



DIVISION OF
CORPORATION FINANCE

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

November 13, 2014

Via E-mail

George H. John, CEO
Rocket Fuel Inc.
1900 Seaport Blvd.
Redwood City, CA 94063

**Re: Rocket Fuel Inc.
Registration Statement on Form S-3
Filed November 6, 2014
File No. 333-199901**

Dear Mr. John:

We have limited our review of your registration statement to those issues we have addressed in our comment. Please respond to this letter by amending your registration statement and providing the requested information. Where 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Information Incorporated by Reference, page 37

1. Please revise this section to incorporate the Form 8-K filed on February 21, 2014 as well as any reports filed subsequent to the date the Form S-3 was initially filed. Refer to Question 123.05 of our Securities Act Forms Compliance and Disclosure Interpretations for guidance on incorporating Exchange Act reports filed after filing of a registration statement but prior to its effectiveness. Also, we note you incorporate a Form 8-K filed on November 5, 2014, although no Form 8-K was filed on that date. Please revise. Finally, please note that the Form 8-K/A filed on November 6, 2014 that includes the financial statements of X Plus Two Solutions and related pro forma information incorrectly appears as a Form 8-K in EDGAR.

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.

George H. John
Rocket Fuel Inc.
November 13, 2014
Page 2

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:

- 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 Rule 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 Matthew Crispino, Staff Attorney, at (202) 551-3456 with any questions. In his absence, you may contact me at (202) 551-3462. If you thereafter require further assistance, you may contact Barbara C. Jacobs, Assistant Director, at (202) 551-3730.

Sincerely,

/s/ Mark P. Shuman

Mark P. Shuman
Branch Chief – Legal

cc: Via E-mail
Rachel B. Proffitt, Esq.
Wilson Sonsini Goodrich & Rosati