



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-0405

March 10, 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.
Form S-1 filed February 10, 2006
File No. 333-131716

Dear Mr. Seré:

We have reviewed your filing 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 supplemental 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.

Form S-1

General

1. Where comments on a section also relate to disclosure in another section, please make parallel changes to all affected disclosure. This will eliminate the need for us to repeat similar comments.
2. We will need time to review all new disclosure, any additional proposed artwork or graphics and all omitted exhibits. You can expedite the review

process by providing all this information and all these documents promptly.
We may have additional comments.

3. Provide updated disclosure in each amendment. For example, please include any updated information regarding the status of your application with the Nasdaq National Stock Market.
4. Please update your financial statements. Refer to Rule 3-12 of Regulation S-X.
5. Please update your consent from your independent auditor.
6. Please file the executed copy of the agreements filed as exhibits, inclusive of conformed signatures. Except for the legal opinion and auditor's consent, none of the exhibits filed contain conformed signatures.
7. Please provide the information required by Schedule A under the Securities Act and Item 501 (b)(3) of Regulation S-K regarding the price or price range of the securities being offered by selling shareholders. While we note that the shares are being sold by selling shareholders not the issuer, you must nonetheless provide information regarding the price at which you expect the shares will trade.

Cover Page

8. Delete the third paragraph. The cover page should be restricted to the information called for by Items 501(b)(1)-(7) of Regulation S-K.
9. Your current disclosure states your intention to apply for quotation on the Nasdaq National Stock Market. Please clarify whether you have in fact applied for quotation on the Nasdaq National Stock Market and if not, specify the reasons why you have not yet applied. In this regard, we note your reference to the eligibility requirements. Specify which of the requirements, if any, you have yet to meet.

Inside Front Cover Page

10. The maps provided in the filing are difficult to read. To facilitate our review, please provide copies of the color version of the maps you intend to include in the prospectus.

Prospectus Summary, page 1

11. Revise to provide a summary that is balanced. Your discussion of "Strategy" and "Competitive Strengths" should be balanced with a discussion of the risks associated with each of those. For example, the summary references your anticipated drilling program during 2006 yet it fails to reference the fact that you had a working capital deficit of \$14.9 million as of the period ended

September 30, 2005 which consisted largely of your exposure to derivative liability. Please revise the summary to list the more salient risks that could impact your company and operations.

12. Avoid repetition of disclosure in the summary. In this regard, we note the disclosure on pages 2-3 is almost a verbatim reproduction of the discussion on pages 42-44 of the prospectus. Please revise your disclosure accordingly.

Corporate Information, page 7

13. On page 25, you disclose that *net* proceeds approximated \$27 million in connection with the offering conducted in January 2006. However, in this section, you indicate you received aggregate proceeds of \$28 million, including the additional shares sold in February 2006. Please reconcile this inconsistency.
14. Supplement the disclosure by stating the purpose of the merger of GeoMet, Inc., into GeoMet Resources, Inc.

Summary of Financial, Reserve and Operating Data, page 9

15. We note your presentation of the non-GAAP measure EBITDA and that you calculate this measure, as disclosed on page 24, using net income/(loss) before cumulative effect of change in account principle, net of tax. Please be advised that Question 14 of the Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures, located at <http://www.sec.gov/divisions/corpfin/faqs/nongaapfaq.htm#ebit>, indicates that the definition of earnings as included in the exempted measure EBITDA “is intended to mean net income as presented in the statement of operations under GAAP.” Please review this guidance and revise your presentation of this measure throughout your filing as appropriate.

Risk Factors, page 10

16. Provide a risk factor that discloses the fact that your obligations under your current credit agreement are secured by virtually all of your assets including equity interests in your subsidiaries. Delineate the risk to you resulting from an event of default under the credit agreement.
17. Delineate in greater detail, the risk to you resulting from negative redeterminations, inclusive of scheduled and special redeterminations as defined in the credit agreement.
18. We note that borrowings under the credit agreement are subject to market

interest rates. Revise this risk factor to discuss your credit agreement and the interest rate exposure risk you face. Delineate by way of example, the dollar impact to you resulting from an increase of 100 basis points in interest rates.

