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

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

DAWSON GEOPHYSICAL COMPANY

(Exact name of registrant as specified in its charter)

Texas

75-0970548

(State of incorporation or organization)

(I.R.S. Employer I.D. No.)

508 West Wall, Suite 800
Midland, Texas
(Address of principal executive offices)

79701

(Zip Code)

is of principal executive offices)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered

Name of each exchange on which each class is to be registered

Rights to Purchase Preferred Stock

Nasdaq Global Select Market

If this Form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box. o

If this Form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box. o

Securities Act registration statement file number to which this form relates: **Not applicable.**

Securities to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

Item 1. Description of Registrant's Securities to be Registered.

On July 8, 2009, the Board of Directors of Dawson Geophysical Company (the "Company") declared a dividend of one right ("Right") for each outstanding share of the Company's Common Stock, par value \$0.33 1/3 per share ("Common Stock"), to shareholders of record at the close of business on July 23, 2009. Each Right entitles the registered holder to purchase from the Company a unit consisting of one one-hundredth of a share (a "Fractional Share") of Series A Junior Participating Preferred Stock, par value \$1.00 per share (the "Preferred Stock"), at a purchase price of \$130.00 per Fractional Share, subject to adjustment (the "Purchase Price"). The description and terms of the Rights are set forth in a Rights Agreement effective as of the close of business on July 23, 2009 as it may from time to time be supplemented or amended (the "Rights Agreement") between the Company and Mellon Investor Services LLC, as Rights Agent.

Initially, the Rights will be attached to all certificates representing outstanding shares of Common Stock, and no separate certificates for the Rights ("Rights Certificates") will be distributed. The Rights will separate from the Common Stock and a "Distribution Date" will occur, with certain exceptions, upon the earlier of (i) ten days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired, or obtained the right to acquire, beneficial ownership of 15% or more of the outstanding shares of Common Stock (the date of the announcement being the "Stock Acquisition Date"), or (ii) ten business days following the commencement of a tender offer or exchange offer that would result in a person's becoming an Acquiring Person. In certain circumstances, the Distribution Date may be deferred by the Board of Directors. Certain inadvertent acquisitions will not result in a person's becoming an Acquiring Person if the person promptly divests itself of sufficient Common Stock. If at the time of the adoption of the Rights Agreement, any person or group of affiliated or associated persons is the beneficial owner of 15% or more of the outstanding shares of Common Stock, such person shall not become an Acquiring Person unless and until certain increases in such person's beneficial ownership occur or are deemed to occur. Until the Distribution Date, (a) the Rights will be evidenced by the Common Stock certificates and will be transferred with and only with such Common Stock certificates, (b) new Common Stock certificates issued after the close of business on July 23, 2009 will contain a notation incorporating the Rights Agreement by reference and (c) the surrender for transfer of any certificate for Common Stock will also constitute the transfer of the Rights associated with the Common Stock represented by such certificates.

The Rights are not exercisable until the Distribution Date and will expire at the close of business on July 23, 2019, unless earlier redeemed or exchanged by the Company as described below.

As soon as practicable after the Distribution Date, Rights Certificates will be mailed to holders of record of Common Stock as of the close of business on the Distribution Date and, from and after the Distribution Date, the separate Rights Certificates alone will represent the Rights. All shares of Common Stock issued prior to the Distribution Date will be issued with Rights. Shares of Common Stock issued after the Distribution Date in connection with certain employee benefit plans or upon conversion of certain securities will be issued with Rights. Except as otherwise determined by the Board of Directors, no other shares of Common Stock issued after the Distribution Date will be issued with Rights.

In the event (a "Flip-In Event") that a person becomes an Acquiring Person (except pursuant to a tender or exchange offer for all outstanding shares of Common Stock at a price and on terms that a majority of the directors of the Company who are not, and are not representatives, nominees, Affiliates or Associates of, an Acquiring Person or the person making the offer determines to be fair to and otherwise in the best interests of the Company and its shareholders (a "Permitted Offer")), each holder of a Right will thereafter have the right to receive, upon exercise of such Right, a number of shares of Common Stock (or, in certain circumstances, cash, property or other securities of the Company) having a Current Market Price (as defined in the Rights Agreement) equal to two times the exercise price of the Right. Notwithstanding the foregoing, following the occurrence of any Triggering Event, all Rights that are, or (under certain circumstances specified in the Rights Agreement) were, beneficially owned by or transferred to an Acquiring Person (or by certain related parties) will be null and void in the circumstances set forth in the Rights Agreement. However, Rights are not exercisable following the occurrence of any Flip-In Event until such time as the Rights are no longer redeemable by the Company as set forth below.

