

HIXON JAMES A
Form 4
December 06, 2011

FORM 4

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

OMB APPROVAL

OMB Number: 3235-0287
Expires: January 31, 2015
Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
HIXON JAMES A

2. Issuer Name and Ticker or Trading Symbol
NORFOLK SOUTHERN CORP
[NSC]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
THREE COMMERCIAL PLACE
(Street)

3. Date of Earliest Transaction (Month/Day/Year)
12/05/2011

____ Director
 Officer (give title below)
____ 10% Owner
____ Other (specify below)
Exec. VP-Law & Corp. Relations

NORFOLK, VA 23510

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

(City) (State) (Zip)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price
Common Stock	12/05/2011		M		19,905	A	\$ 19.625
Common Stock	12/05/2011		S		19,905	D	\$ 76.15 (1)
Common Stock	12/06/2011		G	V	1,954	D	\$ 0
Common Stock							7,856.0091 (2)
						I	By 401(k) Plan

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474
(9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	Amount or Number of Shares
Option to buy (granted 2003)	\$ 19.625	12/05/2011		M ⁽³⁾	19,905 ⁽³⁾	02/03/2004 02/02/2013	Common Stock	19,905

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
HIXON JAMES A THREE COMMERCIAL PLACE NORFOLK, VA 23510			Exec.VP-Law & Corp. Relations	

Signatures

H. D. McFadden, via P.O.A. for James A.
Hixon

12/06/2011

**Signature of Reporting Person

Date

Explanation of Responses:

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) Reports weighted average sale price of shares sold. The price range was \$76.00 to 76.30.

(2) Represents the approximate number of whole shares of Common Stock estimated -- on the basis of the unit accounting system used by the Plan Administrator -- as of December 5, 2011, to have been credited to the reporting person's account in the Norfolk Southern Corporation Thrift and Investment Plan (TIP), a trustee 401(k) plan. In accordance with TIP's terms applicable to all participants, acquisitions were made at various times and at various prices.

(3) Reflects exercise and resulting cancellation of stock option, in a single transaction, exempt from Section 16(b). The stock option was granted under the Long-Term Incentive Plan (a Rule 16b-3 plan).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Edgar Filing: HIXON JAMES A - Form 4

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. er-bottom:1px solid #000000;background-color:#cceeef;">

(a)

—

3,738

(a)

5,000

(b)

Net loss attributable to ION as adjusted

\$

(23,371

)

\$

(10,441

)

\$

(40,554

)

\$

(28,783

)

Net loss per share as adjusted:

Basic

\$

(1.68

)

\$

(0.88

)

\$

(3.03

)

Explanation of Responses:

\$
(2.43
)

Diluted
\$
(1.68
)

\$
(0.88
)

\$
(3.03
)

\$
(2.43
)

- (a) Represents the ongoing expense associated with the accelerated vesting and cash exercise of stock appreciation rights awards.
- (b) Represents a loss contingency accrual related to legal proceedings. See Footnote 8 “Litigation” of Footnotes to Consolidated Financial Statements.

We intend that the following discussion of our financial condition and results of operations will provide information that will assist in understanding our consolidated financial statements, the changes in certain key items in those financial statements from period to period, and the primary factors that accounted for those changes. The financial results are reported in accordance with Generally Accepted Accounting Principles (“GAAP”). However, management believes that certain non-GAAP performance measures may provide users of this financial information, additional meaningful comparisons between current results and results in prior operating periods. One such non-GAAP financial measure is adjusted income (loss) from operations or adjusted net income (loss), which excludes certain charges or amounts. This adjusted income (loss) amount is not a measure of financial performance under GAAP. Accordingly, it should not be considered as a substitute for income (loss) from operations, net income (loss) or other income data prepared in accordance with GAAP.

For a discussion of factors that could impact our future operating results and financial condition, see (i) Item 1A. “Risk Factors” in our Annual Report on Form 10-K, as amended, for the year ended December 31, 2017, and (ii) Item 1A. “Risk Factors” in Part II of this Form 10-Q.

Results of Operations

Three Months Ended June 30, 2018 Compared to Three Months Ended June 30, 2017

Our consolidated net revenues of \$24.7 million for the three months ended June 30, 2018 (the “Current Quarter”) decreased by \$21.3 million, or 46%, compared to total net revenues of \$46.0 million for the three months ended June 30, 2017 (the “Comparable Quarter”). Our overall gross margin was (6)% in the Current Quarter, as compared to 34% in the Comparable Quarter. For the Current Quarter, our loss from operations was \$22.5 million, compared to income of \$3.6 million for the Comparable Quarter.

Net loss for the Current Quarter was \$25.9 million, or \$(1.86) per share, compared to \$10.4 million, or \$(0.88) per share, for the Comparable Quarter. Excluding the impact of special items, as noted in the above table, adjusted net loss for the Current Quarter was \$23.4 million, or \$(1.68) per share.

Net Revenues, Gross Profits and Gross Margins

E&P Technology & Services — Net revenues for the Current Quarter decreased by \$18.7 million, or 55%, to \$15.2 million, compared to \$33.9 million for the Comparable Quarter. Within the E&P Technology & Services segment, total multi-client revenues were \$9.9 million, a decrease of 67%, with both new venture and Data Library revenues experiencing significant declines from the Comparable Quarter. The decrease in multi-client revenues was partially due to a key delayed license round announcement where we have data. This delayed announcement resulted in certain customers pushing the signing of their commitments to the second half of 2018. Imaging Services revenues were \$5.3 million, a 28% increase. This increase was attributable to an increase in proprietary ocean bottom nodal imaging projects. The Current Quarter reflects a gross loss of \$4.9 million, representing a (32)% gross margin, compared to a gross profit of \$11.9 million, which represented a 35% gross margin in the Comparable Quarter.

