

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**FORM S-8****REGISTRATION STATEMENT**
UNDER
THE SECURITIES ACT OF 1933**DAWSON GEOPHYSICAL COMPANY**

(Exact name of Registrant as specified in its charter)

Texas
(State or other jurisdiction
of incorporation or organization)**75-0970548**
(I.R.S. Employer
Identification Number)**508 West Wall, Suite 800**
Midland, Texas 79701
(Address of principal executive offices, including zip code)**Dawson Geophysical Company**
2006 Stock and Performance Incentive Plan
(Full Title of the Plan)**Stephen C. Jumper**
President and Chief Executive Officer
Dawson Geophysical Company
508 West Wall, Suite 800
Midland, Texas 79701
(432) 684-3000
(Name, address and telephone number, including area code, of agent for service)*Copy to:*
Neel Lemon
Sarah Rechter
Baker Botts L.L.P.
2001 Ross Avenue, Suite 600
Dallas, Texas 75201-2980
Telephone: (214) 953-6500
Facsimile: (214) 953-6503**CALCULATION OF REGISTRATION FEE**

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock, par value \$0.33 1/3 per share (3)	750,000 shares	\$76.57	\$57,427,500	\$1,763.02

- (1) Pursuant to Rule 416 under the U.S. Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement includes any additional shares of the registrant's Common Stock that may be issued pursuant to any stock split, stock dividend or similar transaction with respect to these shares.
- (2) Estimated solely for the purpose of determining the registration fee pursuant to Rule 457(c) and 457(h) under the Securities Act, the offering price and registration fee are based on a price of \$76.57 per share, which price is an average of the high and low prices of the Common Stock as reported in the NASDAQ Global Select Market on October 1, 2007.
- (3) Each share of common stock includes one right to purchase 1/100th of a share of Series A Junior Participating Preferred Stock under the Registrant's Rights Agreement. No separate consideration is payable for the preferred share purchase rights. The registration fee for these securities is included in the fee for the common stock.

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Consent of KPMG LLP

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Note: The document(s) containing the plan information required by Item 1 of Form S-8 and the statement of availability of registrant information and any other information required by Item 2 of Form S-8 will be sent or given to participants as specified by Rule 428 under the Securities Act. In accordance with Rule 428 and the requirements of Part I of Form S-8, such documents are not being filed with the Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act. Dawson Geophysical Company (the "Company") shall maintain a file of such documents in accordance with the provisions of Rule 428. Upon request, the Company shall furnish to the Commission or its staff a copy or copies of all of the documents included in such file.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents filed by the Company with the Commission pursuant to the Securities Exchange Act of 1934 (the "Exchange Act"), are incorporated in this Registration Statement by reference and shall be deemed to be a part hereof:

1. Our Annual Report on Form 10-K for the fiscal year ended September 30, 2006, filed on December 4, 2006;
2. Our Quarterly Report on Form 10-Q for the quarter ended December 31, 2006, filed on February 9, 2007;
3. Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, filed on May 10, 2007;
4. Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, filed on August 7, 2007;
5. Our Current Reports on Form 8-K filed on November 7, 2006*, November 14, 2006*, November 17, 2006*, January 29, 2007*, February 6, 2007*; February 7, 2007*; February 9, 2007*, February 14, 2007*, March 2, 2007*, April 25, 2007*, May 2, 2007*, May 11, 2007*, July 23, 2007*, August 1, 2007*, August 3, 2007*, August 6, 2007, August 8, 2007* and September 6, 2007*;
6. The description of our Common Stock contained in our Registration Statement on Form 8-A filed on February 1, 1982, as amended by Form 8-A/A filed on March 8, 1982 and as thereafter amended from time to time for the purpose of updating, changing or modifying such description, and the description of our rights to purchase Series A Junior Participating Preferred Stock on Form 8-A filed on July 19, 1999 and as thereafter amended from time to time for the purpose of updating, changing or modifying such description.

* Excluding any portions thereof that are deemed to be furnished and not filed.

In addition, all documents filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold, or which deregisters all securities then remaining unsold, shall be deemed to be incorporated in this Registration Statement by reference and to be a part hereof from the date of filing of such documents.

Item 4 Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

Not Applicable.

Item 6. Indemnification of Directors and Officers.

