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

FORM 10-Q

MARK ONE

| ☑ Quarterly Report Pursuant to Section 13 or 1 | 5(d) of the Securities Exchange Act of 1934 |
|---|--|
| for the Quarterly Period end | led March 31, 2017; or |
| ☐ Transition Report Pursuant to Section 13 or 1 | 5(d) of the Securities Exchange Act of 1934 |
| for the transition period from | to |
| ZION OIL & C (Exact name of registrant as | · |
| Delaware | 20-0065053 |
| (State or other jurisdiction of | (I.R.S. Employer |
| incorporation or organization) | Identification No.) |
| 12655 N Central Expressway, Suite 1000, Dallas, TX | 75243 |
| (Address of principal executive offices) | Zip Code |
| Indicate by check mark whether the registrant (1) has filed all report Exchange Act of 1934 during the preceding 12 months (or for such shand (2) has been subject to such filing requirements for the past 90 day Indicate by check mark whether the registrant has submitted elect Interactive Data File required to be submitted and posted pursuant to be | norter period that the registrant was required to file such reports), ys. Yes⊠ No □ tronically and posted on its corporate Web site, if any, every Rule 405 of Regulation S-T (§232.405 of this chapter) during the |
| Indicate by check mark whether the registrant is a large accelerated fi company, or an emerging growth company. See the definitions of company," and "emerging growth company" in Rule 12b-2 of the Excl | ler, an accelerated filer, a non-accelerated filer, smaller reporting "large accelerated filer," "accelerated filer," "smaller reporting |
| Large accelerated filer □ Non-accelerated filer □ (Do not check if a smaller rep | Accelerated filer |
| If an emerging growth company, indicate by check mark if the registra complying with any new or revised financial accounting standards pro | ★ |
| Indicate by check mark whether the registrant is a shell company (as d | efined in Rule 12b-2 of the Exchange Act). Yes □ No ⊠ |
| As of April 28, 2017, Zion Oil & Gas, Inc. had outstanding 47,839,247 | 7 shares of common stock, par value \$0.01 per share. |

INDEX PAGE

PART 1 – FINANCIAL INFORMATION

| | Page |
|--|------|
| Item 1 – Financial Statements – Unaudited | 1 |
| Balance Sheets – March 31, 2017 and December 31, 2016 | 1 |
| Statements of Operations for the three months ended March 31, 2017 and 2016 | 2 |
| Statements of Changes in Stockholders' Equity for the three months ended March 31, 2017 | 3 |
| Statements of Cash Flows for the three months ended March 31, 2017 and 2016 | 4 |
| Notes to Financial Statements | 5 |
| Item 2 – Management's Discussion and Analysis of Financial Condition and Results of Operations | 19 |
| Item 3 – Quantitative and Qualitative Disclosures About Market Risk | 29 |
| Item 4 – Controls and Procedures | 30 |
| PART II — OTHER INFORMATION | |
| Item 1 – Legal Proceedings | 31 |
| Item 1A – Risk Factors | 31 |
| Item 2 – Unregistered Sales of Equity Securities and Use of Proceeds | 31 |
| Item 3 – Defaults upon Senior Securities | 31 |
| Item 4 – Mine Safety Disclosures | 31 |
| Item 5 – Other Information | 32 |
| Item 6 – Exhibits | 32 |
| Exhibit Index | 32 |
| SIGNATURES | 33 |
| | |

Balance Sheets as of (Unaudited)

| | March 31, 2017 | December 31, 2016 |
|--|-------------------|----------------------|
| | US\$ thousands | US\$ thousands |
| Current assets | thousanus | tilousanus |
| Cash and cash equivalents | 3,862 | 3,192 |
| Fixed short term bank deposits – restricted | 1,815 | 1,295 |
| Prepaid expenses and other | 562 | 347 |
| Other deposits | 264 | _ |
| Other receivables | 877 | 144 |
| Total current assets | 7,380 | 4,978 |
| | | |
| Unproved oil and gas properties, full cost method (see Note 4) | 8,452 | 6,397 |
| | | |
| Property and equipment at cost | | |
| Net of accumulated depreciation of \$414 and \$442 | 186 | 113 |
| | | |
| Other assets | | |
| Fixed long term bank deposits – restricted | 76 | |
| Assets held for severance benefits | 188 | 162 |
| Total other assets | 264 | 162 |
| | | |
| Total assets | 16,282 | 11,650 |
| | | ,,,,, |
| Liabilities and Stockholders' Equity | | |
| Elabilities and Stockholders Equity | | |
| Current liabilities | | |
| Accounts payable | 193 | 181 |
| Asset retirement obligation | 470 | 200 |
| Derivative liability (see Note 6) | 622 | 895 |
| Accrued liabilities | 1,091 | 677 |
| Total current liabilities | 2,376 | 1,953 |
| | | |
| Long-term liabilities | | |
| 10% Senior convertible bonds, net of unamortized deferred financing cost of \$111 and \$118 and unamortized debt discount of \$1,462 and 1,513 at March 31, 2017 and December 31, 2016 | | |
| respectively (see Note 5) | 1,883 | 1,826 |
| Provision for severance pay | 228 | 206 |
| Obligation under capital lease, net of current maturities of \$7 (see Note 7C) | 49 | |
| Total long-term liabilities | 2,160 | 2,032 |
| Total liabilities | 4,536 | 3,985 |
| Commitments and contingencies (see Note 7) | | |

Stockholders' equity

Common stock, par value \$.01; Authorized: 200,000,000 shares at March 31, 2017: Issued and outstanding: 47,520,071 and 42,577,541 shares at March 31, 2017 and December 31, 2016

| respectively | 475 | 426 |
|--|-----------|-----------|
| Additional paid-in capital | 165,261 | 157,854 |
| Accumulated deficit | (153,990) | (150,615) |
| Total stockholders' equity | 11,746 | 7,665 |
| | | |
| Total liabilities and stockholders' equity | 16,282 | 11,650 |
| | | |

Statements of Operations (Unaudited)

| | For the three months ended March 31, | |
|--|--------------------------------------|-----------|
| | 2017 | 2016 |
| | US\$ | US\$ |
| | thousands | thousands |
| General and administrative | 2,847 | 1,172 |
| Other | 676 | 391 |
| Loss from operations | (3,523) | (1,563) |
| Other income (expense), net | | |
| Gain on derivative liability | 273 | _ |
| Other income, net | 10 | _ |
| Foreign exchange (loss) | 31 | 21 |
| Financial (expenses), net | (166) | (10) |
| Loss before income taxes | (3,375) | (1,552) |
| Income taxes | | |
| Net loss | (3,375) | (1,552) |
| Net loss per share of common stock - basic and diluted (in US\$) | (0.07) | (0.04) |
| Tier 1955 per Share of common stock busic and unated (in OSG) | (0.07) | (0.04) |
| Weighted-average shares outstanding-basic and diluted (in thousands) | 47,237 | 38,995 |

Zion Oil & Gas, Inc.
Statements of Changes in Stockholders' Equity (Unaudited)

| | Common Stock | | Additional paid-in | Accumulated | |
|--|---------------------|-----------|--------------------|-------------|-----------|
| | Shares | Amounts | Capital | deficit | Total |
| | | US\$ | US\$ | US\$ | US\$ |
| | thousands | thousands | thousands | thousands | thousands |
| Balances as of December 31, 2016 | 42,578 | 426 | 157,854 | (150,615) | 7,665 |
| Funds received from sale of DSPP units and shares | 3,717 | 37 | 5,181 | | 5,218 |
| Value of bonds converted to shares | 1 | * | 1 | _ | 1 |
| Funds received from option exercises | 1,224 | 12 | <u>—</u> | | 12 |
| Value of options granted to employees, directors and | | | | | |
| others as non-cash compensation | | _ | 2,225 | _ | 2,225 |
| Net loss | | | | (3,375) | (3,375) |
| Balances as of March 31, 2017 | 47,520 | 475 | 165,261 | (153,990) | 11,746 |

Statements of Cash Flows (Unaudited)

| | For the three months ended March 31, | | |
|---|--------------------------------------|-----------|--|
| | 2017 | 2016 | |
| | US\$ | US\$ | |
| | thousands | thousands | |
| | | | |
| Cash flows from operating activities | | | |
| Net loss | (3,375) | (1,552) | |
| Adjustments required to reconcile net loss to net cash used in operating activities: | | | |
| Depreciation | 10 | 15 | |
| Capital gain on sale of property and equipment | (10) | - | |
| Cost of options issued to employees, directors and others as non-cash compensation | 2,034 | 172 | |
| Interest on short term bank deposits | (17) | (10) | |
| Interest and finance expense accrued on convertible bonds and amortization of debt discount | 144 | - | |
| Change in derivative liability | (273) | - | |
| Change in assets and liabilities, net: | | | |
| Change in other deposits | (264) | _ | |
| Prepaid expenses and other | (215) | 13 | |
| Change in other receivables | (83) | 31 | |
| Severance pay, net | (4) | 7 | |
| Accounts payable | (116) | (281) | |
| Accrued liabilities | (87) | (562) | |
| Asset retirement obligation | - | (3) | |
| Net cash used in operating activities | (2,256) | (2,170) | |
| ivet easif used in operating activities | (2,230) | (2,170) | |
| Cash flows from investing activities | | | |
| Investment in short term bank deposits | (503) | 42 | |
| Investment in long term bank deposits | (76) | - | |
| Acquisition of property and equipment | (16) | (12) | |
| Proceeds from sale of property and equipment | 14 | _ | |
| Investment in unproved oil and gas properties | (1,058) | (244) | |
| Net cash used in investing activities | (1,639) | (214) | |
| | (1,00) | (211) | |
| Cash flows from financing activities | | | |
| | - | 2,655 | |
| Proceeds from sale of 10% Senior Convertible Bonds | | · | |
| Repayments of capital loan | (15) | - | |
| Deferred offering cost | - | (2) | |
| Proceeds from sale of stock and exercise of options | 4,580 | 760 | |
| Net cash provided by financing activities | 4,565 | 3,413 | |
| | | | |
| Net increase (decrease) in cash and cash equivalents | 670 | 1,029 | |
| Cash and cash equivalents – beginning of period | 3,192 | 2,871 | |
| Cash and cash equivalents – end of period | 3,862 | 3,900 | |
| | | | |
| Non-cash investing and financing activities: | | | |
| Cost of ontions canitalized to oil & gas properties | 101 | | |

