



**Item 8.01. Other Events**

On August 21, 2008, Christopher M. Friedemann, Senior Vice President, Corporate Marketing of ION Geophysical Corporation (the Company), adopted a stock trading plan in accordance with the requirements specified in Rule 10b5-1 of the Securities Exchange Act of 1934. Mr. Friedemann adopted the plan as part of his personal long-term investment strategy for asset diversification and liquidity. Mr. Friedemann will have no control over the stock sales under the plan. The plan provides for the exercise of options to purchase an aggregate of up to 85,000 shares of the Company's common stock and the subsequent sale of the acquired shares on the open market at prevailing market prices, in each case subject to minimum price thresholds. The plan expires in June 2010. As of August 21, 2008, Mr. Friedemann directly or indirectly owned options to purchase 195,000 shares of the Company's common stock that are currently exercisable or are exercisable within 60 days.

Transactions under the plan will commence no earlier than September 1, 2008, and will be disclosed publicly through Form 144 and Form 4 filings with the Securities and Exchange Commission in accordance with applicable securities laws, rules and regulations. Except as may be required by law, the Company does not undertake any obligation to update or report any modification, termination, or other activity under the plan or any other plan that may be adopted by other officers or directors of the Company.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: August 22, 2008

ION GEOPHYSICAL CORPORATION

By: /s/ DAVID L. ROLAND  
David L. Roland  
Senior Vice President, General Counsel  
and Corporate Secretary