

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

DIVISION OF CORPORATION FINANCE

June 16, 2011

<u>Via Facsimile</u> Mr. Edward G. Roth President and Chief Executive Officer Syntroleum Corporation 5416 S. Yale Avenue, Suite 400 Tulsa, OK 74135

> Re: Syntroleum Corporation Form 10-K for the Fiscal Year ended December 31, 2010 Filed March 15, 2011 File No. 001-34490

Dear Mr. Roth:

We have reviewed your filing and have the following comment. Please respond to this letter within ten business days by amending your filing or by advising us when you will address this comment. If you do not believe our comment applies 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 this comment, we may have additional comments.

Form 10-K for the Fiscal Year ended December 31, 2010

Exhibit 99.3

Dynamic Fuels, LLC Financial Statements

1. We note that the auditor is not identified in the November 17, 2010 opinion. Please obtain and file an opinion that is signed by the auditor in an amendment to your annual report on Form 10-K.

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 comment, please provide a written statement from the company acknowledging that:

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- 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.

You may contact Jenifer Gallagher at (202) 551-3706 or Kimberly Calder, Assistant Chief Accountant at (202) 551-3701 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

/s/ Karl Hiller

Karl Hiller Branch Chief