Operations Optimization — Total net revenues for the Current Quarter decreased by \$2.5 million, or (21)% to \$9.6 million, compared to \$12.1 million for the Comparable Quarter. Optimization Software & Services net revenues for the Current Quarter increased by \$0.4 million, or 8% to \$4.8 million, compared to \$4.4 million for the Comparable Quarter, primarily due to an increase in subscription-based license revenues and hardware sales of our Gator ocean bottom command and control software and from the positive impact due to changes in foreign currencies. Devices net revenues for the Current Quarter decreased by \$2.9 million, or 38%, to \$4.8 million, compared to \$7.7 million for the Comparable Quarter. Revenues continue to be impacted by reduced activity by seismic contractors, as numerous vessels have been taken out of service. Gross margins were 52% for the Current Quarter and Comparable Quarter.

Ocean Bottom Integrated Technologies — Net revenues for the Current Quarter and Comparable Quarter were zero. In line with our component strategy, revenues for the elements of fully integrated 4Sea system will be recognized in the relevant segment, either E&P Technology and Services or Operations Optimization. While not our primary route to market, we are continuing to pursue projects for the crew on a case by case basis that meet our long-term risk and return thresholds. Gross loss for the Current Quarter was \$1.6 million, compared to gross loss of \$2.6 million for the Comparable Quarter. The decline was due to reduced depreciation expense and several cost control initiatives implemented in 2017 and 2018, including the renegotiation and eventual expiration of our vessel leases, which eliminated our vessel lease costs.

Operating Expenses

Research, Development and Engineering — Research, development and engineering expense increased \$0.2 million, or 4%, to \$4.3 million, for the Current Quarter, compared to \$4.1 million for the Comparable Quarter. We see significant long-term potential for OceanGeo and our technologies to improve OBS productivity. We continue to invest in our 4Sea system and we expect long-term demand for OBS surveys spanning the spectrum from exploration to production (4D) to multi-client to increase.

Marketing and Sales — Marketing and sales expense increased \$1.1 million, or 22%, to \$6.0 million, for the Current Quarter, compared to \$4.9 million for the Comparable Quarter, primarily due to increased marketing expenses to broaden and diversify our offerings into adjacent markets.

General, Administrative and Other Operating Expenses — General, administrative and other operating expenses increased \$0.5 million, or 6%, to \$10.7 million, for the Current Quarter, compared to \$10.2 million for the Comparable Quarter. Excluding the impact of special items which represent the ongoing expense associated with the accelerated vesting and cash exercise of stock appreciation rights awards, expenses decreased \$1.9 million, or 19%.

The decrease was driven by reductions in employment expense and professional fees as we continue to maintain our cost control discipline.

32

Other Items

Interest Expense, Net — Interest expense, net, was \$2.9 million for the Current Quarter compared to \$4.2 million for the Comparable Quarter. The decrease in interest expense was a result of lower outstanding debt during the Current Quarter. For additional information, please refer to “Liquidity and Capital Resources — Sources of Capital” below.

Income Tax Expense — Income tax expense for the Current Quarter was \$0.2 million compared to a benefit of \$2.4 million for the Comparable Quarter. Our effective tax rates for the Current Quarter and Comparable Quarter were (0.6)% and (31.5)%, respectively. The income tax expense for the Current Quarter and Comparable Quarter primarily relates to results generated by our non-U.S. businesses. Our effective tax rates for the Current Quarter and Comparable Quarter were negatively impacted by the change in valuation allowance related to U.S. operating losses for which we cannot currently recognize a tax benefit. See further discussion of establishment of the deferred tax valuation allowance at Footnote 7 “Income Taxes” of Notes to Unaudited Condensed Consolidated Financial Statements.

Six Months Ended June 30, 2018 Compared to Six Months Ended June 30, 2017

Our consolidated net revenues of \$58.3 million for the six months ended June 30, 2018 (the “Current Period”) decreased by \$20.3 million, or 26%, compared to total net revenues of \$78.6 million for the six months ended June 30, 2017 (the “Comparable Period”). Our overall gross profit percentage for the Current Period was 9%, compared to 28%, for the Comparable Period. For the Current Period, our loss from operations was \$35.2 million, compared to \$17.5 million, for the Comparable Period.

Net loss for the Current Period was \$44.3 million, or \$(3.31) per share, compared to a net loss of \$33.8 million, or \$(2.85) per share, in the Comparable Period. Excluding the impact of special items, as noted in the above table, adjusted net loss for Current Period was \$40.6 million, or \$(3.03) per share compared to adjusted net loss of \$28.8 million, or \$(2.43) per share, in the Comparable Period.

Net Revenues, Gross Profits and Gross Margins

E&P Technology & Services — Net revenues for the Current Period decreased by \$17.4 million, or 30%, to \$39.8 million, compared to \$57.2 million for the Comparable Period. The change in revenues during the Current Period is fairly consistent with the changes as described for the Current Quarter as discussed above. Gross profit decreased by \$16.4 million to a gross loss of \$0.5 million, or (1)% gross margin, compared to a gross profit of \$15.9 million, or 28% gross margin, in the Comparable Period. These declines in gross profit and margin were due to the decrease in revenues noted above.

Operations Optimization — Total net revenues for the Current Period decreased by \$2.9 million or (14)%, to \$18.5 million compared to \$21.4 million for the Comparable Period. Optimization Software & Services net revenues for the Current Periods increased by \$0.9 million, or 10%, to \$9.6 million compared to \$8.7 million for the Comparable Period. The increase in revenues during the Current Period is fairly consistent with the changes as described for the Current Quarter as discussed above. Devices net revenues for the Current Period decreased by \$3.8 million, or 30%, to \$8.9 million, compared to \$12.7 million for the Comparable Period. Revenues continue to be impacted by reduced activity by seismic contractors as numerous vessels have been taken out of service. Gross profit decreased by \$1.8 million to \$9.2 million, representing a 50% gross margin, for the Current Period compared to \$11.0 million, representing a 52% gross margin, for the Comparable Period. Gross profits and gross margin remained fairly consistent with the Comparable Period.

