UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| | | FORM 10-Q | | |
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| | QUARTERLY REPORT PURSUANT TO SE | | | ACI OF 1934 |
| | F | or the quarterly period ended Mar | ch 31, 2020 | |
| | | or | | |
| | TRANSITION REPORT PURSUANT TO SI | ECTION 13 OR 15(d) OF THE SEC | CURITIES EXCHANGE | ACT OF 1934 |
| | | Commission File Number: 1-3 | 6132 | |
| | | AINS GP HOLDIN xact name of registrant as specified in | | |
| | Delaware | | 90-1005472 | |
| | (State or other jurisdiction of incorporation or orga | nization) | (I.R.S. Employer Identifi | cation No.) |
| | Securities registered pursuant to Section 12(b) of | Houston, Texas 77002 (Address of principal executive offices) (713) 646-4100 (Registrant's telephone number, including | | |
| Ī | Title of each class | Trading Symbol(s) | Name of each exch | nange on which registered |
| | Class A Shares | PAGP | | Stock Exchange |
| 1934 requ | Indicate by check mark whether the registrant (1) 4 during the preceding 12 months (or for such shortirements for the past 90 days. ☑ Yes ☐ No Indicate by check mark whether the registrant has egulation S-T during the preceding 12 months (or | ter period that the registrant was requested that the registrant was requested that the registrant was requested to the regist | uired to file such reports), a | nd (2) has been subject to such filing be submitted pursuant to Rule 405 |
| an e | Indicate by check mark whether the registrant is a merging growth company. See the definitions of "pany" in Rule 12b-2 of the Exchange Act. (Check | large accelerated filer, an accelerated arge accelerated filer," "accelerated f | l filer, a non-accelerated fil | er, a smaller reporting company, or |
| | Large accelerated filer ⊠ | | | erated filer □ |
| | Non-accelerated filer □ | | Smaller reportin | |
| | | | Emerging growt | h company 🗌 |
| | | | | |
| new | If an emerging growth company, indicate by checor revised financial accounting standards provide | _ | | ition period for complying with any |
| | | d pursuant to Section 13(a) of the Exc | change Act. \square | |

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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)

| | 1 | March 31, 2020 | | cember 31, 2019 |
|---|----|-------------------|---------|--------------------|
| | | (unaı | ıdited) | |
| ASSETS | | | | |
| CURRENT ASSETS | | | | |
| Cash and cash equivalents | \$ | 40 | \$ | 47 |
| Restricted cash | | 122 | | 37 |
| Trade accounts receivable and other receivables, net | | 2,200 | | 3,614 |
| Inventory | | 181 | | 604 |
| Other current assets | | 530 | | 312 |
| Total current assets | | 3,073 | | 4,614 |
| PROPERTY AND EQUIPMENT | | 17,962 | | 18,983 |
| Accumulated depreciation | | (3,549) | | (3,616) |
| Property and equipment, net | | 14,413 | | 15,367 |
| OTHER ASSETS | | | | |
| Investments in unconsolidated entities | | 3,714 | | 3,683 |
| Goodwill | | | | 2,540 |
| Deferred tax asset | | 1,455 | | 1,280 |
| Linefill and base gas | | 955 | | 981 |
| Long-term operating lease right-of-use assets, net | | 430 | | 466 |
| Long-term inventory | | 73 | | 182 |
| Other long-term assets, net | | 1,053 | | 856 |
| Total assets | \$ | 25,166 | \$ | 29,969 |
| LIABILITIES AND PARTNERS' CAPITAL | | | | |
| CURRENT LIABILITIES | | | | |
| Trade accounts payable | \$ | 2,246 | \$ | 3,687 |
| Short-term debt | | 363 | | 504 |
| Other current liabilities | | 750 | | 828 |
| Total current liabilities | | 3,359 | | 5,019 |
| LONG-TERM LIABILITIES | | | | |
| Senior notes, net | | 8,941 | | 8,939 |
| Other long-term debt, net | | 477 | | 248 |
| Long-term operating lease liabilities | | 370 | | 387 |
| Other long-term liabilities and deferred credits | | 833 | | 891 |
| Total long-term liabilities | | 10,621 | | 10,465 |
| COMMITMENTS AND CONTINGENCIES (NOTE 12) | | | | |
| PARTNERS' CAPITAL | | | | |
| Class A shareholders (184,240,079 and 182,138,592 shares outstanding, respectively) | | 1,457 | | 2,155 |
| Noncontrolling interests | | 9,729 | | 12,330 |
| | | | | |
| Total partners' capital | | 11,186 | | 14,485 |

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

Three Months Ended March 31, 2020 2019 (unaudited) **REVENUES** \$ 7,907 \$ 8,022 Supply and Logistics segment revenues 187 197 Transportation segment revenues 175 156 Facilities segment revenues 8,269 8,375 Total revenues COSTS AND EXPENSES 7,367 7,119 Purchases and related costs 326 304 Field operating costs 70 77 General and administrative expenses 169 136 Depreciation and amortization 619 4 (Gains)/losses on asset sales and asset impairments, net (Note 14) 2,515 Goodwill impairment losses (Note 6) 11,044 7,662 Total costs and expenses 713 (2,775)**OPERATING INCOME/(LOSS)** OTHER INCOME/(EXPENSE) 110 89 Equity earnings in unconsolidated entities 267 Gain on/(impairment of) investments in unconsolidated entities, net (Note 7) (22)(108)(101)Interest expense (net of capitalized interest of \$6 and \$11, respectively) 25 (31)Other income/(expense), net (2,826)993 INCOME/(LOSS) BEFORE TAX (30)(6)Current income tax expense 140 (49)Deferred income tax (expense)/benefit NET INCOME/(LOSS) (2,692)914 2,111 (767)Net (income)/loss attributable to noncontrolling interests \$ (581)147 NET INCOME/(LOSS) ATTRIBUTABLE TO PAGP \$ 0.92 (3.18)BASIC AND DILUTED NET INCOME/(LOSS) PER CLASS A SHARE 159 183 BASIC AND DILUTED WEIGHTED AVERAGE CLASS A SHARES OUTSTANDING

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

| | | ded | | |
|--|-------------|---------|----|-------|
| | | 2020 | | 2019 |
| | (unaudited) | | | |
| Net income/(loss) | \$ | (2,692) | \$ | 914 |
| Other comprehensive income/(loss) | | (327) | | 58 |
| Comprehensive income/(loss) | | (3,019) | | 972 |
| Comprehensive (income)/loss attributable to noncontrolling interests | | 2,356 | | (812) |
| Comprehensive income/(loss) attributable to PAGP | \$ | (663) | \$ | 160 |

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

Translation

| | | Derivative Instruments | | Adjustments Other | | Other | | Other | | Other | | Total |
|---|-----|---------------------------|---------|-----------------------------------|---------|---|----|----------------------------|--|-------|--|-------|
| | | | | (una | ıdited) | | | | | | | |
| Balance at December 31, 2019 | \$ | (259) | \$ | (674) | \$ | _ | \$ | (933) | | | | |
| | | | | | | | | | | | | |
| Reclassification adjustments | | 2 | | _ | | _ | | 2 | | | | |
| Unrealized loss on hedges | | (79) | | _ | | _ | | (79) | | | | |
| Currency translation adjustments | | _ | | (251) | | _ | | (251) | | | | |
| Other | | _ | | _ | | 1 | | 1 | | | | |
| Total period activity | | (77) | | (251) | | 1 | | (327) | | | | |
| Balance at March 31, 2020 | \$ | (336) | \$ | (925) | \$ | 1 | \$ | (1,260) | | | | |
| | | | : ===== | | | | | | | | | |
| | | | | | | | | | | | | |
| | n | erivative | 7 | Franclation | | | | | | | | |
| | | erivative struments | | Translation djustments | | Other | | Total | | | | |
| | | struments | | djustments (unau | dited) | Other | | | | | | |
| Balance at December 31, 2018 | | | | djustments | dited) | Other | \$ | Total (1,030) | | | | |
| Balance at December 31, 2018 | Ins | struments | A | djustments (unau | | Other | \$ | | | | | |
| Balance at December 31, 2018 Reclassification adjustments | Ins | struments | A | djustments (unau | | Other — | \$ | | | | | |
| | Ins | (177) | A | djustments (unau | | Other | \$ | (1,030) | | | | |
| Reclassification adjustments | Ins | (177) 2 | A | djustments (unau | | Other | \$ | (1,030) | | | | |
| Reclassification adjustments Unrealized loss on hedges | Ins | (177) 2 (23) | A | djustments (unau (853) — | | Other — — — — — — — — — — — — — — — — — — — | \$ | (1,030) 2 (23) | | | | |
| Reclassification adjustments Unrealized loss on hedges Currency translation adjustments | Ins | (177) 2 (23) | A | djustments (unau (853) — | | | \$ | (1,030) 2 (23) 78 | | | | |

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

| | | Three Months Ended March 31, | | | |
|--|---------|---------------------------------|---------|-------|--|
| | | 2020 | | 2019 | |
| CACH ELONG EDOM ODER ATTING A CHINATELE | | (una | udited) | | |
| CASH FLOWS FROM OPERATING ACTIVITIES Not income (loss) | ¢ | (2,602) | ¢ | 01.4 | |
| Net income/(loss) Respectivities of net income/(loss) to not such provided by operating activities. | \$ | (2,692) | \$ | 914 | |
| Reconciliation of net income/(loss) to net cash provided by operating activities: | | 160 | | 126 | |
| Depreciation and amortization | | 169 | | 136 | |
| (Gains)/losses on asset sales and asset impairments, net (Note 14) | | 619 | | 4 | |
| Goodwill impairment losses (Note 6) | | 2,515 | | 17 | |
| Equity-indexed compensation expense/(benefit) | | (4) | | 17 | |
| Inventory valuation adjustments | | 232 | | | |
| Deferred income tax expense/(benefit) | | (140) | | 49 | |
| Loss on foreign currency revaluation | | 46 | | 4 | |
| Change in fair value of Preferred Distribution Rate Reset Option (Note 10) | | (26) | | (23) | |
| Equity earnings in unconsolidated entities | | (110) | | (89) | |
| Distributions on earnings from unconsolidated entities | | 125 | | 98 | |
| (Gain on)/impairment of investments in unconsolidated entities, net (Note 7) | | 22 | | (267) | |
| Other | | 5 | | 7 | |
| Changes in assets and liabilities, net of acquisitions | | 128 | | 182 | |
| Net cash provided by operating activities | | 889 | | 1,032 | |
| CASH FLOWS FROM INVESTING ACTIVITIES | | | | | |
| Cash paid in connection with acquisitions, net of cash acquired (Note 14) | | (308) | | _ | |
| Investments in unconsolidated entities | | (147) | | (125) | |
| Additions to property, equipment and other | | (245) | | (280) | |
| Proceeds from sales of assets (Note 14) | | 104 | | _ | |
| Cash paid for purchases of linefill and base gas | | (5) | | (16) | |
| Other investing activities | | (9) | | (8) | |
| Net cash used in investing activities | | (610) | | (429) | |
| CASH FLOWS FROM FINANCING ACTIVITIES | | | | | |
| Net repayments under PAA commercial paper program (Note 8) | | (93) | | _ | |
| Net borrowings under PAA senior secured hedged inventory facility (Note 8) | | 89 | | _ | |
| Distributions paid to Class A shareholders (Note 9) | | (66) | | (48) | |
| Distributions paid to noncontrolling interests (Note 9) | | (233) | | (207) | |
| Other financing activities | | 112 | | 58 | |
| Net cash used in financing activities | <u></u> | (191) | _ | (197) | |
| Effect of translation adjustment | | (10) | | (3) | |
| Net increase in cash and cash equivalents and restricted cash | | 78 | | 403 | |
| Cash and cash equivalents and restricted cash, beginning of period | | 84 | | 69 | |
| Cash and cash equivalents and restricted cash, end of period | \$ | 162 | \$ | 472 | |
| Cash paid for: | | | | | |
| Interest, net of amounts capitalized | \$ | 65 | \$ | 70 | |
| Income taxes, net of amounts refunded | \$ | 51 | \$ | 65 | |
| meome takes, her or amounts retuined | Ф | 21 | ψ | co | |

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, 2019 | \$ 2,155 | \$ 12,330 | \$ 14,485 |
| Net loss | (581) | (2,111) | (2,692) |
| Distributions (Note 9) | (66) | (245) | (311) |
| Deferred tax asset | 20 | _ | 20 |
| Other comprehensive loss | (82) | (245) | (327) |
| Change in ownership interest in connection with Exchange Right exercises (Note 9) | 10 | (10) | _ |
| Contributions from noncontrolling interests (Note 9) | _ | 8 | 8 |
| Other | 1 | 2 | 3 |
| Balance at March 31, 2020 | \$ 1,457 | \$ 9,729 | \$ 11,186 |

| | Class A Shareholders | Noncontrolling Interests | I | Total Partners' Capital |
|------------------------------|-------------------------|-----------------------------|----|----------------------------|
| | | (unaudited) | | |
| Balance at December 31, 2018 | \$ 1,846 | \$ 11,473 | \$ | 13,319 |
| Net income | 147 | 767 | | 914 |
| Distributions | (48) | (219) | | (267) |
| Deferred tax asset | (3) | _ | | (3) |
| Other comprehensive income | 13 | 45 | | 58 |
| Other | _ | 1 | | 1 |
| Balance at March 31, 2019 | \$ 1,955 | \$ 12,067 | \$ | 14,022 |

Note 1—Organization and Basis of Consolidation and Presentation

Organization

Plains GP Holdings, L.P. ("PAGP") is a Delaware limited partnership formed in 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 March 31, 2020, 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," "our," "our," "ours" and similar terms refer to PAGP and its subsidiaries.

As of March 31, 2020, PAGP owned (i) a 100% managing member interest in Plains All American GP LLC ("GP LLC"), an entity that has also elected to be taxed as a corporation for United States federal income tax purposes and (ii) an approximate 75% limited partner interest in Plains AAP, L.P. ("AAP") through our direct ownership of approximately 183.2 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 also holds the non-economic general partner interest in AAP. AAP is a Delaware limited partnership that, as of March 31, 2020, directly owned a limited partner interest in PAA through its ownership of approximately 248.4 million PAA common units (approximately 31% of PAA's total outstanding common units and Series A preferred units combined). 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 primarily for crude oil, natural gas liquids ("NGL") and natural gas. 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.

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

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

ISDA = International Swaps and Derivatives Association

LIBOR = London Interbank Offered Rate

LTIP = Long-term incentive plan

Mcf = Thousand cubic feet

MMbls = Million barrels

NGL = Natural gas liquids, including ethane, propane and butane

NYMEX = New York Mercantile Exchange

SEC = United States Securities and Exchange Commission

TWh = Terawatt hour
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 2019 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, 2019 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, 2020 should not be taken as indicative of results to be expected for the entire year.

Management judgment is required to evaluate whether PAGP controls an entity. Key areas of that evaluation include (i) determining whether an entity is a variable interest entity ("VIE"); (ii) determining whether PAGP is the primary beneficiary of a VIE, including evaluating which activities of the VIE most significantly impact its economic performance and the degree of power that PAGP and its related parties have over those activities through variable interests; and (iii) identifying events that require reconsideration of whether an entity is a VIE and continuously evaluating whether PAGP is a VIE's primary beneficiary.

We have determined that our subsidiaries, PAA and AAP, are VIEs and should be consolidated by PAGP because:

- The limited partners of PAA and AAP lack (i) substantive "kick-out rights" (i.e., the right to remove the general partner) based on a simple majority or lower vote and (ii) substantive participation rights and thus lack the ability to block actions of the general partner that most significantly impact the economic performance of PAA and AAP, respectively.
- AAP is the primary beneficiary of PAA because it has the power to direct the activities that most significantly impact PAA's performance and the right to receive benefits, and obligation to absorb losses, that could be significant to PAA.
- PAGP is the primary beneficiary of AAP because it has the power to direct the activities that most significantly impact AAP's performance and the right to receive benefits, and obligation to absorb losses, that could be significant to AAP.

With the exception of a deferred tax asset of \$1.455 billion and \$1.280 billion as of March 31, 2020 and December 31, 2019, respectively, substantially all assets and liabilities presented on PAGP's Condensed Consolidated Balance Sheets are those of PAA. Only the assets of each respective VIE can be used to settle the obligations of that individual VIE, and the creditors of each/either of those VIEs do not have recourse against the general credit of PAGP. PAGP did not provide any financial support to PAA or AAP during the three months ended March 31, 2020 or the year ended December 31, 2019. See Note 17 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for information regarding the Omnibus Agreement entered into by the Plains Entities on November 15, 2016.

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

COVID-19

During the first quarter of 2020, the novel coronavirus ("COVID-19") pandemic resulted in a swift and material decline in global crude oil demand, which contributed to an oversupply of crude oil that has been exacerbated by increases in production from certain suppliers in the global oil markets. These macroeconomic and industry specific challenges resulted in a number of impairment charges recognized during the first quarter. See Note 6 and Note 14 for further discussion of these impairments.

Many uncertainties remain with respect to COVID-19, including uncertainty regarding the length of time the pandemic will continue, as well as the timing, pace and extent of an economic recovery in the United States and elsewhere, and how such uncertainties will impact the energy industry and our business. As a result, these matters may affect our estimates and assumptions on amounts reported in the financial statements and accompanying notes in the near term.