191

815

Cost of options capitalized to oil & gas properties

10% Senior convertible bonds - cash held in escrow

| Unpaid investments in oil & gas properties | 806 | 248 |
|---|-----|-----|
| Subscription receivable for the sale of stock | 650 | - |
| 10% Senior Convertible Bonds converted to shares | 1 | - |
| Acquisition of property and equipment under capital lease | 71 | - |
| | | |

Notes to Financial Statements (Unaudited)

Note 1 - Nature of Operations and Basis of Presentation

A. Nature of Operations

Zion Oil & Gas, Inc., a Delaware corporation ("we," "our," "Zion" or the "Company") is an oil and gas exploration company with a history of 17 years of oil & gas exploration in Israel. As of March 31, 2017, the Company has no revenues from its oil and gas operations.

Exploration Rights/Exploration Activities

Zion currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License ("MJL"), comprising approximately 99,000 acres. The Company completed construction of and mobilized the drilling rig to the drill pad location from which it will drill its next exploration well, which, unless extended, must be spud by June 30, 2017 as referenced below. The drilling of this well to the desired depth is subject to the Company raising sufficient funds from equity or debt offerings, of which no assurance can be provided.

Depending on the results of the planned exploratory well and having adequate cash resources, multiple wells could be drilled from this pad site as several subsurface geologic targets can be reached using directional well trajectories.

Megiddo-Jezreel Petroleum License ("MJL")

A 7 -

The MJL was awarded on December 3, 2013 for a three-year primary term through December 2, 2016, with the possibility of additional one-year extensions up to a maximum of seven years. The MJL is onshore, south and west of the Sea of Galilee.

On June 28, 2016, the Company submitted a third Application for Extension of Drilling Date, and on July 4, 2016, the Petroleum Commissioner formally approved the application as follows:

Astivity Description

| IVO. | Activity Description | 10 be carriea out by: |
|-------------|--|-----------------------|
| 1 | Sign contract with drilling contractor and forward to Petroleum Commissioner | 13 October 2016 |
| 2 | Submit detailed Engineering Plan to carry out the drilling | 13 October 2016 |
| 3 | Spudding in the license area | 1 December 2016 |
| 4 | Submit a final report on the results of the drilling | 1 May 2017 |
| 5 | Submit a plan for continued work in the license area | 29 June 2017 |

The Petroleum Commissioner modified Zion's work plan deadlines and awarded the Company a one-year extension to December 2, 2017 on its MJL, subject to Zion signing a drilling contract and submitting a detailed engineering plan by October 13, 2016 and spudding an exploratory well by December 1, 2016. The Company timely complied with two key Special Conditions of our existing license terms established by the Israel Petroleum Commissioner, by providing on October 13, 2016 the fully executed drilling contract with S.A. Daflog, S.R.L., an Israeli-registered affiliate of DAFORA S.A., and a Detailed Drilling Engineering Plan for the Megiddo-Jezreel #1 well.

Zion then sought an extension to both its spud date and license extension beyond the three-year primary term. Due in part to Zion's timely compliance with the two key Special Conditions of the Company's work program, on November 29, 2016, the State of Israel's Petroleum Commissioner officially approved Zion's drilling date and license extension request. Key details of the extension are as outlined below:

| <i>No.</i> | Activity Description | To be carried out by: |
|------------|--|-----------------------|
| | Begin drilling / spud well | |
| 1 | | 30 June 2017 |
| 2 | Submit final report on the results of drilling | 1 November 2017 |

Notes to Financial Statements

Note 1 - Nature of Operations and Basis of Presentation (cont'd)

As previously disclosed, the Company needed authorization from the Israel land Authority (the "ILA"), the formal lessor of the land to the kibbutz, to access and utilize the drill site. The Company received this authorization on July 4, 2016. This is in conjunction with our May 15, 2016 signed agreement with Kibbutz Sde Eliyahu on whose property the drilling pad is currently situated. On January 11, 2017, an agreement was signed by the Company and the ILA by which the land usage permission agreement was extended up to and including December 3, 2017.

The drill site plan was prepared by an outside engineering firm to accommodate DAFORA's F-400 rig. The Company awarded the drill site construction contract to an Israeli company and the construction of the drill site and road was completed in February 2017. Zion is finalizing the rig mobilization to the MJ#1 location to begin rig-up and acceptance testing. The drilling, completion and testing of the well will be subject to raising the necessary capital of which no assurances can be provided.

Zion's Former Jordan Valley, Joseph, and Asher-Menashe Licenses

On March 29, 2015, the Energy Ministry formally approved the Company's application to merge the southernmost portion of the Jordan Valley License into the Megiddo-Jezreel License. The Company has plugged all of its exploratory wells (in the former Joseph and Asher-Menashe Licenses) but acknowledges its obligation to complete the abandonment of these well sites in accordance with guidance from the Environmental Ministry and local officials.

B. Basis of Presentation

The accompanying unaudited interim financial statements of Zion Oil & Gas, Inc. have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and with Article 8-03 of Regulation S-X. Accordingly, they do not include all of the information and notes required by GAAP for complete financial statements. In the opinion of management, all adjustments, consisting only of normal recurring accruals necessary for a fair statement of financial position, results of operations and cash flows, have been included. The information included in this Quarterly Report on Form 10-Q should be read in conjunction with the financial statements and the accompanying notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. The year-end balance sheet data presented for comparative purposes was derived from audited financial statements, but does not include all disclosures required by GAAP. The results of operations for the three months ended March 31, 2017 are not necessarily indicative of the operating results for the year ending December 31, 2016 or for any other subsequent interim period.

To date, the Company has not achieved a discovery of either oil or gas in commercial quantities. The Company incurs cash outflows from operations, and all exploration activities and overhead expenses to date have been financed by way of equity or debt financing. The recoverability of the costs incurred to date is uncertain and dependent upon achieving significant commercial production.

Notes to Financial Statements

Note 1 - Nature of Operations and Basis of Presentation (cont'd)

The Company's ability to continue as a going concern is dependent upon obtaining the necessary financing to undertake further exploration and development activities and ultimately generating profitable operations from its oil and natural gas interests in the future. The Company's current operations are dependent upon the adequacy of its current assets to meet its current expenditure requirements and the accuracy of management's estimates of those requirements. Should those estimates be materially incorrect, the Company's ability to continue as a going concern may be impaired. The financial statements have been prepared on a going concern basis, which contemplates realization of assets and liquidation of liabilities in the ordinary course of business. During the three months ended March 31, 2017, the Company incurred a net loss of approximately \$3.4 million and had an accumulated deficit of approximately \$154 million. These factors raise substantial doubt about the Company's ability to continue as a going concern.

The Company expects to incur additional significant expenditures to further its exploration programs. Management is of the opinion that its currently available cash resources are sufficient to finance its plan of operations through June 2017.

To carry out further planned operations beyond that date, the Company must raise additional funds through additional equity and/or debt issuances. There can be no assurance that this capital will be available to the Company, and if it is not, the Company may be forced to curtail or cease exploration and development activities, including the drilling of the planned MJ #1 exploratory well. The financial statements do not include any adjustments that might result from the outcome of this uncertainty (See also Note 7).

Note 2 - Summary of Significant Accounting Policies

A. Net Loss per Share Data

Basic and diluted net loss per share of common stock, par value \$0.01 per share ("Common Stock"), is presented in conformity with ASC 260-10 "Earnings Per Share." Diluted net loss per share is the same as basic net loss per share, as the inclusion of 9,698,413 and 5,711,104 Common Stock equivalents in the three-month period ended March 31, 2017 and 2016 respectively, would be anti-dilutive.

B. Use of Estimates

The preparation of the accompanying financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions about future events. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenues and expenses. Such estimates include the valuation of unproved oil and gas properties, deferred tax assets, asset retirement obligations and legal contingencies. These estimates and assumptions are based on management's best estimates and judgment. Management evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors, including the current economic environment, which management believes to be reasonable under the circumstances. The Company adjusts such estimates and assumptions when facts and circumstances dictate. Illiquid credit markets, volatile equity, foreign currency, and energy markets have combined to increase the uncertainty inherent in such estimates and assumptions. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates. Changes in those estimates resulting from continuing changes in the economic environment will be reflected in the financial statements in future periods.

Notes to Financial Statements

Note 2 - Summary of Significant Accounting Policies (cont'd)

C. Oil and Gas Properties and Impairment

The Company follows the full-cost method of accounting for oil and gas properties. Accordingly, all costs associated with acquisition, exploration and development of oil and gas reserves, including directly related overhead costs, are capitalized.

All capitalized costs of oil and gas properties, including the estimated future costs to develop proved reserves, are amortized on the unit-of-production method using estimates of proved reserves. Investments in unproved properties and major development projects are not amortized until proved reserves associated with the projects can be determined or until impairment occurs. If the results of an assessment indicate that the properties are impaired, the amount of the impairment is included in loss from continuing operations before income taxes, and the adjusted carrying amount of the proved properties is amortized on the unit-of-production method.

