

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	

December 21, 2011

Via EDGAR and Hand Delivery

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

Attn: Ronald E. Alper, Staff Attorney

**Re: USA Compression Partners, LP
Amendment No. 2 to Registration Statement on Form S-1
File No. 333-174803
Filed November 18, 2011**

Ladies and Gentlemen:

Set forth below is the response of USA Compression Partners, LP, a Delaware limited partnership (the "**Partnership**"), to the comment received from the staff of the Division of Corporation Finance (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") by letter dated December 13, 2011 with respect to the above referenced Registration Statement (the "**Registration Statement**").

Concurrently with the submission of this letter, the Partnership has filed through EDGAR Amendment No. 3 to the Registration Statement ("**Amendment No. 3**"). For your convenience, four copies of this letter, as well as four copies of Amendment No. 3 marked to show all changes made since the filing of Amendment No. 2 to the Registration Statement, will be hand delivered to your offices.

For your convenience, the response is prefaced by the exact text of the Staff's corresponding comment in bold text. All references to page numbers and captions correspond to Amendment No. 3, unless otherwise indicated. The response in this letter is based on representations made by the Partnership to Latham & Watkins LLP for the purpose of preparing this letter.

Amendment No. 2 to Registration Statement on Form S-1

Historical Financial Statements, page F-10

Notes to Consolidated Financial Statements — December 31, 2010, 2009, 2008, page F-15

(1) The Partnership, Nature of Business, and Recent Transactions, page F-17

-
1. **We note your response to prior comment seven of our letter dated August 30, 2011. Your disclosure on page F-17 characterizes amounts paid by the target related to shared-based compensation and the broker's fees as "acquisition related costs." Since that term is defined by ASC 805-10-25-23 as the costs the acquirer incurs to effect a business combination and has a specific accounting treatment, please consider your choice of terminology so that there is no confusion in the use of "acquisition related costs." Additionally, we note that your disclosure states that these costs were not recognized in the consolidated statement of operations. In view of making it clear that such items have been excluded from all income statements presented, please provide disclosures explaining how and why these costs were recorded as part of the exchange or, the black line, summarizing the presentation described in your response.**

Response: The Partnership has revised the disclosure in Amendment No. 3 on page F-17 to remove the terminology "acquisition related costs." Additionally the Partnership has included additional disclosure describing how and why these costs were recorded as part of the exchange, and summarized the presentation of such items in the 2010 financial statements.

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

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.