



DIVISION OF
CORPORATION FINANCE

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

January 17, 2013

Via E-mail

Michael L. Hodges
Chief Financial Officer
Rex Energy Corporation
476 Rolling Ridge Drive, Suite 300
State College, Pennsylvania 16801

**Re: Rex Energy Corporation
Form 10-K for the Fiscal Year ended December 31, 2011
Filed March 15, 2012
Form 10-Q for the Fiscal Quarter ended September 30, 2012
Filed November 9, 2012
Form 8-K filed November 13, 2012
Response Letter dated January 7, 2013
File No. 1-33610**

Dear Mr. Hodges:

We have reviewed your filings and response letter and have the following additional comment.

Please respond to this letter within ten business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe amendments are appropriate, please tell us why in your response.

After reviewing any amendments to your filings and the information you provide in response to this comment, we may have additional comments.

Form 8-K filed November 13, 2012

1. We have read your response to prior comment 4 and understand that you have not complied with Regulation G because you believe there is no directly comparable GAAP measure to which you could reconcile your various measures of finding and development costs per one thousand cubic feet of natural gas equivalent. If you present such measures in the future, we will not object provided you also include a tabular presentation of the various figures utilized in the calculations made to determine the measures. It would also be helpful to include, in your annual report, reconciliations of the capital deployed to Total Costs Incurred, which currently appears on page 114 of your Form 10-K.

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With regard to your interim non-GAAP PV 10 measure, if you report similar measures in the future and are unable to reconcile to a standardized measure of discounted future net cash flows relating to proved oil and gas reserves as of the same date (because you are unable to calculate future income tax expense), then you should also present the comparable non-GAAP measure as of the end of your most recently completed fiscal year, reconciled to the GAAP-based standardized measure, also reconciled to your interim non-GAAP PV 10 measure.

Under these circumstances, you should identify all material changes other than future income tax, consistent with the categories set forth in FASB ASC 932-235-50-35; and ensure that any change in your estimates of oil and gas reserves underlying your reconciling adjustments have been prepared in accordance with the reserve definitions in Rule 4-10(a) of Regulation S-X. You should include representation to this effect with any such non-GAAP presentations.

You may contact Michael Fay, Staff Accountant, at (202) 551-3812 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