The Company's oil and gas property represents an investment in unproved properties. These costs are excluded from the amortized cost pool until proved reserves are found or until it is determined that the costs are impaired. All costs excluded are reviewed at least quarterly to determine if impairment has occurred. The amount of any impairment is charged to expense since a reserve base has not yet been established. Impairment requiring a charge to expense may be indicated through evaluation of drilling results, relinquishing drilling rights or other information.

Currently, the Company has no economically recoverable reserves and no amortization base. The Company's unproved oil and gas properties consist of capitalized exploration costs of \$8,452,000 and \$6,397,000 as of March 31, 2017, and December 31, 2016, respectively.

D. Fair Value Measurements

The Company follows Accounting Standards Codification (ASC) 820, "Fair Value Measurements and Disclosures," as amended by Financial Accounting Standards Board (FASB) Financial Staff Position (FSP) No. 157 and related guidance. Those provisions relate to the Company's financial assets and liabilities carried at fair value and the fair value disclosures related to financial assets and liabilities. ASC 820 defines fair value, expands related disclosure requirements, and specifies a hierarchy of valuation techniques based on the nature of the inputs used to develop the fair value measures. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, assuming the transaction occurs in the principal or most advantageous market for that asset or liability.

There are three levels of inputs to fair value measurements - Level 1, meaning the use of quoted prices for identical instruments in active markets; Level 2, meaning the use of quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in markets that are not active or are directly or indirectly observable; and Level 3, meaning the use of unobservable inputs.

The Company uses Level 1 inputs for its fair value measurements whenever there is an active market, with actual quotes, market prices, and observable inputs on the measurement date. The Company uses Level 2 inputs for fair value measurements whenever there are quoted prices for similar securities in an active market or quoted prices for identical securities in an inactive market. The Company uses Level 3 inputs in the Binomial Model used for the valuation of the derivative liability.

Notes to Financial Statements

Note 2 - Summary of Significant Accounting Policies (cont'd)

E. Derivative Liabilities

In accordance with ASC 815-40-25 and ASC 815-10-15 Derivatives and Hedging and ASC 480-10-25 Liabilities-Distinguishing Liabilities from Equity, the embedded derivatives associated with the Convertible Bonds are accounted for as a liability during the term of the related Convertible Bonds (see Note 6).

F. Recently Adopted Accounting Pronouncements

The Company does not believe that the adoption of any recently issued accounting pronouncements in 2017 had a significant impact on our financial position, results of operations, or cash flow.

Note 3 - Stockholders' Equity

A. 2011 Equity Incentive Stock Option Plan

During the three months ended March 31, 2017, the Company granted the following options from the 2011 Equity Incentive Plan for employees, directors and consultants, to purchase as non-cash compensation:

- i. 25,000 shares of Common Stock to a senior officer at an exercise price of \$0.01 per share. The options vested upon grant and are exercisable through December 31, 2026. The fair value of the options at the date of grant amounted to approximately \$34,000.
- ii. 1,555,000 shares of Common Stock to senior officers, staff members and consultants at an exercise price of \$0.01 per share. The options vested upon grant and are exercisable through January 1, 2027. The fair value of the options at the date of grant amounted to approximately \$2,116,000.
- iii. 35,000 shares of Common Stock to senior officers at an exercise price of \$0.01 per share. The options vested upon grant and are exercisable through January 4, 2027. The fair value of the options at the date of grant amounted to approximately \$48,000.
- iv. 20,000 shares of Common Stock to a consultant at an exercise price of \$0.01 per share. The options vested upon grant and are exercisable through January 11, 2027. The fair value of the options at the date of grant amounted to approximately \$27,000

Notes to Financial Statements

Note 3 - Stockholders' Equity (cont'd)

B. Stock Options

The stock option transactions since January 1, 2017 are shown in the table below:

| | Number of shares | Weighted Average exercise price US\$ |
|--|------------------|--------------------------------------|
| Outstanding, December 31, 2016 | 4,166,943 | 1.58 |
| Changes during 2017 to: | | |
| Granted to employees, officers, directors and others * | 1,635,000 | 0.01 |
| Expired/Cancelled/Forfeited | (185,000) | 2.16 |
| Exercised | (1,224,000) | 0.01 |
| Outstanding, March 31, 2017 | 4,392,943 | 1.41 |
| Exercisable, March 31, 2017 | 4,392,943 | 1.41 |

^{*} The receipt of a stock option grant by the grantee recipient is a non-taxable event according to the Internal Revenue Service. The grantee who later chooses to exercise stock options must recognize the market value in income in the year of exercise.

The following table summarizes information about stock options outstanding as of March 31, 2017:

| Shares underlying outstanding options (fully vested) | | | | |
|--|-----------------------|---|------------------------------------|--|
| Range of exercise price | Number Outstanding | Weighted average remaining contractual life (years) | Weighted Average Exercise price | |
| US\$ | | | US\$ | |
| 0.01 | 20,000 | 6.62 | 0.01 | |
| 0.01 | 15,000 | 7.01 | 0.01 | |
| 0.01 | 5,000 | 7.20 | 0.01 | |
| 0.01 | 4,500 | 8.05 | 0.01 | |
| 0.01 | 20,500 | 8.35 | 0.01 | |
| 0.01 | 10,000 | 8.51 | 0.01 | |
| 0.01 | 25,000 | 8.75 | 0.01 | |
| 0.01 | 408,000 | 9.18 | 0.01 | |
| 0.01 | 735,000 | 9.75 | 0.01 | |
| 0.01 | 10,000 | 9.76 | 0.01 | |
| 1.38 | 108,000 | 3.76 | 1.38 | |
| 1.38 | 133,057 | 7.76 | 1.38 | |
| 1.55 | 400,000 | 5.18 | 1.55 | |
| 1.67 | 390,000 | 3.51 | 1.67 | |
| 1.67 | 458,886 | 7.51 | 1.67 | |
| 1.70 | 120,000 | 1.73 | 1.70 | |
| 1.70 | 298,500 | 5.73 | 1.70 | |
| 1.73 | 25,000 | 1.78 | 1.73 | |
| 1.82 | 25,000 | 0.20 | 1.82 | |

| 1.86 | 25,000 | 1.68 | 1.86 |
|-----------|-----------|------|------|
| 1.87 | 25,000 | 4.84 | 1.87 |
| 1.95 | 25,000 | 3.01 | 1.95 |
| 1.96 | 25,000 | 2.43 | 1.96 |
| 2.03 | 25,000 | 4.09 | 2.03 |
| 2.28 | 25,000 | 2.28 | 2.28 |
| 2.61 | 150,000 | 0.68 | 2.61 |
| 2.61 | 881,500 | 4.68 | 2.61 |
| 0.01-2.61 | 4,392,943 | | 1.41 |

Notes to Financial Statements

Note 3 - Stockholders' Equity (cont'd)

Granted to employees

The following table sets forth information about the weighted-average fair value of options granted to employees and directors during the year, using the Black Scholes option-pricing model and the weighted-average assumptions used for such grants:

| | | For the three ended M | |
|---|----|-----------------------|-------------|
| | | 2017 | 2016 |
| Weighted-average fair value of underlying stock at grant date | \$ | 1.37 | \$ 1.81 |
| Dividend yields | | | _ |
| Expected volatility | | 60% | 62%-69% |
| Risk-free interest rates | | 1.86%-1.93% | 1.01%-1.76% |
| Expected lives (in years) | | 5.00 | 3.00-5.50 |
| Weighted-average grant date fair value | S | 1.36 | \$ 1.56 |

Granted to non-employees

The following table sets forth information about the weighted-average fair value of options granted to non-employees during the year, using the Black Scholes option-pricing model and the weighted-average assumptions used for such grants:

| | For the three months ended March 31, | | | | |
|---|--------------------------------------|------------|------------|--|--|
| | | 2017 | 2016 | | |
| Weighted-average fair value of underlying stock at grant date | \$ | 1.36 | \$ | | |
| Dividend yields | | | | | |
| Expected volatility | | 68% | | | |
| Risk-free interest rates | 2 | .36%-2.45% | | | |
| Expected lives (in years) | | 10.00 | | | |
| Weighted-average grant date fair value | \$ | 1.36 | S — | | |

Notes to Financial Statements

Note 3 - Stockholders' Equity (cont'd)

The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the options.

The expected life represents the weighted average period of time that options granted are expected to be outstanding. The expected life of the options granted to employees and directors is calculated based on the Simplified Method as allowed under Staff Accounting Bulletin No. 110 ("SAB 110"), giving consideration to the contractual term of the options and their vesting schedules, as the Company does not have sufficient historical exercise data at this time. The expected life of the option granted to non-employees equals their contractual term. In the case of an extension of the option life, the calculation was made on the basis of the extended life.

C. Compensation Cost for Warrant and Option Issuances

The following table sets forth information about the compensation cost of warrant and option issuances recognized for employees and directors:

For the three months ended March 31,

| 2017 | 2016 | | | | |
|-----------|---------|--|--|--|--|
| US\$ | US\$ | | | | |
| 2,015,000 | 172,000 | | | | |

The following table sets forth information about the compensation cost of warrant and option issuances recognized for non-employees:

For the three months ended March 31,

| 2017 | 2016 |
|---------|-------------|
| US\$ | US\$ |
| 210,000 | |

The following table sets forth information about the compensation cost of option issuances recognized for employees and capitalized to Unproved Oil & Gas properties:

For the three months ended March 31.

| | , |
|---------|-------------|
| 2017 | 2016 |
| US\$ | US\$ |
| 191,000 | |

D. Dividend Reinvestment and Stock Purchase Plan ("DSPP")

On March 27, 2014, the Company launched its Dividend Reinvestment and Stock Purchase Plan (the "DSPP") pursuant to which stockholders and interested investors can purchase shares of the Company's Common Stock as well as units of the Company's securities. The terms of the DSPP are described in the Prospectus Supplement originally filed on March 31, 2014 (the "Original Prospectus Supplement") with the Securities and Exchange Commission ("SEC") under the Company's effective registration Statement on Form S-3, as thereafter amended.

