

August 8, 2011

Via EDGAR and Courier

Securities and Exchange Commission
100 F Street NE
Washington, D.C. 20549
Attention: H. Roger Schwall
Assistant Director, Division of Corporation Finance

Re: Dawson Geophysical Company
Registration Statement on Form S-4
Filed July 20, 2011
File No. 333-174843

Dear Mr. Schwall:

Dawson Geophysical Company (“Dawson”) has today electronically filed under the Securities Exchange Act of 1933, as amended, Pre-Effective Amendment No. 2 (“Amendment No. 2”) to its Registration Statement on Form S-4 (File No. 333-174843), originally filed on June 10, 2011 and amended by Pre-Effective Amendment No. 1 on July 20, 2011 (as amended, the “Registration Statement”). Set forth below are Dawson’s responses to the comments contained in the letter from the Staff (the “Staff”) of the Division of Corporation Finance of the Securities and Exchange Commission (the “Commission”), dated August 4, 2011, with respect to the Registration Statement. Enclosed with this letter, please also find a copy of Amendment No. 2, marked to show changes from the Registration Statement as filed on July 20, 2011.

For your convenience, we have repeated each comment of the Staff in bold face type exactly as given in the comment letter and set forth below such comment is our response. The headings and numbered paragraphs below correspond to the headings and numbered paragraphs of the Staff comment letter.

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Registration Statement on Form S-4

General

1. **We remind you to make parallel changes as appropriate. See prior comment 1 from our letter to you dated July 8, 2011. All references in today's comment letter to "prior" comments refer to comments from the letter dated July 8, 2011.**

Dawson acknowledges the Staff's comment. Accordingly, where the Staff's comments also could apply to similar or related disclosure that appears elsewhere in the same or another section, Dawson will seek to make parallel changes to all affected disclosure.

2. **References to page numbers in this comment letter correspond to the pagination that appears in the marked version of the current amendment. To expedite the staff's review, please also key your page references in your letter of response to the marked version.**

Dawson acknowledges the Staff's comment. Accordingly, as requested, this response letter includes page number references keying each response to the applicable page or pages of the marked version of Amendment No. 2 (that is being delivered herewith) where the responsive disclosure can be found.

3. **With regard to the materials you provided supplementally in response to prior comment 2, portions of the materials prepared by Raymond James are not legible. The quality of the photocopies is such that certain data entries are obscured by a dark-colored background. Please provide us with legible versions of those materials.**

In response to the Staff's comment, we are providing supplementally the materials prepared by Raymond James & Associates, Inc. ("Raymond James"), as Dawson's financial advisor, that were previously provided to the Staff pursuant to Rule 418.

These materials are being provided to the Staff pursuant to Rule 418 under the Securities Act. In accordance with Rule 418, Dawson is requesting that these materials be returned promptly following completion of the Staff's review thereof. In addition, due to their sensitive commercial and financial nature, Dawson will be requesting confidential treatment for these materials under the Freedom of Information Act, as amended ("FOIA"), in accordance with 17 C.F.R. §200.83(b).

4. **We note your response to prior comment 3, as well as the new disclosure at page 66 that you set forth "the most relevant" prospective financial information. Please further revise the amendment to make clear that you have included or summarized all material non-public information that was exchanged and relied upon by the parties.**

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In response to the Staff's comment, please see the revised disclosure on page 71 of the marked version of Amendment No. 2.

Questions and Answers About the Merger, page vi

5. **We note your response to prior comment 14. Please revise your disclosure at pages xii and 7 to clarify that if any of the merger conditions described in the preceding bullet points fail to occur *and the condition is not waived*, the merger will not be consummated and the merger will terminate.**

In response to the Staff's comment, please see the revised disclosure on pages xii and 7 of the marked version of Amendment No. 2.

6. **Wherever you discuss the condition providing for the receipt of "reconfirmation" from the financial advisor, make clear that the condition provides TGC shareholders with little or no protection insofar as (1) the condition may be waived with no consequences and (2) the merger would then be consummated even if its terms would no longer be found "fair" to TGC or its shareholders. In the alternative, explain to us why that is not the case.**

In response to the Staff's comment, please see the revised disclosure on pages xii and 7 of the marked version of Amendment No. 2.

The Merger, page 49

Certain Information Provided by the Parties, page 66

7. **You are responsible for providing disclosure which is both accurate and complete. Therefore, please revise to eliminate the new disclaimer language at pages 67 and 69 which suggests that you are not responsible for the "accuracy or completeness of the prospective information" you provide.**

In response to the Staff's comment, please see the revised disclaimer language on pages 72 and 74 of the marked version of Amendment No. 2.

