



DIVISION OF CORPORATION FINANCE  
MAIL STOP 7010

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

May 23, 2007

Mr. Scott W. Smith  
President and Chief Executive Officer  
Vanguard Natural Resources, LLC  
7700 San Felipe, Suite 485  
Houston, Texas 77063

**Re: Vanguard Natural Resources, LLC  
Registration Statement on Form S-1  
Filed April 25, 2007  
File No. 333-142363**

Dear Mr. Smith:

We have reviewed your filing and have the following comments. Please note that our engineering staff continues its review and will issue comments, if any, under separate cover. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Statement on Form S-1

General

1. Many of our comments apply to disclosure that appears in more than one place. To eliminate the need for us to issue repetitive comments, please make corresponding changes to all affected disclosure throughout your document.
2. Provide current and updated disclosure with each amendment. For example, update the status of your expectation to have your common stock quoted on the New York Stock Exchange, the Omnibus Agreement you plan to enter into with Nami to indemnify you against certain losses, and the legal proceedings between a subsidiary of your predecessor and Asher Land and Mineral, Ltd.

3. We will need the opportunity to review all new disclosure, including any additional proposed artwork or graphics. Similarly, we will need the opportunity to review all omitted exhibits, including the legal opinion and underwriting agreement. To expedite the review process, please provide all this information and all these documents promptly. We may have additional comments.
4. Please provide information required by Regulation S-K that is currently omitted. For example, fill in blanks that appear on pages 13, 92 and 143. Refer to Rules 430 and 430A of Regulation C and Items 501(b)(2) and (3) of Regulation S-K with respect to disclosure regarding the amount of shares and the proposed price range.
5. Since the price range triggers a number of disclosure matters, we will need sufficient time to process the amendment when a price range is included. Please understand that its effect on disclosure throughout the document may cause us to raise issues on areas not previously commented on.
6. Please monitor your need to update financial statements and auditors' consents.

Cover Page

7. We note that you plan to list the offering proceeds before expenses. Please revise to provide the net proceeds of the offering pursuant to Item 501(b)(3) of Regulation S-K.

Summary, page 1

8. With a view toward clear disclosure, please rearrange the order of this section. For instance, consider beginning this section with your discussion of the origins of Vanguard Natural Resources, LLC, such as briefly discussing the separation of your predecessor into your operating subsidiary and Vinland with appropriate descriptions of each, as well as the business reasons for the separation. In addition, disclose in this section that you have only two full time employees and one contract employee and that they work in your Houston office. Also, in addition to your diagram depicting your organizational structure after your initial public offering, it would be helpful to include a diagram of the relative ownership of the properties.
9. You repeat much of this section word for word in the Business section. Revise this section to summarize and highlight the principal aspects of your business and to eliminate repetitive disclosure. In this regard, revise to substantially shorten your discussion of Vinland's past and future operations. While it is relevant to discuss your relationship with Vinland, you should provide a cross-reference to more detailed discussions in other parts of the prospectus regarding Vinland's plans and operations and how these may affect your business.

10. Revise to provide a more balanced overview of your business. For example, you cite your business strategy and competitive strengths but do not mention the more significant challenges and material risks you face, including those relating to your dependence on Vinland, the substantial capital expenditures required for your operations, the intense competition you face and the limited rights of your unitholders. Briefly discuss in this section the more significant risks that may impact your operations and future plans. A mere cross-reference to the risk factors section is insufficient.
11. We note certain claims here and elsewhere in the prospectus that require objective support, such as your statements that the “Appalachian Basin is a mature producing region with well known geologic characteristics,” “that wells in the Appalachia Basin produce little or no water,” and that “wells in the Appalachian Basin are typically drilled at relatively low cost.” Provide us with objective support for these types of statements and claims. If you cannot provide such support, delete that language.

The Offering, page 9

12. We refer you to your discussion of the Call Right. Please advise us as to what consideration was given as to whether you will comply with the tender offer rules and file a Schedule TO when or if this right is exercised. If you believe an exemption from the tender offer rules is available to you, please advise.

Summary Historical and Unaudited Pro Forma Consolidated Financial and Operating Data, page 14

13. Modify this chart and similar charts throughout your filing, particularly that on page 55, to label columns “predecessor,” where predecessor financial information is presented, and to insert a bold vertical line to separate historical from pro forma data.

Risk Factors, page 18

14. Supplement the summary of risks included in this section by referencing the credit risk you face due to the concentration of oil and natural gas receivables from customers upon which you are significantly dependent.
15. Many of your risk factors could apply to any company or any company in your industry. To assist investors’ understanding of the unique risks to which your business is exposed, please review your risk factor discussion and revise where necessary to tailor your discussion. For example, please make clear how the risks arising from the volatility of oil and natural gas prices impact you specifically. As another example, in the first risk factor, discuss the percentage of initial

quarterly distributions you could have made for the year ended December 31, 2006 based on pro forma cash available.