Ocean Bottom Integrated Technologies — Net revenues for the Current Quarter and Comparable Quarter were zero. In line with our component strategy, revenues for the elements of fully integrated 4Sea system will be recognized in the relevant segment, either E&P Technology and Services or Operations Operations. While not our primary route to market, we continue to pursue projects for the crew on a case by case basis that meet our long-term risk and return thresholds. Gross loss for the Current Period was \$3.4 million compared to gross profit of \$5.3 million for the Comparable Period. The decline was due to reduced depreciation expense, several cost control initiatives implemented in 2017 and 2018, including the renegotiation and eventual expiration of our vessel leases, which eliminated our vessel lease costs.

Operating Expenses

Research, Development and Engineering — Research, development and engineering expense was \$8.5 million for the Current Period, an increase of \$0.9 million, or 12%, compared to \$7.6 million for the Comparable Period. We see

significant long-term potential for OceanGeo and our technologies to improve OBS productivity. We continue to invest in our 4Sea system and we expect long-term demand for OBS surveys spanning the spectrum from exploration to production (4D) to multi-client to increase.

Marketing and Sales — Marketing and sales expense was \$11.1 million for the Current Period, an increase of \$1.7 million, or 18%, compared to \$9.4 million, for the Comparable Period, primarily due to increased marketing expenses to broaden and diversify our offerings into adjacent markets.

General, Administrative and Other Operating Expenses — General, administrative and other operating expenses were \$20.9 million for the Current Period, a decrease of \$1.3 million, or 6%, compared to \$22.2 million for the Comparable Period. Excluding the impact of special items which represent the ongoing expense associated with the accelerated vesting and cash exercise of stock appreciation rights awards, expenses decreased \$5.7 million, or 26%. This decrease was driven by reductions in employment expense and professional fees as we continue to maintain our cost control discipline.

Other Items

Interest Expense, net — Interest expense, net, was \$6.7 million for the Current Period compared to \$8.7 million for the Comparable Period. The decrease in interest expense was a result of lower outstanding debt during the first six months of 2018. For additional information, please refer to “Liquidity and Capital Resources — Sources of Capital” below.

Other Expense, Net — Other expense for the Current Period was \$0.7 million compared to other expense of \$4.9 million for the Comparable Period. This difference was primarily related to an increase in our loss contingency accrual related to the WesternGeco legal proceedings of \$5.0 million in the Comparable Period.

Income Tax Expense — Income tax expense for the Current Period was \$1.2 million compared to \$2.0 million for the Comparable Period. Our effective tax rates for the Current Period and Comparable Period were (2.9)% and (6.4)%, respectively. Our income tax expense for the Current Period and Comparable Periods, were primarily related to results from our non-US businesses. Our effective tax rate for the Current Period was negatively impacted by the change in valuation allowance related to U.S. operating losses for which we cannot currently recognize a tax benefit. See further discussion of establishment of the deferred tax valuation allowance at Footnote 7 “Income Taxes” of Notes to Unaudited Condensed Consolidated Financial Statements.

Liquidity and Capital Resources

Sources of Capital

As of June 30, 2018, we had \$44.3 million of cash on hand and nothing drawn from our \$23.3 million of available borrowing capacity under our Credit Facility. Our cash requirements include working capital requirements and cash required for our debt service payments, multi-client seismic data acquisition activities and capital expenditures. As of June 30, 2018, we had working capital of \$3.7 million. Working capital requirements are primarily driven by our investment in our multi-client data library (\$13.8 million in the Current Period) and royalty payments for multi-client sales. Also, our headcount has traditionally been a significant driver of our working capital needs. As a significant portion of our business is involved in the planning, processing and interpretation of seismic data services, one of our largest investments is in our employees, which requires cash expenditures for their salaries, bonuses, payroll taxes and related compensation expenses, typically in advance of related revenue billings and collections.

Our working capital requirements may change from time to time depending upon many factors, including our operating results and adjustments in our operating plan in response to industry conditions, competition and unexpected events. In recent years, our primary sources of funds have been cash flows generated from operations, existing cash balances, debt and equity issuances and borrowings under our revolving credit facilities.

On February 21, 2018, we announced our successful completion of a public equity offering to begin de-levering our balance sheet. We issued and sold 1,820,000 shares of common stock at a public offering price of \$27.50 per share, and warrants to purchase an additional 1,820,000 shares of our common stock. The net proceeds from this offering were \$47.2 million, including transaction expenses. A portion of the net proceeds were used to retire our \$28.5 million Third Lien Notes in March 2018 (several weeks before their maturity date). The warrants have an exercise price of \$33.60 per share, are immediately exercisable and expire on March 21, 2019. If the warrants are exercised in full prior to their expiration, we would receive additional proceeds of \$61.2 million excluding underwriter fees and transaction expenses.

Revolving Credit Facility

In August 2014, ION Geophysical Corporation and our material U.S. subsidiaries, GX Technology Corporation, ION Exploration Products (U.S.A.), Inc. and I/O Marine Systems, Inc. (collectively, the “Subsidiary Borrowers”; ION Geophysical Corporation and the Subsidiary Borrowers are, collectively, the “Borrowers”) entered into a Revolving Credit and Security Agreement with PNC Bank, National Association (“PNC”), as agent (the “Original Credit Agreement”), which was amended by the First Amendment to Revolving Credit and Security Agreement in August

2015 (the “First Amendment”) and the Second Amendment to Revolving Credit and Security Agreement in April 2016 (the “Second Amendment”; the Original Credit Agreement, as amended by the First Amendment and the Second Amendment, the “Credit Facility”).

34

The Credit Facility is available to provide for the Borrowers' general corporate needs, including working capital requirements, capital expenditures, surety deposits and acquisition financing. The maximum amount of the revolving line of credit under the Credit Facility is the lesser of \$40.0 million and a monthly borrowing base.

The borrowing base under the Credit Facility will increase or decrease monthly using a formula based on certain eligible receivables, eligible inventory and other amounts, including a percentage of the net orderly liquidation value the Borrowers' multi-client data library (not to exceed \$15.0 million for the multi-client data library data component). As of June 30, 2018, the borrowing base under the Credit Facility was \$23.3 million, and there was zero outstanding indebtedness under the Credit Facility. Accounts and unbilled receivables from foreign operations are not included the borrowing base calculation.