Note 2—Summary of Significant Accounting Policies

Restricted Cash

Restricted cash includes cash held by us that is unavailable for general use and is comprised of amounts advanced to us by certain equity method investees related to the construction of fixed assets where we serve as construction manager. The following table presents a reconciliation of cash and cash equivalents and restricted cash reported on our Condensed Consolidated Balance Sheet that sum to the total of the amounts shown on our Condensed Consolidated Statement of Cash Flows (in millions):

| | | March 31, 2020 | | | | December 31, 2019 | |
|---|----|-------------------|----|----|--|----------------------|--|
| Cash and cash equivalents | \$ | 40 | \$ | 47 | | | |
| Restricted cash | | 122 | | 37 | | | |
| Total cash and cash equivalents and restricted cash | \$ | 162 | \$ | 84 | | | |

Recent Accounting Pronouncements

Except as discussed below and in our 2019 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, 2020 that are of significance or potential significance to us.

Accounting Standards Updates Adopted During the Period

We adopted the ASUs listed below effective January 1, 2020 and our adoption did not have a material impact on our financial position, results of operations or cash flows (see Note 2 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for additional information regarding these ASUs):

- ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments;
- ASU 2018-17, Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities;
- ASU 2018-15, Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force);
- ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement; and
- ASU 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (along with a series
 of related ASUs).

Accounting Standards Updates Issued During the Period

In March 2020, the FASB issued 2020-04, *Reference Rate Reform (Topic 848)*: Facilitation of the Effects of Reference Rate Reform on Financial Reporting, which provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. This guidance is effective prospectively upon issuance through December 31, 2022 and may be applied from the beginning of an interim period that includes the issuance date of this ASU. We are currently evaluating the effect that this guidance will have on our financial position, results of operations and cash flows.

Note 3—Revenues and Accounts Receivable

Revenue Recognition

We disaggregate our revenues by segment and type of activity under ASC Topic 606, *Revenues from Contracts with Customers* ("Topic 606"). These categories depict how the nature, amount, timing and uncertainty of revenues and cash flows are affected by economic factors. See Note 3 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for additional information regarding our types of revenues and policies for revenue recognition.

The following tables present our Supply and Logistics, Transportation and Facilities segment revenues from contracts with customers disaggregated by type of activity (in millions):

| | Three Months Ended March 31, | | | |
|---|---------------------------------|-------|------|-------|
| | 2020 | | 2020 | |
| Supply and Logistics segment revenues from contracts with customers | | | | |
| Crude oil transactions | \$ | 7,322 | \$ | 6,936 |
| NGL and other transactions | | 428 | | 910 |
| Total Supply and Logistics segment revenues from contracts with customers | \$ | 7,750 | \$ | 7,846 |

| | Three Months Ended March 31, | | |
|---|---------------------------------|----|------|
| | 2020 | | 2019 |
| Transportation segment revenues from contracts with customers | | | |
| Tariff activities: | | | |
| Crude oil pipelines | \$ 512 | \$ | 478 |
| NGL pipelines | 26 | | 27 |
| Total tariff activities | 538 | | 505 |
| Trucking | 35 | | 39 |
| Total Transportation segment revenues from contracts with customers | \$ 573 | \$ | 544 |

| | Three Months Ended March 31, | | | led |
|---|---------------------------------|------|----|------|
| | | 2020 | | 2019 |
| Facilities segment revenues from contracts with customers | ' | | | |
| Crude oil, NGL and other terminalling and storage | \$ | 182 | \$ | 176 |
| NGL and natural gas processing and fractionation | | 109 | | 87 |
| Rail load / unload | | 14 | | 20 |
| Total Facilities segment revenues from contracts with customers | \$ | 305 | \$ | 283 |

Reconciliation to Total Revenues of Reportable Segments. The following tables present the reconciliation of our revenues from contracts with customers to segment revenues and total revenues as disclosed in our Condensed Consolidated Statements of Operations (in millions):

| Three Months Ended March 31, 2020 | Transportation | | Facilities | Supply and titles Logistics | | Total | | |
|--|----------------|-----|------------|-----------------------------|----|-------|----|-------|
| Revenues from contracts with customers | \$ | 573 | \$ | 305 | \$ | 7,750 | \$ | 8,628 |
| Other items in revenues | | 6 | | 8 | | 158 | | 172 |
| Total revenues of reportable segments | \$ | 579 | \$ | 313 | \$ | 7,908 | \$ | 8,800 |
| Intersegment revenues | | | | | | | | (531) |
| Total revenues | | | | | | | \$ | 8,269 |

| Three Months Ended March 31, 2019 | Supply and Transportation Facilities Logistics | | | | Total | |
|--|--|-----|----|-----|-------------|-------------|
| Revenues from contracts with customers | \$ | 544 | \$ | 283 | \$ 7,846 | \$ 8,673 |
| Other items in revenues | | 12 | | 16 | 176 | 204 |
| Total revenues of reportable segments | \$ | 556 | \$ | 299 | \$ 8,022 | \$ 8,877 |
| Intersegment revenues | | | | | | (502) |
| Total revenues | | | | | | \$ 8,375 |

Minimum Volume Commitments. We have certain agreements that require counterparties to transport or throughput a minimum volume over an agreed upon period. At March 31, 2020 and December 31, 2019, counterparty deficiencies associated with contracts with customers and buy/sell arrangements that include minimum volume commitments totaled \$22 million and \$42 million, respectively, of which \$18 million and \$22 million, respectively, was recorded as a contract liability. The remaining balance of \$4 million and \$20 million at March 31, 2020 and December 31, 2019, respectively, 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.

Contract Balances. Our contract balances consist of amounts received associated with services or sales for which we have not yet completed the related performance obligation. The following table presents the change in the contract liability balance during the three months ended March 31, 2020 (in millions):

| | Contra | act Liabilities |
|-------------------------------|--------|-----------------|
| Balance at December 31, 2019 | \$ | 354 |
| Amounts recognized as revenue | | (242) |
| Additions | | 36 |
| Balance at March 31, 2020 | \$ | 148 |

Remaining Performance Obligations. Topic 606 requires a presentation of information about partially and wholly unsatisfied performance obligations under contracts that exist as of the end of the period. The information includes the amount of consideration allocated to those remaining performance obligations and the timing of revenue recognition of those remaining performance obligations. Certain contracts meet the requirements for the presentation as remaining performance obligations. These arrangements include a fixed minimum level of service, typically a set volume of service, and do not contain any variability other than expected timing within a limited range. These contracts are all within the scope of Topic 606. The following table presents the amount of consideration associated with remaining performance obligations for the population of contracts with external customers meeting the presentation requirements as of March 31, 2020 (in millions):

| | ainder of 2020 | 2021 | 2022 | 2023 | 2024 | 025 and ereafter |
|---|-------------------|-----------|-----------|-----------|-----------|---------------------|
| Pipeline revenues supported by minimum volume commitments and capacity agreements (1) | \$ 124 | \$ 168 | \$ 162 | \$ 160 | \$ 138 | \$ 553 |
| Storage, terminalling and throughput agreement revenues | 307 | 324 | 254 | 192 | 147 | 367 |
| Total | \$ 431 | \$ 492 | \$ 416 | \$ 352 | \$ 285 | \$ 920 |

⁽¹⁾ Calculated as volumes committed under contracts multiplied by the current applicable tariff rate.

The presentation above does not include (i) expected revenues from legacy shippers not underpinned by minimum volume commitments, including pipelines where there are no or limited alternative pipeline transportation options, (ii) intersegment revenues and (iii) the amount of consideration associated with certain income generating contracts, which include a fixed minimum level of service, that are either not within the scope of Topic 606 or do not meet the requirements for presentation as remaining performance obligations under Topic 606. The following are examples of contracts that are not included in the table above because they are not within the scope of Topic 606 or do not meet the Topic 606 requirements for presentation:

- Minimum volume commitments on certain of our joint venture pipeline systems;
- Acreage dedications;
- Supply and Logistics buy/sell arrangements with future committed volumes;
- All other Supply and Logistics contracts, due to the election of practical expedients related to variable consideration and short-term contracts;
- Transportation and Facilities contracts that are short-term;
- Contracts within the scope of ASC Topic 842, Leases; and
- Contracts within the scope of ASC Topic 815, *Derivatives and Hedging*.

Trade Accounts Receivable and Other Receivables, Net

Our accounts receivable are primarily from purchasers and shippers of crude oil and, to a lesser extent, purchasers of NGL. During the first quarter of 2020, macroeconomic and geopolitical conditions including the collapse of oil prices driven by both the decrease in demand caused by the COVID-19 pandemic and excess supply has caused liquidity issues impacting many energy companies, which in turn has increased the potential credit risks associated with certain counterparties with which we do business. To mitigate credit risk related to our accounts receivable, we utilize a rigorous credit review process. We closely monitor market conditions and perform credit reviews of each customer 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, credit insurance or parental guarantees. Additionally, in an effort to mitigate credit risk, a significant portion of our transactions with counterparties are settled on a net-cash basis. For a majority of these net-cash arrangements, 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).

Accounts receivable from the sale of crude oil are generally settled with counterparties on the industry settlement date, which is typically in the month following the month in which the title transfers. Otherwise, we generally invoice customers within 30 days of when the products or services were provided and generally require payment within 30 days of the invoice date. We review all outstanding accounts receivable balances on a monthly basis and record our receivables net of expected credit losses. We do not write-off accounts receivable balances until we have exhausted substantially all collection efforts. At March 31, 2020 and December 31, 2019, substantially all of our trade accounts receivable were less than 30 days past their scheduled invoice date. Our expected credit losses are immaterial. Although we consider our credit procedures to be adequate to mitigate any significant credit losses, given the sharp decline in demand for crude oil and the drop in prices, the actual amount of current and future credit losses could vary significantly from estimated amounts.

The following is a reconciliation of trade accounts receivable from revenues from contracts with customers to total Trade accounts receivable and other receivables, net as presented on our Condensed Consolidated Balance Sheets (in millions):

| | March 31, 2020 | Dece | nber 31, 2019 |
|---|-----------------------|------|---------------|
| Trade accounts receivable arising from revenues from contracts with customers | \$ 1,796 | \$ | 3,381 |
| Other trade accounts receivables and other receivables (1) | 2,668 | | 3,576 |
| Impact due to contractual rights of offset with counterparties | (2,264) | | (3,343) |
| Trade accounts receivable and other receivables, net | \$ 2,200 | \$ | 3,614 |

The balance is comprised primarily of accounts receivable associated with buy/sell arrangements that are not within the scope of Topic 606.

Note 4—Net Income/(Loss) Per Class A Share

Basic net income/(loss) per Class A share is determined by dividing net income/(loss) attributable to PAGP by the weighted average number of Class A shares outstanding during the period. Our Class B and Class C shares do not share in the earnings of the Partnership; accordingly, basic and diluted net income per Class B and Class C share has not been presented.

Diluted net income/(loss) per Class A share is determined by dividing net income/(loss) 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/(loss) 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 12 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K 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. See Note 18 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for information regarding PAGP LTIP awards.

For the three months ended March 31, 2020 and 2019, the possible exchange of 63 million and 120 million AAP units, respectively, and 1 million and 2 million AAP Management Units, respectively, would not have had a dilutive effect on basic net income/(loss) per Class A share. For the three months ended March 31, 2020, our PAGP LTIP awards were antidilutive. For the three months ended March 31, 2019, our PAGP LTIP awards were dilutive; however, there were less than 0.1 million dilutive LTIP awards for the period, which did not change the presentation of weighted average Class A shares outstanding or net income/(loss) per Class A share.

The following table sets forth the computation of basic and diluted net income/(loss) per Class A share (in millions, except per share data):

| | | March 31, | | | |
|---|-----------|-----------|----|------|--|
| | | 2020 | | 2019 | |
| Basic and Diluted Net Income/(Loss) per Class A Share | | _ | | | |
| Net income/(loss) attributable to PAGP | \$ | (581) | \$ | 147 | |
| Basic and diluted weighted average Class A shares outstanding | | 183 | | 159 | |
| | | | | | |
| Basic and diluted net income/(loss) per Class A share | <u>\$</u> | (3.18) | \$ | 0.92 | |

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, 2020 | | | | | December 31, 2019 | | | | | | | |
|--------------------------------|----------------|--------------------|----|------------------|----|-------------------------------|----|--------|--------------------|----|-------------------|----|-------------------------------|
| | Volumes | Unit of Measure | | arrying Value | | Price/ Unit ⁽¹⁾ | Vo | olumes | Unit of Measure | (| Carrying Value | | Price/ Unit ⁽¹⁾ |
| Inventory | | | | | | | | | | | | | |
| Crude oil | 7,168 | barrels | \$ | 128 | \$ | 17.86 | | 8,613 | barrels | \$ | 450 | \$ | 52.25 |
| NGL | 3,992 | barrels | | 42 | \$ | 10.52 | | 7,574 | barrels | | 142 | \$ | 18.75 |
| Other | N/A | | | 11 | | N/A | | N/A | | | 12 | | N/A |
| Inventory subtotal | | | | 181 | | | | | | | 604 | | |
| | | | | | • | | | | | _ | | | |
| Linefill and base gas | | | | | | | | | | | | | |
| Crude oil | 14,251 | barrels | | 804 | \$ | 56.42 | - | 14,316 | barrels | | 826 | \$ | 57.70 |
| NGL | 1,640 | barrels | | 41 | \$ | 25.00 | | 1,701 | barrels | | 47 | \$ | 27.63 |
| Natural gas | 25,576 | Mcf | | 110 | \$ | 4.30 | 2 | 24,976 | Mcf | | 108 | \$ | 4.32 |
| Linefill and base gas subtotal | | | | 955 | | | | | | | 981 | | |
| | | | _ | | | | | | | | | | |
| Long-term inventory | | | | | | | | | | | | | |
| Crude oil | 2,789 | barrels | | 55 | \$ | 19.72 | | 2,598 | barrels | | 152 | \$ | 58.51 |
| NGL | 1,579 | barrels | | 18 | \$ | 11.40 | | 1,707 | barrels | | 30 | \$ | 17.57 |
| Long-term inventory subtotal | | | | 73 | | | | | | | 182 | • | |
| | | | | | | | | | | | | | |
| Total | | | \$ | 1,209 | | | | | | \$ | 1,767 | | |

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.

At the end of each reporting period, we assess the carrying value of our inventory and make any adjustments necessary to reduce the carrying value to the applicable net realizable value. Any resulting adjustments are a component of "Purchases and related costs" on our accompanying Condensed Consolidated Statements of Operations. We recorded a charge of \$232 million during the three months ended March 31, 2020 related to the write-down of our crude oil and NGL inventory, of which \$40 million is associated with our long-term inventory, due to declines in prices during the first quarter of 2020. A portion of this inventory valuation adjustment was offset by the recognition of gains on derivative instruments being utilized to hedge future sales of our crude oil and NGL inventory. Such gains were recorded to "Supply and Logistics segment revenues" in our accompanying Consolidated Statement of Operations. See Note 10 for discussion of our derivative and risk management activities.

Note 6—Goodwill

During the first quarter of 2020, we recorded impairment losses related to goodwill. Our market capitalization declined significantly during the first quarter driven by current macroeconomic and geopolitical conditions including the collapse of oil prices driven by both the decrease in demand caused by the COVID-19 pandemic and excess supply as well as changing market conditions and expected lower crude oil production in certain regions, resulting in expected decreases in future cash flows for certain of our assets. In addition, the uncertainty related to oil demand continues to have a significant impact on the investment and operating plans of our primary customers. Based on these events, we concluded that a triggering event occurred which required us to perform a quantitative impairment test as of March 31, 2020, utilizing a discounted cash flow approach. We applied a discount rate of approximately 14% in the determination of the fair value of each of our reporting units, which represents our estimate of the cost of capital of a theoretical market participant. The fair values of the reporting units are Level 3 measurements in the fair value hierarchy and were based on various inputs, as discussed below. The discounted cash flows for each reporting unit were based on six years of projected cash flows and terminal values that we believe would be applied by a theoretical market participant in similar market transactions. The discounted cash flows for the respective reporting units utilized various other assumptions, including, but not limited to (i) volumes (based on historical information and estimates of future drilling and completion activity, as well as expectations of future demand recovery), (ii) tariff and storage rates, (iii) future commodity prices (based on relevant indices and applicable quality and location differentials), and (iv) estimated fixed and variable costs. We used a range of cash flows for the discounted cash flow calculations, based on differing potential market scenarios but for each of the reporting units, the ultimate outcome of the impairment test was unchanged by the various points within the range of cash flows. Based upon the results of the impairment test, we concluded that the carrying value of each of our reporting units exceeded their respective fair values, resulting in a goodwill impairment charge for the entire goodwill balance for each reporting unit.