16. Revise risk factor subheadings so that they clearly identify the risk to be discussed. Several of your risk factor captions are too vague and generic to adequately describe the risk that follows. For example, simply stating “Future price declines may result in a write-down of our asset carrying values” and “Locations that we decide to drill may not yield natural gas in commercially viable quantities” does not disclose the resulting risk of harm to investors. Revise to provide captions that concisely identify the risk, not only state a fact.
17. It is inappropriate to include “risk factors” that serve as disclaimers or which apply to all public companies. If appropriate, this information may appear later in your prospectus. Examples include “We will incur increased costs as a result of being a public company,” “If we fail to develop or maintain an effective system of internal controls,...,” and “An increase in interest rates may cause the market price of our common units to decline.”
18. In a number of places in the risk factor section you use variations of the phrase “material adverse effect.” Please revise to add disclosure describing and expressing the specific and immediate effects to the investors. Also, rather than indicating that you “cannot assure” a particular outcome, revise to state the risk plainly and directly.
19. Eliminate language that tends to mitigate the risk you discuss, such as clauses that begin “although” or “while.” Instead, focus on the underlying risk.
20. Please include a risk factor discussing the various related party transactions between you and entities affiliated with Nami, focusing on the risk that you may not have been, and in the future may not be, in a position to negotiate the best or most competitive terms for your contracts with these entities, given the related party affiliations. As relevant, discuss how the material terms of these agreements were negotiated and determined.
21. Please include a discussion of the risks of having only two full time employees and one contract employee. Discuss the risks associated with your employees working in your Houston office while your operations are located in properties in southeast Kentucky and northeast Tennessee.

We could lose our interests in future wells....., page 21

22. We note that you may elect to forego participation in the future drilling of wells through the payment to Vinland of your share of costs related to that drilling. Please provide some brief examples of circumstances that may lead you to forego participation.

Because we handle natural gas and other petroleum products,....., page 25

23. Please revise to describe your current experience with any failure to comply with any such laws or regulations.

Many of our leases are in areas that have been partially depleted..., page 27

24. To help investors understand the magnitude of this risk, disclose the percentage of your leases that are affected by the risk discussed in this risk factor.

We may incur substantial additional debt in the future....., page 28

25. Please advise us as to your consideration of including a risk factor explaining that, if true, a majority of the proceeds from this offering will be used to repay debt and therefore you do not expect to have proceeds to expand or invest in your business.

We are subject to complex federal, state, local and other laws and regulations..., page 31

26. If material, inform us of your potential exposure to and the dollar amount of reserves established for exposure to environmental and other liabilities. We may have additional comments.

Use of Proceeds, page 39

27. Revise this section to provide, in tabular and quantified form, the sources and uses of the funds being raised in this offering and other funds, if necessary to accomplish such uses. In this regard, please describe with specificity the “future working capital” and “general corporate purposes” to which you refer. We may have additional comments.
28. If it is your intention to draw down on the revolving credit facility once it is paid down with the proceeds of the offering, or enter into and draw down on a new credit facility, and you know what those uses will be and the approximate amounts, provide that information under “Use of Proceeds.”

Capitalization, page 40

29. Include on this page the offering price and number of units to be issued to the public, or include a reference to another place in your filing where this information may be found.

Cash Distribution Policy and Restrictions on Distributions, page 42

Rationale for Our Cash Distribution Policy, page 42

30. Revise this section to provide additional key facts about your cash distribution policy, rather than simply offering a cross-reference. For example, state the dividend amount, the attributes including whether the dividends are cumulative, and whether you historically have paid cash distributions.

Our Initial Quarterly Distribution Rate, page 44

31. Generally, when describing your distribution policy, please revise to state what it will be and what you will pay, rather than what you “intend” or “expect” to declare and pay. Please revise where appropriate throughout your filing.

Estimated Cash Available to Pay Distributions, page 46

32. Clarify whether you have included all operating subsidiaries when calculating your estimated cash available for distribution.

Estimated Adjusted EBITDA, page 47

33. Please clarify whether you would borrow, if necessary, to pay the expected minimum quarterly distributions. For instance, discuss whether your limited liability company agreement permits you to borrow funds to pay the distributions on all outstanding units in the event you have not generated sufficient cash from operations.
34. Also, clarify whether you assume all debt will be refinanced as it comes due since you do not intend to build up cash to meet repayment obligations.

