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, 2021

OR

☐ 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: None

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

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

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 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 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, date 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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its report. ☒

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 30, 2021, the last business day of the registrant's most recently completed second quarter, was approximately $132,022,347. This amount is based on the closing price of registrant's common stock on the OTCQX Market on that date.

The registrant had 434,717,503 shares of common stock, par value $0.01, outstanding as of March 15, 2022.

DOCUMENTS INCORPORATED BY REFERENCE

The Registrant intends to file a definitive proxy statement pursuant to Regulation 14A in connection with its 2021 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.

2021 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:

- The going concern qualification in our consolidated financial statements;
- our liquidity and our ability to raise capital to finance our overall exploration and development activities within our license area;
- our ability to continue meeting the requisite continued listing requirements by OTCQX;
- the outcome of the current SEC investigation against us;
- business interruptions from COVID-19 pandemic;
- our ability to obtain new license areas to continue our petroleum exploration program;
- interruptions, increased consolidated financial costs and other adverse impacts of the coronavirus pandemic on the drilling and testing of our MJ#2 well and our capital raising efforts;
- our ability to explore for and develop natural gas and oil resources successfully and economically within our license area;
- 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 as well as access to qualified personnel;
- 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
- the demand for oil and natural gas, both locally in Israel and globally; and
- the impact of fluctuating oil and gas prices on our exploration efforts

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 and interpretation 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 availability 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, consolidated 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 22 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 OTCQX Market under the symbol "ZNOG" and our Common Stock warrant under the symbol "ZNOGW."

The Company currently holds one active petroleum exploration license onshore Israel, the New Megiddo License 428 ("NML 428"), comprising approximately 99,000 acres. The NML 428 was awarded on December 3, 2020 for a six-month term with the possibility of an additional six-month extension. On April 29, 2021, Zion submitted a request to the Ministry of Energy for a six-month extension to December 2, 2021. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022. The ML 428 lies onshore, south and west of the Sea of Galilee, and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

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 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, 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. During the years ended December 31, 2021, and 2020, respectively, the Company did not record any post-impairment charges.

While the well was not commercially viable, Zion 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 would support further evaluation and potential further exploration efforts within our License area. Zion believed it was prudent and consistent with good industry practice to examine further these questions with a focused 3-D seismic imaging shoot of approximately 72 square kilometers surrounding the MJ#1 well. Zion completed all of the acquisition, processing and interpretation of the 3-D data and incorporated its expanded knowledge base into the drilling of our current MJ-02 exploratory well.

On March 12, 2020, Zion entered into a Purchase and Sale Agreement with Central European Drilling kft, a Hungarian corporation, to purchase an onshore oil and gas drilling rig, drilling pipe, related equipment and spare parts for a purchase price of $5.6 million in cash, subject to acceptance testing and potential downward adjustment. We remitted to the Seller $250,000 on February 6, 2020 as earnest money towards the Purchase Price. The Closing anticipated by the Agreement took place on March 12, 2020 by the Seller's execution and delivery of a Bill of Sale to us. On March 13, 2020, the Seller retained the earnest money deposit, and the Company remitted $4,350,000 to the seller towards the purchase price, and $1,000,000 (the "Holdback Amount") was deposited in escrow with American Stock Transfer and Trust Company LLC. On January 6, 2021, Zion completed its acceptance testing of the I-35 drilling rig and the Holdback Amount was remitted to Central European Drilling.

The MJ-02 drilling plan was approved by the Ministry of Energy on July 29, 2020. On January 6, 2021, Zion officially spudded its MJ-02 exploratory well. On November 23, 2021, Zion announced via a press release that it completed drilling the MJ-02 well to a total depth of 5,531 meters (~18,141 feet) with a 6-inch open hole at that depth.

A full set of detailed and comprehensive tests including neutron-density, sonic, gamma, and resistivity logs were acquired in December 2021, as a result of which we identified an encouraging zone of interest. Zion is presently in the planning and procurement phases of extensive well testing, and this is expected to take several months.

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 CEO, 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

The Company currently holds one active petroleum exploration license onshore Israel, the New Megiddo License 428 ("NML 428"), comprising 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 NML 428 was awarded on December 3, 2020 for a six-month term with the possibility of an additional six-month extension. On April 29, 2021, Zion submitted a request to the Ministry of Energy for a six-month extension to December 2, 2021. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022.

The NML 428 lies onshore, south and west of the Sea of Galilee and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

Map 1. Zion's New Megiddo License as of December 31, 2021.