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

| | Transportation Facilities | | acilities | Supply and Logistics | | Total | |
|--|---------------------------|---------|-----------|----------------------|----|-------|-------------|
| Balance at December 31, 2019 | \$ | 1,052 | \$ | 982 | \$ | 506 | \$ 2,540 |
| Acquisitions | | 2 | | _ | | _ | 2 |
| Foreign currency translation adjustments | | (19) | | (7) | | (5) | (31) |
| Goodwill, gross | | 1,035 | | 975 | | 501 | 2,511 |
| Impairments | | (1,038) | | (975) | | (502) | (2,515) |
| Foreign currency translation adjustments | | 3 | | _ | | 1 | 4 |
| Accumulated impairment losses | | (1,035) | | (975) | | (501) | (2,511) |
| Balance at March 31, 2020 | \$ | _ | \$ | _ | \$ | _ | \$ |

Note 7—Investments in Unconsolidated Entities

Our investments in unconsolidated entities consisted of the following (in millions, except percentage data):

| | | Ownership Interest | Ownership Interest | | Investment Balance | | |
|--|-----------------------------|----------------------|--------------------|-------|--------------------|-------|--|
| Entity (1) | Type of Operation | at March 31, 2020 | | | December 31, 2019 | | |
| BridgeTex Pipeline Company, LLC | Crude Oil Pipeline | 20% | \$ | 427 | \$ | 431 | |
| Cactus II Pipeline LLC | Crude Oil Pipeline | 65% | | 767 | | 738 | |
| Capline Pipeline Company LLC | Crude Oil Pipeline (2) | 54% | | 499 | | 484 | |
| Diamond Pipeline LLC | Crude Oil Pipeline | 50% | | 477 | | 476 | |
| Eagle Ford Pipeline LLC | Crude Oil Pipeline | 50% | | 391 | | 382 | |
| Eagle Ford Terminals Corpus Christi LLC ("Eagle Ford Terminals") | Crude Oil Terminal and Dock | 50% | | 128 | | 126 | |
| Red Oak Pipeline LLC ("Red Oak") | Crude Oil Pipeline (3) (4) | 50% | | 54 | | 20 | |
| Saddlehorn Pipeline Company, LLC ("Saddlehorn") | Crude Oil Pipeline | 30% | | 181 | | 234 | |
| STACK Pipeline LLC | Crude Oil Pipeline | 50% | | 116 | | 117 | |
| White Cliffs Pipeline, LLC | Crude Oil Pipeline | 36% | | 193 | | 196 | |
| Wink to Webster Pipeline LLC | Crude Oil Pipeline (3) | 16% | | 182 | | 136 | |
| Other investments | | | | 299 | | 343 | |
| Total investments in unconsolidated entities | | | \$ | 3,714 | \$ | 3,683 | |

Except for Eagle Ford Terminals, which is reported in our Facilities segment, the financial results from the entities are reported in our Transportation segment.

Impairments

During the three months ended March 31, 2020, we recognized a loss of \$43 million related to the write-down of certain of our investments included in "Other investments" in the table above due to an other-than-temporary impairment related to a decline in market conditions. This loss is reflected in "Gain on/(impairment of) investments in unconsolidated entities, net" on our Condensed Consolidated Statement of Operations.

Divestitures

Saddlehorn. In February 2020, we sold a 10% ownership interest in Saddlehorn for proceeds of approximately \$78 million, including working capital adjustments, and have retained a 30% interest. We recorded a gain of approximately \$21 million related to this sale, which is included in "Gain on/(impairment of) investments in unconsolidated entities" on our Condensed Consolidated Statement of Operations. We continue to account for our remaining interest under the equity method of accounting.

⁽²⁾ The Capline pipeline was taken out of service pending the reversal of the pipeline system.

⁽³⁾ Asset is currently under construction and has not yet been placed in service.

⁽⁴⁾ In March 2020, the partners announced they were deferring the Red Oak pipeline project and suspending actions that would require additional capital spending on the project, and that they would re-evaluate demand for the project in light of recent market developments.

Note 8—Debt

Debt consisted of the following (in millions):

| | March 31, 2020 | | ecember 31, 2019 |
|--|-------------------|----|---------------------|
| SHORT-TERM DEBT | | | |
| PAA commercial paper notes, bearing a weighted-average interest rate of 2.2% (1) | \$ _ | \$ | 93 |
| PAA senior secured hedged inventory facility, bearing a weighted-average interest rate of 1.8% and 2.7% , respectively $^{(1)}$ | 237 | | 325 |
| Other | 126 | | 86 |
| Total short-term debt | 363 | | 504 |
| | | | |
| LONG-TERM DEBT | | | |
| PAA senior notes, net of unamortized discounts and debt issuance costs of \$59 and \$61, respectively (2) | 8,941 | | 8,939 |
| PAA senior secured hedged inventory facility, bearing a weighted-average interest rate of 1.8% (2) | 177 | | _ |
| PAA GO Zone term loans, net of debt issuance costs of \$1 and \$1, respectively, bearing a weighted-average interest rate of 2.5% and 2.6%, respectively | 199 | | 199 |
| Other | 101 | | 49 |
| Total long-term debt | 9,418 | | 9,187 |
| Total debt ⁽³⁾ | \$ 9,781 | \$ | 9,691 |

We classified these PAA commercial paper notes and credit facility borrowings as short-term as of March 31, 2020 and December 31, 2019, 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.

Borrowings and Repayments

Total borrowings under the PAA credit facilities and commercial paper program for the three months ended March 31, 2020 and 2019 were approximately \$9.6 billion and \$0.5 billion, respectively. Total repayments under the PAA credit facilities and commercial paper program were approximately \$9.6 billion and \$0.5 billion for the three months ended March 31, 2020 and 2019, 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.

As of March 31, 2020, we classified PAA's \$600 million, 5.00% senior notes due February 2021 and a portion of PAA's senior secured hedged inventory facility borrowings as long-term based on PAA's ability and intent to refinance such amounts on a long-term basis.

PAA's fixed-rate senior notes had a face value of approximately \$9.0 billion at both March 31, 2020 and December 31, 2019. We estimated the aggregate fair value of these notes as of March 31, 2020 and December 31, 2019 to be approximately \$7.2 billion and \$9.3 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 PAA's credit facilities, commercial paper program and GO Zone term loans approximates fair value as interest rates reflect current market rates. The fair value estimates for PAA's senior notes, credit facilities, commercial paper program and GO Zone term loans are based upon observable market data and are classified in Level 2 of the fair value hierarchy.

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 and transportation of crude oil, NGL and natural gas. Additionally, we issue letters of credit to support insurance programs, derivative transactions, including hedging-related margin obligations, and construction activities. At March 31, 2020 and December 31, 2019, we had outstanding letters of credit of \$106 million and \$157 million, respectively.

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, 2019 | 182,138,592 | 65,785,702 | 549,538,139 |
| Conversion of AAP Management Units (1) | _ | 559,768 | _ |
| Exchange Right exercises (1) | 2,101,487 | (2,101,487) | _ |
| Redemption Right exercises (1) | _ | (1,206,599) | 1,206,599 |
| Other | _ | _ | 24,431 |
| Outstanding at March 31, 2020 | 184,240,079 | 63,037,384 | 550,769,169 |
| | | | |
| | Class A Shares | Class B Shares | Class C Shares |
| Outstanding at December 31, 2018 | 159,485,588 | 119,604,338 | 516,938,280 |
| Redemption Right exercises (1) | | (91,672) | 91,672 |
| Other | _ | _ | 226,814 |
| Outstanding at March 31, 2019 | 159,485,588 | 119,512,666 | 517,256,766 |
| | <u> </u> | | |

See Note 12 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for information regarding conversions of AAP Management Units, Exchange Rights and Redemption Rights.

Distributions

The following table details distributions to our Class A shareholders paid during or pertaining to the first three months of 2020 (in millions, except per share data):

| Distribution Payment Date | Distributions to Class A Shareholders | | Distributions per Class A Share | |
|-----------------------------|--|----|------------------------------------|------|
| May 15, 2020 ⁽¹⁾ | \$ | 33 | \$ | 0.18 |
| February 14, 2020 | \$ | 66 | \$ | 0.36 |

Payable to shareholders of record at the close of business on May 1, 2020 for the period from January 1, 2020 through March 31, 2020.

Consolidated Subsidiaries

Noncontrolling Interests in Subsidiaries

As of March 31, 2020, noncontrolling interests in our subsidiaries consisted of (i) limited partner interests in PAA including a 69% interest in PAA's common units and PAA's Series A preferred units combined and 100% of PAA's Series B preferred units, (ii) an approximate 25% limited partner interest in AAP and (iii) a 33% interest in Red River Pipeline Company LLC ("Red River LLC").

During the three months ended March 31, 2020, we received \$8 million of contributions from noncontrolling interests in Red River LLC related to the Red River pipeline capacity expansion.

Subsidiary Distributions

PAA Series A Preferred Unit Distributions. The following table details distributions to PAA's Series A preferred unitholders paid during or pertaining to the first three months of 2020 (in millions, except per unit data):

| | Series A Preferred Unitholders | | | | | |
|-----------------------------|--------------------------------|--------------|---------|-----------------|--|--|
| Distribution Payment Date | Cash I | Distribution | Distril | bution per Unit | | |
| May 15, 2020 ⁽¹⁾ | \$ | 37 | \$ | 0.525 | | |
| February 14, 2020 | \$ | 37 | \$ | 0.525 | | |

Payable to unitholders of record at the close of business on May 1, 2020 for the period from January 1, 2020 through March 31, 2020. At March 31, 2020, such amount was accrued as distributions payable in "Other current liabilities" on our Condensed Consolidated Balance Sheet.

PAA Series B Preferred Unit Distributions. Distributions on PAA's Series B preferred units are payable semi-annually in arrears on the 15th day of May and November. The following table details distributions to be paid to PAA's Series B preferred unitholders (in millions, except per unit data):

| | Series B Preter | | | | | |
|-----------------------------|-----------------|------------|----------|----------------|--|--|
| Distribution Payment Date | Cash Dis | stribution | Distribu | ıtion per Unit | | |
| May 15, 2020 ⁽¹⁾ | \$ | 24.5 | \$ | 30.625 | | |

Payable to unitholders of record at the close of business on May 1, 2020 for the period from November 15, 2019 through May 14, 2020.

At March 31, 2020, approximately \$18 million of accrued distributions payable to PAA's Series B preferred unitholders was included in "Other current liabilities" on our Condensed Consolidated Balance Sheet.

PAA Common Unit Distributions. The following table details distributions to PAA's common unitholders paid during or pertaining to the first three months of 2020 (in millions, except per unit data):

| | Distributions | | | | | | | |
|-----------------------------|--------------------|-----|----|-----|-------------------------|-----|-------------|------------------|
| | Common Unitholders | | | | | | Cash I | Distribution per |
| Distribution Payment Date | Public | | | AAP | Total Cash Distribution | | Common Unit | |
| May 15, 2020 ⁽¹⁾ | \$ | 86 | \$ | 45 | \$ | 131 | \$ | 0.18 |
| February 14, 2020 | \$ | 172 | \$ | 90 | \$ | 262 | \$ | 0.36 |
| | | | | | | | | |

(1) Payable to unitholders of record at the close of business on May 1, 2020 for the period from January 1, 2020 through March 31, 2020.

AAP Distributions. The following table details the distributions to AAP's partners paid during or pertaining to the first three months of 2020 from distributions received from PAA (in millions):

| | Distribution to AAP's Partners | | | | | | | |
|-----------------------------|--------------------------------|----|----|------|---------------------------------|----|--|--|
| Distribution Payment Date | Noncontrolling Interests | | | PAGP | Total Cash Distributions | | | |
| May 15, 2020 ⁽¹⁾ | \$ | 12 | \$ | 33 | \$ | 45 | | |
| February 14, 2020 | \$ | 24 | \$ | 66 | \$ | 90 | | |

Payable to unitholders of record at the close of business on May 1, 2020 for the period from January 1, 2020 through March 31, 2020.

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. At the inception of the hedging relationship, we assess whether the derivatives employed are highly effective in offsetting changes in cash flows of anticipated hedged transactions. Throughout the hedging relationship, retrospective and prospective hedge effectiveness is assessed on a qualitative basis.

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 designated as cash flow hedges, changes in fair value are deferred in AOCI and recognized in earnings in the periods during which the underlying hedged transactions are recognized in earnings. Derivatives that are not designated as a hedging instrument and derivatives that do not qualify for hedge accounting 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.

Our financial derivatives, used for hedging risk, are governed through ISDA 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.

At March 31, 2020 and December 31, 2019, 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 exchange-traded derivatives transacted through a clearing brokerage account, as described below, we do not require our non-cleared derivative counterparties to post collateral with us.

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 sales 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, 2020, net derivative positions related to these activities included:

- A net long position of 9.9 million barrels associated with our crude oil purchases, which was unwound ratably during April 2020 to match monthly average pricing.
- A net short time spread position of 6.0 million barrels, which hedges a portion of our anticipated crude oil lease gathering purchases through May 2021.
- A net crude oil basis spread position of 6.3 million barrels at multiple locations through December 2021. These derivatives allow us to lock in grade basis differentials.
- A net short position of 15.7 million barrels through December 2022 related to anticipated net sales of crude oil and NGL inventory.

Storage Capacity Utilization — For capacity allocated to our supply and logistics operations, we have utilization risk in a backwardated market structure. As of March 31, 2020, we used derivatives to manage the risk that a portion of our storage capacity will not be utilized (an average of approximately 2.0 million barrels per month of storage capacity through December 2021). These positions involve no outright price exposure.

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. The following table summarizes our open derivative positions utilized to hedge the price risk associated with anticipated purchases and sales related to our natural gas processing and NGL fractionation activities as of March 31, 2020:

| | Notional Volume | |
|---------------------------------|-----------------|-----------------|
| | (Short)/Long | Remaining Tenor |
| Natural gas purchases | 41.8 Bcf | December 2022 |
| Propane sales | (3.0) MMbls | December 2020 |
| Butane sales | (1.8) MMbls | December 2020 |
| Condensate sales (WTI position) | (0.9) MMbls | December 2020 |
| Power supply requirements (1) | 0.9 TWh | December 2022 |

Power position to hedge a portion of our power supply requirements at our Canadian natural gas processing and fractionation plants.

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.

Our commodity derivatives are not designated as a hedging relationship, as such, changes in the fair value are reported in earnings. A summary of the impact of our commodity derivatives recognized in earnings as follows (in millions):

| | | | nths Ende ch 31, | d | |
|--|------|-----|---------------------|------|--|
| | 2020 | | 2 | 2019 | |
| Supply and Logistics segment revenues | \$ | 149 | \$ | 213 | |
| Field operating costs | | 1 | | 7 | |
| Net gain/(loss) from commodity derivative activity | \$ | 150 | \$ | 220 | |

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) (in millions):

| | March 31, 2020 | | Dec | cember 31, 2019 |
|------------------------------------|-------------------|------|-----|--------------------|
| Initial margin | \$ | 163 | \$ | 73 |
| Variation margin posted/(returned) | (| 214) | | (45) |
| Letters of credit | | (74) | | (73) |
| Net broker payable | \$ (| 125) | \$ | (45) |

The following table reflects the Condensed Consolidated Balance Sheet line items that include the fair values of our commodity derivative assets and liabilities and the effect of the collateral netting. Such amounts are presented on a gross basis, before the effects of counterparty netting. However, we have elected to present our commodity derivative assets and liabilities with the same counterparty on a net basis on our Condensed Consolidated Balance Sheet when the legal right of offset exists. Amounts in the table below are presented in millions.

| | March 31, 2020 | | | | | | December 31, 2019 | | | | | | | | |
|--|------------------------|----|-----------------------|----|------------------------------------|----|--|----|----------|----|-----------------------|----|------------------------------------|------------|--|
| | Commodit Assets | J | vatives iabilities | C | Effect of collateral Netting | Pr | t Carrying Value esented on te Balance Sheet | | Commodit | | vatives iabilities | C | Effect of Collateral Netting | Pre the | Carrying Value sented on Balance Sheet |
| Derivative Assets | Assets | | labilities | | retting | | Silect | | Assets | | iaumues | | retting | | Silect |
| Other current assets | \$ 446 | \$ | (256) | \$ | (125) | \$ | 65 | \$ | 179 | \$ | (37) | \$ | (45) | \$ | 97 |
| Other long-term assets, net | 99 | | (15) | | _ | | 84 | | 24 | | _ | | _ | | 24 |
| Derivative Liabilities | | | | | | | | | | | | | | | |
| Other current liabilities | 161 | | (171) | | _ | | (10) | | 32 | | (56) | | _ | | (24) |
| Other long-term liabilities and deferred credits | _ | | (12) | | _ | | (12) | | _ | | (12) | | _ | | (12) |
| Total | \$ 706 | \$ | (454) | \$ | (125) | \$ | 127 | \$ | 235 | \$ | (105) | \$ | (45) | \$ | 85 |

Interest Rate Risk Hedging

We use interest rate derivatives to hedge the benchmark interest rate 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 expense associated with the underlying debt.

The following table summarizes the terms of our outstanding interest rate derivatives as of March 31, 2020 (notional amounts in millions):

| Hedged Transaction | Number and Types of Derivatives Employed | lotional Amount | Expected Termination Date | Average Rate Locked | Accounting Treatment |
|-------------------------------|---|--------------------|------------------------------|------------------------|-------------------------|
| Anticipated interest payments | 8 forward starting swaps (30-year) | \$ 200 | 6/15/2020 | 3.06 % | Cash flow hedge |
| Anticipated interest payments | 8 forward starting swaps (30-year) | \$ 200 | 6/15/2023 | 1.38 % | Cash flow hedge |
| Anticipated interest payments | 8 forward starting swaps (30-year) | \$ 200 | 6/14/2024 | 0.73 % | Cash flow hedge |

As of March 31, 2020, there was a net loss of \$336 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 transactions or (ii) interest expense accruals associated with underlying debt instruments. We reclassified a net loss of \$2 million and \$2 million during the three months ended March 31, 2020 and 2019, respectively. Of the total net loss deferred in AOCI at March 31, 2020, we expect to reclassify a net loss of \$12 million to earnings in the next twelve months. We estimate that substantially all of the remaining deferred loss will be reclassified to earnings through 2054 as the underlying hedged transactions impact earnings. A portion of these amounts is based on market prices as of March 31, 2020; 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 unrealized gain/(loss) recognized in AOCI for derivatives (in millions):

| | Three Mo Mar | ed |
|--------------------------------|-----------------|------------|
| | 2020 | 2019 |
| Interest rate derivatives, net | \$ (79) | \$ (23) |

At March 31, 2020, the net fair value of our interest rate hedges, which were included in "Other current liabilities" and "Other long-term liabilities and deferred credits" on our Condensed Consolidated Balance Sheet, totaled \$115 million and \$9 million, respectively. At December 31, 2019, the fair value of these hedges was \$44 million and included in "Other current liabilities."

