnership formed on July 17, 2013 that has elected to be taxed as a corporation for United States federal income tax purposes. As of March 31, 2017, our sole assets consisted of (i) a 100% managing member interest in Plains All American GP LLC ("GP LLC") that has also elected to be taxed as a corporation for United States federal income tax purposes and (ii) an approximate 53% limited partner interest in AAP through our direct ownership of approximately 150.8 million AAP units and indirect ownership of approximately 1.0 million AAP units through GP LLC. GP LLC is a Delaware limited liability company that also holds the non-economic general partner interest in AAP. AAP is a Delaware limited partnership that, as of March 31, 2017, directly owns an approximate 37% limited partner interest in PAA represented by approximately 288.3 million PAA common units. AAP is the sole member of PAA GP LLC ("PAA GP"), a Delaware limited liability company that directly holds the non-economic general partner interest in PAA.

PAA owns and operates midstream energy infrastructure and provides logistics services for crude oil, NGL, natural gas and refined products. PAA owns an extensive network of pipeline transportation, terminalling, storage and gathering assets in key crude oil and NGL producing basins and transportation corridors and at major market hubs in the United States and Canada.

***Overview of Operating Results, Capital Investments and Other Significant Activities***

During the first three months of 2017, we recognized net income of $402 million as compared to net income of $177 million recognized during the first three months of 2016. Our financial results for the comparative periods were impacted by:

- The favorable impact of gains on certain derivative instruments and contributions from our recently completed acquisitions and capital expansion projects, partially offset by less favorable crude oil and NGL market conditions and margin compression caused by continued intense competition;

- Higher interest expense primarily related to financing activities associated with our capital investments; and

- Higher income tax expense primarily due to higher year-over-year income as impacted by fluctuations in derivative mark-to-market valuations in our Canadian operations.

See further discussion of our segment operating results in the "—Results of Operations—Analysis of Operating Segments" and "—Other Income and Expenses" sections below.

We invested $307 million in midstream infrastructure projects during the three months ended March 31, 2017, with a targeted expansion capital plan for the full year of 2017 of approximately $900 million. Additionally, in February 2017, we acquired a crude oil gathering system located in the Northern Delaware Basin for approximately $1.217 billion and a marine propane terminal for $41 million. To fund such capital activities, we sold PAGP and PAA equity securities for net proceeds of approximately $1.7 billion. We also continued to advance our strategic divestiture program during the first quarter of 2017, completing two non-core asset sales for cash proceeds of approximately $161 million and entering into a definitive sales agreement for approximately $225 million that we expect to close in the second quarter or early in the third quarter of 2017, subject to customary closing conditions, including the receipt of regulatory approvals.

Subsequent to March 31, 2017, we completed the formation of a 50/50 joint venture, which subsequently acquired a crude oil pipeline located in the Southern Delaware Basin for $133 million, of which $66.5 million represents our 50% share.

We paid approximately $372 million of cash distributions to our Class A shareholders and noncontrolling interests during the three months ended March 31, 2017, and we declared a quarterly distribution of $0.55 per Class A share to be paid on May 15, 2017.

**Acquisitions and Capital Projects**

The following table summarizes our expenditures for acquisition capital, expansion capital and maintenance capital (in millions):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2017 | 2016 |
| Acquisition capital [(1)] [(2)] | $ 1,258 | $ 85 |
| Expansion capital [(1)] [(3)] | 307 | 370 |
| Maintenance capital [(3)] | 59 | 47 |
| | $ 1,624 | $ 502 |

(1) Acquisition capital for the first three months of 2017 primarily relates to the ACC Acquisition. See Note 6 to our Condensed Consolidated Financial Statements for further discussion regarding our acquisition activities.

(2) Acquisitions of initial investments or additional interests in unconsolidated entities are included in "Acquisition capital." Subsequent contributions to unconsolidated entities related to expansion projects of such entities are recognized in "Expansion capital." We account for our investments in such entities under the equity method of accounting.

(3) Capital expenditures made to expand the existing operating and/or earnings capacity of our assets are classified as expansion capital. Capital expenditures for the replacement of partially or fully depreciated assets in order to maintain the operating and/or earnings capacity of our existing assets are classified as maintenance capital.

### *Expansion Capital Projects*

The following table summarizes our notable projects in progress during 2017 and the estimated cost for the year ending December 31, 2017 (in millions):

| Projects | 2017 |
|---|---|
| Diamond Pipeline | $300 |
| Permian Basin Area Systems | 150 |
| Fort Saskatchewan Facility Projects | 90 |
| STACK Projects | 50 |
| Cushing Terminal Expansions | 30 |
| St. James Terminal Projects | 20 |
| Other Projects | 260 |
| Total Projected 2017 Expansion Capital Expenditures | $900 |

### Results of Operations

The following table sets forth an overview of our consolidated financial results calculated in accordance with GAAP (in millions, except per share amounts).

| | Three Months Ended March 31, | | Variance | |
|---|---|---|---|---|
| | 2017 | 2016 | $ | % |
| Transportation segment adjusted EBITDA [1] | $ 273 | $ 281 | $ (8) | (3)% |
| Facilities segment adjusted EBITDA [1] | 188 | 167 | 21 | 13 % |
| Supply and Logistics segment adjusted EBITDA [1] | 51 | 184 | (133) | (72)% |
| Adjustments: | | | | |
| Depreciation and amortization of unconsolidated entities | (14) | (12) | (2) | (17)% |
| Selected items impacting comparability - segment adjusted EBITDA | 267 | (177) | 444 | ** |
| Unallocated general and administrative expenses | (1) | (1) | — | — % |
| Depreciation and amortization | (122) | (114) | (8) | (7)% |
| Interest expense, net | (129) | (116) | (13) | (11)% |
| Other income/(expense), net | (5) | 5 | (10) | ** |
| Income tax expense | (106) | (40) | (66) | (165)% |
| Net income | 402 | 177 | 225 | 127 % |
| Net income attributable to noncontrolling interests | (361) | (141) | (220) | (156)% |
| Net income attributable to PAGP | $ 41 | $ 36 | $ 5 | 14 % |
| | | | | |
| Basic net income per Class A share [2] | $ 0.34 | $ 0.39 | $ (0.05) | (13)% |
| Diluted net income per Class A share [2] | $ 0.34 | $ 0.37 | $ (0.03) | (8)% |
| Basic weighted average Class A shares outstanding [2] | 120 | 95 | 25 | 26 % |
| Diluted weighted average Class A shares outstanding [2] | 120 | 245 | (125) | (51)% |

** Indicates that variance as a percentage is not meaningful.

(1) Segment adjusted EBITDA is the measure of segment performance that is utilized by our Chief Operating Decision Maker (“CODM”) to assess performance and allocate resources among our operating segments. This measure is adjusted for certain items, including those that our CODM believes impact comparability of results across periods. See Note 13 to our Condensed Consolidated Financial Statements for additional discussion of such adjustments.

(2) The share and per-share amounts for the 2016 period have been retroactively adjusted to reflect the effect of the reverse split that was effected as part of the Simplification Transactions. See Note 1 to our Condensed Consolidated Financial Statements for additional discussion of the Simplification Transactions.

***Non-GAAP Financial Measures***

To supplement our financial information presented in accordance with GAAP, management uses additional measures known as “non-GAAP financial measures” in its evaluation of past performance and prospects for the future. The primary additional measure used by management is earnings before interest, taxes, depreciation and amortization (including our proportionate share of depreciation and amortization of unconsolidated entities) and adjusted for certain selected items impacting comparability (“Adjusted EBITDA”).

Management believes that the presentation of such additional financial measure provides useful information to investors regarding our performance and results of operations because this measure, when used to supplement related GAAP financial measures, (i) provide additional information about our core operating performance, (ii) provide investors with the same financial analytical framework upon which management bases financial, operational, compensation and planning/budgeting decisions and (iii) present measurements that investors, rating agencies and debt holders have indicated are useful in assessing us and our results of operations. This non-GAAP measure may exclude, for example, (i) charges for obligations that are expected to be settled with the issuance of equity instruments, (ii) gains or losses on derivative instruments that are related to underlying activities in another period (or the reversal of such adjustments from a prior period), the mark-to-market related to our Preferred Distribution Rate Reset Option, gains and losses on derivatives that are related to investing activities (such as the purchase of linefill) and inventory valuation adjustments, as applicable, (iii) long-term inventory costing adjustments, (iv) items that are not indicative of our core operating results and business outlook and/or (v) other items that we believe should be excluded in understanding our core operating performance. This measure may further be adjusted to include amounts related to deficiencies associated with minimum volume commitments whereby we have billed the counterparties for their deficiency obligation and such amounts are recognized as deferred revenue in “Accounts payable and accrued liabilities” in our Condensed Consolidated Financial Statements. Such amounts are presented net of applicable amounts subsequently recognized into revenue. We have defined all such items as “selected items impacting comparability.” We do not necessarily consider all of our selected items impacting comparability to be non-recurring, infrequent or unusual, but we believe that an understanding of these selected items impacting comparability is material to the evaluation of our operating results and prospects.

Although we present selected items impacting comparability that management considers in evaluating our performance, you should also be aware that the items presented do not represent all items that affect comparability between the periods presented. Variations in our operating results are also caused by changes in volumes, prices, exchange rates, mechanical interruptions, acquisitions, expansion projects and numerous other factors as discussed, as applicable, in “Analysis of Operating Segments.”

Our definition and calculation of certain non-GAAP financial measures may not be comparable to similarly-titled measures of other companies. Adjusted EBITDA is reconciled to Net Income, the most directly comparable measure as reported in accordance with GAAP, and should be viewed in addition to, and not in lieu of, our Condensed Consolidated Financial Statements and footnotes.

The following table sets forth the reconciliation of our non-GAAP financial performance measure from Net Income (in millions):

| | Three Months Ended March 31, | | Variance | |
|---|---|---|---|---|
| | 2017 | 2016 | $ | % |
| Net income | $ 402 | $ 177 | $ 225 | 127 % |
| Add/(Subtract): | | | | |
| Interest expense, net | 129 | 116 | 13 | 11 % |
| Income tax expense | 106 | 40 | 66 | 165 % |
| Depreciation and amortization | 122 | 114 | 8 | 7 % |
| Depreciation and amortization of unconsolidated entities (1) | 14 | 12 | 2 | 17 % |
| Selected Items Impacting Comparability - Adjusted EBITDA: | | | | |
| (Gains)/losses from derivative activities net of inventory valuation adjustments (2) | (289) | 122 | (411) | ** |
| Long-term inventory costing adjustments (3) | 7 | 23 | (16) | ** |
| Deficiencies under minimum volume commitments, net (4) | 11 | 27 | (16) | (59)% |
| Equity-indexed compensation expense (5) | 3 | 4 | (1) | ** |
| Net (gain)/loss on foreign currency revaluation (6) | (4) | 1 | (5) | ** |
| Significant acquisition-related expenses (7) | 5 | — | 5 | ** |
| Selected Items Impacting Comparability - segment adjusted EBITDA | (267) | 177 | (444) | ** |
| Losses from derivative activities (2) | 4 | — | 4 | ** |
| Net (gain)/loss on foreign currency revaluation (6) | 1 | (4) | 5 | ** |
| Selected Items Impacting Comparability - Adjusted EBITDA (8) | $ (262) | $ 173 | $ (435) | ** |
| Adjusted EBITDA (8) | $ 511 | $ 632 | $ (121) | (19)% |

** Indicates that variance as a percentage is not meaningful.

(1) Over the past several years, we have increased our participation in pipeline strategic joint ventures, which are accounted for under the equity method of accounting. Our proportionate share of the depreciation and amortization expense associated with such unconsolidated entities is excluded when reviewing Adjusted EBITDA, similar to our consolidated pipelines.

(2) We use derivative instruments for risk management purposes and our related processes include specific identification of hedging instruments to an underlying hedged transaction. Although we identify an underlying transaction for each derivative instrument we enter into, there may not be an accounting hedge relationship between the instrument and the underlying transaction. In the course of evaluating our results of operations, we identify the earnings that were recognized during the period related to derivative instruments for which the identified underlying transaction does not occur in the current period and exclude the related gains and losses in determining Adjusted EBITDA. In addition, we exclude gains and losses on derivatives that are related to investing activities, such as the purchase of linefill. We also exclude the impact of corresponding inventory valuation adjustments, as applicable, as well as the mark-to-market adjustment related to our Preferred Distribution Rate Reset Option. See Note 10 to our Condensed Consolidated Financial Statements for a comprehensive discussion regarding our derivatives and risk management activities and our Preferred Distribution Rate Reset Option.

