



DIVISION OF  
CORPORATION FINANCE  
MAIL STOP 7010

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

October 5, 2007

Mail Stop 7010

via U.S. mail and facsimile

Mark S. Berg  
Pioneer Southwest Energy Partners, LP  
5205 N. O'Connor Blvd. Suite 200  
Irving, Texas  
75309

**Re: Pioneer Southwest Energy Partners, LP.  
Amendment No. 1 Registration Statement on Form S-1  
Filed September 13, 2007  
File No. 333-144868**

Dear Mr. Berg:

We have reviewed your amended filing and have the following 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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Please file the supplemental information provided in response to prior comment 13 on EDGAR. Additionally, please provide objective, verifiable support for the claim that Pioneer is the largest producer in the Spraberry field.
2. We note your response to prior comment 28. Please revise your disclosure where applicable and indicate, as done in the response, that you do not have an established timeframe for the acquisition of midstream assets or undeveloped properties, are not party to any agreements related to acquisitions of this kind and may never undertake such acquisitions.
3. We note your response to prior comment 30. Your conclusion that the contracts are not "material" appears to be premised on the fact that the Partnership is not a party to the agreements. Item 601(b)(10) also requires the filing of material contracts "in which the registrant...has a beneficial interest." Please provide us further analysis as to why these contracts do not need to be filed.
4. In response to prior comment 32, you indicate that no direct form of compensation will be paid to the officers and directors of the general partner. We refer you however, to Section 4.7 of the form of Administrative Services Agreement. The section appears to contemplate equity incentive compensation that would be directly payable by the Partnership, if the Partnership chose to provide such compensation, to the employees of Pioneer USA or its affiliates for the provision of the services listed in the agreement. Please clarify for us whether the compensation contemplated would be distinct from the amounts paid by the Partnership pursuant to Section 4.1 of the form of Administrative Services Agreement. We may have further comment.

Non-GAAP Financial Measures, page 13

5. We note your response to comment 17 of our letter dated August 23, 2007 and note EBITDAX will be required to be reported to your lenders under certain material debt covenants. In this regard, please refer to Question 10 of the Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures issued by the staff on June 13, 2003 to ensure your disclosures address the suggested areas of disclosure.

Capital Expenditures and Expenses, page 50

6. We have reviewed your amended disclosure provided in response to comment 22 of our letter dated August 23, 2007. Revise to disclose if the \$16 million in cash withheld for replacement reserves will be the only growth capital expenditures forecasted for the twelve months ended December 31, 2008. Your last sentence

under “Capital Expenditures” on page 50 implies you may make other acquisitions outside of these replacement reserves during the forecast period that are not included in the table on page 45. Please expand your disclosures to address how you will fund any acquisitions outside of those incurred in excess of the \$16 million withheld for replacement reserves. Also, tell us and disclose the expected maintenance capital expenditures forecasted for the twelve months ended December 31, 2008, and if so, how you have considered and included these maintenance expenditures on the tables on pages 43 and 45.

Critical Accounting Estimates, page 69

7. We have reviewed your amended disclosure provided in response to comment 26 of our letter dated August 23, 2007. Revise to expand on such factors as how you arrived at the estimate, how accurate the estimates have been in the past, and whether the estimates are reasonably likely to change in the future. Please provide quantitative disclosure where possible to provide investors a sensitivity analysis for your estimates.

Business, page 73

Competitive Strengths, page 75

8. We note the revisions made under this heading in response to prior comment 27. It is not apparent from the added text that you intend to enter into a credit facility and intend on relying on the facility to make additional acquisitions. As such, the statement regarding your lack of indebtedness as a competitive strength does not appear to have been placed within the appropriate context. We reissue the comment. Please revise your disclosure accordingly.

Unaudited Pro Forma Statement of Operations, page F-4

9. We note footnote (d) to adjust lease operating expense for the COPAS fee. Please revise to clarify why the amount of these adjustments, for the six months ended June 30, 2007 and the year ended December 31, 2006, \$2.368 million and \$4.550 million respectively, do not reconcile to the COPAS fees disclosed for the same periods on page 60 under Production Expenses and General and Administrative Expenses - \$3.1 million and \$5.8 million.

Engineering Comments

10. In comment 41 of our letter, we asked that you provide to us a listing of “generally accepted petroleum engineering and evaluation principles” and cite a reference for same in your document. As we have not received this information and could find no reference in the amendment, we reissue the request.

11. We also asked that you discuss the procedures you follow to reconcile differences between your estimates and those performed by the third party engineer. We could not find such discussion in the amendment and we reissue the request.
12. Your response 43 indicates that you do not have reliable data for the partnership's properties required for compliance with our request. Please amend your document to disclose the "Reserve-to-Production Ratio" and "Estimated Production Decline Rate" applicable to Pioneer's aggregate Spraberry proved developed producing properties as of year-end 2006.

#### Closing Comments

As appropriate, please amend the above filing in response to these comments. You may wish to provide us with a marked copy 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 Act of 1933 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.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Mr. Mark Berg  
Pioneer Southwest Energy Partners LP  
October 5, 2007  
Page 5 of 5

You may contact Robert Carroll at (202) 551-3362 or, in his absence, Shannon Buskirk at (202) 551-3717 if you have questions regarding comments on the financial statements and related matters. Please contact Ronald Winfrey, Petroleum Engineer, at (202) 551-3704 with questions regarding the engineering comments. You may contact Mellissa Campbell Duru at (202) 551-3757 or, in her absence, me at (202) 551-3611 with any other questions.

Sincerely,

Anne Nguyen Parker  
Branch Chief

cc: Robert Kimball, Esq. (by facsimile)  
William Finnegan, Esq.  
S. Buskirk  
A. Parker  
B. Carroll  
M. Duru