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

FORM 10-K

MARK ONE:
☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year ended December 31, 2018

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: 001-33228

ZION OIL & GAS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**20-0065053**
(State or other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
12655 N Central Expressway, Suite 1000, Dallas, TX	**75243**
(Address of Principal Executive Offices)	(Zip Code)

(214) 221-4610
(Registrant's telephone number, including area code)

Securities registered under Section 12 (b) of the Exchange Act:

Common Stock, par value $0.01 per share	**Nasdaq Global Market**
(Title of Class)	(Name of each exchange on which registered)

Securities registered under Section 12 (g) of the Exchange Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☒

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 29, 2018, the last business day of the registrant's most recently completed second quarter, was approximately $234 million. This amount is based on the closing price of registrant's common stock on the NASDAQ Global Market on that date.

The registrant had 70,088,286 shares of common stock, par value $0.01, outstanding as of March 3, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

The Registrant intends to file a definitive proxy statement pursuant to Regulation 14A in connection with its 2019 Annual Meeting of Stockholders within 120 days after the close of the fiscal year covered by this Form 10-K. Portions of such proxy statement are incorporated by reference into Items 10, 11, 12, 13 and 14 of Part III of this report.

2018 ANNUAL REPORT (SEC FORM 10-K)

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Securities and Exchange Commission
Item Number and Description

FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K (herein, "Annual Report") and the documents included or incorporated by reference in this Annual Report contain statements concerning our expectations, beliefs, plans, objectives, goals, strategies, future events or performance and underlying assumptions and other statements that are not historical facts. These statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. You generally can identify our forward-looking statements by the words "anticipate," "believe," "budgeted," "continue," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "objective," "plan," "potential," "predict," "projection," "scheduled," "should," "will" or other similar words. These forward-looking statements include, among others, statements regarding:

- Our ability to raise sufficient capital to successfully acquire, interpret, and analyze 3-D seismic data and continue with exploratory efforts within our license area;
- the going concern qualification in our financial statements;
- Our liquidity and our ability to raise capital to finance our overall exploration and development activities;
- The outcome of the current SEC investigation and the resulting class action lawsuit against us;
- Our ability to obtain new license areas to continue our petroleum exploration program;
- our ability to explore for and develop natural gas and oil resources successfully and economically within our license areas;
- our ability to maintain the exploration license rights to continue our petroleum exploration program;
- the availability of equipment, such as seismic equipment, drilling rigs, and production equipment;
- the impact of governmental regulations, permitting and other legal requirements in Israel relating to onshore exploratory drilling;
- our estimates of the time frame within which future exploratory activities will be undertaken;
- changes in our exploration plans and related budgets;
- the quality of existing and future license areas with regard to, among other things, the existence of reserves in economic quantities;
- anticipated trends in our business;
- our future results of operations;
- our capital expenditure program;
- future market conditions in the oil and gas industry; and
- the demand for oil and natural gas, both locally in Israel and globally.

More specifically, our forward-looking statements may include, among others, statements relating to our schedule, business plan, targets, estimates or results of our applications for new exploration rights and future exploration plans, including the number, timing and results of wells, the timing and risk involved in drilling follow-up wells, planned expenditures, prospects budgeted and other future capital expenditures, risk profile of oil and gas exploration, acquisition of seismic data (including number, timing and size of projects), planned evaluation of prospects, probability of prospects having oil and natural gas, expected production or reserves, acreage, working capital requirements, hedging activities, the ability of expected sources of liquidity to implement our business strategy, future hiring, future exploration activity, production rates, all and any other statements regarding future operations, financial results, business plans and cash needs and other statements that are not historical fact.

Such statements involve risks and uncertainties, including, but not limited to, those relating to the uncertainties inherent in exploratory drilling activities, the volatility of oil and natural gas prices, operating risks of oil and natural gas operations, our dependence on our key personnel, factors that affect our ability to manage our growth and achieve our business strategy, risks relating to our limited operating history, technological changes, our significant capital requirements, the potential impact of government regulations, adverse regulatory determinations, litigation, competition, the uncertainty of reserve information and future net revenue estimates, property acquisition risks, industry partner issues, availability of equipment, weather and other factors detailed herein and in our other filings with the Securities and Exchange Commission (the “SEC”).

We have based our forward-looking statements on our management’s beliefs and assumptions based on information available to our management at the time the statements are made. We caution you that assumptions, beliefs, expectations, intentions and projections about future events may and often do vary materially from actual results. Therefore, we cannot assure you that actual results will not differ materially from those expressed or implied by our forward-looking statements.

Some of the factors that could cause actual results to differ from those expressed or implied in forward-looking statements are described under “Risk Factors” in this Annual Report and in our other periodic reports filed with the SEC. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual outcomes may vary materially from those indicated. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by reference to these risks and uncertainties. You should not place undue reliance on our forward-looking statements. Each forward-looking statement speaks only as of the date of the particular statement, and we undertake no duty to update any forward-looking statement.

PART I

ITEM 1. BUSINESS

Overview

Zion Oil and Gas, Inc., a Delaware corporation, is an oil and gas exploration company with a history of 19 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."

The Company currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License, comprising approximately 99,000 acres. The Megiddo Jezreel #1 ("MJ #1") site was completed in early March 2017, after which the drilling rig and associated equipment were mobilized to the site. Performance and endurance tests were completed, and the MJ #1 exploratory well was spud on June 5, 2017 and drilled to a total depth ("TD") of 5,060 meters (approximately 16,600 feet). Thereafter, the Company obtained three open-hole wireline log suites (including a formation image log) and the well was successfully cased and cemented. The Ministry of Energy approved the well testing protocol on April 29, 2018.

During the fourth quarter of 2018, the Company testing protocol was concluded at the Megiddo Jezreel #1 ("MJ #1") well. The test results confirmed that the MJ #1 well does not contain hydrocarbons in commercial quantities in the zones tested. As a result of the above determination, in the year ended December 31, 2018, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of $30,906,000.

While the well was not commercially viable, Zion has learned a great deal from the drilling and testing of this well. We believe that the drilling and testing of this well carried out the testing objectives which may support further evaluation and potential further exploration efforts within our License area.

As a result of the information gained drilling the MJ#1 well, Zion now believes it is prudent and consistent with good industry practice to try and answer some of the questions raised by the drilling with a focused 3D seismic imaging shoot of approximately 50 square kilometers surrounding the MJ#1 well. See discussion under Summary of Current and Former License Area.

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.

Company Background

In 1983, during a visit to Israel, John M. Brown (our Founder and Chairman of the Board of Directors) became inspired and dedicated to finding oil and gas in Israel. During the next 17 years he made several trips each year to Israel, hired oil and gas consultants in Israel and Texas, met with Israeli government officials, made direct investments with local exploration companies, and assisted Israeli exploration companies in raising money for oil and gas exploration in Israel. This activity led Mr. Brown to form Zion Oil & Gas, Inc. in April 2000, in order to receive the award of a small onshore petroleum license from the Israeli government.

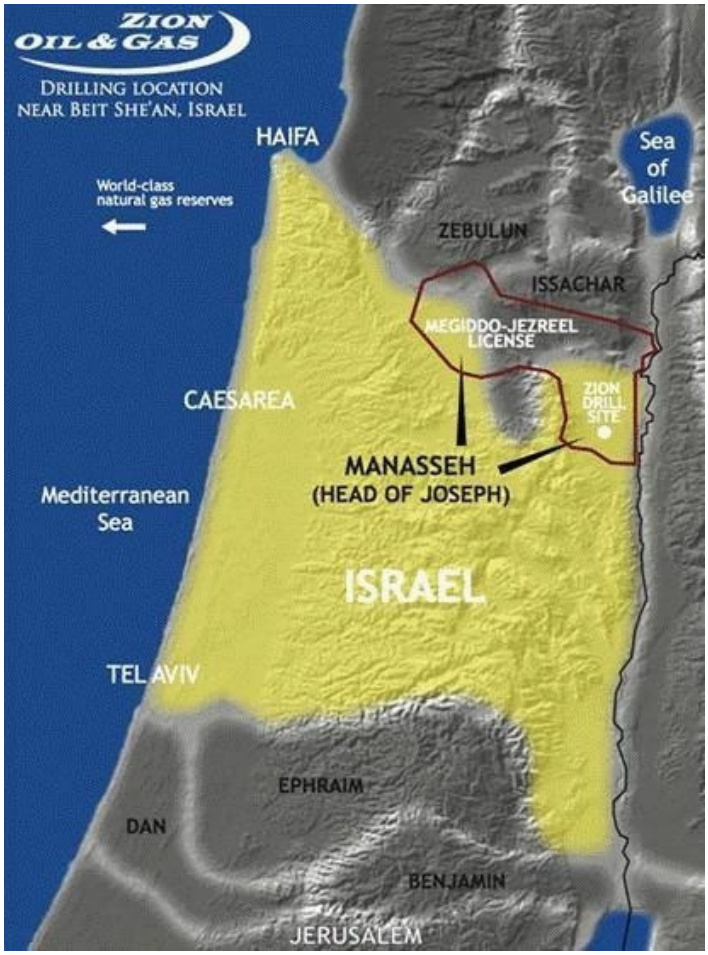
Zion's vision, as guided by John Brown, of finding oil and/or natural gas in Israel, is biblically inspired. The vision is based, in part, on biblical references alluding to the presence of oil and/or natural gas in territories within the State of Israel that were formerly within certain ancient biblical tribal areas. While John Brown provides the broad vision and goals for our company, the actions taken by the Zion Board of Directors and management team as it actively explores for oil and gas in Israel, are based on modern science and good business practice. Zion's oil and gas exploration activities are supported by appropriate geological, geophysical and other science-based studies and surveys typically carried out by companies engaged in oil and gas exploration activities.

Upon the award of our first petroleum right in May 2000, the Israeli government provided us access to most of its data with respect to previous exploration in the area, including geologic reports, seismic records and profiles, drilling reports, well files, gravity surveys, geochemical surveys and regional maps. We also gathered information concerning prior and ongoing geological, geophysical and drilling activity relevant to our planned activities from a variety of publicly accessible sources. Subsequently, we have acquired additional studies on our own such as seismic and other geophysical and geological surveys.

ZION'S CURRENT EXPLORATION LICENSE AREA

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.

The Megiddo-Jezreel License is scheduled to terminate on December 2, 2020.



Map 1. Zion's Megiddo-Jezreel Petroleum Exploration License as of December, 2018.

Summary of Current and Former Company License Areas

Megiddo-Jezreel Petroleum License

The Megiddo-Jezreel License (No. 401) 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 Megiddo-Jezreel License lies onshore, south and west of the Sea of Galilee and we continue our exploration focus here as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

On November 20, 2017, Israel's Petroleum Commissioner officially approved Zion's multi-year extension request on its Megiddo-Jezreel License No. 401, extending its validity to December 2, 2019, and on February 28, 2019, a further extension to December 2, 2020 was granted. In addition, the Company's surface use agreement was extended through December 3, 2019 by the Israel Land Authority.

Until recently, the Company remained subject to the following updated key license terms:

No.	***Activity Description***	***Execution by:***
1	*Submit final report on the results of drilling*	✓ *31 May 2018*
2	*Submit program for continuation of work under license*	*30 June 2018*

On June 1, 2018, Zion submitted its Megiddo-Jezreel #1 End of Well Report (EOWR) for the Megiddo-Jezreel License No. 401, thus fulfilling our No. 1 End of Well Report license work plan obligation, shown above.

On June 14, 2018 Zion submitted its Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License No. 401. The additional time was necessary because we had still not completed testing and evaluating all planned testing zones. On July 1, 2018, Israel's Petroleum Commissioner granted our work program report extension to November 1, 2018.

No.	***Activity Description***	***Execution by:***
1	*Submit program for continuation of work under license*	*1 November 2018*

On October 29, 2018 Zion received approval from the Petroleum Commissioner for an Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License No. 401. The additional time was necessary because we had still not completed testing and evaluating all planned testing zones.

No.	***Activity Description***	***Execution by:***
1	*Submit program for continuation of work under license*	*31 January 2019*

On January 31, 2019, Zion submitted its Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License No. 401. The additional time was necessary to finalize the work program. On February 3, 2019 Israel's Petroleum Commissioner granted Zion's work program report extension to February 28, 2019, as shown below:

Number	***Activity Description***	***Execution by:***
1	*Submit program for continuation of work under license*	*28 February 2019*

Exploration Plans Going Forward

The Company currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License, comprising approximately 99,000 acres, which is scheduled to terminate on December 2, 2019. Under current law, we are entitled to apply to the Israeli Petroleum Commissioner for a one-year extension through December 2, 2020. See Footnote 13 – Subsequent Events for more information.

The Megiddo Jezreel #1 ("MJ #1") exploratory well was spud on June 5, 2017 and drilled to a total depth ("TD") of 5,060 meters (approximately 16,600 feet). Thereafter, the Company obtained three open-hole wireline log suites (including a formation image log) and the well was successfully cased and cemented. The Ministry of Energy approved the well testing protocol on April 29, 2018.

During the fourth quarter of 2018, the Company testing protocol was concluded at the MJ #1 well. The test results confirmed that the MJ #1 well does not contain hydrocarbons in commercial quantities in the zones tested. As a result of the above determination, in the year ended December 31, 2018, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of $30,906,000.

The MJ#1 well provided Zion with information which Zion believes is important for potential future exploration efforts within its license area. As with many frontier wildcat wells, the MJ#1 also left several questions unanswered.

While not meant to be an exhaustive list, a summary of what Zion believes to be key information learned in the MJ#1 well is as follows:

1. The MJ#1 encountered much higher subsurface temperatures at a depth shallower than expected before drilling the well. In our opinion, this is significant because reaching a minimum temperature threshold is necessary for the generation of hydrocarbons from an organic-rich source rock.

2. The known organic rich (potentially hydrocarbon bearing) Senonian age source rocks that are typically present in this part of Israel were not encountered as expected. Zion expected these source rocks to be encountered at approximately 1,000 meters in the MJ#1 well.

3. MJ#1 had natural fractures, permeability (the ability of fluid to move through the rock) and porosity (pore space in rock) that allowed the sustained flow of formation fluid in the shallower Jurassic and lower Cretaceous age formations between approximately 1,200 and 1,800 meters. While no hydrocarbons were encountered, Zion believes this fact is nonetheless significant because it provides important information about possible reservoir pressures and the ability of fluids to move within the formation and to the surface.

4. MJ#1 encountered oil in the Triassic Mohilla formation which Zion believes suggests an active deep petroleum system is in Zion's license area. There was no natural permeability or porosity in the Triassic Mohilla formation to allow formation fluid to reach the surface naturally during testing and thus the MJ#1 was not producible or commercial.

5. The depths and thickness of the formations we encountered varied greatly from pre-drill estimates. This required the MJ#1 to be drilled to a much greater depth than previously expected. Zion has tied these revised formation depths to seismic data which will allow for more accurate interpretation and mapping in the future.

A summary of what Zion believes to be some key questions left to be answered are:

1. Is the missing shallow Senonian age source rock a result of regional erosion, or is it missing because of a fault that cut the well-bore and could be reasonably expected to be encountered in the vicinity of the MJ#1 drill site? Zion believes this is an important question to answer because if the Senonian source rocks do exist in this area, the high temperatures encountered are sufficient to mature these source rocks and generate oil.

2. Do the unusually high shallow subsurface temperatures extend regionally beyond the MJ#1 well, which could allow for the generation of hydrocarbons in the Senonian age source rock within our license area?

3. As a consequence of seismic remapping, where does the MJ#1 well lie relative to the potential traps at the Jurassic and Triassic levels and was the well location too low on the structures and deeper than the potential hydrocarbons within those traps?

As a result of these unanswered questions and with the information gained drilling the MJ#1 well, Zion now believes it is prudent and consistent with good industry practice to try and answer some of these questions with a focused 3D seismic imaging shoot of approximately 50 square kilometers surrounding the MJ#1 well.

The Company has commenced preliminary scouting and survey design to help identify the geologic boundaries of the proposed 3D seismic survey. Additionally, Zion held initial meetings with potential vendors to aid in the 3D seismic planning and acquisition process. Once the survey design and surface layout are completed, Zion intends to acquire the necessary government permits and negotiate potential surface damages to crops, irrigation piping, and other surface features. Zion believes it will be necessary to import seismic source equipment and autonomous wireless geophones (to record the signal) to acquire the 3D data. Once data acquisition is completed, interpretation is the final step and will involve integration with, and modification of, previous work by Zion technical staff. Zion's ability to fully undertake all of these aforementioned activities is subject to Zion raising the needed capital, of which no assurance can be provided.

Exploration Expenditures

The following table summarizes the amounts we expended on our exploration efforts between 2016 and 2018:

	2018 US$ (000)	2017 US$ (000)	2016 US$ (000)
Megiddo-Jezreel Valley License			
Geological & Geophysical Operations	611	774	1,020
Equipment purchases	655	1,407	325
Location construction	100	1,054	89
Exploratory Drilling Operations	14,581	12,123	--
Asher-Menashe License (expired on June 9, 2014) Plug & Abandonment Operations	--	--	2
Joseph License (expired on October 10, 2013)			
Plug & Abandonment Operations	--	--	2
Total	15,947	15,358	1,438

Employees & Contractors

As of December 31, 2018, we had 25 employees and contractors of whom all but four are on a full-time basis. Included in this number are certain contractors who provide services to Zion on an ongoing basis. Of the 25 total headcount, 16 work out of our Dallas office and 9 work out of the Caesarea, Israel office. None of our current employees or contractors are subject to any collective bargaining agreements, and there have been no strikes.

We regularly utilize independent consultants and contractors to perform various professional services, particularly for services connected to drilling operations, such as specialized drilling, health and safety, engineering, logging, cementing and well-testing.

Competition and Markets

The oil and gas exploration industry in Israel currently consists of a number of exploration companies. These include relatively small local or foreign companies (such as Zion Oil & Gas, Genie Oil & Gas/Afek, and Givot Olam), as well as larger consortia of local Israeli and foreign participants (Noble Energy Inc./Delek Group Ltd.). Most groups are engaged primarily in offshore activities, which is not an area in which we are currently active. So long as we hold our current license, Israeli law conveys an exclusive exploration right to Zion such that no additional companies may compete in our license area.

Historically, Israel (particularly onshore) has not been an area of interest for international integrated or large or mid-size independent oil and gas exploration companies for various reasons, one of which is likely geopolitical. Since the announcement of the Tamar and Leviathan discoveries during 2009 and 2010, this situation has changed somewhat. Limited availability in Israel of oil field service companies, equipment and personnel continues to present obstacles, especially during periods of decreased activity and risk aversion in the current market. We attempt to enhance our position by developing and maintaining good professional relations with oil field service providers and by demonstrating a high level of credibility in making and meeting commercial commitments.

The oil and gas industry is cyclical, and from time to time there is a shortage of drilling rigs, equipment, supplies and qualified personnel. During these periods, the costs and delivery times of rigs, equipment and supplies can vary greatly. If the unavailability or high cost of drilling and completion rigs, equipment, supplies or qualified personnel was particularly severe in the areas where we operate, we could be materially and adversely affected. We will continue to monitor the market and build service provider relationships in order to help mitigate concentration risk.

If any exploratory well that we drills is commercially productive, we would install the appropriate production equipment which includes, among other items, oil and gas separation facilities and storage tanks. Under the terms of the Petroleum Law, we may be required by the Minister of Energy and Water Resources to offer first refusal for any oil and gas discovered to Israeli domestic purchasers at market prices.

Since Israel imports almost all of its crude oil needs and the market for crude oil in Israel is limited to two local oil refineries, no special marketing strategy needs to be adopted initially with regard to any oil that we may ultimately discover. We believe that we would have a ready local market for our oil at market prices in addition to having the option of exporting to the international market, if any of our future exploratory wells are commercially productive.

Israel's Petroleum Law

Our business in Israel is subject to regulation by the State of Israel under the Petroleum Law. The administration and implementation of the Petroleum Law are vested in the Minister of Infrastructures, Energy and Water Resources ("Energy Minister"), the Petroleum Commissioner and an advisory council. The following discussion includes a brief summary review of certain provisions of the Petroleum Law as currently in effect. This review is not complete, and it should not be relied on as a definitive restatement of the law related to petroleum exploration and production activities in Israel.

Petroleum resources are owned by the State of Israel, regardless of whether they are located on state lands or the offshore continental shelf. No person is allowed to explore for or produce petroleum without being granted a specific right under the Petroleum Law.

License. The "license" is a petroleum exploration right, bestowing an exclusive right for further exploration work and requiring the drilling of one or more test wells. The initial term of a license is up to three years, and it may be extended for up to an additional four years (in one year increments). A license area may not exceed 400,000 dunams (approximately 98,842 acres). One dunam is equal to 1,000 square meters (approximately 0.24711 of an acre). No one entity may hold more than 12 licenses or hold more than a total of four million dunam in aggregate license area.

Production lease. Upon discovery of petroleum in commercial quantities, a licensee has a statutory "right" to receive a production "lease." The initial lease term is 30 years, extendable for an additional 20 years (up to a maximum period of 50 years). A lease confers upon the lessee the exclusive right to explore for and produce petroleum in the lease area and requires the lessee to produce petroleum in commercial quantities (or pursue test or development drilling). The lessee is entitled to transport and market the petroleum produced, subject, however, to the right of the government to require the lessee to supply local needs first, at market price.

Petroleum rights fees. The holders of licenses and leases are required to pay fees to the government of Israel to maintain the rights. The fees vary according to the nature of the right, the size and location (onshore or offshore) of the right, acreage subject to the right and, in the case of a license, the period during which the license has been maintained. Every subsequent year, the license fee increases incrementally.

Requirements and entitlements of holders of petroleum rights. The holder of a petroleum right (license or lease) is required to conduct its operations in accordance with a work program set as part of the petroleum right, with due diligence and in accordance with the accepted practice in the petroleum industry. The holder is required to submit progress and final reports; provided, however, the information disclosed in such reports remains confidential for as long as the holder owns a petroleum right on the area concerned.

If the holder of a petroleum right does not comply with the work program provided by the terms of the right, the Petroleum Commissioner may issue a notice requiring that the holder cure the default within 60 days of the giving of the notice, together with a warning that failure to comply within the 60-day cure period may entail cancellation of the right. If the petroleum right is cancelled following such notice, the holder of the right may, within 30 days of the date of notice of the Commissioner's decision, appeal such cancellation to the Energy Minister. No petroleum right shall be cancelled until the Energy Minister has ruled on the appeal.

We are obligated, according to the Petroleum Law, to pay royalties to the Government of Israel on the gross production of oil and gas from the oil and gas properties of Zion located in Israel (excluding those reserves serving to operate the wells and related equipment and facilities). The royalty rate stated in the Petroleum Law is 12.5% of the produced reserves. At December 31, 2018 and 2017, the Company did not have any outstanding obligation with respect to royalty payments, since it is in the development stage and, to this date, no proved reserves have been found.

In March 2011, the Israeli parliament enacted the Petroleum Profits Taxation Law, 2011, which imposes a new levy on oil and gas production. Under the new tax regime, the Israeli Government repealed the percentage depletion deduction and imposed a levy at an initial rate of 20% on profits from oil and gas which will gradually rise to 45.52% for 2016 onwards, depending on the levy coefficient (the R-Factor). The R-Factor refers to the percentage of the amount invested in the exploration, the development and the establishment of the project, so that the 20% rate will be imposed only after a recovery of 150% of the amount invested (R-Factor of 1.5) and will range linearly up to 45.52% after a recovery of 230% of the amount invested (R-Factor of 2.3). For purposes of the levy rate calculation, the minimal gas sale price that will be accepted by the State is the bi-annual average local price. The present 12.5% royalty imposed on oil revenues remains unchanged.

The grant of a petroleum right does not automatically entitle its holder to enter upon the land to which the right applies or to carry out exploration and production work thereon. Entry requires the consent of the private or public holders of the surface rights and of other public regulatory bodies (e.g. planning and building authorities, Nature Reserves Authority, municipal and security authorities, etc.). The holder of a petroleum right may request the government to acquire, on its behalf, land needed for petroleum purposes. The petroleum right holder is required to obtain all other necessary approvals.

Petroleum Taxation. Our activities in Israel will be subject to taxation both in Israel and in the United States. Under the U.S. Internal Revenue Code, we will be entitled to claim either a deduction or a foreign tax credit with respect to Israeli income taxes paid or incurred on our Israeli source oil and gas income. As a general rule, we anticipate that it will be more advantageous for us to claim a credit rather than a deduction for applicable Israeli income taxes on our U.S tax return. A tax treaty exists between the U.S. and Israel that would provide opportunity to use the tax credit.

Exploration and development expenses. Under current US and Israeli tax laws, exploration and development expenses incurred by a holder of a petroleum right can, at the option of such holder, either be expensed in the year incurred or capitalized and expensed (or amortized) over a period of years. Most of our expenses to date have been expensed for both U.S. and Israeli income tax purposes.

Depletion allowances. Until 2011, the holder of an interest in a petroleum license or lease was allowed a deduction for income tax purposes on account of the depletion of the petroleum reserve relating to such interest. This may have been by way of percentage depletion or cost depletion, whichever is greater. In 2010, the Finance Minister of Israel established an advisory committee to study the country's fiscal policy as it relates to the upstream oil and natural gas sector, as well as various options, including an increase in royalties or cancellation of tax incentives. In January 2011, the Finance Ministry advisory committee issued its final recommendations which included cancellation of currently existing tax incentives, including the depletion allowance. In 2011, the depletion allowance was abolished.

Corporate tax. Under current Israeli tax laws, whether a company is registered in Israel or is a foreign company operating in Israel through a branch, it is subject to Israeli Companies Tax on its taxable income (including capital gains) from Israeli sources at a rate of 24%, effective January 1, 2017, and at a flat rate of 23%, effective January 1, 2018.

Import duties. Insofar as similar items are not available in Israel, the Petroleum Law provides that the owner of a petroleum right may import into Israel, free of most customs, purchase taxes and other import duties, all machinery, equipment, installations, fuel, structures, transport facilities, etc. (apart from consumer goods and private cars and similar vehicles) that are required for the petroleum exploration and production purposes, subject to the requirement that security be provided to ensure that the equipment is exported out of Israel within the agreed upon time frame.

Israeli Energy Related Regulations

Our operations are subject to legal and regulatory oversight by energy-related ministries or other agencies of Israel, each having jurisdiction over certain relevant energy or hydrocarbons laws.

The Onshore Petroleum Exploration Permitting Process in Israel

The permitting process in Israel with respect to petroleum exploration continues to undergo significant modification, the result of which is to considerably increase the complexity, time period, and expenditures needed to obtain the necessary permits to undertake exploratory drilling once a drilling prospect has been identified. Applications for new exploration licenses need to comply with more demanding requirements relating to a license applicant's financial capability, experience and access to experienced personnel. 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 December 28, 2017, the Energy Ministry issued new guidelines for the formal approval by the Commissioner of the discovery of a petroleum field capable of producing commercial quantities of petroleum. The guidelines detail the applicable petroleum discovery application requirements including submission of a conceptual field development plan.