(3) We carry crude oil and NGL inventory that is comprised of minimum working inventory requirements in third-party assets and other working inventory that is needed for our commercial operations. We consider this inventory necessary to conduct our operations and we intend to carry this inventory for the foreseeable future. Therefore, we classify this inventory as long-term on our balance sheet and do not hedge the inventory with derivative instruments (similar to linefill in our own assets). We treat the impact of changes in the average cost of the long-term inventory (that result from fluctuations in market prices) and writedowns of such inventory that result from price declines as a selected item impacting comparability. See Note 4 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for additional inventory disclosures.

(4) We have certain agreements that require counterparties to deliver, transport or throughput a minimum volume over an agreed upon period. Substantially all of such agreements were entered into with counterparties to economically support the return on our capital expenditure necessary to construct the related asset. Some of these agreements include make-up rights if the minimum volume is not met. We record a receivable from the counterparty in the period that services are provided or when the transaction occurs, including amounts for deficiency obligations from counterparties associated with minimum volume commitments. If a counterparty has a make-up right associated with a deficiency, we defer the revenue attributable to the counterparty's make-up right and subsequently recognize the revenue at the earlier of when the deficiency volume is delivered or shipped, when the make-up right expires or when it is determined that the counterparty's ability to utilize the make-up right is remote. We include the impact of amounts billed to counterparties for their deficiency obligation, net of applicable amounts subsequently recognized into revenue, as a selected item impacting comparability. We believe the inclusion of the contractually committed revenues associated with that period is meaningful to investors as the related asset has been constructed, is standing ready to provide the committed service and the fixed operating costs are included in the current period results.

(5) Our total equity-indexed compensation expense includes expense associated with awards that will or may be settled in PAA common units and awards that will or may be settled in cash. The awards that will or may be settled in PAA common units are included in PAA's diluted net income per unit calculation when the applicable performance criteria have been met. The compensation expense associated with these awards is considered as a selected item impacting comparability as the dilutive impact of the outstanding awards is included in PAA's diluted net income per unit calculation, as applicable, and the majority of the awards are expected to be settled in PAA common units. The portion of compensation expense associated with awards that are certain to be settled in cash is not considered a selected item impacting comparability. See Note 16 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for a comprehensive discussion regarding our equity-indexed compensation plans.

(6) During the periods presented, there were fluctuations in the value of CAD to USD, resulting in gains and losses that were not related to our core operating results for the period and were thus classified as a selected item impacting comparability. See Note 10 to our Condensed Consolidated Financial Statements for discussion regarding our currency exchange rate risk hedging activities.

(7) Includes acquisition-related expenses associated with the ACC Acquisition. See Note 6 to our Condensed Consolidated Financial Statements for additional discussion.

(8) Adjusted EBITDA includes Other income/expense, net adjusted for selected items impacting comparability. Segment adjusted EBITDA is exclusive of such amounts.

***Analysis of Operating Segments***

We manage our operations through three operating segments: Transportation, Facilities and Supply and Logistics. Our CODM (our Chief Executive Officer) evaluates segment performance based on a variety of measures including segment adjusted EBITDA, segment volumes, segment adjusted EBITDA per barrel and maintenance capital investment.

We define segment adjusted EBITDA as revenues and equity earnings in unconsolidated entities less (a) purchases and related costs, (b) field operating costs and (c) segment general and administrative expenses, plus our proportionate share of the depreciation and amortization expense of unconsolidated entities, and further adjusted for certain selected items including (i) the mark-to-market of derivative instruments that are related to underlying activities in another period (or the reversal of such adjustments from a prior period), gains and losses on derivatives that are related to investing activities (such as the purchase of linefill) and inventory valuation adjustments, as applicable, (ii) long-term inventory costing adjustments, (iii) charges for obligations that are expected to be settled with the issuance of equity instruments, (iv) amounts related to deficiencies associated with minimum volume commitments, net of applicable amounts subsequently recognized into revenue and (v) other items that our CODM believes are integral to understand our core segment operating performance. See Note 13 to our Condensed Consolidated Financial Statements for a reconciliation of segment adjusted EBITDA to net income attributable to PAGP.

Revenues and expenses from our Canadian based subsidiaries, which use CAD as their functional currency, are translated at the prevailing average exchange rates for the month.

**Transportation Segment**

Our Transportation segment operations generally consist of fee-based activities associated with transporting crude oil and NGL on pipelines, gathering systems, trucks and barges. The Transportation segment generates revenue through a combination of tariffs, third-party pipeline capacity agreements and other transportation fees.

The following tables set forth our operating results from our Transportation segment:

| **Operating Results (1)** | **Three Months Ended March 31,** | | **Favorable/(Unfavorable) Variance** | |
|---|---|---|---|---|
| **(in millions, except per barrel data)** | **2017** | **2016** | **$** | **%** |
| Revenues | | | | |
| Tariff activities | $ 352 | $ 349 | $ 3 | 1 % |
| Trucking | 37 | 34 | 3 | 9 % |
| Total transportation revenues | 389 | 383 | 6 | 2 % |
| | | | | |
| Costs and expenses | | | | |
| Trucking costs | (24) | (21) | (3) | (14)% |
| Field operating costs (2) | (137) | (137) | — | — % |
| Equity-indexed compensation expense - field operating costs | (4) | — | (4) | ** |
| Segment general and administrative expenses (2) (3) | (27) | (23) | (4) | (17)% |
| Equity-indexed compensation expense - general and administrative | (2) | (2) | — | ** |
| Equity earnings in unconsolidated entities | 53 | 47 | 6 | 13 % |
| | | | | |
| Adjustments (4): | | | | |
| Depreciation and amortization of unconsolidated entities | 14 | 12 | 2 | 17 % |
| Deficiencies under minimum volume commitments, net | 5 | 20 | (15) | (75)% |
| Equity-indexed compensation expense | 1 | 2 | (1) | ** |
| Significant acquisition-related expenses | 5 | — | 5 | ** |
| Segment adjusted EBITDA | $ 273 | $ 281 | $ (8) | (3)% |
| Maintenance capital | $ 29 | $ 35 | $ 6 | 17 % |
| Segment adjusted EBITDA per barrel | $ 0.64 | $ 0.67 | $ (0.03) | (4)% |

| **Average Daily Volumes** | **Three Months Ended March 31,** | | **Favorable/(Unfavorable) Variance** | |
|---|---|---|---|---|
| **(in thousands of barrels per day) (5)** | **2017** | **2016** | **Volumes** | **%** |
| Tariff activities volumes | | | | |
| Crude oil pipelines (by region): | | | | |
| Permian Basin (6) | 2,466 | 2,045 | 421 | 21 % |
| South Texas / Eagle Ford (6) | 310 | 313 | (3) | (1)% |
| Western | 189 | 175 | 14 | 8 % |
| Rocky Mountain (6) | 385 | 437 | (52) | (12)% |
| Gulf Coast | 342 | 581 | (239) | (41)% |
| Central (6) | 405 | 379 | 26 | 7 % |
| Canada | 363 | 394 | (31) | (8)% |
| Crude oil pipelines | 4,460 | 4,324 | 136 | 3 % |
| NGL pipelines | 180 | 178 | 2 | 1 % |
| Tariff activities total volumes | 4,640 | 4,502 | 138 | 3 % |
| Trucking volumes | 114 | 106 | 8 | 8 % |
| Transportation segment total volumes | 4,754 | 4,608 | 146 | 3 % |

** Indicates that variance as a percentage is not meaningful.

(1) Revenues and costs and expenses include intersegment amounts.

(2) Field operating costs and Segment general and administrative expenses exclude equity-indexed compensation expense, which is presented separately in the table above.

(3) Segment general and administrative expenses reflect direct costs attributable to each segment and an allocation of other expenses to the segments. The proportional allocations by segment require judgment by management and are based on the business activities that exist during each period.

(4) Represents adjustments included in the performance measure utilized by our CODM in the evaluation of segment results. See Note 13 to our Condensed Consolidated Financial Statements for additional discussion of such adjustments.

(5) Average daily volumes are calculated as the total volumes (attributable to our interest) for the period divided by the number of days in the period.

(6) Region includes volumes (attributable to our interest) from pipelines owned by unconsolidated entities.

Tariffs and other fees on our pipeline systems vary by receipt point and delivery point. The segment results generated by our tariff and other fee-related activities depend on the volumes transported on the pipeline and the level of the tariff and other fees charged, as well as the fixed and variable field costs of operating the pipeline. As is common in the pipeline transportation industry, our tariffs incorporate a loss allowance factor that is intended to offset losses due to evaporation, measurement and other losses in transit. We value the variance of allowance volumes to actual losses at the estimated net realizable value (including the impact of gains and losses from derivative-related activities) at the time the variance occurred and the result is recorded as either an increase or decrease to tariff activities revenues.

The following is a discussion of items impacting Transportation segment operating results for the periods indicated.

*Revenues from Tariff Activities, Equity Earnings in Unconsolidated Entities and Volumes.* The following table presents variances in tariff activities revenues and equity earnings in unconsolidated entities by region for the comparative periods presented:

| | Favorable/(Unfavorable) Variance Three Months Ended March 31, 2017-2016 | |
|---|---|---|
| **(in millions)** | **Revenues** | **Equity Earnings** |
| Tariff activities: | | |
| Permian Basin region | $ 25 | $ 1 |
| Rocky Mountain region | (8) | 2 |
| Gulf Coast region | (11) | — |
| Other (including pipeline loss allowance revenue) | (3) | 3 |
| Total tariff activities variance | $ 3 | $ 6 |

- Permian Basin region — The increase in revenues was largely driven by (i) increased production in the Delaware Basin, which favorably impacted our Basin pipeline, (ii) higher volumes on our Cactus pipeline and (iii) results from the Alpha Crude Connector gathering system, which we acquired in February 2017.

- Rocky Mountain region — The decrease in revenues was largely driven by (i) lower volumes due to downtime on our Wahsatch pipeline, which we proactively shut down for approximately 30 days during the first quarter of 2017 as a precautionary measure in response to indications of soil movement identified by our monitoring systems, and (ii) the sale of 50% of our investment in Cheyenne Pipeline in June 2016, subsequent to which it was accounted for under the equity method of accounting.

  Equity earnings increased primarily due to earnings from (i) our 40% investment in the entity that owns the Saddlehorn Pipeline, a segment of which was placed in service in the third quarter of 2016, and (ii) our 50% investment in Cheyenne Pipeline, as discussed above.

- Gulf Coast region — Revenues and volumes decreased primarily due to the sale of certain of our Gulf Coast pipelines in March 2016 and July 2016.

*Adjustments: Deficiencies under minimum volume commitments, net.* Many industry infrastructure projects developed and completed over the last several years were underpinned by long-term minimum volume commitment contracts whereby the shipper, based on an expectation of continued production growth, agreed to either: (i) ship and pay for certain stated volumes or (ii) pay the agreed upon price for a minimum contract quantity. The activity presented in the table above primarily reflects the amounts billed in the respective quarter under minimum volume commitment contracts. As production increased in the Permian Basin, shippers were able to fulfill the contracts. Accordingly, such amounts were lesser in magnitude for the first quarter of 2017.

*Segment General and Administrative Expenses.* The increase in segment general and administrative expenses (excluding equity-indexed compensation expense) for the three months ended March 31, 2017 compared to the three months ended March 31, 2016 was primarily due to costs associated with our acquisition activities.

*Equity-Indexed Compensation Expense.* The following table presents total equity-indexed compensation expense by segment (in millions):

| | Three Months Ended March 31, | | Favorable/ (Unfavorable) Variance |
|---|---|---|---|
| **Operating Segment** | **2017** | **2016** | |
| Transportation | $ 6 | $ 2 | $ (4) |
| Facilities | 3 | 1 | (2) |
| Supply and Logistics | 3 | 1 | (2) |
| | $ 12 | $ 4 | $ (8) |

Across all segments, equity-indexed compensation expense increased by $8 million for the three months ended March 31, 2017 compared to the same period in 2016, primarily due to more probable awards outstanding and a higher average value for those awards during the three months ended March 31, 2017 compared to the same period in 2016. See Note 16 to our Consolidated Financial Statements included in Part IV of our 2016 Annual Report on Form 10-K for additional information regarding our equity-indexed compensation plans.

