

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

**SCHEDULE 13D/A**

Under the Securities Exchange Act of 1934 (Amendment No. 1)

**LRR Energy, L.P.**

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(Name of Issuer)

**Common Units Representing Limited Partner Interests**

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(Title of Class of Securities)

**50214A 104**

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(CUSIP Number)

**Richard A. Robert**  
**Executive Vice President and Chief Financial Officer**  
**Vanguard Natural Resources, LLC**  
**5847 San Felipe, Suite 3000**  
**Houston, Texas 77057**  
**(832) 327-2255**

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(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

**October 5, 2015**

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(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 13d-7(b) for other parties to whom copies are to be sent.

\*The remainder of the cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No.: 50214A 104

1.	NAME OF REPORTING PERSON Vanguard Natural Resources, LLC		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (SEE INSTRUCTIONS) OO		
5.	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 1,000 (See Items 3, 4 and 5, below)	
	8.	SHARED VOTING POWER 1,000 (See Items 3, 4 and 5, below)	
	9.	SOLE DISPOSITIVE POWER 1,000 (See Items 3, 4 and 5, below)	
	10.	SHARED DISPOSITIVE POWER 1,000 (See Items 3, 4 and 5, below)	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,000 (See Items 3, 4 and 5, below)		
12.	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 100% (See Items 3, 4 and 5, below)		
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO (Limited Liability Company)		

**ITEM 1. Security and Issuer.**

This Amendment No. 1 to Schedule 13D (this “Amendment No. 1”) amends and supplements the initial Schedule 13D filed with the Securities and Exchange Commission on April 29, 2015 (the “Initial Schedule 13D”) by Vanguard Natural Resources, LLC (“Vanguard”), relating to the common units representing limited partner interests in LRR Energy, L.P. (“LRE common units”), a Delaware limited partnership (“LRE”).

Except as otherwise specified in this Amendment No. 1, all items left blank remain unchanged in all material respects and any items that include responses are deemed to amend and restate the corresponding items in the Initial Schedule 13D. Capitalized terms used herein but not defined herein have the respective meanings ascribed to them in the Initial Schedule 13D.

**ITEM 3. Source and Amount of Funds or Other Consideration.**

Item 3 of the Initial Schedule 13D is hereby amended and supplemented as follows:

On October 5, 2015, Vanguard consummated the transactions contemplated by the Merger Agreement. Pursuant to the terms of the Merger Agreement, Merger Sub was merged with and into LRE, with LRE continuing as the surviving entity and as a wholly owned subsidiary of Vanguard, and, at the same time, Vanguard acquired all of the limited liability company interests in LRE GP in exchange for common units representing limited liability company interests in Vanguard (“Vanguard common units”). In accordance with the terms of the Merger Agreement, each outstanding LRE common unit was converted into the right to receive 0.550 newly issued Vanguard common units or, in the case of fractional Vanguard common units, cash. The total consideration paid by Vanguard in connection with the Merger and other transactions described in the Merger Agreement consisted of approximately 14,581,291 newly issued Vanguard Common Units.

As a result of the consummation of the transactions contemplated by the Merger Agreement, (i) LRE is now a wholly owned subsidiary of Vanguard, (ii) LRE Common Units ceased to be traded on the New York Stock Exchange, (iii) the registration of the LRE Common Units will be terminated pursuant to Sections 12(b) and 12(g) of the Act, and (iv) LRE will no longer be required to file periodic reports with the SEC. Pursuant to the terms of the Voting Agreement, the Voting Agreement, other than Section 3.2 (*Lock-up Agreement*), Article IV (*Termination*) and Article V (*Miscellaneous*), was terminated at the effective time of the Merger. Accordingly, this Amendment No. 1 is the final amendment to the Initial Schedule 13D and is an exit filing.

Immediately following the transactions contemplated by the Merger Agreement, Vanguard beneficially owns 1,000 issued and outstanding LRE Common Units, or 100% of the issued and outstanding LRE Common Units.

**ITEM 4. Purpose of the Transaction.**

Item 4 of the Initial Schedule 13D is hereby amended and supplemented by reference to Item 3 in this Amendment No. 1, which is incorporated herein in its entirety.

**ITEM 5. Interest in Securities of the Issuer.**

(a)-(b) Item 5 of the Initial Schedule 13D is hereby amended and supplemented by reference to (i) Rows 7-13 of the cover page of this Amendment No. 1 and (ii) Item 3 in this Amendment No. 1, which are incorporated herein in their entirety.

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**ITEM 7. Material to Be Filed as Exhibits.**

<b>Exhibit Number</b>	<b>Description</b>
Exhibit A	Purchase Agreement and Plan of Merger, dated as of April 20, 2015, by and among Vanguard Natural Resources, LLC, Lighthouse Merger Sub, LLC, Lime Rock Management LP, Lime Rock Resources A, L.P., Lime Rock Resources B, L.P., Lime Rock Resources C, L.P., Lime Rock Resources II-A, L.P., Lime Rock Resources II-C, L.P., LRR Energy, L.P. and LRE GP, LLC (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by LRR Energy, L.P. with the SEC on April 22, 2015).
Exhibit B	Voting and Support Agreement, dated as of April 20, 2015, by and among Vanguard Natural Resources, LLC, Lime Rock Resources A, L.P., Lime Rock Resources B, L.P., Lime Rock Resources C, L.P. LRR Energy, L.P., LRE GP, LLC, and, solely for purposes of Section 3.2, Lime Rock Management LP, Lime Rock Resources II-A, L.P. and Lime Rock Resources II-C, L.P. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by LRR Energy, L.P. with the SEC on April 22, 2015).
Exhibit C	Registration Rights Agreement, dated as of April 20, 2015, by and among Vanguard Natural Resources, LLC, Lime Rock Management LP, Lime Rock Resources A, L.P., Lime Rock Resources B, L.P., Lime Rock Resources C, L.P., Lime Rock Resources II-A, L.P. and Lime Rock Resources II-C, L.P. (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by LRR Energy, L.P. with the SEC on April 22, 2015).

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**SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: October 5, 2015

**VANGUARD NATURAL RESOURCES, LLC**

By: /s/ Richard A. Robert  
Richard A. Robert

Executive Vice President, Chief Financial Officer and Corporate  
Secretary  
(Principal Financial Officer and Principal Accounting Officer)