Currency Exchange Rate Risk Hedging

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

Our use of foreign currency derivatives include (i) derivatives we use to hedge currency exchange risk created by the use of USD-denominated commodity derivatives to hedge commodity price risk associated with CAD-denominated commodity purchases and sales and (ii) foreign currency exchange contracts we use to manage our Canadian business cash requirements.

The following table summarizes our open forward exchange contracts as of March 31, 2020 (in millions):

| | | USD CAD | | CAD | Average Exchange Rate USD to CAD |
|---|------|-----------|----|-----|-------------------------------------|
| Forward exchange contracts that exchange CAD for USD: | | | | | |
| | 2020 | \$ 132 | \$ | 175 | \$1.00 - \$1.32 |
| | | | | | |
| Forward exchange contracts that exchange USD for CAD: | | | | | |
| | 2020 | \$ 300 | \$ | 404 | \$1.00 - \$1.35 |

These derivatives are not designated as a hedging relationship. As such, changes in fair value are recognized in earnings as a component of Supply and Logistics segment revenues. For the three months ended March 31, 2020 and 2019, the amounts recognized in earnings for our currency exchange rate hedges were a loss of \$6 million and a gain of \$5 million, respectively.

At March 31, 2020, the net fair value of these currency exchange rate hedges, which was included in "Other current assets" and "Other current liabilities" on our Condensed Consolidated Balance Sheet, totaled \$1 million and \$6 million, respectively. At December 31, 2019, the net fair value of these currency exchange rate hedges, which was included in "Other current assets" and "Other current liabilities" on our Condensed Consolidated Balance Sheet, totaled \$2 million and \$1 million, respectively.

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. This embedded derivative is not designated as a hedging relationship and corresponding changes in fair value are recognized in "Other income/(expense), net" in our Condensed Consolidated Statement of Operations. For the three months ended March 31, 2020 and 2019, we recognized gains of \$26 million and \$23 million, respectively. The fair value of the Preferred Distribution Rate Reset Option, which was included in "Other long-term liabilities and deferred credits" on our Condensed Consolidated Balance Sheets, totaled \$8 million and \$34 million at March 31, 2020 and December 31, 2019, respectively. See Note 13 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for additional information regarding the Series A preferred units and Preferred Distribution Rate Reset Option.

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):

| | F | air Value as o | f March 31, 20 | Fair Value as of December 31, 2019 | | | | |
|--|---------|----------------|----------------|------------------------------------|---------|---------|---------|--------|
| Recurring Fair Value Measures (1) | Level 1 | Level 2 | Level 3 | Total | Level 1 | Level 2 | Level 3 | Total |
| Commodity derivatives | \$ 177 | \$ 128 | \$ (53) | \$ 252 | \$ 42 | \$ 105 | \$ (17) | \$ 130 |
| Interest rate derivatives | _ | (124) | _ | (124) | _ | (44) | _ | (44) |
| Foreign currency derivatives | _ | (5) | _ | (5) | _ | 1 | _ | 1 |
| Preferred Distribution Rate Reset Option | _ | _ | (8) | (8) | _ | _ | (34) | (34) |
| Total net derivative asset/(liability) | \$ 177 | \$ (1) | \$ (61) | \$ 115 | \$ 42 | \$ 62 | \$ (51) | \$ 53 |

⁽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 and over-the-counter commodity contracts such as futures and swaps. The fair value of exchange-traded commodity derivatives and over-the-counter commodity contracts 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 observable markets with less volume and transaction frequency than active markets. In addition, it includes certain physical commodity contracts. The fair values of these derivatives are corroborated with market observable inputs.

Level 3

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

The fair values of our Level 3 physical commodity and other contracts and over-the-counter options are based on valuation models utilizing significant timing estimates, which involve management judgment, and pricing inputs from observable and unobservable markets with less volume and transaction frequency than active markets. Significant deviations from these estimates and inputs could result in a material change in fair value. We report unrealized gains and losses associated with these contracts in our Condensed Consolidated Statements of Operations as Supply and Logistics segment revenues.

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):

| | | nths Er ch 31, | nths Ended h 31, | | |
|--|------------|-------------------|---------------------|--|--|
| | 2020 | | 2019 | | |
| Beginning Balance | \$ (51) | \$ | (24) | | |
| Net gains/(losses) for the period included in earnings | (10) | | 23 | | |
| Settlements | _ | | (10) | | |
| Derivatives entered into during the period | _ | | 1 | | |
| Ending Balance | \$ (61) | \$ | (10) | | |
| | | | | | |
| Change in unrealized gains/(losses) included in earnings relating to Level 3 derivatives still held at the end of the period | \$ (10) | \$ | 24 | | |

Note 11—Related Party Transactions

See Note 17 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for a complete discussion of our related party transactions.

PAA's Ownership of our Class C Shares

As of March 31, 2020 and December 31, 2019, PAA owned 550,769,169 and 549,538,139, respectively, Class C shares. The Class C shares represent a non-economic limited partner interest in us that provides PAA, as the sole holder, a "pass-through" voting right through which PAA's common unitholders and Series A preferred unitholders have the effective right to vote, pro rata with the holders of our Class A and Class B shares, for the election of eligible directors.

Transactions with Other Related Parties

Our other related parties include (i) principal owners and their affiliated entities and (ii) entities in which we hold investments and account for under the equity method of accounting (see Note 7 for information regarding such entities). We recognize as our principal owners entities that have a designated representative on the board of directors of our general partner and/or own greater than 10% of the limited partner interests in AAP. Such limited partner interests in AAP translates into a significantly smaller indirect ownership interest in PAA. We also consider subsidiaries or funds identified as affiliated with principal owners to be related parties. As of March 31, 2020, Kayne Anderson Capital Advisors, L.P. was a principal owner.

During the three months ended March 31, 2020 and 2019, we recognized sales and transportation revenues, purchased petroleum products and utilized transportation services from our principal owners and their affiliated entities and our equity method investees. 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 these transactions is included below (in millions):

| | | Three Months Ended March 31, | | | |
|---|---------|---------------------------------|----|------|--|
| | <u></u> | 2020 | | 2019 | |
| Revenues from related parties (1)(2)(3) | \$ | 23 | \$ | 225 | |
| | | | | | |
| Purchases and related costs from related parties (2)(3) | \$ | 129 | \$ | 114 | |

- (1) A majority of these revenues are included in "Supply and Logistics segment revenues" on our Condensed Consolidated Statements of Operations.
- Crude oil purchases that are part of inventory exchanges under buy/sell transactions are netted with the related sales, with any margin presented in "Purchases and related costs" in our Condensed Consolidated Statements of Operations.
- Revenues and purchases and related costs from related parties for 2019 include transactions with The Energy & Minerals Group ("EMG") and its subsidiaries through May 2019 and Occidental Petroleum Corporation ("Oxy") and its subsidiaries through September 2019. Following transactions reducing EMG and Oxy's ownership interest in AAP in May and September 2019, respectively, EMG and Oxy are no longer recognized as principal owners. See Note 17 to our 2019 Annual Report on Form 10-K for additional information.

Our receivable and payable amounts with these related parties as reflected on our Condensed Consolidated Balance Sheets were as follows (in millions):

| | March 31, 2020 | December 31, 2019 | | |
|---|-------------------|----------------------|--|--|
| Trade accounts receivable and other receivables, net from related parties (1) | \$ 180 | \$ 134 | | |
| | | | | |
| Trade accounts payable to related parties (1)(2) | \$ 97 | \$ 102 | | |

⁽¹⁾ Includes amounts related to crude oil purchases and sales, transportation services and amounts owed to us or advanced to us related to expansion projects of equity method investees where we serve as construction manager.

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.

We have agreements to store and transport crude oil at posted tariff rates on pipelines or at facilities that are owned by equity method investees, in which we own a 50% interest. A portion of our commitment to transport is supported by crude oil buy/sell or other agreements with third parties with commensurate quantities.

Legal Proceedings — General

In the ordinary course of business, we are involved in various legal proceedings, including those arising from regulatory and environmental matters. In connection with determining the probability of loss associated with such legal proceedings and whether any potential losses associated therewith are estimable, we take into account what we believe to be all relevant known facts and circumstances, and what we believe to be reasonable assumptions regarding the application of those facts and circumstances to existing agreements, laws and regulations. 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. Accordingly, we can provide no assurance that the outcome of the various legal proceedings that we are currently involved in, or will become involved with in the future, will not, individually or in the aggregate, have a material adverse effect on our consolidated financial condition, results of operations or cash flows.

Environmental — General

Although we have made significant investments in our maintenance and integrity programs, 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 we believe are 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, 2020, our estimated undiscounted reserve for environmental liabilities (including liabilities related to the Line 901 incident, as discussed further below) totaled \$142 million, of which \$89 million was classified as short-term and \$53 million was classified as long-term. At December 31, 2019, our estimated undiscounted reserve for environmental liabilities (including liabilities related to the Line 901 incident) totaled \$140 million, of which \$60 million was classified as short-term and \$80 million was classified as long-term. Such short- and long-term environmental liabilities are reflected in "Other current liabilities" and "Other long-term liabilities and deferred credits," respectively, on our Condensed Consolidated Balance Sheets. At March 31, 2020, we had recorded receivables totaling \$81 million for amounts probable of recovery under insurance and from third parties under indemnification agreements, of which \$69 million was classified as short-term and \$12 million was classified as long-term. At December 31, 2019, we had recorded \$72 million of such receivables, of which \$35 million was classified as short-term and \$37 million was classified as long-term. Such short- and long-term receivables are reflected in "Trade accounts receivable and other receivables, net" and "Other long-term assets, net," respectively, on our Condensed Consolidated Balance Sheets.

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 included the United States Coast Guard, the EPA, the State of California Department of Fish and Wildlife ("CDFW"), 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 and as set forth in the Consent Decree described below, 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 12, 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 obligated 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 imposed a pressure restriction on the section of Line 903 between Pentland Pump Station and Emidio Pump Station, which was subsequently lifted, and required 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, with the exception of the Pentland to Emidio segment of Line 903, which remains in service. No timeline has been established for the restart of Line 901 or Line 903. The remaining uncompleted portions of the CAO, which primarily relate to returning Lines 901 and 903 to service, have been incorporated into the Consent Decree (defined and discussed below). Upon entry of the Consent Decree by the Court, we expect that the CAO will be closed out by PHMSA.

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. All potential claims by PHMSA against PAA arising out of the Line 901 failure would be settled pursuant to the Consent Decree discussed below.

In late May of 2015, the California Attorney General's Office and the District Attorney's office for the County of Santa Barbara (collectively, the "Prosecutors") 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 May 2016 Indictment included a total of 46 counts against PAA. On July 28, 2016, at an arraignment hearing held in California Superior Court in Santa Barbara County, PAA pled not guilty to all counts. Between May of 2016 and May of 2018, 31 of the criminal charges against PAA (including one felony charge) and all of the criminal charges against our employee, were dismissed. The remaining 15 charges were the subject of a jury trial in California Superior Court in Santa Barbara County that began in May of 2018. The jury returned a verdict on September 7, 2018, pursuant to which we were (i) found guilty on one felony discharge count and eight misdemeanor counts (which included one reporting count, one strict liability discharge count and six strict liability animal takings counts) and (ii) found not guilty on one strict liability animal takings count. The jury deadlocked on three counts (including two felony discharge counts and one strict liability animal takings count), and two misdemeanor discharge counts were dropped. On April 25, 2019, PAA was sentenced to pay fines and penalties in the aggregate amount of just under \$3.35 million for the convictions covered by the September 2018 jury verdict (the "2019 Sentence"). The fines and penalties imposed in connection with the 2019 Sentence have been paid. The Superior Court also indicated that it would conduct further hearings on the issue of whether there were any "direct victims" of the spill that are entitled to restitution under applicable law. In April of 2019, the Prosecutors announced their intent to re-try the two felony discharge counts for which no jury verdict was returned. The strict liability animal taking count for which no jury verdict was returned has been dismissed. On October 7, 2019, upon motion from Plains, the court dismissed the two remaining felony counts and vacated a second trial on these 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 have cooperated with the DOJ's investigation by responding to their requests for documents and access to our 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. Except in connection with the May 2016 Indictment and the 2019 Sentence, to date no criminal charges with respect to the Line 901 release have been brought against PAA or any of its affiliates, officers or employees.

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 have been processing those claims and making payments as appropriate. 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. The court originally certified three sub-classes of claimants and denied certification of the other proposed sub-class. On appeal, the Ninth Circuit Court of Appeals overturned the certification of one of the three sub-classes, the oil-industry sub-class, and the District Court subsequently dismissed the oil-industry sub-class representatives' claims. The two remaining sub-classes include (i) commercial fishermen who landed fish in certain specified fishing blocks in the waters adjacent to Santa Barbara County or persons or businesses who resold commercial seafood landed in such areas; and (ii) residential beachfront properties on a beach and residential properties with a private easement to a beach where oil from the spill washed up. The court has tentatively set a trial date of September 1, 2020 for those two sub-classes. 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.

In addition, four unitholder derivative lawsuits have been filed by certain purported investors in PAA against PAGP and certain of PAA's affiliates, officers and directors. One lawsuit was filed in State District Court in Harris County, Texas and subsequently dismissed by the Court. 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 and subsequently dismissed without prejudice. Plaintiffs amended and refiled their complaint on June 3, 2019. All claims against the officers and directors of PAA and all affiliates of PAA, except PAGP, were dismissed with prejudice in January 2020. Consistent with and subject to the terms of our governing organizational documents (and to the extent applicable, insurance policies), we have indemnified and funded the defense costs of our officers and directors in connection with these lawsuits. We will vigorously defend the remaining derivative claim against PAGP.

We have also received several other individual lawsuits and complaints from companies, governmental agencies 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. In this regard, following the Line 901 incident, we entered into a cooperative Natural Resource Damage Assessment ("NRDA") process with the following federal and state agencies designated or authorized by law to act as trustees for the natural resources of the United States and the State of California (collectively, the "Trustees"): the United States Department of Interior, the National Oceanic and Atmospheric Administration, CDFW, the California Department of Parks and Recreation, the California State Lands Commission, and the Regents of the University of California. As part of the NRDA process, PAA and the Trustees jointly and independently planned and conducted a number of natural resource assessment activities related to the Line 901 incident. On March 13, 2020, the United States and the People of the State of California filed a civil complaint against Plains All American Pipeline, L.P. and Plains Pipeline L.P. along with a pre-negotiated settlement agreement in the form of a Consent Decree (the "Consent Decree"). The Consent Decree, which was pre-negotiated and signed by DOJ, PHMSA, EPA, CDFW, California Department of Parks and Recreation, California State Lands Commission, Office of the State Fire Marshal, Central Coast Regional Water Quality Control Board, and Regents of the University of California, will, if entered by the court, settle all of the claims asserted in the lawsuit. The Consent Decree would require Plains to pay \$24 million in civil penalties and implement certain agreed-upon injunctive relief, and pay \$22.325 million as compensation for injuries to, destruction of, loss of use of natural resources resulting from the Line 901 incident. The Consent Decree is subject to a public notice and comment period that is set to expire on May 20, 2020, and review and approval by the Federal District Court for the Central

Taking the foregoing into account, as of March 31, 2020, we estimate that the aggregate total costs we have incurred or will incur with respect to the Line 901 incident will be approximately \$400 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 accrue such estimates of aggregate total costs to "Field operating costs" in our Condensed Consolidated Statements of Operations. 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 or 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, 2020, we had a remaining undiscounted gross liability of \$90 million related to this event, of which approximately \$80 million is presented in "Other current 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, 2020, we had collected, subject to customary reservations, \$203 million out of the approximate \$275 million of release costs that we believe are probable of recovery from insurance carriers, net of deductibles. Therefore, as of March 31, 2020, we have recognized a receivable of approximately \$72 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 \$63 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.