Article IX of our bylaws provides that:

“To the extent permitted by Texas Business Corporation Act Article 2.02-1, the corporation shall indemnify any present or former Director, officer, employee, or agent of the corporation against judgments, penalties (including excise and similar taxes), fines, settlements, and reasonable expenses actually incurred by the person in connection with a proceeding in which the person was, is, or is threatened to be made a named defendant or respondent because the person is or was a Director, officer, employee, or agent of the corporation.”

Article 2.02-1 of the Texas Business Corporation Act permits corporations to indemnify a person who was or is a director, officer, employee or agent of a corporation or who serves at the corporation’s request as a director, officer, partner, venturer, proprietor, trustee, employee, agent, or similar functionary of another foreign or domestic corporation, employee benefit plan, other enterprise, or other entity (an “outside enterprise”), who was, is, or is threatened to be named a defendant in a legal proceeding by virtue of such person’s position in the corporation or in an outside enterprise, but only if the person acted in good faith and reasonably believed, in the case of conduct in the person’s official capacity, that the conduct was in or, in the case of all other conduct, that the conduct was not opposed to the corporation’s best interest, and, in the case of a criminal proceeding, the person had no reasonable cause to believe the conduct was unlawful. A person may be indemnified within the above limitations against judgments, penalties (including excise and similar taxes), fines, settlements, and reasonable expenses actually incurred; however, indemnification is limited to reasonable expenses actually incurred in a proceeding in which the person is found liable to the corporation or is found to have improperly received a personal benefit and shall not be made in respect of any proceeding in which the person shall have been found liable for willful or intentional misconduct in the performance of his duty to the corporation. A corporation must indemnify a director, officer, employee, or agent against reasonable expenses incurred in connection with a proceeding in which the person is a party because of the person’s corporate position, if the person was successful, on the merits or otherwise, in the defense of the proceeding. Under certain circumstances, a corporation may also advance expenses to such person.

Indemnification can be made by the corporation only upon a determination made in the manner prescribed by the statute that indemnification is proper in the circumstances because the party seeking indemnification has met the applicable standard of conduct as set forth in Article 2.02-1 of the Texas Business Corporation Act.

Article 2.02-1 of the Texas Business Corporation Act also permits a corporation to purchase and maintain insurance or to make other arrangements on behalf of any of the above persons against any liability asserted against and incurred by the person in such capacity, or arising out of the person’s status as such a person, whether or not the corporation would have the powers to indemnify the person against the liability under applicable law.

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Item 7. Exemption From Registration Claimed.

Not Applicable.

Item 8. Exhibits.

The following documents are filed as a part of this registration statement or incorporated by reference herein:

INDEX TO EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
4.1*	Second Restated Articles of Incorporation of the Company (filed on February 9, 2007 as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2006 and incorporated herein by reference).
4.2*	Amended and Restated Bylaws of the Company (filed on August 7, 2007 as Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007 and incorporated herein by reference).
4.3*	Rights Agreement by and between the Company and Mellon Investor Services, LLC (f/k/a Chasemellon Shareholder Services, L.L.C.), as Rights Agent, dated July 13, 1999 (filed on December 11, 2003 as Exhibit 4 to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2003 and incorporated herein by reference).
5.1	Opinion of Baker Botts L.L.P., regarding the legality of securities to be issued by the Company.
10.1*	Dawson Geophysical Company 2006 Stock and Performance Incentive Plan (the "2006 Plan") (filed on January 29, 2007 as Exhibit 10.1 to the Company's Current Report on Form 8-K and incorporated herein by reference).
10.2*	Form of Restricted Stock Agreement for the 2006 Plan (filed on August 6, 2007 as Exhibit 10.1 to the Company's Current Report on Form 8-K and incorporated herein by reference).
10.3*	Form of Stock Option Agreement for the 2006 Plan (filed on August 6, 2007 as Exhibit 10.2 to the Company's Current Report on Form 8-K and incorporated herein by reference).
23.1	Consent of Independent Registered Public Accounting Firm KPMG LLP.
23.2	Consent of Baker Botts L.L.P. (included in Exhibit 5.1).
24.1	Powers of Attorney (included in signature page hereto).

* Incorporated herein by reference as indicated.

Item 9. Undertakings.

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that the undertakings set forth in paragraphs (i) and (ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 6 above, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Midland, State of Texas, on October 2, 2007.

