500 West Texas Avenue Suite 1200 Midland, Texas 79701

April 4, 2019

VIA EDGAR

United States Securities and Exchange Commission Division of Corporation Finance Mail Stop 3561 100 F. Street, N.E. Washington, D.C. 20549

Attn: Mara L. Ransom, Assistant Director, Office of Consumer Products Adam Phippen, Staff Accountant Donna Di Silvio, Staff Accountant Katherine Bagley, Staff Attorney

Re: Rattler Midstream Partners LP Amendment No. 4 to Registration Statement on Form S-1 Filed March 13, 2019 File No. 333-226645

Ladies and Gentlemen:

Set forth below are the responses of Rattler Midstream LP, a Delaware limited partnership formerly known as Rattler Midstream Partners LP (the "*Partnership*"), to the comments received from the staff (the "*Staff*") of the Securities and Exchange Commission (the "*Commission*") in a letter dated March 20, 2019 with respect to Amendment No. 4 to the Registration Statement on Form S-1 submitted to the Staff on March 13, 2019, File No. 333-226645 (the "*Registration Statement*").

The Partnership has amended the Registration Statement and filed Amendment No. 5 to the Registration Statement ("*Amendment No. 5*") with the Commission on the date hereof to, among other things, address the Staff's comments. For your convenience, the Partnership has set forth below each Staff comment followed by the Partnership's response. Caption references and page numbers refer to the captions and pages contained in Amendment No. 5, unless otherwise indicated. Capitalized terms used but not otherwise defined in this letter have the meanings ascribed to such terms in Amendment No. 5.

Estimated EBTIDA and Distributable Cash Flow for the Twelve Months Ending March 31, 2020, page 70

1. We reviewed your revisions made in response to comment 8. Reference is made to footnotes (2) and (4) on page 73. Please disclose the interest rate used to calculate interest expense. The rate should be based on either the current interest rate or the rate for which you have a commitment.

Response: In response to the Staff's comment, the Partnership has added the requested disclosure to footnotes (2) and (4) at page 73.

Significant Forecast Assumptions, page 73

2. We reviewed your response to comment 9. Please revise to disclose why operating expenses, costs of goods sold, general and administrative expenses, depreciation, amortization, and accretion and income tax expense is expected to increase in the twelve months ending March 31, 2020 as compared to the pro forma year ended December 31, 2018.

Response: In response to the Staff's comment, the Partnership has added an explanation of the changes to forecasted operating expenses, costs of goods sold, depreciation, amortization and accretion and income tax expense in its disclosure at pages 75 and 76. With respect to changes to forecasted general and administrative expenses, the Partnership respectfully directs the Staff's attention to the second paragraph under the heading "General and Administrative Expenses" on page 76, which includes an explanation for the increase to such expense.

Financial Statements

Rattler Midstream LP Unaudited Pro Forma Combined Financial Statements, page F-2

3. We reviewed your response and revisions made in response to comment 12. Please also include your calculation of pro forma weighted average number of common units outstanding as a footnote in the notes to pro forma combined financial statements.

Response: In response to the Staff's comment, the Partnership has added the requested disclosure to new footnote (g) at page F-7.

4. We reviewed your response to comment 14. We note you concluded this transaction is an asset drop down and not the contribution of a business. Please tell us why you plan to present the asset drop down transaction effective January 1, 2019 as if it had occurred January 1, 2018 for purposes of preparing unaudited pro forma combined statements of operations referencing authoritative literature that supports your presentation. In this regard, it appears the midstream assets and office building were in operation prior to the transfer to you February 18, 2019 and as such, the expenses associated with the operation of those assets should be reflected in the pro forma combined statement of operations despite the fact that the related commercial agreements were not effective until January 1, 2019. In addition, please tell us how you have accounted for previous drop downs of businesses and/or assets and your consideration of disclosing your accounting policies for these transactions.

Response: The Partnership acknowledges the Staff's comment and supplementally notes that Article 11 of Regulation S-X requires the disclosure of pro forma financial information that would be material to an investor. Further, the pro forma information shall include adjustments that are directly attributable to the subject transaction, factually supportable and, for the purposes of a pro forma income statement, expected to have a continuing impact. As such, the Partnership has included the 2019 asset drop-down from Diamondback of additional midstream assets (the "2019 Midstream Assets"), acquired as part of the acquisitions of Ajax Resources, LLC ("Ajax") and Energen Corporation ("Energen") completed by Diamondback in the fourth quarter of 2018, in the pro forma financial statements as it is material, representing approximately 35% of total property, plant and equipment, and is directly attributable to the overall proceeds expected to be raised from the initial public offering. The Partnership notes that while the 2019 Midstream Assets were in operation in 2018 as part of Ajax and Energen, both primarily upstream businesses, no revenue and/or costs were attributable to such assets separate from any upstream contracts. This lack of attribution made any revenue and expense adjustments within the pro forma financial statements, with the exception of depreciation expense, impossible to factually support. In response to the first part of the Staff's comment, the Partnership has added an explanation of the accounting treatment for the 2019 Midstream Assets to new footnote (f) at page F-7.