*Maintenance Capital.* Maintenance capital consists of capital expenditures for the replacement of partially or fully depreciated assets in order to maintain the operating and/or earnings capacity of our existing assets. The decrease in maintenance capital for the three months ended March 31, 2017 compared to the same period in 2016 was primarily driven by the sale of certain Gulf Coast pipelines in March 2016 and July 2016.

**Facilities Segment**

Our Facilities segment operations generally consist of fee-based activities associated with providing storage, terminalling and throughput services for crude oil, refined products, NGL and natural gas, as well as NGL fractionation and isomerization services and natural gas and condensate processing services. The Facilities segment generates revenue through a combination of month-to-month and multi-year agreements and processing arrangements.

The following tables set forth our operating results from our Facilities segment:

| **Operating Results** (1)<br>**(in millions, except per barrel data)** | **Three Months Ended March 31, 2017** | **2016** | **Favorable/(Unfavorable)Variance $** | **%** |
|---|---|---|---|---|
| Revenues | $ 293 | $ 265 | $ 28 | 11 % |
| Natural gas related costs | (11) | (5) | (6) | (120)% |
| Field operating costs (2) | (82) | (85) | 3 | 4 % |
| Equity-indexed compensation expense - field operating costs | (1) | — | (1) | ** |
| Segment general and administrative expenses (2) (3) | (17) | (15) | (2) | (13)% |
| Equity-indexed compensation expense - general and administrative | (2) | (1) | (1) | ** |
| | | | | |
| Adjustments (4): | | | | |
| Deficiencies under minimum volume commitments, net | 6 | 7 | (1) | (14)% |
| Losses from derivative activities net of inventory valuation adjustments | 2 | — | 2 | ** |
| Equity-indexed compensation expense | — | 1 | (1) | ** |
| Segment adjusted EBITDA | $ 188 | $ 167 | $ 21 | 13 % |
| Maintenance capital | $ 27 | $ 9 | $ (18) | (200)% |
| Segment adjusted EBITDA per barrel | $ 0.47 | $ 0.44 | $ 0.03 | 7 % |

| **Volumes** (5) | **Three Months Ended March 31, 2017** | **2016** | **Favorable/(Unfavorable)Variance Volumes** | **%** |
|---|---|---|---|---|
| Crude oil, refined products and NGL terminalling and storage (average monthly capacity in millions of barrels) | 111 | 105 | 6 | 6 % |
| Rail load / unload volumes (average volumes in thousands of barrels per day) | 35 | 91 | (56) | (62)% |
| Natural gas storage (average monthly working capacity in billions of cubic feet) | 97 | 97 | — | — % |
| NGL fractionation (average volumes in thousands of barrels per day) | 125 | 115 | 10 | 9 % |
| Facilities segment total volumes (average monthly volumes in millions of barrels) (6) | 132 | 127 | 5 | 4 % |

** Indicates that variance as a percentage is not meaningful.

(1) Revenues and costs and expenses include intersegment amounts.

(2) Field operating costs and Segment general and administrative expenses exclude equity-indexed compensation expense, which is presented separately in the table above.

(3) Segment general and administrative expenses reflect direct costs attributable to each segment and an allocation of other expenses to the segments. The proportional allocations by segment require judgment by management and are based on the business activities that exist during each period.

(4) Represents adjustments included in the performance measure utilized by our CODM in the evaluation of segment results. See Note 13 to our Condensed Consolidated Financial Statements for additional discussion of such adjustments.

(5) Average monthly volumes are calculated as total volumes for the period divided by the number of months in the period.

(6) Facilities segment total volumes is calculated as the sum of: (i) crude oil, refined products and NGL terminalling and storage capacity; (ii) rail load and unload volumes multiplied by the number of days in the period and divided by the number of months in the period; (iii) natural gas storage working capacity divided by 6 to account for the 6:1 mcf of natural gas to crude Btu equivalent ratio and further divided by 1,000 to convert to monthly volumes in millions; and

(iv) NGL fractionation volumes multiplied by the number of days in the period and divided by the number of months in the period.

The following is a discussion of items impacting Facilities segment operating results for the periods indicated.

*Revenues and Volumes.* Variances in revenues and average monthly volumes for the comparative periods were driven by:

- NGL Storage, NGL Fractionation and Canadian Natural Gas Processing — Revenues increased by $33 million primarily due to contributions from the Western Canada NGL assets we acquired in August 2016 and also from higher fees at certain of our NGL storage and fractionation facilities, which were largely offset in our Supply and Logistics segment results.

- Rail Terminals — Revenues decreased by $8 million primarily due to lower volumes at our U.S. terminals resulting from less favorable market conditions, partially offset by revenues and volumes from our Fort Saskatchewan rail terminal that came on line in April 2016.

- Crude Oil Storage — Revenues decreased by $3 million primarily due to (i) lower results related to the sale of certain of our East Coast terminals in April 2016 and (ii) decreased utilization at certain of our West Coast terminals. Such decreases were partially offset by increased revenues from our St. James and Cushing terminals due to aggregate capacity expansions of over 2.5 million barrels and higher ancillary fees.

*Field Operating Costs.* The decrease in field operating costs (excluding equity-indexed compensation expense) for the three months ended March 31, 2017 compared to the three months ended March 31, 2016 was primarily due to reduced rail activity and cost reduction efforts. Such decreases were largely offset by an increase in operating costs associated with the Western Canada NGL assets acquired in August 2016.

*Equity-indexed compensation expense.* See "—Analysis of Operating Segments—Transportation Segment" for discussion of equity-indexed compensation expense for the periods presented.

*Maintenance Capital.* The increase in maintenance capital for the three months ended March 31, 2017 compared to the same period in 2016 was primarily due to increased investment in our integrity management program, primarily on assets at our West Coast terminals.

**Supply and Logistics Segment**

Our revenues from supply and logistics activities reflect the sale of gathered and bulk-purchased crude oil, as well as sales of NGL volumes purchased from suppliers and natural gas sales attributable to the activities performed by our natural gas storage commercial optimization group. Generally, our segment profit is impacted by (i) increases or decreases in our Supply and Logistics segment volumes (which consist of lease gathering crude oil purchases volumes, NGL sales volumes and waterborne cargos), (ii) the effects of competition on our lease gathering and NGL margins and (iii) the overall volatility and strength or weakness of market conditions and the allocation of our assets among our various risk management strategies. In addition, the execution of our risk management strategies in conjunction with our assets can provide upside in certain markets. Although segment profit may be adversely affected during certain transitional periods as discussed further below, our crude oil and NGL supply, logistics and distribution operations are not directly affected by the absolute level of prices, but are affected by overall levels of supply and demand for crude oil and NGL and relative fluctuations in market-related indices.

The following tables set forth our operating results from our Supply and Logistics segment:

| **Operating Results (1)** <br> **(in millions, except per barrel data)** | **Three Months Ended March 31,** <br> **2017** | <br> **2016** | **Favorable/(Unfavorable)Variance** <br> **$** | <br> **%** |
|---|---|---|---|---|
| Revenues | $ 6,400 | $ 3,821 | $ 2,579 | 67 % |
| Purchases and related costs | (5,970) | (3,677) | (2,293) | (62)% |
| Field operating costs (2) | (67) | (81) | 14 | 17 % |
| Equity-indexed compensation expense - field operating costs | — | — | — | ** |
| Segment general and administrative expenses (2) (3) | (23) | (25) | 2 | 8 % |
| Equity-indexed compensation expense - general and administrative | (3) | (1) | (2) | ** |
| | | | | |
| Adjustments (4): | | | | |
| (Gains)/losses from derivative activities net of inventory valuation adjustments | (291) | 122 | (413) | ** |
| Long-term inventory costing adjustments | 7 | 23 | (16) | ** |
| Net (gain)/loss on foreign currency revaluation | (4) | 1 | (5) | ** |
| Equity-indexed compensation expense | 2 | 1 | 1 | ** |
| Segment adjusted EBITDA | $ 51 | $ 184 | $ (133) | (72)% |
| Maintenance capital | $ 3 | $ 3 | $ — | — % |
| Segment adjusted EBITDA per barrel | $ 0.45 | $ 1.65 | $ (1.20) | (73)% |

| **Average Daily Volumes** <br> **(in thousands of barrels per day)** | **Three Months Ended March 31,** <br> **2017** | <br> **2016** | **Favorable/(Unfavorable)Variance** <br> **Volumes** | <br> **%** |
|---|---|---|---|---|
| Crude oil lease gathering purchases | 916 | 913 | 3 | — % |
| NGL sales | 351 | 308 | 43 | 14 % |
| Waterborne cargos | 7 | 7 | — | — % |
| Supply and Logistics segment total | 1,274 | 1,228 | 46 | 4 % |

** Indicates that variance as a percentage is not meaningful.

(1) Revenues and costs include intersegment amounts.

(2) Field operating costs and Segment general and administrative expenses exclude equity-indexed compensation expense, which is presented separately in the table above.

(3) Segment general and administrative expenses reflect direct costs attributable to each segment and an allocation of other expenses to the segments. The proportional allocations by segment require judgment by management and are based on the business activities that exist during each period.

(4) Represents adjustments included in the performance measure utilized by our CODM in the evaluation of segment results. See Note 13 to our Condensed Consolidated Financial Statements for additional discussion of such adjustments.

The following table presents the range of the NYMEX WTI benchmark price of crude oil (in dollars per barrel):

| | **NYMEX WTI Crude Oil Price** <br> **Low** | <br> **High** |
|---|---|---|
| Three months ended March 31, 2017 | $ 47 | $ 54 |
| Three months ended March 31, 2016 | $ 26 | $ 41 |

Because the commodities that we buy and sell are generally indexed to the same pricing indices for both sales and purchases, revenues and costs related to purchases will fluctuate with market prices. However, the margins related to those sales and purchases will not necessarily have a corresponding increase or decrease. The absolute amount of our revenues and purchases increased for the three months ended March 31, 2017 compared to the same period in 2016 primarily due to higher crude oil prices. Additionally, revenues were impacted by gains from certain derivative activities.

Generally, we expect a base level of earnings from our Supply and Logistics segment from the assets employed by this segment. This base level may be optimized and enhanced when there is a high level of market volatility, favorable basis differentials and/or a steep contango or backwardated market structure. During certain transitional periods, such as the current extended period of lower crude oil prices, our ability to generate above base-level earnings is challenging, and taking into account the overcapacity of midstream assets and increased competition that currently exists in most crude oil producing regions, generating even baseline-level performance is challenging. Our NGL operations are also impacted by similar competitive pressures. In addition, our NGL operations are sensitive to weather-related demand, particularly during the approximate five-month peak heating season of November through March, and temperature differences from period-to-period may have a significant effect on NGL demand and thus our financial performance.

The following is a discussion of items impacting Supply and Logistics segment operating results for the periods indicated.

*Net Revenues and Volumes.* Our Supply and Logistics segment revenues, net of purchases and related costs, increased by $286 million for the three months ended March 31, 2017 compared to the three months ended March 31, 2016, as gains from certain derivative activities (as discussed further below) more than offset lower results from less favorable market conditions. The following summarizes the significant items impacting the comparative periods:

- Impact from Certain Derivative Activities Net of Inventory Valuation Adjustments — The impact from certain derivative activities on our net revenues includes mark-to-market and other gains and losses resulting from certain derivative instruments that are related to underlying activities in another period (or the reversal of mark-to-market gains and losses from a prior period) and inventory valuation adjustments, as applicable. See Note 10 to our Condensed Consolidated Financial Statements for a comprehensive discussion regarding our derivatives and risk management activities. These gains and losses impact our net revenues but are excluded from segment adjusted EBITDA and thus are reflected as an “Adjustment” in the table above.

- Crude Oil Operations — Net revenues from our crude oil supply and logistics activities decreased for the three months ended March 31, 2017 as compared to the same 2016 period, primarily due to continued and intensifying competition, largely due to overbuilt infrastructure underwritten with volume commitments and the effect of such on differentials, as well as volume declines in certain areas, which negatively impacted our unit margins. See the “Outlook” section below for additional discussion of recent market conditions.

- NGL Operations — Net revenues from our NGL operations decreased for the three months ended March 31, 2017 as compared to the three months ended March 31, 2016, largely due to (i) higher supply costs driven by competition, which more than offset higher sales volume from the Western Canada NGL assets acquired in August 2016, (ii) warmer weather during the 2016-2017 heating season and (iii) higher storage and processing fees for the 2017 period, which were largely offset in our Facilities segment results.