DAWSON GEOPHYSICAL COMPANY

By: /s/ Stephen C. Jumper
Stephen C. Jumper
President and Chief Executive Officer

Pursuant to the requirements of the U.S. Securities Act of 1933, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

Each person whose signature appears below appoints Stephen C. Jumper and Christina W. Hagan, and each of them, each of whom may act without the joinder of the others, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and any registration statement for the same offering filed pursuant to Rule 462 under the U.S. Securities Act, and to file the same with all exhibits thereto and all documents in connection therewith with the U.S. Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully and for all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ L. Decker Dawson</u> L. Decker Dawson	Chairman of the Board of Directors	October 2, 2007
<u>/s/ Stephen C. Jumper</u> Stephen C. Jumper	President, Chief Executive Officer and Director (Principal Executive Officer)	October 2, 2007
<u>/s/ Paul H. Brown</u> Paul H. Brown	Director	October 2, 2007
<u>/s/ Gary M. Hoover</u> Gary M. Hoover	Director	October 2, 2007
<u>/s/ Tim C. Thompson</u> Tim C. Thompson	Director	October 2, 2007
<u>/s/ Christina W. Hagan</u> Christina W. Hagan	Executive Vice President, Secretary and Chief Financial Officer (Principal Financial and Accounting Officer)	October 2, 2007

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23.2	Consent of Baker Botts L.L.P. (included in Exhibit 5.1).
24.1	Powers of Attorney (included in signature page hereto).

* Incorporated herein by reference as indicated.

October 2, 2007

Dawson Geophysical Company
508 West Wall, Suite 800
Midland, Texas 79701

Ladies and Gentlemen:

As set forth in the Registration Statement on Form S-8 (the "Registration Statement") to be filed by Dawson Geophysical Company, a Texas corporation (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), relating to 750,000 additional shares (the "Shares") of the Company's Common Stock, par value \$0.33 1/3 per share (the "Common Stock"), that may be issued pursuant to the terms of the Dawson Geophysical Company 2006 Stock and Performance Incentive Plan (the "Plan"), certain legal matters in connection with the Shares are being passed upon for you by us. At your request, this opinion is being furnished to you for filing as Exhibit 5.1 to the Registration Statement.

In our capacity as your counsel in connection with the above and as a basis for the opinions hereinafter expressed, we have examined (i) the Company's Second Restated Articles of Incorporation and Amended and Restated Bylaws, each as amended to date, (ii) the Plan, (iii) originals, or copies certified or otherwise identified, of corporate records of the Company, (iv) certificates of public officials and of representatives of the Company and (v) statutes and other instruments or documents. In giving such opinions, we have relied upon certificates of officers of the Company with respect to the accuracy of the factual matters contained in such certificates.

We have assumed that all signatures on all documents examined by us are genuine, that all documents submitted to us as originals are accurate and complete, that all documents submitted to us as copies are true and correct copies of the originals thereof and that all information submitted to us was accurate and complete. In addition, we have assumed for purposes of this opinion that the consideration received by the Company for the Shares will be not less than the par value of the Shares.

On the basis of the foregoing, and subject to the assumptions, limitations and qualifications hereinafter set forth, we are of the opinion that, when issued and sold from time to time in accordance with the provisions of the Plan, the Shares will have been duly authorized by all necessary corporate action on the part of the Company; and upon issuance and delivery of such Shares from time to time pursuant to the terms of the Plan and otherwise in accordance with the terms and conditions of an award granted pursuant to the Plan, and, in the case of stock options, the exercise thereof and payment for such Shares as provided therein, such Shares will be validly issued, fully paid and nonassessable.

This opinion is limited to the laws of the State of Texas, and no opinion is expressed herein as to matters governed by the law of any other jurisdiction.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Baker Botts L.L.P.

Baker Botts L.L.P.

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Dawson Geophysical Company:

We consent to the incorporation by reference in the registration statement related to the 2006 stock and performance incentive plan on Form S-8 of Dawson Geophysical Company of our reports dated November 30, 2006, with respect to the balance sheets of Dawson Geophysical Company as of September 30, 2006 and 2005, and the related statements of operations, stockholders' equity and other comprehensive income, and cash flows for each of the years in the three-year period ended September 30, 2006, and the related financial statement schedule, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting as of September 30, 2006 which report appears in the September 30, 2006 annual report on Form 10-K of Dawson Geophysical Company. Our report refers to the adoption of SFAS No. 123 (Revised 2006) "Share Based Payment" in fiscal year 2006.

/s/ KPMG LLP

Dallas, Texas
October 1, 2007