

December 16, 2014

Via EDGAR and Federal Express

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

Re: TGC Industries, Inc.
Registration Statement on Form S-4
Filed November 6, 2014
File No. 333-199922

Dear Mr. Schwall:

TGC Industries, Inc. ("TGC") has today electronically filed under the Securities Exchange Act of 1933, as amended, Pre-Effective Amendment No. 1 (the "Amendment No. 1") to its Registration Statement on Form S-4 (File No. 333-199922), originally filed on November 6, 2014 (the "Registration Statement"). Set forth below are TGC's responses to the comments contained in the letter from the Staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission"), dated December 3, 2014, with respect to the Registration Statement. Enclosed with the copy of this letter sent to the Staff by overnight delivery are courtesy copies of Amendment No. 1, marked to show changes from the Registration Statement as filed on November 6, 2014.

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.

Registration Statement on Form S-4 Filed November 6, 2014

Unaudited Pro Forma Condensed Combined Consolidated Financial Information, page 213

Notes to Unaudited Pro Forma Condensed Combined Consolidated Financial Information

Note 3 — Estimate of Consideration Expected to be Transferred, page 219

1. Please revise your calculation of the preliminary purchase price estimate to use the most recent stock price at the time of filing in future amendments to your registration statement.

TGC acknowledges the Staff's comment and will utilize the most recent stock price at the time of filing in future amendments. For this Amendment No. 1, TGC has utilized the closing stock price of TGC on the date prior to filing, December 15, 2014

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Note 6 — Adjustments to Unaudited Pro Forma Condensed Combined Balance Sheet, page 222

2. Please tell us about the "information from third parties" referred to as part of certain footnotes to your pro forma balance sheet.

TGC respectfully advises the Staff that the information from third parties was intended to refer to information and analyses provided to TGC by its advisors in connection with its preliminary due diligence. TGC has removed all references to "third parties" in its footnotes and acknowledges its responsibility for all estimates made in connection with the pro forma financial statements.

3. Please expand your disclosure regarding adjustment (h) to your pro forma balance sheet to provide a qualitative description of the factors that make up pro forma goodwill.

TGC respectfully notes that, as a result of the change in TGC stock price subsequent to the initial filing of the Registration Statement, there is no longer any goodwill reflected in the pro forma balance sheet as of September 30, 2014. If pro forma goodwill is reflected in future filings, TGC will provide a qualitative description of the factors that make up the pro forma goodwill at that time.

4. Please tell us what consideration you have given to including adjustments for direct, incremental transaction costs related to the business combination in your pro forma balance sheet. To the extent your pro forma balance sheet reflects these types of costs, please provide disclosure clearly indicating that similar adjustments were not made to your pro forma statement of operations.

TGC has updated the pro forma balance sheet as of September 30, 2014 to include an adjustment to reflect the direct and incremental transaction costs related to the business combination not currently reflected in the historical balance sheets of TGC and Dawson as of September 30, 2014.

Note 7 — Adjustments to Unaudited Pro Forma Condensed Combined Statements of Income, page 223

5. Adjustment (j) to your pro forma statement of operations appears to relate to the presentation of third-party reimbursable costs which you have identified as an accounting policy difference between TGC Industries, Inc. and Dawson Geophysical Company. However, it appears that the determination of whether gross or net presentation is appropriate should be based on the terms of a specific arrangement. Please revise your disclosure to explain this adjustment in the context of FASB ASC 605-45-45 or tell us why this guidance is not applicable.

TGC acknowledges that the accounting determination of whether an entity is acting as principal or agent and, as a result, gross or net revenue presentation is necessarily dependent on the specific facts and circumstances of the underlying contracts. We understand that Dawson's general contracting and business practices are designed such that it is acting as principal under the guidance in ASC 605-45-45 with respect to all activities conducted with

and on behalf of the customer, including the utilization of third party vendors. As a result it records all payments received from the customer as revenue. TGC's contracts, in contrast, have historically been structured differently whereby TGC is acting as agent, based on the indicators in ASC 605-45-45-3 through 18, with respect to certain third party involvement in the delivery of services under its contracts. The adjustment was intended to reflect the impact of a change in policy with respect to the manner in which TGC contracts with its customers going forward to be consistent with Dawson's historical contracting policies. As Dawson expects that it will utilize its contract policies going forward for the combined company, this would necessarily drive a change in the accounting for TGC relative to its historic practices. TGC understands that while the adjustment is directly attributable to the acquisition, it does not meet the factually supportable threshold under Article 11 to be included in the pro forma financial statements and, therefore, we have removed the adjustment in Amendment No. 1.

Financial Statements, page F-1

6. Please update your financial statements and related information. See Rule 3-12 of Regulation S-X.

In response to the Staff's comment, please see the updated financial statements and related information beginning on page F-20 of Amendment No. 1.

Exhibits

7. Please file the legal and tax opinions.

In response to the Staff's comment, the legal and tax opinions have now been filed with Amendment No. 1, included executed copies of the legality opinion at Exhibit 5.1 and the tax opinions at Exhibits 8.1 and 8.2.

If you have any questions with respect to the foregoing responses or require further information, please contact the undersigned at (214) 651-5587 or Matthew L. Fry at (214) 651-5443.

Very truly yours,

/s/ W. Scott Wallace
W. Scott Wallace

cc: Wayne A. Whitener
TGC Industries, Inc.

Matthew L. Fry
Haynes and Boone, LLP

Wei Lu, Staff Accountant
Paul Monsour, Staff Attorney