On March 15, 2018, the Energy Ministry issued new guidelines regarding a uniform reporting manner by which the operator must submit to the Commissioner data and materials regarding lawful exploration and production activities. The guidelines detail the timeline, data, forms, format, media and materials (such as rock cuttings, cores, gas and oil samples) that must be submitted for seismic and drilling activities.

We believe that these new regulations will significantly increase the expenditures associated with obtaining new exploration rights and drilling new wells, coupled with the heavy financial burden of "locking away" significant amounts of cash that could otherwise be used for operational purposes. Finally, this will also considerably increase the time needed to obtain all of the necessary authorizations and approvals prior to drilling.

Environmental & Safety / Planning & Building

Oil and gas drilling operations could potentially harm the environment if there are polluting spills caused by the loss of well control. The Petroleum Law and regulations provide that the conduct of petroleum exploration and drilling operations be pursued in compliance with "good oil field practices" and that measures of due care be taken to avoid seepage of oil, gas and well fluids into the ground and from one geologic formation to another. The Petroleum Law and regulations also require that, upon the abandonment of a well, it be adequately plugged and marked. Recently, as a condition for issuing the required permit for the construction of a drilling site, the planning commissions have required the submission of a site remediation plan, subject to approval of the environmental authorities. Our operations are also subject to claims for personal injury and property damage caused by the release of chemicals or petroleum substances by us or others in connection with the conduct of petroleum operations on our behalf. 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 January 21, 2016, the Environmental Ministry published Professional Guidelines and Standards for Remediation of Land. The guidelines clarify and define what is considered polluted land, remediation and the permitted methods to remediate polluted land, and it applies to oil and gas exploration companies including Zion.

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 when the operator seeks to apply.

We do not know and cannot predict whether any new legislation in this area will be enacted and, if so, in what form and which of its provisions, if any, will relate to and affect our activities, how and to what extent or what impact, if any, it might have on our financial statements. There are no known proceedings instituted by governmental authorities, pending or known to be contemplated against us under any environmental laws. We are not aware of any events of noncompliance in our operations in connection with any environmental laws or regulations. However, we cannot predict whether any new or amended environmental laws or regulations introduced in the future will have a material adverse effect on our future business.

The Company believes that these new and/or revised regulations will significantly increase the complexity, time, and expenditures associated with obtaining new exploration rights, drilling, and plugging/abandoning new wells, coupled with the heavy financial burden of "locking away" significant amounts of cash that could otherwise be used for operational purposes.

Political Climate

We are directly influenced by the political, economic and military conditions affecting Israel. Specifically, we could be adversely affected by:

- any major hostilities involving Israel;

- the interruption or curtailment of trade between Israel and its present trading partners;

- a full or partial mobilization of the reserve forces of the Israeli army; and

- a significant downturn in the economic or financial condition of Israel.

Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors, and a state of hostility, varying from time to time in intensity and degree, has led to security and economic problems for Israel. Any ongoing or future violence between Israel and the Palestinians, armed conflicts, terrorist activities, tension along Israel's borders, or political instability in the region could possibly disrupt international trading activities in Israel and may materially and negatively affect our business conditions and could harm our prospects and business.

Civil unrest could spread throughout the region or grow in intensity, leading to more regime changes resulting in governments that are hostile to the United States and Israel, civil wars, or regional conflict. More recently, Russia initiated significant and direct military intervention in Syria consisting of air strikes against ISIS and other parties. With ongoing operations by Russia, the U.S. and other countries in areas in close proximity to Israel, there is an increased risk of deliberate and/or inadvertent mishaps that could give rise to grave military and political consequences.

We cannot predict the effect, if any, on our business of renewed hostilities between Israel and its neighbors or any other changes in the political climate in the area.

Foundations

If we are successful in finding commercial quantities of hydrocarbons in Israel, 6% of our gross revenues from production will go to fund two charitable foundations that we established with the purpose of donating to charities in Israel, the U.S. and elsewhere in the world.

For charitable activities concerning Israel, the Bnei Joseph Foundation (R.A.) was established. On November 11, 2008, both the Articles of Association and Incorporation Certificate were certified by the Registrar of Amutot (i.e. Charitable Foundations) in Israel.

For the U.S. and worldwide charitable activities, the Abraham Foundation in Geneva, Switzerland was established. On June 20, 2008, the Articles of Incorporation were executed and filed by the Swiss Notary in the Commercial Registrar in Geneva. On June 23, 2008, the initial organizational meeting of the founding members was convened in Israel. Regulations for the Organization of the Abraham Foundation, signed by the founding members, were then filed with the Registrar. On November 19, 2008, the Swiss Confederation approved the Foundation as an international foundation under the supervision of the federal government. On December 8, 2008, the Republic of Geneva and the Federal government of Switzerland issued a tax ruling providing complete tax exemption for the Foundation.

Our shareholders, in a resolution passed at the 2002 Annual Meeting, gave authority to the Zion Board of Directors to transfer a 3% overriding royalty interest to each of the two foundations with regard to the Joseph and Asher-Menashe licenses. In accordance with that resolution, we took steps to legally donate a 3% overriding royalty interest to the Bnei Joseph Foundation (in Israel) and a 3% overriding royalty interest to the Abraham Foundation (in Switzerland).

On June 22, 2009, we received an official letter from the Commissioner informing us that the 3% overriding royalty interest to each of the Bnei Joseph Foundation and the Abraham Foundation had been registered in the Israeli Oil Register with regard to the Joseph and Asher-Menashe licenses. On November 9, 2011, we received an official letter from the Commissioner informing us that the 3% overriding royalty interest to each of the Bnei Joseph Foundation and the Abraham Foundation had been registered in the Israeli Oil Register with regard to the Jordan Valley License.

On February 5, 2014, the Company submitted applications to the Petroleum Commissioner, requesting royalty interest transfers from the Megiddo-Jezreel License of 3% overriding royalties to the Bnei Joseph Amutot and the Abraham Foundation, respectively. On April 8, 2014, the transfers were approved by the Petroleum Commissioner and duly registered.

Available Information

Zion's internet website address is "www.zionoil.com." We make available, free of charge, on our website, and on our Zion mobile application, under "SEC Reports," our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, Forms 3, 4 and 5 filed on behalf of directors and executive officers and amendments to those reports, as soon as reasonably practicable after providing the SEC such reports.

Our Corporate Governance Policy, the charters of the Audit Committee, the Compensation Committee and the Nominating and Governance Committee, and the Code of Ethics for directors, officers, employees and financial officers are also available on our website under "Corporate Governance" and in print to any stockholder who provides a written request to the Corporate Secretary at Zion Oil & Gas, Inc., 12655 North Central Expressway, Suite 1000, Dallas, Texas 75243, Attn: Corporate Secretary.

We file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and other documents with the SEC under the Securities Exchange Act of 1934, as amended. The public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an internet website that contains reports, proxy and information statements, and other information regarding issuers, including Zion Oil & Gas, Inc., that file electronically with the SEC. The public can obtain any document we file with the SEC at www.sec.gov. Information contained on or connected to our website is not incorporated by reference into this Form 10-K and should not be considered part of this report or any other filing that we make with the SEC.

ITEM 1A. RISK FACTORS

In evaluating our company, the risk factors described below should be considered carefully. The occurrence of one or more of these events could significantly and adversely affect our business, prospects, financial condition and results of operations.

Risks Associated with our Company

We are a company with no current source of revenue. Our ability to continue in business depends upon our continued ability to obtain significant financing from external sources and the ultimate success of our petroleum exploration efforts in onshore Israel, none of which can be assured.

We were incorporated in April 2000, and we have incurred negative cash flows from our operations, and presently all exploration activities and overhead expenses are financed solely by way of the issue and sale of equity securities or debt instruments. The recoverability of the costs we have incurred to date is uncertain and is dependent upon achieving commercial production or sale, none of which can be assured. Our operations are subject to all of the risks inherent in exploration companies with no revenues or operating income. Our potential for success must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with a new business, especially the oil and gas exploration business, and in particular the deep, wildcat exploratory wells in which we are engaged in Israel. We cannot warrant or provide any assurance that our business objectives will be accomplished.

Our ability to continue in business depends upon our continued ability to obtain the necessary financing from external sources to undertake further exploration and development activities and generate profitable operations from oil and natural gas interests in the future. We incurred net losses of $38,511,000 for the year ended December 31, 2018, $9,989,000 for the year ended December 31, 2017 and $8,513,000 for the year ended December 31, 2016. The audited financial statements have contained a statement by the auditors that raises substantial doubt about us being able to continue as a "going concern" unless we are able to raise additional capital.

We expect to incur substantial expenditures in our exploration and development programs. Our existing cash balances will not be sufficient to satisfy our exploration and development plans going forward. We are considering various alternatives to remedy any future shortfall in capital. We may deem it necessary to raise capital through equity markets, debt markets or other financing arrangements, including participation arrangements that may be available. Because of the current absence of any oil and natural gas reserves and revenues in our license areas, there can be no assurance that our capital will be available on commercially acceptable terms (or at all) and if it is not, we may be forced to substantially curtail or cease exploration expenditures which could lead to our inability to meet all of our commitments.

Our financial statements do not reflect the adjustments or reclassifications of assets and liabilities that would be necessary if we are unable to continue as a going concern.

We may not be able to maintain the listing of our common stock on the Nasdaq Global Market, which could adversely affect our liquidity and the trading volume and market price of our common stock, and decrease your investment.

Our common stock is currently traded on the Nasdaq Global Market. Under Nasdaq's listing maintenance standards, on January 8, 2019, we received a letter from Nasdaq indicating that we did not satisfy the requirement for continued listing on the Nasdaq Global Market under Nasdaq Listing Rule 5450(a), to maintain a minimum bid price of $1 per share. If the closing bid price of our common stock does not thereafter regain compliance for a minimum of 10 consecutive trading days during the 180 days following notification, Nasdaq may delist our common stock from trading on the Nasdaq Global Market. If we do not regain compliance by July 8, 2019, we may transfer from the Nasdaq Global Market to the Nasdaq Capital Market and may be eligible for an additional compliance period of 180 calendar days. To qualify for the additional compliance period, the Company would have to meet the continued listing requirement for market value of publicly held shares and all other requirements for initial listing on the Nasdaq Capital Market (except for the bid price requirement), and provide written notice to Nasdaq of its intention to cure the bid price deficiency during the additional 180-day compliance period, by effecting a reverse stock split, if necessary.

We are involved in an ongoing government investigation by the United States Securities and Exchange Commission, the results of which may have a material adverse effect on our financial condition and business.

On June 21, 2018, the Fort Worth Regional Office of the SEC informed Zion that it is conducting an investigation and requested that we voluntarily provide certain information and documents in connection with its investigation. We are cooperating fully with the SEC in connection with its investigation. Investigations of this nature are inherently uncertain and their results cannot be predicted with certainty. Regardless of the outcome, the SEC investigation can have an adverse impact on us because of legal costs, diversion of management resources, and other factors. Determining reserves for this investigation is a fact-intensive process that requires significant judgment. The investigation could also result in reputational harm to Zion and may have a material adverse effect on Zion's current and future business and exploratory activities and its ability to raise capital to continue our oil and gas exploratory activities.

We, and some of our current and former officers and directors, have been named as parties to various lawsuits arising out of, or related to, the previously disclosed SEC investigation and those lawsuits could adversely affect us, require significant management time and attention, result in significant legal expenses or damages, and cause our business, financial condition, results of operations, and cash flows to suffer.

A number of shareholder lawsuits, both class action and derivative, have been filed against us and certain of our current and former officers and directors, as detailed more fully in Item 3, Legal Proceedings. These class action complaints assert claims for alleged violations of the federal securities laws and seeks unspecified money damages and other relief on behalf of a putative class of persons who purchased or otherwise acquired our common stock. Regardless of the outcome, these lawsuits, and any other litigation that may be brought against us or our current or former officers and directors, could be time-consuming, result in significant expense, and divert the attention and resources of our management and other key employees. An unfavorable outcome in any of these matters could exceed coverage provided under potentially applicable insurance policies, which is limited. Any such unfavorable outcome could have a material adverse effect on our business, financial condition, results of operations, and cash flows. Further, we could be required to pay damages or additional penalties or have other remedies imposed against us, or our current or former directors or officers, which could harm our reputation, business, financial condition, results of operations, or cash flows.

Our ongoing exploration and development efforts are subject to many contingencies outside of our control, and any considerable delay in obtaining all of the needed licenses, approvals and authorizations may severely impair our business.

After reaching total depth of 5,060 meters (approximately 16,600 feet) on the MJ#1 well on February 14, 2018, Zion finalized its testing program on November 30, 2018. The test results confirmed that the MJ #1 well did not contain hydrocarbons in commercial quantities in the zones tested. As a result of unanswered questions and with the information gained drilling the MJ#1 well, Zion now believes it is prudent and consistent with good industry practice to try and answer some of these questions with a focused 3D seismic imaging shoot of approximately 50 square kilometers surrounding the MJ#1 well. Zion must submit for approval to Israel's Energy Ministry for their final approval the work plan for 2019. While Zion does not expect objections to the work plan which outlines the seismic procedures, there is no assurance that we will ultimately be granted such final permission to shoot the seismic. See the discussion under "Energy Related Regulation — The Onshore Exploration Permitting Process in Israel;" "New Onshore Licensing Guidelines". In addition, the Company having commenced preliminary scouting and survey design, needs to: (i) identify the geologic boundaries of the proposed 3D seismic survey; (ii) identify and reach agreement with potential vendors to aid in the 3D seismic planning and acquisition process; (iii) acquire the necessary government permits; and (iv) negotiate potential surface damages to crops, irrigation piping, and other surface features; and (v) identify and reach agreement with vendors to import seismic source equipment and autonomous wireless geophones (to record the signal) to acquire the 3D data. Once data acquisition is completed, interpretation is the final step and will involve integration with, and modification of, previous work by Zion technical staff. Satisfaction of the foregoing activities involves contingencies outside our control.

Zion's ability to fully undertake all of these aforementioned activities is subject to its raising the needed capital from its continuing offerings, of which no assurance can be provided.

For these reasons, although our seismic program is currently in the pre-planning stages with hopes of permitting and acquisition in the 2nd and 3rd quarters of 2019, we cannot provide full assurance that we will in fact be able to complete the programs in the desired or planned time-frame.

We require significant capital to realize our business plan.

Our ongoing work program is expensive. We believe that our current cash resources are sufficient to allow us to undertake exploratory activities in our current license area through May 31, 2019. We estimate that, when we are not actively drilling a well, our monthly expenditure is approximately $500,000 per month. However, when we are drilling, testing or acquiring seismic which we hope to commence in Q2 of 2019, we estimate that there is an additional cost of approximately $1,500,000 - $2,500,000 per month. Additionally, the newly enacted onshore licensing and environmental and safety related regulations promulgated by the various energy related ministries in Israel during 2017-2018 are likely to render obtaining new explorations licenses increasingly expensive. For example, at the time of the award of any new exploration license, we will be required to submit performance bank guarantees in the form of a restricted Israel cash deposits for 10% of the cost of the planned drilling program as well as other amounts to cover potential environmental damages. See “Israel Energy Related Governmental Regulations.”

We have no commitments for any financing, and no assurance can be provided that we will be able to raise funds when needed. Further, we cannot assure you that our actual cash requirements will not exceed our estimates. Even if we were to discover hydrocarbons in commercial quantities, we will require additional financing to bring our interests into commercial operation and pay for operating expenses until we achieve a positive cash flow. Additional capital also may be required in the event we incur any significant unanticipated expenses.

Under the current capital and credit market conditions, we may not be able to obtain additional equity or debt financing on acceptable terms. Even if financing is available, it may not be available on terms that are favorable to us or in sufficient amounts to satisfy our requirements.

If we are unable to obtain additional financing, we may be unable to implement our business plan and our growth strategies, respond to changing business or economic conditions and withstand adverse operating results. If we are unable to raise further financing when required, our planned exploration activities may have to be scaled down or even ceased, and our ability to generate revenues in the future would be negatively affected.

Additional financing could cause your relative interest in our assets and potential earnings to be significantly diluted. Even if we have exploration success, we may not be able to generate sufficient revenues to offset the cost of dry holes and general and administrative expenses.

If we cannot obtain the new petroleum exploration licenses, then our business may be severely impaired.

While we continue to evaluate the hydrocarbon potential in the MJ#1 well license area, the license is scheduled to terminate in December 2019. Zion applied for a license extension through December 2, 2020 to which it received approval for on February 28, 2019.

Our ability to obtain desired exploration licenses on acceptable terms is subject to change in regulations and policies and to the discretion of the applicable government agencies in Israel. Additionally, the newly enacted onshore licensing and environmental and safety related regulations promulgated by the various energy related ministries in Israel during 2011-2012 are likely to render obtaining new exploration licenses increasingly expensive and more time consuming. Accordingly, there can be no assurance that we will be able to obtain new or additional exploration rights. If we are unable for whatever reason to obtain the newly sought license applications that we deem necessary or desirable, our business may be severely impaired.

We rely on independent experts and technical or operational service providers over whom we may have limited control.

The success of our oil and gas exploration efforts is dependent upon the efforts of various third parties that we do not control. These third parties provide critical drilling, engineering, logging, pressure pumping, geological, geophysical and other scientific analytical services, including 2-D and 3-D seismic imaging technology to explore for and develop oil and gas prospects. Given our small size and limited resources, we do not have all the required expertise on staff. As a result, we rely upon various companies and other third parties to assist us in identifying desirable hydrocarbon prospects to acquire and to provide us with technical assistance and services. In addition, we rely upon the owners and operators of oilfield service equipment.

If any of these relationships with third-party service providers are terminated or are unavailable on commercially acceptable terms, we may not be able to execute our business plan. Our limited control over the activities and business practices of these third parties, any inability on our part to maintain satisfactory commercial relationships with them, their limited availability or their failure to provide quality services could materially and adversely affect our business, results of operations and financial condition.

We have historically commenced exploration drilling operations without 3-D seismic surveys, thereby potentially increasing the risk of drilling a non-producing or non-commercial well.

Historically, Zion used 2-D seismic technology prior to drilling, and also utilized gravity and magnetic data, built cross section maps from offset wells and utilized geophysical analysis from similar geologic targets, all of which is consistent with good industry practice. In addition, the use of pilot or stratigraphic tests is often used by industry in areas where there is little or no offset well data, like Israel, where our exploration license area is located. Zion therefore determined it was not prudent to conduct extensive analytical pre-drilling testing such as 3-D seismic imaging, the drilling of an expendable “pilot” well or “stratigraphic test” to collect data (logs, cores, fluid samples, pressure data) to determine if drilling a well capable of producing oil or gas (full completion with casing and well testing) is justified. After drilling the MJ#1, however, Zion believes that 3-D seismic imaging data, with the additional months, delays and increased costs associated with it, is prudent and warranted and will be incorporated into the existing 2-D data in identifying potential new drilling prospects if it can be cost effectively obtained. Its acquisition and processing costs are many multiples greater than that for 2-D data and could result in the need to potentially import additional equipment. Zion is typically engaged in drilling deep onshore wildcat wells in Israel where only approximately 500 total wells have ever been drilled, the vast majority of which are relatively shallow. As such, exploration risks are inherently very substantial.

Exploratory well drilling locations that we decide to drill may not yield oil or natural gas in commercially viable quantities.

There is no way to predict in advance of drilling and testing whether any particular location will yield oil or natural gas in sufficient quantities to recover drilling or completion costs or to be economically viable. The use of technologies and the study of producing fields in the same area, if any, will not enable us to know conclusively prior to drilling whether oil, natural gas liquids (NGLs) or natural gas will be present or, if present, whether oil or natural gas will be present in sufficient quantities to be economically viable. Even if sufficient amounts of oil, NGLs or natural gas exist, we may inadvertently damage the potentially productive hydrocarbon bearing formation or experience mechanical difficulties while drilling or completing a well, resulting in a reduction in production from the well or abandonment of the well. If we drill exploratory wells that we identify as dry holes in our future drilling locations, our business may be materially harmed. We cannot assure you that the analogies we draw from available data from other wells, more fully explored locations or producing fields will be applicable to our drilling locations. Ultimately, the cost of drilling, completing and operating any well is often uncertain, and new wells may not be productive.

Deterioration of political, economic and security conditions in Israel may adversely affect our operations.

Any major hostilities involving Israel, a substantial decline in the prevailing regional security situation or the interruption or curtailment of trade between Israel and its present trading partners could have a material adverse effect on our operations. See the prior discussion on Political Climate.

Prolonged and/or widespread regional conflict in the Middle East could have the following results, among others:

- capital market reassessment of risk and subsequent redeployment of capital to more stable areas making it more difficult for us to obtain financing for potential development projects;

- security concerns in Israel, making it more difficult for our personnel or supplies to enter or exit the country;
- security concerns leading to evacuation of our personnel;
- damage to or destruction of our wells, production facilities, receiving terminals or other operating assets;
- inability of our service and equipment providers to deliver items necessary for us to conduct our operations in Israel, resulting in delays; and
- the lack of availability of drilling rig and experienced crew, oilfield equipment or services if third party providers decide to exit the region.

Loss of property and/or interruption of our business plans resulting from hostile acts could have a significant negative impact on our earnings and cash flow. In addition, we may not have enough insurance to cover any loss of property or other claims resulting from these risks.

We have a history of losses and we cannot assure you that we will ever be profitable.

We incurred net losses of $38,511,000 for the year ended December 31, 2018, $9,989,000 for the year ended December 31, 2017, and $8,513,000 for the year ended December 31, 2016. We cannot provide any assurance that we will ever be profitable.

Earnings, if any, will be diluted due to governmental royalty and charitable contributions.

We are legally bound to pay a government royalty of 12.5% of gross sales revenues. Additionally, we are legally required to pay 6% of gross sales revenue to two separate foundations (3% each to two separate foundations – see the separate section on foundations). As our expenses increase with respect to the amount of sales, these donations and allocation could significantly dilute future earnings and, thus, depress the price of the common stock.

Risks Associated with our Business

We are subject to increasing Israeli governmental regulations and environmental requirements that may cause us to incur substantial incremental costs and/or delays in our drilling program.

Our business is subject to laws and regulations promulgated by the State of Israel relating to the exploration for, and the development, production and marketing of, crude oil and natural gas, as well as safety matters. Legal requirements are frequently changed and subject to interpretation, and we are unable to predict the ultimate cost of compliance with these requirements or their effect on our operations. We may be required to make substantial expenditures to comply with governmental laws and regulations.

Environmental laws and regulations change frequently, and the implementation of new, or the modification of existing, laws or regulations could adversely impact our operations. The discharge of natural gas, crude oil, or other pollutants into the air, soil or water may give rise to substantial liabilities on our part to government agencies and third parties and may require us to incur substantial costs of remediation. In addition, we may incur costs and penalties in addressing regulatory agency procedures regarding possible non-compliance.

Our lack of diversification increases the risk of an investment in us, and our financial condition and results of operations may deteriorate if we fail to diversify.

Our business focus is on oil and gas exploration on a limited number of properties in Israel and exploitation of any significant reserves that are found within our license areas. As a result, we lack diversification, in terms of both the nature and geographic scope of our business. We will likely be impacted more acutely by factors affecting our industry or the regions in which we operate than we would if our business were more diversified. If we are unable to diversify our operations, our financial condition and results of operations could deteriorate.

We currently have no proved reserves or current production and we may never have any.

We do not have any proved reserves or current production of oil or gas. We cannot assure you that any wells will be completed or produce oil or gas in commercially profitable quantities.

Oil and gas exploration is an inherently risky business.

Exploratory drilling involves enormous risks, including the risk that no commercially productive oil or natural gas reservoirs will be discovered. Even when properly used and interpreted, seismic data analysis and other computer simulation techniques are only tools used to assist geoscientists in trying to identify subsurface structures and the presence of an active petroleum system. They do not allow the interpreter to know conclusively if hydrocarbons are present or economically available. The risk analysis techniques we use in evaluating potential drilling sites rely on subjective judgments of our personnel and consultants. Additionally, we are typically engaged in drilling deep onshore wildcat exploratory wells in Israel where only approximately 500 total wells have ever been drilled, the vast majority of which are relatively shallower. As such, exploration risks are inherently very substantial.

A substantial and extended decline in oil or natural gas prices could adversely impact our future rate of growth and the carrying value of our unproved oil and gas assets.

Prices for oil and natural gas fluctuate widely. Fluctuations in the prices of oil and natural gas will affect many aspects of our business, including our ability to attract capital to finance our operations, our cost of capital, and the value of our unproved oil and natural gas properties. Prices for oil and natural gas may fluctuate widely in response to relatively minor changes in the supply of and demand for oil and natural gas, market uncertainty and a wide variety of additional factors that are beyond our control, such as the domestic and foreign supply of oil and natural gas, technological advances affecting energy consumption, and domestic and foreign governmental regulations. Significant and extended reductions in oil and natural gas prices could require us to reduce our capital expenditures and impair the carrying value of our assets.

While there is much analysis and speculation as to the cause of this fluctuation in the price and its predicted future course, there are many factors that contribute to the price of oil, none of which the Company controls. The oil price is also impacted by actual supply and demand, as well as by expectation. Demand for energy is closely related to economic activity which is compounded by key advances and innovation in exploration techniques in recent years. Significant geopolitical events such as heightened conflict in the Middle East and large scale terrorist activities can also impact the price of oil tremendously.

If we are successful in finding commercial quantities of oil and/or gas, our revenues, operating results, financial condition and ability to borrow funds or obtain additional capital will depend substantially on prevailing prices for oil and natural gas. Declines in oil and gas prices may materially adversely affect our financial condition, liquidity, ability to obtain financing and operating results. Lower oil and gas prices also may reduce the amount of oil and gas that we could produce economically.

Historically, oil and gas prices and markets have been volatile, with prices fluctuating widely, and they are likely to continue to be volatile, making it impossible to predict with any certainty the future prices of oil and gas. The bottom line is that there are many and varied causes for the fluctuation in the price of oil and natural gas, and we have no control over these factors.

The insurance we carry is insufficient to cover all of the risks we face, which could result in significant financial exposure.

Exploration for and production of crude oil and natural gas can be hazardous, involving natural disasters and other unplanned events such as blowouts, well cratering, fire and explosion and loss of well control which can result in damage to or destruction of wells, injury to persons, loss of life, or damage to property and the environment. Exploration and production activities are also subject to risk from political developments such as terrorist acts, piracy, civil disturbances, war, expropriation or nationalization of assets, which can cause loss of or damage to our property.