Note 13—Operating Segments

We manage our operations through three operating segments: Transportation, Facilities and Supply and Logistics. See Note 3 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for a summary of the types of products and services from which each segment derives its revenues. 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 and 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 and/or refurbishment 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):

| | Tra | nsportation | | Facilities | Supply and Logistics | | | | Total |
|--|-----|-------------|----|------------|-------------------------|-------|----|-------|--------------|
| Three Months Ended March 31, 2020 | | _ | | | | | | | |
| Revenues: | | | | | | | | | |
| External customers (1) | \$ | 297 | \$ | 175 | \$ | 7,907 | \$ | (110) | \$ 8,269 |
| Intersegment (2) | | 282 | | 138 | | 1 | | 110 | 531 |
| Total revenues of reportable segments | \$ | 579 | \$ | 313 | \$ | 7,908 | \$ | _ | \$ 8,800 |
| Equity earnings in unconsolidated entities | \$ | 108 | \$ | 2 | \$ | _ | | | \$ 110 |
| Segment Adjusted EBITDA | \$ | 442 | \$ | 210 | \$ | 141 | | | \$ 793 |
| Maintenance capital | \$ | 34 | \$ | 14 | \$ | 3 | | | \$ 51 |
| Three Months Ended March 31, 2019 | | | | | | | | | |
| Revenues: | | | | | | | | | |
| External customers (1) | \$ | 303 | \$ | 156 | \$ | 8,022 | \$ | (106) | \$ 8,375 |
| Intersegment (2) | | 253 | | 143 | | _ | | 106 | 502 |
| Total revenues of reportable segments | \$ | 556 | \$ | 299 | \$ | 8,022 | \$ | _ | \$ 8,877 |
| Equity earnings in unconsolidated entities | \$ | 89 | \$ | _ | \$ | _ | | | \$ 89 |
| Segment Adjusted EBITDA | \$ | 399 | \$ | 184 | \$ | 278 | | | \$ 861 |
| Maintenance capital | \$ | 27 | \$ | 17 | \$ | 2 | | | \$ 46 |
| As of March 31, 2020 | | | | | | | | | |
| Total assets | \$ | 14,461 | \$ | 6,416 | \$ | 4,289 | | | \$ 25,166 |
| As of December 31, 2019 | | | - | | | | | | |
| Total assets | \$ | 15,549 | \$ | 7,593 | \$ | 6,827 | | | \$ 29,969 |

Transportation revenues from External customers include certain inventory exchanges with our customers where our Supply and Logistics segment has transacted the inventory exchange and serves as the shipper on our pipeline systems. See Note 3 to our Consolidated Financial Statements included in Part IV of our 2019 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 revenues from External customers presented above and adjusted those revenues out such that Total revenues 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 activities are conducted at posted tariff rates where applicable, or otherwise at 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/(loss) attributable to PAGP (in millions):

| | | Ended | | |
|---|----|---------|----|-------|
| | | 2020 | | 2019 |
| Segment Adjusted EBITDA | \$ | 793 | \$ | 861 |
| Adjustments (1): | | | | |
| Depreciation and amortization of unconsolidated entities (2) | | (17) | | (12) |
| Gains/(losses) from derivative activities, net of inventory valuation adjustments (3) | | (30) | | 74 |
| Long-term inventory costing adjustments (4) | | (115) | | 21 |
| Deficiencies under minimum volume commitments, net (5) | | 2 | | 7 |
| Equity-indexed compensation expense (6) | | (4) | | (3) |
| Net gain/(loss) on foreign currency revaluation (7) | | 13 | | (5) |
| Significant acquisition-related expenses (8) | | (3) | | _ |
| Unallocated general and administrative expenses | | (1) | | (1) |
| Depreciation and amortization | | (169) | | (136) |
| Gains/(losses) on asset sales and asset impairments, net | | (619) | | (4) |
| Goodwill impairment losses | | (2,515) | | _ |
| Gain on/(impairment of) investments in unconsolidated entities, net | | (22) | | 267 |
| Interest expense, net | | (108) | | (101) |
| Other income/(expense), net | | (31) | | 25 |
| Income/(loss) before tax | | (2,826) | | 993 |
| Income tax (expense)/benefit | | 134 | | (79) |
| Net income/(loss) | | (2,692) | | 914 |
| Net (income)/loss attributable to noncontrolling interests | | 2,111 | | (767) |
| Net income/(loss) attributable to PAGP | \$ | (581) | \$ | 147 |

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

⁽²⁾ Includes our proportionate share of the depreciation and amortization of unconsolidated entities.

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.

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 write-downs of such inventory that result from price declines from Segment Adjusted EBITDA.

- 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 realized on the settlement of foreign currency transactions as well as the revaluation of monetary assets and liabilities denominated in a foreign currency.
- Includes acquisition-related expenses associated with the Felix Midstream LLC acquisition. See Note 14 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, 2020 as our CODM does not view such expenses as integral to understanding our core segment operating performance.

Note 14—Acquisitions, Divestitures and Asset Impairments

Acquisitions

Felix Midstream LLC. In February 2020, we acquired Felix Midstream LLC, now known as FM Gathering LLC ("FM Gathering") from Felix Energy Holdings II, LLC for approximately \$300 million, net of working capital and other adjustments. FM Gathering owns and operates a newly constructed crude oil gathering system in the Delaware Basin, with associated crude oil storage and truck offloading capacity, and is supported by a long-term acreage dedication. The assets acquired are primarily included in our Transportation and Supply and Logistics segments. This acquisition was accounted for using the acquisition method of accounting and the determination of the fair value of the assets acquired and liabilities assumed has been estimated in accordance with the applicable accounting guidance. The determination of these values is preliminary and we expect to finalize our fair value determination in 2020. The assets acquired primarily consisted of property and equipment of \$115 million and intangible assets of \$187 million. The preliminary fair value of the tangible assets is a Level 3 measurement in the fair value hierarchy and was determined using a cost approach. The cost approach was based on costs incurred on similar recent construction projects. The preliminary fair value of the intangible assets is also a Level 3 measurement in the fair value hierarchy and was determined by applying a discounted cash flow approach. Such approach utilized discount rates varying from 15% to 16%, based on our estimate of the risk that a theoretical market participant would assign to the respective intangible assets.

Divestitures

Saddlehorn Pipeline Company, LLC. In February 2020, we sold a 10% ownership interest in Saddlehorn Pipeline Company, LLC for proceeds of approximately \$78 million, including working capital adjustments. We recorded a gain of approximately \$21 million related to this sale, which is included in "Gain on/(impairment of) investments in unconsolidated entities, net" on our Condensed Consolidated Statement of Operations.

Assets Held For Sale. As of March 31, 2020, we classified approximately \$333 million as assets held for sale on our Condensed Consolidated Balance Sheet (in "Other current assets"). The assets held for sale, which were valued based on fair value less costs to sell, are primarily property and equipment, are included in our Facilities segment and are related to transactions to sell our interests in:

· certain NGL terminals, which closed in April 2020 for proceeds of approximately \$163 million, subject to certain adjustments; and

PLAINS GP HOLDINGS, L.P. AND SUBSIDIARIES NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

• certain Los Angeles Basin ("LA Basin") terminals. In January 2020, we signed a definitive agreement to sell certain of our LA Basin crude oil terminals for \$195 million, subject to certain adjustments. We expect the transaction to close in the second half of 2020, subject to customary closing conditions, including the receipt of regulatory approvals.

As a result of these reclassifications to assets held for sale, we recognized non-cash impairment losses of approximately \$167 million. Such impairment losses are reflected in "(Gains)/losses on asset sales and asset impairments, net" on our Condensed Consolidated Statement of Operations.

Asset Impairments (Held and Used)

During the first quarter of 2020, we recognized approximately \$489 million of non-cash impairment losses related to certain pipeline and other long-lived assets included in our Transportation and Facilities segments, along with certain of our investments in unconsolidated entities. Of these losses, approximately \$446 million is reflected in "(Gains)/losses on asset sales and asset impairments, net" with the remainder reflected in "Gain on/(impairment of) investments in unconsolidated entities, net" on our Condensed Consolidated Statement of Operations.

The current macroeconomic and geopolitical conditions including the collapse of oil prices driven by both the decrease in demand caused by the COVID-19 pandemic and excess supply, as well as changing market conditions and expected lower crude oil production in certain regions, resulted in expected decreases in future cash flows for certain of our assets, which was a triggering event that required us to assess the recoverability of our carrying value of such long-lived assets. As a result of our impairment review, we wrote off the portion of the carrying amount of these long-lived assets that exceeded their fair value. Our estimated fair values (which we consider a Level 3 measurement in the fair value hierarchy) were based upon a discounted cash flow approach utilizing various assumptions and the application of a discount rate of approximately 14%, which represents our estimate of the cost of capital of a theoretical market participant. Such assumptions included (but were not limited to) (i) volumes (based on historical information and estimates of future drilling and completion activity), (ii) tariff rates, (iii) future commodity prices (based on relevant indices and applicable quality and location differentials), and (iv) estimated fixed and variable costs.

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 2019 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, 2020, our sole cash-generating 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 75% limited partner interest in AAP through our direct ownership of approximately 183.2 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, 2020, directly owned a limited partner interest in PAA through its ownership of approximately 248.4 million PAA common units (approximately 31% of PAA's total outstanding common units and Series A preferred units combined). 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 primarily for crude oil, NGL and natural gas. 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. PAA's operations are conducted directly and indirectly through its operating subsidiaries and are managed through three operating segments: Transportation, Facilities and Supply and Logistics. See "—Results of Operations—Analysis of Operating Segments" for further discussion.

Recent Events & Outlook

During the quarter, COVID-19 escalated into a global pandemic, which led to widespread shelter-in-place or similar requirements throughout North American and global markets. The resulting energy demand destruction constitutes a significant near-term challenge facing the energy industry, specifically the uncertainty around not only the magnitude and duration of the demand destruction but also the timing and extent of a recovery. Industry estimates indicate that global demand for crude oil in the second quarter of 2020 could be in the range of 20% to 25% less than the second quarter of 2019.

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In North American markets, these developments have resulted in an immediate industry response, led by the U.S. refining sector quickly reducing crude runs and producers quickly reducing drilling and completion activities and production levels. In addition, the Organization of Petroleum Exporting Countries ("OPEC") and other countries responded with plans to curtail production. However, all of these actions have not been sufficient to balance the market. Demand reductions have been faster and deeper than supply reductions and the resulting over-supply of crude oil is impacting the entire energy supply chain, causing remaining storage capacity to fill and producers to significantly reduce activity and/or shut in production in most, if not all, key basins. While we do not believe all of these actions will rebalance the market in the near term, they should help with the longer-term process of rebalancing the market, which will depend heavily on the speed with which energy demand recovers, the ultimate level of demand recovery and the size of the global supply surplus at the point in time when demand levels begin to exceed supply additions.

The situation continues to evolve on a daily basis and it is difficult to gauge the level of shut-ins, but at this time we expect storage in key market hubs to fill by June. With inventories for both crude oil and gasoline in the U.S. at historically high levels, the inventory overhang combined with the potential for a slow recovery of demand could result in a crude oil price environment that makes it difficult to achieve increased levels of drilling activity and production in the U.S. for the balance of 2020 and potentially into 2021. These market dynamics will have a negative impact on our business relative to pre-pandemic levels, with the impacts in 2021 potentially being more pronounced than in 2020. On May 5, 2020, we issued revised 2020 guidance reflecting our expectations for business performance in the current market environment. Our guidance represents estimates that we believe are reasonable based on market conditions and expectations at the time, but we can provide no assurance that our estimates will be accurate and our actual results could be materially worse than such estimates.

In response to these current dynamic and uncertain market conditions, on April 7, 2020, we issued a press release announcing a number of actions taken in order to further strengthen our balance sheet and further enhance our liquidity and long-term financial flexibility. These actions include significantly reducing and continuing to challenge our capital program, reducing the amount of our common distribution payable in May 2020, progressing asset sales, and reducing costs, while remaining focused on operating safely and responsibly.

Specifically, we announced the reduction of our 2020/2021 capital program by \$750 million, or 33%, and we decreased PAA's common unit distribution and our Class A share distribution payable in May 2020 by 50%, which reflects a reduction of \$525 million on an annualized basis. We completed an additional approximately \$165 million asset sale on April 1, 2020, which resulted in year-to-date assets sale proceeds through such date of approximately \$245 million (which amount excludes a previously announced approximately \$195 million asset sale that remains under a definitive agreement and is expected to close later in the year). While all of these actions should contribute towards a stronger balance sheet and should enhance our liquidity and long-term financial security, we can provide no assurance that we will be able to effect certain future actions (such as capital reductions, asset sales and expense reductions) and additional actions may be necessary to achieve our balance sheet, liquidity and financial security objectives (see Part II, Item 1A. "Risk Factors").

While some modifications in our operations have been necessary to deal with risks associated with the COVID-19 pandemic, we have not experienced any material constraints in our ability to continue our essential business functions and have not incurred any significant additional operating costs as a result of the pandemic, including costs associated with navigating the applicable shelter-in-place or similar restrictions and implementing our business continuity plans. We remain focused on the health and safety of our workforce, and have modified our operations in ways that we believe are prudent and appropriate in order to protect our employees while continuing to operate our assets in an effective and responsible manner.

Overview of Operating Results, Capital Investments and Other Significant Activities

The macroeconomic and industry specific challenges discussed above have resulted in a number of impairment charges recognized during the first quarter as discussed further below. See "—Liquidity and Capital Resources" and Part II, Item 1A. "Risk Factors" for additional discussion of the expected and potential impact of COVID-19 and related market conditions on our business.

During the first three months of 2020, we recognized a net loss of \$2.7 billion as compared to net income of \$914 million recognized during the first three months of 2019. The net loss for the period was driven by goodwill impairment losses of \$2.5 billion and was also impacted by non-cash impairment charges of approximately \$655 million related to the write-down of certain pipeline and other long-lived assets, certain of our investments in unconsolidated entities, and assets upon classification as held for sale. In addition, we recognized approximately \$232 million of inventory valuation adjustments due to declines in commodity prices during the first quarter of 2020.

Our results for the comparative period were also impacted by:

- · Less favorable results from our Supply and Logistics segment due to less favorable crude oil differentials and lower NGL margins;
- Higher depreciation and amortization expense in the 2020 period primarily due to additional depreciation expense associated with the completion of various capital expansion projects and an adjustment to the useful lives of certain assets;
- Unfavorable foreign currency impacts of \$59 million recognized in "Other income/(expense)" in the 2020 period;
- A gain of \$21 million recognized in the current period related to the sale of a portion of our interest in Saddlehorn Pipeline Company,
 LLC, compared to a non-cash gain of \$267 million recognized in the 2019 period related to a fair value adjustment resulting from the
 accounting for the contribution of our undivided joint interest in the Capline pipeline system for an equity interest in Capline Pipeline
 Company LLC; and
- An income tax benefit for the first quarter of 2020 due to the impact of lower earnings at PAA, including goodwill impairment losses, on income attributable to PAGP.

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

We invested \$352 million in midstream infrastructure projects during the three months ended March 31, 2020, which primarily related to projects under development in the Permian Basin. Additionally, during the first quarter of 2020, we acquired approximately \$308 million of assets, which primarily included a crude oil gathering system located in the Delaware Basin. See the "—Acquisitions and Capital Projects" section below for additional information.

We also paid approximately \$299 million of cash distributions to our Class A shareholders and noncontrolling interests during the three months ended March 31, 2020.

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, | | | | | |
|--------------------------|---------------------------------|----|------|--|--|--|
| | 2020 | | 2019 | | | |
| Acquisition capital | \$ 308 | \$ | _ | | | |
| Expansion capital (1)(2) | 352 | | 351 | | | |
| Maintenance capital (2) | 51 | | 46 | | | |
| | \$ 711 | \$ | 397 | | | |

⁽¹⁾ 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.

Expansion Capital Projects

On April 7, 2020, in response to the current dynamic and uncertain market conditions, we announced our plan to significantly reduce and continue to challenge our capital program. Total expansion capital for 2020/2021 is now targeted to be approximately \$1.55 billion, or \$750 million (33%) lower than the previously targeted \$2.3 billion capital program, and \$1.35 billion (47%) lower when eliminating \$600 million of assumed joint venture project financing (net to our share) for the Red Oak project, which has been deferred. The balance of the capital reductions relate to cancellations, cost savings and scope adjustments to other capital projects. The following table summarizes our notable projects in progress during 2020 and the estimated cost for the year ending December 31, 2020 (in millions):

| Projects | 2020 |
|---|-------------|
| Long-haul Pipeline Projects | \$ 220 |
| Permian Basin Takeaway Pipeline Projects | 355 |
| Complementary Permian Basin Projects | 225 |
| Selected Facilities/Downstream Projects | 160 |
| Other Projects | 140 |
| Total Projected 2020 Expansion Capital Expenditures | \$ 1,100 |

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 and/or refurbishment 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."

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 data):

| | Three M | Ionths arch 31 | | Variance | | | |
|---|-----------|-------------------|-------|-----------|--------|--|--|
| | 2020 | | 2019 | \$ | % | | |
| Transportation Segment Adjusted EBITDA (1) | \$ 442 | \$ | 399 | \$ 43 | 11 % | | |
| Facilities Segment Adjusted EBITDA (1) | 210 | | 184 | 26 | 14 % | | |
| Supply and Logistics Segment Adjusted EBITDA (1) | 141 | | 278 | (137) | (49)% | | |
| Adjustments: | | | | | | | |
| Depreciation and amortization of unconsolidated entities | (17) | | (12) | (5) | (42)% | | |
| Selected items impacting comparability - Segment Adjusted EBITDA | (137) | | 94 | (231) | ** | | |
| Unallocated general and administrative expenses | (1) | | (1) | _ | — % | | |
| Depreciation and amortization | (169) | | (136) | (33) | (24)% | | |
| Gains/(losses) on asset sales and asset impairments, net | (619) | | (4) | (615) | ** | | |
| Goodwill impairment losses | (2,515) | | _ | (2,515) | N/A | | |
| Gain on/(impairment of) investments in unconsolidated entities, net | (22) | | 267 | (289) | (108)% | | |
| Interest expense, net | (108) | | (101) | (7) | (7)% | | |
| Other income/(expense), net | (31) | | 25 | (56) | ** | | |
| Income tax (expense)/benefit | 134 | | (79) | 213 | 270 % | | |
| Net income/(loss) | (2,692) | | 914 | (3,606) | (395)% | | |
| Net (income)/loss attributable to noncontrolling interests | 2,111 | | (767) | 2,878 | 375 % | | |
| Net income/(loss) attributable to PAGP | \$ (581) | \$ | 147 | \$ (728) | (495)% | | |
| | | | | | | | |
| Basic and diluted net income/(loss) per Class A share | \$ (3.18) | \$ | 0.92 | \$ (4.10) | (446)% | | |
| Basic and diluted weighted average Class A shares outstanding | 183 | | 159 | 24 | 15 % | | |

^{**}Indicates that variance as a percentage is not meaningful.

