



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

DIVISION OF
CORPORATION FINANCE

December 30, 2010

Mr. Richard A. Robert
Executive Vice President and Chief Financial 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, 2009
Filed March 5, 2010
File No. 001-33756

Dear Mr. Robert:

We have reviewed your filing 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 this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply 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 these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2009

Business, page 1

Natural Gas, Natural Gas Liquids and Oil Data, page 4

Qualifications of Technical Persons and Internal Controls over Reserves Estimation Process, page 5

1. We note your disclosures indicating that your estimates of proved reserves were prepared by your independent petroleum engineering firm “in accordance with generally accepted petroleum engineering and evaluation principles.” While we understand that there are fundamentals of physics, mathematics and economics that are applied in the estimation of reserves, we are not aware of an official industry compilation of generally accepted petroleum engineering principles. With a view toward possible disclosure, please explain to us the basis for concluding that such principles have been sufficiently established so as to judge that the reserve information has been prepared in conformity with such principles. We also note that your independent petroleum engineers use such language in their reports filed as Exhibits 99.1 and 99.2.
2. We note you engaged independent petroleum engineers to prepare your reserve estimates. Please provide a description of the internal control procedures you perform to reconcile material differences between your quarterly reserve estimates prepared internally and the annual reserve estimates prepared by your independent petroleum engineers.
3. Please disclose the qualifications of the technical person primarily responsible for accepting the final report of the reserves estimates from your independent petroleum engineers. We refer you to the guidance in Item 1202(a)(7) of Regulation S-K.

Proved Undeveloped Reserves, page 6

4. We note your proved undeveloped reserves (PUDs) increased to 46.0 Bcfe as of December 31, 2009 from 27.6 Bcfe as of December 31, 2008. With a view toward possible disclosure, please provide us with a reconciliation of your 2009 PUDS activity, indicating the material changes to your PUDs, pursuant to Item 1203(b) of Regulation S-K.

Developed and Undeveloped Acreage, page 7

5. We note you disclosed your developed and undeveloped oil and gas leasehold acreage. However, you did not disclose information about related material minimum remaining terms of your leases and concessions. Please expand your disclosure to comply with the guidance in Item 1208(b) of Regulation S-K.

6. Please tell us whether you had any commitments to deliver fixed and determinable quantities of oil or gas at December 31, 2009 and, if so, please provide the disclosure required by Item 1207 of Regulation S-K.

Consolidated Balance Sheets, page 71

7. Please provide all of the disclosures of oil and gas property costs not subject to amortization, for each year presented, on the face of the balance sheets and in the notes to the financial statements, or tell us why you believe these disclosures are not required. Refer to Rule 4-10(c)(7)(ii) of Regulation S-X, for further guidance.

Supplemental Natural Gas and Oil Information (Unaudited), page 97

8. Please expand your disclosure to provide the capitalized costs of unproved properties, as required by FASB ASC Topic 932-235-50-14, or tell us why you believe such disclosure is unnecessary.
9. Please expand your disclosure to provide the costs incurred for property acquisition, exploration and development of unproved properties, as required by FASB ASC Topic 932-235-50-19, or tell us why you believe such disclosure is unnecessary.

Exhibit 99.1

10. Please ask your independent petroleum engineer to revise their report to comply with the following sub-items under Item 1202(a)(8) of Regulation S-K:
 - A discussion of primary economic assumptions, including, without limitation, the oil and gas prices used in preparation of your proved reserve estimates.
 - A discussion of the possible effects of regulation on your ability to recover the reserves.
 - A statement that the engineer has used all methods and procedures considered necessary under the circumstances to prepare the report.
11. Please ask your independent petroleum engineer, to disclose the qualifications of the technical person primarily responsible for overseeing the preparation of the reserves estimates. We refer you to the guidance in Item 1202(a)(7) of Regulation S-K.

Exhibit 99.2

12. Please ask your independent petroleum engineer to revise their report to comply with the following sub-items under Item 1202(a)(8) of Regulation S-K:

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- A discussion of primary economic assumptions, including, without limitation, the oil and gas prices used in preparation of your proved reserve estimates.
 - A statement that the engineer has used all methods and procedures considered necessary under the circumstances to prepare the report.
13. We note the report states that “[d]ata used in this audit were obtained....” Please ask your independent petroleum engineer to clarify whether their report is for preparation of reserves estimates or reserves audit.

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

- 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 Suying Li at (202) 551-3335 or Donald Delaney at (202) 551-3863 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3311 with any other questions.

Sincerely,

Ethan Horowitz
Branch Chief