Summary of Current and Former Company License Areas

Megiddo-Jezreel Petroleum License

The Megiddo-Jezreel License 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 401 lies onshore, south and west of the Sea of Galilee, and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential. In November 2016, the State of Israel's Petroleum Commission officially approved Zion's drilling date and license extension request to December 2, 2017. 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 MJL well. The test results confirmed that the MJ #1 well did not contain hydrocarbons in commercial quantities in the zones tested. As a result, 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. During the years ended December 31, 2021, and 2020, the Company did not record any post-impairment charges.

On January 31, 2019, Zion submitted its Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License 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*

On February 24, 2019 and thereafter on February 26, 2019 Zion submitted its proposed 2019 Work Program on the Megiddo-Jezreel License 401.

On February 28, 2019 Israel's Petroleum Commissioner officially approved the revised and updated Work Program on the Megiddo-Jezreel License 401 as shown below:

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

On April 30, 2019 Zion submitted its Application for Extension of Continued Work Program Due Date on the Megiddo-Jezreel License 401. The additional time was necessary for Zion to conduct a 3-D survey in an area of approximately 72 square kilometers. This required, among others, extensive permitting activities with relevant local landowners, the Israel Land Authority ("ILA"), certain authorities and others, and the seismic survey might not conclude prior to the beginning of the rainy season in Israel. This in turn would result in additional delay, as rain and mud are not conducive to the performance of a seismic survey which includes extensive use of vibrators.

Zion proposed new timelines and activity descriptions are shown below:

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 November 2019
2	Commence 3D seismic survey in an area of approximately 72 square kilometers	1 April 2020
3	Transfer of field material configuration and processed material to the Ministry pursuant to Ministry guidelines	15 August 2020
4	Submit interpretation report	15 November, 2020

On May 1, 2019, Israel's Petroleum Commissioner granted Zion's work program report extension.

Zion fulfilled all of its commitments and activities per the new timelines shown above.

On March 12, 2020, Zion entered into a Purchase and Sale Agreement with Central European Drilling kft ("CED"), a Hungarian corporation, to purchase an onshore oil and gas drilling rig, drilling pipe, related equipment and spare parts for a purchase price of $5.6 million in cash, subject to acceptance testing and potential downward adjustment. We remitted to the Seller $250,000 on February 6, 2020 as earnest money towards the Purchase Price. The Closing anticipated by the Agreement took place on March 12, 2020 by the Seller's execution and delivery of a Bill of Sale to us. On March 13, 2020, the Seller retained the earnest money deposit, and the Company remitted $4,350,000 to the seller towards the purchase price and $1,000,000 (the "Holdback Amount") was deposited in escrow with American Stock Transfer and Trust Company LLC.

As previously disclosed, the Company required authorization from 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 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 agreement was extended through December 3, 2019. On July 1, 2019, an agreement was signed by the Company and the ILA by which the surface usage agreement was extended through December 3, 2020.

The MJ-02 drilling plan was approved by the Ministry of Energy on July 29, 2020. The New Megiddo License 428 was awarded on December 3, 2020 for a six-month term with the possibility of an additional six-month extension. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022. The New Megiddo License 428 area is the same area as the Megiddo-Jezreel License 401 area and lies onshore, south and west of the Sea of Galilee and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

On January 6, 2021, Zion officially spudded its MJ-02 exploratory well. On November 23, 2021, Zion announced via a press release that it completed drilling the MJ-02 well to a total depth of 5,531 meters (~18,141 feet) with a 6-inch open hole at that depth.

A full set of detailed and comprehensive tests including neutron-density, sonic, gamma, and resistivity logs were acquired in December 2021, as a result of which we identified an encouraging zone of interest. Zion is presently in the planning and procurement phases of extensive well testing, and this is expected to take several months.

Zion's Former Joseph License

Zion has plugged all of its exploratory wells on its former Joseph License area, and the reserve pits have been evacuated, but acknowledges its obligation to complete the abandonment of these well sites in accordance with guidance from the Energy Ministry, Environmental Ministry and local officials.

I-35 Drilling Rig & Associated Equipment

	I-35 Drilling Rig	Rig Spare Parts	Other Drilling Assets	Total
	US$ thousands	US$ thousands	US$ thousands	US$ thousands
31 December 2019	**-**	**-**	**-**	**-**
Net Purchase Price [1]	4,600	-	-	4,600
Restricted Cash as Holdback in Escrow [1]	500	500	-	1,000
Purchase Price Allocations	(88)	40	48	-
Capitalized Costs [2]	1,481	-	-	1,481
Asset Additions	-	158	329	487
Asset Disposals	-	-	-	-
31 December 2020	6,493	698	377	7,568
Asset Additions	**-**	**191**	**25**	**216**
Asset Depreciation	**(634)**	**-**	**(69)**	**(703)**
Asset Disposals for Self-Consumption	**-**	**(247)**	**-**	**(247)**
December 31, 2021	**5,859**	**643**	**333**	**6,834**

(1) These are the initial cash payments for the purchase of the I-35 drilling rig in early 2020
(2) Capitalized costs include inspection, quarantine, labor, transportation, insurance, and other costs required to place the I-35 drilling rig in service initially, per GAAP.