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), gains and losses on asset sales and asset impairments, goodwill impairment losses and gains on and impairments of investments in unconsolidated entities, adjusted for certain selected items impacting comparability ("Adjusted EBITDA").

Segment Adjusted EBITDA is the measure of segment performance that is utilized by our 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.

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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) provides additional information about our core operating performance, (ii) provides investors with the same financial analytical framework upon which management bases financial, operational, compensation and planning/budgeting decisions and (iii) presents measures 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), 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 "Other current 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 impa

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/(Loss), 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 accompanying notes.

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

| | | onths Ended rch 31, | Varia | ınce |
|--|------------|------------------------|------------|--------|
| | 2020 | 2019 | \$ | % |
| Net income/(loss) | \$ (2,692) | \$ 914 | \$ (3,606) | (395)% |
| Add/(Subtract): | | | | |
| Interest expense, net | 108 | 101 | 7 | 7 % |
| Income tax expense/(benefit) | (134) | 79 | (213) | (270)% |
| Depreciation and amortization | 169 | 136 | 33 | 24 % |
| (Gains)/losses on asset sales and asset impairments, net | 619 | 4 | 615 | ** |
| Goodwill impairment losses | 2,515 | _ | 2,515 | N/A |
| (Gain on)/impairment of investments in unconsolidated entities, net | 22 | (267) | 289 | 108 % |
| Depreciation and amortization of unconsolidated entities (1) | 17 | 12 | 5 | 42 % |
| Selected Items Impacting Comparability: | | | | |
| (Gains)/losses from derivative activities, net of inventory valuation adjustments ⁽²⁾ | 30 | (74) | 104 | ** |
| Long-term inventory costing adjustments (3) | 115 | (21) | 136 | ** |
| Deficiencies under minimum volume commitments, net (4) | (2) | (7) | 5 | ** |
| Equity-indexed compensation expense (5) | 4 | 3 | 1 | ** |
| Net (gain)/loss on foreign currency revaluation (6) | (13) | 5 | (18) | ** |
| Significant acquisition-related expenses (7) | 3 | _ | 3 | ** |
| Selected Items Impacting Comparability - Segment Adjusted EBITDA | 137 | (94) | 231 | ** |
| Gains from derivative activities (2) | (26) | (23) | (3) | ** |
| Net (gain)/loss on foreign currency revaluation (6) | 59 | (1) | 60 | ** |
| Selected Items Impacting Comparability - Adjusted EBITDA (8) | 170 | (118) | 288 | ** |
| Adjusted EBITDA (8) | \$ 794 | \$ 861 | \$ (67) | (8)% |

^{**} Indicates that variance as a percentage is not meaningful.

Over the past several years, we have increased our participation in strategic pipeline joint ventures accounted for under the equity method of accounting. We exclude our proportionate share of the depreciation and amortization expense of such unconsolidated entities when reviewing Adjusted EBITDA, similar to our consolidated assets.

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. See Note 10 to our Condensed Consolidated Financial Statements for a comprehensive discussion regarding our derivatives and risk management activities.

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- 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 write-downs of such inventory that result from price declines as a selected item impacting comparability. See Note 5 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for additional inventory disclosures.
- 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.
- 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. We consider the compensation expense associated with these awards 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 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 18 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for a comprehensive discussion regarding our equity-indexed compensation plans.
- During the periods presented, there were fluctuations in the value of CAD to USD, resulting in non-cash 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 Felix Midstream acquisition in February 2020. See Note 14 for additional information.
- (8) Other income/(expense), net per our Condensed Consolidated Statements of Operations, adjusted for selected items impacting comparability ("Adjusted Other income/(expense), net") is included in Adjusted EBITDA and excluded from Segment Adjusted EBITDA.

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 understanding our core segment operating performance. See Note 13 to our Condensed Consolidated Financial Statements for a reconciliation of Segment Adjusted EBITDA to Net income/(loss) 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 and trucks. The Transportation segment generates revenue through a combination of tariffs, pipeline capacity agreements and other transportation fees. 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.

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

| Operating Results (1) | Three Months Ended March 31, | | | Vai | riance | |
|--|---------------------------------|-------|----|-------|--------------|-------|
| (in millions, except per barrel data) | | 2020 | | 2019 | \$ | % |
| Revenues | \$ | 579 | \$ | 556 | \$ 23 | 4 % |
| Purchases and related costs | | (79) | | (52) | (27) | (52)% |
| Field operating costs | | (162) | | (174) | 12 | 7 % |
| Segment general and administrative expenses (2) | | (28) | | (27) | (1) | (4)% |
| Equity earnings in unconsolidated entities | | 108 | | 89 | 19 | 21 % |
| | | | | | | |
| Adjustments (3): | | | | | | |
| Depreciation and amortization of unconsolidated entities | | 17 | | 12 | 5 | 42 % |
| Inventory valuation adjustments | | 6 | | _ | 6 | ** |
| Deficiencies under minimum volume commitments, net | | (4) | | (7) | 3 | ** |
| Equity-indexed compensation expense | | 2 | | 2 | _ | ** |
| Significant acquisition-related expenses | | 3 | | _ | 3 | ** |
| Segment Adjusted EBITDA | \$ | 442 | \$ | 399 | \$ 43 | 11 % |
| Maintenance capital | \$ | 34 | \$ | 27 | \$ 7 | 26 % |
| Segment Adjusted EBITDA per barrel | \$ | 0.67 | \$ | 0.68 | \$ (0.01) | (1)% |

| Average Daily Volumes | Three Mor Marc | nths Ended ch 31, | Varia | nce |
|---|-------------------|----------------------|---------|-------|
| (in thousands of barrels per day) (4) | 2020 | 2019 | Volumes | % |
| Tariff activities volumes | | | | |
| Crude oil pipelines (by region): | | | | |
| Permian Basin (5) | 5,165 | 4,268 | 897 | 21 % |
| South Texas / Eagle Ford ⁽⁵⁾ | 458 | 460 | (2) | — % |
| Central (5) | 404 | 509 | (105) | (21)% |
| Gulf Coast | 144 | 158 | (14) | (9)% |
| Rocky Mountain (5) | 273 | 302 | (29) | (10)% |
| Western | 203 | 182 | 21 | 12 % |
| Canada | 327 | 322 | 5 | 2 % |
| Crude oil pipelines | 6,974 | 6,201 | 773 | 12 % |
| NGL pipelines | 187 | 210 | (23) | (11)% |
| Tariff activities total volumes | 7,161 | 6,411 | 750 | 12 % |
| Trucking volumes | 94 | 93 | 1 | 1 % |
| Transportation segment total volumes | 7,255 | 6,504 | 751 | 12 % |

^{**} Indicates that variance as a percentage is not meaningful.

- 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.
- (4) 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.
- (5) Region includes volumes (attributable to our interest) from pipelines owned by unconsolidated entities.

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

Revenues, Purchases and Related Costs, Equity Earnings in Unconsolidated Entities and Volumes. The following table presents variances in revenues, purchases and related costs and equity earnings in unconsolidated entities by region:

| Favorable/(Unfavorable) Variance |
|----------------------------------|
| Three Months Ended March 31, |
| 2020-2019 |

| (in millions) | Rev | enues | hases and ted Costs | quity rnings |
|---|-----|-------|------------------------|-----------------|
| Permian Basin region | \$ | 45 | \$ (28) | \$ 31 |
| Central region | | (12) | (1) | (4) |
| Other regions, trucking and pipeline loss allowance revenue | | (10) | 2 | (8) |
| Total variance | \$ | 23 | \$ (27) | \$ 19 |

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

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.

• *Permian Basin region*. The increase in revenues, net of purchases and related costs, of \$17 million was primarily due to higher volumes on certain of our gathering systems, primarily due to increased crude oil production in the Delaware Basin and, to a lesser extent, from the gathering system we acquired from Felix Midstream in February 2020. In turn, the increased gathering volumes drove the increase in volumes on our intra-basin pipelines. These increases were partially offset by lower long-haul pipeline movements to Cushing.

The increase in equity earnings over the comparative period was primarily from our 65% interest in the Cactus II pipeline, which was placed in service in the third quarter of 2019.

Central region. The decrease in revenues, net of purchases and related costs, was primarily due to lower volumes as a result of lower
production and competition in the region.

The decrease in equity earnings was primarily due to the impact of refinery downtime on certain of the demand pull pipelines out of Cushing, Oklahoma, in which we own a 50% interest.

• Other regions, trucking and pipeline loss allowance revenue. The decrease in other revenues for the three months ended March 31, 2020 compared to the three months ended March 31, 2019 was primarily due to lower pipeline loss allowance revenue in 2020 due to lower prices, as well as the recognition of an inventory valuation adjustment (which impacts revenues but is excluded from Segment Adjusted EBITDA and thus is reflected as an "Adjustment" in the "Operating Results" table above).

Field Operating Costs. The decrease in field operating costs for the three months ended March 31, 2020 compared to the same period in 2019 was primarily due to a decrease in the use of drag reducing agents in our pipelines and a decreased reliance on generators as additional pipeline capacity was in service during the first quarter of 2020. In addition, equity-based compensation costs on liability-classified awards (which are not included as an "Adjustment" in the table above) were lower due to a decrease in PAA's common unit price.

Segment General and Administrative Expenses. The increase in segment general and administrative expenses for the three months ended March 31, 2020 compared to the same period in 2019 was primarily due to acquisition-related expenses associated with the Felix Midstream acquisition (which impact segment general and administrative expenses but are excluded from Segment Adjusted EBITDA and thus are reflected as an "Adjustment" in the table above), partially offset by a lower equity-based compensation costs on liability-classified awards (which are not included as an "Adjustment" in the table above) due to a decrease in PAA's common unit price.

Maintenance Capital. Maintenance capital consists of capital expenditures for the replacement and/or refurbishment of partially or fully depreciated assets in order to maintain the operating and/or earnings capacity of our existing assets. The increase in maintenance capital for the three months ended March 31, 2020 compared to the same period in 2019 was primarily due to the timing of projects in our integrity management program.

Facilities Segment

Our Facilities segment operations generally consist of fee-based activities associated with providing storage, terminalling and throughput services primarily for crude oil, 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.

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

| Operating Results (1) | Three Months Ended March 31, | | | | | | Variance | | |
|--|---------------------------------|------|----|------|------|------|----------|--|--|
| (in millions, except per barrel data) | | 2020 | | 2019 | | \$ | % | | |
| Revenues | \$ | 313 | \$ | 299 | \$ | 14 | 5 % | | |
| Purchases and related costs | | (2) | | (4) | | 2 | 50 % | | |
| Field operating costs | | (88) | | (86) | | (2) | (2)% | | |
| Segment general and administrative expenses (2) | | (19) | | (21) | | 2 | 10 % | | |
| Equity earnings in unconsolidated entities | | 2 | | _ | | 2 | N/A | | |
| | | | | | | | | | |
| Adjustments (3): | | | | | | | | | |
| (Gains)/losses from derivative activities | | 1 | | (4) | | 5 | ** | | |
| Deficiencies under minimum volume commitments, net | | 2 | | _ | | 2 | ** | | |
| Equity-indexed compensation expense | | 1 | | _ | | 1 | ** | | |
| Segment Adjusted EBITDA | \$ | 210 | \$ | 184 | \$ | 26 | 14 % | | |
| Maintenance capital | \$ | 14 | \$ | 17 | \$ | (3) | (18)% | | |
| Segment Adjusted EBITDA per barrel | \$ | 0.55 | \$ | 0.49 | \$ | 0.06 | 12 % | | |
| | | | | | | | | | |
| | Three Months Ended March 31, | | | | Vari | ance | | | |

| | | Three Months Ended March 31, | | ınce |
|--|------|---------------------------------|---------|------|
| Volumes (4) | 2020 | 2019 | Volumes | % |
| Liquids storage (average monthly capacity in millions of barrels) (5) | 111 | 109 | 2 | 2 % |
| Natural gas storage (average monthly working capacity in billions of cubic feet) | 63 | 63 | | — % |
| NGL fractionation (average volumes in thousands of barrels per day) | 154 | 157 | (3) | (2)% |
| Facilities segment total volumes (average monthly volumes in millions of barrels) ⁽⁶⁾ | 127 | 124 | 3 | 2 % |

^{**} Indicates that variance as a percentage is not meaningful.

- (4) Average monthly volumes are calculated as total volumes for the period divided by the number of months in the period.
- (5) Includes volumes (attributable to our interest) from facilities owned by unconsolidated entities.
- Facilities segment total volumes is calculated as the sum of: (i) liquids storage capacity; (ii) 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 (iii) 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.

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

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.

⁽³⁾ 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.

Revenues, Purchases and Related Costs and Volumes. Variances in revenues and average monthly volumes were primarily driven by the following:

- NGL Operations. Revenues from our NGL operations were favorably impacted for the three months ended March 31, 2020 compared to the
 three months ended March 31, 2019 by the receipt of a deficiency payment of approximately \$20 million upon the expiration of a multi-year
 contract and from higher fees at certain of our NGL storage facilities. Such favorable impacts were partially offset by lower revenues from
 certain of our NGL fractionation facilities.
- *Crude Oil Storage*. Revenues from our crude oil storage operations increased by \$6 million for the three months ended March 31, 2020 compared to three months ended March 31, 2019 primarily due to (i) the addition of an aggregate of 1.8 million barrels of storage capacity at our Midland, Cushing and St. James terminals and (ii) increased activity at certain of our West Coast terminals.
- Rail Terminals. Revenues from our rail terminals decreased by \$5 million for the three months ended March 31, 2020 compared to three
 months ended March 31, 2019 primarily due to decreased activity at certain of our rail terminals as a result of less favorable market
 conditions.

Maintenance Capital. For the three months ended March 31, 2020 compared to the same period in 2019, maintenance capital spending decreased primarily due to the impact of lower expenditures related to cavern maintenance at our gas storage facilities.

Supply and Logistics Segment

Revenues from our Supply and Logistics segment activities reflect the sale of gathered and bulk-purchased crude oil, as well as sales of NGL volumes. Generally, our segment results are impacted by (i) increases or decreases in our Supply and Logistics segment volumes (which consist of lease gathering crude oil purchases volumes and NGL sales volumes), (ii) the overall strength, weakness and volatility of market conditions, including regional differentials, and (iii) the effects of competition on our lease gathering and NGL margins. In addition, the execution of our risk management strategies in conjunction with our assets can provide upside in certain markets.

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

| Operating Results (1) | Three Months Ended March 31, | | | nded Variance | | | |
|---|---------------------------------|----|---------|------------------|--------|-------|--|
| (in millions, except per barrel data) | 2020 | | 2019 | | \$ | % | |
| Revenues | \$ 7,908 | \$ | 8,022 | \$ | (114) | (1)% | |
| Purchases and related costs | (7,813) | | (7,562) | | (251) | (3)% | |
| Field operating costs | (58) | | (69) | | 11 | 16 % | |
| Segment general and administrative expenses (2) | (22) | | (28) | | 6 | 21 % | |
| | | | | | | | |
| Adjustments ⁽³⁾ : | | | | | | | |
| (Gains)/losses from derivative activities, net of inventory valuation adjustments | 23 | | (70) | | 93 | ** | |
| Long-term inventory costing adjustments | 115 | | (21) | | 136 | ** | |
| Equity-indexed compensation expense | 1 | | 1 | | _ | ** | |
| Net (gain)/loss on foreign currency revaluation | (13) | | 5 | | (18) | ** | |
| Segment Adjusted EBITDA | \$ 141 | \$ | 278 | \$ | (137) | (49)% | |
| Maintenance capital | \$ 3 | \$ | 2 | \$ | 1 | 50 % | |
| Segment Adjusted EBITDA per barrel | \$ 1.00 | \$ | 2.12 | \$ | (1.12) | (53)% | |

| Average Daily Volumes (4) | Three Mor Marc | nths Ended ch 31, | Var | iance |
|--|-------------------|----------------------|---------|-------|
| (in thousands of barrels per day) | 2020 | 2019 | Volumes | % |
| Crude oil lease gathering purchases | 1,318 | 1,128 | 190 | 17 % |
| NGL sales | 220 | 328 | (108) | (33)% |
| Supply and Logistics segment total volumes | 1,538 | 1,456 | 82 | 6 % |

^{**} Indicates that variance as a percentage is not meaningful.

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

| | NYMEX W11 Crude Oil Price | | | | |
|-----------------------------------|------------------------------|----|------|--|--|
| | Low | | High | | |
| Three months ended March 31, 2020 | \$ 14 | \$ | 63 | | |
| Three months ended March 31, 2019 | \$ 47 | \$ | 60 | | |

Our crude oil and NGL supply, logistics and distribution operations are not directly affected by the absolute level of prices. 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. Additionally, net revenues are impacted by net gains and losses from certain derivative activities during the periods.

