



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4628

April 22, 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
Response Dated April 14, 2016
File No. 1-33756**

Dear Mr. Smith:

We have reviewed your April 14, 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 April 12, 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 5 explains the reasons underlying the positive revisions of previous volume estimates to your proved undeveloped reserves (“PUDs”) during the fiscal year ended December 31, 2015. Please revise to provide additional disclosure explaining these changes consistent with the information provided in your response. Refer to Item 1203(b) of Regulation S-K.

2. In response to prior comment 6, you state that you have a reasonable expectation that you will have the financing required to develop your PUDs over the next three years. You also state that the historical practice of financing the development of your PUDs primarily using cash flow from operations will continue in the future. However, it appears that capital expenditures budgeted for the drilling of PUDs over the next three years greatly exceeds the amount actually expended to drill PUDs in the last three years. Please provide us with additional information explaining the basis for your statement that cash flow from operations will be sufficient to finance your drilling development plan and to reduce borrowings under your Reserve-Based Credit Facility. As part of your response, include a schedule showing your planned development expenditures and the related source of capital by year. In addition, tell us more about your expectations regarding the availability of debt and equity financing through the capital markets specifically for PUD development and address the restrictions and covenants associated with currently outstanding debt which limit your ability to incur additional indebtedness.
3. Your response to prior comment 6 states that you would expect to seek additional financing if commodity prices do not increase over the coming years and your cash flow from operations becomes insufficient to continue financing the development of your PUDs. Please tell us whether your statement regarding the sufficiency of cash flow from operations to finance your drilling development plan assumes that commodity prices will increase from current levels.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 65

Recent Developments and Outlook, page 65

4. We note your response to prior comment 7. Please revise your disclosure to explain why your total proved reserves as of December 31, 2015 increased as result of using the 5-year New York Mercantile Exchange forward strip price at February 29, 2016. As part of your revised disclosure, include the table showing the average annual settlement prices input into your model and the table comparing the reported reserve volumes and the strip pricing volumes from your response.

Results of Operations, page 68

5. Your response to prior comment 8 identifies the items that account for the difference between the 2015 expected hedge prices and the actual realized prices for 2015. Please tell us about the factors resulting in the differences for "Differentials / Transportation and Processing Fee Deducts" and "Impact from Short Puts" and explain why your disclosure of 2015 expected hedge prices did not reflect the anticipated effect of these items.

6. Based on the information provided in response to prior comment 8, it appears that the calculations underlying the summary disclosure regarding your hedging program for 2016 are primarily based on fixed price swaps and three-way collars. Please tell us how other derivative contracts (e.g., basis swap contracts) are considered in computing the information used in your summary disclosure. In addition, explain how you calculate the expected impact of three-way collars for purposes of this disclosure.

Notes to Consolidated Financial Statements

Supplemental Oil and Natural Gas Information, page 134

7. Your response to prior comment 10 states that you do not include abandonment costs in your calculation of the standardized measure of discounted future cash flows. Please tell us how you considered the guidance provided by the Division of Corporation Finance to oil and gas producers in a letter dated February 4, 2004 stating that the requirement to disclose “net cash flows” relating to an entity's interest in oil and gas reserves requires the inclusion of the cash outflows associated with the settlement of an asset retirement obligation. This letter is available on our website at <http://www.sec.gov/divisions/corpfm/guidance/oilgasletter.htm>.
8. Please explain your basis for the statement made in response to prior comment 10 regarding the significance of abandonment costs to your calculation of the standardized measure of discounted future cash flows. Also address the significance of abandonment costs to the line item in this calculation for future development costs. As part of your response, provide us with a detailed materiality analysis including the amounts for asset retirement obligations and future abandonment costs related to proved undeveloped wells.
9. Please tell us why salvage value was considered in assessing the impact of asset retirement obligations on the standardized measure of discounted future cash flows and quantify the salvage value associated with your properties. Refer to FASB ASC 932-360-50-31.
10. Your response to prior comment 11 shows the individual items that make up the adjustment to your standardized measure of discounted future net cash flows referenced as “Change in production rates, timing and other.” Please tell us why the amount described as “change in current period net cash flows (net of production cost)” is not included as part of the adjustment referenced as “Net changes in prices and production costs” if it represents the impact of the decline in commodity prices.

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You may contact Sandra Eisen, Staff Accountant, at (202) 551-3864 or Ethan Horowitz, Accounting Branch Chief, at (202) 551-3311 with any questions.

Sincerely,

/s/ Brad Skinner for

H. Roger Schwall
Assistant Director
Office of Natural Resources

cc: Douglas V. Getten
Paul Hastings LLP