19. You disclose on page F-23 that for the nine months ended September 30, 2005, and for the year ended December 31, 2004, one customer purchased approximately 99 percent of the company's natural gas production. To the extent it is material to your operations, please supplement the risk factor disclosure to reference the risk you face resulting from your reliance on a significant customer.

“We will require additional capital to fund our future activities...” page 12

20. Tailor your risk factor discussion under this heading to reference material commitments that may also impact your capital resources in the future. In this regard, we note the Pond Creek Acquisition price will be fully due and payable as of 2008. Revise your risk factor discussion to address this and other future liabilities that will impact your capital resources.

“Hedging transactions may limit our potential gains...” page 16

21. We note the increase as of September 30, 2005, by 1,879% in unrealized losses to \$21.8 million from \$1.1 million in the period ended September 30, 2004. Tailor the risk factor discussion to address your potential exposure due to your hedging and derivative contracts.

“We do not intend to pay...” page 18

22. Indicate the length of the period for which you will not be able to pay dividends by the terms of the credit facility. If it will be for the entire time of the credit facility, indicate the termination date of the facility.

“You may experience dilution...” page 18

23. You disclose on page 63 the terms of a stockholders' agreement that specifies that additional issuances of common stock of the company to original stockholders will be issued at a per share consideration of \$2.50 up to a maximum funding of \$40 million. Please confirm whether the terms of this agreement still apply and further delineate in this risk factor discussion the dilutive risk to shareholders caused by the issuance of shares to original stockholders resulting from the agreement.

Management's Discussion and Analysis of Results of Operations and Financial Condition, page 25

Critical Accounting Policies, page 26

Revenue Recognition, page 28

24. We note that you "recognize gas revenue from [y]our interests in producing wells as gas is produced and sold from those wells." Please confirm, if true, that your policy complies with the revenue recognition criteria outlined by SAB Topic 13 or otherwise advise.

Liquidity and Capital Resources, page 36

Cash Flows and Liquidity, page 36

25. Delineate in greater detail how you anticipate meeting your capital expenditures during 2006 given your current resources. In this regard, we note that the proceeds received from the recent private equity offering and loan repayment in January and February of 2006 totaled approximately \$44.5 million and that you anticipate expending approximately \$80- \$90 million in capital expenditures during 2006.
26. We note your disclosure regarding the need to dewater coalbeds on page 13. Please expand your disclosure on page 13 and in your Management's Discussion and Analysis to indicate:
 - the length of time that it takes a well to dewater before it produces CBM gas;
 - how you dispose of the water from the wells and any environmental liability that it creates; and
 - expand your discussion of liquidity to address how the length of time required to dewater a well results in a delay in your ability to generate cash flow from a well after your initial capital investment.

Capital Expenditures and Capital Resources, page 38

Credit Facility, page 38

27. Your disclosure should provide an accurate summary of the material provisions of the agreements to which you are a party. In this regard, expand your disclosure regarding the material provisions of the Credit Agreement, inclusive of a more detailed discussion regarding the material covenants, events of default and the consequences of an event of default with regard to your operations.

28. Section 4.3 of the Second Amended and Restated Credit Agreement dated January 6, 2006, indicates that “special determinations” of the borrowing base may occur in addition to schedule redeterminations of the borrowing base. Clarify in your description of the credit agreement, the circumstances that may lead to the required banks exercising their rights to invoke Section 4.3.
29. Delineate the dollar impact to you resulting from an increase in 100 basis points in interest rates on your outstanding debt under the credit facility.

Business, page 42

30. Update your disclosure to speak as of December 31, 2005.

About GeoMet, page 42

31. We note your statement that “[A]t September 30, 2005, we had 258.5 Bcf of estimated proved reserves with a PV-10 of approximately \$1.4 billion using gas prices in effect at such date.” We note that this “Present Value” of your proved reserves (or what is more commonly known as PV-10) differs from the standardized measure of discounted future net cash flows relating to proved oil and gas reserves (SMOG), as calculated and presented in accordance with SFAS 69. As you indicate on page 24 of your filing, this disclosure is considered a non-GAAP measure. As such, you must provide all disclosures required by Item 10(e) of Regulation S-K wherever you make reference to this measure or reference the location where such disclosures are made. We further note your discussion on page 45 under the Estimated Proved Reserves heading, and would expect your disclosures with respect to this non-GAAP measure to include the following:
 - A statement that PV-10 differs from the GAAP measure SMOG;
 - An explanation that the most comparable GAAP measure SMOG is typically not calculated on a quarterly or interim basis and provide an explanation as to why your presentation includes this measure as of September 30, 2005;
 - An indication, if true, that the only difference between SMOG and PV-10 is taxes;
 - A statement, if true, that it is not practicable to calculate taxes on a quarterly basis.