- Long-Term Inventory Costing Adjustments — Our net revenues are impacted by changes in the weighted average cost of our crude oil and NGL inventory pools that result from price movements during the periods. These costing adjustments related to long-term inventory necessary to meet our minimum inventory requirements in third-party assets and other working inventory that was needed for our commercial operations. We consider this inventory necessary to conduct our operations and we intend to carry this inventory for the foreseeable future. These costing adjustments impact our net revenues but are excluded from segment adjusted EBITDA and thus are reflected as an “Adjustment” in the table above.

- Foreign Exchange Impacts — Our net revenues are impacted by fluctuations in the value of CAD to USD, resulting in foreign exchange gains and losses on U.S. denominated net assets within our Canadian operations. In addition, the appreciation of CAD relative to USD resulted in higher net USD costs of approximately $4 million for the three months ended March 31, 2017 compared to the same period in 2016. Such costs are primarily associated with intercompany facility fees and are largely offset in our Facilities segment results.

*Field Operating Costs.* The decrease in field operating costs (excluding equity-indexed compensation expense) for the three months ended March 31, 2017 compared to the three months ended March 31, 2016 was primarily due to a combination of lower driver wages, shorter truck hauls and reduced use of third party trucking services as pipeline expansion projects were placed into service.

*Equity-indexed compensation expense.* See "—Analysis of Operating Segments—Transportation Segment" for discussion of equity-indexed compensation expense for the periods presented.

***Other Income and Expenses***

**Depreciation and Amortization**

Depreciation and amortization expense for the three months ended March 31, 2017 and 2016 includes net gains of approximately $4 million and $6 million, respectively, which were primarily associated with non-core asset sales during the periods. Excluding such gains, depreciation and amortization expense increased for the three months ended March 31, 2017 compared to the three months ended March 31, 2016 primarily due to additional depreciation and amortization expense associated with recently acquired assets and the completion of various capital expansion projects, partially offset by the write-off in 2016 of $10 million of costs associated with the discontinuation of certain capital projects.

**Interest Expense**

The increase in interest expense for the three months ended March 31, 2017 over the three months ended March 31, 2016 was primarily due to (i) lower capitalized interest driven by fewer capital projects under construction and (ii) a higher weighted average debt balance.

**Other Income/(Expense), Net**

Other income/(expense), net for the three months ended March 31, 2017 was impacted by a loss of $4 million related to the mark-to-market adjustment of the Preferred Distribution Rate Reset Option. See Note 10 to our Condensed Consolidated Financial Statements for additional information. Excluding such loss, Other income/(expense), net for the periods presented was primarily comprised of gains or losses from the revaluation of foreign currency transactions and monetary assets and liabilities.

**Income Tax Expense**

Income tax expense increased for the three months ended March 31, 2017 compared to the three months ended March 31, 2016 primarily due to (i) higher year-over-year income as impacted by fluctuations in derivative mark-to-market valuations in our Canadian operations, (ii) higher deferred tax expense associated with the amortization of our deferred tax asset, and (iii) higher deferred tax expense recorded in the first quarter of 2017 related to a change in our effective tax rate.

On April 26, 2017, the White House issued a one-page outline for proposed changes to the U.S. tax code. In the current proposed tax reform plan, federal corporate income tax rates would be decreased from 35% to 15%. PAGP's deferred tax balances are calculated based on the tax rates in effect during the period. A change in federal corporate income tax rates for a current or future period is recorded as a component of the income tax provision for the period in which the law is enacted to change current or future tax rates. A reduction in the corporate federal income tax rate to 15%, as currently proposed, would result in a write-off of a portion of the deferred tax asset through income tax expense in the period the change is enacted.

**Outlook**

***Market Overview and Outlook***

See "Management's Discussion and Analysis of Financial Condition and Results of Operations-Market Overview and Outlook" included in Item 7 of our 2016 Annual Report on Form 10-K for a discussion of historical crude oil market conditions and our view on potential drilling and production activity levels. The increase in crude oil prices during the fourth quarter of 2016 and early 2017 led to increased rig activity in areas where we anticipated production levels to increase, most notably the Permian Basin and the STACK resource play in Oklahoma.

Producer drilling activity has been rising in many of the producing basins where we operate. For example, since early February 2017, Permian Basin rig counts have increased by over 20%, adding approximately 60 rigs over the ensuing three month period. In addition, upstream acreage acquisition activity in the Permian Basin continued throughout the first quarter of 2017, with over $7 billion in acreage transactions announced, which involved meaningful positions located in the Northern Delaware Basin. Current rig counts do not fully reflect the expected increase associated with certain of these transactions. In addition to increases in well productivity, we expect a continuation of a time lag between increased drilling activity and increased production as producers shift to multiple well pad operations and delayed scheduling of completion activities.

Taking all of these factors into account, we continue to expect production levels to ramp up in the second half of this year. The increased production levels should increase pipeline utilization in our Transportation Segment. Longer term, we believe rising production levels will also provide some potential relief on the margin compression we have been experiencing within our Supply and Logistics segment. However, we can provide no assurance that the improvement in market conditions will be achieved or that we will not be negatively impacted by declining crude oil supply, lower commodity prices, reduced producer activity levels, competition for incremental volumes, reduced margins, low levels of volatility, challenging capital markets conditions or other related factors. Additionally, construction of additional infrastructure by us and our competitors could lead to even greater levels of excess takeaway capacity in certain areas for the near- to medium-term, which could further reduce unit margins in our various segments, and which could be exacerbated by declining levels of crude oil production. Finally, we cannot be certain that our expansion efforts will generate targeted returns or that any recently completed or future acquisition activities will be successful. See “Risk Factors—Risks Related to PAA’s Business” discussed in Item 1A of our 2016 Annual Report on Form 10-K.

***Outlook for Certain Idled and Underutilized Assets***

During 2015, we shut down Line 901 and a portion of Line 903 in California following the release of crude oil (see Note 12 to our Condensed Consolidated Financial Statements for additional information). During the period since these pipelines were idled, we have been assessing potential alternatives in order to return them to operation. Some of the alternatives under consideration could result in incurring costs associated with retiring certain assets or an impairment of some or all of the carrying value of the idled property and equipment, which was approximately $94 million as of March 31, 2017 and December 31, 2016.

We own a 54% undivided joint interest in the Capline Pipeline (“Capline”) system, which originates in St. James, Louisiana and terminates in Patoka, Illinois. We anticipate the construction of new crude oil pipeline infrastructure and the ongoing changing crude oil flows in the United States may result in a decline in volumes on the Capline system in future years to levels that cannot sustain operations. The owners of the Capline system are considering various alternatives for the use of the pipeline system, including an assessment of the commercial potential to reverse the pipeline direction within the next several years. Developments in the commercial outlook for the Capline system could result in incurring costs associated with retiring certain assets or an impairment of the carrying value of our interest in the Capline system, which was $201 million and $227 million at March 31, 2017 and December 31, 2016, respectively.

**Liquidity and Capital Resources**

***General***

On a consolidated basis, our primary sources of liquidity are (i) cash flow from operating activities, (ii) borrowings under PAA's credit facilities or the PAA commercial paper program and (iii) funds received from sales of equity and debt securities. In addition, we may supplement these sources of liquidity with proceeds from our non-core asset sales program, as further discussed below in the section entitled “—Acquisitions, Investments, Expansion Capital Expenditures and Divestitures.” Our primary cash requirements include, but are not limited to, (i) ordinary course of business uses, such as the payment of amounts related to the purchase of crude oil, NGL and other products and other expenses and interest payments on outstanding debt, (ii) expansion and maintenance activities, (iii) acquisitions of assets or businesses, (iv) repayment of principal on long-term debt and (v) distributions to our Class A shareholders and noncontrolling interests. We generally expect to fund our short-term cash requirements through cash flow generated from operating activities and/or borrowings under the PAA commercial paper program or PAA's credit facilities. In addition, we generally expect to fund our long-term needs, such as those resulting from expansion activities or acquisitions and refinancing long-term debt, through a variety of sources (either separately or in combination), which may include the sources mentioned above as funding for short-term needs and/or the issuance of additional equity or debt securities. As of March 31, 2017, we had a working capital surplus of $56 million and approximately $2.8 billion of liquidity available to meet our ongoing operating, investing and financing needs, subject to continued covenant compliance, as noted below (in millions):

| | | As of March 31, 2017 |
|---|---|---|
| Availability under PAA senior unsecured revolving credit facility [1] [2] | $ | 1,582 |
| Availability under PAA senior secured hedged inventory facility [1] [2] | | 1,091 |
| Availability under PAA senior unsecured 364-day revolving credit facility | | 1,000 |
| Amounts outstanding under PAA commercial paper program | | (958) |
| Subtotal | | 2,715 |
| Cash and cash equivalents | | 41 |
| Total | $ | 2,756 |

(1) Represents availability prior to giving effect to amounts outstanding under the PAA commercial paper program, which reduce available capacity under the facilities.

(2) Available capacity was reduced by outstanding letters of credit of $77 million, comprised of $18 million under the PAA senior unsecured revolving credit facility and $59 million under the PAA senior secured hedged inventory facility.

We believe that we have, and will continue to have, the ability to access the PAA commercial paper program and credit facilities, which we use to meet our short-term cash needs. We believe that our financial position remains solid and we have sufficient liquidity; however, extended disruptions in the financial markets and/or energy price volatility that adversely affect our business may have a materially adverse effect on our financial condition, results of operations or cash flows. Also, see Item 1A. “Risk Factors” of our 2016 Annual Report on Form 10-K for further discussion regarding such risks that may impact our liquidity and capital resources. Usage of the PAA credit facilities, which provide the backstop for the PAA commercial paper program, is subject to ongoing compliance with covenants. As of March 31, 2017, PAA was in compliance with all such covenants.

***Cash Flow from Operating Activities***

For a comprehensive discussion of the primary drivers of cash flow from operating activities, including the impact of varying market conditions and the timing of settlement of our derivatives, see Item 7. “Liquidity and Capital Resources—Cash Flow from Operating Activities” included in our 2016 Annual Report on Form 10-K.

Net cash provided by operating activities for the first three months of 2017 and 2016 was $815 million and $631 million, respectively, and primarily resulted from earnings from our operations. Net cash provided by operating activities for the 2017 period was also positively impacted by a decrease in margin balances required as part of our hedging activities that were funded by short-term debt. Additionally, as discussed further below, changes in our inventory levels during these periods impacted our cash flow from operating activities.

During the three months ended March 31, 2017, we decreased the overall volume of inventory that we held, primarily due to the seasonal sale of NGL and natural gas inventory resulting in a favorable impact on our cash provided by operating activities. However, the favorable effects from liquidation of such inventory were partially offset by higher prices for crude oil inventory that was purchased and stored at the end of the quarter due to contango market conditions.

During the three months ended March 31, 2016, we decreased the overall volume of inventory that we held, primarily due to the seasonal sale of NGL and natural gas inventory. The net proceeds received from liquidation of such inventory were used to repay borrowings under our commercial paper program and favorably impacted cash flow from operating activities during the period. Additionally, lower inventory levels were further impacted by lower prices for such inventory stored at the end of the quarter compared to the prior year end. However, the favorable effects from liquidation of our NGL and natural gas inventory were partially offset by increased levels of crude oil inventory purchased and stored due to contango market conditions.

*Minimum Volume Commitments.* We have certain agreements that require counterparties to deliver, transport or throughput a minimum volume over an agreed upon period. Some of these agreements include make-up rights if the minimum volume is not met. We record a receivable from the counterparty in the period that services are provided or when the transaction occurs, including amounts for deficiency obligations from counterparties associated with minimum volume commitments. If a counterparty has a make-up right associated with a deficiency, we defer the revenue attributable to the counterparty make-up right and subsequently recognize the revenue at the earlier of when the deficiency volume is delivered or shipped, when the make-up right expires or when it is determined that the counterparty’s ability to utilize the make-up right is remote. Deferred revenue associated with non-performance under minimum volume contracts could be significant and could adversely affect our profitability and earnings, but generally does not impact our liquidity.

At March 31, 2017 and December 31, 2016, counterparty deficiencies associated with agreements that include minimum volume commitments totaled $74 million and $66 million, respectively, of which $62 million and $54 million, respectively, was recorded as deferred revenue. The balance of $12 million at each respective date was related to deficiencies for which the counterparties had not met their contractual minimum commitments and were not reflected in our Condensed Consolidated Financial Statements as we had not yet billed or collected such amounts.

