

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Mail Stop 4628

November 29, 2016

Jamey S. Seely
Executive Vice President, General Counsel and Corporate Secretary
ION Geophysical Corporation
2105 CityWest Blvd., Suite 100
Houston, TX 77042

Re: ION Geophysical Corporation

Form 10-K for Fiscal Year Ended December 31, 2015

Filed February 11, 2016

File No. 1-12691

Dear Ms. Seely:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall Assistant Director Office of Natural Resources