The Credit Facility requires us to maintain compliance with various covenants. At June 30, 2018, we were in compliance with all of the covenants under the Credit Facility. For further information regarding our Credit Facility, see above Footnote 5 "Long-term Debt" of Footnotes to Unaudited Condensed Financial Statements.

Senior Secured Notes

As of December 31, 2017, ION Geophysical Corporation's 9.125% Senior Secured Second Priority Notes due December 2021 (the "Second Lien Notes") had an outstanding aggregate principal amount of \$120.6 million, and ION Geophysical Corporation's 8.125% Senior Third Priority Notes due May 2018 (the "Third Lien Notes") had an outstanding aggregate principal amount of \$28.5 million. (The Third Lien Notes and the Second Lien Notes are herein, collectively the "Notes"). In March 2018, we obtained consent from a majority of the Second Lien Notes holders and from PNC to redeem, in full, the Third Lien Notes prior to their stated maturity. On March 26, 2018, we redeemed the Third Lien Notes paying the then outstanding principal balance of \$28.5 million, plus all accrued and unpaid interest through the redemption date. For a complete discussion of the Third Lien Notes prior to their early redemption, see Footnote 3 to the Financial Statements included in our Annual Report on Form 10-K, as amended for the year ended December 31, 2017.

The Second Lien Notes remain outstanding and are senior secured second-priority obligations guaranteed by the Company's material U.S. subsidiaries, GX Technology Corporation, ION Exploration Products (U.S.A.), Inc. and I/O Marine Systems, Inc. (the "Guarantors"). The Second Lien Notes mature on December 15, 2021. Interest on the Second Lien Notes accrues at the rate of 9.125% per annum and is payable semiannually in arrears on June 15 and December 15 of each year during their term, except that the interest payment otherwise payable on June 15, 2021 will be payable on December 15, 2021.

The April 2016 indenture governing the Second Lien Notes (the "Second Lien Notes Indenture") contains certain covenants that, among other things, limits or prohibits our ability and the ability of our restricted subsidiaries to take certain actions or permit certain conditions to exist during the term of the Second Lien Notes, including among other things, incurring additional indebtedness, creating liens, paying dividends and making other distributions in respect of our capital stock, redeeming our capital stock, making investments or certain other restricted payments, selling certain kinds of assets, entering into transactions with affiliates, and effecting mergers or consolidations. These and other restrictive covenants contained in the Second Lien Notes Indenture are subject to certain exceptions and qualifications. All of our subsidiaries are currently restricted subsidiaries.

As of June 30, 2018, we were in compliance with all of the covenants under the Second Lien Notes Indenture.

On or after December 15, 2019, we may, on one or more occasions, redeem all or a part of the Second Lien Notes at the redemption prices set forth below, plus accrued and unpaid interest and special interest, if any, on the Second Lien Notes redeemed during the 12-month period beginning on December 15th of the years indicated below:

Date	Percentage
2019	105.500%
2020	103.500%
2021 and thereafter	100.000%

Meeting our Liquidity Requirements

As of June 30, 2018, our total outstanding indebtedness (including capital lease obligations) was approximately \$117.6 million, including approximately \$120.6 million outstanding Second Lien Notes maturing in December 2021, \$0.5 million of equipment capital leases and other short-term debt, partially offset by \$3.4 million of debt issuance

costs.

35

For the Current Period, total capital expenditures, including the investments in our multi-client data library, were \$14.2 million. We expect investments in our multi-client data library this year to be in the range of \$35 million to \$45 million. We expect capital expenditures related to property, plant, equipment and seismic rental assets to be in the range of \$1 million to \$2 million in 2018.

During the Current Period, we paid \$2.5 million of the \$5.0 million litigation accrual we established in the first quarter of 2017, we paid the remaining \$1.25 million balance July 2018. We believe that our existing cash balance, cash from operations and undrawn availability under our Credit Facility will be sufficient to meet our anticipated cash needs for at least the next 12 months. However, as described at Part II, Item 1. "Legal Proceedings," there are possible scenarios involving an outcome in the WesternGeco lawsuit that could materially and adversely affect our liquidity and as a result, our business, financial condition and results of operations.

Cash Flow from Operations

In the Current Period, we used \$0.2 million of cash from operating activities compared to \$3.5 million for the Comparable Period. The decrease was driven by low revenue activity, reductions in accounts payable and accrued expenses, partially offset by collections of our combined accounts and unbilled receivable balance.

Cash Flow from Investing Activities

Cash used in investing activities was \$14.2 million in the Current Period compared to \$9.4 million for the Comparable Period. The principal uses of cash in our investing activities during the Current Period were \$13.8 million invested in our multi-client data library and \$0.4 million for capital expenditures related to property, plant, equipment and seismic rental assets.

The principal use of cash in our investing activities during the Comparable Period were \$8.5 million invested in our multi-client data library.

Cash Flow from Financing Activities

Net cash provided by financing activities was \$6.4 million in the Current Period, compared to \$3.5 million of cash used in the Comparable Period. Cash provided by financing activities was related to \$47.2 million of net cash received from our equity offering, partially offset by \$29.7 million of payments of long-term debt, including equipment capital leases, and a \$10.0 million repayment of our Credit Facility in the Current Period.

The net cash used in financing activities during the Comparable Period was primarily related to \$3.2 million of payments of long-term debt, including equipment capital leases.

Inflation and Seasonality

Inflation in recent years has not had a material effect on our cost of goods or labor, or the prices for our products or services. Traditionally, our business has been seasonal, with strongest demand often occurring in the fourth quarter of our fiscal year.