As is customary within our industry, we maintain insurance against many, but not all, potential perils confronting our operations and in coverage amounts and deductible levels that we believe to be economic. Consistent with that profile, our insurance program is structured to provide us financial protection from unfavorable loss resulting from damages to or the loss of physical assets or loss of human life, liability claims of third parties, and exploratory drilling interruption attributed to certain assets and including such occurrences as well blowouts and resulting oil spills, at a level that balances cost of insurance with our assessment of risk and our ability to achieve a reasonable rate of return on our investments. Although we believe the coverage and amounts of insurance carried are adequate and consistent with industry practice, we do not have insurance protection against all the risks we face. Because we chose not to insure certain risks, insurance may not be available at a level that balances the cost of insurance and our desired rates of return, or actual losses exceed coverage limits. We regularly review our risks of loss and the cost and availability of insurance and revise our insurance program accordingly.

If an event occurs that is not covered by insurance or not fully protected by insured limits, it could have a significant adverse impact on our financial condition, results of operations and cash flows.

We face various risks associated with the trend toward increased activism against oil and gas exploration and development activities.

Opposition toward oil and gas drilling and development activity has been growing globally and is particularly pronounced in Organization for Economic Co-operation and Development (“OECD”) countries which include the U.S., the U.K and Israel. Companies in the oil and gas industry, such as us, are often the target of activist efforts from both individuals and non-governmental organizations regarding environmental compliance and business practices, potential damage to fresh water sources, and safety, among other topics. Future activist efforts could result in the following:

- delay or denial of drilling or other exploration permits;
- shortening of lease terms or reduction in lease size;
- restrictions on installation or operation of gathering or processing facilities;
- restrictions on the use of certain operating practices, such as hydraulic fracturing;
- legal challenges or lawsuits;
- damaging publicity about us;
- increased costs of doing business;
- reduction in demand for our products; and
- other adverse effects on our ability to develop our properties and expand production.

Our need to incur costs associated with responding to these initiatives or complying with any resulting new legal or regulatory requirements resulting from these activities that are substantial and not adequately provided for, could have a material adverse effect on our business, financial condition and results of operations.

Economic risks may adversely affect our operations and/or inhibit our ability to raise additional capital.

Economically, our operations in Israel may be subject to:

- exchange rate fluctuations;
- royalty and tax increases and other risks arising out of Israeli State sovereignty over the mineral rights in Israel and its taxing authority; and
- changes in Israel’s economy that could lead to oil and gas price controls.

Consequently, our operations may be substantially affected by local economic factors beyond our control, any of which could negatively affect our financial performance and prospects.

Legal risks could negatively affect our market value.

Legally, our operations in Israel may be subject to:

- changes in the Petroleum Law resulting in modification of license and permit rights;
- adoption of new legislation relating to the terms and conditions pursuant to which operations in the energy sector may be conducted;
- changes in laws and policies affecting operations of foreign-based companies in Israel; and
- changes in governmental energy and environmental policies or the personnel administering them.

The Israeli Energy Ministry has now enacted regulations relating to licensing requirements for entities engaged in the fuel sector that would result in our having to obtain additional licenses to market and sell hydrocarbons that we may discover.

Further, in the event of a legal dispute in Israel, we may be subject to the exclusive jurisdiction of Israeli courts or we may not be successful in subjecting persons who are not United States residents to the jurisdiction of courts in the United States, either of which could adversely affect the outcome of a dispute.

There are limitations on the transfer of interests in our petroleum rights, which could impair our ability to raise additional funds to execute our business plan.

The Israeli government has the right to approve any transfer of rights and interests in any license or other petroleum right we hold or may be granted and any mortgage of any license or other petroleum rights to borrow money. If we attempt to raise additional funds through borrowings or joint ventures with other companies and are unable to obtain required approvals from the government, the value of your investment could be significantly diluted or even lost.

Our dependence on the limited contractors, equipment and professional services available in Israel may result in increased costs and possibly material delays in our work schedule.

Due to the lack of competitive resources in Israel, costs for our operations may be more expensive than costs for similar operations in other parts of the world. We are also more likely to incur delays in our exploration schedules and be subject to a greater risk of failure in meeting our required work schedule. Similarly, some of the oil field personnel we need to undertake our planned operations are not necessarily available in Israel or available on short notice for work in Israel. Any or all of the factors specified above may result in increased costs and delays in the work schedule.

Our dependence on Israeli local licenses and permits as well as new regulations calling for enhanced bank guarantees and insurance coverage may require more funds than we have budgeted and may cause delays in our work schedule.

In connection with drilling operations, we are subject to a number of Israeli local licenses and permits. Some of these are issued by the Israeli defense forces, the Civil Aviation Authority, the Israeli Water Commission, the Israel Lands Authority, the holders of the surface rights in the lands on which we intend to conduct drilling operations, local and regional planning commissions and environmental authorities.

In the event of a commercial discovery and depending on the nature of the discovery and the production and related distribution equipment necessary to produce and sell the discovered hydrocarbons, we will be subject to additional licenses and permits, including from various departments in the Energy Ministry, regional and local planning commissions, the environmental authorities and the Israel Lands Authority. If we are unable to obtain some or all of these permits or the time required to obtain them is longer than anticipated, we may have to alter or delay our planned work schedule, which would increase our costs.

If we are successful in finding commercial quantities of oil and/or gas, our operations will be subject to laws and regulations relating to the generation, storage, handling, emission, transportation and discharge of materials into the environment, which can adversely affect the cost, manner or feasibility of our doing business. Many Israeli laws and regulations require permits for the operation of various facilities, and these permits are subject to revocation, modification and renewal. Governmental authorities have the power to enforce compliance with their regulations, and violations could subject us to fines, injunctions or both.

If compliance with environmental regulations is more expensive than anticipated, it could adversely impact the profitability of our business.

Risks of substantial costs and liabilities related to environmental compliance issues are inherent in oil and gas operations. It is possible that other developments, such as stricter environmental laws and regulations, and claims for damages to property or persons resulting from oil and gas exploration and production, would result in substantial costs and liabilities. This could also cause our insurance premiums to be significantly greater than anticipated.

The unavailability or high cost of drilling rigs, equipment, supplies, other oil field services and personnel could adversely affect our ability to execute our exploration and development plans on a timely basis and within our budget.

Our industry is cyclical and, from time to time, there is a shortage of drilling rigs, equipment, supplies and oilfield services. There may also be a shortage of trained and experienced personnel. During these periods, the costs of such items are substantially greater and their availability may be limited, particularly in locations that typically have limited availability of equipment and personnel, such as the Eastern Mediterranean, where our operations are located. As a result, drilling rigs and oilfield services may not be available at rates that provide a satisfactory return on our investment.

Risks Related to our Common Stock

We will issue additional common stock in the future, which would dilute the ownership interests of our existing stockholders.

In the future, we anticipate issuing additional securities in connection with capital raising efforts, including shares of our common stock or securities convertible into or exchangeable for our common stock, resulting in the dilution of the ownership interests of our stockholders. We are authorized under our amended and restated certificate of incorporation to issue 200,000,000 shares of common stock. As of March 3, 2019, there were 70,088,286 shares of our common stock issued and outstanding.

We have an effective shelf registration statement on Form S-3/A (File No. 333-216191) from which additional shares of our common stock and other securities can be issued. In addition, we may also issue additional shares of our common stock or securities convertible into or exchangeable for our common stock in connection with the hiring of personnel, future acquisitions, future private placements of our securities for capital raising purposes or for other business purposes. Future issuances of our common stock, or the perception that such issuances could occur, could have a material adverse effect on the price of our common stock. The former registration statement was declared effective by the SEC on March 27, 2014 and therefore, was effective until March 26, 2017 plus 180 days thereafter.

On February 23, 2017, the Company filed with the SEC a replacement shelf registration statement on Form S-3 (File No. 333-216191) to become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the SEC, acting pursuant to said Section 8(a), may determine. From time to time, the Company may offer up to $102,350,000 of any combination of the securities described in this prospectus, in the form of common stock, debt securities, warrants, and/or units.

When we offer a particular series of securities, we will describe the intended use of the net proceeds from that offering in a prospectus supplement. The actual amount of net proceeds we spend on a particular use will depend on many factors, including, our future capital expenditures, the amount of cash required by our operations, and our future revenue growth, if any. Therefore, we will retain broad discretion in the use of the net proceeds.

Because the likelihood of paying cash dividends on our common stock is remote at this time, stockholders must look solely to appreciation of our common stock to realize a gain on their investments.

We do not know when or if we will pay dividends. We currently intend to retain future earnings, if any, to finance the expansion of our business. Our future dividend policy is within the discretion of our board of directors and will depend upon various factors, including our business, financial condition, results of operations, capital requirements and investment opportunities. Accordingly, stockholders must look solely to appreciation of our common stock to realize a gain on their investment. This appreciation may not occur.

Our stock price and trading volume may be volatile, which could result in losses for our stockholders.

The public market for our common stock has been characterized by significant price and volume fluctuations. There can be no assurance that the market price of our common stock will not decline below its current or historic price ranges. The market price may bear no relationship to the prospects, stage of development, existence of oil and gas reserves, revenues, earnings, assets or potential of our company and may not be indicative of our future business performance. The trading price of our common stock could be subject to wide fluctuations. Fluctuations in the price of oil and gas and related international political events can be expected to affect the price of our common stock. In addition, the stock market in general has experienced extreme price and volume fluctuations that have affected the market price for many companies, sometimes unrelated to the operating performance of these companies. These market fluctuations, as well as general economic, political and market conditions, may have a material adverse effect on the market price of our common stock.

Some of the factors that could negatively affect our share price or result in fluctuations in the price or trading volume of our common stock include:

- actual or anticipated quarterly variations in our operating results,
- developments in the SEC investigation and pending shareholder lawsuits,
- changes in expectations as to our future financial performance or changes in financial estimates, if any,
- announcements relating to our business or the business of our competitors,
- conditions generally affecting the oil and natural gas industry,
- the success of our operating strategy, and
- the operating and stock performance of other comparable companies, and
- The continued listing of our stock on a recognized stock exchange

Many of these factors are beyond our control, and we cannot predict their potential effect on the price of our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 2. PROPERTIES

The Company currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License, comprising approximately 99,000 acres. The Megiddo Jezreel #1 (“MJ #1”) exploratory well was spud on June 5, 2017 and drilled to a total depth (“TD”) of 5,060 meters (approximately 16,600 feet). Thereafter, the Company obtained three open-hole wireline log suites (including a formation image log) and the well was successfully cased and cemented. The Ministry of Energy approved the well testing protocol on April 29, 2018.

Please refer to the discussion above under Item 1, under the caption “Summary of Exploration Activities” and “Exploration Plans Going Forward”.

The table below summarizes certain data for our license area for the year ended December 31, 2018:

Type of Right	Name	Area (Approx. Acres)	Working Interest	Expiration Date
License	Megiddo-Jezreel	98,842	100%	December 2, 2020(1)(2)

(1) After the initial primary term of three years, the license was extended through December 2, 2020 subject to compliance with the terms of the license as amended.

(2) Declaration of a commercial discovery during the license term, as may in certain circumstances be extended for two years to define the boundaries of the field, would entitle Zion to receive a 30-year lease (extendable for up to an additional 20 years (50 years in all) subject to compliance with a field development work program and production.

Surface Rights

The surface rights to drill site in Megiddo-Jezreel License area are held under a long-term lease by Kibbutz Sde Eliyahu. The rights are owned by the State of Israel and administered by the Israel Lands Authority. Permission has been granted to Zion by both Kibbutz Sde Eliyahu and the Israel Lands Authority for the use of the surface rights.

The surface rights to former drill sites in the former Joseph License area are held under a long-term lease by Kibbutz Ma’anit. The rights are owned by the State of Israel and administered by the Israel Lands Authority. Permission has been granted to Zion by both Kibbutz Ma’anit and the Israel Lands Authority for the use of the surface rights. The Company has completed the plugging obligations of all wells within the Joseph License area and acknowledges its obligation to complete the abandonment of the wells in accordance with guidance from the Environmental Ministry in 2019 even though the Joseph License has expired.

The surface rights to the former drill site in the former Asher-Menashe License area are held under a long-term lease by Kibbutz Ein Carmel. The rights are owned by the State of Israel and administered by the Israel Lands Authority. Permission has been granted to Zion by both Kibbutz Ein Carmel and the Israel Lands Authority for the use of the surface rights. The Company has completed the plugging obligations of the only well within the Asher-Menashe License area and acknowledges its obligation to complete the abandonment of the well in accordance with guidance from the Environmental Ministry in 2019 even though the Asher-Menashe License has expired.

Summary of Exploration Activities/Present Activities

Please refer to the discussion above under Item 1, under the caption “Summary of Exploration Activities” and “Exploration Plans Going Forward”.

Office Properties

(i) On September 10, 2015, the Company signed a lease agreement with Hartman Income REIT Property Holdings, LLC (“Hartman”) for premises containing 7,276 square feet. The lease term is for 65 months from December 1, 2015 to April 30, 2021. Rent was abated for the first five months (December 2015 through April 2016). Beginning in May 2016 and through April 2017, rent was paid on a monthly basis in the base amount of $7,882 per month. Thereafter, from May 2017 through April 2018, rent was paid on a monthly basis in the amount of $8,186 per month; from May 2018 through April 2019, rent is $8,489 per month; from May 2019 through April 2020, rent is $8,792 per month; and from May 2020 through April 2021, rent is $9,095 per month. We are also obligated to pay our pro-rated portion of all taxes, utilities, and insurance during the lease term.

On June 14, 2016, the Company and Hartman signed a First Amendment to Lease Agreement whereby the premises were expanded to include approximately 1,498 square feet, for a new total of approximately 8,774 square feet. The first amendment commencement date was July 1, 2016 and the payment of monthly rent was revised. Beginning in July 2016 and extending through November 2016, rent was paid on a monthly basis in the base amount of $7,882 per month. Beginning in December 2016 and extending through May 2017, rent was paid monthly in the base amount of $9,505.17 per month. Beginning in June 2017 and extending through May 2018, rent was paid monthly in the base amount of $9,870.75 per month. Beginning in June 2018 and extending through May 2019, rent is to be paid monthly in the base amount of $10,236.33 per month. Beginning in June 2019 and extending through May 2020, rent is to be paid monthly in the base amount of $10,601.92 per month. Beginning in June 2020 and extending through May 2021, rent is to be paid monthly in the base amount of $10,967.50 per month.

(ii) The Company's field office in Caesarea Israel consists of 6,566 square feet. The lease term is five years from February 1, 2014 to January 31, 2019. Rent is to be paid on a monthly basis in the base amount of approximately NIS 37,800 per month (approximately $10,100) per month at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in the CPI. The Company is also obligated to pay all related taxes, utilities, insurance and maintenance payments during the lease term. Pursuant to the lease, two years from the commencement of the lease term, the Company may terminate the agreement upon three months' notice provided the Company secures a replacement lessee approved by the lessor at its discretion.

The Company has an option to renew the lease for another five years, provided it is not in breach of the agreement, where it is required as well to furnish a notice of intent to exercise the option six months prior to termination of lease, and it furnishes a bank guarantee and insurance confirmation prior to commencement of option period.

The Company exercised the above-mentioned option on September 25, 2018. Rent is to be paid on a monthly basis in the base amount of approximately NIS 39,200 per month (approximately $10,450) at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in the CPI. The Company has an option to renew the lease for another five years from February 1, 2024 to January 31, 2029, provided it is not in breach of the agreement, where it is required as well to furnish a notice of intent to exercise the option six months prior to termination of lease, and it furnishes a bank guarantee and insurance confirmation prior to commencement of the option period. In the event that the Company does not exercise the option to renew the lease, the Company would pay the lessor an amount of approximately NIS 85,000 (approximately $22,700) at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in the CPI.

Under the lease agreement, the Company is authorized to further sublease part of the leased premises to a third party that is pre-approved by the sub-lessor. Rent and its related taxes, utilities, insurance and maintenance expenses for 2018, 2017 and 2016 were $309,000, $302,000 and 285,000 respectively.

Geneva Branch

On July 11, 2014, Zion Oil & Gas, Inc., Geneva Branch was registered in the Canton of Geneva, Switzerland. The legal Swiss name for the foreign branch is "Zion Oil & Gas, Inc., Wilmington, Branch of Geneva". The Zion Swiss Branch has its registered office and its business office at 6 Avenue Jules Crosnier, 1206 Champel, Geneva, Switzerland. The purpose of the branch is to operate a foreign treasury center for the Company.

ITEM 3. LEGAL PROCEEDINGS

Securities and Exchange Commission ("SEC") Investigation

As previously disclosed by the Company, on June 21, 2018, Zion received a subpoena to produce documents from the Fort Worth office of the SEC informing the Company of the existence of a non-public, fact-finding inquiry into the Company. Prior to the receipt of the subpoena on June 21, 2018, Zion had no previous communication with the SEC on this issue and was unaware of this investigation. The SEC stated that "the investigation and the subpoena do not mean that we have concluded that [Zion] or anyone else has violated the law." To date, Zion has furnished all required documents to the SEC in response to the subpoena and will continue to fully cooperate with the investigation.

The Company cannot predict when this matter will be resolved or what further action, if any, the SEC may take in connection with it.

Litigation

Following the commencement of the SEC investigation, on August 9, 2018, a putative class action (the “class action”) Complaint was filed against Zion, Victor G. Carrillo, the Company’s Chief Executive Officer at such time, and Michael B. Croswell Jr., the Company’s Chief Financial Officer in the U.S. District Court for the Northern District of Texas. On November 16, 2018, the Court entered an Order in the class action appointing lead plaintiffs and approving lead counsel and on January 22, 2019, an Amended Complaint was filed. The suit alleges violations of Section 10(b) of the Securities Exchange Act of 1934 (the “Exchange Act”) and Rule 10b-5 promulgated thereunder by the SEC and Section 11 of the Securities Act of 1933 (the “Securities Act”) against all defendants and alleges violations of Section 20(a) of the Exchange Act and Section 15 of the Securities Act against the individual defendants The alleged class period is from February 13, 2018 through November 20, 2018.

By Verified Consolidated Stockholder Derivative Complaint filed on March 4, 2019, three (3) stockholder derivative lawsuits previously filed in federal district court in Delaware on September 10, 2018, November 1, 2018, and November 21, 2018 were consolidated into one lawsuit filed derivatively and purportedly on behalf of the Company against Victor G. Carrillo, Michael B. Croswell, Jr., John M. Brown, Dustin L. Guinn, Forest A. Garb, Kent S. Siegel, Paul Oroian, William H. Avery, the Estate of Yehezkel Druckman, Lee Russell, Justin W. Furnace, Gene Scammahorn, Ralph F. DeVore, and Martin M. van Brauman. The suit alleges breach of fiduciary duty, unjust enrichment, violations of Section 14 (a) of the Exchange Act and conspiracy to “facilitate and disguise” other alleged wrongdoings. The “Relevant Period” of alleged wrongdoing spans from February 13, 2018 and continues through the present. The suit seeks unspecified damages to be awarded to the Company, orders directing the Company and individual defendants to make certain corporate governance reforms, restitution, and fees and costs.

On September 25, 2018, another lawsuit was filed in the 68th district court, Dallas County, Texas derivatively and purportedly on behalf of the Company against John M. Brown, Forrest A. Garb, Kent S. Siegel, Michael b. Croswell, Jr., Dustin L. Guinn, Victor G. Carrillo, Paul Oroian, William H. Avery, Justin W. Furnace, Gene Scammahorn, Martin M. van Brauman, and Lee R. Russell. This suit alleges claims for breaches of fiduciary duty and unjust enrichment against the individual defendants in connection with certain public statements made by the Company from March 12, 2018 to May 30, 2018, and the Company as a nominal defendant.

On October 29, 2018, Zion received a shareholder request to inspect books and records pursuant to Section 220 of the Delaware General Corporation Law for the purpose of investigating potential corporate mismanagement and breaches of fiduciary duty in connection with public statements made by the Company from March 12, 2018 to May 30, 2018.

The Company disputes the above claims and has made an advanced deposit of $500,000 to defense counsel against expected legal expenses in defending the litigation. The Company carries insurance that is applicable to these claims. Because of the uncertainties of litigation, it is not feasible to predict or determine the outcome of these matters, to guarantee that there will be no liability, or to reasonably estimate any loss in excess of its coverage. However, the Company intends to pursue a vigorous defense to the claims.

From time to time, the Company may also be subject to routine litigation, claims or disputes in the ordinary course of business. The Company defends itself vigorously in all such matters. However, we cannot predict the outcome or effect of any of the litigation or any other pending litigation or claims.

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

We completed the initial public offering of our common stock in January 2007. From January 3, 2007 and through September 1, 2009, shares of our common stock were traded on the NYSE Amex under the symbol "ZN." Since September 2, 2009, our common stock has been trading on the NASDAQ Global Market, also under the symbol "ZN."

The following table sets forth the high and low sales prices for the common stock for the periods indicated, as reported by the NASDAQ Global Market.

Fiscal Year	High	Low
2018:		
First Quarter	$ 5.53	$ 2.11
Second Quarter	$ 4.87	$ 2.89
Third Quarter	$ 4.15	$ 0.91
Fourth Quarter	$ 1.30	$ 0.41

Fiscal Year	High	Low
2017:		
First Quarter	$ 1.43	$ 1.12
Second Quarter	$ 3.53	$ 1.09
Third Quarter	$ 5.88	$ 2.68
Fourth Quarter	$ 3.39	$ 1.89

The closing per share stock price of our Common Stock on March 4, 2019 was $.50.

Holders

As of February 28, 2019, there were approximately 16,000 shareholders of record of our common stock. A significant number of shares of our Common Stock are held in either nominee name or street name brokerage accounts and, consequently, we are unable to determine the number of beneficial owners of our stock.

Dividends

We have never paid dividends on our common stock and do not plan to pay dividends on the common stock in the foreseeable future. Whether dividends will be paid in the future will be in the discretion of our board of directors and will depend on various factors, including our earnings and financial condition and other factors our board of directors considers relevant. We currently intend to retain earnings to develop and expand our business.

Issuer Purchases of Equity Securities

We do not have a stock repurchase program for our common stock.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with the financial statements and the notes thereto and the information contained in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations." Historical results are not necessarily indicative of future results. The selected financial data for the years ended December 31, 2015 and 2014 are derived from our audited financial statements not included in this report. All data is in thousands of USD, except share data:

	2018	2017	2016	2015	2014
Statement of Operations Data					
Revenues	—	—	—	—	—
Operating costs and expenses:					
General and administrative expenses	6,360	6,043	6,664	5,472	4,142
Other	2,214	2,744	2,227	1,790	2,541
Impairment of unproved oil and gas properties	30,906	—	—	—	—
Loss (gain) on derivative liability	(1,521)	971	(731)	—	—
Other expense (income), net	552	231	353	44	73
Net loss	(38,511)	(9,989)	(8,513)	(7,306)	(6,756)
Net loss per share of common stock	(0.63)	(0.19)	(0.21)	(0.20)	(0.19)
Balance Sheet Data					
Cash and cash equivalents	2,791	6,892	3,192	2,871	5,344
Unproved oil and gas properties	6,714	21,695	6,397	5,022	3,891
Current liabilities	4,834	6,787	1,953	1,453	1,165
Total liabilities	7,392	9,108	3,985	1,702	1,360
Stockholders' equity	5,129	24,440	7,665	8,730	10,520

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Introduction

The following discussion and analysis should be read in conjunction with Item 6, "Selected Financial Data" and our accompanying financial statements and the notes to those financial statements included elsewhere in this Annual Report. Some of our discussion is forward-looking and involves risks and uncertainties. For information regarding factors that could have a material adverse effect on our business, refer to *Risk Factors* under Item 1A of this Report.

Overview

Zion Oil and Gas is an oil and gas exploration company with a history of 18 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 currently trades on the NASDAQ Global Market under the symbol "ZN."

The Company currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License, comprising approximately 99,000 acres. The Megiddo Jezreel #1 ("MJ #1") exploratory well was spud on June 5, 2017 and drilled to a total depth ("TD") of 5,060 meters (approximately 16,600 feet). Thereafter, the Company obtained three open-hole wireline log suites (including a formation image log) and the well was successfully cased and cemented. The Ministry of Energy approved the well testing protocol on April 29, 2018.

During the fourth quarter of 2018, the Company testing protocol was concluded at the MJ #1 well. The test results confirmed that the MJ #1 well did not contain hydrocarbons in commercial quantities in the zones tested. As a result of the above determination, in the year ended December 31, 2018, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of $30,906,000.

The MJ#1 well provided Zion with information Zion believes is important for potential future exploration efforts within its license area. As with many frontier wildcat wells, the MJ#1 also left several questions unanswered.

While not meant to be an exhaustive list, a summary of what Zion believes to be key information learned in the MJ#1 well is as follows:

1. The MJ#1 encountered much higher subsurface temperatures at a depth shallower than expected before drilling the well. In our opinion, this is significant because reaching a minimum temperature threshold is necessary for the generation of hydrocarbons from an organic-rich source rock.

2. The known organic rich (potentially hydrocarbon bearing) Senonian age source rocks that are typically present in this part of Israel were not encountered as expected. Zion expected these source rocks to be encountered at approximately 1,000 meters in the MJ#1 well.

3. MJ#1 had natural fractures, permeability (the ability of fluid to move through the rock) and porosity (pore space in rock) that allowed the sustained flow of formation fluid in the shallower Jurassic and lower Cretaceous age formations between approximately 1,200 and 1,800 meters. While no hydrocarbons were encountered, Zion believes this fact is nonetheless significant because it provides important information about possible reservoir pressures and the ability of fluids to move within the formation and to the surface.

4. MJ#1 encountered oil in the Triassic Mohilla formation which Zion believes suggests an active deep petroleum system is in Zion's license area. There was no natural permeability or porosity in the Triassic Mohilla formation to allow formation fluid to reach the surface naturally during testing and thus the MJ#1 was not producible or commercial.

5. The depths and thickness of the formations we encountered varied greatly from pre-drill estimates. This required the MJ#1 to be drilled to a much greater depth than previously expected. Zion has tied these revised formation depths to seismic data which will allow for more accurate interpretation and mapping in the future.

A summary of what Zion believes to be some key questions left to be answered are:

1. Is the missing shallow Senonian age source rock a result of regional erosion, or is it missing because of a fault that cut the well-bore and could be reasonably expected to be encountered in the vicinity of the MJ#1 drill site? Zion believes this is an important question to answer because if the Senonian source rocks do exist in this area, the high temperatures encountered are sufficient to mature these source rocks and generate oil.

2. Do the unusually high shallow subsurface temperatures extend regionally beyond the MJ#1 well, which could allow for the generation of hydrocarbons in the Senonian age source rock within our license area?

3. As a consequence of seismic remapping, where does the MJ#1 well lie relative to the potential traps at the Jurassic and Triassic levels and was the well location too low on the structures and deeper than the potential hydrocarbons within those traps?

