

YORKTOWN ENERGY PARTNERS IV LP  
Form SC 13D/A  
May 26, 2011

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. 2)\***

GeoMet, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

37250U201

(CUSIP Number)

**Bryan H. Lawrence**

**Yorktown Energy Partners IV, L.P.**

**410 Park Avenue**

**19th Floor**

**New York, New York 10022**

**(212) 515-2112**

**Copies to:**

**Ann Marie Cowdrey**

**Thompson & Knight LLP**

**One Arts Plaza**

**1722 Routh Street, Suite 1500**

**Dallas, Texas 75201-2533**

**(214) 969-1700**

(Name, Address and Telephone Number of Person Authorized to  
Receive Notices and Communications)

May 12, 2011

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. o

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7(b) for other parties to whom copies are to be sent.

\* The remainder of the cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 ( Act ) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).



CUSIP No. 37250U201

(1) NAMES OF REPORTING PERSONS I.R.S. Identification Nos. of Above Persons (entities only)  
YORKTOWN ENERGY PARTNERS IV, L.P.

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)  
(a)   
(b)

(3) SEC USE ONLY

(4) SOURCE OF FUNDS (SEE INSTRUCTIONS)  
OO

(5) CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

(6) CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

(7) SOLE VOTING POWER  
NUMBER OF 12,437,072

(8) SHARED VOTING POWER  
SHARES BENEFICIALLY OWNED BY 0

(9) SOLE DISPOSITIVE POWER  
EACH REPORTING

PERSON 12,437,072

WITH SHARED DISPOSITIVE POWER

(10)

0

(11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

12,437,072 (1)

(12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

(13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

31.1% (2)

(14) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

(1) Yorktown IV Company LLC is the sole general partner of Yorktown Energy Partners IV, L.P. As a result, Yorktown IV Company LLC may be deemed to have the power to vote or direct the vote or to dispose or direct the disposition of the shares owned by Yorktown Energy Partners IV, L.P. Yorktown IV Company LLC disclaims beneficial ownership of the securities owned by Yorktown Energy Partners IV, L.P. in excess of its pecuniary interests therein.

(2) Based on 39,974,554 shares of Common Stock of the Issuer issued and outstanding as of May 2, 2011, as set forth in the Issuer's quarterly report on Form 10-Q for the quarter ended March 31, 2011, filed with the Securities and Exchange Commission (the SEC) on May 6, 2011.

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(b)

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This Amendment No. 2 amends the Schedule 13D with respect to the common stock of GeoMet, Inc., a Delaware corporation (the Issuer), previously filed by Yorktown Energy Partners IV, L.P., a Delaware limited partnership ( Yorktown IV ), with the SEC on August 7, 2006, as amended by Amendment No. 1 to Schedule 13D filed by Yorktown IV with the SEC on August 25, 2008 (the Schedule 13D ). Capitalized terms used herein without definition shall have the meanings given to such terms in the Schedule 13D.

**Item 5. INTEREST IN SECURITIES OF THE ISSUER.**

Subparagraphs a, b and c of Item 5 in the Schedule 13D are amended and restated in their entirety by the following:

(a) Yorktown IV beneficially owns 12,437,072 shares of Common Stock of the Issuer, representing 31.1% of the issued and outstanding shares of Common Stock of the Issuer. Yorktown IV Company may, as the sole general partner of Yorktown IV, be deemed to be the beneficial owner of all 12,437,072 shares of Common Stock of the Issuer beneficially owned by Yorktown IV. All calculations made herein are made in accordance with Rule 13d-3(d) of the Securities Exchange Act of 1934, as amended, and based on 39,974,554 shares of Common Stock of the Issuer issued and outstanding as of May 2, 2011.

(b) Through Yorktown IV Company, its general partner, Yorktown IV has the sole power (and no shared power) to vote or direct the vote or to dispose or direct the disposition of 12,437,072 shares of Common Stock of the Issuer. As the sole general partner of Yorktown IV, Yorktown IV Company has the sole power (and no shared power) to vote or direct the vote or to dispose or direct the disposition of 12,437,072 shares of Common Stock of the Issuer.

(c) On May 14, 2008, Yorktown IV distributed in-kind, on a pro rata basis and for no additional consideration, in accordance with its limited partnership agreement, an aggregate of 806,489 shares of Common Stock of the Issuer, to its limited and general partners (the First Distribution ). Upon the consummation of the First Distribution by Yorktown IV, Yorktown IV Company distributed in-kind, on a pro rata basis and for no additional consideration, in accordance with its operating agreement, all 157,308 shares of Common Stock of the Issuer received in the First Distribution to its members.

On August 13, 2008, Yorktown IV distributed in-kind, on a pro rata basis and for no additional consideration, in accordance with its limited partnership agreement, an aggregate of 1,209,135 shares of Common Stock of the Issuer, to its limited and general partners (the Second Distribution ). Upon the consummation of the Second Distribution by Yorktown IV, Yorktown IV Company distributed in-kind, on a pro rata basis and for no additional consideration, in accordance with its operating agreement, all 235,320 shares of Common Stock of the Issuer received in the Second Distribution to its members.

On May 12, 2011, Yorktown IV distributed in-kind, on a pro rata basis and for no additional consideration, in accordance with its limited partnership agreement, an aggregate of 1,750,000 shares of Common Stock of the Issuer, to its limited and general partners (the Third Distribution ). Upon the consummation of the Third Distribution by Yorktown IV, Yorktown IV Company distributed in-kind, on a pro rata basis and for no additional consideration, in accordance with its operating agreement, all 25,862 shares of Common Stock of the Issuer received in the Third Distribution to its members.

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SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: May 24, 2011

YORKTOWN ENERGY PARTNERS IV, L.P.

By: Yorktown IV Company LLC

By: /s/ Bryan H. Lawrence

Name: Bryan H. Lawrence

Title: Managing Member

YORKTOWN IV COMPANY LLC

By: /s/ Bryan H. Lawrence

Name: Bryan H. Lawrence

Title: Managing Member