Critical Accounting Policies and Estimates

Refer to our Annual Report on Form 10-K as amended for the year ended December 31, 2017, for a complete discussion of our significant accounting policies and estimates. On January 1, 2018 we adopted Accounting Standard Codification ("ASC") Topic 606, "Revenue from Contracts with Customers", ("new revenue standard"), which did not have a material impact on our consolidated balance sheets or consolidated statement of operations for any of our reporting segments. On January 1, 2019 we will adopt Accounting Standards Update ("ASU") 2016-02, "Leases (Topic 842)", which will have a material impact on our consolidated balance sheets, however, we expect the income statement recognition to appear similar to its current methodology. There have been no other material changes in the Current Period regarding our critical accounting policies and estimates. For discussion of our adoptions of the new revenue standards, see Footnote 4 "Revenue From Contracts With Customers" of Footnotes to Unaudited Condensed Consolidated Financial Statements.

Revenue Recognition

We derive revenue from the sale of (i) multi-client and proprietary data imaging services and E&P Advisors consulting services within our E&P Technologies & Services segment; (ii) seismic data acquisition systems and other seismic equipment, (iii) seismic command and control software systems and software solutions for operations management within our Operations Optimization segment; and (iv) a full suite of OBS technologies and services that include survey design and planning and data acquisition within our Ocean Bottom Integrated Technologies segment.

All revenues of the E&P Technology & Services and Ocean Bottom Integrated Technologies segments and the services component of revenues for the Optimization Software & Services group as part of the Operations Optimization segment are classified as services revenues. All other revenues are classified as product revenues.

36

We use a five-step model to determine proper revenue recognition from customer contracts. Revenue is recognized when (i) a contract is approved by all parties; (ii) the goods or services promised in the contract are identified; (iii) the consideration we expect to receive in exchange for the goods or services promised is determined; (iv) the consideration is allocated to the goods and services in the contract; and (v) control of the promised goods or services is transferred to the customer. We do not disclose the value of contractual future performance obligations such as backlog with an original expected length of one year or less within the footnotes.

Multi-client and Proprietary Surveys, and Imaging Services - As multi-client seismic surveys are being designed, acquired or processed (the “New Venture” phase), we enter into non-exclusive licensing arrangements with our customers, who pre-fund or underwrite these programs in part. License revenues from these surveys are recognized during the New Venture phase as the seismic data is acquired and/or processed on a proportionate basis as work is performed and control is transferred to the customer. Under this method, we recognize revenues based upon quantifiable measures of progress, such as kilometers acquired or surveys of performance completed to date. Upon completion of a multi-client seismic survey, it is considered “on-the-shelf,” and licenses to the survey data are granted to customers on a non-exclusive basis.

We also perform seismic surveys, imaging and other services under contracts to specific customers, whereby the seismic data is owned by those customers. We recognize revenue as the seismic data is acquired and/or processed on a proportionate basis as work is performed. We use quantifiable measures of progress consistent with our multi-client seismic surveys.

Acquisition Systems and Other Seismic Equipment - For sales of seismic data acquisition systems and other seismic equipment, we recognize revenue when control of the goods has transferred to the customer. Transfer of control generally occurs when (i) we have a present right to payment; (ii) the customer has legal title to the asset; (iii) we have transferred physical possession of the asset; (iv) the customer has significant rewards of ownership; and/or (v) the customer has accepted the asset.

Software - Licenses for our navigation, survey and quality control software systems provide the customer with a right to use the software. We offer usage-based licenses where we receive a monthly fee based on the number of vessels and licenses used each month. For these usage-based licenses, we recognize revenue as the performance obligations are performed over the contract term, which is generally two to five years. In addition to usage-based licenses, we offer perpetual software licenses which provide the customer with a right to use the software as it exists when made available to the customer. Revenue from these licenses is recognized upfront at the point in time when the software is made available to the customer.

These arrangements generally include us providing related services, such as training courses, engineering services and annual software maintenance. We allocate consideration to each element of the arrangement based upon directly observable or estimated standalone selling prices. Revenue is recognized for these services as control transfers to the customer over time.

Ocean Bottom Integrated Technologies - We recognize revenue as the data is acquired and control transfers to the customer. We use quantifiable measures of progress consistent with our multi-client surveys. In connection with acquisition contracts, we may receive revenues for preparation and mobilization of equipment and personnel, capital improvements to vessels, or demobilization activities. We defer the revenues earned and incremental costs incurred that are directly related to these activities and recognize such revenues and costs over the primary contract term of the acquisition project as we transfer the goods and services to the customer. We recognize the costs of relocating vessels without contracts to more promising market sectors as such costs are incurred.

Leases

In February 2016, the Financials Account Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2016-02, “Leases (Topic 842)” which introduces the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous guidance. The guidance will be effective for annual reporting periods beginning after December 15, 2018 and interim periods within those fiscal years with early adoption permitted. We will adopt ASU 2016-02 on January 1, 2019. We are currently evaluating its operating leases related to offices, processing centers, warehouse spaces and, to a lesser extent, certain equipment. We expect the recording of these leases as right-of-use assets and liabilities will result in a material impact on our consolidated balance sheet.

However, we expect the income statement recognition to appear similar to its current methodology.

37

Foreign Sales Risks

The majority of our foreign sales are denominated in U.S. dollars. Product revenues are allocated to geographical locations on the basis of the ultimate destination of the equipment, if known. If the ultimate destination of such equipment is not known, product revenues are allocated to the geographical location of initial shipment. Service revenues, which primarily relate to our E&P Technology & Services segment, are allocated based upon the billing location of the customer. For the Current and Comparable Periods, international sales comprised 79% and 73%, respectively, of total net revenues.

The following table is a summary of net revenues by geographic area (in thousands):

	Six Months Ended June 30,	
	2018	2017
Net revenues by geographic area:		
Latin America	\$17,446	\$18,757
North America	12,357	21,265
Europe	11,609	17,064
Africa	7,241	1,473
Asia Pacific	7,863	11,585
Middle East	1,190	1,081
Commonwealth of Independent States	545	7,332
Total	\$58,251	\$78,557

Credit Risks

At June 30, 2018, we had one multinational oil customer with a balance of 11% of our total combined accounts and unbilled receivable balances. However, there were no customers that comprised more than 10% of our total net revenues for the six months ended June 30, 2018.