As a result of these unanswered questions and with the information gained drilling the MJ#1 well, Zion now believes it is prudent and consistent with good industry practice to try and answer some of these questions with a focused 3D seismic imaging shoot of approximately 50 square kilometers surrounding the MJ#1 well.

Zion received a multi-year license extension through December 2, 2020. Zion made its annual license fee payment on December 31, 2018, thereby confirming the Company's commitment to further exploration in the license area. The Company has commenced preliminary scouting and survey design to help identify the geologic boundaries of the proposed 3D seismic survey. Additionally, Zion held initial meetings with potential vendors to aid in the 3D seismic planning and acquisition process. Once the survey design and surface layout are completed, Zion intends to acquire the necessary government permits and negotiate potential surface damages to crops, irrigation piping, and other surface features. Zion believes it will be necessary to import seismic source equipment and autonomous wireless geophones (to record the signal) to acquire the 3D data. Once data acquisition is completed, interpretation is the final step and will involve integration with, and modification of, previous work by Zion technical staff.

Zion recognizes the financial and time commitment that Zion's shareholders have made in their support. Zion's ability to fully undertake all of these aforementioned activities is subject to its raising the needed capital from its continuing offerings, of which no assurance can be provided.

Zion's ability to fully undertake all of these aforementioned activities is subject to its raising the needed capital from its continuing offerings through the issuance of our securities, and we anticipate we will continue to need to raise funds through the issuance of equity 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 favorable terms (or at all).

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

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 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 expense. 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.

We have identified the accounting principles which we believe are most critical to the reported financial status by considering accounting policies that involve the most complex of subjective decisions or assessment.

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 properties represent 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. A further 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 adjustments 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.

During the fourth quarter of 2018, the Company’s testing protocol was concluded at the MJ #1 well. The test results confirmed that the MJ #1 well did not contain hydrocarbons in commercial quantities in the zones tested. As a result of the above determination, in the year ended December 31, 2018, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of $30,906,000. No impairment charges were recorded in 2016 and 2017 (see Note 4).

Following the impairment charge noted above, the total net book value of our unproved oil and gas properties under the full cost method is $6,714,000 at December 31, 2018.

Currency Utilized

Although our oil & gas properties and our principal operations are in Israel, we report all our transactions in United States dollars. Certain dollar amounts in the financial statements may represent the dollar equivalent of other currencies.

Valuation of Deferred Taxes

We record a valuation allowance to reduce our deferred tax asset to the amount that we believe is likely to be realized in the future. In assessing the need for the valuation allowance, we have considered not only future taxable income but also feasible and prudent tax planning strategies. In the event that we were to determine that it would be likely that we would, in the future, realize our deferred tax assets in excess of the net recorded amount, an adjustment to the deferred tax asset would be made. In the period that such a determination was made, the adjustment to the deferred tax asset would produce an increase in our net income.

Asset Retirement Obligation

We record a liability for 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

We follow 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. We use Level 1 inputs for fair value measurements whenever there is an active market, with actual quotes, market prices, and observable inputs on the measurement date. We use 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. We use observable market data whenever available. We use 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

The following table sets forth our Statements of Operations data for the years ended December 31 (all data is in thousands of USD):

	2018	**2017**	**2016**
Operating costs and expenses:			
General and administrative expenses	6,360	6,043	6,664
Other	2,214	2,744	2,227
Impairment of unproved oil and gas properties	30,906	-	-
Subtotal Operating costs and expenses	39,480	8,787	8,891
Loss, (gain) on derivative liability	(1,521)	971	(731)
Other expense, net	552	231	353
Net loss	38,511	9,989	8,513

FOR THE YEAR ENDED DECEMBER 31, 2018 COMPARED TO DECEMBER 31, 2017

Revenue. We currently have no revenue generating operations.

Operating costs and expenses. Operating costs and expenses for the year ended December 31, 2018 were $39,480,000 compared to $8,787,000 for the year ended December 31, 2017. The increase in operating costs and expenses during the year ended December 31, 2018 is primarily attributable to the recognition of an impairment charge of $30,906,000 during Q4 2018.

General and administrative expenses. General and administrative expenses for the year ended December 31, 2018 were $6,360,000 compared to $6,043,000 for the year ended December 31, 2017. The increase in General and administrative expenses during the year ended December 31, 2018 is primarily attributable to higher legal expenses stemming from the SEC investigation and related derivative lawsuits. This increase was partially offset by lower non-cash expenses recognized and recorded in connection with stock option grants during 2018 compared to the corresponding period in 2017.

Other expenses. Other expenses during the year ended December 31, 2018 were $2,214,000 compared to $2,744,000 for the year ended December 31, 2017. Other general and administrative expenses are comprised of non-compensation and non-professional expenses incurred. The decrease in other general and administrative expenses during the year ended December 31, 2018 compared to the corresponding period in 2017 is primarily attributable to less marketing expenses associated with investor relations activities.

Impairment of unproved oil and gas properties. Impairment of unproved oil and gas properties expenses during the year ended December 31, 2018 was $30,906,000 compared to zero for the year ended December 31, 2017. The increase in impairment of unproved oil and gas properties expenses in 2018 compared to 2017 is attributable to the impairment charge of $30,906,000 recorded during the year ended December 31, 2018 related to the MJ1 well.

Loss, (gain) on derivative liability. Loss, (gain) on derivative liability during the year ended December 31, 2018 was ($1,521,000) compared to $971,000 for the year ended December 31, 2017. An embedded derivative is contained within the valuation of Zion's $100 convertible bond offering which closed in March 2016. The gain on derivative liability during the year ended December 31, 2018 compared to the loss on derivative liability during the year ended December 31, 2017 is primarily due to the decrease in the share price of our common stock that occurred during the year ended December 31, 2018.

Other expense, net. Other expense, net for the year ended December 31, 2018 was $552,000 compared to $231,000 for the year ended December 31, 2017. The increase in Other expense, net during the year ended December 31, 2018 compared to 2017 is primarily attributable to exchange rate differences associated with the fluctuating exchange rates of the New Israeli Shekels ("NIS") with the U.S. Dollar ("USD") and to financial expenses related to the Company's convertible bonds.

Net Loss. Net loss for the year ended December 31, 2018 was $38,511,000 compared to $9,989,000 for the year ended December 31, 2017.

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 common stock as well as proceeds from the exercise of warrants and options to purchase common shares.

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 financial statements for the year ended December 31, 2018 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 December 31, 2018, we had approximately $2,791,000 in cash and cash equivalents compared to $6,892,000 at December 31, 2017. Our working capital (current assets minus current liabilities) was $537,000 at December 31, 2018 and $3,646,000 at December 31, 2017. The derivative liability at December 31, 2018 was $345,000, and this non-cash liability negatively impacts the working capital figure. Our working capital balances, exclusive of the non-cash derivative liability amounts, were $882,000 at December 31, 2018 and $5,512,000 at December 31, 2017.

As of December 31, 2018, we provided bank guarantees to various governmental bodies (approximately $1,236,000) and others (approximately $80,000) in respect of our drilling operation in the aggregate amount of approximately $1,316,000. The (cash) funds backing these guarantees and additional amounts added to support currency fluctuations as required by the bank are held in restricted interest-bearing accounts and are reported on the Company's balance sheets as fixed short-term bank deposits restricted, and fixed long-term bank deposits restricted.

During the year ended December 31, 2018, cash used in operating activities totaled $5,833,000. Cash provided by financing activities during the year ended December 31, 2018 was $15,950,000 and is primarily attributable to proceeds received from the Dividend Reinvestment and Stock Purchase Plan (the "DSPP" or "Plan"). Net cash used in investing activities such as unproved oil and gas properties, other assets and restricted bank deposits was $16,829,000 for the year ended December 31, 2018.

We expect to incur additional significant expenditures to further our exploration and development programs. While we raised approximately $2,000,000 during the period December 10, 2018 through January 23, 2019, we will need to raise additional funds in order to acquire, interpret, and analyze new 3-D seismic date in our license area. Additionally, we estimate that, when we are not actively drilling a well, our expenditures are approximately $500,000 per month excluding exploratory operational activities. However, when we are actively drilling a well, we estimate an additional minimum expenditure of approximately $2,500,000 per month. Zion expects that during a period of active seismic data acquisition the expenditures to be approximately $1,500,000 to $2,500,000. The above estimates are subject to change. Management believes that our existing cash balance, coupled with anticipated proceeds under the DSPP, will be sufficient to finance our plan of operations through May 2019. In addition, reference is also made to the legal proceedings referred to in Item 3 of this report relating to lawsuits filed against us following the disclosure of the SEC investigation. While we paid an advanced deposit in the amount of $500,000, any unforeseen or unexpected outlays in this regard may adversely affect our available funds or additional amounts that we may need to raise.

No assurance can be provided that we will be able to raise the needed operating capital.

Even if we raise the needed funds 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., seismic acquisition costs, permitting and surface damages and importation of equipment into Israel, etc.) in existing license areas, the costs associated with extended delays in undertaking the required exploratory work, and plugging and abandonment activities which is typical of what we have experienced in the past.

On March 13, 2014 Zion filed a registration statement on Form S-3 that is part of a replacement registration statement that was filed with the SEC using a "shelf" registration process. The registration statement was declared effective by the SEC on March 31, 2014. 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), for which the three year period ended 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.

The Dividend Reinvestment and Stock Purchase Plan

On March 13, 2014 Zion filed a registration statement on Form S-3 that is part of a replacement registration statement that was filed with the SEC using a “shelf” registration process. The registration statement was declared effective by the SEC on March 31, 2014. 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), for which the three year period ended 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 March 27, 2014, we launched our 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 directly from the Company. 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 participant the opportunity to purchase the Company’s Common Stock at a warrant exercise price of $1.00. Each of the three warrants series has different expiration dates that have been extended.

The warrants first became exercisable on May 2, 2016 and, in the case of ZNWAC on May 2, 2018 and in the case of ZNWAD on May 2, 2019, at a per share exercise price of $1.00.

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

As of May 2, 2018, any outstanding ZNWAC warrants expired.

On December 4, 2018, the Company extended the termination date of the ZNWAD Warrant by one (1) year from the expiration date of May 2, 2019 to May 2, 2020.

On November 1, 2016, we launched a unit offering (the “Unit Program”) under our DSPP which continued through March 31, 2017 pursuant to which participants purchased units comprised of seven shares of Common Stock and seven Common Stock purchase warrants, at a per unit purchase price of $10. The warrant is referred to as “ZNWAE.”

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.

On May 22, 2017, we launched a new unit offering (the "New Unit Program"). The New Unit Program consisted of a new combination of common stock and warrants, a new time period in which to purchase under the program, and a new unit price, but otherwise the same unit program features, conditions and terms in the Prospectus Supplement applied. The new unit program began on May 22, 2017 and terminated on July 12, 2017. This new Unit Option Program enabled participants to purchase Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) a certain number of shares of Common Stock determined by dividing $250.00 (the price of one Unit) by the average of the high and low sale prices of the Company's publicly traded common stock as reported on the NASDAQ on the unit purchase date and (ii) Common Stock purchase warrants to purchase an additional 25 shares of Common Stock. Each warrant affords the participant the opportunity to purchase one share of the Company's Common Stock at a warrant exercise price of $1.00. The warrant is referred to as "ZNWAF."

All ZNWAF warrants became exercisable on August 14, 2017 and continue to be exercisable through August 14, 2020 at a per share exercise price of $1.00. The warrant terms provide that if the Company's Common Stock trades above $5.00 per share as 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 accelerate the termination date of the warrant upon providing 60 days advanced notice to the warrant holders.

An Amendment No. 2 to the Prospectus Supplement (as described below) was filed on October 12, 2017.

Under Amendment No. 2, the Company initiated another Unit Option Program which terminated on December 6, 2017. This Unit Option Program enabled participants to purchase Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) a certain number of shares of Common Stock determined by dividing $250.00 (the price of one Unit) by the average of the high and low sale prices of the Company's Common Stock as reported on the NASDAQ on the unit purchase date and (ii) Common Stock purchase warrants to purchase an additional 15 shares of Common Stock at a warrant exercise price of $1.00 per share. The warrant is referred to as "ZNWAG."

The warrants became exercisable on January 8, 2018 and continue to be exercisable through January 8, 2021 at a per share exercise price of $1.00. The warrant terms provide that if the Company's Common Stock trades above $5.00 per share as 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 accelerate the termination date of the warrant upon providing 60 days advanced notice to the warrant holders.

On February 1, 2018, the Company initiated another Unit Option Program which terminated on February 28, 2018. The Unit Option consisted of Units of our securities where each Unit (priced at $250.00 each) was comprised of (i) 50 shares of Common Stock and (ii) Common Stock purchase warrants to purchase an additional 50 shares of Common Stock. The investor's Plan account was credited with the number of shares of the Company's Common Stock acquired under the Units purchased. Each warrant affords the investor the opportunity to purchase one share of Company Common Stock at a warrant exercise price of $5.00. The warrant is referred to as "ZNWAH."

The warrants became exercisable on April 2, 2018 and continue to be exercisable through April 2, 2020 at a per share exercise price of $5.00, after the Company, on December 4, 2018, extended the termination date of the Warrant by one (1) year from the expiration date of April 19, 2019 to April 19, 2020.

On August 21, 2018, the Company initiated another Unit Option and terminated on September 26, 2018. The Unit Option consisted of Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) a certain number of shares of Common Stock determined by dividing $250.00 (the price of one Unit) by the average of the high and low sale prices of the Company's publicly traded common stock as reported on the NASDAQ on the Unit Purchase Date and (ii) Common Stock purchase warrants to purchase an additional twenty-five (25) shares of Common Stock. The investor's Plan account was credited with the number of shares of the Company's Common Stock acquired under the Units purchased. Each warrant affords the investor the opportunity to purchase one share of Company Common Stock at a warrant exercise price of $1.00. The warrant is referred to as "ZNWAJ."

The warrants became exercisable on October 29, 2018 and continue to be exercisable through October 29, 2020 at a per share exercise price of $1.00, after the Company, on December 4, 2018, extended the termination date of the Warrant by one (1) year from the expiration date of April 19, 2019 to April 19, 2020.

On December 10, 2018, the Company's most recent Unit Option began and was terminated on January 23, 2019. The Unit Option consisted of Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) two hundred and fifty (250) shares of Common Stock and (ii) Common Stock purchase warrants to purchase an additional two hundred and fifty (250) shares of Common Stock at a per share exercise price of $0.01. The investor's Plan account would be credited with the number of shares of the Company's Common Stock and Warrants that are acquired under the Units purchased. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $0.01. The warrant is referred to as "ZNWAK."

The warrants become exercisable on February 25, 2019 and continue to be exercisable through February 25, 2020 at a per share exercise price of $0.01.

The company raised approximately $2,000,000 from the period December 10, 2018 through January 23, 2019, under the DSPP and its most recently completed unit offering.

For the years ended December 31, 2018, 2017 and 2016, approximately $13,781,000, $22,994,000 and $4,338,000 was raised under the DSPP program, respectively.

The warrants represented by the ticker ZNWAA are tradable on the Nasdaq market. However, all of the other warrants characterized above, in the table below, and throughout this Form 10-K, are not tradeable and are used internally for classification and accounting purposes only.

2018 Subscription Rights Offering

On April 2, 2018 the Company announced an offering ("2018 Subscription Rights Offering") through American Stock Transfer& Trust Company, LLC (the "Subscription Agent"), at no cost to the shareholders, of non-transferable Subscription Rights to purchase Rights (each "Right" and collectively, the "Rights") of its securities to persons who owned shares of our Common Stock on April 13, 2018 ("the Record Date"). Pursuant to the 2018 Subscription Rights Offering, each holder of shares of common stock on the Record Date received non-transferable rights to subscribe for Rights, with each Right comprised of one share of the Company Common Stock, par value $0.01 per share (the "Common Stock") and one Common Stock Purchase Warrant to purchase an additional one share of Common Stock. Each Right could be purchased at a per Right subscription price of $5.00. Each Warrant afforded the investor the opportunity to purchase one share of the Company Common Stock at a warrant exercise price of $3.00. The warrant is referred to as "ZNWAI."

The warrants became exercisable on June 29, 2018 and continue to be exercisable through June 29, 2020 at a per share exercise price of $3.00, after the Company, on December 4, 2018, extended the termination date of the Warrant by one (1) year from the expiration date of June 29, 2019 to June 29, 2020.

Each shareholder received .10 (one tenth) of a subscription right (i.e. one subscription right for each 10 shares owned) for each share of the Company's Common Stock owned on the Record Date.

The 2018 Subscription Rights Offering terminated on May 31, 2018. The Company raised net proceeds of approximately $3,038,000, from the sale of the Rights, after deducting fees and expenses of $243,000 incurred in connection with the rights offering.

Warrants Extended

On December 4, 2018, the Company executed an Amendment to certain Warrant Agent Agreements (the "Agreements") between the Company and American Stock Transfer & Trust Company ("AST"). The Company has implemented Agreements with AST as the Company's Warrant Agent (the "Warrant Agent"), under a Warrant Agent Agreement dated February 2, 2015 for the Warrant ZNWAD, under a Warrant Agent Agreement dated February 1, 2018 for the Warrant ZNWAH, under a Warrant Agent Agreement dated April 2, 2018 for the Warrant ZNWAI and under a Warrant Agent Agreement dated August 21, 2018 for the Warrant ZNWAJ.

The Warrant ZNWAD had an expiration date of May 2, 2019, the Warrant ZNWAH had an expiration date of April 19, 2019, the Warrant ZNWAI had an expiration date of June 29, 2019 and the Warrant ZNWAJ had an expiration date of October 29, 2019.

Pursuant to Section 3.2 of the Warrant Agent Agreements, the Company in its sole discretion extended the termination date of the above Warrants by delaying the Expiration Dates and such extension shall be identical in duration among all of the Warrants. The Company extended the termination date of the Warrant ZNWAD by one (1) year from the expiration date of May 2, 2019 to May 2, 2020. The Company extended the termination date of the Warrant ZNWAH by one (1) year from the expiration date of April 19, 2019 to April 19, 2020. The Company extended the termination date of the Warrant ZNWAI by one (1) year from the expiration date of June 29, 2019 to June 29, 2020. The Company extended the termination date of the Warrant ZNWAJ by one (1) year from the expiration date of October 29, 2019 to October 29, 2020.

The Warrants transactions since January 1, 2016 are shown in the table below:

	ZNWAA	ZNWAB	ZNWAC	ZNWAD	ZNWAE	ZNWAF	ZNWAG	ZNWAH	ZNWAI	ZNWAJ	Total
Outstanding warrants, December 31, 2015	1,567,155	287,072	287,072	287,072	-	-	-	-	-	-	2,428,371
Exercise Price	$ 2.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 5.00	$ 3.00	1.00	
Warrant Termination Date	1/31/2020	5/2/2017	5/2/2018	5/2/2020	5/2/2020	8/14/2020	1/8/2021	4/19/2020	6/29/2020	10/29/2020	
Change during 2016 to:											
Issued	-	95,180	95,180	95,180	803,376	-	-	-	-	-	1,088,916
Exercised	-	(68,698)	(37,524)	(34,412)	-	-	-	-	-	-	(140,634)
Expired	-	-	-	-	-	-	-	-	-	-	-
Outstanding and exercisable warrants, December 31, 2016	**1,567,155**	313,554	344,728	347,840	803,376	-	-	-	-	-	3,376,653

Change during 2017 to:

	ZNWAA	ZNWAB	ZNWAC	ZNWAD	ZNWAE	ZNWAF	ZNWAG	ZNWAH	ZNWAI	ZNWAJ	Total
Issued	-	-	-	-	3,262,742	683,865	414,300	-	-	-	4,360,907
Exercised	(42,538)	(206,737)	(69,576)	(53,506)	(1,037,999)	(223,634)	-	-	-	-	(1,633,990)
Expired	-	(106,817)	-	-	-	-	-	-	-	-	(106,817)
Outstanding and exercisable warrants, December 31, 2017	1,524,617	-	275,152	294,334	3,028,119	460,231	414,300	-	-	-	5,996,753

Change during 2018 to:

	ZNWAA	ZNWAB	ZNWAC	ZNWAD	ZNWAE	ZNWAF	ZNWAG	ZNWAH	ZNWAI	ZNWAJ	Total
Issued	-	-	-	-	10,493	100	6,030	373,900	656,274	550,900	1,597,697
Exercised	(25,813)	-	(196,913)	(50,481)	(894,102)	(100,721)	(179,752)	(1,500)	(15,539)	(4,850)	(1,469,671)
Expired	-	-	(78,239)	-	-	-	-	-	-	-	(78,239)
Outstanding and exercisable warrants, December 31, 2018	1,498,804	-	-	243,853	2,144,310	359,610	240,578	372,400	640,735	546,050	6,046,540

Senior Convertible Bonds Rights Offering (October 21, 2015 – March 31, 2016)

On October 21, 2015, we filed with the SEC a prospectus supplement for a rights offering. Under this rights offering, we 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 due May 2021”), to persons who owned shares of our 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, we 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, we issued approximately $3,470,000 aggregate principal amount of Notes due May 2021 in connection with the rights offering. We raised 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 rights offering. These costs have been discounted as deferred offering costs.

12% Convertible Bonds Public Offering (May 31, 2016 - October 31, 2016)

On May 31, 2016, we filed with the SEC a Prospectus Supplement, as subsequently amended on June 22, 2016 and August 30, 2016, for an offering of Zion’s 12% Convertible Senior Bonds due 2028 (the “Bonds;” each, a “Bond”) in a minimum aggregate amount of $2,500,000, on a “best efforts minimum/maximum offering,” up to a maximum amount of $12,000,000 (the “Follow On Public Offering”). The Follow On Public Offering was made available through Network 1 Financial Securities, Inc. (“Network 1”) and other licensed broker/dealers. The “best efforts” public offering period was scheduled to continue through September 1, 2016. This conditional closing was subject to extension by the Company, in its sole discretion, for an additional 60-day period to which the Company elected, thereby extending the closing to November 1, 2016. All offering proceeds were deposited into an escrow account at Ocean First Bank, which acted as the escrow agent for the “best efforts” offering.

On November 1, 2016, the Company closed its public bond offering. The minimum aggregate amount of $2,500,000 was not reached as of the November 1, 2016 closing date. Ocean First Bank was duly authorized and effectively completed the prompt return of invested funds, without deduction, to the rightful owners.

In connection with the "best efforts" offering, we incurred and expensed of approximately $83,000 in deferred issuance costs, which primarily consisted of underwriter fees, legal and other professional service fees.

Tabular Disclosure of Contractual Obligations

The following summarizes our contractual financial obligations for continuing operations at December 31, 2018, and the effect such obligations are expected to have on our liquidity and cash flow in future periods.

	Payment due by period (in Thousands of USD)					
	2019	2020	2021	2022	Thereafter	Total
Exploration Related Commitments	3,501	—	—	—	—	3,501
Operating Leases	328	322	228	173	187	1.238
Convertible Bonds (a)	327	327	3,593	—	—	4,247
Employment Agreements	1,115	—	—	—	—	1,115
Total	5,271	649	3,821	173	187	10,101

(a) Zion has the right to make this annual payment in ZN common shares (payment in kind).

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

We do not believe that the adoption of any recently issued accounting pronouncements in 2018 had a significant impact on our financial position, results of operations, or cash flow, except for ASC Update No. 2015-03—Interest—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, which requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation of a debt discount. For public business entities, the amendments in this Update are effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. At December 31, 2018, and 2017 we reclassified $63,000 and $90,000, respectively, in deferred offering costs from an asset account and applied it to the outstanding debt balance (see Note 7).

ITEM 7A. 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. During the period January 1, 2018 through December 31, 2018, the USD has fluctuated by approximately 8.1% against the NIS (the USD has strengthened relative to the NIS). By contrast, during the period January 1, 2017 through December 31, 2017, the USD fluctuated by approximately (9.8%) against the NIS (the USD weakened relative to the NIS). Continued strengthening 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 December 31, 2018, we had cash, cash equivalents and short-term and long-term bank deposits of approximately $4,125,000. The weighted average annual interest rate related to our cash and cash equivalents for the year ended December 31, 2018 was approximately 0.12%.

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 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required by this item are included beginning at page F-1 below.

Zion Oil & Gas, Inc.
Management's Assessment of Internal Control over Financial Reporting
December 31, 2018

Overview

Zion Oil and Gas, Inc., a Delaware corporation, is an oil and gas exploration company with a history of 19 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."

The Company currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License, comprising approximately 99,000 acres. The Megiddo Jezreel #1 ("MJ #1") site was completed in early March 2017, after which the drilling rig and associated equipment were mobilized to the site. Performance and endurance tests were completed, and the MJ #1 exploratory well was spud on June 5, 2017, ahead of the June 30, 2017 deadline under the then-existing license terms. The MJ #1 well has been drilled to a total depth ("TD") of 5,060 meters (approximately 16,600 feet). Thereafter, the Company obtained three open-hole wireline log suites (including a formation image log) and the well was successfully cased and cemented. The Ministry of Energy approved the well testing protocol on April 29, 2018.

During the fourth quarter of 2018, the Company testing protocol was concluded at the Megiddo Jezreel #1 ("MJ #1") well. The test results confirmed that the MJ #1 well does not contain hydrocarbons in commercial quantities in the zones tested. As a result of the above determination, in the year ended December 31, 2018, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of $30,906,000.

While the well was not commercially viable, Zion has learned a great deal from the drilling and testing of this well. We believe that the drilling and testing of this well carried out the testing objectives and support further evaluation and potential further exploration efforts within our License area.

The MJ#1 well has provided Zion with information Zion believes is important for potential future exploration efforts within its license area. As with many frontier wildcat wells, the MJ#1 also left several questions unanswered.

While not meant to be an exhaustive list, a summary of what Zion believes to be key information learned in the MJ#1 well is as follows:

1. The MJ#1 encountered much higher subsurface temperatures at a depth shallower than expected before drilling the well. In our opinion, this is significant because reaching a minimum temperature threshold is necessary for the generation of hydrocarbons from an organic-rich source rock.
2. The known organic rich (potentially hydrocarbon bearing) Senonian age source rocks that are typically present in this part of Israel were not encountered as expected. Zion expected these source rocks to be encountered at approximately 1,000 meters in the MJ#1 well.
3. MJ#1 had natural fractures, permeability (the ability of fluid to move through the rock) and porosity (pore space in rock) that allowed the sustained flow of formation fluid in the shallower Jurassic and lower Cretaceous age formations between approximately 1,200 and 1,800 meters. While no hydrocarbons were encountered, Zion believes this fact is nonetheless significant because it provides important information about possible reservoir pressures and the ability of fluids to move within the formation and to the surface.
4. MJ#1 encountered oil in the Triassic Mohilla formation which Zion believes suggests an active deep petroleum system is in Zion's license area. There was no natural permeability or porosity in the Triassic Mohilla formation to allow formation fluid to reach the surface naturally during testing and thus the MJ#1 was not producible or commercial.
5. The depths and thickness of the formations we encountered varied greatly from pre-drill estimates. This required the MJ#1 to be drilled to a much greater depth than previously expected. Zion has tied these revised formation depths to seismic data which will allow for more accurate interpretation and mapping in the future.

