



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

DIVISION OF
CORPORATION FINANCE

May 28, 2013

Via E-mail

Robert C. Reeves
President and Chief Executive Officer
Athlon Energy Inc.
420 Throckmorton Street, Suite 1200
Fort Worth, Texas 76102

**Re: Athlon Energy Inc.
Draft Registration Statement on Form S-1
Submitted April 29, 2013
File No. 377-00165**

Dear Mr. Reeves:

We have reviewed your draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1

General

1. Since you appear to qualify as an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act, please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

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2. Please revise to distinguish your references to “development capital,” which you appear to define as capital expenditures at page G-1, and “development and exploitation” capital. We note that your references to “development capital” at page 66 and elsewhere in the filing.
3. Revise to clarify your references to “low-risk vertical drilling locations” and how you “de-risk” such locations. For example, discuss whether vertical drilling locations are lower risk than horizontal ones or whether the risk depends on geographic area.

Prospectus Cover Page

4. Please expand the first paragraph to disclose that this offering also includes shares to be sold by selling shareholders, identify the selling shareholders and quantify the amount or value of the securities they will sell in this offering. In addition, please tell us whether the shares to be sold by the selling shareholders are included in the underwriting arrangement. We may have further comment.

Non-GAAP Financial Measures, page 14

5. Please clarify why you have included adjustments to remove acquisition costs and advisory fees paid to Apollo to compute your non-GAAP measure “Adjusted EBITDA” as these charges appear to have required cash settlement and Item 10(e)(1)(ii)(A) of Regulation S-K generally prohibits the exclusion of such charges.

Use of Proceeds, page 51

6. Please provide tabular disclosure and quantification of the various uses of proceeds from this offering.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 56

How We Evaluate Our Operations, page 61

7. We note your statement, “Based on estimates prepared by our independent reserve engineers, as of December 31, 2012, the wells we expect to drill in 2013 through the Atoka formation in Howard, Midland & Other and Glasscock areas have an average EUR of 141 MBOE, 208 MBOE and 118 MBOE, respectively.” Please amend your document to disclose also the EUR figures for oil, gas and NGL.

Results of Operations, page 62

8. You state that oil revenues, gas revenues and NGL revenues increased from 2011 to 2012 primarily as the result of a full year of production from your Element acquisition in October 2011, “as well as your development program in the Permian Basin.” Please quantify the amount of oil production revenue, NGL production revenue and gas production revenue that increased due to your development program, as compared to the revenue that increased due to your Element acquisition.

Business, page 78

Proved Undeveloped Reserves, page 88

9. Item 1203(b) of Regulation S-K requests that registrants “Disclose material changes in proved undeveloped reserves that occurred during the year, including proved undeveloped reserves converted into proved developed reserves.” We note the omission of the figures for changes to your PUD reserves. Please amend your document to disclose the separate figures for PUD reserve changes due to revisions, extensions/discoveries, acquisition/divestiture and improved recovery.

Developed and Undeveloped Acreage, page 89

10. We note that 15%, 9% and 13% of your net undeveloped acreage will expire in 2013, 2014 and 2015, respectively. Please amend your document to disclose figures for the proved undeveloped reserves, if any, which you have attributed to acreage whose expiration date precedes the scheduled date for PUD drilling.

Glossary, page G-3

11. Your descriptions of “Proved developed reserves” and “Proved undeveloped reserves” begin with the phrase “Reserves of any category...”. Please amend your document to describe the subject reserves with the applicable category. You may refer to pages four and five of FASB ASC Section 932-235-20 Glossary.

Financial Statements

Athlon Energy Inc.

General

12. Please present an audited balance sheet of Athlon Energy Inc. to comply with Rule 3-01 of Regulation S-X.

13. On page 124 you describe certain transactions that occurred as part of your “corporate reorganization” in April 2013. Specifically, you state Apollo exchanged their Class A limited partner interests in your predecessor for common stock as well as holders of the Class B limited partner interests in your predecessor also exchanged their interests for common stock. Please explain why these transactions do not appear to be reflected in the balance sheet you have filed and/or discussed in the footnotes.

Unaudited Pro Forma Financial Statements

14. We note your pro forma financial statements will give effect to your predecessor’s capital restructuring program, the corporate reorganization and the initial public offering of your common stock. Rather than presenting the pro forma adjustments for all of these distinct transactions in one column, please revise your format to present a separate pro forma adjustment column for each transaction followed by a summation column.

Athlon Holdings LP

General

15. Please update the financial statements of your predecessor entity to comply with Rule 3-12 of Regulation S-X. Pro forma financial information should be updated accordingly as well.

Supplemental Information, page F-36

16. As you follow the full cost method of accounting, please disclose the information set forth in Rule 4-10(c)(7) of Regulation S-X (FASB ASC 932-10-S99-1(c)(7)).
17. We note the negative proved reserve revision for 2012 - 8,352 MBOE or 18% of 2012 beginning volume. FASB ASC Paragraph 932-235-50-5 requires “appropriate explanation of significant changes” for line items in the reconciliation of your disclosed proved reserves. Please amend your document to explain the details/circumstances of the 2012 revisions.

Exhibits

18. Please provide us with an analysis as to whether you are required to file the stockholders agreement with Apollo.

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Exhibit 99.3

19. A discussion of the capital costs included in the third party engineering report is omitted. Please file a third party report that discusses the considerations of and sources for the estimated future capital costs presented.

Closing Comments

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Jenifer Gallagher, Staff Accountant, at (202) 551-3706 or John Cannarella, Staff Accountant, at (202) 551-3337 if you have questions regarding comments on the financial statements and related matters. You may contact Ronald Winfrey, Petroleum Engineer, at (202) 551-3704 with questions about engineering comments. Please contact Caroline Kim, Staff Attorney, at (202) 551-3878 or, in her absence, the undersigned at (202) 551-3611 with any other questions.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker
Branch Chief

CC: Sean T. Wheeler
Latham & Watkins LLP