# BAKER BOTTS LLP

August 29, 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 August 8, 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. 3 ("Amendment No. 3") 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 and Pre-Effective Amendment No. 2 on August 8, 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 24, 2011, with respect to the Registration Statement. Amendment No. 3 also includes updated financials and pro forma information for the quarter ended June 30, 2011 as well as new disclosure in respect of the recent amendment to the Merger Agreement (which was previously discussed in filings on a Current Report on Form 8-K by each company). Enclosed with this letter, please also find a copy of Amendment No. 3, marked to show changes from the Registration Statement as filed on August 8, 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.

#### Amendment No. 2 to Registration Statement on Form S-4

#### General

1. All references in today's comment letter to "prior" comments refer to comments from the letter dated August 4, 2011. References to page numbers in this comment letter correspond to the pagination that appears in the marked version of the current amendment (that is, the version you provided us which shows insertions as well as deletions). To expedite the staff's review, please continue to 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. 3 (that is being delivered herewith) where the responsive disclosure can be found.

#### The Merger, page 51

2. We received the materials you provided in response to prior comment 3 and it now appears that both advisors lacked data points for at least some of the analyses they performed. For example, we refer you to page 15 of the newly provided materials. In that regard, please revise the disclosure which appears at page 74 to make clear that in deriving the "Enterprise Value / Forward EBITDA" shown, Raymond James had data for only 10 of the 14 listed transactions, and make similar revisions to the descriptions of the various analysis summaries, as appropriate.

In response to the Staff's comment, please see the revised disclosure on pages 78, 84 and 86 of the marked version of Amendment No. 3.

#### Opinion of TGC's Financial Advisor, page 77

3. We re-issue prior comment 10, in part. If Southwest Securities conveyed to the TGC board any of its "qualitative judgments" about the significance and relevance of the relative contribution analysis or provided any additional material context that is not fully communicated in your disclosure, please revise to provide the reader with this information as well. Please also clarify the relevance of the anticipated operational and financial synergies vis-à-vis deal fairness to TGC shareholders.

Southwest Securities has confirmed to TGC that it did not convey to the TGC board any of its "qualitative judgments" about the significance or relevance of the relative contribution analysis and did not provide any additional material context that is not fully communicated in the disclosure. Accordingly, the disclosure regarding

Southwest Securities' opinion in Amendment No. 3 is complete in this regard. In response to the final sentence of the Staff's comment, please see the revised disclosure on page 88 of the marked version of Amendment No. 3.

## Material U.S. Federal Income Tax Consequences of the Merger, page 122

- 4. We note your response to prior comment 12, but you continue to suggest that the discussion/opinion "assumes that ... therefore the merger would qualify as a 'reorganization' under Section 368(a)..." Also further revise the disclosure in this section to eliminate any ambiguity with regard to the disclosure already constituting an opinion, rather than merely referring to the receipt of some future opinion. Similarly, revise to clarify that the letters you filed as exhibits serve only to confirm (as short form opinions) the opinion actually set forth at pages 123-124. For example, you indicate in the first paragraph of this section that the "discussion ... is the opinion of" named counsel, but then in the following locations you suggest that the reader look to the exhibits for the opinions:
  - The first paragraph ("The opinions of counsel are included as exhibits");
  - Second paragraph under "Qualification of the Merger as a Reorganization" ("Each tax opinion included as an exhibit...");
  - Third paragraph under "Qualification of the Merger as a Reorganization" (seeming to make a distinction between "the conclusions set forth in the opinions" and those "described herein.")

In response to the Staff's comment, please see the revised disclosure on pages 127 and 128 of the marked version of Amendment No. 3.

5. Similarly, please obtain and file revised opinions of counsel that clarify in each case the reference to the "opinion set forth below," if the reference is retained.

In response to the Staff's comment, please see the revised tax opinions filed as exhibits to Amendment No. 3.

## Where you can find more information, page 143

6. Please continue to update this section to include all required Exchange Act filings. You need to identify all subsequently filed Exchange Act reports in this section prior to effectiveness. For guidance, refer to Question and Answer 123.05 (Securities Act Forms) of the Division of Corporation Finance's Compliance and Disclosure Interpretations, available on our website at http://www.sec.gov/divisions/corpfin/cfguidance.shtml.

In response to the Staff's comment, please see the updated disclosure on page 153 of the marked version of Amendment No. 3.

\* \* \*

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.

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