SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT **UNDER** THE SECURITIES ACT OF 1933

NATURAL GAS SERVICES GROUP, INC.

(Exact name of registrant as specified in its charter)

Colorado 75-2811855 (I.R.S. Employer Identification No.)

(State or other jurisdiction of incorporation or organization)

508 West Wall Street, Ste 550 Midland, Texas 79701 (432) 262-2700

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

1998 STOCK OPTION PLAN

(Full title of the plan)

Stephen C. Taylor, Chief Executive Officer 508 West Wall Street, Ste 550 Midland, Texas 79701 (432) 262-2700

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

David A. Thayer Jones & Keller, P.C. 1625 Broadway, Suite 1600 Denver, Colorado 80202

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o Accelerated Filer $\ oxtimes$ Non-accelerated filer o Smaller Reporting Company o

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, \$.01	200,000	\$14.84(2)	\$2,968,000	\$165.62

- (1) Pursuant to Rule 416(a), this registration statement also covers such indeterminate number of additional securities as may become issuable under the plan as a result of stock splits, stock dividends or similar adjustments to the Registrant's common stock.
- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(h) and equal to the average of the high and low sales prices as quoted on the New York Stock Exchange on June 16, 2009.

EXPLANATORY NOTE

This Registration Statement on Form S-8 relates to the registration of 200,000 additional shares of common stock authorized for issuance under the Registrant's 1998 Stock Option Plan, as amended. Pursuant to General Instruction E of Form S-8, the contents of the Registrant's Registration Statements on Form S-8, No. 333-110954, filed by the Registrant with the Securities and Exchange Commission on December 5, 2003, and No. 333-147311, filed by the Registrant with the Securities and Exchange Commission on November 13, 2007, are hereby incorporated by reference.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The following documents are filed as a part of this registration statement.

Number Number	Description
5	Opinion of Jones & Keller, P.C. regarding legality of securities.
10.9	1998 Stock Option Plan, as amended (Incorporated by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K dated June 18, 2009 and filed with the Securities and Exchange Commission on June 18, 2009).
23.1	Consent of Hein & Associates LLP
23.2	Consent of Jones & Keller, P.C. (included in the opinion filed as Exhibit 5).

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 of 1933, as amended (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 prospectus filed with the SEC 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; and
- (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 paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC 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 registrants annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the 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 foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC 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 June 18, 2009.

NATURAL GAS SERVICES GROUP, INC.

By:/s/ Stephen C. Taylor Stephen C. Taylor Chief Executive Officer

By:/s/ Earl R. Wait
Earl R. Wait
Principal Accounting Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Stephen C. Taylor Stephen C. Taylor	Director	June 18, 2009
/s/ Alan Baker Alan Baker	Director	June 18, 2009
John W. Chisholm	Director	June 18, 2009
/s/ Charles G. Curtis Charles G. Curtis	Director	June 18, 2009
/s/ Paul D. Hensley Paul D. Hensley	Director	June 18, 2009
/s/ William F. Hughes, Jr. William F. Hughes	Director	June 18, 2009
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/s/ Gene A. Strasheim
Gene A. Strasheim
/s/ Richard L. Yadon
Richard L. Yadon

Director June 18, 2009

Director June 18, 2009

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INDEX TO EXHIBITS

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JONES & KELLER, P.C. 1625 Broadway, Suite 1600 Denver, Colorado 80202

> Telephone (303) 573-1600 Telecopier (303) 573-8133

June 18, 2009

Board of Directors Natural Gas Services Group, Inc. 508 West Wall Street, Suite 550 Midland, Texas 79701

Re: Natural Gas Services Group, Inc. Registration Statement on Form S-8

Gentlemen:

We have acted as counsel to Natural Gas Services Group, Inc., a Colorado corporation (the "Company"), in connection with the preparation of the Registration Statement on Form S-8 (the "Registration Statement"), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), relating to 300,000 shares of common stock (the "Common Stock") of the Company which may be issued pursuant to the 2009 Restricted Stock/Unit Plan (the "Plan").

This opinion has been prepared and shall be construed in accordance with customary practice of lawyers who regularly give opinion letters of this kind.

In rendering our Opinion, we have examined such agreements, documents, instruments and records as we deemed necessary or appropriate under the circumstances for us to express our Opinion, including, without limitation, the Articles of Incorporation and Bylaws, as restated or amended, of the Company; and the resolutions adopted by the Board of Directors of the Company authorizing and approving the Agreement and preparation and filing of the Registration Statement. In making all of our examinations, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to the original documents of all documents submitted to us as copies, and the due execution and the delivery of all documents by any persons or entities other than the Company where due execution and delivery by such persons or entities is a prerequisite to the effectiveness of such documents.

Based on the foregoing, we are of the opinion that the Common Stock to be issued by the Company pursuant to the Plan has been duly authorized and, upon issuance, compliance with any restrictive terms, delivery and payment therefor in accordance with the terms of the Plan and awards thereunder, will be validly issued, fully paid and nonassessable, except as enforcement thereof may be limited by bankruptcy, insolvency, garnishment or other similar laws relating to or affecting the enforcement of creditors rights generally and by general principles of equity..

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to references to our firm included in or made a part of the Registration Statement.

Very truly yours,

/s/ Jones & Keller, P.C.

JONES & KELLER, P.C.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of Natural Gas Services Group, Inc. of our reports dated March 2, 2009, relating to our audits of the consolidated financial statements and internal control over financial reporting, which appear in the Annual Report on Form 10-K of Natural Gas Services Group, Inc. for the year ended December 31, 2008.

/s/ Hein & Associates LLP Dallas, Texas June 18, 2009