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.

Segment Adjusted EBITDA and Volumes. The following summarizes the significant items impacting our Supply and Logistics Segment Adjusted EBITDA:

- *Crude Oil Operations*. Revenues, net of purchases and related costs, ("net revenues") from our crude oil operations decreased for the three months ended March 31, 2020 compared to the three months ended March 31, 2019, primarily due to less favorable differentials in the Permian Basin, partially offset by more favorable arbitrage opportunities in Canada.
- *NGL Operations*. Net revenues from our NGL operations decreased for the three months ended March 31, 2020 compared to the three months ended March 31, 2019, primarily due to weaker fractionation spreads, narrower sales differentials and lower sales volumes.

⁽¹⁾ Revenues and costs include intersegment amounts.

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.

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.

⁽⁴⁾ Average daily volumes are calculated as the total volumes for the period divided by the number of days in the period.

- 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), losses on derivatives that are related to investing activities (such as the purchase of linefill) 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.
- 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. These non-cash 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.
- *Field Operating Costs*. The decrease in field operating costs for the three months ended March 31, 2020 compared to the same period in 2019 was primarily driven by a decrease in long-haul third-party trucking costs and a decrease in company personnel and truck costs as additional pipeline capacity came into service after the first quarter of 2019.
- Segment General and Administrative Expenses. The decrease in segment general and administrative expenses for the three months ended March 31, 2020 compared to the same period in 2019 was primarily driven by a decrease in equity-based compensation costs on liability-classified awards (which are not included as an "Adjustment" in the table above) due to a decrease in PAA's common unit price.

Other Income and Expenses

Depreciation and Amortization

Depreciation and amortization expense increased for the three months ended March 31, 2020 compared to the three months ended March 31, 2019 largely driven by (i) additional depreciation expense associated with the completion of various capital expansion projects and (ii) a reduction in the useful lives of certain assets.

Gains/Losses on Asset Sales and Asset Impairments, Net

The net loss on asset sales and asset impairments for the three months ended March 31, 2020 was largely driven by (i) non-cash impairment losses of approximately \$446 million related to the write-down of certain pipeline and other long-lived assets due to the current macroeconomic and geopolitical conditions including the collapse of oil prices driven by both the decrease in demand caused by the COVID-19 pandemic and excess supply, as well as changing market conditions and expected lower crude oil production in certain regions, and (ii) approximately \$167 million of impairment losses recognized on assets upon classification as held for sale. See Note 14 for additional information regarding these asset impairments.

Goodwill Impairment Losses

During the first quarter of 2020, we recognized a goodwill impairment charge of \$2.5 billion, representing the entire balance of goodwill. See Note 6 to our Condensed Consolidated Financial Statements for additional information.

Gain on/Impairment of Investments in Unconsolidated Entities, Net

During the three months ended March 31, 2020, we recognized a loss of \$43 million related to the write-down of certain of our investments in unconsolidated entities. Additionally, during the three months ended March 31, 2020, we recognized a gain of \$21 million related to our sale of a 10% interest in Saddlehorn Pipeline Company, LLC. See Note 7 to our Condensed Consolidated Financial Statements for additional information. During the three months ended March 31, 2019, we recognized a non-cash gain of \$267 million related to a fair value adjustment resulting from the accounting for the contribution of our undivided joint interest in the Capline pipeline system for an equity interest in Capline Pipeline Company LLC.

Interest Expense

The increase in interest expense for the three months ended March 31, 2020 compared to the three months ended March 31, 2019 was primarily due to (i) lower capitalized interest in the 2020 period driven by fewer capital projects under construction and (ii) a higher weighted average debt balance during the 2020 period from higher commercial paper and credit facility borrowings.

Other Income/(Expense), Net

The following table summarizes the components impacting Other income/(expense), net (in millions):

| Three Months Ended March 31, | | | | |
|---------------------------------|----------------------------|-------------------------------|--|--|
| 2020 | | 2019 | | |
| \$ 26 | \$ | 23 | | |
| (59) | | 1 | | |
| 2 | | 1 | | |
| \$ (31) | \$ | 25 | | |
| \$ | 2020 \$ 26 (59) 2 | 2020 \$ 26 \$ (59) 2 | | |

⁽¹⁾ See Note 10 to our Condensed Consolidated Financial Statements for additional information.

Income Tax Expense/Benefit

The income tax benefit for the three months ended March 31, 2020 compared to the income tax expense for the months ended March 31, 2019 was primarily due to the impact of lower earnings at PAA, including goodwill impairment losses, on income attributable to PAGP.

In response to the COVID-19 pandemic, many governments have enacted or are contemplating measures to provide aid and economic stimulus. These measures may include deferring the due dates of tax payments or other changes to their income and non-income-based tax laws. The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), which was enacted on March 27, 2020 in the U.S., includes measures to assist companies, including temporary changes to income and non-income-based tax laws. There were no material tax impacts to our financial statements as it relates to COVID-19 measures. We continue to monitor additional guidance issued by the U.S. Treasury Department, the Internal Revenue Service and others.

The net loss during the first quarter of 2020 was related to the impact that the change in in the U.S. dollar to Canadian dollar exchange rate had on the portion of our intercompany net investment that is not long-term in nature.

Outlook

Market Overview and Outlook

See "—Executive Summary —Recent Events & Outlook."

Outlook for Certain Investments in Unconsolidated Entities

As of March 31, 2020, we owned a 50% undivided joint interest in Red Oak Pipeline LLC ("Red Oak"), which was in the process of developing a new pipeline that would provide crude oil transportation service from Cushing, Oklahoma, and the Permian Basin in West Texas to multiple destinations along the Texas Gulf Coast, including Corpus Christi, Ingleside, Houston and Beaumont, Texas. In March 2020, the partners announced they were deferring the Red Oak pipeline project and suspending actions that would require additional capital spending on the project, and that they would re-evaluate demand for the project in light of recent market developments. If the partners decide not to move forward with the pipeline project, we may recognize an impairment of the carrying value of our interest in Red Oak, which was \$54 million as of March 31, 2020 (\$122 million including our estimate of committed costs incurred in the second quarter).

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 divestiture program, as further discussed below in the section entitled "—Acquisitions and Capital Expenditures." 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, 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 and the sale of assets.

As of March 31, 2020, although we had a working capital deficit of \$286 million, we had approximately \$2.5 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, 2020 | | |
|--|-----------------------------|--|--|
| Availability under PAA senior unsecured revolving credit facility (1)(2) | \$ 1,583 | | |
| Availability under PAA senior secured hedged inventory facility (1)(2) | 897 | | |
| Subtotal | 2,480 | | |
| Cash and cash equivalents | 40 | | |
| Total | \$ 2,520 | | |

⁽¹⁾ Represents availability prior to giving effect to borrowings outstanding under the PAA commercial paper program, which reduce available capacity under the facilities. There were no commercial paper borrowings outstanding as of March 31, 2020.

Available capacity under the PAA senior unsecured revolving credit facility and the PAA senior secured hedged inventory facility was reduced by outstanding letters of credit of \$97 million and \$9 million, respectively.

Current macroeconomic and geopolitical conditions including the collapse of oil prices driven by both the decrease in demand caused by the COVID-19 pandemic and excess supply has caused liquidity issues impacting many energy companies; however, 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 strong 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. In addition, usage of the PAA credit facilities, which provide the financial backstop for the PAA commercial paper program, is subject to ongoing compliance with covenants. As of March 31, 2020, PAA was in compliance with all such covenants. Also, see Item 1A. "Risk Factors" included in our 2019 Annual Report on Form 10-K and Item 1A. "Risk Factors" below in Part II of this Form 10-Q for further discussion regarding such risks that may impact our liquidity and capital resources.

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 2019 Annual Report on Form 10-K.

Net cash provided by operating activities for the first three months of 2020 and 2019 was \$889 million and \$1,032 million, respectively, and primarily resulted from earnings from our operations. Additionally, as discussed further below, changes during these periods in our inventory levels and associated margin balances required as part of our hedging activities impacted our cash flow from operating activities.

During the three months ended March 31, 2020 and 2019, our cash provided by operating activities was positively impacted by decreases in the volume of inventory that we held, primarily due to the sale of NGL and crude oil inventory. The favorable effects from the liquidation of such inventory were partially offset by the timing of revenue recognized during the period for which cash was received in prior periods.

Acquisitions and Capital Expenditures

In addition to our operating needs discussed above, on a consolidated basis, we also use cash for our acquisition activities and expansion capital projects and maintenance capital activities. 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 recent years, we have also used proceeds from our divestiture program. We have made and will continue to make capital expenditures for acquisitions, expansion capital projects and maintenance activities. However, in the near term we do not plan to issue common equity to fund such activities.

Acquisitions. In February 2020, we acquired a crude oil gathering system and related assets in the Delaware Basin for approximately \$300 million. See Note 14 to our Condensed Consolidated Financial Statements for additional information.

Capital Projects. We invested \$352 million in midstream infrastructure during the three months ended March 31, 2020, and we expect to invest approximately \$1.1 billion during the full year ending December 31, 2020. Our expected capital investment for 2020 reflects a reduction from our expected capital investment at year-end 2019 due to the current dynamic and uncertain market conditions. See "—Acquisitions and Capital Projects" for additional information. We expect to fund our 2020 capital program with retained cash flow, proceeds from assets sold as part of our divestiture program or debt.

Divestitures. In January 2020, we entered into a definitive agreement to sell certain of our Los Angeles Basin crude oil terminals for \$195 million, subject to certain adjustments and expect the transaction to close in the second half of 2020. In April 2020, we sold certain NGL terminals for \$163 million, subject to certain adjustments. See Note 14 to our Condensed Consolidated Financial Statements for additional information. Additionally, we sold a 10% ownership interest in Saddlehorn Pipeline Company, LLC for proceeds of approximately \$78 million. See Note 7 to our Condensed Consolidated Financial Statements for additional information.

Ongoing Acquisition, Divestiture and Investment Activities. We intend to continue to focus on activities to enhance investment returns and reinforce capital discipline through asset optimization, joint ventures, potential divestitures and similar arrangements. We typically do not announce a transaction until after we have executed a definitive agreement. However, in certain cases in order to protect our business interests or for other reasons, we may defer public announcement of a transaction until closing or a later date. Past experience has demonstrated that discussions and negotiations regarding a potential transaction can advance or terminate in a short period of time. Moreover, the closing of any transaction for which we have entered into a definitive agreement may be subject to customary and other closing conditions, which may not ultimately be satisfied or waived. Accordingly, we can give no assurance that our current or future acquisition or investment efforts will be successful, or that our strategic asset divestitures will be completed. Although we expect the acquisitions and investments we make to be accretive in the long term, we can provide no assurance that our expectations will ultimately be realized. Also, see Item 1A. "Risk Factors—Risks Related to PAA's Business" of our 2019 Annual Report on Form 10-K for further discussion regarding risks related to our acquisitions 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 (including borrowings for NYMEX and ICE margin deposits) 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 and other debt agreements, as well as payment of distributions to our Class A shareholders and noncontrolling interests.

PAGP Registration Statements. We have filed with the SEC a 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 "PAGP Traditional Shelf"). At March 31, 2020, we had approximately \$939 million of unsold securities available under the PAGP Traditional Shelf. We also have access to a shelf registration statement (the "PAGP 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. We did not conduct any offerings under the PAGP Traditional Shelf or the PAGP WKSI Shelf during the three months ended March 31, 2020.

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 \$1.1 billion of debt or equity securities (the "PAA Traditional Shelf"). At March 31, 2020, PAA had approximately \$1.1 billion of unsold securities available under the PAA 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 Traditional Shelf or the PAA WKSI Shelf during the three months ended March 31, 2020.

Credit Agreements, Commercial Paper Program and Indentures. The credit agreements for the PAA revolving credit facilities (which impact PAA's ability to access the PAA commercial paper program because they provide the financial backstop that supports PAA's short-term credit ratings) and its GO Zone term loans and the indentures governing its senior notes contain cross-default provisions. A default under PAA's credit agreements or indentures would permit the lenders to accelerate the maturity of the outstanding debt. As long as PAA is in compliance with the provisions in its credit agreements, its ability to make distributions of available cash is not restricted. As of March 31, 2020, PAA was in compliance with the covenants contained in its credit agreements and indentures.

PAA's fixed-rate senior notes had a face value of approximately \$9.0 billion at both March 31, 2020 and December 31, 2019. We estimated the aggregate fair value of these notes as of March 31, 2020 and December 31, 2019 to be approximately \$7.2 billion and \$9.3 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. The decrease in the fair value of PAA's fixed-rate senior notes is attributable to widening credit spreads in the secondary market for the debt of oil and gas industry participants in general, and the debt of PAA and many of its peers in the United States midstream sector specifically. This widening has occurred due to a number of external forces, such as the collapse of oil prices driven by both the decrease in demand caused by the COVID-19 pandemic and excess supply.

During the three months ended March 31, 2020, we had net repayments on PAA's credit agreements and commercial paper program of \$4 million. The net repayments resulted primarily from cash flow from operating activities and proceeds from

asset sales, which offset borrowings during the period related to funding needs for capital investments, inventory purchases and other general partnership purposes.

As of March 31, 2019 and December 31, 2018, we had no outstanding borrowings under PAA's credit agreements or commercial paper program. However, during the three months ended March 31, 2019, we borrowed and repaid \$0.5 billion under PAA's commercial paper program. The repayments resulted primarily from cash flow from operating activities.

Distributions to Our Class A Shareholders

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. Our levels of financial reserves are established by our general partner and include reserves for the proper conduct of our business (including future capital expenditures and anticipated credit needs), compliance with law or contractual obligations and funding of future distributions to our shareholders. On May 15, 2020, we will pay a quarterly distribution of \$0.18 per Class A share (\$0.72 per Class A share on an annualized basis), which equates to a reduction of 50% compared to the quarterly distribution of \$0.36 per Class A share (\$1.44 per Class A share on an annualized basis) paid in February 2020. This reduction was made in response to the current dynamic and uncertain market conditions to further reinforce our commitment to maintaining a solid capital structure and strong liquidity. See "—Executive Summary —Recent Events & Outlook" for further discussion. See Note 9 to our Condensed Consolidated Financial Statements for details of distributions paid during or pertaining to the first three months of 2020. Also, see Item 5. "Market for Registrant's Shares, Related Shareholder Matters and Issuer Purchases of Equity Securities—Cash Distribution Policy" included in our 2019 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. As of March 31, 2020, noncontrolling interests in our subsidiaries consisted of (i) limited partner interests in PAA including a 69% interest in PAA's common units and PAA's Series A preferred units combined and 100% of PAA's Series B preferred units, (ii) an approximate 25% limited partner interest in AAP and (iii) a 33% interest in Red River LLC. See Note 9 to our Condensed Consolidated Financial Statements for additional information.

Distributions to PAA's Series A preferred unitholders. On May 15, 2020, PAA will pay a cash distribution of \$37 million (\$0.525 per unit) on its Series A preferred units outstanding as of May 1, 2020, the record date for such distribution for the period from January 1, 2020 through March 31, 2020. See Note 9 to our Condensed Consolidated Financial Statements for details of distributions made during or pertaining to the first three months of 2020.

Distributions to PAA's Series B preferred unitholders. Distributions on PAA's Series B preferred units are payable in cash semi-annually in arrears on the 15th day of May and November. On May 15, 2020, PAA will pay the semi-annual cash distribution of \$24.5 million on the Series B preferred units to holders of record at the close of business on May 1, 2020 for the period from November 15, 2019 to May 14, 2020. See Note 9 to our Condensed Consolidated Financial Statements for additional information.

Distributions to PAA's common unitholders. On May 15, 2020, PAA will pay a quarterly distribution of \$0.18 per common unit (\$0.72 per common unit on an annualized basis) on its common units outstanding as of May 1, 2020, the record date for such distribution for the period from January 1, 2020 through March 31, 2020. See Note 9 to our Condensed Consolidated Financial Statements for details of distributions paid during or pertaining to the first three months of 2020.

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 and cost of borrowing.

