

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

February 10, 2009

Christina W. Hagan Chief Financial Officer Dawson Geophysical Company 508 West Wall, Suite 800 Midland, Texas 79701

**Re:** Dawson Geophysical Company

Form 10-K for the Fiscal Year Ended September 30, 2008

Filed December 9, 2008

**Response Letter Dated February 4, 2009** 

File No. 0-10144

Dear Ms. Hagan:

We have reviewed your response letter and have the following comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Definitive Proxy Statement on Schedule 14A filed on December 16, 2008

## Short-Term Incentive Compensation, page 8

1. We note your response to our prior comment one and we reissue this comment. Please provide greater detail on the formula used to determine the distributions of the bonus pool to eligible employees. Provide a quantitative example of how the formula is used to calculate the incentive compensation awarded from the bonus pool to a named executive officer. Finally, provide disclosure, in table format or otherwise, of the actual value of each variable for each named executive officer.

## Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our

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review. Please understand that we may have additional comments after reviewing your responses to our comments.

Please contact Sean Donahue at (202) 551-3579 or John Madison at (202) 551-3296 with any other questions.

Sincerely,

H. Roger Schwall Assistant Director

cc: Sean Donahue John Madison Christina W. Hagan (432-684-3030)