On January 6, 2021, Zion completed its acceptance testing of the I-35 drilling rig and the Holdback Amount was remitted to Central European Drilling on January 8, 2021.

As mentioned previously, the MJ-02 drilling plan was approved by the Ministry of Energy on July 29, 2020. The New Megiddo License 428 was awarded on December 3, 2020 for a six-month term with the possibility of an additional six-month extension. On April 29, 2021, Zion submitted a request to the Ministry of Energy for a six-month extension to December 2, 2021. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022.

The New Megiddo License 428 area is the same area as the Megiddo Jezreel license 401 area and lies onshore, south and west of the Sea of Galilee and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

Exploration Expenditures

The following table summarizes the amounts we expended on our exploration efforts between 2020 and 2021:

	2021 US$ (000)	2020 US$ (000)
I-35 Drilling Rig & Associated Equipment	182	7,568
Megiddo License 428:		
Exploratory drilling operations	25,640	649
Equipment and inventory purchases	2,580	1,241
Environmental, geological & geophysical operations	2,082	762
Location construction and maintenance	1,122	236
Joseph License (expired on October 10, 2013) plug & abandonment operations	-	13
Total	31,606	10,469

Employees & Contractors

As of December 31, 2021, we had 24 employees and contractors of whom all but two are on a full-time basis. Included in this number are certain contractors who provide services to Zion on an ongoing basis. Of the 24 total headcount, 17 work out of our Dallas office and 7 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, Givot Olam, and Globe Exploration), 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 drill 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 Energy ("Energy Minister"), the Petroleum Commissioner and an advisory council. The following discussion includes a brief summary 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. Israeli law provides for three types of rights, two relevant to the exploration stage and the third for the production stage.

Preliminary permit. The "preliminary permit" allows a prospector to conduct preliminary investigations, such as field geology, airborne magnetometer surveys and seismic data acquisition, but does not allow test drilling. It may be granted for a period not to exceed 18 months. The holder of a preliminary permit is entitled to request a priority right on the permit area, which, if granted, prevents an award of petroleum rights on the permit area to any other party. There are no restrictions as to size of the permit area or to the number of permits that may be held by one prospector. However, Israeli policy is to award an area no larger than that for which the applicant has a reasonable plan of operation and has shown evidence of the necessary financial resources to execute the plan.

License. The next level of petroleum right is the "license," 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). In the event of a discovery, the license may be extended for an additional two years. 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 (and pursue test and 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.

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, 2021 and 2020, 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 flat rate of 23%, effective January 1, 2019.

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 June 2, 2020, the Energy Ministry issued a guidance document titled “Commissioner for Petroleum Affairs Guidelines: Extraordinary Incidences Report.” These guidelines describe the reporting procedure regarding incidences that are out of the ordinary during pre-drilling, drilling and production activities including incidences that cause bodily injury or damage to property or environment or incidences that are a cause of delay or abort of drilling activities.

On September 15, 2020, the Energy Ministry issued a guidance document titled “Principles for Submission of an Application for a Preliminary Permit with Priority Rights.” Pursuant to this document, applicants for a Preliminary Permit need to comply with more demanding requirements relating to a preliminary permit applicant’s financial capability, experience and access to experienced personnel.

The Company believes that these new regulations are likely to result in an increase in the expenditures associated with obtaining new exploration rights and drilling new wells. The Company expects that an additional financial burden could occur as a result of 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.

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.

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 401 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.

On January 14, 2021, the Company submitted applications to the Energy Ministry, Natural Resources Administration, requesting royalty interest transfers from the New Megiddo License 428 of 3% overriding royalties to each of the Bnei Joseph Amutot and the Abraham Foundation, respectively. On March 1, 2021, the Energy Ministry approved both transfers.

Subsidiaries

On January 24, 2020, Zion incorporated a wholly owned subsidiary, Zion Drilling, Inc., a Delaware corporation, for the purpose of owning a drilling rig and related equipment and spare parts, and on January 31, 2020, Zion incorporated another wholly owned subsidiary, Zion Drilling Services, Inc., a Delaware corporation, to act as the contractor providing such drilling services. When Zion is not using the rig for its own exploration activities, Zion Drilling Services may contract with other operators in Israel to provide drilling services at market rates then in effect.