Assumptions and Considerations, page 48

35. Revise this section to ensure that each revenue or expense you anticipate over the next four quarters is balanced with comparable historical amounts. For example, in the second bullet point, you do not discuss historical premiums, if any, to your weighted average natural gas sales price, and the reasons for those premiums.
36. Describe any debt covenants that would limit your ability to make the cash distributions and disclose whether you would be in compliance with those covenants based on your forward-looking operating results and expected cash flow information.
37. Explain in greater detail the basis for your forecast that production costs will stay constant at \$5.1 million. In your disclosure, discuss the impact of the increase in

the gathering and compression fee you pay to Vinland from \$0.25 per Mcf to \$0.55 per Mcf for wells drilled after January 5, 2007.

Capital Expenditures, page 51

38. It is not clear whether your “drilling capital expenditures” are the only maintenance and capital expenditures that you anticipate. Please clarify and quantify any other such expenditures.

Unaudited Pro Forma Cash Available to Pay Distributions, page 52

39. Since your historical excess cash available to pay distributions would have been insufficient to pay your expected distributions per unit, indicate in the table from where you would have obtained the additional cash, such as through borrowings.

Selected Historical and Unaudited Pro Forma Consolidated Financial Data, page 55

40. It appears that your column for 2003 should be labeled “unaudited,” since your first paragraph states that it is unaudited.

Management’s Discussion and Analysis..., page 57

Critical Accounting Policies and Estimates, page 70

41. Please revise your disclosures to address the material implications of the uncertainties that are associated with your assumptions and estimates. Specifically, you should provide the following:
- (a) An analysis of the uncertainties involved in applying the principle and the variability that is reasonably likely to result from its application.
  - (b) An analysis of how you arrive at the measures and how accurate the estimates or underlying assumptions have been in the past.
  - (c) An analysis of your specific sensitivity to change based on outcomes that are reasonably likely to occur and have a material effect.

Please refer to FRC Section 501.14 for further guidance.

Contractual Obligations, page 69

42. Please add note disclosure to your table which clearly indicates, if true, that the amounts disclosed as payments for long-term debt do not include interest. Additionally, please disclose the relevant terms of the debt.

Business, page 74

43. If you have any sales contracts that last for more than one year, please provide the requisite backlog disclosure pursuant to Item 101(c)(1)(viii) of Regulation S-K.

Principal Customers, page 84

44. Please discuss the material terms of your agreements with the principal customers identified in this section. Please file any written agreements with these customers, or tell us why these do not need to be filed.

Legal Proceedings, page 90

45. We note that if the Asher lease is terminated or if Nami Resources' rights to production under wells of which you have contract rights to receive proceeds are adversely affected, you may lose your contract rights to receive such proceeds or it could be adversely affected. Although the ultimate outcome of this matter cannot presently be determined, please disclose the current probability that it will be resolved in your favor. Also, please clearly indicate the liability amounts you have currently accrued with respect to this matter.

Our Board of Directors and Executive Officers, page 94

46. Revise the biographical sketches as necessary to eliminate any gaps or ambiguities regarding time and all offices held during the five year periods. For example, it is unclear how long Mr. Blake was Vice President and General Manager of Appalachian Production Services and Appalachian Energy.

Management, page 92

47. On page 94, you state that your board of directors determined executive compensation in fiscal year 2006. On page 96, however, you state that "Nami, as our sole owner, determined executive compensation for our President and Chief Executive Officer, which was our only officer in fiscal year 2006." Please revise for consistency.

Compensation Discussion and Analysis, page 96

48. We note you have entered into employment agreements with Messrs. Smith and Robert providing for a base salary of \$200,000 per year. We further note your statement that executive base salaries should be targeted near the median range of salaries for executives in similar positions with similar responsibilities at comparable companies.



We finally note that you expect your compensation committee will evaluate individual executive performance with a goal of setting compensation levels it believes are comparable with executives in other companies of similar size and stage of development engaged in the acquisition, development and exploitation of mature, long-lived natural gas and oil properties while taking into account your relative performance and your own strategic goals. Please substantially revise this section to provide clear, meaningful disclosure and eliminate vague terms. In your revisions, please be sure to address the following:

- Discuss whether the base salaries for Messrs. Smith and Robert will meet your target of being near the median range for executives in similar positions at comparable companies.
- Identify and describe the companies, as well as the similar positions and responsibilities, to which you have compared your policies.
- Specify what you consider important in terms of individual responsibilities, performance and experience, and how you take “into account” competitive market compensation paid by other companies for similar positions.

We may have further comment. See Item 402(b)(2)(xiv) of Regulation S-K and instruction 4 to Item 402(b) of Regulation S-K for additional guidance.