On January 13, 2015, the Company amended the Original Prospectus Supplement ("Amendment No. 3") to provide for a unit option

Notes to Financial Statements

Note 3 - Stockholders' Equity (cont'd)

(the "Unit Option") under the DSPP comprised of one share of Common Stock and three Common Stock purchase warrants with each unit priced at \$4.00. Each warrant afforded the investor or stockholder the opportunity to purchase the Company's Common Stock at a warrant exercise price of \$1.00. Each of the three warrants series have different expiration dates that have been extended.

The warrants became first exercisable on May 2, 2016 and, in the case of ZNWAB continued to be exercisable through May 2, 2017, May 2, 2018 for ZNWAC (2 years) and May 2, 2019 for ZNWAD (3 years), respectively, at a per share exercise price of \$1.00.

On November 1, 2016, the Company launched a unit offering (the "Unit Program") under the Company's DSPP pursuant to which stockholders and interested investors could purchase units comprised of seven (7) shares of Common Stock and seven (7) Common Stock purchase warrants, at a per unit purchase price of \$10. The warrant shall have the symbol "ZNWAE." On January 30, 2017, the Company extended the Unit Option program that was filed under Amendment No. 7, dated November 1, 2016. The Unit Program continued as under Amendment No. 7, but with a revised time period. Otherwise, the same Unit Program features, conditions and terms in the Prospectus Supplement and Amendment No. 2 applied. The Company's Unit Option Program began on November 1, 2016 and was to terminate January 31, 2017, but was extended until March 31, 2017. This Unit Program terminated on March 31, 2017.

The ZNWAE warrants became exercisable on May 1, 2017, which is the 31st day following the Unit Option Termination Date (i.e., on March 31, 2017) and continue to be exercisable through May 1, 2020 (3 years) at a per share exercise price of \$1.00. If the Company's Common Stock trades above \$5.00 per share at the closing price for 15 consecutive trading days at any time prior to the expiration date of the warrant, the Company has the sole discretion to terminate the warrant early upon providing 60 days advanced notice to warrant holders.

As of March 31, 2017, the number of outstanding warrants for each warrant issue is shown below:

| Warrant | ZNWAA | ZNWAB | Z | NWAC | ZNWAD | ZNWAE |
|---|------------|------------|----|---------|------------|------------|
| Exercise Price/Warrant | \$ 2.00 | \$ 1.00 | \$ | 1.00 | \$ 1.00 | \$ 1.00 |
| Outstanding/Exercisable Warrants @ March 31, 2017 | 1,566,595 | 289,446 | | 333,273 | 340,558 | 4,028,598 |

As of May 2, 2017, any outstanding ZNWAB warrants expired.

For the three months ended March 31, 2017, approximately \$5,218,000 was raised under the DSPP program, of which \$650,000 is recognized as other receivables as of March 31, 2017. During April 2017, all the funds were collected. As a result, the Company issued approximately 3,717,000 shares of its Common Stock during the same period.

The total amount of funds received from the DSPP, including the exercise of warrants, from the inception date through March 31, 2017 is approximately \$18,243,000.

On February 23, 2017, the Company filed a Form S-3 with the SEC (Registration No. 333-216191) as a replacement for the Form S-3 (Registration No. 333-193336), in which the three (3) year period was ending March 31, 2017, along with the base Prospectus and Supplemental Prospectus. The Form S-3, as amended, and the new base Prospectus became effective on March 10, 2017, along with the Prospectus Supplement that was filed and became effective on March 10, 2017. The Prospectus Supplement under Registration No. 333-216191 describes the terms of the DSPP and replaces the prior Prospectus Supplement, as amended, under the prior Registration No. 333-193336.

E. Warrant Descriptions

The price and the expiration dates for the series of warrants to investors are as follows:

| | Period of Grant | US\$ | Expiration Date | |
|------------------|----------------------------|------|------------------------|--|
| | | | | |
| ZNWAA Warrants | March 2013 – December 2014 | 2.00 | January 31, 2020 | |
| ZNWAB Warrants * | January 2015 – March 2016 | 1.00 | May 02, 2017 | |
| ZNWAC Warrants | January 2015 – March 2016 | 1.00 | May 02, 2018 | |
| ZNWAD Warrants | January 2015 – March 2016 | 1.00 | May 02, 2019 | |
| ZNWAE Warrants | November 2016 – March 2017 | 1.00 | May 01, 2020 | |

^{*} Unexercised ZNWAB warrants were expired as of the filing date of this report.

Notes to Financial Statements

Note 4 - Unproved Oil and Gas Properties, Full Cost Method

Unproved oil and gas properties, under the full cost method, are comprised as follows:

| | March 31, 2017 | December 31, 2016 |
|---|-------------------|-------------------|
| | US\$ thousands | US\$ thousands |
| Excluded from amortization base: | | |
| Inventory, and other operational related costs | 3,477 | 1,770 |
| Capitalized salary costs | 1,824 | 1,579 |
| Legal costs, license fees and other preparation costs | 3,121 | 3,018 |
| Other costs | 30 | 30 |
| | 8,452 | 6,397 |

Note 5 - Senior Convertible Bonds

Rights Offering -10% Senior Convertible Notes due May 2, 2021

On October 21, 2015, the Company filed with the SEC a prospectus supplement for a rights offering. Under the rights offering, the Company distributed at no cost, 360,000 non-transferable subscription rights to subscribe for, on a per right basis, two 10% Convertible Senior Bonds par \$100 due May 2, 2021 (the "Notes"), to persons who owned shares of the Company's Common Stock on October 15, 2015, the record date for the offering. Each whole subscription right entitled the participant to purchase two convertible bonds at a purchase price of \$100 per bond. Effective October 21, 2015, the Company executed a Supplemental Indenture, as issuer, with the American Stock Transfer & Trust Company, LLC, a New York limited liability trust company ("AST"), as trustee for the Notes (the "Indenture").

The offering was scheduled to terminate on January 15, 2016 but was extended to March 31, 2016. On March 31, 2016, the rights offering terminated.

On May 2, 2016, the Company issued approximately \$3,470,000 aggregate principal amount of Notes in connection with the rights offering. The Company received net proceeds of approximately \$3,334,000, from the sale of the Notes, after deducting fees and expenses of \$136,000 incurred in connection with the offering. These costs have been discounted as deferred offering costs.

The Notes contain a convertible option that gives rise to a derivative liability, which is accounted for separately from the Notes (see below and Note 8). Accordingly, the Notes were initially recognized at fair value of approximately \$1,844,000, which represents the principal amount of \$3,470,000 from which a debt discount of approximately \$1,626,000 (which is equal to the fair value of the convertible option) was deducted.

During the three months ended March 31, 2017, the Company recorded approximately \$7,000 in amortization expense related to the deferred financing costs, and approximately \$51,000 in debt discount amortization, net. The Notes are governed by the terms of the Indenture. The Notes are senior unsecured obligations of the Company and bear interest at a rate of 10% per year, payable annually in arrears on May 2 of each year, commencing May 2, 2017. The Notes will mature on May 2, 2021, unless earlier redeemed by the Company or converted by the holder.

Interest and principal may be paid, at the Company's option, in cash or in shares of the Company's Common Stock. The number of shares for the payment of interest in shares of Common Stock, in lieu of the cash amount, will be based on the average of the closing prices of the Company's Common Stock as reported by Bloomberg L.P. for the 30 trading days preceding the record date for the

payment of interest; such record date has been designated and will always be the 10th business day prior to the interest payment date on May 2 of each year. The number of shares for the payment of principal, in lieu of the cash amount, shall be based upon the average of the closing price of the Company's Common Stock as reported by Bloomberg L.P. for the 30 trading days preceding the principal repayment date; such record date has been designated as the trading day immediately prior to the 30-day period preceding the maturity date of May 2, 2021. Fractional shares will not be issued and the final number of shares will be rounded up to the next whole share.

At any time prior to the close of business on the business day immediately preceding April 2, 2021, holders may convert their notes into Common Stock at the conversion rate of 44 shares per \$100 bond (which is equivalent to a conversion rate of approximately \$2.27 per share). The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of stock dividends and payment of cash dividends.

Beginning May 3, 2018, the Company is entitled to redeem for cash the outstanding Notes at an amount equal to the principal and accrued and unpaid interest, plus a 10% premium. No "sinking fund" is provided for the Notes due May 2021, which means that the Company is not required to periodically redeem or retire the Notes due May 2021.

Notes to Financial Statements

Note 5 - Senior Convertible Bonds (cont'd)

Through the three months ended March 31, 2017, approximately 14 convertible bonds of \$100 each have been converted under this offering at a conversion rate of approximately \$2.27 per share. As a result, the Company issued approximately 600 shares of its Common Stock during the same period.

| | N | March 31, 2017 US\$ | De | 2016 US\$ |
|--|----|---------------------------|----|--------------|
| 10% Senior Convertible Bonds, net of debt discount on derivative liability of \$1,626,000 on the day | | | | |
| of issuance | \$ | 1,844,000 | \$ | 1,844,000 |
| Debt discount amortization, net | \$ | 164,000 | \$ | 113,000 |
| Bonds converted to shares | \$ | (14,000) | \$ | (13,000) |
| Offering cost, net | \$ | (111,000) | \$ | (118,000) |
| 10% senior Convertible bonds – Long Term Liability | \$ | 1,883,000 | \$ | 1,826,000 |

The Company recognized \$86,000 and \$231,000 in interest expense for the three months ended March 31, 2017, and for the year ended December 31, 2016, respectively, related to the Notes, payable for the first time and in arrears on May 2, 2017. See Subsequent Events for data on the payment of interest in kind on May 2, 2017.

