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

March 6, 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 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 year ended December 31, 2011 (the "Form 10-K") set forth in the letter from the Securities and Exchange Commission ("SEC") dated February 28, 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 response to prior comment four from our letter dated December 21, 2012 indicates that commencement of data acquisition is either the physical laying out of seismic equipment or recording contractually determined data points. Based on information contained in your response to prior comment five, we understand that the different definitions of commencement of data acquisition are specifically related to Eagle Canada and TGC, respectively. That is, for Eagle Canada, commencement of data acquisition is defined as the physical laying out of seismic equipment, while for TGC it is defined as recording contractually determined data points. If our understanding is incorrect, clarify for us the specific situations or circumstances under which you apply these different definitions, and explain your basis for such application.

RESPONSE:

Your understanding is correct.

2. Explain to us, in greater detail, why you believe the "commencement of data acquisition" represents delivery under your turnkey contracts. Your response should address both arrangements under which commencement of data acquisition is considered to be the physical laying out of seismic equipment and arrangements under which commencement of data acquisition is considered to be recording contractually determined data points. As part of your response, describe the material terms of the different arrangements under which you perform turnkey services. Your description should clearly identify all deliverables, and should address any material performance, payment, cancellation and refund provisions.

RESPONSE:

In accordance with the customary and longstanding industry-wide practice, seismic data recorded constitutes the deliverable that the Company's U.S. operations are contracted to obtain. The recorded data can be provided to the client at any time. Likewise, in accordance with customary and longstanding industry-wide practice, layout of seismic recording equipment is the deliverable Eagle Canada is contracted to perform. A record of this activity is provided to the client each day.

Whether occurring in the United States or Canada, achievement of the metrics above begins contract performance and creates an obligation to pay for all data acquired or seismic data recording equipment physically laid out. At this point in the seismic data acquisition process, cancellation of the contract is no longer permitted.

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 Mr. James Brata