



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

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

January 4, 2006

via facsimile and U.S. mail

Mr. Thomas J. Concannon
Vice President
Geokinetics Inc.
One Riverway, Suite 2100
Houston, Texas 77056

Re: Geokinetics Inc.
Form S-1, filed December 30, 2005
File No. 333-130777

Dear Mr. Concannon:

This is to advise you that a preliminary review of the above registration statement indicates that it fails in numerous respects to comply with the requirements of the Securities Act of 1933, the rules and regulations under that Act, and the requirements of the form. The Form S-1 does not include audited financial statements for the registrant, Geokinetics Inc. You also failed to include the related auditors' opinion and auditors' consent on the registrant's financial statements. In addition, you did not file the consent from the auditors for the acquiree, Trace Energy Services Ltd. Further, there is no indication of the auditor name, auditor location and date of the opinion on the audit report and review reports on historical and pro forma information for the acquiree. The review report for the registrant also fails to include the name and location of the auditing firm and the report is undated. See Article 2 of Regulation S-X, AT 401.19 and AU 722.37. Acknowledgment letters for the review reports on unaudited interim financial information were not provided. Refer to Item 601(b)(15) of Regulation S-K.

For these reasons, we will not perform a detailed examination of the registration statement, and will not issue any comments because to do so would delay the review of other disclosure documents that do not appear to contain comparable deficiencies.

You are advised that we will not recommend acceleration of the effective date of the registration statement and that, should the registration statement become effective in its present form, we would be required to consider what recommendation, if any, we should make to the Commission.

Mr. Thomas J. Concannon
Geokinetics Inc.
January 4, 2006
Page 2

We suggest that you consider submitting a substantive amendment to correct the deficiencies or a request for withdrawal of the filing.

You may contact Lily Dang at (202) 551-3867, Karl Hiller, Branch Chief, at (202) 551-3686 or the undersigned at (202) 551-3763 if you have any questions.

Sincerely,

Barry Stem
Senior Assistant Chief Accountant

cc: L. Dang
K. Hiller
T. Richter