



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

DIVISION OF
CORPORATION FINANCE

January 27, 2014

Via E-mail

Ms. Karen L. Power
Senior Vice President & Principal Financial Officer
Syntroleum Corporation
5416 S. Yale Suite 400
Tulsa, OK 74135

**Re: Syntroleum Corporation
Annual Report on Form 10-K
Filed March 15, 2013
Current Report on Form 8-K
Filed December 18, 2013
File No. 1-34490**

Dear Ms. Power:

We have reviewed your response letter dated December 10, 2013 as well as your filing and have the following additional comments.

Please respond to this letter within ten 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.

Annual Report on Form 10-K filed March 15, 2013

Business, page 2

1. We note your response to our prior comment one of our letter dated November 27, 2013 and reissue the comment. In the business section, please disclose that two customers made up 97% of revenues in 2012 and 99% in 2011, and include the names of the customers. In addition, please file your agreement with the customer that has provided you with approximately \$6.5 million in technical services revenue over the past three years. Refer to Item 601 of Regulation S-K. Finally, please expand your risk factors to discuss your dependence on these customers.

Management's Discussion & Analysis, page 15

2. We note your response to our prior comment two. Please expand your MD&A to provide readers with information necessary to an understanding of your financial condition, changes in financial condition, and results of operations. Refer to Item 303 of Regulation S-K and SEC Release 33-8350 (Nov. 29, 2003). For example, discuss in detail the economic conditions that compelled the Dynamic Fuels plant to be placed in standby mode. Expand your MD&A to explain why you recognized \$9 million in earned deferred income from expired one-time license agreements and \$3.7 million in previously unrecognized technical services revenue from Dynamic Fuels in 2012 and not in prior fiscal periods.

Current Report on Form 8-K filed December 18, 2013

Item 9.01

3. Please note that Item 6.01(b)(2) of Regulation S-K requires the filing of all schedules containing information which is material to an investment decision and which is not otherwise disclosed in the agreement or the disclosure document. In this regard, please file the omitted schedules to the asset purchase agreement filed as Exhibit 2.1.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Karen L. Power
Syntroleum Corporation
January 27, 2014
Page 3

Please contact PJ Hamidi at (202) 551-3421 or, in his absence, the undersigned at (202) 551-3611 with any questions.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker
Branch Chief