



DIVISION OF
CORPORATION FINANCE

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

May 24, 2011

Via E-mail

Mr. Frank L. Jennings
Chief Financial Officer
Synergy Resources Corporation
20203 Highway 60
Platteville, Colorado 80651

**Re: Synergy Resources Corporation
Form 10-K/A for Fiscal Year Ended August 31, 2010
Filed May 10, 2011
Form 10-Q for Fiscal Quarter Ended February 28, 2011
Filed April 12, 2011
Response Letter Dated May 10, 2011
File No. 333-146561**

Dear Mr. Jennings:

We have reviewed your filings and response letter and 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 within ten business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. 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 filings and the information you provide in response to these comments, we may have additional comments.

General

1. Please make sure that your letter of response indicates precisely (by page number) where responsive disclosure to each numbered comment, and, as applicable, each point contained therein, may be found in the marked version of the amendment. In addition, please make sure that your letter of response provides explanations and/or analyses that are sufficiently detailed.

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Form 10-K/A for the Fiscal Year Ended August 31, 2010

Business, page 1

Well and Production Data, page 4

2. We reissue comment 1 in our letter dated March 4, 2011. Please provide your analysis as to how you have complied with the disclosure requirements of Item 1206 of Regulation S-K.

Executive Compensation, page 33

3. We note your response to comment 9 in our letter dated March 4, 2011 and we reissue such comment. Please revise your disclosure to quantify such amount that Mr. Jennings spends on your business.

Exhibits, Financial Statement Schedules, page 40

4. We note your response to comment 12 in our letter dated March 4, 2011. Please provide the basis for not filing any agreements relating to the issuances of your securities during 2010, including, and without limitation, purchase agreements, unit agreements, warrant agreements or indentures.

Note 1 – Organization and Summary of Significant Accounting Policies, page F-8

Oil and Gas Properties, page F-9

5. We note your revised disclosure on page F-9, as well as on page 28 of your Form 10-K/A, responding to prior comment 11. Your revised disclosure states that “the capitalized costs of proved oil and gas properties...and the cost of unevaluated properties, may not exceed the estimated future net cash flows from proved oil and gas reserves... plus the cost of unevaluated properties not being amortized, plus the lower of cost or estimated fair value of unevaluated properties not being amortized...”. Please note that the portion of your disclosure underlined will need to be removed to be in compliance with the guidance on limitation on capitalized costs per Rule 4-10(c)(4) of Regulation S-X.

Form 10-Q for Quarterly Period Ended February 28, 2011

6. We note that the body of the Form 10-Q was filed as Exhibit 32, Exhibit 32 was filed as Exhibit 31 and Exhibit 31 was filed as the body of the Form 10-Q. In future filings, please ensure that your filings are correctly tagged.

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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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Lily Dang at (202) 551-3867 or Kimberly Calder at (202) 551-3701 if you have questions regarding comments on the financial statements and related matters. Please contact Sirimal R. Mukerjee at (202) 551-3340 or, in his absence, me at (202) 551-3611.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker
Branch Chief