

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

DIVISION OF CORPORATION FINANCE Mail Stop 7010

June 26, 2006

via U.S. mail

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

> Re: Geokinetics Inc. Amendment No. 2 to Form S-1 Filed June 14, 2006 File No. 333-130777

> > Amendment No. 1 to Form 10-K for Fiscal Year Ended December 31, 2005 Filed June 14, 2006 Amendment 1 to Form 10-Q for Fiscal Quarter Ended March 31, 2006 Filed June 14, 2006 Amendment No. 3 to Form 8-K Filed June 14, 2006 File No. 0-09268

Response Letter Filed June 14, 2006

Dear Mr. Concannon:

We have reviewed your filings and response letter and have the following comments. We have limited our review of your filings to those issues we have addressed in our comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. 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 filings. 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 S-1/A2 Filed June 14, 2006

Incorporation of Certain Documents by Reference, page ii

1. Please revise your disclosure of the filing date for Amendment No. 3 of Form 8-K to indicate June 14, 2006, as reflected in EDGAR.

Exhibit 23.3 - Consent of Independent Registered Public Accounting Firm

2.. Please ask Trace Energy Services Ltd.'s independent accountants, KPMG LLP, to ensure that its reference to your registration statement amendment date is correct in its updated consent to be filed with your next registration statement amendment.

Form 10-K/A1 Filed June 14, 2006

General

3. Please add an explanatory note to the forepart of your filing summarizing the main reasons for your amendment. Add a similar explanatory note to the forepart of your amended Forms 10-Q and 8-K.

Financial Statements

Note 1 – Summary of Significant Accounting Policies, page F-9

Reclassifications and Additional Disclosures, page F-9

4. Please revise your disclosure to remove the suggestion that the SEC requested additional disclosures, reclassifications and revisions to your financial statements. Your company's management should take full responsibility for correcting the financial statements.

Revenue Recognition and Work In Process, page F-10

5. We note you have added disclosure regarding your revenue recognition policy in response to prior comment 14. Please further augment that disclosure to clarify whether there are any cancellation provisions available to your customers under your contracts that would entitle them to a refund of amounts paid or which would release them from any obligation to compensate you for the value of work performed (e.g. instances where you are unable to complete work in accordance

> with certain milestones or within a given period of time). Please also indicate how recognition is handled in instances where you have revenue sharing arrangements (e.g. where a customer funding a survey would be entitled to some portion of licensing revenues secured from other customers). Finally, please disclose how you are handling fees received during periods of mobilization, prior to the commencement of services. In each case, details of your disclosure should be sufficiently clear to understand how the conditions under which you recognize revenue support your determination that delivery and customer acceptance have occurred, and that revenues were fixed and determinable, as would be required under SAB Topic 13:A.

<u>Note 7 – Restructuring of Debt, Reverse Stock Split and Private Placement of Common</u> <u>Stock, page F-17</u>

6. We note that in response to prior comment 9, you added disclosure explaining that your \$83.8 million gain resulted from a comprehensive restructuring that eliminated \$80 million in your debt obligations under your 2003 and 2005 Senior Secured Notes and reduced your lease obligations to GeoLease.

While your added note disclosure provides more details on the nature and terms of the transactions that gave rise to your \$83.8 million gain, it would be helpful to have additional disclosure covering the reasons the note holders agreed to the terms that you describe. It should be clear why the 2005 note holders were willing to give up \$71 million in principal and accrued interest in exchange for only \$15,000 in cash, and the 2003 note holders were willing to give up \$9 million in principal and accrued interest in exchange for only \$82,709 in cash and 1.1 million of your common shares, rather than take custody of your assets or ownership of the company either through bankruptcy or otherwise, since you describe the notes as being secured. Further, please address the disproportionate terms of settlement, between the 2005 and 2003 notes.

Form 8-K/A3 Filed June 14, 2006

Unaudited Pro Forma Financial Statements, page 23

7. We have read the disclosure you added in response to prior comment 27, regarding the various adjustments made to conform the Trace Energy Services presentation of certain revenue and cost items to that of Geokinetics. Although you indicate that the historical presentation conforms to industry practice, the nature of the underlying transactions remains unclear. Since you state that a portion of the debit recorded against revenues represents "…reimbursement of costs for which Trace derives no benefit nor bears any cost," you should further explain why that item appears in the historical financial statements, and how you have handled the credit offsetting the initial debit in recording this item in the

historical financial statements. Further, you should explain how costs incurred by subcontractors are given accounting recognition in the Trace Energy Services financial statements, or clarify if these are actually costs Trace Energy Services has paid subcontractors for services. Tell us the Canadian and U.S. GAAP literature that you believe accommodates the presentation for both items. Please note that under SAB Topic 1:M.2, industry practice will not override U.S. GAAP.

Closing Comments

As appropriate, please amend your registration statement in response to these comments. Please amend your Forms 10-K, 10-Q and 8-K within 10 business days of the date of this letter. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendments that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and 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 Act of 1933 and that they have provided all information investors require for an informed investment decision. 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filings or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Lily Dang at 202-551-3867 or Don Delaney at 202-551-3863 if you have questions regarding comments on the financial statements and related matters. Please contact Donna Levy at (202) 551-3292 with legal questions, or me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller Branch Chief

cc: James J. Spring, III, Esq. L. Dang D. Delaney D. Levy