



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

DIVISION OF
CORPORATION FINANCE

November 16, 2012

Via E-mail

J. Gregory Holloway
Vice President, General Counsel and Secretary
USA Compression Partners, LP
100 Congress Avenue, Suite 450
Austin, Texas 78701

**Re: USA Compression Partners, LP
Amendment No. 8 to Registration Statement on Form S-1
Filed November 6, 2012
File No. 333-174803
Amendment No. 4 to Registration Statement on Form S-1
Filed November 6, 2012
File No. 333-180551**

Dear Mr. Holloway:

We have reviewed your registration statements 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 this letter by amending your registration statements and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe amendments are appropriate, please tell us why in your response.

After reviewing any amendment to your registration statements and the information you provide in response to these comments, we may have additional comments.

Amendment No. 8 to Registration Statement on Form S-1 (333-174803)

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 78

Liquidity and Capital Resources, page 92

1. Please revise to provide the underlying reasons behind the changes in your nine months operating cash flows for the period ended September 30, 2012 so readers can better understand their variability. We note your disclosure that the increase was due to an increase in income offset by a higher use of working capital for that period; however, the disclosure provides little insight regarding the drivers behind the changes in significant

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line items making up working capital such as accounts payable and accrued liabilities.
Refer to Section IV of our SEC Release No. 33-8350.

Certain Relationships and Related Party Transactions, page 126

2. Please describe in this section the \$750,000 in expenses that you incurred under an agreement between USA Compression Holdings, LLC and its affiliates, as you disclose on page F-37.

Financial Statements, page F-1

Notes to the Condensed Interim Financial Statements, page F-32

(6) Transaction with Related Parties, page F-37

3. Please identify all related party transactions on the face of the balance sheet, income statement, or statement of cash flows. Reference is made to Rule 4-08(k) of Regulation S-X. We also noted you incurred \$750,000 and \$250,000 of such expenses related to a management fee for the nine months period ended September 30, 2012 and 2011, respectively.

(7) Operating Leases, page F-38

4. Please explain the significant increase in total future lease payments as of June 30, 2012 from \$1,981,412 to \$4,335,251 as of September 30, 2012.

Amendment No. 4 to Registration Statement on Form S-1 (333-180551)

5. Please revise this registration statement to comply with comments 1-4 above.

You may contact Scott Stringer, Staff Accountant, at (202) 551-3272 or Andrew Mew, Accounting Branch Chief, at (202) 551-3377, if you have questions regarding comments on the financial statements and related matters. Please contact Lisa Kohl, Staff Attorney, at (202) 551-3252, Catherine Brown, Staff Attorney, at (202) 551- 3513, or me, at (202) 551-3720, with any other questions.

Sincerely,

/s/ Catherine T. Brown for

Mara L. Ransom
Assistant Director

cc: Sean T. Wheeler, Esq.