Opinion of Dawson's Financial Advisor, page 69

8. **Notwithstanding your response to prior comments 18 and 19, you indicate at pages 70 and 75 that each summary is "qualified in its entirety by reference to the full text" of the respective opinion. Please revise or advise.**

In response to the Staff's comment, please see the revised disclosure on pages 75 and 81 of the marked version of Amendment No. 2.

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9. **In your discussion of Raymond James' transaction premium analysis at page 73, please revise to clarify that only six of the 19 merger and acquisition transactions referenced were in the energy sector. Also make sure that you accurately cite the referenced period in the tables you provide, where it appears that four weeks rather than one month was the period in each case.**

In response to the Staff's comment, please see the revised disclosure on pages 78 and 79 of the marked version of Amendment No. 2.

Opinion of TGC's Financial Advisor, page 75

10. **We refer you to prior comment 21. You now disclose that although the referenced ratio "fell outside of the implied exchange ratio range, the analysis did not take into consideration the potential value creation of the merger, and the results of this analysis are not necessarily indicative of the contributions..." Revise to discuss in necessary detail what you mean when you cite "the potential value creation of the merger" in this context and to clarify the relevance of that potential vis-à-vis deal fairness to TGC shareholders.**

In response to the Staff's comment, please see the revised disclosure on page 88 of the marked version of Amendment No. 2.

11. **You disclose on page 53 that (1) in February the board discussed different types of "collars," (2) representatives of Southwest Securities participated in the meeting, and (3) the advisors were directed to pursue a collar with certain specified characteristics. If material, please summarize in necessary detail the particulars of Southwest Securities' collar analysis, including but not limited to any opinion it rendered as to the fairness of the agreed upon collar. See Item 4(b) of Form S-4 and Item 1015(b)(6) of Regulation S-K. If you do not believe that its analysis and opinion were materially related to the transaction, please explain your conclusion to us.**

In response to the Staff's comment, please see the additional disclosure on pages 58 and 59 of the marked version of Amendment No. 2.

Material U.S. Federal Income Tax Consequences of the Merger, page 120

12. **We refer you to prior comments 12 and 13. It appears that you have provided short form opinions which indicate that the disclosure in this section constitutes the firm's opinion. However, in this section you refer to opinions to be received in the future as a condition to the merger, and then discuss the tax consequences "[a]ssuming that the merger qualifies as a 'reorganization'" for Section 368(a) purposes. We therefore reissue prior comment 13, insofar as counsel does not appear to have opined on the tax consequences based on the facts of the contemplated transaction. You will need to obtain and file appropriate opinions**

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which do not “assume” this conclusion and ensure that the disclosure clearly address the material tax consequences in that regard.

In response to the Staff’s comment, please see the revised disclosure on page 128 of the marked version of Amendment No. 2. We have also refiled each of the tax opinions with today’s date.

Where you can find more information, page 143

13. Provide updated disclosure, including a complete list of the incorporated documents as of the latest practicable date.

In response to the Staff’s comment, please see the updated disclosure on page 152 of the marked version of Amendment No. 2.

Exhibit 5.1

14. Obtain and file a new opinion which does not suggest that (1) it is rendered “only” to you and (2) it may not be relied upon by others.

In response to the Staff’s comment, please see the revised Exhibit 5.1 to the Registration Statement.

15. We note that counsel limited the opinions expressed to matters of federal law and the Texas Business Organizations Code. Please have your counsel confirm to us in writing that the law covered by the opinion includes also the applicable provisions of the Texas Constitution and reported judicial decisions interpreting these laws.

In response to the Staff’s comment, Baker Botts L.L.P. hereby confirms that the law covered by the opinion attached as Exhibit 5.1 to the Registration Statement includes the applicable provisions of the Texas Constitution and reported judicial decisions interpreting federal law and the Texas Business Organizations Code. Please see the revised Exhibit 5.1 to the Registration Statement that reflects the full scope of the opinion’s coverage.

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In response to the closing comments of the Staff's comment letter, Dawson has advised us, and has authorized us to hereby acknowledge on its behalf, in connection with its response to the Staff's comments, that:

- 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;
- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve Dawson from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- Dawson may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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If you have any questions with respect to the foregoing responses or require further information, please contact the undersigned at (214) 953-6954 or Sarah Rechter at (214) 953-6419.

Very truly yours,

/s/ Neel Lemon

Neel Lemon

cc: Stephen C. Jumper
Dawson Geophysical Company

Sarah Rechter
Baker Botts L.L.P.

Alexandra M. Ledbetter, Attorney-Advisor