Note 6 - Derivative Liability

The Notes issued by the Company and discussed in Note 5 contain a convertible option that gives rise to a derivative liability.

The debt instrument the Company issued includes a make-whole provision, which provides that in the event of conversion by the investor under certain circumstances, the issuer is required to deliver to the holder additional consideration beyond the settlement of the conversion obligation.

Because time value make-whole provisions are not clearly and closely related to the debt host and would meet the definition of a derivative if considered freestanding, they should be evaluated under the indexation guidance to determine whether they would be afforded the scope exception pursuant to ASC 815-10-15-74(a). This evaluation is generally performed in conjunction with the analysis of the embedded conversion feature.

The Company has measured its derivative liability at fair value and recognized the derivative value as a current liability and recorded the derivative value on its balance sheet. The fair value of the shares to be issued upon conversion of the Notes was recorded as a derivative liability, with the change in the fair value recorded as a gain or loss in the accompanying statement of operations.

The valuation of the Notes was done by using the Binomial Model, a well-accepted option-pricing model, and based on the Notes' terms and other parameters the Company identified as relevant for the valuation of the Notes' Fair Value.

The Binomial Model used the forecast of the Company share price during the Note's contractual term.

Notes to Financial Statements

Note 6 - Derivative Liability (cont'd)

As of March 31, 2017, the Company's liabilities that are measured at fair value are as follows:

| | | Maro 20 | | ! , | | December 31, 2016 | | | |
|--|----|---------------|----|------------|---------|----------------------|-------|---------|--|
| |] | Level 3 Total | | Total | Level 3 | | Total | | |
| | | US\$ | | | | US\$ | | | |
| Fair value of derivative liability at March 31, 2017 | \$ | 622,000 | \$ | 622,000 | \$ | 895,000 | \$ | 895,000 | |

Change in value of derivative liability during 2017 are as follows:

| | US\$ thousands |
|--|-------------------|
| Derivative liability fair value at December 31, 2016 | 895 |
| Gain on derivative liability | (273) |
| Derivative liability fair value at March 31, 2017 | 622 |

The following table presents the assumptions that were used for the model as of March 31, 2017:

| | March 31, 2017 | Do | December 31, 2016 | | |
|--|-------------------|--------------------|-------------------|--|--|
| Convertible Option Fair Value of approximately | \$ 622,00 | \$ | 895,000 | | |
| Annual Risk-free Rate | 1.7 | 1.75% 1.86% | | | |
| Volatility | 49.8 | 5% | 57.56% | | |
| Expected Term (years) | 4.0 |) | 4.34 | | |
| Convertible Notes Face Value | \$ 3,455,70 | \$ | 3,457,100 | | |
| Expected annual yield on Regular Notes | 28.7 | 7% | 28.77% | | |
| Price of the Underlying Stock | \$ 1.2 | \$ | 1.37 | | |

During the three months ended March 31, 2017, the Company recorded unrealized gains of approximately \$273,000 (net) within the Statements of Operations line item, gain on derivative liability. A slight change in an unobservable input like volatility could have a significant impact on the fair value measurement of the derivative liability.

Note 7 - Commitments and Contingencies

A. Litigation

From time to time, the Company may be subject to routine litigation, claims, or disputes in the ordinary course of business. The Company defends itself vigorously in all such matters. In the opinion of management, no pending or known threatened claims, actions or proceedings against the Company are expected to have a material adverse effect on its financial position, results of operations or cash flows. However, the Company cannot predict with certainty the outcome or effect of any such litigation or investigatory matters or any other pending litigation or claims. There can be no assurance as to the ultimate outcome of any such lawsuits and investigations.

Notes to Financial Statements

Note 7 - Commitments and Contingencies (cont'd)

B. Environmental and Onshore Licensing Regulatory Matters

The Company is engaged in oil and gas exploration and production and may become subject to certain liabilities as they relate to environmental cleanup of well sites or other environmental restoration procedures and other obligations as they relate to the drilling of oil and gas wells or the operation thereof. Various guidelines have been published in Israel by the State of Israel's Petroleum Commissioner and Energy and Environmental Ministries since 2012 as it pertains to oil and gas activities. Mention of these guidelines was included in previous Zion Oil & Gas filings.

On May 16, 2016, the Energy Ministry issued new guidelines for the preparation and submission of a drilling program in accordance with industry best practices or "Good Oilfield Practice."

On May 17, 2016, the Energy Ministry issued new guidelines for production testing in accordance with "Good Industry Practice" detailing the applicable measures and reporting requirements.

On June 28, 2016, the Energy Ministry issued new guidelines for occupational health and safety practices regarding oil and gas drilling and production activities per international norms, coupled with Israeli legal safety guidelines. These regulations focus on industry best practices in the area of health, safety, and environmental (HS&E) factors as well as risk management. In addition, there is a new requirement to have the Petroleum Commissioner's approval over the safety standards which the operator seeks to apply.

The Company believes that these new regulations are likely increase both the time and the expenditures associated with obtaining new exploration rights and drilling new wells.

C. Capitalized lease

During 2017, the Company signed a capital lease agreement to purchase a vehicle, on which a down payment of \$15,000 was paid by the Company. The lease period is for 44 months (approximately 3.7 years, hereinafter the "lease period") starting on March 25, 2017 and ending on October 24, 2020. The lease bears a monthly payment in the amount of approximately NIS 4,000 (approximately \$1,100) per month, at the exchange rate in effect for the date of this report and is linked to an increase (but not a decrease) in CPI. The lease bears a purchase option in the end of the lease period in the amount of approximately NIS 75,000 (approximately \$21,000) at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in CPI.

A capital lease asset and a capital lease obligation were recognized in the Company's balance sheet in the amount of approximately \$71,000, based on the fair value of the vehicle at the starting date of the lease. The net carrying value of the capital lease asset was approximately \$71,000 as of March 31, 2017. The capital lease asset is being depreciated using the straight-line method over its estimated useful life expectancy of approximately seven years. As of March 31, 2017, the accumulated depreciation of the capital lease asset amounted to less than \$1,000.

At March 31, 2017, future minimum payments due under capital lease were:

| | US\$ thousands |
|---|-------------------|
| 2017 | 10 |
| 2018 | 13 |
| 2019 | 13 |
| 2020 | 32 |
| Less: portion representing imputed interest | (12) |
| Capital lease obligations | |

TIOO

The Financial Accounting Standards Board ("FASB") has been contemplating changes that impact capital leases. Any final changes resulting from the FASB are not expected to have a material impact on Zion's financial statements as it relates to the capital lease described above.

Notes to Financial Statements

Note 7 - Commitments and Contingencies (cont'd)

D. Bank Guarantees

As of March 31, 2017, the Company provided bank guarantees to various governmental bodies (approximately \$1,662,000) and others (approximately \$81,000) in respect of its drilling operation in an aggregate amount of approximately \$1,743,000. The funds backing these guarantees and additional amounts added to support currency fluctuations as required by the bank are held in interest-bearing accounts and are reported on the Company's balance sheets as fixed short and long term bank deposits – restricted.

Note 8 - Subsequent Events

- (i) On April 17, 2017, the Company granted options under the 2011 Equity Incentive Plan to employees and consultants to purchase 90,000 shares of Common Stock at an exercise price of \$0.01 per share. The options vested upon grant and are exercisable through April 17, 2027. The fair value of the options at the date of grant amounted to approximately \$104,000.
- (ii) Approximately \$225,000 was collected through the Company's DSPP Program during the period April 1 through April 30, 2017.
- (iii) On May 1, 2017, the Company granted options under the 2011 Non-Employee Directors Stock Option Plan, to purchase 25,000 shares of Common Stock to a new board member at an exercise price of \$1.33 per share. The options vested upon grant and are exercisable through May 1, 2023. The fair value of the options at the date of grant amounted to approximately \$11,000.00.
- (iv) On May 2, 2017, the Company paid its annual 10% interest to its bondholders of record on April 18, 2017. The interest was paid-in-kind ("PIK") in the form of Common Stock. An average Zion stock price of \$1.196 was determined based on the 30 trading days prior to the record date of April 18, 2017. This figure was used to divide into 10% of the par value of the bonds held by the holders. The Company issued 288,965 shares to the accounts of its bondholders.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

THE FOLLOWING DISCUSSION SHOULD BE READ IN CONJUNCTION WITH OUR UNAUDITED INTERIM FINANCIAL STATEMENTS AND THE RELATED NOTES TO THOSE STATEMENTS INCLUDED IN THIS FORM 10-Q. SOME OF OUR DISCUSSION IS FORWARD-LOOKING AND INVOLVES RISKS AND UNCERTAINTIES. FOR INFORMATION REGARDING RISK FACTORS THAT COULD HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS, REFER TO THE DISCUSSION OF RISK FACTORS IN THE "DESCRIPTION OF BUSINESS" SECTION OF OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2016, FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Forward-Looking Statements

Certain statements made in this discussion are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements may materially differ from actual results.

