



DIVISION OF  
CORPORATION FINANCE  
MAIL STOP 7010

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

July 11, 2008

By Facsimile and U.S. Mail

Mr. Phillip W. Terry  
Chief Executive Officer  
Arena Resources, Inc  
6555 S. Lewis Ave.  
Tulsa, Oklahoma 74136

**Re: Arena Resources, Inc**  
**Form 10-K for the Fiscal Year Ended December 31, 2007**  
**Filed March 12, 2008**  
**File No. 001-31657**

Dear Mr. Terry:

We have reviewed your Form 10-K for the fiscal year ended December 31, 2007 and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. 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 Fiscal Year Ended December 31, 2007

Business Development, page 4

1. We note your disclosure indicating that you had pre-tax PV10 of \$1.98 billion as of December 31, 2007. Please provide a reconciliation of this non-GAAP measure to the most directly comparable measure calculated and presented in accordance with GAAP. Refer to Item 10(e) of Regulation S-K.

Summary of Oil and Natural Gas Properties and Projects, page 17

2. We note that your operations employ certain secondary recovery techniques including water flooding. We further note your disclosure on page 9 that “Approximately 30% of your proven reserves depend upon secondary recovery techniques to establish production.” Please tell us how you account for the related costs to explore, develop and then to maintain production and specify the accounting treatment for such costs incurred during each stage of a project’s life, such as exploration, development, production and, reclamation. We may have further comment.

Engineering Comments

Properties, page 14

General Background, page 14

3. We note your unit acquisition and drilling costs are calculated without consideration for the estimated future development costs for proved undeveloped reserves even though you included PUD reserves in the unit cost computation. Please revise this calculation to include the estimated future development costs for proved undeveloped reserves to present a complete picture of the costs you have incurred and expect to incur to fully develop these properties.

Proved Reserves, page 16

4. We note your disclosed proved reserves. Please furnish us the petroleum engineering reports – in hard copy and electronic spreadsheet format - you used as the basis for your 2007 proved reserve disclosures. Please include the items below if they are not already incorporated in the reports:
  - a) One-line recaps for each property sorted by field and by present worth within each proved reserve category including the estimated date of first production for your proved undeveloped properties;
  - b) Total company summary income forecast schedules for each proved reserve category with proved developed segregated into producing and non-producing properties;
  - c) Individual income forecasts for each of the two largest properties (net equivalent reserve basis) in the proved developed and in the proved undeveloped categories as well as the AFE (or itemized development cost estimates) for both PUD entities;

- d) Engineering exhibits (e.g. maps, rate/time plots, volumetric calculations) for each of these four largest properties. Please include normal operational plots such as oil cut vs. cumulative production and injection history/estimated fill up for any secondary recovery units included. Base maps should identify existing well and PUD locations as well as producing status. You may contact us for assistance in this or any other matter.

Estimated Costs Related to Conversion of Proved Undeveloped Reserves to Proved Developed Reserves, page 16

5. The “Estimated Development Costs” total - \$301 million – is \$20 million less than the development cost line for your 2007 standardized measure presentation on page 78. Please explain this difference to us and modify your disclosure to the extent needed..

Production History, page 19

6. The “Average production cost (per BOE)” does not appear to include production taxes per FAS 69, paragraph 25. Please revise this to include a line item for unit production taxes.

Supplemental Information on Oil and Gas Producing Activities (Unaudited), page 77

Changes in Standardized Measure of Discounted Future Net Cash Flows, page 78

7. The line item “Development costs incurred during the year” presents \$362 million for 2007, but your incurred 2007 development costs, on page 67, are \$113 million. We see similar differences for 2006 and 2005. Please explain these differences to us and modify your disclosure to the extent needed..

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

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Arena Resources, Inc  
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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 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 John Cannarella at (202) 551-3337 if you have questions regarding comments on the financial statements and related matters. You may contact Ronald Winfrey, Petroleum Engineer, at (202) 551-3704 with questions about engineering comments. Please contact me at (202) 551-3683 with any other questions.

Sincerely,

Jill Davis  
Branch Chief