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 13 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. 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 other amounts due under the specified contractual obligations as of March 31, 2020 (in millions):

| | Remainder of 2020 | | 2021 | | 2022 | | 2023 | | 2024 | | 2025 and Thereafter | | Total | |
|--|-------------------|-------|------|-------|------|-------|------|-------|------|-------|------------------------|--------|-------|--------|
| Long-term debt and related interest payments (1) | \$ | 311 | \$ | 1,026 | \$ | 1,312 | \$ | 1,636 | \$ | 1,055 | \$ | 8,753 | \$ | 14,093 |
| Leases (2) | | 97 | | 99 | | 93 | | 70 | | 58 | | 305 | | 722 |
| Other obligations (3) | | 619 | | 477 | | 301 | | 304 | | 279 | | 1,189 | | 3,169 |
| Subtotal | | 1,027 | | 1,602 | | 1,706 | | 2,010 | | 1,392 | | 10,247 | | 17,984 |
| Crude oil, NGL and other purchases (4) | | 5,830 | | 6,440 | | 6,182 | | 5,849 | | 5,454 | | 14,024 | | 43,779 |
| Total | \$ | 6,857 | \$ | 8,042 | \$ | 7,888 | \$ | 7,859 | \$ | 6,846 | \$ | 24,271 | \$ | 61,763 |

- Includes debt service payments, interest payments due on PAA's senior notes and the commitment fee on assumed available capacity under the PAA credit facilities, as well as long-term borrowings under the PAA credit agreements and the PAA commercial paper program, if any. Although there may be short-term borrowings under the PAA credit agreements 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 agreements or the PAA commercial paper program) in the amounts above. For additional information regarding PAA's debt obligations, see Note 8 to our Condensed Consolidated Financial Statements.
- Includes both operating and finance leases as defined by FASB guidance. Leases are primarily for (i) railcars, (ii) office space, (iii), land, (iv) vehicles, (v) storage tanks and (vi) tractor trailers. See Note 14 to our Consolidated Financial Statements included in Part IV of our 2019 Annual Report on Form 10-K for additional information.
- Includes (i) other long-term liabilities, (ii) storage, processing and transportation agreements (including certain agreements for which the amount and timing of expected payments is subject to the completion of underlying construction projects), (iii) certain rights-of-way easements and (iv) noncancelable commitments related to our capital expansion projects, including projected contributions for our share of the capital spending of our equity method investments. The storage, processing and transportation agreements include approximately \$1.8 billion associated with agreements to store, process and transport crude oil at posted tariff rates on pipelines or at facilities that are owned by equity method investees. A portion of our commitment to transport is supported by crude oil buy/sell or other agreements with third parties with commensurate quantities.
- (4) Amounts are primarily based on estimated volumes and market prices based on average activity during March 2020. 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 and transportation of crude oil, NGL and natural gas. Additionally, we issue letters of credit to support insurance programs, derivative transactions, including hedging-related margin obligations, and construction activities. At March 31, 2020 and December 31, 2019, we had outstanding letters of credit of approximately \$106 million and \$157 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 2019 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:

Factors Related Primarily to the COVID-19 Pandemic and Excess Supply Situation:

- the continuation of a swift and material decline in global crude oil demand and crude oil prices for an uncertain period of time that
 correspondingly may lead to a significant reduction of domestic crude oil, NGL and natural gas production (whether due to reduced producer
 cash flow to fund drilling activities or the inability of producers to access capital, or both, the unavailability of pipeline and/or storage
 capacity, the shutting-in of production by producers, government-mandated pro-ration orders, or other factors), which in turn could result in
 significant declines in the actual or expected volume of crude oil and NGL shipped, processed, purchased, stored, fractionated and/or gathered
 at or through the use of our assets and/or the reduction of commercial opportunities that might otherwise be available to us;
- uncertainty regarding the length of time it will take for the United States, Canada, and the rest of the world to slow the spread of the COVID-19 virus to the point where applicable authorities are comfortable easing current restrictions on various commercial and economic activities and the extent to which consumer demand and demand for crude oil rebound once such restrictions are lifted; such restrictions are designed to protect public health but also have the effect of significantly reducing demand for crude oil;
- uncertainty regarding the future actions of foreign oil producers such as Saudi Arabia and Russia and the risk that they take actions that will prolong or exacerbate the current over-supply of crude oil;
- uncertainty regarding the timing, pace and extent of an economic recovery in the United States and elsewhere, which in turn will likely affect demand for crude oil and therefore the demand for the midstream services we provide and the commercial opportunities available to us;
- the effect of an overhang of significant amounts of crude oil inventory stored in the United States and elsewhere and the impact that such inventory overhang ultimately has on the timing of a return to market conditions that are more conducive to an increase in drilling and production activities in the United States;
- the refusal or inability of our customers or counterparties to perform their obligations under their contracts with us (including commercial
 contracts, asset sale agreements and other agreements), whether justified or not and whether due to financial constraints (reduced
 creditworthiness, liquidity issues or insolvency), market constraints, legal constraints (including governmental orders or guidance), the
 exercise of contractual or common law rights that allegedly excuse their performance (such as force majeure or similar claims) or other
 factors:

- our inability to perform our obligations under our contracts, whether due to non-performance by third parties, including our customers or counterparties, market constraints, third-party constraints, legal constraints (including governmental orders or guidance), or other factors;
- operational difficulties due to physical distancing restrictions and the additional demands such restrictions may place on our employees, which may in turn make it more challenging to retain or recruit talented labor;
- disruptions to futures markets for crude oil, NGL and other petroleum products, which may impair our ability to execute our commercial and hedging strategies;
- our inability to reduce capital expenditures to the extent forecasted, whether due to the incurrence of unexpected or unplanned expenditures, third-party claims or other factors;
- the inability to complete forecasted asset sale transactions due to governmental action, litigation, counterparty non-performance or other factors;

General Factors:

- · our ability to pay distributions to our Class A shareholders;
- our expected receipt of, and amounts of, distributions from Plains AAP, L.P.;
- the effects of competition, including the effects of capacity overbuild in areas where we operate;
- negative societal sentiment regarding the hydrocarbon energy industry and the continued development and consumption of hydrocarbons, which could influence consumer preferences and governmental or regulatory actions in ways that adversely impact our business;
- unanticipated changes in crude oil and NGL market structure, grade differentials and volatility (or lack thereof);
- environmental liabilities or events that are not covered by an indemnity, insurance or existing reserves;
- fluctuations in refinery capacity in areas supplied by our mainlines and other factors affecting demand for various grades of crude oil, NGL
 and natural gas and resulting changes in pricing conditions or transportation throughput requirements;
- · maintenance of PAA's credit rating and ability to receive open credit from suppliers and trade counterparties;
- the occurrence of a natural disaster, catastrophe, terrorist attack (including eco-terrorist attacks) or other event, including cyber or other attacks on our electronic and computer systems;
- the successful integration and future performance of acquired assets or businesses and the successful operation of joint ventures and joint operating arrangements we enter into from time to time, whether relating to assets operated by us or by third parties;
- failure to implement or capitalize, or delays in implementing or capitalizing, on expansion projects, whether due to permitting delays, permitting withdrawals or other factors;
- 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, including legislation or regulatory initiatives that prohibit, restrict or regulate hydraulic fracturing;
- 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;

- general economic, market or business conditions (both within the United States and globally and including the potential for a recession or significant slowdown in economic activity levels) and the amplification of other risks caused by volatile financial markets, capital constraints and liquidity concerns;
- the availability of, and our ability to consummate, divestitures, joint ventures, acquisitions or other strategic opportunities;
- 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 effectiveness of our risk management activities;
- 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; and
- other factors and uncertainties inherent in the transportation, storage, terminalling and marketing of crude oil, 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 2019 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 overthe-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, basis differentials and storage capacity utilization. We manage these exposures with various instruments including 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 of natural gas. We manage these exposures with various instruments including futures, swaps and options.

• NGL and other

We utilize NGL derivatives, primarily propane and butane 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 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, 2020 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 Decrease | | |
|------------------|------------|-----|----|------|----|------------------------------|--|--|
| Crude oil | \$ | 145 | \$ | (23) | \$ | 23 | | |
| Natural gas | | 2 | \$ | 5 | \$ | (5) | | |
| NGL and other | | 105 | \$ | (7) | \$ | 7 | | |
| Total fair value | \$ | 252 | | | | | | |

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, 2020, approximately \$614 million, was subject to interest rate re-sets that generally range from one day to approximately one month. The average interest rate on variable rate debt that was outstanding during the three months ended March 31, 2020 was 2.2%, based upon rates in effect during such period. The fair value of our interest rate derivatives was a liability of \$124 million as of March 31, 2020. A 10% increase in the forward LIBOR curve as of March 31, 2020 would have resulted in an increase of \$14 million to the fair value of our interest rate derivatives. A 10% decrease in the forward LIBOR curve as of March 31, 2020 would have resulted in a decrease of \$14 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, 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 \$5 million as of March 31, 2020. A 10% increase in the exchange rate (USD-to-CAD) would have resulted in a decrease of \$17 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 \$17 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, default probabilities and timing estimates 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 \$8 million as of March 31, 2020. A 10% increase or decrease in the fair value would have an impact of \$1 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, 2020, 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 2020 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 2019 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, as could the following:

PAA's business, results of operations, financial condition, cash flows and unit price can be adversely affected by pandemics, epidemics or other public health emergencies, such as the recent COVID-19 pandemic.

PAA's business, results of operations, financial condition, cash flows and unit price can be adversely affected by pandemics, epidemics or other public health emergencies, such as the recent outbreak of COVID-19. The COVID-19 pandemic has given rise to and/or heightened a variety of risks and uncertainties inherent in PAA's business, many of which are described in our 2019 Annual Report. Such risks and uncertainties, which in some cases have been exacerbated by events and circumstances that are not related to the COVID-19 pandemic, have either already begun to adversely impact PAA's business or are reasonably likely to adversely impact its business in the future. These risks, uncertainties and other factors include the following:

- The pandemic has resulted in a swift and material decline in global crude oil demand and crude oil prices, which PAA anticipates will lead to a significant reduction of domestic crude oil, NGL and natural gas production (whether due to reduced producer cash flow to fund drilling activities, the inability of producers to access capital, the unavailability of pipeline and/or storage capacity, the shutting-in of production by producers, government-mandated pro-ration orders or other factors), which in turn could result in significant declines in the actual or expected volume of crude oil and NGL shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of PAA's assets and/or the reduction of commercial opportunities that might otherwise be available to PAA.
- The significant decline in global crude oil demand has contributed to an oversupply of crude oil that has been exacerbated by the actions of foreign oil producers (most notably Saudi Arabia and Russia), who significantly increased crude oil production during the first quarter of 2020 and then subsequently announced in early April a temporary production cut of approximately ten million barrels per day.
- Because global demand for crude oil has declined more rapidly than supply, storage facilities have been filling at an accelerated rate and will
 likely reach levels at or near maximum operating capacity during the second quarter of 2020. This will lead to an "overhang" of significant
 amounts of crude oil inventory stored in the United States and elsewhere, a factor that has contributed to a material decline in crude oil prices.
- The resulting macroeconomic environment of reduced crude oil demand, excess crude oil supply and low crude oil prices has caused producers throughout North America, including many of PAA's customers in the Permian Basin and elsewhere, to begin cutting back on production levels and may eventually lead to the shutting in of production by such producers. This could have a material adverse effect on the demand for the midstream services PAA offers and the commercial opportunities that are available to it. In turn, such factors could have a material adverse impact on PAA's financial performance during the current year and future periods. A turnaround of these adverse macroeconomic factors depends largely on an increase in global demand for crude oil, which will be driven primarily by the length of time it takes for the United States, Canada, and the rest of the world to slow the spread of the COVID-19 virus to the point where applicable authorities are comfortable easing current restrictions on various commercial and economic activities and the extent to which consumer demand and demand for crude oil rebound once such restrictions are lifted. The timing of any such easing of restrictions and resulting market recovery is highly uncertain and depends on a wide

variety of factors that are outside of PAA's control, including the development and effectiveness of COVID-19 testing protocols, treatments and vaccines; the capacity of our healthcare systems and public health infrastructure to manage current and future outbreaks; the availability and impact of new epidemiological information about the virus; and various political and economic considerations. Even once such restrictions are lifted, it is unknown whether consumption of petroleum products will return to pre-COVID levels, due to changes in consumer habits or preferences. As a result, PAA is unable to predict the timing of any such market recovery, including a return to market conditions that are more conducive to an increase in drilling and production activities in the United States and Canada.

- PAA anticipates an increased risk of nonpayment and nonperformance by customers or other counterparties. PAA's customers or counterparties may refuse or be unable to perform their obligations under their contracts with it (including commercial contracts, asset sale agreements and other agreements), whether justified or not and whether due to financial constraints (reduced creditworthiness, liquidity issues or insolvency), market constraints, legal constraints (including bankruptcy proceedings, governmental orders or guidance), the exercise of contractual or common law rights that allegedly excuse their performance (such as force majeure or similar claims) or other factors.
- PAA may face additional challenges maintaining its investment grade credit rating, which could in turn reduce its borrowing capacity and cause its counterparties to reduce the amount of open credit PAA receives from them. Disruptions to futures markets for crude oil, NGL and other petroleum projects may also impair PAA's ability to execute its commercial and hedging strategies.
- Many of PAA's support functions are operating remotely, which presents technical and communication challenges. As a result, PAA may be more
 vulnerable to cybersecurity breaches, risk management oversights or other delays in, or disruptions to, communications, which may in turn affect
 PAA's ability to effectively manage its business.
- PAA may face operational difficulties due to physical distancing restrictions. Such restrictions may also place additional demands on its employees, which may in turn make it more challenging to retain or recruit talented labor.
- PAA may have additional difficulties performing its obligations under its contracts, whether due to non-performance by third parties, including PAA's customers or counterparties, market constraints, third-party constraints, legal constraints (including governmental orders or guidance), or other factors.
- The COVID-19 pandemic has caused widespread supply chain disruptions, which may make it more challenging to obtain sufficient quantities of high quality materials at acceptable prices and in a timely manner. If PAA is unable to source such materials, it could materially and adversely affect its ability to construct new infrastructure and maintain its existing assets.

In April 2020, PAA announced certain actions in response to the COVID-19 pandemic, including a reduction in distributions on its common units, planned reductions in capital expenditures, asset divestitures and other cost reductions throughout the organization and supply chain. However, PAA may be unable to reduce capital expenditures to the extent forecasted, effectively divest assets at attractive prices or realize anticipated cost savings. Even if PAA is able to execute its planned actions, they may be insufficient to maintain its liquidity and capital structure.

For all of these reasons, PAA cannot reasonably estimate with any degree of certainty the future impact COVID-19 may have on its results of operations, financial position, and liquidity.

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, 2020, certain Legacy Owners or their permitted transferees exercised the Exchange Right, which resulted in the issuance of 2,101,487 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

Not applicable.

Item 5. OTHER INFORMATION

None.

Item 6. EXHIBITS

| Exhibit No. | | Description |
|-------------|---|---|
| 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 | _ | Amendment No. 1 dated October 1, 2018 to the Third Amended and Restated Limited Liability Company Agreement of PAA GP Holdings LLC (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed August 20, 2018). |
| 3.6 | _ | Amendment No. 2 dated December 10, 2018 to the Third Amended and Restated Limited Liability Company Agreement of PAA GP Holdings LLC (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed December 11, 2018). |
| 3.7 | _ | Amendment No. 3 dated November 21, 2019 to the Third Amended and Restated Limited Liability Company Agreement of PAA GP Holdings LLC (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed November 27, 2019). |
| 3.8 | _ | Seventh Amended and Restated Agreement of Limited Partnership of Plains All American Pipeline, L.P., dated as of October 10, 2017 (incorporated by reference to Exhibit 3.1 to PAA's Current Report on Form 8-K filed October 12, 2017). |
| 3.9 | _ | 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). |
| 3.10 | _ | 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). |
| 3.11 | _ | Amendment No. 1 dated September 26, 2018 to the Eighth Amended and Restated Limited Partnership Agreement of Plains AAP, L.P. (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed October 2, 2018). |
| 3.12 | _ | Amendment No. 2 dated May 23, 2019 to the Eighth Amended and Restated Limited Partnership Agreement of Plains AAP, L.P. (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed May 30, 2019). |
| 3.13 | _ | <u>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).</u> |
| 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 | _ | 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). |
| 4.5 | _ | 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). |
| 4.6 | _ | 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). |
| 4.7 | _ | 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). |
| 4.8 | _ | 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). |
| 4.9 | _ | 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). |
| 4.10 | _ | 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). |
| 4.11 | _ | 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). |
| 4.12 | _ | 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). |
| 4.13 | _ | 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). |
| 4.14 | _ | <u>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).</u> |
| 4.15 | _ | <u>Thirty-First Supplemental Indenture (3.55% Senior Notes due 2029) dated September 16, 2019, 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 September 17, 2019).</u> |
| 4.16 | _ | 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). |
| | | |

| 4.17 | _ | <u>Description of Our Securities (incorporated by reference to Exhibit 4.17 to our Annual Report on Form 10-K for the year ended December 31, 2019).</u> |
|----------|---|---|
| 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 - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. |
| 101.SCH† | _ | Inline XBRL Taxonomy Extension Schema Document |
| 101.CAL† | _ | Inline XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.DEF† | _ | Inline XBRL Taxonomy Extension Definition Linkbase Document |
| 101.LAB† | _ | Inline XBRL Taxonomy Extension Label Linkbase Document |
| 101.PRE† | _ | Inline XBRL Taxonomy Extension Presentation Linkbase Document |
| 104† | _ | Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101) |

[†] Filed herewith.

^{††} Furnished herewith.

SIGNATURES

Pursuant to the requirements 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/ Willie Chiang

Willie Chiang,

Chief Executive Officer and Director of PAA GP Holdings LLC

(Principal Executive Officer)

May 8, 2020

By: /s/ Al Swanson

Al Swanson,

Executive Vice President and Chief Financial Officer of PAA GP

Holdings LLC (Principal Financial Officer)

May 8, 2020

By: /s/ Chris Herbold

Chris Herbold,

Senior Vice President and Chief Accounting Officer of PAA GP

Holdings LLC (Principal Accounting Officer)

May 8, 2020

CERTIFICATION

I, Willie Chiang, 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 8, 2020
/s/ Willie Chiang
Willie Chiang
Chief Executive Officer

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 8, 2020

/s/ Al Swanson

Al Swanson

Chief Financial Officer

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

- I, Willie Chiang, 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, 2020 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/ Willie Chiang

Name: Willie Chiang Date: May 8, 2020

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, 2020 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 8, 2020