Forward-looking statements can be identified by terminology such as "may", "should", "expects", "intends", "anticipates", "believes", "estimates", "predicts", or "continue" or the negative of these terms or other comparable terminology and include, without limitation, statements regarding:

- our ability to explore for and develop oil and natural gas resources successfully and economically;
- our liquidity and our ability to raise capital to finance our exploration and development activities;
- the quality of our license areas with regard to, among other things, the existence of reserves in economic quantities;
- the likelihood of being granted new or revised petroleum exploration rights by Israeli authorities;
- the availability of equipment, such as drilling rigs, oil transport trucks, and transportation pipelines and the cost thereof;
- the impact of governmental regulations, permitting and other legal requirements in Israel relating to onshore exploratory drilling and production;
- our estimates of the timing and number of exploratory wells we expect to drill and other exploration activities and planned expenditures and the time frame within which they will be undertaken;
- changes in our drilling plans and related budgets;
- anticipated trends in our business;
- our future results of operations;
- our capital expenditure program;
- future market conditions in the oil and gas industry; and
- demand for oil and natural gas, both locally in Israel, regionally, and globally.

Overview

Zion Oil and Gas, Inc., a Delaware corporation, is an oil and gas exploration company with a history of over 17 years of oil and gas exploration in Israel. We were incorporated in Florida on April 6, 2000 and reincorporated in Delaware on July 9, 2003. We completed our initial public offering in January 2007. Our common stock, par value \$0.01 per share (the "Common Stock"), currently trades on the NASDAQ Global Market under the symbol "ZN" and our Common Stock warrant under the symbol "ZNWAA."

Zion currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License ("MJL"), comprising approximately 99,000 acres. The Company has constructed and mobilized the drilling rig to the specific drill pad location from which to drill its next exploration well, which it plans to spud within the second quarter of 2017. The drilling of this well to the desired depth is subject to the Company raising sufficient funds through capital raising efforts currently being planned by management.

Depending on the results of the planned exploratory well and having adequate cash resources, multiple wells could be drilled from this pad site, as several subsurface geologic targets can be reached using directional well trajectories.

At present, we have no revenues or operating income. Our ability to generate future revenues and operating cash flow will depend on the successful exploration and exploitation of our current and any future petroleum rights or the acquisition of oil and/or gas producing properties, and the volume and timing of such production. In addition, even if we are successful in producing oil and gas in commercial quantities, our results will depend upon commodity prices for oil and gas, as well as operating expenses including taxes and royalties.

Our executive offices are located at 12655 North Central Expressway, Suite 1000, Dallas, Texas 75243, and our telephone number is (214) 221-4610. Our branch office's address in Israel is 9 Halamish Street, North Industrial Park, Caesarea 3088900, and the telephone number is +972-4-623-8500. Our website address is: www.zionoil.com.

Current Exploration and Operation Efforts

Megiddo-Jezreel Petroleum License

Zion currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License (covering an area of approximately 99,000 acres – See Map 1). Under Israeli law, Zion has an exclusive right to oil and gas exploration in our license area in that no other company may drill there. In the event we drill an oil or gas discovery in our license area, current Israeli law entitles us to convert the relevant portions of our license to a 30-year production lease, extendable to 50 years, subject to compliance with a field development work program and production.



Map 1. Zion's Megiddo-Jezreel Petroleum Exploration License as of March, 2017.

The Megiddo-Jezreel License ("MJL") was awarded on December 3, 2013 for a three-year primary term through December 2, 2016, with the possibility of additional one-year extensions up to a maximum of seven years. The MJL (~99,000 acres) is onshore, south and west of the Sea of Galilee.

On October 6, 2016, Zion entered into a drilling contract with S.A. DAFLOG S.R.L., an Israeli-registered affiliate of DAFORA S.A. DAFORA is the largest drilling company in Romania and has drilled over 1,000 wells in Romania, Eastern Europe and

East Africa. Zion will use DAFORA's F-400 drilling rig which has a 3,000 HP capacity drawworks capable of drilling to over 7,000 meters (approximately 23,000 feet). This provides sufficient horsepower and safety factor to drill our planned well with a target depth of up to 4,500 meters (approximately 15,000 feet).

The process of securing an appropriate drilling rig and crew with which to drill the MJ #1 exploratory well was long and complicated. As such, Zion submitted a drilling date extension request to the Petroleum Commissioner on November 7, 2016. Key details of the extension request are outlined below:

| <u>NO.</u> | ACTIVITY DESCRIPTION | TO BE CARRIED OUT BY: |
|------------|--|-----------------------|
| 1 | Begin drilling / spud well | 30 June 2017 |
| 2 | Submit final report on the results of drilling | 1 November 2017 |
| 3 | Submit a plan for continued work in the license area | 1 December 2017 |

On November 29, 2016, the Company received notification from the State of Israel's Petroleum Commissioner officially approving the Company's drilling date extension

Since receiving the aforementioned extension, the drill site plan was prepared by an outside engineering firm to accommodate DAFORA's F-400 Rig. Zion awarded the drill site construction contract to an Israeli company. The final step in the process is for Zion to receive approval for our Application for Permit to Drill which has been submitted. Drill site construction started in late December 2016, and was completed in February, 2017. Upon completion of the access road and drill site, Zion commenced rig mobilization to the MJ#1 location. It has accepted all loads of the Israeli based equipment on location and commenced rig-up. It expects to finalize rig-up and commence acceptance testing, assuming no customs, weather or regulatory delays in May 2017. The drilling, completion and testing of the well will be subject to raising the necessary capital of which no assurances can be provided. As of the date of this report, the Company has cash resources to commence drilling the well but does not yet have the cash resources to drill the MJ #1 well to the planned total depth of 4,500 meters (approximately 15,000 feet).

Zion's Former Asher-Menashe and Joseph Licenses

Zion has plugged all of its exploratory wells on its former Asher-Menashe and Joseph License areas, and the reserve pits have been evacuated, but acknowledges its obligation to complete the abandonment of these well sites in accordance with guidance from the Energy Ministry, Environmental Ministry and local officials. We continue to make significant progress toward fully abandoning all these sites.

Onshore Licensing, Oil and Gas Exploration and Environmental Guidelines

The Company is engaged in oil and gas exploration and production and may become subject to certain liabilities as they relate to environmental cleanup of well sites or other environmental restoration procedures and other obligations as they relate to the drilling of oil and gas wells or the operation thereof. Various guidelines have been published in Israel by the State of Israel's Petroleum Commissioner, the Energy Ministry, and the Environmental Ministry since 2012 as it pertains to oil and gas activities. Mention of these guidelines was included in previous Zion Oil & Gas filings.

We believe that these new regulations are likely to increase the expenditures associated with obtaining new exploration rights and drilling new wells. The company expects that an additional financial burden could occur as a result of the Ministry requiring cash reserves that could otherwise be used for operational purposes.

Capital Resources Highlights

We need to raise significant funds to finance the drilling and testing of MJ #1 exploratory well and maintain orderly operations. To date, we have funded our operations through the issuance of our securities and convertible debt. We will need to continue to raise funds through the issuance of equity and/or debt securities (or securities convertible into or exchangeable for equity securities). No assurance can be provided that we will be successful in raising the needed equity on terms favorable to us (or at all).

The Dividend Reinvestment and Stock Purchase Plan

On March 27, 2014, the Company launched its Dividend Reinvestment and Stock Purchase Plan (the "DSPP") pursuant to which stockholders and interested investors can purchase shares of the Company's Common Stock as well as units of the Company's securities. The terms of the DSPP are described in the Prospectus Supplement originally filed on March 31, 2014 (the "Original Prospectus Supplement") with the Securities and Exchange Commission ("SEC") under the Company's effective registration Statement on Form S-3, as thereafter amended.

On January 13, 2015, the Company amended the Original Prospectus Supplement ("Amendment No. 3") to provide for a unit option (the "Unit Option") under the DSPP comprised of one share of Common Stock and three Common Stock purchase warrants with each unit priced at \$4.00. Each warrant afforded the investor or stockholder the opportunity to purchase the Company's Common Stock at a warrant exercise price of \$1.00. Each of the three warrants series have different expiration dates that have been extended.

The warrants became first exercisable on May 2, 2016 and continued to be exercisable through May 2, 2017 for ZNWAB (1 year), and continue to be exercisable to May 2, 2018 for ZNWAC (2 years) and May 2, 2019 for ZNWAD (3 years), respectively, at a per share exercise price of \$1.00.

On November 1, 2016, the Company launched a unit offering (the "Unit Program") under the Company's DSPP pursuant to which stockholders and interested investors could purchase units comprised of seven (7) shares of Common Stock and seven (7) Common Stock purchase warrants, at a per unit purchase price of \$10.00. The warrant has the symbol "ZNWAE." On January 30, 2017, the Company extended the Unit Option Program that was filed under Amendment No. 7, dated November 1, 2016. The Unit Program continued under Amendment No. 7, but with a revised expiration date of March 31, 2017. Otherwise, the same Unit Program features, conditions and terms in the Prospectus Supplement and Amendment No. 2 applied.

The ZNWAE warrants became exercisable on May 1, 2017, which is the 31st day following the Unit Program Termination Date (i.e., on March 31, 2017) and continue to be exercisable through May 1, 2020 (3 years) at a per share exercise price of \$1.00. If the Company's Common Stock trades above \$5.00 per share at the closing price for 15 consecutive trading days at any time prior to the expiration date of the warrant, the Company has the sole discretion to terminate the warrant early upon providing 60 days advanced notice to warrant holders.

