



DIVISION OF
CORPORATION FINANCE

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

February 28, 2011

VIA U.S. MAIL AND FACSIMILE

Ed Holloway
President
Synergy Resources Corporation
20203 Highway 60
Platteville, Colorado 80651

**Re: Synergy Resources Corporation
Form 10-K for Fiscal Year Ended August 31, 2010
Filed November 24, 2010
Form 10-Q for Quarterly Period Ended November 30, 2010
Filed January 13, 2011
File No. 333-146561**

Dear Mr. Holloway:

We have reviewed your filings 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.

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

Business, page 1

Well and Production Data, page 4

1. Please provide your analysis as to how you have complied with the disclosure requirements of Item 1206 of Regulation S-K. In this regard, we note your disclosure at page 4 that as of November 15, 2010, two wells were in the process of completion.
2. We note the table on page 4 regarding average production costs. Please revise to provide the average production cost, not including ad valorem and severance taxes, as required by Item 1204(b) of Regulation S-K. In this regard, we note the table on page 19 that breaks out the production costs and the severance and ad valorem taxes per BOE.

Oil and Gas Properties and Proven Reserves, page 5

3. We note your disclosure at page 6 regarding your undeveloped acreage. Please revise your disclosure to provide the information required by Item 1208(b) of Regulation S-K with respect to minimum remaining terms of leases and concessions.
4. We note your disclosure at page 6 that Ryder Scott Company, L.P. prepared the estimates of your proved reserves. Please expand your disclosure to discuss the qualifications of the technical person(s) at Ryder Scott primarily responsible for overseeing the preparations of the reserves estimate. See Item 1207(a) of Regulation S-K.
5. In this regard, please expand your disclosure to describe any internal controls that you have in respect of such reserves estimates. For example, we note your disclosure that Mr. Holloway oversaw the preparation of the estimates, but please clarify whether you have a reserves committee and, if so, please discuss the qualifications of the members on the committee. Please also discuss who selected Ryder Scott.
6. We note from your Form 10-K for the Fiscal Year Ended August 31, 2009 and from your transactions with Petroleum Management, LLC and Petroleum Exploration and Management, LLC that there appears to have been a material additions to your reserves estimate. Please provide a general discussion of the technologies used to establish the material additions to your proved reserves, as contemplated by Item 1202(a)(6) of Regulation S-K.
7. We note that you have provided information regarding proved undeveloped reserves. Please provide the information required by Item 1203(b) – (d) of Regulation S-K, or tell us why it is not applicable. In this regard, we note from your disclosure on page 7 that PUD make up about 45% of your total proved reserves as of August 31, 2010.

Controls and Procedures, page 29

Management's Report on Internal Control Over Financial Reporting, page 29

8. Please revise your disclosure to indicate that your principal executive officer and principal financial officer have evaluated the effectiveness of your "internal control over financial reporting" as opposed to your "disclosure controls and procedures."

Executive Compensation, page 33

9. We note your disclosure that Mr. Jennings's compensation is based on the amount of time he spends on your business. Please revise your disclosure to quantify such amount.

Certain Relationships and Related Transactions, page 37

10. Please provide all of the information required by Item 404 of Regulation S-K in respect of your transaction with HS Land & Cattle, LLC.

Financial Statements

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

Oil and Gas Properties, page F-9

11. Please expand your disclosure under this heading, as well as on page 25, to discuss how the lower of cost or estimated fair value of unproven properties *included in the costs being amortized* affects the limitation of your net capitalized costs. Please be sure that your disclosures address both points (B) and (C) of Rule 4-10(c)(4) of Regulation S-X.

Please make similar changes to your disclosures in Form 10-Q for the fiscal quarter ended November 30, 2010.

Exhibits, Financial Statement Schedules, page 40

12. Please file all material agreements, including without limitation:
 - any purchase agreements entered into in connection with your issuances of notes and other securities,
 - any acquisition agreements (including in connection with your related party transactions with Petroleum Exploration and Management, LLC and Petroleum Management, LLC),

- your new employment agreements referenced at page 33 and
- your consulting agreements with certain of your directors referenced at page 33,

or tell us why you do not need to. See Item 601(b)(10) of Regulation S-K. In your response, please confirm that you have filed all material agreements.

Exhibit 99

13. We note your disclosure that the “process of estimating the quantities of recoverable oil and gas reserves relies on the use of certain generally accepted analytical procedures.” While we understand that there are fundamentals of physics, mathematics and economics that are applied in the estimation of reserves, we are not aware of an official industry compilation of such “generally accepted analytical procedures.” With a view toward possible disclosure, please explain to us the basis for concluding that such procedures have been sufficiently established so as to judge that the reserve information has been prepared in conformity with such procedures.

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.

Ed Holloway
Synergy Resources Corporation
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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,

Anne Nguyen Parker
Branch Chief