

811 Main Street, Suite 3700
Houston, TX 77002
Tel: +1.713.546.5400 Fax: +1.713.546.5401
www.lw.com

LATHAM & WATKINS LLP

FIRM / AFFILIATE OFFICES
Abu Dhabi Moscow
Barcelona Munich
Beijing New Jersey
Boston New York
Brussels Orange County
Chicago Paris
Doha Riyadh
Dubai Rome
Frankfurt San Diego
Hamburg San Francisco
Hong Kong Shanghai
Houston Silicon Valley
London Singapore
Los Angeles Tokyo
Madrid Washington, D.C.
Milan

January 3, 2013

Via **EDGAR**

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-4628

Attn: Mara L. Ransom, Assistant Director

**Re: USA Compression Partners, LP
Registration Statements on Form S-1
Supplemental Response dated December 28, 2012
File Nos. 333-174803 and 333-180551**

Ladies and Gentlemen:

Set forth below is the response of USA Compression Partners, LP, a Delaware limited partnership (the "**Partnership**"), to the comments received from the staff of the Division of Corporation Finance (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") by letter dated January 3, 2013 with respect to the above referenced Registration Statements (the "**Registration Statements**"). The Partnership has revised the Registration Statement on Form S-1 (File No. 333-174803) ("**IPO Registration Statement**") in response to the Staff's comments and selected revised pages of the IPO Registration Statement reflecting these changes are attached.

For your convenience, the response is prefaced by the exact text of the Staff's corresponding comment in bold text. The response in this letter is based on representations made by the Partnership to Latham & Watkins LLP for the purpose of preparing this letter.

Preliminary Estimate of Selected Fourth Quarter 2012 Financial Results, page 5

- 1. We note your proposed disclosure regarding your preliminary estimate of certain fourth quarter 2012 financial results and your disclosure of the estimated range of net income amounts. In that regard, we are unclear why you did not disclose the estimated range for costs of operations and selling and general administrative expenses to balance your presentation. Please explain or revise.**

Response: The Partnership has revised page 6 to disclose estimated ranges for costs of operations and selling and general administrative expenses.

-
- 2. We note your statement in the first full paragraph on page 6 that your actual results for the fourth quarter of 2012 may differ materially from the results presented in your prospectus. If you choose to disclose preliminary results, you should be able to assert that the actual results are not expected to vary materially from that reflected in the preliminary results. Please remove this statement, as it implies that investors should not rely on the information presented, or explain to us why the presentation of this information alongside a disclaimer that the preliminary financial information could differ materially provides meaningful disclosure to investors.**

Response: The Partnership has revised page 6 to remove language indicating that the Partnership's actual results could differ "materially" from the preliminary estimates, but has retained disclosure cautioning that the actual results may differ from the preliminary estimates.

- 3. We note your statement on page 6 that you "do not expect [y]our consolidated financial statements and related notes as of and for the year ended December 31, 2012 to be publicly announced or filed with the SEC until after this offering is completed." Please confirm your understanding that if, prior to the effective date of your registration statement, more precise numbers become available as you conduct your financial closing procedures for the quarter ended December 31, 2012, or your financial statements for the most recent quarterly period become available, they should be included in your registration statement.**

Response: The Partnership confirms that if, prior to the effective date of the IPO Registration Statement, more precise numbers become available for the quarter ended December 31, 2012, or the Partnership's financial statements for the most recent quarterly period become available, they will be included in the Partnership's registration statement.

Estimated Cash Available for Distribution for Year Ended December 31, 2013, page 56

- 4. Please tell us and disclose how you calculated the fixed charge coverage ratio.**

Response: The Partnership has removed the fixed charge coverage ratio from the unaudited pro forma cash available for distribution table on page 53, the estimated cash available for distribution for the year ending December 31, 2013 table on page 56 and footnote three on page 57.

Please do not hesitate to contact me by telephone at (713) 546-7459 or by fax at (713) 546-5401 or Sean T. Wheeler by telephone at (713) 546-7418 or by fax at (713) 546-5401 with any questions or comments regarding this correspondence.

Very truly yours,
/s/ Keith Benson

Keith Benson
of Latham & Watkins LLP

2

cc: J. Gregory Holloway, USA Compression Partners, LP
Sean T. Wheeler, Latham & Watkins LLP
Mike Rosenwasser, Vinson & Elkins L.L.P.
E. Ramey Layne, Vinson & Elkins L.L.P.

3