A summary of what Zion believes to be some key questions left to be answered are:

1. Is the missing shallow Senonian age source rock a result of regional erosion, or is it missing because of a fault that cut the well-bore and could be reasonably expected to be encountered in the vicinity of the MJ#1 drill site? Zion believes this is an important question to answer because if the Senonian source rocks do exist in this area, the high temperatures encountered are sufficient to mature these source rocks and generate oil.
2. Do the unusually high shallow subsurface temperatures extend regionally beyond the MJ#1 well, which could allow for the generation of hydrocarbons in the Senonian age source rock within our license area?
3. As a consequence of seismic remapping, where does the MJ#1 well lie relative to the potential traps at the Jurassic and Triassic levels and was the well location too low on the structures and deeper than the potential hydrocarbons within those traps?

As a result of these unanswered questions and with the information gained drilling the MJ#1 well, Zion now believes it is prudent and consistent with good industry practice to try and answer some of these questions with a focused 3D seismic imaging shoot of approximately 50 square kilometers surrounding the MJ#1 well.

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.

We believe that our system of internal control pertaining to financial reporting provides reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external purposes in accordance with GAAP. Our internal control over financial reporting also includes those policies and procedures that pertain to the maintenance of records that accurately and fairly reflect the transactions and dispositions of our assets, and provides reasonable assurance that transactions are recorded as necessary to permit preparation of our financial statements in accordance with GAAP.

Zion Oil & Gas, Inc.
Management's Assessment of Internal Control over Financial Reporting
December 31, 2018

Background

We evaluated the design and operating effectiveness of our internal control over financial reporting as of December 31, 2018 in accordance with Section 404 – Management Assessment of Internal Controls of the Sarbanes-Oxley Act of 2002 ("Section 404") and the Securities and Exchange Commission's ("SEC") internal controls reporting requirements set forth in its final rule in Release No. 34-47986, Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports ("Release No. 34-47986").

In Release No. 34-47986, the SEC requires that we base our evaluation of the effectiveness of our internal control over financial reporting on a suitable, recognized control framework that is established by a body or group that has followed due-process procedures, including the broad distribution of the framework for public comment. Specifically, Release No. 34-47986 provides that a suitable framework must:

- be free from bias;
- permit reasonably consistent qualitative and quantitative measurements of a company's internal control;
- be sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of a company's internal controls are not omitted; and
- be relevant to an evaluation of internal control over financial reporting.

Accordingly, we chose to use the Internal Control – Integrated Framework (2013), established by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO Framework") as the basis for evaluating the design and operating effectiveness of our internal control over financial reporting.

To draw accurate conclusions about the design and operating effectiveness of our internal control over financial reporting, we must observe a threshold established by the SEC in Release No. 34-47986 which precludes us from determining that our internal control over financial reporting is effective if we identify one or more material weaknesses in our internal control over financial reporting.

In Auditing Standard No. 5, An Audit of Internal Control Over Financial Reporting Performed in Conjunction with an Audit of Financial Statements ("AS5"), the Public Company Accounting Oversight Board ("PCAOB") defines a material weakness as a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

To further clarify the meaning of material weakness, AS5 defines the following related terms:

- *Control deficiency.* A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis.
- *Significant deficiency.* A significant deficiency is a control deficiency, or combination of control deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of the company's financial reporting.

In Release No. 34-47986, the SEC requires that our assessment of our internal control over financial reporting be: (1) based on procedures sufficient both to evaluate design and test operating effectiveness; and (2) supported by sufficient evidential matter.

Assessment of Internal Control over Financial Reporting

We designed our internal control over financial reporting to effectively support our assertions related to all significant processes and disclosures in our financial statements. Evidence of the design and control objectives of our internal control over financial reporting is documented in detailed process flow narratives which describe the controls over significant processes and procedures designed to prevent and detect material misstatements or omissions in our financial statements and include controls related to:

- Authorizing, initiating, recording, processing, and reconciling all significant account balances, classes of transactions and disclosure, and related assertions included in our financial statements;
- Initiating and processing non-routine and non-systematic transactions;
- Selection and application of appropriate accounting policies;
- Prevention, identification, and detection of fraud;
- Financial reporting processes; and
- Safeguarding assets.

Our approach to evaluating the design and operating effectiveness of our internal control over financial reporting included the following procedures which were subject to the direction and oversight of the Audit Committee of our Board of Directors, CEO, CFO and General Counsel:

- Determine the scope of the evaluation;
- Document the control environment;
- Plan and perform tests to evaluate the design and operating effectiveness of internal control over financial reporting;
- Evaluate identified control deficiencies to determine whether the control deficiencies, individually or in combination, are significant deficiencies or material weaknesses; and
- Report the results of the evaluation and the conclusion about the design and operating effectiveness of internal control over financial reporting as of the end of the most recent fiscal year based on the evaluation in accordance with Section 404 and Release No. 34-47986.

Zion Oil & Gas, Inc.
Management's Assessment of Internal Control over Financial Reporting
December 31, 2018

Scope

Zion Oil & Gas, Inc., a Delaware corporation ("we," "our," "Zion" or the "Company") is an oil and gas exploration company with a history of 19 years of oil & gas exploration in Israel. As of December 31, 2018, the Company had no revenues from its oil and gas operations.

Significant processes

Based on our quantitative and qualitative analysis, the following processes and sub-processes were identified as significant to our financial statements:

USA Operations:

- Entity-level Controls
- Financial Reporting
- General Ledger and Equity
- Human Resources
- Information Technology
- Legal
- Payroll
- Purchasing
- Treasury Management
- Tax Reporting

Israel Operations:

- General Ledger and Equity
- Human Resources
- Information Technology
- Inventory Management
- Legal
- Payroll
- Purchasing
- Treasury Management
- Tax Reporting

Document the control environment

For each significant process, we identified the points within the process at which a misstatement, including a misstatement due to fraud, related to each financial statement assertion could occur and identified controls in place to address potential misstatements and prevent or detect unauthorized acquisition, use, or disposition of assets. We also identified entity-level controls that address corporate governance. We utilized narrative documents to capture the control environment at the entity-wide level and for each significant process. Controls identified in each of the process flow narratives were summarized in control matrices.

Zion Oil & Gas, Inc.
Management's Assessment of Internal Control over Financial Reporting
December 31, 2018

Plan and perform testing

We performed tests of the design and operating effectiveness of our internal control over financial reporting to evaluate controls over all relevant assertions related to all significant processes and disclosures. To determine the nature, timing, and extent of the tests of internal control over financial reporting, we performed the following steps:

- Identified all relevant financial statement assertions;
- Identified all significant processes and major classes of transactions; and
- Identified controls to test.

Identify controls to test

Upon identifying significant processes, we evaluated whether to test preventive controls, detective controls, or a combination of both for the assertions relevant to individual significant processes. To achieve effective tests of controls over financial reporting, we chose to test a combination of both preventive and detective controls.

Testing and evaluating design effectiveness

To test and evaluate design effectiveness of our internal control over financial reporting, we considered the control objectives in each area and whether the controls could effectively prevent or detect errors or fraud that could result in material misstatements in our financial statements. The procedures we performed to test and evaluate design effectiveness included inquiry, observation, walkthroughs, inspection of relevant documentation, and specific evaluation of whether the controls are likely to prevent or detect errors or fraud that could result in misstatements if they operated as intended.

Testing and evaluating operating effectiveness

We determined the nature, timing, and extent of tests of controls to evaluate operating effectiveness of our internal control over financial reporting.

Nature. Our tests of controls over operating effectiveness included a mix of inquiry, inspection of relevant documentation, observation, and re-performance of the controls. The nature of the test we performed often depended upon the nature of the control itself. In cases where effective operation of the control was not sufficiently evident, we re-performed the control and/or inquired of relevant personnel for additional evidence.

Timing. The period of time over which we performed tests of controls varied with the nature of the control being tested and with the frequency with which specific controls operate and specific policies apply. We tested controls that were relevant to our internal control over financial reporting for fiscal year 2018.

Extent. In determining the extent of procedures to perform, we designed the procedures to provide a high level of assurance that the control being tested was operating effectively. In making this determination, we evaluated the nature, frequency of operation, and importance of the control being tested.

Zion Oil & Gas, Inc.
Management's Assessment of Internal Control over Financial Reporting
December 31, 2018

Nature of the control

We evaluated the complexity of the controls, the significance of the judgments made in connection with their operation, and the level of competence of the individual performing the controls to ensure effective operation of the controls.

Frequency of operation

Depending on the frequency of operation of the controls being tested, we randomly selected transactions as follows:

Frequency	Number of selections
Daily	10-25
Weekly	5-10
Monthly	2
Quarterly	1
Yearly	1

For controls that operate in connection with each transaction, we tested multiple operations of the control over a sufficient period of time to obtain a high level of assurance that the controls operated effectively. For controls that operate less frequently, we tested significantly fewer operations of the control. For controls that we strengthened or implemented later in the year, we tested operation of the control from the date of change or implementation.

Importance of the control

We considered controls that address multiple financial statement assertions and certain period-end detective controls more important that certain related preventive controls. As a result, we evaluated operation of these controls more extensively.

Evaluate identified control deficiencies

We evaluated any control deficiencies identified through our testing to determine whether those deficiencies, individually or in combinations, were significant deficiencies or material weaknesses. Our evaluation of the significance of each deficiency included both quantitative and qualitative factors.

To evaluate the significance of each potential deficiency, we determined the likelihood that the deficiency, or a combination of deficiencies, could result in a misstatement of an account balance or disclosure and the magnitude of the potential misstatement resulting from the deficiency or deficiencies.

In determining the likelihood that a deficiency, or a combination of deficiencies, could result in a misstatement of an account balance or disclosure, we considered the following factors:

- The nature of the financial statement accounts, disclosures, and assertions involved;
- The susceptibility to fraud or loss of the related assets;
- The extent of judgment required to determine the amount involved;

Zion Oil & Gas, Inc.
Management's Assessment of Internal Control over Financial Reporting
December 31, 2018

- The cause and frequency of known or detected exceptions for the operating effectiveness of a control;
- The relationship of the control with other controls;
- The interaction of the deficiencies; and
- The potential future consequences of the deficiencies.

To determine the magnitude of the misstatement that could result from each potential deficiency or combination of deficiencies, we identified the financial statement amounts or total of transactions exposed by the deficiency and the volume of activity in the account balance or class of transactions exposed to the deficiency that has occurred in the current period or that is expected in future periods.

Furthermore, we considered the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs that they have reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP.

Any deficiencies identified through our testing of the design and operating effectiveness of controls over financial reporting are detailed in supporting schedules. The evaluation of these deficiencies in combination is described in the following section of this document.

Process-Level Control Deficiencies in Combination

Zero business process control deficiencies remained as of December 31, 2018.

Information Technology General Control Deficiencies

Our evaluation of the information technology control environment did not result in a control deficiency as of December 31, 2018.

Report the results of the evaluation and the conclusion

Based on our evaluation of our internal control over financial reporting and the absence of any significant deficiencies as of December 31, 2018, we believe there is not a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected. Therefore, we conclude that our internal control over financial reporting is effective as of December 31, 2018.

February 6, 2019

Zion Oil & Gas, Inc.

/s/ Dustin L. Guinn	/s/ Michael B. Croswell Jr
Dustin L. Guinn, Chief Executive Officer	Michael B. Croswell Jr, Chief Financial Officer

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

(i) By letter dated (and received) October 3, 2018, MaloneBailey LLP ("Malone") notified the Audit Committee of the Board of Directors (the "Audit Committee") of Zion of its resignation as the Company's independent registered public accounting firm.

The previously issued reports of Malone on the Company's financial statements for the fiscal years ended December 31, 2017 and 2016 contained no adverse opinion or disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles, other than an explanatory paragraph relating to the Company's ability to continue as a going concern.

During the fiscal years ended December 31, 2017 and 2016, and the subsequent period through October 3, 2018, the date of Malone's resignation, there were no disagreements with Malone on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Malone, would have caused Malone to make reference to the subject matter of the disagreements in their reports.

In accordance with Item 304(a)(3) of Regulation S-K, the Company provided Malone with a copy of certain information as set forth in Item 4.01 of the Form 8-K filing on October 10, 2018. The Company requested that Malone furnish the Company with a letter addressed to the Securities and Exchange Commission ("SEC") stating whether Malone agrees with the above statements in the Item 4.01 as required by SEC rules. Malone has furnished the requested letter, and it is incorporated by reference to Item 4.01 of the Company's Current Report on Form 8-K as filed with the SEC on October 10, 2018.

(ii) On October 10, 2018, the Audit Committee engaged RBSM LLP ("RBSM") as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2018.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES.

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in the reports we file or furnish to the SEC under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms, and that information is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

We carried out an evaluation required by the Exchange Act, under the supervision and with the participation of our principal executive officer and principal financial and accounting officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rule 13a-15(e) of the Exchange Act, as of December 31, 2018. Based on this evaluation, our principal executive officer and our principal financial and accounting officer concluded that our disclosure controls and procedures were effective, as of December 31, 2018, to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act are recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and to provide reasonable assurance that such information is accumulated and communicated to our management, including our principal executive officer and principal financial and accounting officer, as appropriate to allow timely decisions regarding required disclosures.

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the control system will be met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events and the application of judgment in evaluating the cost-benefit relationship of possible controls and procedures. Because of these and other inherent limitations of control systems, there is only reasonable assurance that our controls will succeed in achieving their goals under all future conditions.

MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management report called for by Item 308(a) of Regulation S-K is incorporated herein by reference to Management's Report on Internal Control over Financial Reporting, included in Item 8. Financial Statements and Supplementary Data.

The independent auditor's attestation report called for by Item 308(b) of Regulation S-K is incorporated herein by reference to Report of Independent Registered Public Accounting Firm (Internal Control Over Financial Reporting), included in Item 8. Financial Statements and Supplementary Data.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our management, including our principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its evaluation under the framework in Internal Control - Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2018 in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Limitations on Controls

Our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives as specified above. Management does not expect, however, that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all error and fraud. Any control system, no matter how well designed and operated, is based upon certain assumptions and can provide only reasonable, not absolute, assurance that its objectives will be met. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

There were no changes in internal controls over financial reporting that occurred during 2018 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item will incorporate by reference such information as set forth in our definitive Proxy Statement (the "2019 Proxy Statement") for our 2019 annual meeting of stockholders. The 2019 Proxy Statement will be filed with the SEC not later than 120 days subsequent to December 31, 2018.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will incorporate by reference the 2019 Proxy Statement for the 2019 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2018.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will incorporate by reference the 2019 Proxy Statement for the 2019 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2018.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item will incorporate by reference the 2019 Proxy Statement for the 2019 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2018.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will incorporate by reference the 2019 Proxy Statement for the 2019 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2018.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial Statements:

Report of Independent Registered Public Accounting Firm – RBSM, LLP (2018)

Report of Independent Registered Public Accounting Firm – MaloneBailey, LLP (2017)

Balance Sheets as of December 31, 2018, and 2017.

Statements of Operations for the Years Ended December 31, 2018, 2017 and 2016.

Statements of Changes in Stockholders' Equity for the Years Ended December 31, 2018, 2017 and 2016.

Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016.

Number	Description
3.1	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Zion Oil & Gas, Inc. (incorporated herein by reference to the Company's Quarterly Report on Form 10-Q, for the quarter ended June 30, 2011, filed with the SEC on August 9, 2011, Exhibit 3.1, and to the Company's Form 8-K, filed with the SEC on June 11, 2015, Exhibit 3(i).1.)
3.2	Amended and Restated Bylaws of Zion Oil & Gas, Inc. (incorporated by reference to the Company's Form 8-K filed with the SEC on December 21, 2017)
4.1	Registration Statement on Form S-3 (File No. 333-216191) as amended, (incorporated by reference as filed with the SEC on February 23, 2017 and amended March 7, 2017)
4.2	Prospectus Supplement dated March 10, 2017, (incorporated by reference as filed with the SEC on March 10, 2017)
4.3	Prospectus Supplement dated July 6, 2015 (incorporated by reference as filed with the SEC on October 21, 2015)
4.4	Prospectus Supplement dated October 21, 2015, as amended, (incorporated by reference as filed with the SEC on October 21, 2015)
4.5	Original Indenture (incorporated by reference to the Company's Form 8-A filed with the SEC on October 21, 2015 and to the Registrant's Prospectus, Registration No. 333-193336, Exhibit 4.2 filed with the SEC on March 13, 2014)
4.6	Supplemental Indenture effective as of October 21, 2015 between Zion Oil & Gas, Inc., as Issuer, and American Stock Transfer & Trust Company, LLC, as Trustee, (incorporated by reference to the Company's Form 8-K filed with the SEC on October 21, 2015)
4.7	Form T-1 Statement of Eligibility of Trustee for Indenture under the Trust Indenture Act of 1939 (incorporated by reference to the Company's Form 8-K filed with the SEC on October 21, 2015)
10.1	Executive Employment and Retention Agreements (Management Agreements)
	(i) Employment Agreement dated November 13, 2013 and made effective January 1, 2014 between Zion Oil & Gas, Inc. and John Brown (incorporated by reference to Exhibit 10.1 to the Company's Form 10-K as filed with the SEC on March 14, 2017)
	(ii) Employment Agreement dated as of June 16, 2015 between Zion Oil & Gas, Inc. and Victor G. Carrillo (incorporated by reference to Exhibit 10.1.(3) to the Company's Form 10-K as filed with the SEC on March 15, 2016)
	(iii) Employment Agreement dated as of July 1, 2016 between Zion Oil & Gas, Inc. and Dustin Guinn (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on September 16, 2016)
	(iv) Employment Agreement dated as of August 15, 2016 between Zion Oil & Gas, Inc. and Michael Croswell Jr (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K as filed with the SEC on September 16, 2016)
10.2	2011 Equity Incentive Plan (filed as Annex B to the Company's Definitive Proxy Statement on Schedule 14 A filed with the SEC on May 9, 2011) and as amended (incorporated by reference to the Company's Form S-8 filed with the SEC on June 11, 2015)
10.3	2011 Non-Employee Directors Stock Option Plan (filed as Annex C to the Company's Definitive Proxy Statement on Schedule 14 A filed with the SEC on May 9, 2011) and as amended (incorporated by reference to the Company's Form S-8 filed with the SEC on June 11, 2015)

Number	Description
10.4	Office Lease Agreement between Zion Oil & Gas, Inc., tenant, and Hartman Income REIT Property Holdings, LLC, lease commencement date December 1, 2015 and lease expiration date April 30, 2021 (incorporated by reference to the Company's Form 10-Q filed with the SEC on November 10, 2015)
10.5	Megiddo-Jezreel License, as amended, (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on December 10, 2013)
10.6	Extension Letter to Megiddo-Jezreel License, as extended to December 2, 2020
14.1	Code of Ethics (incorporated by reference to Exhibit 14.1 to the Company's Current Report on Form 8-K as filed with the SEC on December 10, 2007)
16.1	Audit letter by MaloneBailey dated October 10, 2018 (incorporated by reference to Item 4.01 to the Company's Current Report on Form 8-K as filed with the SEC on October 10, 2018)
31.1*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial and Accounting Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of Chief Financial and Accounting Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
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

* filed herewith

ITEM 16. FORM 10-K SUMMARY

Registrants may voluntarily include a summary of information required by Form 10-K under this Item 16. We have elected not to include such summary.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ZION OIL & GAS, INC.
(Registrant)

By: /s/ Dustin Guinn
Dustin Guinn
Chief Executive Officer
(Principal Executive Officer)

Date: March 8, 2019

By: /s/ Michael B. Croswell Jr.
Michael B. Croswell Jr.
Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: March 8, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Dustin Guinn Dustin Guinn	Chief Executive Officer (Principal Executive Officer)	March 8, 2019
/s/ Michael B. Croswell Jr. Michael B. Croswell Jr.	Chief Financial Officer (Principal Financial and Principal Accounting Officer)	March 8, 2019
/s/ John M. Brown John M. Brown	Chairman of the Board of Directors	March 8, 2019
/s/ William H. Avery William H. Avery	General Counsel and Director	March 8, 2019
/s/ Martin M. van Brauman Martin M. van Brauman	Corporate Secretary, Treasurer and Director	March 8, 2019
/s/ Paul Oroian Paul Oroian	Director	March 8, 2019
/s/ John Seery John Seery	Director	March 8, 2019
/s/ Forrest A. Garb Forrest A. Garb	Director	March 8, 2019
/s/ Kent Siegel Kent Siegel	Director	March 8, 2019
/s/ Gene Scammahorn Gene Scammahorn	Director	March 8, 2019
/s/ Virginia Prodan Virginia Prodan	Director	March 8, 2019
/s/ Lee Russell Lee Russell	Director	March 8, 2019

Zion Oil & Gas, Inc.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Zion Oil & Gas, Inc.

Opinions on the Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying balance sheet of Zion Oil & Gas, Inc. (the "Company") as of December 31, 2018 and the related statements of operations, stockholders' equity, and cash flows for the year then ended, and the related notes and financial statement schedule II (collectively, the financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018, and the results of its operations and its cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

Going Concern Matter

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinions

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting, appearing under item 8. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud and whether effective internal control over financial reporting was maintained in all material respects.

Our audit of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provide a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ RBSM LLP

We have served as the Company's auditor since 2018.

New York, NY
March 8, 2019

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of
Zion Oil & Gas, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Zion Oil & Gas, Inc. (the "Company") as of December 31, 2017, and the related statements of operations, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Matter

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ MaloneBailey, LLP
www.malonebailey.com
We served as the Company's auditor from 2011 through 2018.
Houston, Texas
March 12, 2018

Zion Oil & Gas, Inc.

Balance Sheets as of

	December 31, 2018 US$ thousands	December 31, 2017 US$ thousands
Current assets		
Cash and cash equivalents	**2,791**	6,892
Fixed short term bank deposits – restricted	**1,325**	1,197
Prepaid expenses and other	**461**	434
Other deposits	**280**	540
Governmental receivables	**361**	1,237
Other receivables	**153**	133
Total current assets	**5,371**	10,433
Unproved oil and gas properties, full cost method (see Note 4)	**6,714**	21,695
Property and equipment at cost		
Net of accumulated depreciation of $455 and $453	**156**	196
Other assets		
Fixed short term bank deposits – restricted	**9**	990
Assets held for severance benefits	**271**	234
Total other assets	**280**	1,224
Total assets	**12,521**	33,548
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	**2,811**	2,750
Asset retirement obligation (see Note 10B)	**720**	470
Derivative liability (see Note 8)	**345**	1,866
Accrued liabilities (see Note 5)	**958**	1,701
Total current liabilities	**4,834**	6,787
Long-term liabilities		
10% Senior convertible bonds, net of unamortized deferred financing cost of $63 and $90 and unamortized debt discount of $993 and $1,267 at December 31, 2018 and 2017 respectively (see Note 7)	**2,211**	2,002
Obligation under capital lease, net of current maturities of $10 (see Note 7C)	**30**	39
Provision for severance pay	**317**	280
Total long-term liabilities	**2,558**	2,321
Total liabilities	**7,392**	9,108
Commitments and contingencies (see Note 10)		
Stockholders' equity		
Common stock, par value $.01; Authorized: 200,000,000 shares at December 31, 2018: Issued and outstanding: 66,405,180 and 55,888,399 shares at December 31, 2018 and 2017 respectively	**664**	559
Additional paid-in capital	**203,580**	184,485
Accumulated deficit	**(199,115)**	(160,604)
Total stockholders' equity	**5,129**	24,440
Total liabilities and stockholders' equity	**12,521**	33,548

The accompanying notes are an integral part of the financial statements.

Zion Oil & Gas, Inc.

Statements of Operations

	For the year ended December 31,		
	2018	**2017**	**2016**
	US$ thousands	**US$ thousands**	**US$ thousands**
General and administrative	**6,360**	6,043	6,664
Impairment of unproved oil and gas properties	**30,906**	—	—
Other	**2,214**	2,744	2,227
Loss from operations	**(39,480)**	(8,787)	(8,891)
Other income (expense), net			
(Loss), gain on derivative liability	**1,521**	(971)	731
Other income, net	—	10	43
Foreign exchange gain, (loss)	**(133)**	152	(6)
Financial (expenses), net	**(419)**	(393)	(390)
Loss before income taxes	**(38,511)**	(9,989)	(8,513)
Income taxes	—	—	—
Net loss	**(38,511)**	(9,989)	(8,513)
Net loss per share of common stock - basic and diluted (in US$)	**(0.63)**	(0.20)	(0.21)
Weighted-average shares outstanding–basic and diluted (in thousands)	**61,107**	50,593	41,238

The accompanying notes are an integral part of the financial statements.

Zion Oil & Gas, Inc.

Statements of Changes in Stockholders' Equity

	Common Stock		Additional paid-in Capital	Accumulated deficit	Total
	Shares	Amounts			
	thousands	US$ thousands	US$ thousands	US$ thousands	US$ thousands
Balances as of December 31, 2015	38,220	382	150,450	(142,102)	8,730
Funds received from sale of DSPP units and shares	2,796	28	4,310	—	4,338
Value of bonds converted to shares	6	*	8		8
Funds received from option exercises	1,556	16	—	—	16
Value of options granted to employees, directors and others as non-cash compensation	—	—	3,086	—	3,086
Net loss	—	—	—	(8,513)	(8,513)
Balances as of December 31, 2016	42,578	426	157,854	(150,615)	7,665
Funds received from sale of DSPP units and shares	11,298	113	22,881	—	22,994
Value of bonds converted to shares	43	*	149	—	149
Bond interest paid in shares	289	3	343		346
Funds received from option exercises	1,680	17	534	—	551
Value of options granted to employees, directors and others as non-cash compensation	—	—	2,724	—	2,724
Net loss	—	—	—	(9,989)	(9,989)
Balances as of December 31, 2017	55,888	559	184,485	(160,604)	24,440
Funds received from sale of DSPP units and shares	**9,466**	**94**	**13,687**	**—**	**13,781**
Funds received from Rights Offering	**656**	**7**	**3,031**	**—**	**3,038**
Value of bonds converted to shares	**41**	*****	**176**	**—**	**176**
Bond interest paid in shares	**71**	**1**	**330**	**—**	**331**
Funds received from option exercises	**283**	**3**	**16**	**—**	**19**
Value of options granted to employees, directors and others as non-cash compensation	**—**	**—**	**1,855**	**—**	**1,855**
Net loss	**—**	**—**	**—**	**(38,511)**	**(38,511)**
Balances as of December 31, 2018	**66,405**	**664**	**203,580**	**(199,115)**	**5,129**

The accompanying notes are an integral part of the financial statements.