***Acquisitions, Investments, Expansion Capital Expenditures and Divestitures***

In addition to our operating needs discussed above, on a consolidated basis, we also use cash for our acquisition activities and expansion capital projects. Historically, we have financed these expenditures primarily with cash generated by operating activities and the financing activities discussed in "—Equity and Debt Financing Activities" below. In the near term, we also intend to use proceeds from our asset sales program, as discussed further below. We have made and will continue to make capital expenditures for acquisitions, expansion capital and maintenance capital.

*Acquisitions*. During the three months ended March 31, 2017 and 2016, we paid cash of $1.254 billion (net of cash acquired of $4 million) and $85 million, respectively, for acquisitions. The acquisitions completed during the three months ended March 31, 2017 primarily included the ACC System located in the Northern Delaware Basin in Southeastern New Mexico and West Texas. See Note 6 to our Condensed Consolidated Financial Statements for additional information regarding the ACC Acquisition. The ACC Acquisition was initially funded through borrowings under PAA's senior unsecured revolving credit facility. Such borrowings were subsequently repaid with proceeds from PAA's March 2017 issuance of its common units to AAP pursuant to the Omnibus Agreement and in connection with our underwritten equity offering.

On April 3, 2017, we and an affiliate of Noble Midstream Partners LP completed the acquisition of Advantage Pipeline, L.L.C. for a purchase price of $133 million through a newly formed 50/50 joint venture. For our 50% share ($66.5 million), we contributed approximately 1.3 million PAA common units and approximately $26 million in cash.

*2017 Capital Projects.* We invested approximately $307 million in midstream infrastructure during the three months ended March 31, 2017, and we expect to invest approximately $900 million during the year ended December 31, 2017. See "—Acquisitions and Capital Projects" for detail of our projected capital expenditures for the year ending December 31, 2017. The majority of funding for our 2017 capital program was provided by proceeds from equity issuances during the first quarter of 2017, with the remaining funding expected to be provided by the sale of various non-core assets throughout the year.

*Divestitures*. Our strategic divestiture program includes the evaluation of potential sales of non-core assets and/or sales of partial interests in assets to strategic joint venture partners to optimize our asset portfolio and strengthen our balance sheet and leverage metrics. We sold certain non-core assets for proceeds of $161 million during the three months ended March 31, 2017, and we expect to close an additional approximately $500 million of sales during the second quarter or early in the third quarter of 2017, subject to customary closing conditions. See Note 6 to our Condensed Consolidated Financial Statements for additional information regarding these asset sales and divestitures.

***Equity and Debt Financing Activities***

On a consolidated basis, our financing activities primarily relate to funding expansion capital projects, acquisitions and refinancing of debt maturities, as well as short-term working capital and hedged inventory borrowings related to our NGL business and contango market activities. Our financing activities have primarily consisted of equity offerings, PAA senior notes offerings and borrowings and repayments under the credit facilities or the PAA commercial paper program, as well as payment of distributions to our Class A shareholders and noncontrolling interests.

*Registration Statements.* We have filed with the SEC a universal shelf registration statement that, subject to effectiveness at the time of use, allows us to issue up to an aggregate of $1.0 billion of equity securities (the "Traditional Shelf"). Our issuances of equity securities associated with our Continuous Offering Program have been issued pursuant to the Traditional Shelf. At March 31, 2017, we had approximately $939 million of unsold securities available under the Traditional Shelf. Additionally, in February 2017, we filed a universal shelf registration statement (the "WKSI Shelf"), which provides us with the ability to offer and sell an unlimited amount of equity securities, subject to market conditions and capital needs. Our Underwritten Offering, discussed further below, was conducted under our WKSI Shelf.

*Sales of Class A Shares*. The following table summarizes our sales of Class A shares during the three months ended March 31, 2017 (net proceeds in millions):

| Type of Offering | Class A Shares Issued | | Net Proceeds [1] | |
|---|---|---|---|---|
| Continuous Offering Program | 1,786,326 | $ | 61 | [2] [3] |
| Underwritten Offering | 48,300,000 | | 1,474 | [3] |
| | **50,086,326** | **$** | **1,535** | |

[1] Amounts are net of costs associated with the offerings.

[2] We pay commissions to our sales agents in connection with issuances of Class A shares under our Continuous Offering Program. We paid $1 million of such commissions during the three months ended March 31, 2017.

[3] Pursuant to the Omnibus Agreement entered into in conjunction with the Simplification Transactions, we used the net proceeds from the sale of our Class A shares, after deducting the sales agents' commissions and offering expenses, to purchase from AAP a number of AAP units equal to the number of Class A shares sold in such offering at a price equal to the net proceeds from such offering. Also pursuant to the Omnibus Agreement, immediately following such purchase and sale, AAP used the net proceeds it received from such sale of AAP units to us to purchase from PAA an equivalent number of common units of PAA. See "—Subsidiary Sales of Common Units" below.

*PAA Registration Statements.* PAA periodically accesses the capital markets for both equity and debt financing. PAA has filed with the SEC a universal shelf registration statement that, subject to effectiveness at the time of use, allows PAA to issue up to an aggregate of $2.0 billion of debt or equity securities (the "PAA Traditional Shelf"). All issuances of PAA equity securities associated with PAA's Continuous Offering Program have been issued pursuant to the PAA Traditional Shelf. At March 31, 2017, PAA had approximately $1.1 billion of unsold securities available under the Traditional Shelf. PAA also has access to a universal shelf registration statement (the "PAA WKSI Shelf"), which provides it with the ability to offer and sell an unlimited amount of debt and equity securities, subject to market conditions and capital needs. PAA did not conduct any offerings under the PAA WKSI Shelf during the three months ended March 31, 2017.

*PAA Continuous Offering Program.* During the three months ended March 31, 2017, PAA issued an aggregate of approximately 4.0 million common units under its continuous offering program, generating proceeds of $129 million, net of $1 million of commissions paid to its sales agents.

*PAA Unit Issuances Under Omnibus Agreement.* During the three months ended March 31, 2017, pursuant to the Omnibus Agreement discussed above, PAA sold (i) approximately 1.8 million common units to AAP in connection with our issuance of Class A shares under our Continuous Offering Program and (ii) 48.3 million common units to AAP in connection with our underwritten offering.

*Credit Agreements, Commercial Paper Program and Indentures.* The PAA credit agreements (which impact the ability to access the PAA commercial paper program because they provide the backstop that supports PAA's short-term credit ratings) and the indentures governing PAA's senior notes contain cross-default provisions. A default under the credit agreements would permit the lenders to accelerate the maturity of the outstanding debt. As long as PAA is in compliance with the provisions in the credit agreements, its ability to make distributions of available cash is not restricted. As of March 31, 2017, PAA was in compliance with the covenants contained in the credit agreements and indentures.

On a consolidated basis, during the three months ended March 31, 2017, we had net repayments under PAA's credit facilities and PAA commercial paper program of $352 million. The net repayments resulted primarily from cash flow from operating activities and cash received from equity activities, which offset borrowings during the period related to funding needs for (i) acquisition and capital investments, (ii) inventory purchases and related margin balances required as part of our hedging activities, (iii) repayment of PAA's $400 million, 6.13% senior notes in January 2017 and (iv) other general partnership purposes.

During the three months ended March 31, 2016, we had net repayments under the credit facilities and the PAA commercial paper program of $1.5 billion. These net repayments resulted primarily from cash flow from operating activities, including sales of NGL and natural gas inventory that was liquidated during the period, as well as cash received from equity activities.

***Distributions to Our Class A Shareholders and Noncontrolling Interests***

*Distributions to our Class A shareholders.* We distribute all of our available cash within 55 days following the end of each quarter to Class A shareholders of record. Available cash is generally defined as all of our cash and cash equivalents on hand at the end of each quarter less reserves established in the discretion of our general partner for future requirements. On May 15, 2017, we will pay a quarterly distribution of $0.55 per Class A share, which is unchanged from our prior two quarterly distributions, but represents a year-over-year distribution decrease of approximately 11%. See Note 9 to our Condensed Consolidated Financial Statements for details of distributions paid during or pertaining to the first three months of 2017. Also, see Item 5. “Market for Registrant’s Shares, Related Shareholder Matters and Issuer Purchases of Equity Securities—Cash Distribution Policy” included in our 2016 Annual Report on Form 10-K for additional discussion regarding distributions.

*Distributions to noncontrolling interests.* Distributions to noncontrolling interests represent amounts paid on interests in consolidated entities that are not owned by us. During the three months ended March 31, 2017 and 2016, we paid distributions of approximately $315 million and $375 million, respectively, to noncontrolling interests.

We believe that we have sufficient liquid assets, cash flow from operating activities and borrowing capacity under the credit agreements to meet our financial commitments, debt service obligations, contingencies and anticipated capital expenditures. We are, however, subject to business and operational risks that could adversely affect our cash flow. A prolonged material decrease in our cash flows would likely produce an adverse effect on our borrowing capacity.

**Contingencies**

For a discussion of contingencies that may impact us, see Note 12 to our Condensed Consolidated Financial Statements.

**Commitments**

*Contractual Obligations.* In the ordinary course of doing business, we purchase crude oil and NGL from third parties under contracts, the majority of which range in term from thirty-day evergreen to five years, with a limited number of contracts with remaining terms extending up to approximately nine years. We establish a margin for these purchases by entering into various types of physical and financial sale and exchange transactions through which we seek to maintain a position that is substantially balanced between purchases on the one hand and sales and future delivery obligations on the other. In addition, we enter into similar contractual obligations in conjunction with our natural gas operations. The table below includes purchase obligations related to these activities. Where applicable, the amounts presented represent the net obligations associated with our counterparties (including giving effect to netting buy/sell contracts and those subject to a net settlement arrangement). We do not expect to use a significant amount of internal capital to meet these obligations, as the obligations will be funded by corresponding sales to entities that we deem creditworthy or who have provided credit support we consider adequate.

The following table includes our best estimate of the amount and timing of these payments as well as others due under the specified contractual obligations as of March 31, 2017 (in millions):

| | Remainder of 2017 | 2018 | 2019 | 2020 | 2021 | 2022 and Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Long-term debt, including current maturities and related interest payments (1) | $ 360 | $ 1,054 | $ 1,270 | $ 870 | $ 940 | $ 11,054 | $ 15,548 |
| Leases and rights-of-way easements (2) | 143 | 167 | 142 | 119 | 98 | 447 | 1,116 |
| Other obligations (3) | 482 | 209 | 155 | 131 | 128 | 436 | 1,541 |
| Subtotal | 985 | 1,430 | 1,567 | 1,120 | 1,166 | 11,937 | 18,205 |
| Crude oil, natural gas, NGL and other purchases (4) | 4,626 | 2,992 | 2,395 | 1,653 | 1,460 | 4,832 | 17,958 |
| Total | $ 5,611 | $ 4,422 | $ 3,962 | $ 2,773 | $ 2,626 | $ 16,769 | $ 36,163 |

(1) Includes debt service payments, interest payments due on PAA’s senior notes, the commitment fee on assumed available capacity under the PAA credit facilities. Although there may be short-term borrowings under the PAA credit facilities and the PAA commercial paper program, we historically repay and borrow at varying amounts. As such, we have included only the maximum commitment fee (as if no short-term borrowings were outstanding on the PAA credit facilities or the PAA commercial paper program) in the amounts above.

(2) Leases are primarily for (i) surface rentals, (ii) office rent, (iii) pipeline assets and (iv) trucks, trailers and railcars. Includes capital and operating leases as defined by FASB guidance, as well as obligations for rights-of-way easements.

(3) Includes (i) other long-term liabilities, (ii) storage, processing and transportation agreements and (iii) non-cancelable commitments related to our capital expansion projects, including projected contributions for our share of the capital spending of our equity method investments. The transportation agreements include approximately $830 million associated with an agreement to transport crude oil on a pipeline that is owned by an equity method investee, in which we own a 50% interest. Our commitment to transport is supported by crude oil buy/sell agreements with third parties (including Oxy) with commensurate quantities.

(4) Amounts are primarily based on estimated volumes and market prices based on average activity during March 2017. The actual physical volume purchased and actual settlement prices will vary from the assumptions used in the table. Uncertainties involved in these estimates include levels of production at the wellhead, weather conditions, changes in market prices and other conditions beyond our control.

*Letters of Credit.* In connection with supply and logistics activities, we provide certain suppliers with irrevocable standby letters of credit to secure our obligation for the purchase of crude oil, NGL and natural gas. Additionally, we issue letters of credit to support insurance programs, derivative transactions and construction activities. At March 31, 2017 and December 31, 2016, we had outstanding letters of credit of approximately $77 million and $73 million, respectively.