As of March 31, 2017, the number of outstanding warrants for each warrant issue is shown below:

| Warrant | ZNWAA | 7 | ZNWAB | Z | ZNWAC | 2 | ZNWAD | ZNWAE |
|---|------------|----|---------|----|---------|----|---------|------------|
| Exercise Price/Warrant | \$ 2.00 | \$ | 1.00 | \$ | 1.00 | \$ | 1.00 | \$ 1.00 |
| Outstanding/Exercisable Warrants @ March 31, 2017 | 1,566,595 | | 289,446 | | 333,273 | | 340,558 | 4,028,598 |

As of May 2, 2017, any outstanding ZNWAB warrants expired.

For the three months ended March 31, 2017, approximately \$5,218,000 was raised under the DSPP program, of which \$650,000 is recognized as other receivables. As a result, the Company issued approximately 3,717,000 shares of its Common Stock during the same period.

The total amount of funds received from the DSPP, including the exercise of warrants, from the inception date through March 31, 2017 is approximately \$18,243,000.

On February 23, 2017, the Company filed a Form S-3 with the SEC (Registration No. 333-216191) as a replacement for the

Form S-3 (Registration No. 333-193336), in which the three (3) year period was ending March 31, 2017, along with the base Prospectus and Supplemental Prospectus. The Form S-3, as amended, and the new base Prospectus became effective on March 10, 2017, along with the Prospectus Supplement that was filed and became effective on March 10, 2017. The Prospectus Supplement under Registration No. 333-216191 describes the terms of the DSPP and replaces the prior Prospectus Supplement, as amended, under the prior Registration No. 333-193336.

On October 21, 2015, we filed with the SEC a prospectus supplement for a rights offering. Under the rights offering, the Company distributed at no cost, 360,000 non-transferable subscription rights to subscribe for, on a per right basis, two 10% Convertible Senior Bonds par \$100 due May 2, 2021 (the "Notes"), to persons who owned shares of the Company's Common Stock on October 15, 2015, the record date for the offering. Each whole subscription right entitled the participant to purchase two convertible bonds at a purchase price of \$100 per bond. Effective October 21, 2015, the Company executed a Supplemental Indenture, as issuer, with the American Stock Transfer & Trust Company, LLC, a New York limited liability trust company ("AST"), as trustee for the Notes (the "Indenture").

The offering was originally scheduled to terminate on January 15, 2016 but was extended to March 31, 2016. On March 31, 2016, the rights offering terminated.

On May 2, 2016, the Company issued approximately \$3,470,000 aggregate principal amount of Notes in connection with the rights offering. The Company received net proceeds of approximately \$3,334,000, from the sale of the Notes, after deducting fees and expenses of \$136,000 incurred in connection with the offering. These costs have been discounted as deferred offering costs.

During the three months ended March 31, 2017, the Company recorded approximately \$7,000 in amortization expense related to the deferred financing costs, and approximately \$51,000 in debt discount amortization, net. The Notes are governed by the terms of the Indenture. The Notes are senior unsecured obligations of the Company and bear interest at a rate of 10% per year, payable annually in arrears on May 2 of each year, commencing May 2, 2017. The Notes will mature on May 2, 2021, unless earlier redeemed by the Company or converted by the holder.

Interest and principal may be paid, at the Company's option, in cash or in shares of the Company's Common Stock. The number of shares for the payment of interest in shares of Common Stock, in lieu of the cash amount, will be based on the average of the closing prices of the Company's Common Stock as reported by Bloomberg L.P. for the 30 trading days preceding the record date for the payment of interest; such record date has been designated and will always be the 10th business day prior to the interest payment date on May 2 of each year. The number of shares for the payment of principal, in lieu of the cash amount, shall be based upon the average of the closing price of the Company's Common Stock as reported by Bloomberg L.P. for the 30 trading days preceding the principal repayment date; such record date has been designated as the trading day immediately prior to the 30-day period preceding the maturity date of May 2, 2021. Fractional shares will not be issued, and the final number of shares will be rounded up to the next whole share.

At any time prior to the close of business on the business day immediately preceding April 2, 2021, holders may convert their notes into Common Stock at the conversion rate of 44 shares per \$100 bond (which is equivalent to a conversion rate of approximately \$2.27 per share). The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of stock dividends and payment of cash dividends.

Beginning May 3, 2018, the Company is entitled to redeem for cash the outstanding Notes at an amount equal to the principal and accrued and unpaid interest, plus a 10% premium. No "sinking fund" is provided for the Notes due May 2021, which means that the Company is not required to periodically redeem or retire the Notes due May 2021.

Through the three months ended March 31, 2017, approximately 14 convertible bonds of \$100 each have been converted under this offering at a conversion rate of approximately \$2.27 per share. As a result, the Company issued approximately 600 shares of its Common Stock during the same period.

For the three months ended March 31, 2017, and for the year ended December 31, 2016, the Company recognized interest expense of approximately \$86,000 and \$231,000, respectively, related to the Notes, payable for the first time and in arrears on May 2, 2017.

Principal Components of our Cost Structure

Our operating and other expenses primarily consist of the following:

- Impairment of Unproved Oil and Gas Properties: Impairment expense is recognized if a determination is made that a well will not be able to be commercially productive. The amounts include amounts paid in respect of the drilling operations as well as geological and geophysical costs and various amounts that were paid to Israeli regulatory authorities.
- General and Administrative Expenses: Overhead, including payroll and benefits for our corporate staff, costs of
 managing our exploratory operations, audit and other professional fees, and legal compliance are included in general
 and administrative expenses. General and administrative expenses also include non-cash stock-based compensation
 expense, investor relations related expenses, lease and insurance and related expenses.
- Depreciation, Depletion, Amortization and Accretion: The systematic expensing of the capital costs incurred to explore for natural gas and oil represents a principal component of our cost structure. As a full cost company, we capitalize all costs associated with our exploration, and apportion these costs to each unit of production, if any, through depreciation, depletion and amortization expense. As we have yet to have production, the costs of abandoned wells are written off immediately versus being included in this amortization pool.

Going Concern Basis

Since we have limited capital resources, no revenue to date and a loss from operations, our financial statements have been prepared on a going concern basis, which contemplates realization of assets and liquidation of liabilities in the ordinary course of business. The appropriateness of using the going concern basis is dependent upon our ability to obtain additional financing or equity capital and, ultimately, to achieve profitable operations. Therefore, there is substantial doubt about our ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Critical Accounting Policies

Management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expense during the reporting period.

Impairment of Oil and Gas Properties

We follow the full-cost method of accounting for oil and gas properties. Accordingly, all costs associated with acquisition, exploration and development of oil and gas reserves, including directly related overhead costs, are capitalized.

All capitalized costs of oil and gas properties, including the estimated future costs to develop proved reserves, are amortized on the unit-of-production method using estimates of proved reserves. Investments in unproved properties and major development projects are not amortized until proved reserves associated with the projects can be determined or until impairment occurs. If the results of an assessment indicate that the properties are impaired, the amount of the impairment is included in income from continuing operations before income taxes, and the adjusted carrying amount of the unproved properties is amortized on the unit-of-production method.

Our oil and gas property represents an investment in unproved properties. Oil and gas property in general is excluded from the amortized cost pool until proved reserves are found or until it is determined that the costs are impaired. All costs excluded are reviewed at least quarterly to determine if impairment has occurred. The amount of any impairment is charged to expense since a reserve base has not yet been established. Impairment requiring a charge to expense may be indicated through evaluation of drilling results, relinquishing drilling rights or other information.

Abandonment of properties is accounted for as an adjustment to capitalized costs. The net capitalized costs are subject to a "ceiling test" which limits such costs to the aggregate of the estimated present value of future net revenues from proved reserves discounted at ten percent based on current economic and operating conditions, plus the lower of cost or fair market value of unproved properties. The recoverability of amounts capitalized for oil and gas properties is dependent upon the identification of economically recoverable reserves, together with obtaining the necessary financing to exploit such reserves and the achievement of profitable operations.

The total net book value of our unproved oil and gas properties under the full cost method was \$8,452,000 at March 31, 2017.

Asset Retirement Obligation

We record a liability for any asset retirement obligation at fair value in the period in which it is incurred and a corresponding increase in the carrying amount of the related long lived assets.

Fair Value Considerations

The Company follows ASC 820, "Fair Value Measurements and Disclosures," as amended by Financial Accounting Standards Board (FASB) Financial Staff Position (FSP) No. 157 and related guidance. Those provisions relate to the Company's financial assets and liabilities carried at fair value and the fair value disclosures related to financial assets and liabilities. ASC 820 defines fair value, expands related disclosure requirements, and specifies a hierarchy of valuation techniques based on the nature of the inputs used to develop the fair value measures. Fair value is defined as the price that would be received from the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, assuming the transaction occurs in the principal or most advantageous market for that asset or liability.

There are three levels of inputs to fair value measurements - Level 1, meaning the use of quoted prices for identical instruments in active markets; Level 2, meaning the use of quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in markets that are not active or are directly or indirectly observable; and Level 3, meaning the use of unobservable inputs. The Company uses Level 1 inputs for its fair value measurements whenever there is an active market, with actual quotes, market prices, and observable inputs on the measurement date. The Company uses Level 2 inputs for fair value measurements whenever there are quoted prices for similar securities in an active market or quoted prices for identical securities in an inactive market. The Company uses observable market data whenever available. The company uses Level 3 inputs in the Binomial Model used for the valuation of the derivative liability.

Derivative Liabilities

In accordance with ASC 815-40-25 and ASC 815-10-15 Derivatives and Hedging and ASC 480-10-25 Liabilities-Distinguishing Liabilities from Equity, the embedded derivatives associated with the Convertible Bonds are accounted for as liabilities during the term of the related Convertible Bonds.

