Haynes and Boone, LLP 2323 Victory Avenue, Suite 700 Dallas, Texas 75219

May 31, 2013

Via EDGAR
Mr. Brad Skinner
Mr. Mark Wojciechowski
Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Re: TGC Industries, Inc.

Form 10-K for the Fiscal Year ended December 31, 2011

Filed March 15, 2012

Form 10-K for the Fixed Year Ended December 31, 2012

Filed March 15, 2013

Response Letter dated March 6, 2013

File No. 1-32472

Dear Messrs. Skinner and Wojciechowski:

On behalf of TGC Industries, Inc. (the "*Company*"), we are submitting the Company's responses to the comments to the Company's Form 10-K for the fiscal years ended December 31, 2011 and 2012 set forth in the letter from the Securities and Exchange Commission ("*SEC*") dated May 9, 2013.

The staff's comments are set forth below and the Company's responses are set forth after the staff's comments.

Form 10-K for the Fiscal Year Ended December 31, 2011
Notes to Consolidated Financial Statements, page 31
Note B — Summary of Significant Accounting Policies, page 31
Revenue Recognition, page 32

Seismic Surveys

1. Your model for recognizing revenue for the turnkey agreements appears similar to a Construction-Type and Production-Type Contract as defined in ACS 605-35, in that you have identified specific output measures for measuring progress on the respective contracts. Please tell us if you believe your turnkey agreements are within the scope of FASB Subtopic ACS 605-35 and explain the basis for your belief. Further, clarify why data points recorded (for TGC) and receiver lines laid (for Eagle Canada) are appropriate output measures, and what alternative measures for measuring progress on these agreements you considered.

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RESPONSE:

The Company believes that its turnkey agreements are within the scope of ASC 605-35. ASC 605-35-05-2 and ASC 605-35-15-2 includes within their scope (a) enforceable contracts (b) performed in accordance with specifications provided by the customer (c) for the construction of facilities or the production of goods or the provision of related services. The Company's turnkey agreements are comprised of (a) enforceable contracts that (b) include detailed specifications mandated by clients for (c) the production of goods (seismic data acquisition) related to proposed oil and gas activities. Data points recorded and receiver lines laid for TGC and Eagle Canada, respectively, are appropriate measures of progress as there is a direct correlation with the production of deliverables (seismic data acquisition) having due regard to work performed consistent with ASC 605-35-25-52b. As described in ASC 605-35-25-70 through ASC 605-35-25-78, both input and output measures can be evaluated for use. Accordingly, other measures of progress (*e.g.* cost-to-cost or other steps required in seismic data acquisition) were evaluated and were found to have a less direct correlation with the earnings process.

2. For the turnkey agreements entered into by TGC and Eagle Canada, tell us specifically what the contracts define as "deliverables" to your customers and what the contracts stipulate as the fixed fee payable to you. In this regard, clarify if the fixed fee is based on each data point recorded (for TGC) and on each receiver line laid (for Eagle Canada), or, alternatively, is fixed fee based on a total number of data points required to be recorded and receiver lines required to be laid during the term of the contract. If the former, please tell us why you don't recognize revenue simply as the data points are recorded (for TGC) and as the receiver lines are laid (for Eagle Canada) based on the fee stipulated in the contracts. Finally, tell us what the customer payments arrangements are for your turnkey agreements.

RESPONSE:

Seismic data that has been generated based upon the specific requirements of each customer are the deliverables of the Company's contracts. The contracted fixed fee relates to a specific rate per square mile of data acquisition, and specifies the total square miles to be recorded and the total fixed number of data points or receiver lines required per square mile. Therefore, the Company recognizes revenue on a per unit basis as each data point is recorded or each receiver line is laid out. Clients generally pay in periodic increments, which in many cases consist of three installments.

3. To the extent that either the TGC or Eagle Canada turnkey contracts do not define as a deliverable data points recorded or receiver lines laid, respectively, explain why you believe these represent appropriate surrogates for the actual deliverables required under those contracts.

RESPONSE:

Data points recorded and receiver lines laid for TGC and Eagle Canada, respectively, are the most appropriate measures of progress as they are directly correlated with the acquisition of seismic data.

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4. Provide us with copies of representative contracts for your TGC and Eagle Canada turnkey agreements.

RESPONSE:

In response to the staff's comment, the Company is providing representative contracts for its TGC and Eagle Canada turnkey agreements to the staff on a supplemental basis. These contracts are being provided to the staff pursuant to Rule 12b-4 under the Securities Exchange Act of 1934. In accordance with Rule 12b-4, the Company is requesting that these contracts be returned promptly following completion of the staff's review thereof. In addition, due to their sensitive commercial nature, the Company will be requesting confidential treatment for these materials under the Freedom of Information Act, as amended, in accordance with 17 C.F.R. §200.83(b).

5. As it relates to the cost of earned revenue under your turnkey agreements, clearly describe for us your current accounting policy, including a related example, and provide references to the specific authoritative language that supports your policy under GAAP.

RESPONSE:

The Company recognizes the cost of revenue on turnkey agreements using the percentage of completion method as prescribed in ASC 650-35 based an appropriate measure of progress as required in ASC 605-35-25-52b. This method matches the per unit basis as each data point is recorded or each receiver line is laid out used in revenue recognition. The best measure of progress is the number of data points recorded in the United States and the number of lines laid out in Canada. Both have a direct correlation to the production of seismic data. All contract costs are reviewed and all estimates are verified monthly to ensure accuracy.

For illustrative purposes, assume that the Company was awarded a \$1 million turnkey contract having Company had completed 500 data points by December 31, 2012, the Company would have recognized 50% of the contract revenue and estimated job costs. The Company would recognize \$500,000 in revenue and \$250,000 in contract costs, excluding period costs.

Please let me know if the responses are acceptable. You can reach me at 214.651.5119.

Very truly yours,

/s/ W. Bruce Newsome

W. Bruce Newsome

Direct Phone Number: 214.651.5119 Direct Fax Number: 214.200.0363 Bruce.newsome@haynesboone.com

cc: Mr. Wayne Whitener
Mr. James Brata