The loss of this customer or deterioration in our relationship with this customer could have a material adverse effect on our results of operations and financial condition.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Refer to Item 7A of our Annual Report on Form 10-K, as amended for the year ended December 31, 2017 for a discussion regarding our quantitative and qualitative disclosures about market risk. There have been no material changes to those disclosures during the Current Period.

Item 4. Controls and Procedures

Disclosure Controls and Procedures. Disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file with or submit to the Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time period specified by the SEC's rules and forms. Disclosure controls and procedures are defined in Rule 13a-15(e) under the Exchange Act, and they include, without limitation, controls and procedures designed to ensure that information required to be disclosed under the Exchange Act is accumulated and communicated to management, including the principal executive officer and the principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2018. Based upon that evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective as of June 30, 2018.

Changes in Internal Control over Financial Reporting. There was not any change in our internal control over financial reporting that occurred during the three months ended June 30, 2018, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

WesternGeco

In June 2009, WesternGeco L.L.C. (“WesternGeco”) filed a lawsuit against us in the United States District Court for the Southern District of Texas, Houston Division. In the lawsuit, styled WesternGeco L.L.C. v. ION Geophysical Corporation, WesternGeco alleged that we had infringed several method and apparatus claims contained in four of its United States patents regarding marine seismic streamer steering devices.

The trial began in July 2012. A verdict was returned by the jury in August 2012, finding that we infringed the claims contained in the four patents by supplying our DigiFIN[®] lateral streamer control units and the related software from the United States and awarded WesternGeco the sum of \$105.9 million in damages, consisting of \$12.5 million in reasonable royalties and \$93.4 million in lost profits.

In June 2013, the presiding judge entered a Memorandum and Order, denying the Company’s post-verdict motions that challenged the jury’s infringement findings and the damages amount. In the Memorandum and Order, the judge also ruled that WesternGeco was entitled to be awarded supplemental damages for the additional DigiFIN units that were supplied from the United States before and after the trial that were not included in the jury verdict due to the timing of the trial. In October 2013, the judge entered another Memorandum and Order, ruling on the number of DigiFIN units that were subject to supplemental damages and also ruling that the supplemental damages applicable to the additional units were to be calculated by adding together the jury’s previous reasonable royalty and lost profits damages awards per unit, resulting in supplemental damages of \$73.1 million.

In April 2014, the judge entered another Order, ruling that lost profits should not have been included in the calculation of supplemental damages in the October 2013 Memorandum and Order and reducing the supplemental damages award in the case from \$73.1 million to \$9.4 million. In the Order, the judge also further reduced the damages awarded in the case by \$3.0 million to reflect a settlement and license that WesternGeco entered into with a customer of ours that had purchased and used DigiFIN units that were also included in the damage amounts awarded against us.

In May 2014, the judge signed and entered a Final Judgment against us in the amount of \$123.8 million. The Final Judgment also included an injunction that enjoins us, our agents and anyone acting in concert with us, from supplying in or from the United States the DigiFIN product or any parts unique to the DigiFIN product, or any instrumentality no more than colorably different from any of these products or parts, for combination outside of the United States. We have conducted our business in compliance with the District Court’s orders in the case, and we have reorganized our operations such that we no longer supply the DigiFIN product or any part unique to the DigiFIN product in or from the United States.

We and WesternGeco each appealed the Final Judgment to the United States Court of Appeals for the Federal Circuit in Washington, D.C. (the “Court of Appeals”). On July 2, 2015, the Court of Appeals reversed in part the Final Judgment of the District Court, holding the District Court erred by including lost profits in the Final Judgment. Lost profits were \$93.4 million and prejudgment interest on the lost profits was approximately \$10.9 million of the \$123.8 million Final Judgment. Pre-judgment interest on the lost profits portion will be treated in the same way as the lost profits. Post-judgment interest will likewise be treated in the same fashion. On July 29, 2015, WesternGeco filed a petition for rehearing en banc before the Court of Appeals. On October 30, 2015, the Court of Appeals denied WesternGeco’s petition for rehearing en banc.

As previously disclosed, we recorded a loss contingency accrual of \$123.8 million. As a result of the reversal by the Court of Appeals, as of June 30, 2015, we reduced our loss contingency accrual to \$22.0 million.

On February 26, 2016, WesternGeco filed a petition for writ of certiorari by the Supreme Court. We filed our response on April 27, 2016. Subsequently, on June 20, 2016, the Supreme Court vacated the Court of Appeals’ ruling although it did not address the lost profits question at that time. Rather, in light of the changes in case law regarding the standard of proof for willfulness in the Halo and Stryker cases, the Supreme Court indicated that the case should be remanded to the Court of Appeals for a determination of whether or not the willfulness determination by the District Court was appropriate.

On October 14, 2016, the Court of Appeals issued a mandate returning the case to the District Court for consideration of whether or not additional damages for willfulness were appropriate.

On November 14, 2016, the District Court ordered the sureties to pay principal and interest on the royalty damages previously awarded and declined to issue a final judgment until after consideration of whether enhanced damages for willfulness would be awarded. While we disagreed with the decision by the District Court ordering payment of the royalty damages and interest without a final judgment, on November 25, 2016, we paid WesternGeco the \$20.8 million due pursuant to the order, at which point we reduced our loss contingency accrual to zero.

39

On March 14, 2017, the District Court held a hearing on whether or not additional damages for willfulness would be payable. The Judge found that ION's infringement was willful, based on his perception that ION did not adequately investigate the scope of the patents, and ION's conduct during trial. However, in his ruling at the hearing, he limited enhanced damages to \$5.0 million because it was a "close case," there was no evidence of copying, and ION was simply acting as a competitor in a capitalist marketplace. The District Court also ordered the appeal bond to be released and discharged. The Court's findings and ruling were memorialized in an order issued on May 16, 2017. On June 30, 2017, WesternGeco and we jointly agreed that neither party would appeal the District Court's award of \$5.0 million in enhanced damages. The parties also agreed that the \$5.0 million would be paid over the course of 12 months with \$1.25 million being paid in two installments of \$0.625 million in 2017 and the remaining \$3.75 million being paid in three quarterly payments of \$1.25 million beginning January 1, 2018. This agreement was memorialized by the court in an order issued on July 26, 2017. Upon assessment of the \$5.0 million in enhanced damages, we accrued \$5.0 million in the first quarter of 2017. As we have made the payments, the accrual has been adjusted, and as of June 30, 2018, the loss contingency accrual was \$1.25 million.

