

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 8-A**

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES  
PURSUANT TO SECTION 12(b) OR 12(g) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**Vanguard Natural Resources, LLC**

(Exact Name of Registrant as Specified in its Charter)

**Delaware**  
(State of incorporation or organization)

**61-1521161**  
(IRS Employer Identification No.)

**5847 San Felipe, Suite 3000  
Houston, TX 77057**  
(Address of principal executive offices and zip code)

Securities to be registered pursuant to Section 12(b) of the Act:

**Title of each class      Name of each exchange on which  
to be so registered each class is to be registered**

7.875% Series A Cumulative Redeemable Perpetual Preferred Units  
representing preferred equity interests The NASDAQ Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box.

Securities Act registration statement file number to which this form relates: N/A (if applicable).

Securities to be registered pursuant to Section 12(g) of the Act: None

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## INFORMATION REQUIRED IN REGISTRATION STATEMENT

### Item 1. Description of Registrant's Securities to be Registered.

A description of the 7.875% Series A Cumulative Redeemable Perpetual Preferred Units (the "Preferred Units"), representing preferred equity interests in Vanguard Natural Resources, LLC (the "Registrant"), is set forth under the captions "Description of Series A Preferred Units" and "Material Tax Considerations" in the Registrant's prospectus supplement dated June 12, 2013 and the base prospectus dated January 18, 2012, as filed by the Registrant with the Securities and Exchange Commission on June 13, 2013, pursuant to Rule 424(b) under the Securities Act of 1933, as amended, which prospectus constitutes a part of the Registrant's Registration Statement on Form S-3 (No. 333-179050), as amended by Post-Effective Amendment No. 1 filed on June 12, 2013. Such prospectus, in the form in which it is so filed, is incorporated herein by reference. The summary descriptions of the Preferred Units do not purport to be complete and are qualified in their entirety by reference to the exhibits, which are hereby incorporated herein and may be amended from time to time.

### Item 2. Exhibits.

The following exhibits to this Registration Statement on Form 8-A are incorporated by reference from the documents specified which have been filed with the Securities and Exchange Commission.

<u>Exhibit No.</u>	<u>Description</u>
1	Certificate of Formation of the Registrant (incorporated herein by reference to Exhibit 3.1 to the Registrant's Form S-1 Registration Statement, filed with the Securities and Exchange Commission on April 25, 2007 (File No. 333-142363)).
2	Third Amended and Restated Limited Liability Company Agreement of the Registrant (incorporated herein by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K, dated June 19, 2013 (File No. 001-33756)).
3	Specimen Unit Certificate for the Preferred Units (incorporated herein by reference to Exhibit B to Exhibit 3.1 of the Registrant's Current Report on Form 8-K, dated June 19, 2013 (File No. 001-33756)).

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**SIGNATURE**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

**VANGUARD NATURAL RESOURCES, LLC**

By: /s/ Scott W. Smith  
Name: Scott W. Smith  
Title: President, Chief Executive Officer and Director

Date: June 19, 2013

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## INDEX TO EXHIBITS

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