



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-4628

August 11, 2009

Mr. Michael J. Rosinski  
Executive Vice President and 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, 2008  
Filed March 2, 2009  
File No. 000-51801**

Dear Mr. Rosinski:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Year Ended December 31, 2008

Business, page 4

Resource Assessment Capability and Inventory Generation, page 6

1. Instruction 5 to Item 102 of Regulation S-K generally prohibits disclosure of unproved reserve volumes in documents filed with the Commission. Therefore, it appears that you should remove your statement, "This inventory, which includes proved undeveloped reserves, represents resources of about 575 Bcfe on a net

unrisked basis and about 300 Bcfe on a net risked basis,” and any similar representations elsewhere in your filing.

Supplemental Oil and Gas Disclosures, page 65

Net Prove and Proved Developed Reserve Summary, page 67

2. Paragraph 11 of SFAS 69 requires that you disclose an explanation of “significant changes” to your proved oil and gas reserves. Please submit the revisions that you propose to address the downward revision of 64 BCFE of proved reserves, presented in your table and mentioned in footnote (6). Please also furnish to us a spread sheet overview of the principal properties involved, indicating the amount of your revision attributed to each of these properties, with a comparison of the engineering methods used for the original estimates and the methods used for the year-end 2008 estimates. You may contact us by telephone if you require further guidance or clarification.

Please direct these engineering items to:  
U.S. Securities and Exchange Commission  
100 F Street NE  
Washington, DC 20549-4628  
Attn: Ronald M. Winfrey

Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our 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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the

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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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Ron Winfrey, Petroleum Engineer, at (202) 551-3704 with questions about engineering comments. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller  
Branch Chief