Zion Oil & Gas, Inc.

Statements of Cash Flows

	For the year ended December 31,		
	2018	**2017**	**2016**
	US$ thousands	**US$ thousands**	**US$ thousands**
Cash flows from operating activities			
Net loss	**(38,511)**	(9,989)	(8,513)
Adjustments required to reconcile net loss to net cash used in operating activities:			
Depreciation	**56**	49	56
Capital gain on sale of property and equipment	**-**	(10)	(43)
Loss on Fixed Asset Disposal	**3**	-	-
Cost of options issued to employees, directors and others as non-cash compensation	**1,507**	2,468	2,873
Amortization of debt discount related to convertible bonds	**385**	325	357
Change in derivative liability	**(1,521)**	971	(731)
Impairment of unproved oil and gas properties	**30,906**	-	-
Change in assets and liabilities, net:			
Other deposits	**260**	(540)	-
Prepaid expenses and other	**(27)**	(87)	13
Governmental receivables	**876**	(1,175)	185
Other receivables	**(20)**	(51)	45
Severance pay, net	**-**	2	21
Accounts payable	**75**	15	(181)
Accrued liabilities	**178**	(38)	(411)
Asset retirement obligation		-	(4)
Net cash used in operating activities	**(5,833)**	(8,060)	(6,333)
Cash flows from investing activities			
Acquisition of property and equipment	**(19)**	(65)	(26)
Proceeds from sale of property and equipment	**-**	14	44
Investment in unproved oil and gas properties	**(15,931)**	(10,820)	(1,192)
Net cash used in investing activities	**(15,950)**	(10,871)	(1,174)
Cash flows from financing activities			
Proceeds from sale of 10% Senior Convertible Bonds	-	-	3,470
Payments related to capital lease	**(9)**	(22)	-
Deferred offering cost	**-**	-	(2)
Proceeds from exercise of stock options	**19**	551	16
Proceeds from Rights Offering	**3,038**	-	-
Proceeds from issuance of stock and exercise of warrants	**13,781**	22,994	4,338
Net cash provided by financing activities	**16,829**	23,523	7,822
Net (decrease), increase in cash, cash equivalents and restricted cash	**(4,954)**	4,592	315
Cash, cash equivalents and restricted cash – beginning of period	**9,079**	4,487	4,172
Cash, cash equivalents and restricted cash – end of period	**4,125**	9,079	4,487
Non-cash investing and financing activities:			
Cost of options capitalized to oil & gas properties	**348**	256	213
Unpaid investments in oil and gas properties	**2,946**	3,876	25
Debt discount related to the derivative liability	**-**	-	1,626
Acquisition of property and equipment under capital lease	**-**	71	-
Convertible Bond interest paid in shares	**331**	346	-
Capitalized convertible bond interest attributed to oil and gas properties	**331**	346	-
Deferred offering cost	**-**	-	136
10% Senior Convertible Bonds converted to shares	**176**	149	8

The accompanying notes are an integral part of the financial statements.

Cash, cash equivalents and restricted cash, are comprised as follows:

	December 31, 2018	**December 31, 2017**
	US$ thousands	**US$ thousands**
Cash and cash equivalents	**2,791**	6,892
Restricted cash included in fixed short-term bank deposits	**1,325**	1,197
Restricted cash included in fixed long-term bank deposits	**9**	990
	4,125	9,079

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 1 - Nature of Operations and Going Concern

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 19 years of oil & gas exploration in Israel. As of December 31, 2018, the Company has no revenues from its oil and gas operations.

Zion maintains its corporate headquarters in Dallas, Texas. We also have branch offices in Caesarea, Israel and Geneva, Switzerland. The purpose of the Israel branch is to support the Company's operations in Israel, and the purpose of the Switzerland branch is to operate a foreign treasury center for the Company.

Exploration Rights/Exploration Activities

The Company currently holds one active petroleum exploration license onshore Israel, the Megiddo-Jezreel License, comprising approximately 99,000 acres. The Megiddo Jezreel #1 ("MJ #1") exploratory well was spud on June 5, 2017 and drilled to a total depth ("TD") of 5,060 meters (approximately 16,600 feet). Thereafter, the Company obtained three open-hole wireline log suites (including a formation image log) and the well was successfully cased and cemented. The Ministry of Energy approved the well testing protocol on April 29, 2018.

During the fourth quarter of 2018, the Company's testing protocol was concluded at the MJ #1 well. The test results confirmed that the MJ #1 well did not contain hydrocarbons in commercial quantities in the zones tested. As a result of the above determination, in the year ended December 31, 2018, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of $30,906,000.

The MJ#1 well provided Zion with information Zion believes is important for potential future exploration efforts within its license area. As with many frontier wildcat wells, the MJ#1 also left several questions unanswered.

While not meant to be an exhaustive list, a summary of what Zion believes to be key information learned in the MJ#1 well is as follows:

1. The MJ#1 encountered much higher subsurface temperatures at a depth shallower than expected before drilling the well. In our opinion, this is significant because reaching a minimum temperature threshold is necessary for the generation of hydrocarbons from an organic-rich source rock.

2. The known organic rich (potentially hydrocarbon bearing) Senonian age source rocks that are typically present in this part of Israel were not encountered as expected. Zion expected these source rocks to be encountered at approximately 1,000 meters in the MJ#1 well.

3. MJ#1 had natural fractures, permeability (the ability of fluid to move through the rock) and porosity (pore space in rock) that allowed the sustained flow of formation fluid in the shallower Jurassic and lower Cretaceous age formations between approximately 1,200 and 1,800 meters. While no hydrocarbons were encountered, Zion believes this fact is nonetheless significant because it provides important information about possible reservoir pressures and the ability of fluids to move within the formation and to the surface.

4. MJ#1 encountered oil in the Triassic Mohilla formation which Zion believes suggests an active deep petroleum system is in Zion's license area. There was no natural permeability or porosity in the Triassic Mohilla formation to allow formation fluid to reach the surface naturally during testing and thus the MJ#1 was not producible or commercial.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 1 - Nature of Operations and Going Concern (cont'd)

5. The depths and thickness of the formations we encountered varied greatly from pre-drill estimates. This required the MJ#1 to be drilled to a much greater depth than previously expected. Zion has tied these revised formation depths to seismic data which will allow for more accurate interpretation and mapping in the future.

A summary of what Zion believes to be some key questions left to be answered are:

1. Is the missing shallow Senonian age source rock a result of regional erosion, or is it missing because of a fault that cut the well-bore and could be reasonably expected to be encountered in the vicinity of the MJ#1 drill site? Zion believes this is an important question to answer because if the Senonian source rocks do exist in this area, the high temperatures encountered are sufficient to mature these source rocks and generate oil.

2. Do the unusually high shallow subsurface temperatures extend regionally beyond the MJ#1 well, which could allow for the generation of hydrocarbons in the Senonian age source rock within our license area?

3. As a consequence of seismic remapping, where does the MJ#1 well lie relative to the potential traps at the Jurassic and Triassic levels and was the well location too low on the structures and deeper than the potential hydrocarbons within those traps?

As a result of these unanswered questions and with the information gained drilling the MJ#1 well, Zion now believes it is prudent and consistent with good industry practice to try and answer some of these questions with a focused 3D seismic imaging shoot of approximately 50 square kilometers surrounding the MJ#1 well.

Zion received a multi-year license extension through December 2, 2019. Zion made its annual license fee payment on December 31, 2018, thereby confirming the Company's commitment to further exploration in the license area. The Company has commenced preliminary scouting and survey design to help identify the geologic boundaries of the proposed 3D seismic survey. Additionally, Zion held initial meetings with potential vendors to aid in the 3D seismic planning and acquisition process. Once the survey design and surface layout are completed, Zion intends to acquire the necessary government permits and negotiate potential surface damages to crops, irrigation piping, and other surface features. Zion believes it will be necessary to import seismic source equipment and autonomous wireless geophones (to record the signal) to acquire the 3D data. Once data acquisition is completed, interpretation is the final step and will involve integration with, and modification of, previous work by Zion technical staff.

Zion's ability to fully undertake all of these aforementioned activities is subject to its raising the needed capital from its continuing offerings, of which no assurance can be provided.

Megiddo-Jezreel Petroleum License ("MJL")

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 lies onshore, south and west of the Sea of Galilee, and the Company continues its exploration focus here as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential. In late November 2016, The State of Israel's Petroleum Commissioner officially approved Zion's drilling date and license extension request.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 1 - Nature of Operations and Going Concern (cont'd)

On October 30, 2017, the Company sought a multi-year extension to its existing license. After receiving feedback from Israel's Petroleum Commissioner, the Company submitted a revised extension request on November 9, 2017. On November 20, 2017, Israel's Petroleum Commissioner officially approved Zion's multi-year extension request on its Megiddo-Jezreel License No. 401, extending its validity to December 2, 2019. Until recently, the Company remained subject to the following updated key license terms:

No.	*Activity Description*	*Execution by:*
1	*Submit final report on the results of drilling*	*31 May 2018*
2	*Submit program for continuation of work under license*	*30 June 2018*

On June 1, 2018, Zion submitted its *Megiddo-Jezreel #1 End of Well Report (EOWR)* for the Megiddo-Jezreel License No. 401, thus fulfilling its No. 1 Final Report license work plan obligation, shown above.

On June 14, 2018 Zion submitted its Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License No. 401. The additional time was necessary because we had still not completed testing and evaluating all planned testing zones. On July 1, 2018, Israel's Petroleum Commissioner granted Zion's work program report extension to November 1, 2018, as shown below.

No.	*Activity Description*	*Execution by:*
1	***Submit program for continuation of work under license***	***1 November 2018***

On October 16, 2018 Zion submitted its Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License No. 401. The additional time was necessary because we had still not completed testing and evaluating all planned testing zones. On October 28, 2018, Israel's Petroleum Commissioner granted Zion's work program report extension to January 31, 2019, as shown below.

No.	*Activity Description*	*Execution by:*
1	***Submit program for continuation of work under license***	***31 January 2019***

On January 31, 2019, Zion submitted its Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License No. 401. The additional time was necessary to finalize the work program. On February 3, 2019 Israel's Petroleum Commissioner granted Zion's work program report extension to February 28, 2019, as shown below:

Number	*Activity Description*	*Execution by:*
3	*Submit program for continuation of work under license*	*28 February 2019*

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 1 - Nature of Operations and Going Concern (cont'd)

As previously disclosed, the Company required authorization from the Israel Land Authority (the "ILA"), the formal lessor of the land to Kibbutz Sde Eliyahu, on whose property the drilling pad is currently situated, to access and utilize the drill site ("surface use agreement"). The Company received this authorization on July 4, 2016. This was preceded by the Company's May 15, 2016 signed agreement with the kibbutz. On January 11, 2017, an agreement was signed by the Company and the ILA by which the surface usage permission agreement was extended through December 3, 2017. On December 31, 2017, an agreement was signed by the Company and the ILA by which the surface usage permission agreement was extended through December 3, 2019.

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 (see note 10C).

B. Going Concern

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.

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 year ended December 31, 2018, the Company incurred a net loss of approximately $38.5 million and had an accumulated deficit of approximately $199 million. These factors raise substantial doubt about the Company's ability to continue as a going concern.

To carry out planned operations, the Company must raise additional funds through additional equity and/or debt issuances or through profitable operations. There can be no assurance that this capital or positive operational income will be available to the Company, and if it is not, the Company may be forced to curtail or cease exploration and development activities. The financial statements do not include any adjustments that might result from the outcome of this uncertainty (See also Note 13).

Note 2 - Summary of Significant Accounting Policies

A. Financial Statements in United States Dollars

The currency of the primary economic environment in which the operations of the Company are conducted is the United States dollar ("dollar"). Therefore, the dollar has been determined to be the Company's functional currency. Non-dollar transactions and balances have been translated into dollars in accordance with the principles set forth in Accounting Standards Codification ("ASC") 830 "Foreign Currency Matters." Transactions in foreign currency (primarily in New Israeli Shekels – "NIS") are recorded at the exchange rate as of the transaction date. Monetary assets and liabilities denominated in foreign currency are translated on the basis of the representative rate of exchange at the balance sheet date. Non-monetary assets and liabilities denominated in foreign currency are stated at historical exchange rates. All exchange gains and losses from re-measurement of monetary balance sheet items denominated in non-dollar currencies are reflected in the statement of operations as they arise.

B. Cash and Cash Equivalents

The Company maintains cash balances with six banks, of which three banks are located in the United States, one in the United Kingdom, and two in Israel. For purposes of the statement of cash flows and balance sheet, the Company considers all highly liquid investments with a maturity of three months or less to be cash equivalents. At times, the Company maintains deposits in financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and does not believe it is exposed to any significant credit risk on cash.

Zion Oil & Gas, Inc.

Notes to Financial Statements

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

C. Fixed Short-Term Time Deposits

Interest bearing deposits for a period which exceeds three months but not more than 12 months and are not restricted are classified as Fixed Short-Term time deposits.

D. Fixed Long-Term Time Deposits

Interest bearing deposits for a period which exceeds 12 months and are not restricted are classified as Fixed Long-Term time deposits.

E. 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 unproved 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.

During the fourth quarter of 2018, the Company testing protocol was concluded at the Megiddo Jezreel #1 ("MJ #1") well. The test results confirmed that the MJ #1 well did not contain hydrocarbons in commercial quantities in the zones tested. As a result of the above determination, in the year ended December 31, 2018, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of $30,906,000. No impairment charges were recorded in 2016 and 2017 (see Note 4).

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 $6,714,000 and $21,695,000 as of December 31, 2018, and 2017, respectively.

F. Property and Equipment

Property and equipment other than oil and gas property and equipment is recorded at cost and depreciated by the straight-line method over its estimated useful life of 3 to 14 years. Depreciation charged to expense amounted to $56,000, $49,000 and $56,000 for the years ended December 31, 2018, 2017 and 2016, respectively. During the years ended December 31, 2017, and 2016 the Company sold one motor vehicle each year. Proceeds of $14,000 and $44,000 were received, and a capital gain of $10,000 and $43,000 was recognized during the year ended December 31, 2017, and 2016, respectively.

G. Assets Held for Severance Benefits

Assets held for employee severance benefits represent contributions to severance pay funds and insurance policies that are recorded at their current redemption value.

Zion Oil & Gas, Inc.

Notes to Financial Statements

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

H. 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.

I. Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled (see Note 9). The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the statements of operations in the period that includes the enactment date.

Based on Accounting Standards Codification (ASC) 740-10-25-6 "Income Taxes," the Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company accounts for interest and penalties related to unrecognized tax benefits, if and when required, as part of income tax expense in the statements of operations. No liability for unrecognized tax benefits was recognized as of December 31, 2018, 2017, and 2016.

J. Environmental Costs and Loss Contingencies

Liabilities for loss contingencies, including environmental remediation costs not within the scope of Financial Accounting Standards Board (FASB) ASC Subtopic 410-20, Asset Retirement Obligations and Environmental Obligations – Asset Retirement Obligations, arising from claims, assessments, litigation, fines, and penalties and other sources, are recorded when probable that a liability has been incurred and the amount of the assessment and/or remediation can be reasonably estimated. Legal costs incurred in connection with loss contingencies are expensed as incurred. Recoveries of environmental remediation costs from third parties that are probable of realization are separately recorded as assets, and are not offset against the related environmental liability.

Accruals for estimated losses from environmental remediation obligations generally are recognized no later than completion of the remedial feasibility study. Such accruals are adjusted as further information develops or circumstances change. Costs of expected future expenditures for environmental remediation obligations are not discounted to their present value.

K. Asset Retirement Obligation

Obligations for dismantlement, restoration and removal of facilities and tangible equipment at the end of oil and gas property's useful life are recorded based on the estimate of the fair value of the liabilities in the period in which the obligation is incurred. This requires the use of management's estimates with respect to future abandonment costs, inflation, market risk premiums, useful life and cost of capital. The estimate of asset retirement obligations does not give consideration to the value the related assets could have to other parties. The obligation is recorded if sufficient information about the timing and (or) method of settlement is available to reasonably estimate fair value (see Note 10C).

Zion Oil & Gas, Inc.

Notes to Financial Statements

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

L. 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 9,441,833 and 9,196,696 and 6,701,596 Common Stock equivalents in 2018, 2017 and 2016 respectively, would be anti-dilutive.

M. Stock Based Compensation

ASC 718, "Compensation – Stock Compensation," prescribes accounting and reporting standards for all share-based payment transactions in which employee services are acquired. Transactions include incurring liabilities, or issuing or offering to issue shares, options, and other equity instruments such as employee stock ownership plans and stock appreciation rights. Share-based payments to employees, including grants of employee stock options, are recognized as compensation expense in the financial statements based on their fair values. That expense is recognized over the period during which an employee is required to provide services in exchange for the award, known as the requisite service period (usually the vesting period).

The Company accounts for stock-based compensation issued to non-employees and consultants in accordance with the provisions of ASC 505-50, "Equity – Based Payments to Non-Employees." Measurement of share-based payment transactions with non-employees is based on the fair value of whichever is more reliably measurable: (a) the goods or services received; or (b) the equity instruments issued. The fair value of the share-based payment transaction is determined at the earlier of performance commitment date or performance completion date.

N. 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.

O. 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 8).

P. Related parties

Parties are considered to be related to the Company if the parties, directly or indirectly, through one or more intermediaries, control, are controlled by, or are under common control with the Company. Related parties also include principal owners of the Company, its management, members of the immediate families of principal owners of the Company and its management and other parties with which the Company may deal if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests. All transactions with related parties are recorded at fair value of the goods or services exchanged. Zion did not have any related party transactions for the fiscal years ending December 2018 and 2017, respectively, with the exception of recurring monthly consulting fees paid to certain management personnel.

Zion Oil & Gas, Inc.

Notes to Financial Statements

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

Q. Recently Adopted Accounting Pronouncements

ASU 2016-02 – Leases (Topic 842)

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-02, Leases (Topic 842) ("ASU 2016-02") in order to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under previous GAAP. ASU 2016-02 requires that a lessee should recognize a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term on the balance sheet. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 (including interim periods within those periods) using a modified retrospective approach and early adoption is permitted. Zion will adopt ASU 2016-02 in the first quarter of 2019. Presently, Zion has operating leases for office space in Dallas, Texas and in Caesarea, Israel plus various leases for motor vehicles, among others. Those leases, and new leases entered in the future, will be accounted for under ASU 2016-02 in 2019 by establishing a right-of-use asset and a corresponding lease liability. Management is in process of evaluating its leases. Although we cannot estimate the dollar value of right-to-use assets and liabilities to be recorded next year, Zion is not subject to any loan covenants and therefore, the expected increase in assets and liabilities is not expected to have a material impact on its business.

ASU 2016-18 – Statement of Cash Flows (Topic 230)

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230) ("ASU 2016-18"), which requires that restricted cash and restricted cash equivalents be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total cash amounts shown on the statement of cash flows. The effective date for ASU 2016-18 is for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted. We adopted ASU 2016-18 effective January 1, 2018. The adoption of ASU 2016-18 had no impact on our retained earnings, and no impact to our net income on an ongoing basis. Adoption of the new standard requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash, or restricted cash equivalents. The amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statements of cash flows. The amendments have been applied using a retrospective transition method to each period presented, as required. The periods ended December 31, 2018, 2017 and 2016, respectively, has been reclassified to reflect this change.

ASU 2018-01 – Leases (Topic 842)

In January 2018, the FASB issued ASU 2018-01, "Land Easement Practical Expedient for Transition to "Topic 842."

The amendments in this Update provide an optional transition practical expedient to not evaluate under Topic 842 existing or expired land easements that were not previously accounted for as leases under Topic 840, Leases. An entity that elects this practical expedient should evaluate new or modified land easements under Topic 842 beginning at the date that the entity adopts Topic 842. An entity that does not elect this practical expedient should evaluate all existing or expired land easements in connection with the adoption of the new lease requirements in Topic 842 to assess whether they meet the definition of a lease. We are currently evaluating the impact of adopting ASU 2018-01 on our consolidated financial statements.

ASU 2018-05 – Income Taxes (Topic 740)

In March 2018, the FASB issued ASU 2018-05, "Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118". This ASU expresses the view of the staff regarding application of Topic 740, Income Taxes, in the reporting period that includes December 22, 2017, the date on which the Tax Cuts and Jobs Act (H.R.1, An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018) was signed into law. We are currently evaluating the impact of adopting ASU 2018-05 on our consolidated financial statements.

ASU 2016-15

In August 2016, the FASB issued ASU 2016-15, Classification of Certain Cash Receipts and Cash Payments, which clarifies how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The effective date for ASU 2016-15 is for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted. We are currently evaluating the impact of adopting ASU 2016-15 on our consolidated financial statements.

Zion Oil & Gas, Inc.

Notes to Financial Statements

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

ASU 2016-09

In March 2016, the FASB issued ASU No. 2016-09, Compensation – Stock Compensation, or ASU No. 2016-09. The areas for simplification in this Update involve several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. For public entities, the amendments in this Update are effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted in any interim or annual period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. An entity that elects early adoption must adopt all of the amendments in the same period. Amendments related to the timing of when excess tax benefits are recognized, minimum statutory withholding requirements, forfeitures, and intrinsic value should be applied using a modified retrospective transition method by means of a cumulative-effect adjustment to equity as of the beginning of the period in which the guidance is adopted. Amendments related to the presentation of employee taxes paid on the statement of cash flows when an employer withholds shares to meet the minimum statutory withholding requirement should be applied retrospectively. Amendments requiring recognition of excess tax benefits and tax deficiencies in the income statement and the practical expedient for estimating expected term should be applied prospectively. An entity may elect to apply the amendments related to the presentation of excess tax benefits on the statement of cash flows using either a prospective transition method or a retrospective transition method. We are currently evaluating the impact of adopting ASU No. 2016-09 on our consolidated financial statements.

The Company does not believe that the adoption of any recently issued accounting pronouncements in 2018 had a significant impact on our financial position, results of operations, or cash flow, except for ASC Update No. 2015-03—Interest—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, which requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation of a debt discount. For public business entities, the amendments in this Update are effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. At December 31, 2018, 2017 and 2016 the Company reclassified $63,000 and $90,000, and $118,000, respectively, in deferred offering costs from an asset account and applied it to the outstanding debt balance (see Note 7).

R. Reclassifications

Certain reclassifications have been made to conform the prior period's financial information to the current period's presentation.

Note 3 - Provision for Severance Pay

Israeli law generally requires payment of severance pay upon dismissal of an Israeli employee or upon termination of employment in certain other circumstances. The following plans relate to the employees in Israel:

A. The liability in respect of certain of the Company's employees is discharged in part by participating in a defined contribution pension plan and making regular deposits with recognized pension funds.

The deposits are based on certain components of the salaries of the said employees. The custody and management of the amounts so deposited are independent of the Company's control, and accordingly such amounts funded (included in expenses on an accrual basis) and related liabilities are not reflected in the balance sheet.

B. The Company's liability for severance pay for its Israeli employees is calculated pursuant to Israeli severance pay law based on the most recent salary of the employee multiplied by the number of years of employment, as of the balance sheet date. Employees are entitled to one month's salary for each year of employment, or a portion thereof. Certain senior executives are entitled to receive additional severance pay. The Company's liability for all of its Israeli employees is partly provided for by monthly deposits in insurance policies and the remainder by an accrual in the financial statements. The value of these policies is recorded as an asset in the Company's balance sheet.

The deposited funds include profits/loss accumulated up to the balance sheet date. The value of the deposited funds is based on current redemption value of these policies.

C. Withdrawals from the funds may be made only upon termination of employment.

D. As of December 31, 2018, and 2017, the Company had a provision for severance pay of $317,000 and $280,000, respectively, of which all was long-term. As of December 31, 2018, and 2017, the Company had $271,000 and $234,000, respectively, deposited in funds managed by major Israeli financial institutions which are earmarked to cover severance pay liability. Such deposits are not considered to be "plan assets" and are therefore included in other assets.

Zion Oil & Gas, Inc.

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:

	December 31, 2018	December 31, 2017
	US$ thousands	US$ thousands
Excluded from amortization base:		
Drilling costs, and other operational related costs	**1,242**	14,999
Capitalized salary costs	**1,579**	2,034
Capitalized interest costs	**677**	346
Legal costs, license fees and other preparation costs	**3,216**	4,087
Other costs	**-**	229
	6,714	21,695

Impairment of unproved oil and gas properties comprised as follows:

	For the year ended December 31,		
	2018	2017	2016
	US$ thousands	US$ thousands	US$ thousands
Excluded from amortization base:			
Drilling costs, and other operational related costs	**27,371**	-	-
Capitalized salary costs	**1,006**	-	-
Legal costs, license fees and other preparation costs	**2,039**	-	-
Other costs	**490**	-	-
	30,906	-	-

Changes in Unproved oil and gas properties during the years ended December 31, 2018, 2017, 2016, are as follows:

	December 31, 2018	December 31, 2017	December 31, 2016
	US$ thousands	US$ thousands	US$ thousands
Excluded from amortization base:			
Drilling costs, and other operational related costs	**13,614**	13,229	458
Capitalized salary costs	**551**	455	402
Capitalized interest costs	**331**	346	-
Legal costs, license fees and other preparation costs	**1,168**	1,069	512
Other costs	**261**	199	3
Impairment of unproved oil and gas properties	**(30,906)**	-	-
	(*14,981)	*15,298	*1,375

* Inclusive of non-cash amounts of approximately $3,625,000, $4,478,000 and $238,000 during the years 2018, 2017 and 2016, respectively

Please refer to Footnote 1 – Nature of Operations and Going Concern for more information about Zion's exploration activities.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 5 - Accrued Liabilities

Accrued liabilities are comprised as follows:

	December 31, 2018	December 31, 2017
	US$ thousands	US$ thousands
Drilling provisions	**156**	1,077
Employees related	**177**	166
Interest on convertible bonds	**231**	231
Audit and Related Costs	**194**	148
Other	**200**	79
	958	1,701

Note 6 - Stockholders' Equity

A. 2011 Equity Incentive Stock Option Plan

In June 2011, the Company's shareholders authorized the adoption of the Zion Oil & Gas, Inc. 2011 Equity Incentive Plan for employees and consultants (the "2011 Plan"), initially reserving for issuance thereunder 2,000,000 shares of Common Stock.

The 2011 Plan provides for the grant of incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock, bonus stock, awards in lieu of cash obligations, other stock-based awards and performance units. The 2011 plan also permits cash payments under certain conditions.

The compensation committee of the Board of Directors is responsible for determining the type of award, when and to whom awards are granted, the number of shares and the terms of the awards and exercise prices. The options are exercisable for a period not to exceed 10 years from the date of grant.