In the event (a "Flip-Over Event") that, at any time from and after the time an Acquiring Person becomes such, (i) the Company is acquired in a merger or other business combination transaction (other than certain mergers that follow a Permitted Offer), or (ii) 50% or more of the Company's assets, cash flow or earning power is sold or transferred, each holder of a Right (except Rights that are voided as set forth above) shall thereafter have the right to receive, upon exercise, a number of shares of common stock of the acquiring company having a Current Market Price equal to two times the exercise price of the Right. Flip-In Events and Flip-Over Events are collectively referred to as "Triggering Events."

The number of outstanding Rights associated with a share of Common Stock, or the number of Fractional Shares of Preferred Stock issuable upon exercise of a Right and the Purchase Price, are subject to adjustment in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Common Stock occurring prior to the Distribution Date. The Purchase Price payable, and the number of Fractional Shares of Preferred Stock or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution in the event of certain transactions affecting the Preferred Stock.

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments amount to at least 1% of the Purchase Price. No fractional shares of Preferred Stock that are not integral multiples of a Fractional Share are required to be issued upon exercise of Rights and, in lieu thereof, an adjustment in cash may be made based on the market price of the Preferred Stock on the last trading date prior to the date of exercise. Pursuant to the Rights Agreement, the Company reserves the right to require prior to the occurrence of a Triggering Event that, upon any exercise of Rights, a number of Rights be exercised so that only whole shares of Preferred Stock will be issued.

At any time until ten days following the first date of public announcement of the occurrence of a Flip-In Event, the Company may redeem the Rights in whole, but not in part, at a price of \$0.01 per Right, payable, at the option of the Company, in cash, shares of Common Stock or such other consideration as the Board of Directors may determine. After a person becomes an Acquiring Person, the right of redemption is subject to certain limitations in the

Rights Agreement. Immediately upon the effectiveness of the action of the Board of Directors ordering redemption of the Rights, the Rights will terminate and the only right of the holders of Rights will be to receive the \$0.01 redemption price. The Rights Agreement does not prevent a shareholder from conducting a proxy contest to remove and replace the Board of Directors with directors who then vote to redeem the Rights, if such actions are taken prior to the time that such shareholder becomes an Acquiring Person.

At any time after the occurrence of a Flip-In Event and prior to a person's becoming the beneficial owner of 50% or more of the shares of Common Stock then outstanding or the occurrence of a Flip-Over Event, the Company may exchange the Rights (other than Rights owned by an Acquiring Person or an affiliate or an associate of an Acquiring Person, which will have become void), in whole or in part, at an exchange ratio of one share of Common Stock, and/or other equity securities deemed to have the same value as one share of Common Stock, per Right, subject to adjustment.

Until a Right is exercised, the holder thereof, as such, will have no rights as a shareholder of the Company, including, without limitation, the right to vote or to receive dividends.

Other than the redemption price, any of the provisions of the Rights Agreement may be amended by the Board of Directors of the Company as long as the Rights are redeemable. Thereafter, the provisions of the Rights Agreement other than the redemption price may be amended by the Board of Directors in order to cure any ambiguity, defect or inconsistency, to make changes that do not materially adversely affect the interests of holders of Rights (excluding the interests of any Acquiring Person), or to shorten or lengthen any time period under the Rights Agreement; *provided*, *however*, that no amendment to lengthen the time period governing redemption shall be made at such time as the Rights are not redeemable.

A copy of the Rights Agreement has been filed with the Securities and Exchange Commission as an exhibit to this Registration Statement on Form 8-A. This summary description of the Rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, which is incorporated herein by reference.

Item 2. Exhibits.

EXHIBIT NUMBER

DESCRIPTION

NUMBI 4.1

Rights Agreement effective as of July 23, 2009 between Dawson Geophysical Company and Mellon Investor Services LLC, as Rights Agent, which includes as Exhibit A the form of Statement of Resolution Establishing Series of Shares of Series A Junior Participating Preferred Stock setting forth the terms of the Preferred Stock, as Exhibit B the form of Rights Certificate and as Exhibit C the Summary of Rights to Purchase Preferred Stock (filed as Exhibit 4.1 to the Company's Current Report on Form 8-K dated July 8, 2009 (File No. 000-10144) and incorporated herein by reference). Pursuant to the Rights Agreement, Rights Certificates will not be mailed until after the Distribution Date (as defined in the Rights Agreement).

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

DAWSON GEOPHYSICAL COMPANY

Date: July 9, 2009 By: /s/ Christina W. Hagan

Christina W. Hagan

Executive Vice President, Secretary and

Chief Financial Officer

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