Areas of Operation, page 42

32. We note your statement that “From project inception through September 30,

2005, [y]our finding and development costs in the Cahaba Basin have averaged \$0.82 per Mcf.” We note your additional statements regarding finding and development costs with respect to other areas of your operation. Due to the variable components of this measure, please revise your discussion to address each of the following, without limitation. In this regard, we are aware of your definition of finding and development costs disclosed on page 83.

- Describe how the measure is calculated.
 - The information used to calculate this measure should be derived directly from the line items disclosed in the schedule of costs incurred and the reconciliation of beginning and ending proved reserve quantities, which is required to be disclosed by paragraphs 11 and 21 of SFAS 69.
 - If the measure does not use data determined in accordance with SFAS 69, please identify:
 - the source of the data;
 - indicate whether or not the measure is a non-GAAP measure, as defined by Item 10(e) (2) of Regulation S-K;
 - if the measure is a non-GAAP measure, supplementally explain why it is appropriate to disclose it in Commission filings based on the conditions identified in Item 10(e)(1)(ii) of Regulation S-K; and,
 - if it is determined that it is appropriate to disclose the non-GAAP measure in Commission filings, provide the disclosure required by Item 10(e) (1)(i) and Question 8 of the Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures, located at <http://www.sec.gov/divisions/corpfin/faqs/nongaapfaq.htm>.
 - Note that finding costs include asset retirement costs. Therefore, this measure should also include asset retirement costs. Refer to the February 24, 2004 sample letter sent to oil and gas producers regarding SFAS 69 and SFAS 143, located at <http://www.sec.gov/divisions/corpfin/guidance/oilgasletter.htm>.

- Note that future development costs expected to be incurred relative to the specific set of reserve additions included in the calculation of the measure should also be included in the calculation.
- Identify the status of the proved reserves that have been added (e.g., proved developed vs. proved undeveloped).
 - It is not appropriate to calculate this measure using non-proved reserves or to use a figure for proved reserve additions that includes both proved reserve additions attributable to consolidated entities combined with proved reserve additions attributable to investments accounted for using the equity method.
 - When a significant portion of the proved reserve additions is proved undeveloped, disclose that additional development costs will need to be incurred before these proved reserves are ultimately produced, and the impact this has on the use and reliability of the measure.
 - Disclose the amount of the estimated future development costs. Explain to investors, if true, that the amount of estimated future development costs related to the proved reserve additions is a component of amounts disclosed in the SFAS 69 disclosures
- Identify the reasons why proved reserves were added.
 - The reconciliation of beginning and ending proved reserves, referred to above, includes several line items that could be identified as potential sources of proved reserve additions. Explain to investors the nature of the reserve additions, whether or not the historical sources of reserve additions are expected to continue, and the extent to which external factors outside of managements' control impact the amount of reserve additions from that source from period to period.
 - Identify all situations that resulted in a reserve addition that did not require the expenditure of additional costs. We note for example that changes in commodity prices and foreign exchange rates routinely have a direct impact on the quantity of proved reserve quantities, but do not require the expenditure of additional exploration or development costs.
- Disclose how management uses this measure.
- Disclose the limitations of this measure.

- Indicate whether the finding cost per unit measure is comparable to other like measures disclosed by other companies.

Certain Transactions with Affiliates and Management, page 63

33. Please revise to clarify the components of the various loans extended to officers during the period from incorporation through the present. In this regard, we note your disclosure that \$17.5 million in loans to officers was repaid to the company in January 2006. Based on your disclosure in this section, however, loans totaling approximately only \$12.1 million appear to have been extended to officers in April 2005 and in December 2000. Please revise or advise.
34. In Note 6 to the Consolidated Financial Statements, you indicate that two of the components of long-term debt consist of a note payable to an individual through September 2015 and a salary continuation payable to an individual through December 2015. Clarify whether the individuals referenced are officers, directors or affiliates of the company and, if so, identify those persons and discuss the terms. We may have further comment.

