

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

Mail Stop 3561

May 18, 2016

Matthew C. Liuzzi Vice President, Chief Financial Officer and Treasurer USA Compression Partners, LP 100 Congress Avenue, Suite 450 Austin, TX 78701

Re:

USA Compression Partners, LP Form 10-K for the Fiscal Year Ended December 31, 2015 Response dated May 5, 2016 Form 8-K Filed May 5, 2016 Form 10-Q for the Fiscal Quarter Ended March 31, 2016 Filed May 5, 2016 Filed May 5, 2016 File No. 001-35779

Dear Mr. Liuzzi:

We have reviewed your May 5, 2016 response to our comment letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our April 21, 2016 letter.

Form 10-K for the Fiscal Year Ended December 31, 2015

Management's Discussion and Analysis of Financial Condition and Results of Operations

General Trends and Outlook, page 45

1. Your response to comment 1 indicates that your compression fleet can be quickly and cost-effectively modified and moved between shale plays and disclosure of your horsepower by shale or region would not provide meaningful information to your investors. To assist us in better understanding your response, please tell us how

frequently you move your equipment between shale plays. Please also tell us the average time and costs associated with redesigning and deploying such equipment during the year ended December 31, 2015, or during the most recent year in which you moved equipment between shale plays.

- 2. Your response to the first bullet point of comment 2 describes various ways in which you monitor your customers' credit quality. Please consider revising your critical accounting policy addressing your allowance for doubtful accounts to explain in more detail the estimates and judgments you make about your customers' ability to pay and any trends you have observed in your customers' credit quality rather than simply stating that you make estimates and judgments and that you evaluate your customers' financial strength. Additionally, since it appears from your response that you monitor your customers' credit ratings, please tell us whether any of your largest customers have credit ratings below investment grade, and tell us how you considered disclosing this information as part of providing investors with insight into the potential risks to and variability of your earnings and cash flows.
- 3. We note your response to the second bullet point of comment 2. Given your risk factor disclosures about the possible impact of contract renegotiations, we believe you should clearly disclose in future filings, if true, that these negotiations did not have a material impact on your results of operations. We believe clarifying the impact of these contract negotiations provides important information to your investors.
- 4. We note your response to the third bullet point of comment 2. Please tell us how the service rates for your month-to-month contracts differed from the service rates for contracts in their primary term during 2015, including whether they were generally above or below the rates for contracts in their primary term. In future filings, please disclose this information for the periods presented, including if applicable making an affirmative statement that rates for month-to-month contracts did not significantly differ from rates for contracts in their primary term. Given that a significant percentage of your contracts are operating on a month-to-month basis and the increased ability of these customers to renegotiate pricing or terminate service as compared to customers with contracts in their primary term, we believe that explaining in more detail the impact of month-to-month contracts on your results and any factors that cause these contracts to have significantly different impacts on your consolidated results and cash flows as compared to contracts in their primary term provides important information to your investors.

Financial Results of Operations, page 49

5. We note your response to comment 4. As the circumstances under which you evaluate compression units for impairment and the specific factors that led to recording a significant impairment charge related to your compression equipment in 2015 were not clearly disclosed in your Form 10-K, please revise future filings to provide this information in appropriate locations, such as your accounting policy footnote or critical

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accounting policy and your analysis of results when you describe the impairment recorded in 2015. We believe that disclosing information similar to that contained in your response will be useful to your investors.

Financial Statements for the Year Ended December 31, 2015

Note (2) – Summary of Significant Accounting Policies

(c) Inventories, page F-8

6. Your response to comment 6 indicates that your inventory cost flow assumptions have not changed. Please tell us why you disclosed FIFO as your inventory cost flow assumption in 2013, and prior years, if you were using the specific identification or weighted average cost method. Also tell us how you considered whether this apparent error in your accounting policy disclosure indicated a deficiency in your disclosure controls and procedures and whether this deficiency has been remediated. We note that you concluded your disclosure controls and procedures were effective in each of your fiscal 2014 Forms 10-Q and that the conclusion in your 2014 Form 10-K solely refers to the lack of timely filing a Form 8-K announcing a change to your general partner's board of directors.

Form 8-K filed May 5, 2016

7. We note your response to comment 8 indicating you will not give equal or greater prominence to non-GAAP measures in future filings. We also note that you furnished under Item 2.02 of Form 8-K a press release describing your earnings for the first quarter of 2016, and this press release continued to give prominence to your non-GAAP measures. Please confirm that in future earnings releases you will not give greater prominence to non-GAAP measures than you do to the most directly comparable GAAP measures, consistent with the guidance in Item 10(e)(1)(i)(A) of Regulation S-K.

Form 10-Q for the Fiscal Quarter Ended March 31, 2016

Notes to the Unaudited Condensed Consolidated Financial Statements

Note (1) – Organization and Summary of Significant Accounting Policies

(f) Property and Equipment, page 6

8. We note that you revised the estimated useful life of your compression equipment from 25 years to 20 – 25 years. Please explain to us the nature of the change in useful life and tell us why you believe it was appropriate to make the change in the first quarter of 2016 rather than during 2015. As part of your response, tell us whether this change relates solely to new equipment acquired during 2016. If not, please revise to disclose the effect

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on net income and any related per-share amounts for the current period, if material. See ASC 250-10-50-4.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Operating Highlights, page 15

9. We note that you present multiple measures of horsepower utilization, including average horsepower utilization based on revenue generating horsepower and fleet horsepower. We understand this specific metric to effectively reflect the average amount of your horsepower earning revenue during the period as a percentage of your total horsepower received from suppliers and available to earn revenue. We also understand the difference between this metric and 100% reflects your average idle horsepower during the period. Please confirm our assumptions, or if our understanding is not correct, explain this matter to us in detail and revise future filings to better explain this metric to your investors. If our understanding is correct, please provide us with management's detailed view of why this utilization metric shows a pattern of decline across the last several quarters, or conversely, why you appear to have a trend of increasing percentages of your horsepower that is available to earn revenue sitting idle and not earning revenue. In doing so, please clearly explain the extent to which this decreasing utilization is due to increased amounts of equipment idle due to repairs and maintenance, the extent to which it is due to acquiring new compression units before you have service contracts for those units, the extent to which it is due to increased equipment returned by your customers for which a new revenue generating use has not been found, and any other applicable factors. Also tell us in detail how you determined this trend did not need to be disclosed and the underlying factors driving this trend analyzed in your MD&A, and if this trend continues, please disclose and analyze it.

You may contact Melissa Blume, Staff Accountant at (202) 551-7128 or me at (202) 551-3737 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Jennifer Thompson

Jennifer Thompson Accounting Branch Chief Office of Consumer Products