At the time of the 2018 asset drop-down from Diamondback of various fresh water assets located in the Delaware and Midland Basins of the Permian Basin that Diamondback constructed and/or acquired (the "*Fresh Water Assets*"), the Partnership performed an asset screen in accordance with Financial Accounting Standards Board ("*FASB*") Accounting Standards Codification ("*ASC*") Topic 805-10-55-5A through 55-5C, which provides guidance as to when an integrated set of activities and assets would be considered a business.

In considering whether substantially all of the fair value of the gross assets acquired is concentrated in a single asset, the Partnership considered all of the fixed assets included in the Fresh Water Assets to be a single asset because, in accordance with ASC 805-10-55-5Ba, the assets are tangible assets that are attached and cannot be physically removed and used separately from one another without a significant diminution in utility. The fair value of this "single asset" represented 86% of the gross fair value of assets acquired, which the Partnership considered to be substantially all of the fair value of the gross assets acquired. The remaining 14% of the fair value of gross assets acquired was attributable to "inventory", which is water that serves as line-fill that is necessary to operate the fresh water pipeline assets. The Partnership believes it would be reasonable to include the value of the line-fill with the value of the fixed assets, which would result in 100% of the fair value of gross assets being concentrated in a single asset.

Additionally, the Partnership determined the transaction to be between entities under common control as Diamondback is the ultimate parent of Rattler and controls the General Partner which governs the Partnership and, therefore, considered the common

control framework of ASC 805-50. For initial recognition of the transaction, the Partnership looked to ASC 805-50-25-2, which governs the recognition date to be used for transactions between entities under common control. Specifically, this guidance notes that a common control transaction should be recognized at the date of asset transfer, while ASC 805-50-30-5 states that the amount at which the transferred assets should be initially recognized should be based on the carrying amounts in the accounts of the transferring entity at the date of transfer. For subsequent recognition of the transaction, the Partnership looked to ASC 805-50-05-5, which notes that some common control transactions result in a change in the reporting entity for the receiving entity. In such a case, the subtopic directs registrants to consider the guidance in ASC 250-10-45-21, also referenced in ASC 805-50-45, which discusses how to present current and historical periods when there is a change in reporting entity and requires a change in reporting entity to be applied retrospectively for all periods presented to show financial information for the new reporting entity for those periods. The Partnership considered the scenarios described in the definition of a change in the reporting entity to determine if the drop-down of the Fresh Water Assets was similar to those scenarios or otherwise resulted in financial statements that, in effect, are those of a different reporting entity. The Partnership determined that the drop-down of Fresh Water Assets was not similar to any of the three scenarios noted in the codification definition and concluded that the drop-down of the Fresh Water Assets did not result in a change in the reporting entity. Therefore, the Partnership accounted for the transaction as an asset drop-down at the carryover basis from Diamondback on a prospective basis, presenting the transaction from January 1, 2018, which was the date the rights and obligations to the assets were transferred.

In response to the second part of the Staff's comment, the Partnership has added its accounting policy with respect to asset drop-downs, including the drop-down of the Fresh Water Assets, to footnote 2 of the historical audited consolidated financial statements at page F-16. It will continue to include such policy in any future filings that include asset drop-downs between entities under common control.

The Partnership respectfully notes that had such transaction required a retrospective recast in line with ASC 805-50-45-2, which addresses financial statement presentation in the period of transfer, the Partnership could not have presented such information due to a lack of information and a lack of any revenue and expense attributable to these assets, as the assets were not clearly identifiable and not tracked in such a manner prior to the transfer date. Such inability includes an inability to present depreciation relative to the assets, as they were previously included in Diamondback's full cost pool. The Partnership also notes that a balance sheet adjustment reflecting the drop-down of the Fresh Water Assets would not have been material to an investor as it would have resulted in an immaterial adjustment to property, plant and equipment, with an offset to equity. Notwithstanding the immateriality of the Fresh Water Assets, the Partnership has disclosed the drop-down amount and transfer date throughout the notes to the historical audited consolidated financial statements and elsewhere in the Registration Statement.

5. Please disclose the nature of the midstream assets dropped down and the amount of additional depreciation expense, if any, associated with those assets.

Response: In response to the Staff's comment, the Partnership has added a description of the 2019 Midstream Assets contribution to the disclosure at page F-3 and has added the requested disclosure with respect to the associated depreciation expense to footnote (a) at page F-6.

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If you have any questions with respect to the foregoing, please do not hesitate to call me at (405) 463-6900 or Seth Molay of Akin Gump Strauss Hauer & Feld LLP at (214) 969-4780.

Very truly yours,

RATTLER MIDSTREAM LP

By: Rattler Midstream GP LLC, its General Partner

By: /s/ Teresa L. Dick

 Name:
 Teresa L. Dick

 Title:
 Chief Financial Officer

 Executive Vice President and Assistant Secretary

cc: Seth R. Molay, P.C. Akin Gump Strauss Hauer & Feld LLP