

October 28, 2011

Via EDGAR

Securities and Exchange Commission 100 F Street NE Washington, D.C. 20549

Re: Dawson Geophysical Company

Request to Withdraw Registration Statement on Form S-4

File No. 333-174843

Ladies and Gentlemen:

Pursuant to Rule 477 promulgated under the Securities Act of 1933, as amended (the "Securities Act"), Dawson Geophysical Company (the "Registrant") hereby respectfully requests that the Securities and Exchange Commission (the "Commission") consent to the withdrawal of the Registrant's Registration Statement on Form S-4 (File No. 333-174843) (the "Registration Statement"), initially filed with the Commission on June 10, 2011 and amended on July 20, 2011, August 8, 2011, August 29, 2011 and September 20, 2011, together with all exhibits thereto, with such request to be approved effective as of the date hereof. The Registration Statement was declared effective by the Commission on September 23, 2011, and no securities have been sold thereunder.

The Registration Statement registered the offering of shares of the Registrant's common stock to be issued in connection with a proposed business combination (the "Merger") between the Registrant and TGC Industries, Inc., a Texas corporation ("TGC"), pursuant to that certain Agreement and Plan of Merger, dated as of March 20, 2011, as amended on August 23, 2011 (the "Merger Agreement"). TGC terminated the Merger Agreement and the Merger has now been abandoned. Accordingly, the Registrant will not proceed with the proposed offering of its common stock in connection with the Merger. Because the proposed offering of the securities registered under the Registration Statement will not occur, the Registrant believes that the withdrawal of the Registration Statement is consistent with the public interest and the protection of investors, as contemplated by Rule 477(a) of the Securities Act.

The Registrant acknowledges that no refund will be made for fees paid to the Commission in connection with filing of the Registration Statement. The Registrant, however, respectfully requests that all fees paid to the Commission in connection with the filing of the Registration Statement be credited for future use should the Registrant proceed with the filing of a subsequent registration statement meeting the requirements of Rule 457(p) promulgated under the Securities Act.

We appreciate your assistance, and should you have any questions regarding this matter or need any additional information, please contact the Registrant's legal counsel, Neel Lemon of Baker Botts L.L.P., at (214) 953-6954, or Sarah Rechter of Baker Botts L.L.P., at (214) 953-6419.

Very truly yours,

/s/ Stephen C. Jumper. President, Chief Executive Officer and Director

cc: Neel Lemon
Baker Botts L.L.P.

Sarah Rechter
Baker Botts L.L.P.