

| OMB APPROVAL | |
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| | | |
|--|---|---|
| 1. Name and Address of Reporting Person* <u>Pence Britt</u> (Last) (First) (Middle) 5847 SAN FELIPE, SUITE 3000 (Street) HOUSTON TX 77057 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>Vanguard Natural Resources, LLC [VNR]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) Other (specify below) X <u>Executive VP of Operations</u> |
| | 3. Date of Earliest Transaction (Month/Day/Year) 05/18/2017 | |
| | 4. If Amendment, Date of Original Filed (Month/Day/Year) | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|-------------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|--------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Units representing LLC units | 05/18/2017 | | C | | 13,000 | A | \$0 | 213,690 | D | |
| Common Units representing LLC units | 05/18/2017 | | F | | 3,556 | D | \$0.05 | 210,134 | D | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | |
| Phantom Units ⁽¹⁾ | \$0.0 | 05/18/2017 | | D ⁽¹⁾ | | 13,000 ⁽¹⁾ | | 05/18/2017 ⁽²⁾ | 05/18/2017 | Common Units representing LLC units | \$0 | 2,695,264 | D | |

Explanation of Responses:

- The phantom units were granted pursuant to the execution of a Second Amended and Restated Employment Agreement on February 8, 2010 and subject to a Phantom Unit Award Agreement. Each phantom unit represents the equivalent of one common unit of the Company. The phantom units are subject to vesting in five equal annual installments, with the first vesting date being May 18, 2013, and each subsequent vesting date occurring on each annual anniversary of the first vesting date. The vested phantom units are payable following each vesting date, in either the Company's common units or in a cash amount equal to the fair market value of the Company's common units on the vesting date.
- The phantom units, once vested, shall be settled through the delivery of a number of Common Units equal to the number of such Vested Units, or an amount of cash equal to the Fair Market Value of a Common Unit on the Vesting Date to be paid in a single lump sum payment, as determined by the Comp Committee in its discretion.

Remarks:

/s/ Britt Pence

05/18/2017

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.