

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

February 24, 2005

VIA EDGAR

Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549

Attention: Jason Wynn
Division of Corporation Finance

Re: Dawson Geophysical Company
Registration Statement on Form S-3
(Registration No. 333-121236)

Ladies and Gentlemen:

Pursuant to Rule 461 of the rules and regulations promulgated under the Securities Act of 1933, as amended, Dawson Geophysical Company (the "Company") hereby requests that the Securities and Exchange Commission (the "Commission") take appropriate action to accelerate the effectiveness of the above-referenced Registration Statement on Form S-3 so that it becomes effective at 2:00 p.m., Washington D.C. time, on Monday, February 28, 2005, or as soon as practicable thereafter.

The Company hereby acknowledges that (i) should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing; (ii) the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and (iii) the Company may not assert this action as defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please address any questions or comments with respect to this request to our counsel, Baker Botts L.L.P., as follows: Sarah Rechter, Baker Botts L.L.P., 2001 Ross Avenue, Dallas, Texas 75201 (ph: 214/953-6419; fax: 214/661-4419).

Very truly yours,

Dawson Geophysical Company

By: /s/ L. Decker Dawson

Name: L. Decker Dawson

Title: Chairman of the Board of Directors and Chief
Executive Officer