

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

ION Geophysical Corporation

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

462044207

(CUSIP Number)

December 31, 2019

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSONS Gates Capital Management, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 488,463 shares of Common Stock
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 488,463 shares of Common Stock
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 488,463 shares of Common Stock	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.2%	
12	TYPE OF REPORTING PERSON IA, PN	

1	NAME OF REPORTING PERSONS Gates Capital Management GP, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 488,463 shares of Common Stock
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 488,463 shares of Common Stock
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 488,463 shares of Common Stock	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.2%	
12	TYPE OF REPORTING PERSON OO	

1	NAME OF REPORTING PERSONS Gates Capital Management, Inc.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 488,463 shares of Common Stock
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 488,463 shares of Common Stock
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 488,463 shares of Common Stock	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.2%	
12	TYPE OF REPORTING PERSON CO, IA	

1	NAME OF REPORTING PERSONS Jeffrey L. Gates	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States Citizen	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 488,463 shares of Common Stock
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 488,463 shares of Common Stock
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 488,463 shares of Common Stock	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.2%	
12	TYPE OF REPORTING PERSON IN	

Item 1. (a) Name of Issuer

ION Geophysical Corporation

(b) Address of Issuer's Principal Executive Offices

2105 City West Blvd., Suite 100, Houston, TX 77042

Item 2. (a) Name of Person Filing

This Statement is filed by each of the entities and persons listed below, all of whom together are referred to herein as the "Reporting Persons":

(i) Gates Capital Management, L.P., a Delaware limited partnership ("Gates Capital"), with respect to the Common Stock held by certain funds as to which Gates Capital serves as investment manager (the "Gates Capital Funds");

(ii) Gates Capital Management GP, LLC, a Delaware limited liability company ("the General Partner"), which is the general partner of Gates Capital, with respect to the Common Stock directly held by the Gates Capital Funds;

(iii) Gates Capital Management, Inc., a Delaware corporation ("the Corporation"), is the managing member of the General Partner, with respect to the Common Stock directly held by the Gates Capital Funds; and

(iv) Jeffrey L. Gates, a United States citizen, who serves as the President of the Corporation, with respect to the Common Stock directly held by the Gates Capital Funds.

(b) Address of Principal Business Office or, if none, Residence

The address of the principal business office of each of the Reporting Persons is c/o Gates Capital Management, L.P., 1177 Avenue of the Americas, 46th Floor, New York, New York 10036.

(c) Citizenship

(i) Gates Capital - a Delaware limited partnership

(ii) The General Partner - a Delaware limited liability company

(iii) The Corporation - a Delaware corporation

(iv) Jeffrey L. Gates - a United States citizen

The filing of this statement should not be construed as an admission that any of the Reporting Persons is, for purposes of Section 13 of the Act, the beneficial owner of the Common Stock reported herein.

(d) Title of Class of Securities

Common Stock, par value \$0.01 per share

(e) CUSIP No.:

462044207

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- (k) A group, in accordance with §240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution:_____

Item 4. Ownership

The percentage set forth in this Schedule 13G/A is calculated based upon the 15,039,674 shares of Common Stock issued and outstanding as of December 19, 2019 as disclosed in the Company's Registration Statement amendment on Form S-3/A filed with the Securities and Exchange Commission on December 19, 2019.

The information required by Items 4(a) - (c) is set forth in Rows 5 - 11 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each Reporting Person.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [X].

Item 6. Ownership of More Than Five Percent on Behalf of Another Person

Not applicable.

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company or Control Person

Not applicable.

Item 8. Identification and Classification of Members of the Group

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 14, 2020

Gates Capital Management, L.P.

By: Gates Capital Management GP, LLC, its general partner

By: Gates Capital Management, Inc., its managing member

By: /s/ Jeffrey L. Gates

Name: Jeffrey L. Gates

Title: President

Gates Capital Management GP, LLC

By: Gates Capital Management, Inc., its managing member

By: /s/ Jeffrey L. Gates

Name: Jeffrey L. Gates

Title: President

Gates Capital Management, Inc.

By: /s/ Jeffrey L. Gates

Name: Jeffrey L. Gates

Title: President

By: /s/ Jeffrey L. Gates

Jeffrey L. Gates

EXHIBIT 1

**JOINT FILING AGREEMENT
PURSUANT TO RULE 13d-1(k)**

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G/A is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G/A shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained herein and therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

DATE: February 14, 2020

Gates Capital Management, L.P.

By: Gates Capital Management GP, LLC, its general partner

By: Gates Capital Management, Inc., its managing member

By: /s/ Jeffrey L. Gates

Name: Jeffrey L. Gates

Title: President

Gates Capital Management GP, LLC

By: Gates Capital Management, Inc., its managing member

By: /s/ Jeffrey L. Gates

Name: Jeffrey L. Gates

Title: President

Gates Capital Management, Inc.

By: /s/ Jeffrey L. Gates

Name: Jeffrey L. Gates

Title: President

By: /s/ Jeffrey L. Gates

Jeffrey L. Gates