Consolidated Balance Sheets, page F-3

35. Please confirm, if true, that you are not required to present a line item for Commitments and contingent liabilities in accordance with Rule 5-02(25) of Regulation S-X or otherwise advise. In this regard, we note your disclosure within footnote 12.

Note 1. Organization, page F-7

36. Please confirm, if true, that the line item Income before income taxes and minority interest is consistent with the pro forma presentation requirement in paragraph 55 of SFAS 141 or otherwise advise.
37. Please explain, in detail, why no goodwill resulted from your allocation of the purchase price for your April 2005 or November 2004 acquisitions.
38. Please tell us how you determined the per share price used to determine the purchase price of the April 2005 transaction.

Note 2. Summary of Significant Accounting Policies, page F-8

Unevaluated Properties, page F-10

39. Please revise your disclosure to address each of the following as required by Rule 4-10(c)(7)(ii) of Regulation S-X or otherwise advise:

- A description in the notes to the financial statements of the current status of the significant properties or projects involved, including the anticipated timing of the inclusion of the costs in the amortization computation;
- A table that shows, by category of cost, the total costs excluded as of the most recent fiscal year; and the amounts of such excluded costs incurred in each of the three most recent fiscal years and in the aggregate for any earlier fiscal years in which the costs were incurred. Please refer to the Rule for a description of the type of costs to be disclosed.

Operating fees, page F-11

40. Please clarify how you account for costs that are in excess of the actual costs incurred related to fields where you have an ownership interest. Please explain why your accounting policy's criteria is for working interest rather than ownership or other economic interest. Refer to Rule 4-10(c)(6)(iv) of Regulation S-X.

Capitalized Interest Costs, page F-11

41. Please expand your disclosure to identify the criteria that you use to determine when it is appropriate to capitalize interest on your oil and gas projects accounted for in accordance with the full cost method. Refer to paragraph 2 of FIN 33.

Stock Based Compensation, page F-12

42. Please explain how you determined the estimated market value of your common stock. We may have further comments.

Note 13. Acquisition and Disposition, page F-24

43. Please explain why you have not provided financial statements for your acquisition of your April 2004 acquisition of properties in West Virginia. Refer to Rule 3-05 of Regulation S-X.

Exhibits, Part II, page II-4

44. Consistent with the requirements of Item 601 of Regulation S-K, please file all material exhibits. We note for example, that the acquisition agreement relating to the working interest in the Appalachian Basin, inclusive of the 50% working interest in one of your principal producing properties, Pond Creek, has not been filed.

Item 15. Recent Sales of Unregistered Securities, page II-2

45. For each transaction, expand the disclosure to indicate the number of persons sold to and name the persons or identify the class of persons. Expand transaction “4” to explain the reference to “the remaining minority.”

Item 17. Undertakings, page II-5

46. Provide all of the undertakings required by Item 512 of Regulation S-K. We note that this offering is made under Rule 415 of Regulation C.

Engineering Comments

Summary, page 1

Summary of Our Properties as of September 30, 2005, page 4

47. We note the disclosure of your estimated proved reserves. Rule 4-10(a)(4) of Regulation S-X provides that proved undeveloped oil and gas reserves may be attributed to locations not offsetting productive units only “where it can be demonstrated with certainty that there is continuity of production from the existing productive formation (emphasis added).” Please submit to us the engineering and geologic justification for any PUD reserves you have claimed which are not in legal, technically justified locations offsetting (adjacent to) productive wells. Otherwise, either affirm to us that none of your claimed PUD reserves are attributed to such locations or delete such volumes from your disclosed proved reserves.
48. Please tell us the estimated hydrocarbon volumes, if any, you have claimed as proved reserves:
- a) In undrilled fault blocks; and
 - b) Below the lowest known – penetrated and assessed - structural occurrence of hydrocarbons.
49. Please submit to us the petroleum engineering reports you used as the basis for your 9-30-05 proved reserve disclosures. These should include:
- a) One-line recaps for each property sorted by field and by present worth within each proved reserve category including the estimated date of first production for your proved undeveloped properties;
 - b) Total company summary income forecast schedules for each proved reserve category with proved developed segregated into producing and non-producing properties;
 - c) Individual income forecasts for each of the two largest wells (net equivalent reserve basis) in the proved developed and proved undeveloped categories for

the Pond Creek field and for the Gurnee Field. Please include the AFE for each of the four PUD wells;

