



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

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

September 19, 2006

Michael C. Jennings
Executive Vice President - Chief Financial Officer
Frontier Oil Corporation
10000 Memorial Drive, Suite 600
Houston, Texas 77024-3411

Re: Frontier Oil Corporation
Form 10-K for Fiscal Year Ended December 31, 2005
Filed March 1, 2006
Form 10-Q for Fiscal Quarters Ended March 31, 2006 and June 30, 2006
Filed May 4, 2006 and August 7, 2006
File No. 1-7627

Dear Mr. Michael C. Jennings:

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 in response to these comments. 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 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 Fiscal Year Ended December 31, 2005

Critical Accounting Policies

1. We note your disclosure regarding your scheduled maintenance accrual and asset retirement obligation. Please expand your critical accounting policy to describe the assumptions and underlying basis for your estimates requiring you to make

specific judgments. Your disclosures should provide information about the quality and variability of your earnings and cash flow so that investors may ascertain the indicative value of your reported financial information. We generally find that disclosures including both a sensitivity analysis and discussion of historical experience in the determining the critical estimate are effective in conveying this information. Please refer to FRC Section 501.14 for further guidance on this subject.

Financial Statements

Consolidated Statement of Changes in Shareholder' Equity

2. We note the subtotal number of outstanding shares presented in your statement of changes in shareholders' equity as of December 31, 2004 does not agree to that presented on the face of your balance sheet. Additionally, your presentation of shares issued prior to January 1, 2005 does not reflect the retroactive adjustment resulting from the stock split in 2005. It appears that your presentation should be modified to provide a consistent presentation of share data which corresponds to the requirement to retroactively adjust earnings per share for all periods presented in accordance with paragraph 54 of SFAS 128.

Note 1 Nature of Operations

3. We note your disclosures indicating you have investments accounted for under the equity method including your 25% interest in 8901 Hangar, Inc and FGI, LLC, although you have not separately presented earnings from equity investees in you consolidated statement of income. Please clarify why you believe it is appropriate to combine these earnings within another component of your statement of operations. Refer to Rule 5-03 of Regulation S-X.

Principals of Consolidation

4. Please expand your disclosures to indicate the specific voting percentage and control criteria management uses to determine whether to consolidate a less than wholly owned subsidiary. Additionally, expand you disclosure to identify your policy regarding how you determine whether to consolidate a variable interest. Confirm whether any of the assets and liabilities associated with your off-balance sheet disclosure were evaluated for potential consolidation.

Asset Retirement Obligation

5. We note your disclosure indicating you have adopted FIN 47 resulting in recognition of an asset retirement obligation. Your disclosures appear to suggest that this asset retirement obligation relates to the handling and disposal of hazardous substances that the Company is legally obligated to incur in maintaining and improving your Refineries. Please explain why you were unable to reasonably estimate this liability prior to your adoption of FIN 47. Please compare and contrast the specific retirement obligations which were recorded prior to the adoption of FIN 47 with those that were recorded subsequent to the adoption of FIN 47.

Note 6 Common Stock

6. We note your disclosure indicating that employees have participated in cashless exercises of stock options. Please expand your stock plan disclosure to describe the cashless exercise terms and specifically address if your stock option compensation plan includes a formal cashless exercise provision. Clarify for us whether the cashless exercise of employee options effectively adjusts the option exercise price and disclose how you account for the exercise price adjustment, or otherwise advise.

Note 8 Commitments and Contingencies

7. Please expand your disclosure to include assessments of the likelihood of loss and obligations by matter using terms as defined in paragraph 3 of SFAS 5.

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 amendment and 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.

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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 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 Jonathan Duersch at (202) 551-3719 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3683 with any other questions.

Sincerely,

Jill S. Davis
Branch Chief