RESULTS OF OPERATIONS

| | | For the three months ended March 31 | | |
|---------------------------------------|---------------|-------------------------------------|--|--|
| | 2017 | 2016 | | |
| | (US \$ in the | ousands) | | |
| Operating costs and expenses: | | | | |
| General and administrative expenses | 2,847 | 1,172 | | |
| Other | 676 | 391 | | |
| Subtotal Operating costs and expenses | 3,523 | 1,563 | | |
| Gain on derivative liability | (273) | | | |
| Other expense (income), net | 125 | (11) | | |
| Net loss | 3,375 | 1,552 | | |

Revenue. We currently have no revenue generating operations.

Operating costs and expenses. Operating costs and expenses for the three months ended March 31, 2017 were \$3,523,000 compared to \$1,563,000 for the three months ended March 31, 2016. The increase in operating costs and expenses during the three months ended March 31, 2017 compared to the corresponding period in 2016 is primarily attributable to an increase in general and administrative expenses driven by the non-cash expenses associated with stock option grants, and by an increase in other expenses.

General and administrative expenses. General and administrative expenses for the three months ended March 31, 2017 were \$2,847,000, compared to \$1,172,000 for the three months ended March 31, 2016. The increase in general and administrative expenses during the three months ended March 31, 2017 compared to the corresponding period in 2016 is primarily attributable to higher non-cash expenses recorded in connection with stock option grants during 2017.

Other expenses. Other expenses during the three months ended March 31, 2017 were \$676,000, compared to \$391,000 for the three months ended March 31, 2016. Other general and administrative expenses are comprised of non-compensation and non-professional expenses incurred. The increase in other general and administrative expenses during the three months ended March 31, 2017 compared to the corresponding period in 2016 is primarily attributable to higher marketing expenses.

Other expense (income), net. Other expense (income), net for the three months ended March 31, 2017 were \$125,000 compared to (\$11,000) for the three months ended March 31, 2016. The increase in other expense (income), net during the three months ended March 31, 2017 compared to the corresponding period in 2016 is primarily attributable to interest expense associated with our convertible bonds recorded during 2017.

Net Loss. Net loss for the three months ended March 31, 2017 was \$3,375,000 compared to \$1,552,000 for the three months ended March 31, 2016.

Liquidity and Capital Resources

Liquidity is a measure of a company's ability to meet potential cash requirements. As discussed above, we have historically met our capital requirements through the issuance of our securities as well as proceeds from the issuance of convertible debt, as well as proceeds from the exercise of warrants and options to purchase common equity.

Our ability to continue as a going concern is dependent upon obtaining the necessary financing to complete further exploration and development activities and generate profitable operations from our oil and natural gas interests in the future. Our current operations are dependent upon the adequacy of our current assets to meet our current expenditure requirements and the accuracy of management's estimates of those requirements. Should those estimates be materially incorrect, our ability to continue as a going concern will be impaired. Our unaudited interim financial statements for the three months ended March 31, 2017 have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. We have incurred a history of operating losses and negative cash flows from operations. Therefore, there is substantial doubt about our ability to continue as a going concern.

At March 31, 2017, we had approximately \$3,862,000 in cash and cash equivalents compared to \$3,192,000 at December 31, 2016, which does not include any restricted funds. Our working capital (current assets minus current liabilities) was \$5,004,000 at March 31, 2017 and \$3,025,000 at December 31, 2016.

As of March 31, 2017, we provided bank guarantees to various governmental bodies (approximately \$1,662,000) and others (approximately \$81,000) in respect of our planned exploratory drilling operations in the aggregate amount of approximately \$1,743,000. The funds securing these guarantees and additional amounts added to support currency fluctuations as required by the bank are held in interest-bearing accounts and are reported on the Company's balance sheets as fixed short and long term bank deposits – restricted.

During the three months ended March 31, 2017, cash used in operating activities totaled \$2,256,000. Cash provided by financing activities during the three months ended March 31, 2017 was \$4,565,000 and is primarily attributable to proceeds received from the DSPP. Net cash used in investing activities such as unproved oil and gas properties, other assets and restricted bank deposits was \$1,639,000 for the three months ended March 31, 2017.

We expect to incur additional significant expenditures to further our exploration programs. We estimate that, when we are not actively drilling a well, our expenditures are approximately \$530,000 per month excluding exploratory operational activities. However, when we become engaged in active drilling operations, we estimate an additional minimum expenditure of approximately \$2,500,000 per month. The above estimates are subject to change. Management believes that our existing cash balance, coupled with anticipated proceeds under the DSPP and/or unit program proceeds, will be sufficient to finance our plan of operations through June 2017. However, as of the date of this report, while we have enough cash on hand to spud the MJL exploratory well, we do not have sufficient cash resources on hand to drill to the desired total depth (TD) the planned MJL well.

Even if we raise the funds needed to drill the MJL well to TD, there are factors that can nevertheless adversely impact our ability to fund our operating needs, including (without limitation), unexpected or unforeseen cost overruns in planned non-drilling exploratory work (e.g., drilling and environmental permit acquisition costs, etc.) in existing license areas and the costs associated with extended delays in undertaking the required exploratory work, which is typical of what we have experienced in the past, or plugging and abandonment activities.

Reference is made to the discussion above under **Capital Resources Highlights** for information relating to working capital that we raised through March 31, 2017.

Off-Balance Sheet Arrangements

We do not currently use any off-balance sheet arrangements to enhance our liquidity or capital resource position, or for any other purpose.

Recently Issued Accounting Pronouncements

The Company does not believe that the adoption of any recently issued accounting pronouncements in 2017 had a significant impact on our financial position, results of operations, or cash flow.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is a broad term for the risk of economic loss due to adverse changes in the fair value of a financial instrument. These changes may be the result of various factors, including interest rates, foreign exchange rates, commodity prices and/or equity prices. In the normal course of doing business, we are exposed to the risks associated with foreign currency exchange rates and changes in interest rates.

Foreign Currency Exchange Rate Risks. A portion of our expenses, primarily labor expenses and certain supplier contracts, are denominated in New Israeli Shekels ("NIS"). As a result, we have significant exposure to the risk of fluctuating exchange rates with the U.S. Dollar ("USD"), our primary reporting currency. Since December 31, 2016 and 2015 to March 31, 2017, the USD has fluctuated by approximately (5.6%) and (7.0%) respectively against the NIS. Continuing devaluation of the US dollar against the NIS will result in lower operating costs from NIS denominated expenses. To date, we have not hedged any of our currency exchange rate risks, but we may do so in the future.

Interest Rate Risk. Our exposure to market risk relates to our cash and investments. We maintain an investment portfolio of short term bank deposits and money market funds. The securities in our investment portfolio are not leveraged, and are, due to their very short-term nature, subject to minimal interest rate risk. We currently do not hedge interest rate exposure. Because of the short-term maturities of our investments, we do not believe that a change in market interest rates would have a significant negative impact on the value of our investment portfolio except for reduced income in a low interest rate environment. At March 31, 2017, we had cash, cash equivalents and short-term bank deposits, inclusive of restricted cash, of approximately \$5,677,000. The weighted average annual interest rate related to our cash and cash equivalents for the three months ended March 31, 2017 was approximately 0.10%.

The primary objective of our investment activities is to preserve principal while at the same time maximizing yields without significantly increasing risk. To achieve this objective, we invest our excess cash in short-term bank deposits and money market funds that may invest in high quality debt instruments.

ITEM 4. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, is recorded, processed, summarized and reported within the time period specified in the SEC's rules and forms. As of March 31, 2017, our chief executive officer and our chief financial officer conducted an evaluation of the effectiveness of our disclosure controls and procedures. Based on this evaluation, our chief executive officer and our chief financial officer concluded that our disclosure controls and procedures were effective as of March 31, 2017.

Changes in Internal Control over Financial Reporting

During the quarter ended March 31, 2017, there were no changes made in our internal controls over financial reporting (as such term is defined in Rule 13a-15(f) of the Exchange Act) that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may be subject to routine litigation, claims, or disputes in the ordinary course of business. We defend our company vigorously in all such matters. However, we cannot predict with certainty the outcome or effect of any of the litigation or investigatory matters or any other pending litigation or claims. There can be no assurance as to the ultimate outcome of these lawsuits and investigations.

ITEM 1A. RISK FACTORS

During the quarter ended March 31, 2017, there were no material changes to the risk factors previously reported in our Annual Report on Form 10-K for the year ended December 31, 2016.

ITEM 2. UNREGISTERED SALES OF SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION:

None.

ITEM 6. EXHIBITS

Exhibit Index:

| 31.1 | Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 under the Exchange Act |
|----------|---|
| 31.2 | Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 under the Exchange Act |
| 32.1 | Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished only) |
| 32.2 | Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished only) |
| 101.INS* | XBRL Instance Document |
| 101.SCH* | XBRL Taxonomy Extension Schema |
| 101.CAL* | XBRL Taxonomy Extension Calculation Linkbase |
| 101.DEF* | XBRL Taxonomy Extension Definition Linkbase |
| 101.LAB* | XBRL Taxonomy Extension Label Linkbase |
| 101.PRE* | XBRL Taxonomy Extension Presentation Linkbase |

^{*} Furnished herewith, XBRL (Extensible Business Reporting Language) information is furnished and not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933, as amended, or Section 18 of the Securities Exchange Act of 1934 and otherwise not subject to liability under these sections.

SIGNATURES

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

ZION OIL & GAS, INC.

(Registrant)

By: /s/ Victor G. Carrillo By: /s/ Michael B. Croswell Jr.

Victor G. Carrillo

Chief Executive Officer

Michael B. Croswell Jr.

Chief Financial Officer

(Principal Executive Officer) (Principal Financial and Accounting Officer)

Date: May 9, 2017 Date: May 9, 2017