

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-3 REGISTRATION STATEMENT NO. 333-180563

UNDER
THE SECURITIES ACT OF 1933

DAWSON OPERATING COMPANY

(Exact name of registrant as specified in its charter)

TEXAS

(State or other jurisdiction of
incorporation or organization)

75-0970548

(IRS Employer Identification No.)

**508 West Wall, Suite 800
Midland, Texas 79701
(432) 684-3000**

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

**Stephen C. Jumper
Chairman of the Board, President and Chief Executive Officer
c/o Dawson Geophysical Company
508 West Wall, Suite 800
Midland, Texas 79701
(432) 684-3000**

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

Copy to:

Neel Lemon
Baker Botts L.L.P.
2001 Ross Avenue, Suite 600
Dallas, Texas 75201-2980
Telephone: (214) 953-6500
Facsimile: (214) 953-6503

Approximate date of commencement of proposed sale to public: Not applicable

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities being offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 Accelerated Filer

Non-accelerated Filer Smaller Reporting Company

This Post-Effective Amendment is being filed to deregister all unsold securities of Dawson Operating Company, previously known as Dawson Geophysical Company ("Registrant") that were registered on Registration Statement No. 333-180563 on Form S-3 (the "Registration Statement"), filed with the Securities and Exchange Commission (the "SEC") on April 4, 2012, registering an indeterminate number or amount of senior and subordinated debt securities, preferred stock, common stock and warrants of the Registrant.

On February 11, 2015, pursuant to an Agreement and Plan of Merger, dated as of October 8, 2014, by and among Dawson Geophysical Company, previously known as TGC Industries, Inc. ("Dawson"), Riptide Acquisition Corp., a direct wholly owned subsidiary of Dawson ("Merger Sub") and Registrant, Merger Sub merged with and into Registrant (the "Merger"), with Registrant surviving the Merger as a direct wholly owned subsidiary of Dawson.

As a result of the Merger, Registrant has terminated all offerings of its securities pursuant to its existing registration statements, including the Registration Statement. Accordingly, pursuant to the undertaking contained in the Registration Statement to remove from registration by means of a post-effective amendment any of the securities that remain unsold at the termination of the offerings, Registrant hereby amends the Registration Statement by deregistering all unsold securities that remain registered under the Registration Statement.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Post-Effective Amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Midland, State of Texas, on February 12, 2015. No other person is required to sign this Post-Effective Amendment to the Registration Statements in reliance upon Rule 478 under the Securities Act of 1933, as amended.

DAWSON OPERATING COMPANY

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

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