

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

January 21, 2010

Mr. Joseph Young Principal Accounting Officer Basic Earth Science Systems, Inc. 633 Seventeenth St., Suite 1645 Denver, Colorado 80202-3625

Re: Basic Earth Science Systems, Inc.

Form 10-K for the Fiscal Year Ended March 31, 2009

Filed June 18, 2009

Form 10-Q for the Quarterly Period Ended September 30, 2009

Filed November 16, 2009

Response letter dated December 28, 2009

File No. 000-07914

Dear Mr. Young:

We have reviewed your filing and response letter and have the following 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.

Engineering Comments

Form 10-K for the Fiscal Year Ended March 31, 2009

Note 12 Unaudited Oil and Gas Reserves Information

Analysis of Changes in Proved Reserves, page 39

1. We have reviewed your response to prior comment five of our letter of December 11, 2009 regarding your proved reserves disclosure. As previously stated, the reserve table should represent the total proved reserves, not just the proved developed reserves. SFAS 69 requires you to additionally disclose the proved developed reserves at the beginning and end of each year. Please provide us with an example of your proposed disclosure.

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- We have reviewed your response to prior comment six of our letter regarding the significant changes to your proved oil and natural gas reserves. SFAS 69 requires you to provide appropriate explanations for the significant reserve changes. It does not ask you to provide an explanation of the line item itself. Therefore, for example, if you had significant changes to your reserves due to revisions please disclose the appropriate explanation for those revisions such as the percentage due to price changes and the percentage due to performance changes, the nature of the performance changes and the location of those reserves changes such as Montana or the specific field if the revisions are material to that field. Similarly, if you had significant additions to reserves due to extensions and discoveries please disclose the details of those additions. Please provide us with an example of your proposed disclosure.
- 3. We have reviewed your response to prior comment seven of our letter regarding how much of your revisions in oil and gas reserves were due to price changes and how much were due to performance changes in each of the reported periods as of March 31, 2008 and as of March 31, 2009. We are asking supplementally for how much of the <u>reserve</u> revisions in the reserve table were due to these two factors. We are not asking for the change in the future value in the Standardized Measure as your response appears to indicate.

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.

You may contact Mark Wojciechowski at (202) 551-3759, or in his absence, Kevin Stertzel at (202) 551-3723 if you have questions regarding comments on the financial statements and related matters. You may contact James Murphy, Petroleum Engineer, at (202) 551-3703 regarding engineering comments. Please contact me at (202) 551-3299 with any other questions.

Sincerely,

Mark C. Shannon Branch Chief