- d) Narratives and engineering exhibits (e.g. maps, performance plots, volumetric calculations) for each of these eight largest wells. Please include a spread sheet compilation of the “substantial gas desorption testing” referenced on page 1.

Competitive Strengths, page 5

50. We note your statement, “*Production Rates*. Unlike conventional natural gas production, which typically declines after initial production is established, production from CBM wells typically increases for the first few years of their productive lives and then begins to decline at a shallow rate.” Please amend your document to balance this with the fact that CBM wells’ initial production is usually modest and the eventual peak rates are usually lower than those of prolific conventional gas wells.

Competitive Strengths, page 6

51. We note your disclosure of finding and development costs. Please amend your document to disclose these costs after the inclusion of estimated future development costs associated with proved undeveloped reserves. If your calculation already considers these costs, please so state.

Risk Factors, page 10

“We may need to use unproven technologies to produce coalbed methane economically on some of our properties,” page 15

52. Please expand your discussion to describe the difficulties in determining permeability of coal from core samples. If you claimed proved reserves that rely on these unproved technologies, explain your position to us. We may have further comment.

Management’s Discussion and Analysis of Results of Operations and Financial Condition, page 25

53. Please describe to us in detail the conditions that account for the differences in unit transaction prices for your Pond Creek acquisition - \$.84/MCF – and your White Oak Creek Sale - \$2.50/MCF.

Business, page 42

Estimated Proved Reserves, page 45

54. We note your statement, “CBM-producing natural gas reservoirs generally are not characterized by declining production rates that vary depending upon reservoir characteristics and other factors.” We believe CBM reservoirs’ production decline rates – after dewatering – are clearly dependent upon reservoir characteristics. Please justify your statement to us with technical support or delete it.

Production and Operating Statistics, page 46

55. Please amend your disclosure of oil and gas prices so that the reader is apprised of the effects of your oil and gas hedging program on the prices you have realized in each of the periods.

Appendix A, page A-1

56. Your independent engineer’s summary reserve report states, “Operating expenses include field operating expenses, transportation expenses, compression charges, and the estimated expenses of direct supervision, but do not include that portion of general administrative costs sometimes allocated to production.” With regard to producing well overhead, Financial Accounting Standard 69, paragraph 27 states “...some expenses incurred at an enterprise’s central administrative office may not be general corporate expenses, but rather may be operating expenses of oil and gas producing activities, and therefore should be reported as such.” We consider the allocation of no G&A to production costs as incorrect since some supervision is an unavoidable requirement for oil and gas production. We recognize that the level of such supervision varies in the industry. Amend your document to include your production overhead in the production costs used to calculate the standardized measure.

Operating Expenses and Capital Costs, page A-6

57. Your 9-30-05 independent engineer’s report states, “Future capital expenditures were estimated using 2004 values and were not adjusted for inflation.” Please amend your document to include capital costs updated to the effective date of the estimate.

Closing Comments

As appropriate, please amend your registration statement 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 information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response 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 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 this action 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 filing 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 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 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 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 Jennifer Goeken, Staff Accountant at (202) 551-3721 or Jill Davis, Accounting Branch Chief at (202) 551-3683 if you have questions regarding comments on the financials statements and related matters. Please contact Ronald Winfrey, Petroleum Engineer at (202) 551-3704 if you have questions regarding the engineering comments. Please contact Mellissa Campbell Duru, at (202) 551-3757 or me at (202)

Mr. J. Darby Seré
GeoMet, Inc.
March 10, 2006
page 15

551-3745 with any other questions. Direct all correspondence to the following ZIP code:
20549-7010.

Sincerely,

H. Roger Schwall
Assistant Director

cc: Kirk Tucker, Esq.
(713) 654-1871 (via facsimile)