

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

December 27, 2012

Via E-mail
John E. Hagale
Chief Financial Officer
Rosetta Resources Inc.
717 Texas, Suite 2800
Houston, TX 77002

Re: Rosetta Resources Inc.

Form 10-K for the Fiscal Year ended December 31, 2011

Filed February 27, 2012 File No. 000-51801

Dear Mr. Hagale:

We have reviewed your filing 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 filing, 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year ended December 31, 2011

Business and Properties, page 3

Proved Reserves, page 7

1. We note from your disclosure on page 8 that all of your proved undeveloped reserves as of December 31, 2011 are in the Eagle Ford. On page 29 you explain that you plan to continue development of the Eagle Ford in Gates Ranch in 2012 and have announced your intention to increase your well density "...to 65 acre spacing from the past practice of drilling on 100 acre spacing." You also disclose on page 3 that in 2011 you completed "...closer spaced wells in two pilot areas in the north half of Gates Ranch."

Please tell the extent to which the proved undeveloped reserves for the Eagle Ford disclosed as of December 31, 2011 include locations with reserves attributable to

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increased well density and closer well spacing; specify the percentage of your total proved undeveloped reserves that are attributable to such locations.

Supplemental Oil and Gas Disclosures (Unaudited), page 82

Net Proved and Proved Developed Reserve Summary, page 85

- 2. Please expand your disclosure of the changes in net quantities of proved reserves to include an appropriate explanation for the significant additions relating to extensions and discoveries and other additions for each of the reporting periods shown to comply with FASB ASC paragraph 932-235-50-5.
- 3. Please expand your disclosure to quantify your proved undeveloped reserves as of December 31, 2009, 2010 and 2011 to comply with the presentation requirements set forth in FASB ASC paragraph 932-235-50-4.

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 John Hodgin, Petroleum Engineer, at (202) 551-3699 if you have questions regarding engineering comments. Please me at (202) 551-3686 with any other questions.

Sincerely,

/s/ Karl Hiller

Karl Hiller Branch Chief