



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

DIVISION OF
CORPORATION FINANCE

September 1, 2011

Via E-mail
Eric D. Mullins
LRE GP, LLC
Heritage Plaza
1111 Bagby Street, Suite 4600
Houston, Texas 77002

**Re: LRR Energy, L.P.
Amendment No. 3 to Registration Statement on Form S-1
Filed August 12, 2011
File No. 333-174017**

Dear Mr. Mullins:

We have reviewed your amended registration statement and letter dated August 11, 2011, and we 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 by amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Amendment No. 3 to Registration Statement on Form S-1

General

1. All references in this letter to prior comments are to the numbered comments issued by staff letter to you dated August 2, 2011. Once you fully comply with prior comment 1, we may have additional comments. We note that much of the information and a number of the referenced materials have not yet been updated or finalized.
2. We note your response to prior comment 2, and we reissue the comment in part. Despite your response, you have not provided marked copies of the changed exhibits.

Use of Proceeds, page 50

3. We note that you intend to use the proceeds received from the offering to repay debt and to pay fees and expenses associated with your new credit facility. Please disclose whether, upon repayment of the debt and fees and expenses, you have any plans to immediately draw down on a facility, and if so, for what purposes.

Sensitivity Analysis, page 75

4. We note your disclosure regarding the sensitivity of projected cash distributions to oil and natural gas production and prices. With a view towards disclosure, please tell us the threshold prices at which you would be unable to make the referenced “minimum” quarterly cash distributions.

Hydraulic Fracturing, page 149

5. We note from your response to prior comment 5 that you enter into master services agreements with your various fracturing service providers. Please provide us supplementally with a form of such agreement.
6. In addition, we note your revised disclosure at page 150 that your current insurance “policies do not provide coverage for all liabilities” and that “a loss not fully covered by insurance could have a material adverse effect on [y]our financial position, results of operations and cash flows.” Please provide related risk factor disclosure.

Exhibit 5.1 – Legality Opinion

7. We note your responses to prior comments 2 and 3. However, you state in part at pages 195 to 196 that a limited partner’s liability “under the Delaware Act will be limited, subject to possible exceptions, to the amount of capital he is obligated to contribute to us for his common units plus his share of any undistributed profits and assets.” Your response to prior comment 2 also indicates in part that Section 5.10 “is intended to clarify that the Limited Partner Interests ... are ‘non-assessable’ (as such term is used in the corporate context) except as provided in the enumerated Sections of the Delaware Act....”

Please revise your prospectus disclosure to provide clarity with regard to potential liability in each referenced exception or other situation involving possible required future payments or contributions. Also obtain and file an opinion of counsel which complies with prior comment 3.

Closing 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 the information the Securities Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Eric D. Mullins
LRR Energy, L.P.
September 1, 2011
Page 4

You may contact Lily Dang at (202) 551-3867 or Karl Hiller, Branch Chief, at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters or James Murphy at (202) 551-3703 if you have questions regarding the engineering comments. Please contact Sirimal R. Mukerjee at (202) 551-3340 or, in his absence, Timothy S. Levenberg, Special Counsel, at (202) 551-3707 with any other questions.

Sincerely,

/s/H.Roger Schwall

H. Roger Schwall
Assistant Director

cc: Via E-mail
Gislar Donnenberg, Esq.
Andrews Kurth LLP
600 Travis, Suite 4200
Houston, Texas 77002