AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF GEOMET, INC.

GeoMet, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, hereby certifies as follows:

<u>FIRST</u>: The name of the corporation is GeoMet, Inc. (the "<u>Corporation</u>"). The Corporation was originally formed under the name GeoMet Resources, Inc., and its original Certificate of Incorporation (the "<u>Certificate</u>") was filed in the Office of the Secretary of State of the State of Delaware on November 9, 2000, and most recently amended by filing of an Amended and Restated Certificate of Incorporation in the Office of the Secretary of State of the State of Delaware on January 24, 2006.

SECOND: That the Board of Directors of the Corporation, by written consent in lieu of special meeting dated July 20, 2006, adopted resolutions proposing and declaring advisable that the Certificate be amended and restated in its entirety as set forth herein (this "Amended and Restated Certificate") and directing that this Amended and Restated Certificate be considered by the stockholders of the Corporation.

<u>THIRD</u>: That a majority of the stockholders of the Corporation, by written consent in lieu of special meeting dated July 21, 2006, adopted a resolution adopting this Amended and Restated Certificate.

<u>FOURTH</u>: As such, this Amended and Restated Certificate was duly adopted in accordance with Sections 228, 242 and 245 and the other applicable provisions of the General Corporation Law of the State of Delaware, and this Amended and Restated Certificate restates, integrates and further amends the Original Certificate to read in its entirety as follows:

ARTICLE I

The name of the corporation is GeoMet, Inc. (the "Corporation").

ARTICLE II

The address of the initial registered office of the Corporation in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, County of New Castle, Delaware 19801. The name of the initial registered agent of the Corporation at such address is The Corporation Trust Company.

ARTICLE III

The purpose for which the Corporation is organized is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

ARTICLE IV

The aggregate number of shares of all classes of stock that the Corporation shall have authority to issue is 135,000,000 shares, consisting of 125,000,000 shares of common stock, par value of \$0.001 per share, and 10,000,000 shares of a class designated as Preferred Stock, par value \$0.001 per share. The relative rights of the shares of each class of the Corporation's capital stock are as follows:

1. Common Stock.

- (a) The holders of common stock shall have and possess all rights as stockholders of the corporation except as such rights may be limited by the preferences, privileges and voting powers, and the restrictions and limitations of the outstanding Preferred Stock. All common stock, when duly issued, shall be fully paid and nonassessable. The holders of common stock shall be entitled to receive such dividends as may be declared from time to time by the Board of Directors.
- (b) Each stockholder of record shall have one vote for each share of stock standing in his name on the books of the corporation and entitled to vote.
- (c) The holders of shares of common stock shall be entitled to receive the net assets of the corporation upon dissolution or liquidation, subject to the payment of any preferences thereto applicable to outstanding Preferred Stock.
- 2. **Preferred Stock.** The corporation may divide and issue the Preferred Stock in series. Preferred shares of each series when issued shall be designated to distinguish them from the shares of all other series. The Board of Directors hereby is expressly vested with authority to divide the class of Preferred Stock into series and to fix and determine the relative rights, limitations and preferences of the shares of any such series so established to the full extent permitted by this Certificate of Incorporation and the Delaware General Corporation Law in respect of the following:
 - (a) The number of shares to constitute such series, and the distinctive designations thereof:
 - (b) The rate and preference of any dividends and the time of payment of any dividends, whether dividends are cumulative and the date from which any dividends shall accrue;
 - (c) Whether shares may be redeemed and, if so, the redemption price and the terms and conditions of redemption;
 - (d) The amount payable upon shares in event of involuntary liquidation;
 - (e) The amount payable upon shares in event of voluntary liquidation;
 - (f) Sinking fund or other provisions, if any, for the redemption or purchase of shares:

- (g) The terms and conditions on which shares may be converted, if the shares of any series are issued with the privilege of conversion;
 - (h) Voting rights, if any; and
- (i) Any other relative rights and preferences of shares of such series, including without limitation any restriction on an increase in the number of shares of any series theretofore authorized and any limitation or restriction of rights or powers to which shares of any future series shall be subject.

Notwithstanding the fixing of the number of shares constituting the particular series upon the issuance thereof, the Board of Directors may at any time thereafter authorize the issuance of additional shares of the same series or may reduce the number of shares constituting such series.

The Board of Directors expressly is authorized to vary the provisions relating to the foregoing matters between the various series of Preferred Stock, but in all other respects the shares of each series shall be of equal rank with each other, regardless of series. All Preferred Stock in any one series shall be identical in all respects.

ARTICLE V

The Board of Directors of the Corporation is expressly authorized and empowered to make, alter or repeal the Bylaws of the Corporation, subject to the power of the stockholders to alter or repeal the Bylaws made by the Board of Directors.

ARTICLE VI

A director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability: (i) for any breach of the director's duty of loyalty to the corporation or its stockholders; (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) under Section 174 of the General Corporation Law of Delaware, as the same exists or hereafter may be amended; or (iv) for any transaction from which such director derived an improper personal benefit. If the General Corporation Law of Delaware is amended after the filing of this Certificate of Incorporation so as to authorize corporate actions further eliminating or limiting personal liability of directors, then the liability of each director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware as the same exists from time to time. Any repeal or modification of this paragraph by the stockholders of the Corporation shall be prospective only and shall not adversely affect any limitation of the personal liability of a director of the Corporation existing at the time of such repeal or modification.

ARTICLE VII

Any contract or other transaction between the Corporation and one or more of its directors, between the Corporation and any firm of which one or more of its directors is a member or of which a director is an employee or in which a director is otherwise interested, or between the Corporation and any corporation or association of which one or more of its directors are shareholders, members, directors, officers or employees or in which they are interested shall be valid for all purposes. The foregoing shall be true notwithstanding the presence of such director or directors at the meeting of the Board of Directors of the Corporation that acts upon or in reference to such contract or transaction and notwithstanding his or their participation in such action, if the fact of such interest shall be disclosed or known to the Board of Directors and the Board of Directors shall nevertheless authorize, approve and ratify such contract or transaction by vote of a majority.

ARTICLE VIII

The election of directors need not be by written ballot unless the Bylaws of the Corporation so provide.

ARTICLE IX

Notwithstanding any other provision of this Certificate of Incorporation or the Bylaws of the Corporation to the contrary, no action required to be taken or which may be taken at any annual or special meeting of the stockholders of the Corporation may be taken by written consent without a meeting of such stockholders.

[signature page follows.]

THE UNDERSIGNED, being the President of the Corporation, for the purpose of amending and restating the Corporation's Certificate of Incorporation pursuant to the General Corporation Law of the State of Delaware, does make this Amended and Restated Certificate of Incorporation, hereby declaring and certifying that this is his act and deed and that the facts herein stated are true, and accordingly has hereunto set his hand as of the 31st day of July, 2006.

| By: | |
|--------------------------|--|
| J. Darby Seré, President | |

GEOMET, INC.