**Off-Balance Sheet Arrangements**

We have no off-balance sheet arrangements as defined by Item 303 of Regulation S-K.

**Recent Accounting Pronouncements**

See Note 2 to our Condensed Consolidated Financial Statements.

**Critical Accounting Policies and Estimates**

For a discussion regarding our critical accounting policies and estimates, see “Critical Accounting Policies and Estimates” under Item 7 of our 2016 Annual Report on Form 10-K.

## FORWARD-LOOKING STATEMENTS

All statements included in this report, other than statements of historical fact, are forward-looking statements, including but not limited to statements incorporating the words “anticipate,” “believe,” “estimate,” “expect,” “plan,” “intend” and “forecast,” as well as similar expressions and statements regarding our business strategy, plans and objectives for future operations. The absence of such words, expressions or statements, however, does not mean that the statements are not forward-looking. Any such forward-looking statements reflect our current views with respect to future events, based on what we believe to be reasonable assumptions. Certain factors could cause actual results or outcomes to differ materially from the results or outcomes anticipated in the forward-looking statements. The most important of these factors include, but are not limited to:

- our ability to pay distributions to our Class A shareholders;
- our expected receipt of, and amounts of, distributions from Plains AAP, L.P.;
- declines in the volume of crude oil and NGL shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of our assets, whether due to declines in production from existing oil and gas reserves, reduced demand, failure to develop or slowdown in the development of additional oil and gas reserves, whether from reduced cash flow to fund drilling or the inability to access capital, or other factors;
- the effects of competition;
- market distortions caused by producer over-commitments to new or recently constructed infrastructure projects, which impacts volumes, margins, returns and overall earnings;
- unanticipated changes in crude oil market structure, grade differentials and volatility (or lack thereof);
- environmental liabilities or events that are not covered by an indemnity, insurance or existing reserves;

- maintenance of PAA's credit rating and ability to receive open credit from suppliers and trade counterparties;
- fluctuations in refinery capacity in areas supplied by our mainlines and other factors affecting demand for various grades of crude oil, refined products and natural gas and resulting changes in pricing conditions or transportation throughput requirements;
- the occurrence of a natural disaster, catastrophe, terrorist attack (including eco-terrorist attacks) or other event, including attacks on our electronic and computer systems;
- failure to implement or capitalize, or delays in implementing or capitalizing, on expansion projects, whether due to permitting delays, permitting withdrawals or other factors;
- tightened capital markets or other factors that increase our cost of capital or limit our ability to obtain debt or equity financing on satisfactory terms to fund additional acquisitions, expansion projects, working capital requirements and the repayment or refinancing of indebtedness;
- the successful integration and future performance of acquired assets or businesses and the risks associated with operating in lines of business that are distinct and separate from historical operations;
- the currency exchange rate of the Canadian dollar;
- continued creditworthiness of, and performance by, our counterparties, including financial institutions and trading companies with which we do business;
- inability to recognize current revenue attributable to deficiency payments received from customers who fail to ship or move more than minimum contracted volumes until the related credits expire or are used;
- non-utilization of our assets and facilities;
- increased costs, or lack of availability, of insurance;
- weather interference with business operations or project construction, including the impact of extreme weather events or conditions;
- the availability of, and our ability to consummate, acquisition or combination opportunities;
- the effectiveness of our risk management activities;
- shortages or cost increases of supplies, materials or labor;
- the impact of current and future laws, rulings, governmental regulations, accounting standards and statements, and related interpretations;
- fluctuations in the debt and equity markets, including the price of PAA's units at the time of vesting under its long-term incentive plans;
- risks related to the development and operation of our assets, including our ability to satisfy our contractual obligations to our customers;
- factors affecting demand for natural gas and natural gas storage services and rates;
- general economic, market or business conditions and the amplification of other risks caused by volatile financial markets, capital constraints and pervasive liquidity concerns; and
- other factors and uncertainties inherent in the transportation, storage, terminalling and marketing of crude oil and refined products, as well as in the storage of natural gas and the processing, transportation, fractionation, storage and marketing of natural gas liquids.

Other factors described herein, as well as factors that are unknown or unpredictable, could also have a material adverse effect on future results. Please read “Risk Factors” discussed in Item 1A of our 2016 Annual Report on Form 10-K. Except as required by applicable securities laws, we do not intend to update these forward-looking statements and information.

**Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are exposed to various market risks, including (i) commodity price risk, (ii) interest rate risk and (iii) currency exchange rate risk. We use various derivative instruments to manage such risks and, in certain circumstances, to realize incremental margin during volatile market conditions. Our risk management policies and procedures are designed to help ensure that our hedging activities address our risks by monitoring our exchange-cleared and over-the-counter positions, as well as physical volumes, grades, locations, delivery schedules and storage capacity. We have a risk management function that has direct responsibility and authority for our risk policies, related controls around commercial activities and certain aspects of corporate risk management. Our risk management function also approves all new risk management strategies through a formal process. The following discussion addresses each category of risk.

**Commodity Price Risk**

We use derivative instruments to hedge price risk associated with the following commodities:

- *Crude oil*

  We utilize crude oil derivatives to hedge commodity price risk inherent in our Supply and Logistics and Transportation segments. Our objectives for these derivatives include hedging anticipated purchases and sales, stored inventory, and storage capacity utilization. We manage these exposures with various instruments including exchange-traded and over-the-counter futures, forwards, swaps and options.

- *Natural gas*

  We utilize natural gas derivatives to hedge commodity price risk inherent in our Supply and Logistics and Facilities segments. Our objectives for these derivatives include hedging anticipated purchases and sales and managing our anticipated base gas requirements. We manage these exposures with various instruments including exchange-traded futures, swaps and options.

- *NGL and other*

  We utilize NGL derivatives, primarily butane and propane derivatives, to hedge commodity price risk inherent in our Supply and Logistics segment. Our objectives for these derivatives include hedging anticipated purchases and sales and stored inventory. We manage these exposures with various instruments including exchange-traded and over-the-counter futures, forwards, swaps and options.

See Note 10 to our Condensed Consolidated Financial Statements for further discussion regarding our hedging strategies and objectives.

The fair value of our commodity derivatives and the change in fair value as of March 31, 2017 that would be expected from a 10% price increase or decrease is shown in the table below (in millions):

| | Fair Value | Effect of 10% Price Increase | Effect of 10% Price Decrease |
|---|---|---|---|
| Crude oil | $ 4 | $ (84) | $ 85 |
| Natural gas | (7) | $ 11 | $ (11) |
| NGL and other | (3) | $ (43) | $ 43 |
| Total fair value | $ (6) | | |

The fair values presented in the table above reflect the sensitivity of the derivative instruments only and do not include the effect of the underlying hedged commodity. Price-risk sensitivities were calculated by assuming an across-the-board 10% increase or decrease in price regardless of term or historical relationships between the contractual price of the instruments and the underlying commodity price. In the event of an actual 10% change in near-term commodity prices, the fair value of our derivative portfolio would typically change less than that shown in the table as changes in near-term prices are not typically mirrored in delivery months further out.

**Interest Rate Risk**

Our use of variable rate debt and any forecasted issuances of fixed rate debt expose us to interest rate risk. Therefore, from time to time, we use interest rate derivatives to hedge interest rate risk associated with anticipated interest payments and, in certain cases, outstanding debt instruments. All of PAA's senior notes are fixed rate notes and thus are not subject to interest rate risk. Our variable rate debt outstanding at March 31, 2017, approximately $1.2 billion, was subject to interest rate re-sets that range from less than one week to approximately one month. The average interest rate on variable rate debt that was outstanding during the three months ended March 31, 2017 was 1.8%, based upon rates in effect during such period. The fair value of our interest rate derivatives was a liability of $43 million as of March 31, 2017. A 10% increase in the forward LIBOR curve as of March 31, 2017 would have resulted in an increase of $33 million to the fair value of our interest rate derivatives. A 10% decrease in the forward LIBOR curve as of March 31, 2017 would have resulted in a decrease of $33 million to the fair value of our interest rate derivatives. See Note 10 to our Condensed Consolidated Financial Statements for a discussion of our interest rate risk hedging activities.

**Currency Exchange Rate Risk**

We use foreign currency derivatives to hedge foreign currency exchange rate risk associated with our exposure to fluctuations in the USD-to-CAD exchange rate. Because a significant portion of our Canadian business is conducted in CAD and, at times, a portion of our debt is denominated in CAD, we use certain financial instruments to minimize the risks of unfavorable changes in exchange rates. These instruments include foreign currency exchange contracts, forwards and options. The fair value of our foreign currency derivatives was a liability of $2 million as of March 31, 2017. A 10% increase in the exchange rate (USD-to-CAD) would have resulted in a decrease of $25 million to the fair value of our foreign currency derivatives. A 10% decrease in the exchange rate (USD-to-CAD) would have resulted in an increase of $25 million to the fair value of our foreign currency derivatives. See Note 10 to our Condensed Consolidated Financial Statements for a discussion of our currency exchange rate risk hedging.

**Preferred Distribution Rate Reset Option**

The Preferred Distribution Rate Reset Option of PAA's Series A preferred units is an embedded derivative that must be bifurcated from the related host contract, PAA's partnership agreement, and recorded at fair value in our Condensed Consolidated Balance Sheets. The valuation model utilized for this embedded derivative contains inputs including PAA's common unit price, ten-year U.S. treasury rates and default probabilities to ultimately calculate the fair value of PAA's Series A preferred units with and without the Preferred Distribution Rate Reset Option. The fair value of this embedded derivative was a liability of $36 million as of March 31, 2017. A 10% increase in the fair value would have an impact of $4 million. A 10% decrease in the fair value would also have an impact of $4 million. See Note 10 to our Condensed Consolidated Financial Statements for a discussion of embedded derivatives.

## Item 4. CONTROLS AND PROCEDURES

***Disclosure Controls and Procedures***

We maintain written disclosure controls and procedures, which we refer to as our "DCP." Our DCP is designed to ensure that information required to be disclosed by us in reports that we file under the Securities Exchange Act of 1934 (the "Exchange Act") is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (ii) accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, to allow for timely decisions regarding required disclosure.

Applicable SEC rules require an evaluation of the effectiveness of our DCP. Management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our DCP as of March 31, 2017, the end of the period covered by this report, and, based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our DCP is effective.

***Changes in Internal Control over Financial Reporting***

In addition to the information concerning our DCP, we are required to disclose certain changes in internal control over financial reporting. There have been no changes in our internal control over financial reporting during the first quarter of 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

***Certifications***

The certifications of our Chief Executive Officer and Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a) are filed with this report as Exhibits 31.1 and 31.2. The certifications of our Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. 1350 are furnished with this report as Exhibits 32.1 and 32.2.

# PART II. OTHER INFORMATION

## Item 1. LEGAL PROCEEDINGS

The information required by this item is included in Note 12 to our Condensed Consolidated Financial Statements, and is incorporated herein by reference thereto.

## Item 1A. RISK FACTORS

For a discussion regarding our risk factors, see Item 1A. of our 2016 Annual Report on Form 10-K. Those risks and uncertainties are not the only ones facing us and there may be additional matters of which we are unaware or that we currently consider immaterial. All of those risks and uncertainties could adversely affect our business, financial condition and/or results of operations.

## Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

In connection with our IPO and related transactions, the former owners of Plains All American GP LLC (the “Legacy Owners”) acquired the following interests (collectively, the “Stapled Interests”): (i) Class A units of AAP (“AAP units”) representing an economic limited partner interest in AAP; (ii) general partner units representing a non-economic membership interest in our general partner; and (iii) Class B shares representing a non-economic limited partner interest in us. The Legacy Owners and any permitted transferees of their Stapled Interests have the right to exchange (the “Exchange Right”) all or a portion of such Stapled Interests for an equivalent number of Class A shares. In connection with the exercise of the Exchange Right, the Stapled Interests are transferred to us and the applicable Class B shares are canceled. Although we issue one Class A share for each Stapled Interest that is exchanged, we also receive one AAP unit and one general partner unit. As a result, the exercise by Legacy Owners of the Exchange Right is not dilutive. During the three months ended March 31, 2017, certain Legacy Owners or their permitted transferees exercised the Exchange Right, which resulted in the issuance of 479,298 Class A shares. The issuance of Class A shares in connection with the exercise of the Exchange Right was exempt from the registration requirements of the Securities Act of 1933, as amended, pursuant to Section 4(a)(2) thereof.