In June 2015, the Company's stockholders approved an increase in the number of shares of Common Stock available under the 2011 Equity Incentive Plan for employees and consultants reserving for issuance thereunder an additional four million shares of Common Stock for a total of six million shares of Common Stock available thereunder.

In June 2017, the Company's stockholders approved an increase in the number of shares of Common Stock available under the 2011 Plan for employees and consultants reserving for issuance thereunder an additional 10 million shares of Common Stock for a total of 16 million shares of Common Stock available thereunder.

During the year ended December 31, 2018, the Company granted the following non-qualified options from the 2011 Plan for employees, directors and consultants, to purchase as non-cash compensation (taxable on the date of exercise):

i. Options to purchase 330,000 shares of Common Stock to 23 senior officers, staff members and consultants at an exercise price of $.01 per share. The options have vesting schedules of 165,000 shares on June 30, 2018 and 165,000 shares on December 31, 2018. The options are exercisable through January 1, 2028. The fair value of the options at the date of grant amounted to approximately $759,000.

ii. Options to purchase 110,000 shares of Common Stock to five senior officers at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through January 4, 2028. The fair value of the options at the date of grant amounted to approximately $250,000.

iii. Options to purchase 55,000 shares of Common Stock to three consultants at an exercise price of $0.01 per share. The options are exercisable through March 1, 2028. However, the vesting and exercisability of these options is subject to the following schedule: (a) 27,500 options vest on June 30, 2018 and (b) the remaining 27,500 options vest on June 30, 2019. The fair value of the options at the date of grant amounted to $222,000.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity

iv. Options to purchase 14,000 shares of Common Stock to seven staff members at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through April 5, 2028. The fair value of the options at the date of grant amounted to approximately $62,000.

v. Options to purchase 10,000 shares of Common Stock to one staff member at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through September 1, 2028. The fair value of the options at the date of grant amounted to approximately $18,000.

During the year ended December 31, 2017, the Company granted the following non-qualified options from the 2011 Equity Incentive Plan for employees, directors and consultants, to purchase as non-cash compensation (taxable on the date of exercise):

i. Options to purchase 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. Options to purchase 1,555,000 shares of Common Stock to 23 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. Options to purchase 35,000 shares of Common Stock to two 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. Options to purchase 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.

v. Options to purchase 90,000 shares of Common Stock to five staff members 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.

vi. Options to purchase 10,000 shares of Common Stock to one staff member at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through September 1, 2027. The fair value of the options at the date of grant amounted to approximately $35,000.

vii. Options to purchase 30,000 shares of Common Stock to one senior officer at an exercise price of $0.01 per share. The options have vesting schedules of 10,000 shares on each of December 31, 2017, June 30, 2018 and June 30, 2019, respectively and are exercisable through October 2, 2027. The fair value of the options at the date of grant amounted to approximately $101,000. The cost recognized during 2017 amounted to approximately $50,000. The balance of $51,000 is expected to be recognized in 2018 and 2019.

viii. Options to purchase 10,000 shares of Common Stock to one consultant at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through October 2, 2027. The fair value of the options at the date of grant amounted to approximately $34,000.

ix. Options to purchase 12,500 shares of Common Stock to one consultant at an exercise price of $0.01 per share. The options vested on December 31, 2017 and are exercisable through December 31, 2027. The fair value of the options at the date of grant amounted to approximately $31,000.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

B. 2011 Non-Employee Directors Stock Option Plan

In June 2011, the Company's shareholders authorized the adoption of the Zion Oil & Gas, Inc. 2011 Non-Employee Directors Stock Option Plan for non-employee directors (the "2011 Directors' Plan"), initially reserving for issuance thereunder 1,000,000 shares of common stock. Under the 2011 Directors' Plan, only non-qualified options may be issued, and they will be exercisable for a period of six years from the date of grant.

The Compensation Committee of the Board of Directors is responsible for determining the type of award, when to grant awards, to whom awards are granted, the number of shares and the terms of the awards and exercise prices. The options are exercisable for a period not to exceed six years from the date of grant.

In June 2015, the Company's stockholders approved an increase in the number of shares of Common Stock available under the 2011 Directors Plan, reserving for issuance thereunder an additional two million shares of Common Stock for a total of three million shares of Common Stock available thereunder.

In June 2017, the Company's stockholders approved an increase in the number of shares of Common Stock available under the 2011 Directors Plan, reserving for issuance thereunder an additional four million shares of Common Stock for a total of seven million shares of Common Stock available thereunder.

During the year ended December 31, 2018, the Company granted the following qualified (market value) options from the 2011 Non-Employee Directors Stock Option Plan for directors to purchase as non-cash compensation:

i. Options to purchase 400,000 shares of Common Stock to eight board members at an exercise price of $2.31 per share. The options vested upon grant and are exercisable through January 1, 2024. The fair value of the options at the date of grant amounted to approximately $428,000.

ii. Options to purchase 25,000 shares of Common Stock to one board member at an exercise price of $4.15 per share. The options vested upon grant and are exercisable through July 2, 2024. The fair value of the options at the date of grant amounted to approximately $55,000.

iii. Options to purchase 25,000 shares of Common Stock to one board member at an exercise price of $1.78 per share. The options vested upon grant and are exercisable through September 4, 2024. The fair value of the options at the date of grant amounted to approximately $25,000.

During the year ended December 31, 2017, the Company granted the following options from the 2011 Directors Plan, to purchase as non-cash compensation (taxable on the date of exercise):

i. Options to purchase 25,000 shares of Common Stock to one 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 $10,000.

ii. Options to purchase 400,000 shares of Common Stock to eight board members at an exercise price of $1.75 per share. The options vested upon grant and are exercisable through June 6, 2023. The fair value of the options at the date of grant amounted to approximately $235,000.

C. 2005 Stock Option Plan

In 2005, a stock option plan (the "2005 Plan") was adopted by the Company, pursuant to which 1,000,000 shares of Common Stock are reserved for issuance to officers, directors, employees and consultants. The 2005 Plan is administered by the Board of Directors or one or more committees appointed by the board (the "2005 Plan Administrator").

The 2005 Plan contemplates the issuance of stock options by the Company both as a private company and as a publicly traded company and is available to residents of the United States, the State of Israel and other jurisdictions as determined by the 2005 Plan Administrator. Awards of stock options under the 2005 Plan are made pursuant to an agreement between the Company and each grantee. The agreement will, among other provisions, specify the number of shares subject to the option, intended tax qualifications, the exercise price, applicable vesting provisions and the term of the stock option grant, all of which are determined on behalf of the Company by the 2005 Plan Administrator. The 2005 Plan remains in effect for a term of ten years unless terminated or extended according to its provisions.

There were no stock issuances from the 2005 Plan during the calendar years 2018, 2017 and 2016.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

D. Warrants and Options

The Company has reserved 10,835,333 shares of common stock as of December 31, 2018, for the exercise of warrants and options to employees and non-employees, of which 10,825,333 are exercisable. These warrants and options could potentially dilute basic earnings per share in future years. The warrants and options exercise prices and expiration dates are as follows:

	Exercise Price	Number of Shares	Expiration Date	Warrants or Options
	US$			
To non-employees				
	0.01	10,000	October 01, 2027	Options
	0.01	45,000	February 28, 2028	Options
	0.01	30,000	January 01, 2028	Options
	1.67	105,000	October 01, 2024	Options
	1.70	115,000	December 20, 2022	Options
	2.61	77,000	December 04, 2021	Options
To employees and directors				
	0.01	15,000	November 11, 2023	Options
	0.01	15,000	March 31, 2024	Options
	0.01	5,000	June 11, 2024	Options
	0.01	10,000	September 30, 2025	Options
	0.01	25,000	December 31, 2025	Options
	0.01	305,000	June 05, 2026	Options
	0.01	25,000	December 31, 2026	Options
	0.01	500,000	January 01, 2027	Options
	0.01	10,000	January 04, 2027	Options
	0.01	60,000	April 17, 2027	Options
	0.01	30,000	October 01, 2027	Options
	0.01	202,500	January 01, 2028	Options
	0.01	110,000	January 04, 2028	Options
	0.01	6,000	April 06, 2028	Options
	1.33	25,000	May 01, 2023	Options
	1.38	108,000	January 02, 2021	Options
	1.38	123,057	January 02, 2025	Options
	1.55	400,000	June 05, 2022	Options
	1.67	340,000	October 01, 2020	Options
	1.67	343,886	October 01, 2024	Options
	1.70	168,500	December 20, 2022	Options
	1.73	25,000	January 09, 2019	Options
	1.75	400,000	June 07, 2023	Options
	1.78	25,000	September 04, 2024	Options
	1.87	25,000	January 31, 2022	Options
	1.95	25,000	April 02, 2020	Options
	1.96	25,000	September 3, 2019	Options
	2.03	25,000	May 01, 2021	Options
	2.31	400,000	January 01, 2024	Options
	2.61	604,500	December 04, 2021	Options
	4.15	25,000	July 02, 2024	Options
To investors				
	1.00	243,853	May 02, 2020	Warrants
	1.00	546,050	October 29, 2020	Warrants
	1.00	2,144,510	March 03, 2020	Warrants
	1.00	359,610	August 14, 2020	Warrants
	1.00	240,578	January 08, 2021	Warrants
	2.00	1,498,804	January 31, 2020	Warrants
	3.00	640,735	June 29, 2020	Warrants
	5.00	372,400	April 19, 2020	Warrants
Total outstanding	1.56*	10,834,983		

* Weighted Average

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

The stock option transactions since January 1, 2016 are shown in the table below:

	Number of shares	**Weighted Average exercise price**
		US$
Outstanding, December 31, 2015	3,629,693	1.76
Changes during 2016 to:		
Granted to employees, officers, directors and others	2,265,000	0.27
Expired/Cancelled/Forfeited	(172,250)	2.76
Exercised	(1,555,500)	0.01
Outstanding, December 31, 2016	4,166,943	1.58
Changes during 2017 to:		
Granted to employees, officers, directors and others	2,212,500	0.34
Expired/Cancelled/Forfeited	(360,000)	2.32
Exercised	(1,680,000)	0.33
Outstanding, December 31, 2017	4,339,443	1.37
Changes during 2018 to:		
Granted to employees, officers, directors and others*	**969,000**	1.11
Expired/Cancelled/Forfeited	**(237,500)**	1.75
Exercised	**(282,500)**	0.07
Outstanding, December 31, 2018	**4,788,443**	1.37
Exercisable, December 31, 2018	**4,778,443**	1.38

* 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 penny stock options must recognize the market value in income in the year of exercise.

The aggregate intrinsic value of options exercised during 2018, 2017 and 2016 was approximately $692,000, $2,438,000 and $2,400,000 respectively.

The aggregate intrinsic value of the outstanding options and warrants as of December 31, 2018, totaling 10,835,333 was approximately $561,000.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

The following table summarizes information about stock options outstanding as of December 31, 2018:

Shares underlying outstanding options (non-vested)				Shares underlying outstanding options (fully vested)			
Range of exercise price	Number outstanding	Weighted average remaining contractual life (years)	Weighted Average Exercise price	Range of exercise price	Number Outstanding	Weighted average remaining contractual life (years)	Weighted Average Exercise price
US$			US$	US$			US$
—	—	—	—	0.01	15,000	4.87	0.01
—	—	—	—	0.01	15,000	5.25	0.01
—	—	—	—	0.01	5,000	5.45	0.01
—	—	—	—	0.01	10,000	6.75	0.01
—	—	—	—	0.01	25,000	7.00	0.01
—	—	—	—	0.01	305,000	7.42	0.01
—	—	—	—	0.01	525,000	8.00	0.01
—	—	—	—	0.01	10,000	8.01	0.01
—	—	—	—	0.01	60,000	8.29	0.01
0.01	10,000	8.75	0.01	0.01	30,000	8.75	0.01
—	—	—	—	0.01	232,500	9.00	0.01
—	—	—	—	0.01	110,000	9.01	0.01
—	—	—	—	0.01	45,000	9.16	0.01
—	—	—	—	0.01	6,000	9.26	0.01
—	—	—	—	1.33	25,000	4.32	1.38
—	—	—	—	1.38	108,000	2.01	1.38
—	—	—	—	1.38	123,057	6.01	1.38
—	—	—	—	1.55	400,000	3.43	1.38
—	—	—	—	1.67	340,000	1.75	1.67
—	—	—	—	1.67	448,886	5.76	1.67
—	—	—	—	1.70	298,500	3.97	1.70
—	—	—	—	1.73	25,000	0.02	1.73
—	—	—	—	1.75	400,000	4.52	1.70
—	—	—	—	1.87	25,000	3.09	1.87
—	—	—	—	1.95	25,000	1.25	1.95
—	—	—	—	1.96	25,000	0.67	1.96
—	—	—	—	2.03	25,000	2.33	2.03
—	—	—	—	2.31	400,000	5.01	2.31
				2.61	681,500	2.93	2.61
—	—	—	—	4.15	25,000	5.51	4.15
0.01	10,000		0.01	0.01-4.15	4,778,443		1.38

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - 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 year ended December 31,		
	2018	**2017**	**2016**
Weighted-average fair value of underlying stock at grant date	**$ 2.38**	$ 1.48	$ 1.56
Dividend yields	**—**	—	—
Expected volatility	**68%-87%**	**45%-69%**	57%-69%
Risk-free interest rates	**2.01%-2.74%**	**1.45%-1.94%**	0.94%-1.93%
Expected lives (in years)	**3.00-5.50**	**3.00-5.87**	3.00-5.50
Weighted-average grant date fair value	**$ 1.72**	$ 1.23	$ 1.35

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 year ended December 31,		
	2018	**2017**	**2016**
Weighted-average fair value of underlying stock at grant date	$ 3.37	$ 1.56	$ 1.51
Dividend yields	**—**	—	—
Expected volatility	**73%-76%**	68%-72%	69%-70%
Risk-free interest rates	**2.46%-2.81%**	2.36%-2.44%	1.73%-1.83%
Expected lives (in years)	**10.00**	10.00	10.00
Weighted-average grant date fair value	$ 3.36	$ 1.55	$ 1.50

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - 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.

E. 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 year ended December 31,		
2018	**2017**	**2016**
US$	**US$**	**US$**
1,553,000	2,448,000	2,726,000

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

For the year ended December 31,		
2018	**2017**	**2016**
US$	**US$**	**US$**
302,000	276,000	360,000

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

For the year ended December 31,		
2018	**2017**	**2016**
US$	**US$**	**US$**
348,000	256,000	213,000

As of December 31, 2018, there was approximately $10,000 of unrecognized compensation cost, related to non-vested stock options granted under the Company's various stock option plans. The cost is expected to be recognized during the year 2019.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

F. 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 (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 participant the opportunity to purchase the Company's Common Stock at a warrant exercise price of $1.00. Each of the three warrants series has 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 (1 year), 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.

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

As of May 2, 2018, any outstanding ZNWAC warrants expired.

On December 4, 2018, the Company extended the termination date of the ZNWAD Warrant by one (1) year from the expiration date of May 2, 2019 to May 2, 2020.

On November 1, 2016, the Company launched a unit offering (the "Unit Program") under the Company's DSPP pursuant to which participants could purchase units comprised of seven shares of Common Stock and seven Common Stock purchase warrants, at a per unit purchase price of $10. The warrant is referred to as "ZNWAE."

The ZNWAE warrants became exercisable on May 1, 2017 and continue to be exercisable through May 1, 2020 at a per share exercise price of $1.00. The warrant terms provide that 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 may, in its sole discretion, accelerate the termination of the warrant upon providing 60 days advanced notice to the warrant holders.

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), for which the three year period ended 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 May 22, 2017, the Company launched a new unit offering (the "New Unit Program"). The New Unit Program consisted of a new combination of common stock and warrants, a new time period in which to purchase under the program, and a new unit price, but otherwise the same unit program features, conditions and terms in the Prospectus Supplement applied. The New Unit Program terminated on July 12, 2017. This New Unit Program enabled participants to purchase Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) the number of shares of Common Stock determined by dividing $250.00 (the price of one Unit) by the average of the high and low sale prices of the Company's Common Stock as reported on the NASDAQ on the unit purchase date and (ii) Common Stock purchase warrants to purchase an additional 25 shares of Common Stock at a warrant exercise price of $1.00 per share. The warrant is referred to as "ZNWAF."

All ZNWAF warrants became exercisable on August 14, 2017 and continue to be exercisable through August 14, 2020 at a per share exercise price of $1.00. The warrant terms provide that if the Company's Common Stock trades above $5.00 per share as 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 accelerate the termination date of the warrant upon providing 60 days advanced notice to the warrant holders.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

On October 16, 2017, the Company initiated another Unit Option Program which terminated on December 6, 2017. This Unit Option Program enabled participants to purchase Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) a certain number of shares of Common Stock determined by dividing $250.00 (the price of one Unit) by the average of the high and low sale prices of the Company's Common Stock as reported on the NASDAQ on the unit purchase date and (ii) Common Stock purchase warrants to purchase an additional 15 shares of Common Stock at a warrant exercise price of $1.00 per share. The warrant is referred to as "ZNWAG."

The warrants became exercisable on January 8, 2018 and continue to be exercisable through January 8, 2021 at a per share exercise price of $1.00. The warrant terms provide that if the Company's Common Stock trades above $5.00 per share as 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 accelerate the termination date of the warrant upon providing 60 days advanced notice to the warrant holders.

On February 1, 2018, the Company initiated another Unit Option Program which terminated on February 28, 2018. The Unit Option consisted of Units of our securities where each Unit (priced at $250.00 each) was comprised of (i) 50 shares of Common Stock and (ii) Common Stock purchase warrants to purchase an additional 50 shares of Common Stock. The investor's Plan account was credited with the number of shares of the Company's Common Stock acquired under the Units purchased. Each warrant affords the investor the opportunity to purchase one share of Company Common Stock at a warrant exercise price of $5.00. The warrant is referred to as "ZNWAH."

The warrants became exercisable on April 2, 2018 and continue to be exercisable through April 2, 2020 at a per share exercise price of $5.00, after the Company, on December 4, 2018, extended the termination date of the Warrant by one (1) year from the expiration date of April 19, 2019 to April 19, 2020.

On August 21, 2018, the Company initiated another Unit Option and it and terminated on September 26, 2018. The Unit Option consisted of Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) a certain number of shares of Common Stock determined by dividing $250.00 (the price of one Unit) by the average of the high and low sale prices of the Company's publicly traded common stock as reported on the NASDAQ on the Unit Purchase Date and (ii) Common Stock purchase warrants to purchase an additional twenty-five (25) shares of Common Stock. The investor's Plan account was credited with the number of shares of the Company's Common Stock acquired under the Units purchased. Each warrant affords the investor the opportunity to purchase one share of Company Common Stock at a warrant exercise price of $1.00. The warrant is referred to as "ZNWAJ."

The warrants became exercisable on October 29, 2018 and continue to be exercisable through October 29, 2020 at a per share exercise price of $1.00, after the Company, on December 4, 2018, extended the termination date of the Warrant by one (1) year from the expiration date of April 19, 2019 to April 19, 2020.

On December 10, 2018, the Company's most recent Unit Option began and it terminated on January 23, 2019. The Unit Option consisted of Units of the Company's securities where each Unit (priced at $250.00 each) is comprised of (i) two hundred and fifty (250) shares of Common Stock and (ii) Common Stock purchase warrants to purchase an additional two hundred and fifty (250) shares of Common Stock at a per share exercise price of $0.01. The investor's Plan account will be credited with the number of shares of the Company's Common Stock and Warrants that are acquired under the Units purchased. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $0.01. The warrant is referred to as "ZNWAK."

The warrants became exercisable on February 25, 2019 and continue to be exercisable through February 25, 2020 at a per share exercise price of $0.01.

For the years ended December 31, 2018, 2017 and 2016, approximately $13,781,000, $22,994,000 and $4,338,000 was raised under the DSPP program, respectively.

The warrants represented by the ticker ZNWAA are tradable on the NASDAQ market. However, all of the other warrants characterized above, in the table below, and throughout this Form 10-K, are not tradeable and are used internally for classification and accounting purposes only.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

G. Subscription Rights Offering

On April 2, 2018 the Company announced an offering ("2018 Subscription Rights Offering") through American Stock Transfer & Trust Company, LLC (the "Subscription Agent"), at no cost to the shareholders, of non-transferable Subscription Rights to purchase Rights (each "Right" and collectively, the "Rights") of its securities to persons who owned shares of our Common Stock on April 13, 2018 ("the Record Date"). Pursuant to the 2018 Subscription Rights Offering, each holder of shares of common stock on the Record Date received non-transferable rights to subscribe for Rights, with each Right comprised of one share of the Company Common Stock, par value $0.01 per share (the "Common Stock") and one Common Stock Purchase Warrant to purchase an additional one share of Common Stock. Each Right may be purchased at a per Right subscription price of $5.00. Each Warrant affords the investor the opportunity to purchase one share of the Company Common Stock at a warrant exercise price of $3.00. The warrant is referred to as "ZNWAI."

The warrants became exercisable on June 29, 2018 and continue to be exercisable through June 29, 2020 at a per share exercise price of $3.00, after the Company, on December 4, 2018, extended the termination date of the Warrant by one (1) year from the expiration date of June 29, 2019 to June 29, 2020.

Each shareholder received .10 (one tenth) of a subscription right (i.e. one subscription right for each 10 shares owned) for each share of the Company's Common Stock owned on the Record Date.

The 2018 Subscription Rights Offering terminated on May 31, 2018. The Company raised net proceeds of approximately $3,038,000, from the sale of the Rights, after deducting fees and expenses of $243,000 incurred in connection with the rights offering.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

H. Warrants Extended

On December 4, 2018, the Company executed an Amendment to certain Warrant Agent Agreements (the "Agreements") between the Company and American Stock Transfer & Trust Company ("AST"). The Company has implemented Agreements with AST as the Company's Warrant Agent (the "Warrant Agent"), under a Warrant Agent Agreement dated February 2, 2015 for the Warrant ZNWAD, under a Warrant Agent Agreement dated February 1, 2018 for the Warrant ZNWAH, under a Warrant Agent Agreement dated April 2, 2018 for the Warrant ZNWAI and under a Warrant Agent Agreement dated August 21, 2018 for the Warrant ZNWAJ.

The Warrant ZNWAD had an expiration date of May 2, 2019, the Warrant ZNWAH had an expiration date of April 19, 2019, the Warrant ZNWAI had an expiration date of June 29, 2019 and the Warrant ZNWAJ had an expiration date of October 29, 2019.

Pursuant to Section 3.2 of the Warrant Agent Agreements, the Company in its sole discretion extended the termination date of the above Warrants by delaying the Expiration Dates and such extension shall be identical in duration among all of the Warrants. The Company extended the duration of the Warrant ZNWAD by one (1) year from the expiration date of May 2, 2019 to May 2, 2020. The Company extended the duration of the Warrant ZNWAH by one (1) year from the expiration date of April 19, 2019 to April 19, 2020. The Company extended the duration of the Warrant ZNWAI by one (1) year from the expiration date of June 29, 2019 to June 29, 2020. The Company extended the duration of the Warrant ZNWAJ by one (1) year from the expiration date of October 29, 2019 to October 29, 2020.

I. Warrant Table

The Warrants transactions since January 1, 2016 are shown in the table below:

Change during 2016 to:

	ZNWAA	ZNWAB	ZNWAC	ZNWAD	ZNWAE	ZNWAF	ZNWAG	ZNWAH	ZNWAI	ZNWAJ	Total
Outstanding warrants, December 31, 2015	1,567,155	287,072	287,072	287,072	-	-	-	-	-	-	2,428,371
Exercise Price	$ 2.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 5.00	$ 3.00	$ 1.00	
Warrant Termination Date	1/31/2020	5/2/2017	5/2/2018	5/2/2020	5/2/2020	8/14/2020	1/8/2021	4/19/2020	6/29/2020	10/29/2020	
Change during 2016 to:											
Issued	-	95,180	95,180	95,180	803,376	-	-	-	-	-	1,088,916
Exercised	-	(68,698)	(37,524)	(34,412)	-	-	-	-	-	-	(140,634)
Expired	-	-	-	-	-	-	-	-	-	-	-
Outstanding and exercisable warrants, December 31, 2016	**1,567,155**	313,554	344,728	347,840	803,376	-	-	-	-	-	3,376,653

Change during 2017 to:

	ZNWAA	ZNWAB	ZNWAC	ZNWAD	ZNWAE	ZNWAF	ZNWAG	ZNWAH	ZNWAI	ZNWAJ	Total
Issued	-	-	-	-	3,262,742	683,865	414,300	-	-	-	4,360,907
Exercised	(42,538)	(206,737)	(69,576)	(53,506)	(1,037,999)	(223,634)	-	-	-	-	(1,633,990)
Expired	-	(106,817)	-	-	-	-	-	-	-	-	(106,817)
Outstanding and exercisable warrants, December 31, 2017	1,524,617	-	275,152	294,334	3,028,119	460,231	414,300	-	-	-	5,996,753

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 6 - Stockholders' Equity (cont'd)

Change during 2018 to:

	ZNWAA	ZNWAB	ZNWAC	ZNWAD	ZNWAE	ZNWAF	ZNWAG	ZNWAH	ZNWAI	ZNWAJ	Total
Issued	-	-	-	-	10,493	100	6,030	373,900	656,274	550,900	1,597,697
Exercised	(25,813)	-	(196,913)	(50,481)	(894,102)	(100,721)	(179,752)	(1,500)	(15,539)	(4,850)	(1,469,671)
Expired	-	-	(78,239)	-	-	-	-	-	-	-	(78,239)
Outstanding and exercisable warrants, December 31, 2018	1,498,804	-	-	243,853	2,144,510	359,610	240,578	372,400	640,735	546,050	6,046,540

J. Rights Offering Senior Convertible Bonds Rights Offering (October 21, 2015 – March 31, 2016)

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 due May 2021"), 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 due May 2021 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 rights offering. These costs have been discounted as deferred offering costs (see also Note 7).

K. 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
ZNWAD Warrants**	January 2015 – March 2016	1.00	May 02, 2020
ZNWAE Warrants	November 2016 – March 2017	1.00	May 01, 2020
ZNWAF Warrants**	May 2017 – July 2017	1.00	August 14, 2020
ZNWAG Warrants	October 2017 – December 2017	1.00	January 08, 2021
ZNWAH Warrants**	February 2018	5.00	April 2, 2020
ZNWAI Warrants**	April 2018 – May 2018	3.00	June 29, 2020
ZNWAJ Warrants	August 2018 – September 2018	1.00	October 29, 2020
ZNWAK Warrants	December 2018 – January 2019	0.01	February 25, 2020

* Zion's ZNWAB Warrants expired on May 2, 2017 and its ZNWAC Warrants expired on May 2, 2018

** On December 4, 2018, the Company extended the termination date of the Warrants by one (1) year.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 7 - Senior Convertible Bonds

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

See Note 6, Paragraph J for a description of the rights offering.

