



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4628

July 25, 2016

Scott W. Smith
Chief Executive Officer
Vanguard Natural Resources, LLC
5847 San Felipe, Suite 3000
Houston, Texas 77057

**Re: Vanguard Natural Resources, LLC
Form 10-K for Fiscal Year Ended December 31, 2015
Form 8-K
Response Dated July 8, 2016
File No. 1-33756**

Dear Mr. Smith:

We have reviewed your July 8, 2016 response to our comment letter 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our June 27, 2016 letter.

Form 10-K for Fiscal Year Ended December 31, 2015

Business, page 1

Oil, Natural Gas and NGLs Data, page 9

Proved Undeveloped Reserves, page 12

1. Your response to prior comment 1 asserts that operating cash flows will be the primary funding source of your capital drilling plan. This statement is based on assumptions such as commodity prices trending in a manner consistent with the New York Mercantile Exchange ("NYMEX") forward strip price. Revise the disclosure regarding your proved undeveloped reserves to address the risks related to the execution of your development

plan considering the uncertainty associated with the various assumptions underlying your plan. Your revised disclosure should explain how changes in factors such as pricing levels could affect the drilling of your proved undeveloped reserves.

Notes to Consolidated Financial Statements

Supplemental Oil and Natural Gas Information, page 134

2. You state that the cash outflows associated with the settlement of asset retirement obligations will be included in calculating the standardized measure of discounted future cash flows in future annual reports on Form 10-K. Please clarify whether this statement applies to all periods for which the standardized measure of discounted future cash flows will be presented. Also, note that the Division of Corporation Finance's letter to oil and gas producers dated February 4, 2004 does not prohibit a statement that cash flows associated with asset retirement obligations are included in the standardized measure of discounted future cash flows.

Form 8-K filed May 2, 2016

3. Your response to prior comment 9 states that the non-GAAP measure Adjusted Net Income Attributable to Common and Class B Unitholders allows investors to make a true comparison of your results without the impact of commodity price fluctuations from period to period which result in changes to the mark-to market value of the portfolio of commodity derivative contracts. This appears to be inconsistent with your stated purpose of highlighting the significant fluctuations that commodity price volatility has on your results, particularly as it relates to changes in the fair value of your derivative contracts. Revise your disclosure to more clearly explain the purpose of adjustments to this non-GAAP measure related to your derivative contracts. With your response, provide us with a reconciliation showing the components of the line items in your calculation of Adjusted Net Income Attributable to Common and Class B Unitholders for change in fair value of commodity derivative contracts and change in fair value of interest rate derivative contracts.

Scott W. Smith
Vanguard Natural Resources, LLC
July 25, 2016
Page 3

You may contact Ethan Horowitz, Accounting Branch Chief, at (202) 551-3311 with any questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director
Office of Natural Resources

cc: Douglas V. Getten
Paul Hastings LLP