## Item 3. DEFAULTS UPON SENIOR SECURITIES

None.

## Item 4. MINE SAFETY DISCLOSURES

None.

## Item 5. OTHER INFORMATION

None.

## Item 6. EXHIBITS

The exhibits listed on the accompanying Exhibit Index are filed or incorporated by reference as part of this report, and such Exhibit Index is incorporated herein by reference.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**PLAINS GP HOLDINGS, L.P.**

By: PAA GP HOLDINGS LLC,
*its general partner*

By: /s/ Greg L. Armstrong
**Greg L. Armstrong,**
***Chairman of the Board,***
***Chief Executive Officer and Director of PAA GP Holdings LLC (Principal Executive Officer)***

May 9, 2017

By: /s/ Al Swanson
**Al Swanson,**
***Executive Vice President and Chief Financial Officer of PAA GP Holdings LLC (Principal Financial Officer)***

May 9, 2017

By: /s/ Chris Herbold
**Chris Herbold,**
***Vice President—Accounting and Chief Accounting Officer of PAA GP Holdings LLC (Principal Accounting Officer)***

May 9, 2017

**EXHIBIT INDEX**

| | | |
|---|---|---|
| 2.1 * | — | Securities Purchase Agreement dated as of January 19, 2017 by and between COG Operating LLC, as seller, and Plains Pipeline, L.P., as purchaser (the schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K) (incorporated by reference to Exhibit 2.1 to PAA's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017). |
| 2.2 * | — | Securities Purchase Agreement dated as of January 19, 2017 by and between Frontier Midstream Solutions, LLC, as seller, and Plains Pipeline, L.P., as purchaser (the schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K) (incorporated by reference to Exhibit 2.2 to PAA's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017). |
| 3.1 | — | Certificate of Limited Partnership of Plains GP Holdings, L.P. (incorporated by reference to Exhibit 3.1 to our Registration Statement on Form S-1 (333-190227) filed July 29, 2013). |
| 3.2 | — | Second Amended and Restated Agreement of Limited Partnership of Plains GP Holdings, L.P. dated as of November 15, 2016 (incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed November 21, 2016). |
| 3.3 | — | Certificate of Formation of PAA GP Holdings LLC (incorporated by reference to Exhibit 3.3 to our Registration Statement on Form S-1 (333-190227) filed July 29, 2013). |
| 3.4 | — | Third Amended and Restated Limited Liability Company Agreement of PAA GP Holdings LLC dated as of February 16, 2017 (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed February 21, 2017). |
| 3.5 | — | Sixth Amended and Restated Agreement of Limited Partnership of Plains All American Pipeline, L.P. dated as of November 15, 2016 (incorporated by reference to Exhibit 3.5 to our Current Report on Form 8-K filed November 21, 2016). |
| 3.6 | — | Seventh Amended and Restated Limited Liability Company Agreement of Plains All American GP LLC dated November 15, 2016 (incorporated by reference to Exhibit 3.3 to our Current Report on Form 8-K filed November 21, 2016). |
| 3.7 | — | Eighth Amended and Restated Limited Partnership Agreement of Plains AAP, L.P. dated November 15, 2016 (incorporated by reference to Exhibit 3.4 to our Current Report on Form 8-K filed November 21, 2016). |
| 3.8 | — | Limited Liability Company Agreement of PAA GP LLC dated December 28, 2007 (incorporated by reference to Exhibit 3.3 to PAA's Current Report on Form 8-K filed January 4, 2008). |
| 4.1 | — | Indenture dated September 25, 2002 among Plains All American Pipeline, L.P., PAA Finance Corp. and Wachovia Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Quarterly Report on Form 10-Q for the quarter ended September 30, 2002). |
| 4.2 | — | Sixth Supplemental Indenture (Series A and Series B 6.70% Senior Notes due 2036) dated May 12, 2006 among Plains All American Pipeline, L.P., PAA Finance Corp., the Subsidiary Guarantors named therein and Wachovia Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed May 12, 2006). |

| | | |
|---|---|---|
| 4.3 | — | Tenth Supplemental Indenture (Series A and Series B 6.650% Senior Notes due 2037) dated October 30, 2006 among Plains All American Pipeline, L.P., PAA Finance Corp., the Subsidiary Guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.2 to PAA's Current Report on Form 8-K filed October 30, 2006). |
| 4.4 | — | Thirteenth Supplemental Indenture (Series A and Series B 6.50% Senior Notes due 2018) dated April 23, 2008 among Plains All American Pipeline, L.P., PAA Finance Corp., the Subsidiary Guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed April 23, 2008). |
| 4.5 | — | Fifteenth Supplemental Indenture (8.75% Senior Notes due 2019) dated April 20, 2009 among Plains All American Pipeline, L.P., PAA Finance Corp., the Subsidiary Guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed April 20, 2009). |
| 4.6 | — | Seventeenth Supplemental Indenture (5.75% Senior Notes due 2020) dated September 4, 2009 among Plains All American Pipeline, L.P., PAA Finance Corp., the Subsidiary Guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed September 4, 2009). |
| 4.7 | — | Nineteenth Supplemental Indenture (5.00% Senior Notes due 2021) dated January 14, 2011 among Plains All American Pipeline, L.P., PAA Finance Corp., the Subsidiary Guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed January 11, 2011). |
| 4.8 | — | Twentieth Supplemental Indenture (3.65% Senior Notes due 2022) dated March 22, 2012 among Plains All American Pipeline, L.P., PAA Finance Corp and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed March 26, 2012). |
| 4.9 | — | Twenty-First Supplemental Indenture (5.15% Senior Notes due 2042) dated March 22, 2012 among Plains All American Pipeline, L.P., PAA Finance Corp and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.3 to PAA's Current Report on Form 8-K filed March 26, 2012). |
| 4.10 | — | Twenty-Second Supplemental Indenture (2.85% Senior Notes due 2023) dated December 10, 2012, by and among Plains All American Pipeline, L.P., PAA Finance Corp. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed December 12, 2012). |
| 4.11 | — | Twenty-Third Supplemental Indenture (4.30% Senior Notes due 2043) dated December 10, 2012, by and among Plains All American Pipeline, L.P., PAA Finance Corp. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.3 to PAA's Current Report on Form 8-K filed December 12, 2012). |
| 4.12 | — | Twenty-Fourth Supplemental Indenture (3.85% Senior Notes due 2023) dated August 15, 2013, by and among Plains All American Pipeline, L.P., PAA Finance Corp. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed August 15, 2013). |
| 4.13 | — | Twenty-Fifth Supplemental Indenture (4.70% Senior Notes due 2044) dated April 23, 2014, by and among Plains All American Pipeline, L.P., PAA Finance Corp. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed April 29, 2014). |
| 4.14 | — | Twenty-Sixth Supplemental Indenture (3.60% Senior Notes due 2024) dated September 9, 2014, by and among Plains All American Pipeline, L.P., PAA Finance Corp. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed September 11, 2014). |

| | | |
|---|---|---|
| 4.15 | — | Twenty-Seventh Supplemental Indenture (2.60% Senior Notes due 2019) dated December 9, 2014, by and among Plains All American Pipeline, L.P., PAA Finance Corp., and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed December 11, 2014). |
| 4.16 | — | Twenty-Eighth Supplemental Indenture (4.90% Senior Notes due 2045) dated December 9, 2014, by and among Plains All American Pipeline, L.P., PAA Finance Corp., and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.3 to our Current Report on Form 8-K filed December 11, 2014). |
| 4.17 | — | Twenty-Ninth Supplemental Indenture (4.65% Senior Notes due 2025) dated August 24, 2015, by and among Plains All American Pipeline, L.P., PAA Finance Corp., and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed August 26, 2015). |
| 4.18 | | Thirtieth Supplemental Indenture (4.50% Senior Notes due 2026) dated November 22, 2016, by and among Plains All American Pipeline, L.P., PAA Finance Corp., and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to PAA's Current Report on Form 8-K filed November 29, 2016). |
| 4.19 | — | Shareholder and Registration Rights Agreement dated October 21, 2013 by and among Plains GP Holdings, L.P. and the other parties signatory thereto (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed October 25, 2013). |
| 10.1 **† | — | Form of Director LTIP Grant Letter (February 2017) - Director Grant - Designated Directors and Audit Committee Members (PAGP Plan) |
| 10.2 **† | — | Form of Director LTIP Grant Letter (February 2017) - Audit Committee Supplement (PAGP Plan) |
| 10.3 **† | — | Form of Director LTIP Grant Letter (February 2017) - Independent Director Grant (PAGP Plan) |
| 31.1 † | — | Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a). |
| 31.2 † | — | Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a). |
| 32.1 †† | — | Certification of Principal Executive Officer pursuant to 18 U.S.C. 1350. |
| 32.2 †† | — | Certification of Principal Financial Officer pursuant to 18 U.S.C. 1350. |
| 101.INS† | — | XBRL Instance Document |
| 101.SCH† | — | XBRL Taxonomy Extension Schema Document |
| 101.CAL† | — | XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.DEF† | — | XBRL Taxonomy Extension Definition Linkbase Document |
| 101.LAB† | — | XBRL Taxonomy Extension Label Linkbase Document |
| 101.PRE† | — | XBRL Taxonomy Extension Presentation Linkbase Document |

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† Filed herewith.

†† Furnished herewith.

* Certain schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule will be furnished supplementally to the SEC upon request.

** Management compensatory plan or arrangement.

PLAINS GP HOLDINGS

**DIRECTOR GRANT**

February 23, 2017

[name]
[address]

Re: Grant of Phantom Class A Shares

Dear [name]:

I am pleased to inform you that you have been granted 10,000 Phantom Class A Shares as of the above date pursuant to the Plains GP Holdings, L.P. Long-Term Incentive Plan (the "Plan"). In tandem with each Phantom Class A Share granted hereby you have been granted a distribution equivalent right (a “DER”). A DER represents the right to receive a cash payment equivalent to the amount, if any, paid in cash distributions on one Class A Share of Plains GP Holdings, L.P. (“PAGP” or the “Partnership”) to the holder of such Class A Share. The terms and conditions of this grant are as set forth below.

1. Subject to the further provisions of this Agreement, your Phantom Class A Shares shall vest (become payable in the form of one Class A Share of PAGP for each Phantom Class A Share) in equal 25% increments (2,500 Phantom Class A Shares per year) annually on the August Distribution Date.

2. Subject to the further provisions of this Agreement, your DERs shall be payable in cash substantially contemporaneously with each Distribution Date.

3. As of each vesting date, for so long as your service on the Board of Directors has not been terminated, you shall be deemed to have automatically received a grant, evidenced hereby, of 2,500 additional Phantom Class A Shares (and tandem DERs), such that the total outstanding Phantom Class A Shares (and tandem DERs) granted by this letter shall remain 10,000.

4. Immediately after the vesting of any Phantom Class A Shares, an equal number of DERs shall expire.

5. Upon any forfeiture of Phantom Class A Shares, an equal number of DERs shall expire.

333 Clay Street, Suite 1600 g Houston, Texas 77002 g 713/646-4100 or 800-564-3036

6. In the event that (i) you voluntarily terminate your service on the Board of Directors (other than for Retirement) or (ii) your service on the Board of Directors is terminated by the Board (by a majority vote of the remaining Directors) for Cause (as defined in the LLC Agreement), all unvested Phantom Class A Shares (and tandem DERs) shall be forfeited as of the date service terminates.

7. In the event your service on the Board of Directors is terminated (i) because of your death or disability (as determined in good faith by the Board), (ii) due to your Retirement, or (iii) for any reason other than as described in clauses (i) and (ii) of paragraph 6 above, all unvested Phantom Class A Shares (and any tandem DERs) shall immediately become nonforfeitable, and shall vest (or, in the case of DERs, be paid) in full as of the next following Distribution Date. Upon such payment, the tandem DERs associated with the Phantom Class A Shares that are vesting shall expire.

8. In the event of a vesting under paragraph 7 above, the provisions of paragraph 3 above shall no longer be operative.

9. For the avoidance of doubt, to the extent the expiration of a DER relates to the vesting of a Phantom Class A Share on a Distribution Date, the intent is for the DER to be paid with respect to such Distribution Date before the DER expires.

