



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4628

February 12, 2016

Edward E. Cohen
Chief Executive Officer
Atlas Growth Partners, L.P.
Park Place Corporate Center One
1000 Commerce Drive, Suite 410
Pittsburgh, PA 15275

**Re: Atlas Growth Partners, L.P.
Amendment No. 3 to Registration Statement on Form S-1
Filed February 1, 2016
File No. 333-207537**

Dear Mr. Cohen:

We have reviewed your amended registration statement 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 statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our January 22, 2016 letter.

Cash Distribution Policy and Restrictions on Distributions, page 61

Estimated Cash Available for Distribution, page 67

1. It is the view of the Staff that it is not appropriate to present the forecast assuming that you will achieve \$130 million of gross proceeds. Please revise the table to reflect only the minimum. Further, we believe that the table should be revised:
 - to break out cash from operations as a separate line item that appears prior to Distributable Cash Flow; and
 - to the extent that cash from operations is not sufficient to make the target distribution and you will use cash on hand, cash from borrowings and cash from the proceeds of

the offering to cover the shortfall, present each of those as a separate line item showing how you will cover the shortfall.

Assumptions and Considerations, page 69

2. Within the table on page 71, you are forecasting a profit margin as a percentage of revenues for your base production of 66.3%, compared to a margin of 80.6% for your projected new wells for the year ended December 31, 2016. Please expand your disclosure to explain the significant variables and factors leading to the improved margins from your current base wells versus your projected new wells.

Sensitivity Analysis, page 73

3. You disclose in the last sentence at page 71 that you have assumed you will not make any acquisitions in your forecast. As such, please remove your disclosure that your sensitivity analysis “assumes that [you] are successfully able to execute on [y]our acquisition strategy during the forecast period.”

Offering size changes, page 73

4. Please revise your table to quantify the estimated distributions on common units held by purchasers in this offering, ATLS and its affiliates and non-affiliate purchasers in the private placement, as well as distributions on general partner units.

Exhibit 5.1

5. Please have counsel revise their opinion to remove assumptions (1) that are readily ascertainable, (2) that assume any material facts, or (3) with regard to which counsel may appropriately rely on applicable officers’ certificates or provide supplemental support as to why the particular assumption should be unobjectionable. Examples include:
 - assumptions (i), (ii) and (x) with respect to the General Partner, and
 - assumption (xii) with respect to the General Partner and the Partnership.

Edward E. Cohen
Atlas Growth Partners, L.P.
February 12, 2016
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You may contact Mark Wojciechowski, Staff Accountant, at 202-551-3759 or Jenifer Gallagher, Staff Accountant, at 202-551-3706 if you have questions regarding comments on the financial statements and related matters. You may contact John Hodgin, Petroleum Engineer, at (202) 551-3699 with questions about engineering comments. Please contact Karina V. Dorin, Staff Attorney, at (202) 551-3763 or me at (202) 551-3745 with any other questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director
Office of Natural Resources