



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
100 F Street, NE
WASHINGTON, D.C. 20549-7010

DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

June 30, 2006

Via U.S. Mail

J. Darby Seré
President and Chief Executive Officer
GeoMet, Inc.
909 Fannin, Suite 3208
Houston, Texas 77010

**Re: GeoMet, Inc.
Amendment No. 3 to Registration Statement on
Form S-1
Filed June 21, 2006
File No. 333-131716
Amendment No. 1 to Registration Statement on
Form S-1
Filed June 21, 2006
File No. 333-134070**

Dear Mr. Seré:

We have reviewed your amended filings and have the following comments. Where indicated, we think you should revise your document 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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

S-1/A

General

1. We remind you of our prior comment 3 regarding the need to make parallel changes to similar disclosure in both registration statements.
2. We still await your response to the letter sent under separate cover regarding the confidential treatment request previously submitted.
3. We note the updated disclosure provided with respect to the option agreement executed by the company with respect to the purchase of Shamrock Energy LLC. Please supplement your disclosure to include reference to the total purchase price payable to Shamrock Energy, LLC should you decide to exercise the option to purchase. Additionally, revise to include disclosure regarding the advance amounts payable to Shamrock Energy LLC during the option period.

Engineering Comment

Risk Factors, page 10

Our ability to market the gas we produce...., page 12

4. We note that you may change your Pond Creek gas transportation arrangement to one of four alternatives. Please amend your document to quantify the anticipated costs of each of these alternatives.

Closing Comments

As appropriate, please amend your registration statements in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its

Mr.Sere
GeoMet, Inc.
June 30, 2006
Page 3

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.

We will consider a written request for acceleration of the effective date of the registration statement as a 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 statements. 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 an 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 Ronald Winfrey, Petroleum Engineer at (202) 551-3704 if you have questions regarding the engineering comment. Please contact Mellissa Campbell Duru, at (202) 551-3757 or me at (202) 551-3745 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director

cc: via facsimile
Kirk Tucker, Esq.
Thompson & Knight LLP
(713) 654-1871