49. We note your statement that specific performance targets used to determine incentive compensation for each of your executive officers in 2007 have not yet been determined. Please indicate when you plan to determine them. Also, when known, revise your disclosure to clarify on an individual basis the target levels and performance goals set for each named executive officer. If you believe that disclosure of the targets or other factors would cause you competitive harm, discuss this supplementally, using the standard you would use to request confidential treatment. See Release 33-8732A, Section II.B.2, including footnote 94.
50. We direct you to Release 8732A, Section II.B.1. As noted therein, the compensation discussion and analysis should be sufficiently precise to identify material differences in compensation policies with respect to individual executive officers. In this regard, please revise your disclosure to discuss why Mr. Robert will be granted an aggregate of 100,000 units under your LTIP.

Grants of Plan-Based Awards, page 98

51. In the grants of plan-based awards table, please include a column indicating the grant date fair value of each equity award computed in accordance with FAS 123R. See Item 402(d)(viii).

Long-Term Incentive Plan, page 98

52. When known or practicable, please revise to provide further details regarding your stock incentive plan. For instance, discuss how the amounts will be determined, when they will be issued, on what basis they will be awarded and how the board of directors, or compensation committee, will determine the exercise prices.

Potential Payments upon Termination or Change-in-Control, page 101

53. Please clarify how the payment levels were set for termination payments. See Item 402(j)(3) of Regulation S-K.

Certain Relationships and Related Party Transactions, page 106

54. Please expand your disclosure to discuss how the material terms of each related party transaction was negotiated and agreed upon. For example, discuss the factors the company considered in determining the pricing of each significant category of services to be provided by Vinland.
55. Please disclose who is responsible for approving related party transactions. Further, in this regard, describe the policies and procedures for the review, approval or ratification of transactions with related persons that are reportable under Item 404(b) of Regulation S-K. The description must include the material features of these policies and procedures that are necessary to understand them.
- Also, identify any transactions required to be reported pursuant to Item 404(a) of Regulation S-K where the policies and procedures did not require review, approval or ratification or where such policies and procedures were not followed. Finally, to the extent that no such procedures or policies were in place at the time of the referenced transactions, revise to make this clear. See 404(b) of Regulation S-K.

Underwriting, page 142

56. Revise to clarify your disclosure on page 143 and specify all of the “factors” you and the underwriters will deem relevant in determining the offering price.

Financial Statements of Vanguard Natural Gas LLC and Subsidiaries

Note 10 – Supplemental Natural Gas and Oil Information, page F-20

57. With regard to your disclosure of changes in the net quantities of proved reserves on page F-21, tell us the amounts included in the three lines labeled “Extensions, Discoveries and other” that do not represent changes due to extensions and

discoveries, and tell us what the “other” activities were. Generally, paragraph 11 of SFAS 69 does not include an “other” category, and the reason for changes should be specified.

Unaudited Pro Forma Consolidated Statement of Operations, page F-26

58. With regard to the adjustments made in the second column labeled Conveyed Operations Pro Forma Adjustments:

(a) It appears that you made an adjustment to selling, general and administrative expense to exclude the \$1,225,377 litigation settlement expense incurred by the predecessor during 2006. Regulation S-X, Rule 11-02(b)(6) requires that adjustments be directly attributable to the transaction. As such, your adjustment is inappropriate. Please amend accordingly.

(b) Your disclosure indicates that the \$3,524,602 adjustment to selling, general and administrative expense includes \$1,225,377 for litigation expense, which we refer to above, and \$2,185,689 for employee costs. Amend your disclosures to explain the additional adjustment of \$113,536.

(c) Your disclosure indicates that expenses borne by Vinland would have been \$2,212,730 (that is, the \$3,438,107 net income in this column, less the \$1,225,377 litigation expense). Confirm to us that it is intended that Vinland would operate at a loss and that the agreements between Vinland and you do not provide for sufficient reimbursement to Vinland to ensure that it operates profitably. Explain to us how this is supported by the Management Services Agreement. Also confirm that amounts due to Vinland under other agreements are accounted for in the pro forma statement of operations.

Signatures

59. Please provide the signature of your principal accounting officer or controller.

Closing Comments

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities Act of 1933 and that they have provided all information investors require

for an informed investment decision. 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

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. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Please contact Sandra Eisen at (202) 551-3864 or, in her absence, April Sifford, Accounting Branch Chief, at (202) 551-3684 if you have questions regarding comments on the financial statements and related matters. Please contact Jason Wynn at (202) 551-3756 or, in his absence, me at (202) 551-3611 with any other questions. Direct all correspondence to the following ZIP code: 20549-7010.

Sincerely,

Anne Nguyen Parker  
Branch Chief

Mr. Scott W. Smith  
Vanguard Natural Resources, LLC  
May 23, 2007  
page 13

cc: S. Eisen  
A. Sifford  
J. Wynn  
J. Murphy

via facsimile

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