WesternGeco filed a second petition for writ of certiorari in the U.S. Supreme Court on February 17, 2017, appealing the lost profits issue again. We filed our response to WesternGeco's second attempt to appeal to the Supreme Court the lost profits issue, raising both the substantive matters we addressed by opposing WesternGeco's first petition, and also advancing a procedural argument that WesternGeco could not raise the same issue for a second time in a second petition for certiorari. On May 30, 2017, the Supreme Court called for the views of the U.S. Solicitor General regarding whether or not to grant certiorari. We and WesternGeco each met with the Solicitor General's office in late July, 2017. On December 6, 2017, the Solicitor General filed its brief, and took the position that the Supreme Court ought to grant certiorari. On January 12, 2018, the Supreme Court granted certiorari as to whether the Court of Appeals erred in holding that lost profits arising from use of prohibited combinations occurring outside of the United States are categorically unavailable in cases where patent infringement is proven under 35 U.S.C. § 271(f)(2) (the specific statute under which we were ultimately held to have infringed WesternGeco's patents and upon which the District Court and the Court of Appeals relied in entering their final rulings).

The Supreme Court heard oral arguments on April 16, 2018. At oral arguments, we argued that the Court of Appeals' decision that eliminated lost profits ought to be affirmed. WesternGeco and the Solicitor General argued that the Court of Appeals' decision that eliminated lost profits ought to be reversed.

On June 22, 2018, the Supreme Court reversed the judgment of the Court of Appeals, held that the award of lost profits to WesternGeco by the District Court was a permissible application of Section 284 of the Patent Act, and remanded the case back to the Circuit Court for further proceedings consistent with its (the Supreme Court's) opinion.

On July 24, 2018, the Supreme Court issued the judgment that returned the case to the Court of Appeals.

At the Court of Appeals, in the case leading up to the Supreme Court, we presented multiple arguments as to why the District Court's award of lost profits was improper. The lost profits damages awarded by the District Court were based on the use of our products by our customers outside of the United States. We argued at the Court of Appeals, and at the Supreme Court, that, as a matter of law, WesternGeco cannot recoup lost profits for the overseas use of our products. This issue, decided in favor of WesternGeco in the recent Supreme Court opinion, was the only issue reached by the Supreme Court in that decision.

We also argued in the Court of Appeals that, under the jury instructions given in our case, the jury was required to find that we had been a direct competitor of WesternGeco in the survey markets where WesternGeco lost profits in order for WesternGeco to recoup them. Because the Court of Appeals ruled in favor of us on the first argument, and overturned the award of lost profits on that basis, the Court of Appeals did not rule on our "direct competitor" argument, and that argument was not presented to the Supreme Court for review. Thus, while the Supreme Court overturned the Court of Appeals' decision that WesternGeco cannot recover foreign lost profits under the Patent Act, the Supreme Court did not order us to pay any amount with respect to lost profits, but rather remanded the case back to the Court of Appeals for further consideration of whether lost profits are payable by us in this case. We will now be permitted to present our second argument at the Court of Appeals (that lost profits should not be awarded to WesternGeco because they were not our direct competitor).

Other proceedings may have an impact on WesternGeco's ability to recover lost profits damages and reasonable royalties even if we do not prevail on the "direct competitor" argument in the Court of Appeals. We were a party to a challenge to the validity of several of WesternGeco's patent claims by means of an Inter Partes Review ("IPR") with the Patent Trial and Appeal Board ("PTAB"). While the above-described lawsuit was pending on appeal, the PTAB invalidated four of the six patent claims that formed the basis for the jury verdict in the lawsuit. WesternGeco appealed that decision to the Court of Appeals, which heard our and WesternGeco's arguments on January 23, 2018. The Court of Appeals affirmed the PTAB's invalidation of the patents on May 7, 2018, and on July 16, 2018, the Court of Appeals denied WesternGeco's petition for a panel rehearing and a rehearing en banc. This decision by the Court of Appeals may provide a separate ground for reducing or vacating any lost-profits or reasonable royalty award in the lawsuit.

On July 25, 2018, we filed a motion for leave to file supplemental briefing in the Court of Appeals, and concurrently, filed a brief arguing that the judgment of the District Court as to both lost profits and reasonable royalties should be vacated, and that the case should be remanded to the District Court for a new determination on damages. On July 27, 2018, the Court of Appeals vacated its September 21, 2016 judgment with respect to damages, and ordered WesternGeco and us to submit supplemental briefing on what relief is appropriate in light of the Supreme Court's decision. This order rendered our motion for leave to submit briefing moot, and, accordingly, the Court of Appeals denied our motion as moot. The supplemental briefing ordered by the Court of Appeals is scheduled to be completed by September 7, 2018.

We may not ultimately prevail in any of the appeals processes noted above and we could be required to pay some or all of the lost profits that were awarded by the District Court if the judgment of the District Court is upheld by the Court of Appeals on remand, or if a new trial is granted and a new judgment issues. Our assessment that we do not have a loss contingency (other than the \$1.25 million noted above) may change in the future due to other developments at the Supreme Court, Court of Appeals, or District Court, and other events, such as changes in applicable law, and such reassessment could lead to the determination that an additional loss contingency is probable, which could have a material effect on our business, financial condition and results of operations. Our assessments disclosed in this Quarterly Report on Form 10-Q or elsewhere are based on currently available information and involve elements of judgment and significant uncertainties. See above, Footnote 8 "Litigation" of Footnotes to Unaudited Condensed Financial Statements".

