

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

August 17, 2010

Mr. Frank A. Lodzinski Chief Executive Officer GeoResources, Inc. 110 Cypress Station Drive, Suite 200 Houston, Texas 77090-1629

Re: GeoResources, Inc.

Amendment No. 1 to Form 10-K for the Fiscal Year Ended December 31,

2009

Filed July 23, 2010

Response Letter Sent July 21, 2010

File No. 0-08041

Dear Mr. Lodzinski:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

General

1. We remind you that we will not be able to accelerate the effectiveness of your outstanding post-effective amendment file number 333-155681 until you have cleared comments on your Form 10-K and related filings.

Preparation of Reserve Estimates, page 5

2. While we understand that there are fundamentals of physics, mathematics and economics that are applied in the estimation of reserves, we are not aware of an official industry compilation of such "generally accepted petroleum engineering principles." With a view toward possible disclosure, please explain to us the basis for concluding that such principles have been sufficiently established so as to judge that the reserve information

Mr. Frank A. Lodzinski GeoResources, Inc. August 17, 2010 Page 2

has been prepared in conformity with such principles. In the alternative, please remove this statement.

Exhibit 99.2

3. We note your response to our prior comment 9 in our letter dated June 10, 2010 and the statement in the report of Cawley, Gillespie & Associates, Inc. that, "[a]ll reserve estimates represent our best judgment based on data available at the time of preparation, and assumptions as to future economic and regulatory conditions." In future filings, please provide a third-party report that provides the statements required pursuant to Items 1202(a)(8)(iv) and (viii) of Regulation S-K.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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.

You may contact Suying Li at (202) 551-3335, Sandy Eisen at (202) 551-3864, or Chris White, Branch Chief, at (202) 551-3461 if you have questions regarding comments on the financial statements and related matters. Please contact Douglas Brown at (202) 551-3265, or me at (202) 551-3611 with any other questions.

Sincerely,

Anne Nguyen Parker Branch Chief