As used herein, (i) “Company” refers to PAA GP Holdings LLC, (ii) “Distribution Date” means the day in February, May, August or November in any year (as context dictates) that is 45 days after the end of a calendar quarter (or, if not a business day, the closest previous business day), (iii) “Board of Directors” or “Board” means the Board of Directors of the Company, and (iv) “Retirement” means you have provided the Chairman of the Board of the Company with written notice indicating that (a) you have retired (or will retire within the next sixty days) from full-time employment and from service as a director of the Company, and (b) excluding director positions held by you at such time, you do not intend to serve as a director of any other public company.

Terms used herein that are not defined herein shall have the meanings set forth in the Plan or, if not defined in the Plan, in the Second Amended and Restated Agreement of Limited Partnership of Plains GP Holdings, L.P., as amended (the "Partnership Agreement") or the Third Amended and Restated Limited Liability Company Agreement of PAA GP Holdings LLC, as amended (the “LLC Agreement”). By signing below, you agree that the Phantom Class A Shares and DERs granted hereunder are governed by the terms of the Plan. Copies of the Plan, the Partnership Agreement and the LLC Agreement are available upon request.

In order for this grant to be effective you must designate a beneficiary that will be entitled to receive any benefits payable under this grant in the event of your death. Please execute and return a copy of this grant letter to me and retain a copy for your records.

PLAINS GP HOLDINGS, L.P.

By: PAA GP HOLDINGS LLC

By:___________________________________
Name: Richard McGee
Title: Executive Vice President

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Beneficiary Designation

| Primary Beneficiary Name | Relationship | Percent (Must total 100%) |
|---|---|---|
| | | |
| | | |
| | | |
| Secondary Beneficiary Name | Relationship | Percent (Must total 100%) |
| | | |
| | | |
| | | |

___________________________________
[name]

No. of Phantom Class A Shares: 10,000

Dated: _____________________________

**Exhibit 10.2**

**Audit Committee Supplement**

February 23, 2017

[name]
[address]

Re: Grant of Phantom Class A Shares

Dear [name]:

I am pleased to inform you that you have been granted 10,000 Phantom Class A Shares as of the above date pursuant to the Plains GP Holdings, L.P. Long-Term Incentive Plan (the "Plan"). In tandem with each Phantom Class A Share granted hereby you have been granted a distribution equivalent right (a “DER”). A DER represents the right to receive a cash payment equivalent to the amount, if any, paid in cash distributions on one Class A Share of Plains GP Holdings, L.P. (“PAGP” or the “Partnership”) to the holder of such Class A Share. The terms and conditions of this grant are as set forth below.

1. Subject to the further provisions of this Agreement, your Phantom Class A Shares shall vest (become payable in the form of one Class A Share of PAGP for each Phantom Class A Share) in equal 25% increments (2,500 Phantom Class A Shares per year) annually on the August Distribution Date.

2. Subject to the further provisions of this Agreement, your DERs shall be payable in cash substantially contemporaneously with each Distribution Date.

3. As of each vesting date, for so long as you serve on the Audit Committee of the Board of Directors (the “Audit Committee”), you shall be deemed to have automatically received a grant, evidenced hereby, of 2,500 additional Phantom Class A Shares (and tandem DERs), such that the total outstanding Phantom Class A Shares (and tandem DERs) granted by this letter shall remain 10,000.

4. Immediately after the vesting of any Phantom Class A Shares, an equal number of DERs shall expire.

5. Upon any forfeiture of Phantom Class A Shares, an equal number of DERs shall expire.

6. In the event that (i) you voluntarily terminate your service on the Audit Committee (other than for Retirement) or (ii) your service on the Board of Directors is terminated by the Board (by a majority vote of the remaining Directors) for Cause (as defined in the LLC Agreement), all unvested Phantom Class A Shares (and tandem DERs) shall be forfeited as of the date service terminates.

7. In the event your service on the Audit Committee is terminated (i) because of your death or disability (as determined in good faith by the Board), (ii) due to your Retirement, or (iii) for any reason other than as described in clauses (i) and (ii) of paragraph 6 above, all unvested Phantom Class A Shares (and any tandem DERs) shall immediately become nonforfeitable, and shall vest (or, in the case of DERs, be paid) in full as of the next following Distribution Date. Upon such payment, the tandem DERs associated with the Phantom Class A Shares that are vesting shall expire.

8. In the event of a vesting under paragraph 7 above, the provisions of paragraph 3 above shall no longer be operative.

9. For the avoidance of doubt, to the extent the expiration of a DER relates to the vesting of a Phantom Class A Share on a Distribution Date, the intent is for the DER to be paid with respect to such Distribution Date before the DER expires.

As used herein, (i) “Company” refers to PAA GP Holdings LLC, (ii) “Distribution Date” means the day in February, May, August or November in any year (as context dictates) that is 45 days after the end of a calendar quarter (or, if not a business day, the closest previous business day), (iii) “Board of Directors” or “Board” means the Board of Directors of the Company, and (iv) “Retirement” means you have provided the Chairman of the Board of the Company with written notice indicating that (a) you have retired (or will retire within the next sixty days) from full-time employment and from service as a director of the Company, and (b) excluding director positions held by you at such time, you do not intend to serve as a director of any other public company.

Terms used herein that are not defined herein shall have the meanings set forth in the Plan or, if not defined in the Plan, in the Second Amended and Restated Agreement of Limited Partnership of Plains GP Holdings, L.P., as amended (the "Partnership Agreement") or the Third Amended and Restated Limited Liability Company Agreement of PAA GP Holdings LLC, as amended (the “LLC Agreement”). By signing below, you agree that the Phantom Class A Shares and DERs granted hereunder are governed by the terms of the Plan. Copies of the Plan, the Partnership Agreement and the LLC Agreement are available upon request.

In order for this grant to be effective you must designate a beneficiary that will be entitled to receive any benefits payable under this grant in the event of your death. Please execute and return a copy of this grant letter to me and retain a copy for your records.

PLAINS GP HOLDINGS, L.P.

By: PAA GP HOLDINGS LLC

By:___________________________________
Name:Richard McGee
Title:Executive Vice President

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Beneficiary Designation

| Primary Beneficiary Name | Relationship | Percent (Must total 100%) |
|---|---|---|
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| Secondary Beneficiary Name | Relationship | Percent (Must total 100%) |
| | | |
| | | |
| | | |

___________________________________
[name]

No. of Phantom Class A Shares: 10,000

Dated: ______________________________

**INDEPENDENT DIRECTOR GRANT**

February 23, 2017

[name]
[address]

Re: Grant of Phantom Class A Shares

Dear [name]:

I am pleased to inform you that you have been granted 15,000 Phantom Class A Shares as of the above date pursuant to the Plains GP Holdings, L.P. Long-Term Incentive Plan (the "Plan"). In tandem with each Phantom Class A Share granted hereby you have been granted a distribution equivalent right (a “DER”). A DER represents the right to receive a cash payment equivalent to the amount, if any, paid in cash distributions on one Class A Share of Plains GP Holdings, L.P. (“PAGP” or the “Partnership”) to the holder of such Class A Share. The terms and conditions of this grant are as set forth below.

1. Subject to the further provisions of this Agreement, your Phantom Class A Shares shall vest (become payable in the form of one Class A Share of PAGP for each Phantom Class A Share) in equal 25% increments (3,750 Phantom Class A Shares per year) annually on the August Distribution Date.

2. Subject to the further provisions of this Agreement, your DERs shall be payable in cash substantially contemporaneously with each Distribution Date.

3. As of each vesting date, for so long as you qualify as an Independent Director (as such term is defined in the LLC Agreement), you shall be deemed to have automatically received a grant, evidenced hereby, of 3,750 additional Phantom Class A Shares (and tandem DERs), such that the total outstanding Phantom Class A Shares (and tandem DERs) granted by this letter shall remain 15,000.

4. Immediately after the vesting of any Phantom Class A Shares, an equal number of DERs shall expire.

5. Upon any forfeiture of Phantom Class A Shares, an equal number of DERs shall expire.

6. In the event that (i) you voluntarily terminate your service on the Board of Directors (other than for Retirement), (ii) your service on the Board of Directors is terminated by the Board (by a majority vote of the remaining Directors) for Cause (as defined in the LLC Agreement), or (iii) you no longer qualify as an Independent Director, all unvested Phantom Class A Shares (and tandem DERs) shall be forfeited as of the date service terminates.

7. In the event your service on the Board of Directors is terminated (i) because of your death or disability (as determined in good faith by the Board), (ii) due to your Retirement, or (iii) for any reason other than as described in clauses (i), (ii) and (iii) of paragraph 6 above, all unvested Phantom Class A Shares (and any tandem DERs) shall immediately become nonforfeitable, and shall vest (or, in the case of DERs, be paid) in full as of the next following Distribution Date. Upon such payment, the tandem DERs associated with the Phantom Class A Shares that are vesting shall expire.

8. In the event of a vesting under paragraph 7 above, the provisions of paragraph 3 above shall no longer be operative.

9. For the avoidance of doubt, to the extent the expiration of a DER relates to the vesting of a Phantom Class A Share on a Distribution Date, the intent is for the DER to be paid with respect to such Distribution Date before the DER expires.

As used herein, (i) "Company" refers to PAA GP Holdings LLC, (ii) "Distribution Date" means the day in February, May, August or November in any year (as context dictates) that is 45 days after the end of a calendar quarter (or, if not a business day, the closest previous business day), (iii) "Board of Directors" or "Board" means the Board of Directors of the Company, and (iv) "Retirement" means you have provided the Chairman of the Board of the Company with written notice indicating that (a) you have retired (or will retire within the next sixty days) from full-time employment and from service as a director of the Company, and (b) excluding director positions held by you at such time, you do not intend to serve as a director of any other public company.

Terms used herein that are not defined herein shall have the meanings set forth in the Plan or, if not defined in the Plan, in the Second Amended and Restated Agreement of Limited Partnership of Plains GP Holdings, L.P., as amended (the "Partnership Agreement") or the Third Amended and Restated Limited Liability Company Agreement of PAA GP Holdings LLC, as amended (the "LLC Agreement"). By signing below, you agree that the Phantom Class A Shares and DERs granted hereunder are governed by the terms of the Plan. Copies of the Plan, the Partnership Agreement and the LLC Agreement are available upon request.

In order for this grant to be effective you must designate a beneficiary that will be entitled to receive any benefits payable under this grant in the event of your death. Please execute and return a copy of this grant letter to me and retain a copy for your records.

PLAINS GP HOLDINGS, L.P.

By: PAA GP HOLDINGS LLC

By:_________________________________
Name:Richard McGee
Title:Executive Vice President

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Beneficiary Designation

| Primary Beneficiary Name | Relationship | Percent (Must total 100%) |
|---|---|---|
| | | |
| | | |
| | | |
| Secondary Beneficiary Name | Relationship | Percent (Must total 100%) |
| | | |
| | | |
| | | |

_________________________________
[name]

No. of Phantom Class A Shares: 15,000

Dated: ____________________________

**EXHIBIT 31.1**

**CERTIFICATION**

I, Greg L. Armstrong, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Plains GP Holdings, L.P. (the “registrant”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: May 9, 2017

/s/ Greg L. Armstrong

Greg L. Armstrong
Chief Executive Officer

**EXHIBIT 31.2**

**CERTIFICATION**

I, Al Swanson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Plains GP Holdings, L.P. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2017

/s/ Al Swanson

Al Swanson
Chief Financial Officer

**EXHIBIT 32.1**

**CERTIFICATION OF
CHIEF EXECUTIVE OFFICER
OF PLAINS GP HOLDINGS, L.P.
PURSUANT TO 18 U.S.C. 1350**

I, Greg L. Armstrong, Chief Executive Officer of Plains GP Holdings, L.P. (the "Company"), hereby certify that:

(i) the accompanying report on Form 10-Q for the period ended March 31, 2017 and filed with the Securities and Exchange Commission on the date hereof (the "Report") by the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Greg L. Armstrong

Name: Greg L. Armstrong

Date: May 9, 2017

**EXHIBIT 32.2**

**CERTIFICATION OF
CHIEF FINANCIAL OFFICER
OF PLAINS GP HOLDINGS, L.P.
PURSUANT TO 18 U.S.C. 1350**

I, Al Swanson, Chief Financial Officer of Plains GP Holdings, L.P. (the “Company”), hereby certify that:

(i) the accompanying report on Form 10-Q for the period ended March 31, 2017 and filed with the Securities and Exchange Commission on the date hereof (the “Report”) by the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Al Swanson

Name: Al Swanson

Date: May 9, 2017