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 years ended December 31, 2018, 2017, and 2016, the Company recorded approximately $27,000, $28,000 and $18,000 respectively, in amortization expense related to the deferred financing costs, and approximately $274,000, 246,000, and $113,000, respectively 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 10^{th} 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.

On May 2, 2018, the Company paid its annual 10% interest to its bondholders of record on April 18, 2018. The interest was paid-in-kind ("PIK") in the form of Common Stock. An average of the Company stock price of $4.68 was determined based on the 30 trading days prior to the record date of April 18, 2018. This figure was used to divide into 10% of the par value of the bonds held by the holders. The Company issued 70,780 shares to the accounts of its bondholders.

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 289,213 shares to the accounts of its bondholders.

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 was 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.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 7 - Senior Convertible Bonds (cont'd)

Through the years ended December 31, 2018, 2017, and 2016, approximately 922, 982 and 129 convertible bonds of $100 each, respectively, have been converted at a conversion rate of approximately $2.27 per share. As a result, the Company issued approximately 41,000, 43,000 and 5,700 shares of its Common Stock during the same period, respectively, and recorded approximately $84,000, $52,000 and ($5,000) in financial expenses (income) during the same period.

	December 31, 2018	December 31, 2017	December 31, 2016
	US$ thousands	US$ thousands	US$ thousands
10% Senior Convertible Bonds	**$ 3,470**	$ 3,470	$ 3,470
Debt discount amortization, net	**$ (993)**	$ (1,267)	$ (1,513)
Bonds converted to shares	**$ (203)**	$ (111)	$ (13)
Offering cost, net	**$ (63)**	$ (90)	$ (118)
10% senior Convertible bonds – Long Term Liability	**$ 2,211**	$ 2,002	$ 1,826

The Company recognized $331,000, $346,000 and $0 in capitalized interest for the years ended December 31, 2018, 2017 and 2016, respectively. The Company recognized $0 and $0 and $231,000 as interest expense for the year ended December 31, 2018, 2017 and 2016, respectively.

Note 8 - Derivative Liability

The Notes issued by the Company and discussed in Note 7 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.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 8 - Derivative Liability (cont'd)

As of December 31, 2018, the Company's liabilities that are measured at fair value are as follows:

	December 31, 2018		December 31, 2017	
	Level 3	Total	Level 3	Total
	US$ thousands	US$ thousands	US$ thousands	US$ thousands
Fair value of derivative liability	**345**	**345**	1,866	1,866

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

	US$ thousands
Derivative liability fair value at December 31, 2016	**895**
Loss on derivative liability	**971**
Derivative liability fair value at December 31, 2017	**1,866**

Change in fair value of derivative liability during 2018 are as follows:

	US$ thousands
Derivative liability fair value at December 31, 2017	**1,866**
Gain on derivative liability	**(1,521)**
Derivative liability fair value at December 31, 2018	**345**

The following table presents the assumptions that were used for the model as of December 31, 2018 and 2017:

	December 31, 2018	December 31, 2017
Convertible Option Fair Value of approximately	**345,000**	1,866,000
Annual Risk-free Rate	**2.47%**	2.03%
Volatility	**115.35%**	68.04%
Expected Term (years)	**2.34**	3.34
Convertible Notes Face Value	**3,266,700**	3,358,900
Expected annual yield on Regular Notes	**28.77%**	28.77%
Price of the Underlying Stock	**0.42**	2.16

During the years ended December 31, 2018, 2017, and 2016, the Company recorded loss, (unrealized gains) of approximately ($1,531,000, net), $971,000, and ($731,000, net), respectively, within the Statements of Operations 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.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 9 - Income Taxes

The Company had no income tax expense due to the operating loss incurred for the years ended December 31, 2018 and 2017.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"), which made broad and complex changes to the U.S. tax code. Certain of these changes may be applicable to the Company, including but not limited to, reducing the U.S. federal corporate tax rate from 35 percent to 21 percent, creating a new limitation on deductible interest expense, eliminating the corporate alternative minimum tax ("AMT"), modifying the rules related to uses and limitations of net operating loss carryforwards generated in tax years ending after December 31, 2017, and changing the rules pertaining to the taxation of profits earned abroad. Changes in tax rates and tax laws are accounted for in the period of enactment. The Tax Act reduces the corporate tax rate to 21 percent, effective January 1, 2018. Consequently, we have recorded a decrease related to deferred tax assets of approximately $0.5 million dollars exclusive of the corresponding change in the valuation allowance, for the year ended December 31, 2018. Due to the full valuation allowance on the deferred tax assets, there is no net adjustment to deferred tax expense or benefit due to the reduction of the corporate tax rate.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2018 and 2017 are presented below:

	December 31, 2018	December 31, 2017
	US$ thousands	US$ thousands
Deferred tax assets:		
Net operating loss carry forwards	**39,976**	35,044
Other	**2,520**	2,203
Total gross deferred tax assets	**42,496**	37,247
Less – valuation allowance	**(40,825)**	(32,750)
Net deferred tax assets	**1,671**	4,497
Deferred tax liabilities:		
Property and equipment	**8**	9
Other	**(269)**	50
Unproved oil and gas properties	**(1,410)**	(4,556)
Total gross deferred tax liabilities	**(1,671)**	(4,497)
Net deferred tax asset	**—**	—

In assessing the likelihood of the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets, including net operating losses, is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible and tax carry forwards are utilizable.

Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. In order to fully realize the deferred tax asset, the Company will need to generate future taxable income of approximately $190,363,000 prior to the expiration of some of the net operating loss carry forwards between 2022 and 2039. Based upon the level of historical taxable losses since the Company's inception, management believes that the Company will not likely realize the benefits of these deductible differences and tax carry forwards and thus, full valuation allowances have been recorded at December 31, 2018 and 2017.

The Company continuously monitors all shareholders that might reach a 5% ownership in the common stock for various purposes, in addition to the I.R.C §382/383 limitation on net operating loss ("NOL") carryforwards following an ownership change. Sections 382/383 limit the use of corporate NOLs following an ownership change. Section 382(g) defines an ownership change generally as a greater than 50% change in the ownership of stock among certain 5% shareholders over a three-year period. For the tax years during the prior 3 years and including the tax year 2018, there are and have been no 5% shareholders even among public institutional shareholders as evidenced by searches of SEC filings. Thus, there have been no change of stock ownership to trigger sections 382/383.

At December 31, 2018, the Company has available federal net operating loss carry forwards of approximately $190,363,000 to reduce future U.S. taxable income.

Income earned from activities in Israel is subject to regular Israeli tax rates. For Israeli tax purposes, exploration costs on unproved properties are expensed. Tax losses can be carried forward indefinitely. At December 31, 2018, the Company has available net operating loss carry forwards of approximately $132,510,000 to reduce future Israeli taxable income.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 9 - Income Taxes (cont'd)

Reconciliation between the theoretical tax benefit on pre-tax reported (loss) and the actual income tax expense:

	Year ended December 31, 2018	Year ended December 31, 2017	Year ended December 31, 2016
	US$ thousands	US$ thousands	US$ thousands
Pre-tax loss as reported	**(38,511)**	(9,989)	(8,515)
U.S. statutory tax rate	**21%**	34%	34%
Theoretical tax expense	**(8,087)**	(3,396)	(2,895)
Increase in income tax expense resulting from:			
Permanent differences	**12**	5	5
Change in tax rate	**-**	20,267	—
Other differences	**-**	4	—
Change in valuation allowance	**8,075**	(16,880)	2,890
Income tax expense	—	—	—

The Company has no material unrecognized tax benefit which would favorably affect the effective income tax rate in future periods and does not believe there will be any significant increases or decreases within the next twelve months. No interest or penalties have been accrued.

The Company has not received final tax assessments since incorporation. In accordance with the US tax regulations, the U.S. federal income tax returns remain subject to examination for the years beginning in 2015.

The Israeli branch has not received final tax assessments since incorporation. In accordance with the Israeli tax regulations, tax returns submitted up to and including the 2013 tax year can be regarded as final.

Note 10 - Commitments and Contingencies

A. Securities and Exchange Commission ("SEC") Investigation

As previously disclosed by the Company, on June 21, 2018, Zion received a subpoena to produce documents from the Fort Worth office of the SEC informing the Company of the existence of a non-public, fact-finding inquiry into the Company. Prior to the receipt of the subpoena on June 21, 2018, Zion had no previous communication with the SEC on this issue and was unaware of this investigation. The SEC stated that "the investigation and the subpoena do not mean that we have concluded that [Zion] or anyone else has violated the law." To date, Zion has furnished all required documents to the SEC in response to the subpoena and will continue to fully cooperate with the investigation.

The Company cannot predict when this matter will be resolved or what further action, if any, the SEC may take in connection with it.

B. Litigation

Following the commencement of the SEC investigation, on August 9, 2018, a putative class action (the "class action") Complaint was filed against Zion, Victor G. Carrillo, the Company's Chief Executive Officer at such time, and Michael B. Croswell Jr., the Company's Chief Financial Officer (collectively, the "Defendants") in the U.S. District Court for the Northern District of Texas. On November 16, 2018, the Court entered an Order in the class action appointing lead plaintiffs and approving lead counsel and on January 22, 2019, an Amended Complaint was filed. The suit alleges violations of Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Rule 10b-5 promulgated thereunder by the SEC and Section 11 of the Securities Act of 1933 (the "Securities Act") against all defendants and alleges violations of Section 20(a) of the Exchange Act and Section 15 of the Securities Act against the individual defendants. The alleged class period is from February 13, 2019 through November 20, 2018.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 10 - Commitments and Contingencies (cont'd)

By Verified Consolidated Stockholder Derivative Complaint filed on March 4, 2019, three (3) stockholder derivative lawsuits previously filed in federal district court in Delaware on September 10, 2018, November 1, 2018, and November 21, 2018 were consolidated into one lawsuit filed derivatively and purportedly on behalf of the Company against Victor G. Carrillo, Michael B. Croswell, Jr., John M. Brown, Dustin L. Guinn, Forest A. Garb, Kent S. Siegel, Paul Oroian, William H. Avery, the Estate of Yehezkel Druckman, Lee Russell, Justin W. Furnace, Gene Scammahorn, Ralph F. DeVore, and Martin M. van Brauman. The suit alleges breach of fiduciary duty, unjust enrichment, violations of Section 14(a) of the Exchange Act and conspiracy to "facilitate and disguise" other alleged wrongdoings. The "Relevant Period" of alleged wrongdoing spans from February 13, 2018 and continues through the present. The suit seeks unspecified damages to be awarded to the Company, orders directing the Company and individual defendants to make certain corporate governance reforms, restitution, and fees and costs.

On September 25, 2018, another lawsuit was filed in the 68th district court, Dallas County, Texas derivatively and purportedly on behalf of the Company against John M. Brown, Forrest A. Garb, Kent S. Siegel, Michael B. Croswell, Jr., Dustin L. Guinn, Victor G. Carrillo, Paul Oroian, William H. Avery, Justin W. Furnace, Gene Scammahorn, Martin M. van Brauman, and Lee R. Russell. This suit alleges claims for breaches of fiduciary duty and unjust enrichment against the individual defendants in connection with certain public statements made by the Company from March 12, 2018 to May 30, 2018, and the Company as a nominal defendant.

These derivative suits seek unspecified damages to be awarded to the Company, orders directing the Company and individual defendants to make certain corporate governance reforms, restitution, and fees and costs.

On October 29, 2018, Zion received a shareholder request to inspect books and records pursuant to Section 220 of the Delaware General Corporation Law for the purpose of investigating potential corporate mismanagement and breaches of fiduciary duty in connection with public statements made by the Company from March 12, 2018 to May 30, 2018.

The Company disputes the above claims and has made an advanced deposit of $500,000 to defense counsel for the cost of defending the litigation. The Company carries insurance that is applicable to these claims. Because of the uncertainties of litigation, it is not feasible to predict or determine the outcome of these matters, to guarantee that there will be no liability, or to reasonably estimate any loss in excess of its coverage. However, the Company intends to pursue a vigorous defense to the claims.

From time to time, the Company may also be subject to routine litigation, claims or disputes in the ordinary course of business. The Company defends itself vigorously in all such matters. However, we cannot predict the outcome or effect of any of the litigation or any other pending litigation or claims.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 10 - Commitments and Contingencies (cont'd)

C. Asset Retirement

The Company currently estimates that the costs of plugging and decommissioning of the exploratory wells drilled to date in the former Asher-Menashe and Joseph License areas and the present Megiddo-Jezreel License to be approximately $720,000 based on current cost rather than Net Present Value. The Company expects to incur such costs beginning in 2019. Liabilities for expenditures are recorded when environmental assessment and/or remediation is probable and the timing and costs can be reasonably estimated.

Changes in Asset Retirement Obligations were as follows:

	December 31, 2018	December 31, 2017
	US$ thousands	US$ thousands
Asset Retirement Obligations, Beginning Balance	**470**	200
Liabilities Settled	**-**	-
Revision of Estimate	**250**	270
Retirement Obligations, Ending Balance	**720**	470

Approximately $250,000 and $270,000 was accrued for the year ended December 31, 2018, and 2017, respectively, and was due to estimated costs for future plugging and abandonment activities related to the currently existing Megiddo-Jezreel License area.

D. 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 as it pertains to oil and gas activities. Mention of these older guidelines was included in previous Zion Oil & Gas filings.

On December 28, 2017, the Energy Ministry issued new guidelines for the formal approval by the Commissioner of the discovery of a petroleum field capable of producing commercial quantities of petroleum. The guidelines detail the applicable petroleum discovery application requirements including submission of a conceptual field development plan.

On March 15, 2018, the Energy Ministry issued new guidelines regarding a uniform reporting manner by which the operator must submit to the Commissioner data and materials regarding lawful exploration and production activities. The guidelines detail the timeline, data, forms, format, media and materials (such as rock cuttings, cores, gas and oil samples) that must be submitted for seismic and drilling activities.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 10 - Commitments and Contingencies (cont'd)

The Company believes that these new regulations are likely to continue to increase the expenditures associated with obtaining new exploration rights and drilling new wells. The Company expects that additional financial burden could occur as a result of requiring cash reserves that could otherwise be used for operational purposes. In addition, these new regulations are likely to continue to increase the time needed to obtain all of the necessary authorizations and approvals to drill and production test exploration wells.

E. Charitable Foundations

Two charitable foundations were established, one in Israel and one in Switzerland, for the purpose of supporting charitable projects and other charities in Israel, the United States and internationally. A 3% royalty or equivalent interest in any Israeli oil and gas interests as may now be held or, in the future be acquired, by the Company was assigned to each charitable organization (6% interest in the aggregate). At December 31, 2018, the Company did not have any outstanding obligation in respect of the charitable foundations, since to this date, no proved reserves have been found.

F. Office and Vehicle Leases

(i) On September 10, 2015, the Company signed a new lease agreement with Hartman Income REIT Property Holdings, LLC ("Hartman") for new premises containing 7,276 square feet. The lease term is for 65 months (about 5.5 years) from December 1, 2015 to April 30, 2021. Rent is abated for the first five (5) month which is December 2015 through April 2016. Beginning in May 2016 and extending through April 2017, rent is to be paid on a monthly basis in the base amount of $7,882 per month. Beginning in May 2017 and extending through April 2018, rent is to be paid on a monthly basis in the base amount of $8,186 per month. Beginning in May 2018 and extending through April 2019, rent is to be paid on a monthly basis in the base amount of $8,489 per month. Beginning in May 2019 and extending through April 2020, rent is to be paid on a monthly basis in the base amount of $8,792 per month. Beginning in May 2020 and extending through April 2021, rent is to be paid on a monthly basis in the base amount of $9,095 per month. The Company is also obligated to pay its pro-rated portion of all taxes, utilities, and insurance during the lease term.

On June 14, 2016, the Company and Hartman signed a First Amendment to Lease Agreement whereby the premises were expanded to include approximately 1,498 square feet, for a new total of approximately 8,774 square feet. The first amendment commencement date was July 1, 2016 and the payment of monthly rent was revised. Beginning in July 2016 and extending through November 2016, rent is to be paid on a monthly basis in the base amount of $7,882 per month. Beginning in December 2016 and extending through May 2017, rent is to be paid monthly in the base amount of $9,505.17 per month. Beginning in June 2017 and extending through May 2018, rent is to be paid monthly in the base amount of $9,870.75 per month. Beginning in June 2018 and extending through May 2019, rent is to be paid monthly in the base amount of $10,236.33 per month. Beginning in June 2019 and extending through May 2020, rent is to be paid monthly in the base amount of $10,601.92 per month. Beginning in June 2020 and extending through May 2021, rent is to be paid monthly in the base amount of $10,967.50 per month. This lease is treated as an operating lease.

(ii) On August 14, 2017, the Company and David McDavid Plano Lincoln Mercury (as Lessor) signed a motor vehicle lease agreement for a 2017 Lincoln MKZ. The first payment of $873.87 was due on August 14, 2017 and this was paid on or around that date. The lease calls for 38 additional payments of $873.87 so that the sum of all 39 payments is $34,080.93. At the inception of the lease, and in addition to the sum of the 39 payments, a one-time payment of $5,000 was made. The value at the end of the lease has a residual value of $18,565.70 per the terms of the lease agreement. Additionally, the Company must pay to the Lessor $.20 cents per mile for each mile in excess of 82,081 miles. This lease is treated as an operating lease.

At December 31, 2018, and continuing through the date of this Form 10-K report, all payments have paid on time to the Lessor, and the Company is in good standing with regard to this lease agreement.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 10 - Commitments and Contingencies (cont'd)

(iii) The Company's field office in Caesarea Israel consists of 6,566 square feet. The lease term is five years from February 1, 2014 to January 31, 2019. Rent is to be paid on a monthly basis in the base amount of approximately NIS 37,800 per month (approximately $10,100) per month at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in the CPI. The Company is also obligated to pay all related taxes, utilities, insurance and maintenance payments during the lease term. Pursuant to the lease, two years from the commencement of the lease term, the Company may terminate the agreement upon three months' notice provided the Company secures a replacement lessee approved by the lessor at its discretion.

The Company has an option to renew the lease for another five years, provided it is not in breach of the agreement, where it is required as well to furnish a notice of intent to exercise the option six months prior to termination of lease, and it furnishes a bank guarantee and insurance confirmation prior to commencement of option period.

The Company exercised the above-mentioned option on September 25, 2018. Rent is to be paid on a monthly basis in the base amount of approximately NIS 39,200 per month (approximately $10,450) at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in the CPI. The Company has an option to renew the lease for another five years from February 1, 2024 to January 31, 2029, provided it is not in breach of the agreement, where it is required as well to furnish a notice of intent to exercise the option six months prior to termination of lease, and it furnishes a bank guarantee and insurance confirmation prior to commencement of the option period. In the event that the Company does not exercise the option to renew the lease, the Company would pay the lessor an amount of approximately NIS 85,000 (approximately $22,700) at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in the CPI.

Under the lease agreement, the Company is authorized to further sublease part of the leased premises to a third party that is pre-approved by the sub-lessor. Rent and its related taxes, utilities, insurance and maintenance expenses for 2018, 2017 and 2016 were $309,000, $302,000 and 285,000 respectively.

The future minimum lease payments as of December 31, 2018, are as follows:

	US$ thousands
2019	**328**
2020	**322**
2021	**228**
2022	**173**
2023 and thereafter	**187**
	1,238

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 10 - Commitments and Contingencies (cont'd)

G. Bank Guarantees

As of December 31, 2018, the Company provided Israeli-required bank guarantees to various governmental bodies (approximately $1,236,000) and others (approximately $80,000) with respect to its drilling operation in an aggregate amount of approximately $1,316,000. The (cash) funds backing these guarantees and additional amounts added to support currency fluctuations as required by the bank are held in restricted interest-bearing accounts and are reported on the Company's balance sheets as fixed short-term bank deposits – restricted, and fixed long-term bank deposits – restricted.

H. 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 $52,000 and $63,000 as of December 31, 2018 and 2017, respectively. The capital lease asset is being depreciated using the straight-line method over its estimated useful life expectancy of approximately seven years. As of December 31, 2018, and 2017, the accumulated depreciation of the capital lease asset amounted to approximately $19,000 and $8,000, respectively.

At December 31, 2018, future minimum payments due under capital lease were:

	US$ thousands
2019	**12**
2020	**32**
Less: portion representing imputed interest	**(4)**
Capital lease obligations	**40**

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.

Note 11 - Risks and Uncertainties

We are directly influenced by the political, economic and military conditions affecting Israel.

We cannot predict the effect, if any, on our business of renewed hostilities between Israel and its neighbors or any other changes in the political climate in the area. Deterioration of political, economic and security conditions in Israel may adversely affect our operations.

We are subject to increasing Israeli governmental regulations and environmental requirements that may cause us to incur substantial incremental costs and/or delays in our drilling program.

Newly enacted onshore licensing and environmental and safety related regulations promulgated by the various energy related ministries in Israel during 2017-2018 have rendered obtaining and drilling under new exploration licenses more time-consuming and expensive.

Zion Oil & Gas, Inc.

Notes to Financial Statements

Note 11 - Risks and Uncertainties (cont'd)

The Company believes that these new and/or revised regulations will also significantly increase the time, effort, and expenditures associated with obtaining all of the necessary authorizations and approvals prior to drilling and production testing its current and any subsequent well(s).

Economic risks may adversely affect our operations and/or inhibit our ability to raise additional capital.

Economically, our operations in Israel may be subject to:

- exchange rate fluctuations between the Israeli shekel versus the US Dollar;
- any significant changes in oil and gas commodities pricing and hence the cost of oilfield services and drilling equipment;
- royalty and tax increases and other risks arising out of Israeli state sovereignty over the mineral rights in Israel and its taxing authority; and
- changes in Israel's economy that could lead to legislation establishing oil and gas price controls.

Consequently, our operations may be substantially affected by local economic factors beyond our control, any of which could negatively affect our financial performance and prospects.

Legal risks could negatively affect our market value.

Legally, our operations in Israel may be subject to:

- changes in the Petroleum Law resulting in modification of license and permit rights;
- adoption of new legislation relating to the terms and conditions pursuant to which operations in the energy sector may be conducted;
- changes in laws and policies affecting operations of foreign-based companies in Israel; and
- changes in governmental energy and environmental policies or the personnel administering them.

Our dependence on the limited contractors, equipment and professional services available in Israel may result in increased costs and possibly material delays in our work schedule.

The unavailability or high cost of drilling rigs, equipment, supplies, other oil field services and personnel could adversely affect our ability to execute our exploration and development plans on a timely basis and within our budget.

Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual outcomes may vary materially from those indicated.

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Notes to Financial Statements

Note 12 - Selected Quarterly Information (Unaudited)

The following represents selected quarterly financial information for 2018 and 2017:

	For the three months ended			
	March 31	June 30	September 30	December 31
	US$ thousands	US$ thousands	US$ thousands	US$ thousands
2018:				
Oil and gas sales	-	-	-	-
Net (loss) gain	(6,251)	(1,241)	781	(31,800)
Net (loss) gain per share – basic and diluted	(0.11)	(0.02)	0.02	(0.48)
Weighted-average shares outstanding–basic and diluted (in thousands)	57,504	59,346	61,089	66,135
2017:				
Oil and gas sales	-	-	-	-
Net loss	(3,375)	(4,971)	(1,462)	(181)
Net loss per share – basic and diluted	(0.07)	(0.10)	(0.03)	(0.003)
Weighted-average shares outstanding–basic and diluted (in thousands)	47,237	50,245	53,382	55,598

Note 13 - Subsequent Events

(i) On January 7, 2019, the Company granted options under the 2011 Equity Incentive Plan to one senior officer, to purchase 25,000 shares of Common Stock at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through January 6, 2029. The fair value of the options at the date of grant amounted to approximately $10,000.

(ii) Approximately $1,715,000 was collected through the Company's DSPP program during the period January 1, 2019 through February 25, 2019.

(iii) On February 24, 2019 Zion submitted its work plan for 2019 in accordance with the requirement referenced in Note 1 of its 2019 license extension. This work plan was approved on February 28, 2019.

(iv) On February 24, 2019 Zion submitted a request for approval for a license extension through December 2, 2020 on its Megiddo-Jezreel License. Zion received approval on its request for license extension through December 2, 2020 on February 28, 2019.

Exhibit 10.6

[TRANSLATION FROM HEBREW]
State of Israel
Energy Ministry

Oil& Gas
23 Adar 1 5769
28 February, 9
Oil_321_2019

To:
Mr. Dustin Guinn
Zion Oil & Gas Inc.

Greetings,

Re: License Extension to license "Megiddo-Jezreel" / 401 and Revision to <u>work plan</u>
Reference: Your letter of the 24th and 26th of February 2019

In response to your referenced request I hereby approve an extension to the "Megiddo-Jezreel" license / 401.up to December 2, 2020.This extension is up to the maximum license period by law, and there will be no further extensions.

I note that at the end of the license period the license shall expire and confidentiality shall not apply to information relating to the license pursuant to the Petroleum Law.

In addition, I also approve the updated work plan as follows:

Number	Activity description	Execution by:
1	Submission of seismic survey plan to the Commissioner and execution of an agreement with a contractor to perform	30 April 2019
2	Commence 3D seismic survey in an area of approximately 50 square kilometers	1 August 2019
3	Transfer of field material configuration and processed material to the Ministry pursuant to Ministry guidelines	15 December 2019
4	Submit interpretation report	20 February 2020

Please note that you are required to comply with all the provisions of the Petroleum Law, 5712-1952, and the regulations thereunder, including submission of all the reports detailed in the Petroleum Law and in the Regulations.

Sincerely,

Yossi Wurtzburger
Petroleum Commissioner

Copy: Oil Unit

EXHIBIT 31.1

CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)

I, Dustin L. Guinn, certify that:

1. I have reviewed this annual report on Form 10-K of Zion Oil & Gas, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15 (f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 8, 2019

/s/ Dustin L. Guinn

Dustin L. Guinn,
Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)

I, Michael B. Croswell, Jr, certify that:

1. I have reviewed this annual report on Form 10-K of Zion Oil & Gas, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15 (f))for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 8, 2019

/s/ Michael B. Croswell Jr.

Michael B. Croswell, Jr,
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Zion Oil and Gas, Inc. (the "Company") on Form 10-K for the year ended December 31, 2018 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, I, Dustin L. Guinn, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Dustin L. Guinn
Dustin L. Guinn
Chief Executive Officer
(Principal Executive Officer)

March 8, 2019

This certification accompanies this Report on Form 10-K pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by such Act, be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Zion Oil and Gas, Inc. (the "Company") on Form 10-K for the year ended December 31, 2017 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, I, Michael B. Croswell, Jr., Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Michael B. Croswell Jr.

Michael B. Croswell, Jr.
Chief Financial Officer
(Principal Financial and Accounting Officer)

March 8, 2019

This certification accompanies this Report on Form 10-K pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by such Act, be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.