



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4628

September 15, 2011

Via E-Mail

Richard F. Miles
President and Chief Executive Officer
Geokinetics, Inc.
1500 City West Blvd.
Suite 800
Houston, TX 77042

**Re: Geokinetics, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2010
Filed April 1, 2011
File No. 001-33460
Response Letter filed September 6, 2011**

Dear Mr. Miles:

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

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

General

1. We note your response to comment 1 of our letter dated August 22, 2011. We note also, with respect to the publicly available information regarding contacts with U.S.-designated state sponsors of terrorism cited in our prior comment 1, that BP, Eni S.p.A. and Petrobras have been the subject of negative publicity relating to their operations associated with Iran and Sudan, and Petrobras and Eni S.p.A. have been the subject of divestment initiatives as a result of their operations associated with Iran and Sudan. Please discuss for us the potential impact on Geokinetics, Inc. of the negative publicity regarding, and the investor sentiment evidenced by divestment activity directed toward, these companies. Your response should address the possibility that your reputation and share value will be negatively impacted by these companies' status as major customers of Geokinetics, Inc.

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Please contact Jennifer Hardy, Special Counsel, at (202) 551-3767 or me at (202) 551-3470 if you have any questions about the comments or our review.

Sincerely,

/s/ Cecilia Blye

Cecilia Blye, Chief
Office of Global Security Risk

cc: Roger Schwall
Assistant Director
Division of Corporation Finance