



DIVISION OF
CORPORATION FINANCE

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

July 10, 2014

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.
Registration Statement on Form S-1
Filed June 17, 2014
File No. 333-196823
Annual Report on Form 10-K for the Fiscal Year Ended December 31, 2013
Filed March 7, 2014
Amendment No. 1 to Current Report on Form 8-K
Filed June 16, 2014
File No. 001-36026**

Dear Mr. Reeves:

We have reviewed your filings 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 the following comments within 10 business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Registration Statement on Form S-1

General

1. Please also be advised that we will not be able to accelerate the effectiveness of your registration statement until you have cleared all comments, including comments on your periodic reports, below.

Form 10-K for the Fiscal Year Ended December 31, 2013

Financial Statements, page 84

Note 2 – Summary of Significant Accounting Policies, page 91

Oil and Natural Gas Properties, page 92

2. We note your policy disclosure concerning the ceiling test required under the full cost methodology inaccurately describes one component of the cost center ceiling as “the lower of cost or fair value of unevaluated properties.” Please revise your accounting and disclosure as necessary to conform with Rule 4-10(c)(4)(i)(C) of Regulation S-X, pertaining to a similar component related to *unproven* properties although not limited to *unevaluated* properties.

Revenue Recognition, page 96

3. Please disclose the origin or nature of the Revenue payable account balance.

Form 8-K/A Filed June 16, 2014

Exhibit 99.5

Note 2 – Pro forma Adjustments and Assumptions, page 5

4. Please revise your disclosure pertaining to pro forma adjustment (e) on page 5, relating to the pro forma balance sheet, to separately identify the purchase price allocation to the properties acquired from Hibernia and Piedra. Also describe the balances and activity of Hibernia that are not being acquired and revise your pro forma statements to present these adjustments in separate columns.

Closing Comments

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

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- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jenifer Gallagher, Staff Accountant, at (202) 551-3706 or Karl Hiller, Accounting Branch Chief, at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters. 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