



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

April 16, 2007

Mr. Steven D. Foster
Chief Financial Officer
Parallel Petroleum Corporation
1004 N. Big Spring, Suite 400
Midland, Texas 79701

**Re: Parallel Petroleum Corporation
Form 10-K for Fiscal Year Ended December 31, 2006
Filed February 28, 2007
File No. 000-13305**

Dear Mr. Foster:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. 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 disclosures 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 Fiscal Year Ended December 31, 2006

Management's Discussion and Analysis, page 29

Critical Accounting Policies and Practices, page 32

Depletion, page 33

1. Please expand your discussion of the unit of production method to specify the components included in your amortized costs, taking into consideration the guidance of Regulation S-X Rule 4-10(c)(3)(i). Please also describe the assumptions and uncertainties underlying your estimates, and identify any material changes implemented during the periods presented. Make similar revision to your disclosure on page F-8.

Costs and Expenses, page 35

2. Please expand your depreciation and depletion expense variance analysis to discuss the extent to which proved undeveloped property purchases and/or changes in estimates of future development or production costs affected your depletion expense variance.

Financial Statements

Statements of Cash Flows, page F-6

3. We note that for year 2006, on the line items labeled *Return on investment in pipelines and gathering system ventures*, you show a \$9 million positive adjustment to net income in the Cash flows from operating activities section, and a \$7.7 million inflow in the Cash flows from investing activities section. Please tell us why you separated the return amount into these two cash flow categories, and reconcile the amounts to the corresponding activity reflected in your Statements of Operations on page F-4, the change in the account balance depicted in your Balance Sheets on page F-3, and the information in Note 7 on page F-17. Submit the revisions you would propose to clarify this matter.

Note (11) Stock Compensation, Warrants and Rights, page F-23

(c) Stock Rights, page F-26

4. Please expand your disclosure to state the purpose of your stock right dividend, and to explain how the stock right provisions serve that purpose. Additionally, please disclose your method of accounting for these stock rights, along with any actual and anticipated effects on your results of operations.

Note (15) Commitments and Contingencies, page F-28

5. We note you disclose that on December 30, 2005, you were named as a defendant in a lawsuit filed by AFE Oil and Gas, LLC, but that you have not established a reserve for this legal contingency as of December 31, 2006. Please expand your disclosure to clarify whether you have not established a reserve because the loss is not deemed probable, or because it is not reasonably estimable. To the extent it is not probable but estimable, disclose the range of reasonably possible loss.

Engineering Comments

General

6. Please provide us a copy of your 2006 detailed reserve report, preferably on CD-ROM or other electronic medium.

Supplemental Oil and Natural Gas Reserve Data, page F-29

7. We note numerous significant reserve changes in your reserve table. However, there are no explanations of these changes. Please amend your document to state the reasons for the significant reserve changes, as required under paragraph 11 of SFAS 69.
8. We note that your proved undeveloped reserves have increased from 26% of your total proved reserves at the end of 2003 to 48% at the end of 2006. Please provide us with a graph or table that stratifies your undeveloped reserves, showing for each year in which such reserves were originally booked as proved, both the quantities of those reserves established in the period and those remaining as undeveloped each year thereafter, including identification of the properties, and aggregation of the totals for each year-end. Also please explain the reasons your undeveloped reserves increased from 35% in 2005 to 48% at the end of 2006, and address the following points.
 - (a) Tell us how many reserves you have converted from proved undeveloped to proved developed in each of the last three years as a result of spending development costs of \$107.3 million from 2004 through 2006, as disclosed on page F-13.
 - (b) Tell us whether you have limited your proved undeveloped reserves to one offset location away from a well with proved reserves in all instances. If not, tell us the circumstances of each case where you have gone beyond one offset location away from an economic well in quantifying undeveloped reserves.

- (c) Tell us how many undeveloped well locations offsetting a horizontal well are typically associated with the booking of undeveloped reserves.

Standardized Measure of Discounted Future Net Cash Flows, page F-31

9. We note that in each of the three years shown, your future production costs calculate to be \$15.73, \$14.24 and \$11.98 per barrel of oil equivalent, based on your proved reserves at the end of 2006, 2005 and 2004, respectively. Please disclose the reason you utilized these prices in the Standardized Measure, while reporting average lifting costs of \$9.91, \$9.24 and \$8.06 per barrel equivalent produced for the same years in the Business section on page 8; and \$7.55, \$6.54 and \$6.26 in MD&A on pages 35 and 38.

Changes in Standardized Measure of Discounted Future Net Cash Flows From Proved Reserves, page F-31

10. Please explain to us the meaning of your disclosure in Footnote 1, concerning the changes you have apparently made in how you determine additional reserves in the categories of "Extensions and discoveries" and "improved recovery."

Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover 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 disclosures in the filing to be certain that the filing include 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 disclosures, 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 disclosures in the filing;

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- staff comments or changes to disclosures 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 Lily Dang at (202) 551-3867 if you have questions regarding comments on the financial statements and related matters. You may contact James Murphy, Petroleum Engineer at (202) 551-3703 with questions about engineering comments. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller
Branch Chief