Other Litigation

We have been named in various other lawsuits or threatened actions that are incidental to our ordinary business. Litigation is inherently unpredictable. Any claims against us, whether meritorious or not, could be time-consuming, cause us to incur costs and expenses, require significant amounts of management time and result in the diversion of significant operational resources. The results of these lawsuits and actions cannot be predicted with certainty. We currently believe that the ultimate resolution of these matters will not have a material adverse effect on our financial condition or results of operations or our liquidity.

Item 1A. Risk Factors

This report contains or incorporates by reference statements concerning our future results and performance and other matters that are "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended ("Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended ("Exchange Act"). These statements involve known and unknown risks, uncertainties, and other factors that may cause our or our industry's results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "would," "should," "intend," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential," or "continue" or the negative of such terms or other comparative terminology. Examples of other forward-looking statements contained or incorporated by reference in this report include statements regarding:

- any additional damages or adverse rulings in the WesternGeco litigation and future potential adverse effects on our liquidity;
- future levels of capital expenditures of our customers for seismic activities;
- future oil and gas commodity prices;
- the effects of current and future worldwide economic conditions (particularly in developing countries) and demand for oil and natural gas and seismic equipment and services;
- future cash needs and availability of cash to fund our operations and pay our obligations;
- the effects of current and future unrest in the Middle East, North Africa, Korea and other regions;
- the timing of anticipated revenues and the recognition of those revenues for financial accounting purposes;
- the effects of ongoing and future industry consolidation, including, in particular, the effects of consolidation and vertical integration in the towed marine seismic streamers market;
- the timing of future revenue realization of anticipated orders for multi-client survey projects and data processing work in our E&P Technology & Services segment;

future levels of our capital expenditures;
future government regulations pertaining to the oil and gas industry;
expected net revenues, income from operations and net income;
expected gross margins for our services and products;

41

future benefits to be derived from the change in our OBS strategy and the success of marketing our 4Sea technology;
 future seismic industry fundamentals, including future demand for seismic services and equipment;
 future benefits to our customers to be derived from new services and products;
 future benefits to be derived from our investments in technologies, joint ventures and acquired companies;
 future growth rates for our services and products;
 the degree and rate of future market acceptance of our new services and products;
 expectations regarding E&P companies and seismic contractor end-users purchasing our more
 technologically-advanced services and products;
 anticipated timing and success of commercialization and capabilities of services and products under development and
 start-up costs associated with their development;
 future opportunities for new products and projected research and development expenses;
 expected continued compliance with our debt financial covenants;
 expectations regarding realization of deferred tax assets;
 expectations regarding the impact of the U.S. Tax Cuts and Jobs Act;
 anticipated results with respect to certain estimates we make for financial accounting purposes; and
 compliance with the U.S. Foreign Corrupt Practices Act and other applicable U.S. and foreign laws prohibiting
 corrupt payments to government officials and other third parties.

These forward-looking statements reflect our best judgment about future events and trends based on the information
 currently available to us. Our results of operations can be affected by inaccurate assumptions we make or by risks and
 uncertainties known or unknown to us. Therefore, we cannot guarantee the accuracy of the forward-looking
 statements. Actual events and results of operations may vary materially from our current expectations and
 assumptions.

Information regarding factors that may cause actual results to vary from our expectations, referred to as “risk factors,”
 appears in our Annual Report on Form 10-K as amended for the year ended December 31, 2017, in Part I, Item 1A.
 “Risk Factors,” as previously filed with the SEC.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(c) During the three months ended June 30, 2018, in connection with the vesting of (or lapse of restrictions on) shares
 of our restricted stock held by certain employees, we acquired shares of our common stock in satisfaction of tax
 withholding obligations that were incurred on the vesting date. The date of acquisition, number of shares and average
 effective acquisition price per share were as follows:

Period	(a) Total Number of Shares Acquired	(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Program	(d) Maximum Number (or Approximate Dollar Value) of Shares That May Yet Be Purchased Under the Plans or Program
April 1, 2018 to April 30, 2018	—	—	Not applicable	Not applicable
May 1, 2018 to May 31, 2018	12,965	\$ 24.50	Not applicable	Not applicable
June 1, 2018 to June 30, 2018	43,865	\$ 23.80	Not applicable	Not applicable
Total	56,830	\$ 23.96		

Item 5. Other Information

None.

42

Item 6. Exhibits

31.1 Certification of Chief Executive Officer

31.2 Certification of Chief Financial Officer

32.1 Certification of Chief Executive Officer

32.2 Certification of Chief Financial Officer

10.22 Form of Warrant Agreement, filed on February 16, 2018 as Exhibit 10.1 to the Company's Current Report on Form 8-K, and incorporated herein by reference.

101 The following materials are formatted in Extensible Business Reporting Language (XBRL): (i) Condensed Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017, (ii) Condensed Consolidated Statements of Operations for the three- and six-months ended June 30, 2018 and 2017, (iii) Condensed Consolidated Statements of Comprehensive Loss for the three- and six-months ended June 30, 2018 and 2017, (iv) Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2018 and 2017, (v) Footnotes to Unaudited Condensed Consolidated Financial Statements.

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 thereunto duly authorized.

ION GEOPHYSICAL CORPORATION

By /s/ Steven A. Bate
Steven A. Bate
Executive Vice President and Chief Financial Officer

Date: August 2, 2018

44

EXHIBIT INDEX

Exhibit No. Description

31.1 Certification of Chief Executive Officer

31.2 Certification of Chief Financial Officer

32.1 Certification of Chief Executive Officer

32.2 Certification of Chief Financial Officer

10.22 Form of Warrant Agreement, filed on February 16, 2018 as Exhibit 10.1 to the Company's Current Report on Form 8-K, and incorporated herein by reference.

101 The following materials are formatted in Extensible Business Reporting Language (XBRL): (i) Condensed Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017, (ii) Condensed Consolidated Statements of Operations for the three- and six-months ended June 30, 2018 and 2017, (iii) Condensed Consolidated Statements of Comprehensive Loss for the three- and six-months ended June 30, 2018 and 2017, (iv) Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2018 and 2017, (v) Footnotes to Unaudited Condensed Consolidated Financial Statements.

45