Zion has the trademark "ZION DRILLING" filed with the United States Patent and Trademark Office. Zion has the trademark filed with the World Intellectual Property Organization in Geneva, Switzerland, pursuant to the Madrid Agreement and Protocol. In addition, Zion has the trademark filed with the Israeli Trademark Office in Israel.

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 $10,721,000 for the year ended December 31, 2021, and $6,996,000 for the year ended December 31, 2020. The audited consolidated 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.

Currently, we are substantially reliant on the proceeds of sales of our common stock under the Dividend Reinvestment and Stock Purchase Plan. During the past two completed fiscal years, we have financed our operations primarily from the proceeds of sales of our stock under the Dividend Reinvestment and Stock Purchase Plan. For the years ended December 31, 2021 and 2020, we raised approximately $26,219,000 and $28,390,000, respectively, under the Plan. Of the amounts raised, approximately 85% of the amounts raised in 2020 were attributable to one participant and 67% of the amounts raised in 2021 were attributable to two participants. The cessation of funding from these participants may result in adverse consequences to our business, such as a delay in our testing efforts, until we locate alternate sources for this funding.

Our independent registered public accounting firm has included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited consolidated financial statements included in this prospectus. Our audited consolidated financial statements at December 31, 2021 and 2020 and for the years then ended were prepared assuming that we will continue as a going concern.

Such an opinion could materially limit our ability to raise additional funds through the issuance of new debt or equity securities or otherwise. Our ability to continue as a going concern is contingent upon, among other factors, the sale of the shares of our common stock in this offering or obtaining alternate financing. We cannot provide any assurance that we will be able to raise additional capital.

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

Effective September 3, 2020, our common stock began trading, and is currently listed, on the OTCQX Market. The maintenance requirements for listing are to maintain a minimum bid price of $0.10 per share as of the close of business for at least one of every 30 consecutive calendar days, a market capitalization of at least $5 million for at least one of every 30 consecutive calendar days, and at least two Market Makers publish priced quotations on OTC Link ATS within 90 days of the Company joining OTCQX. In the event that the Company's bid price, the market capitalization, or the number of Market Makers fall below the minimum criteria, a cure period of 180 calendar days to regain compliance shall begin, during which time the applicable criteria must be met for 10 consecutive trading days.

No assurance be provided that we will be able to maintain continued listing on OTCQX. Delisting from the OTCQX Market may have an adverse effect on our ability to raise the capital needed to continue our oil and gas exploration efforts and maintain operations.

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 consolidated financial condition and business.

On June 21, 2018, the Fort Worth Regional Office of the SEC informed Zion that it was conducting a formal, non-public investigation and asked that we provide certain information and documents in connection with its investigation. Since that date, we have fully cooperated with the SEC on an on-going basis in connection with its investigation. Investigations of this nature are inherently uncertain and their results cannot be predicted with certainty. Regardless of the outcome, an SEC investigation could have an adverse impact on us because of legal costs, diversion of management resources, and other factors. 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.

The outbreak of Covid-19 in 2020, and the subsequent variants of Covid which continue today, may interrupt or delay our exploration activities in the MJL and could affect our capital raising efforts on which we rely to continue our exploration program and maintain our operations, thereby adversely affecting our business.

We cannot predict the impact, if any, that the outbreak of the coronavirus will have on the testing of our MJ-02 well. In an effort to combat the coronavirus, the Israeli authorities have mandated severe restrictions on the day-to-day operations of businesses, including closures of airports, required quarantine periods of any persons entering Israel as well as rules relating to the conduct of business. At the present time, we cannot predict the impact, if any, of these regulations on our planned operations.

In addition, the coronavirus is adversely affecting the global economy and resulting in, amongst other things, significant unemployment and business shutdown, leading to potentially a protracted business recession. Any such development may adversely affect our capital raising efforts, on which we rely to continue our exploration program and maintain operations.

The extent to which the coronavirus impacts our operations, specifically our capital raising efforts, as well as our ability to continue our exploratory efforts, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information which may emerge concerning the severity of the coronavirus and the actions to contain the coronavirus or treat its impact, among others.

Our sole exploratory license granted on December 3, 2020 is scheduled to expire on August 1, 2022. We have not applied for any other license area and no assurance can be given that we will be awarded another exploratory license.

We currently hold one active petroleum exploration license onshore Israel, the New Megiddo License 428, comprising approximately 99,000 acres. The New Megiddo License 428 was granted on December 3, 2020 and was valid for six months with the possibility of an additional six-month extension. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022. No assurance can be given that we will be given additional extension on this present license. Additionally, we have not applied for any other license area and no assurance can be provided that a license will be granted to us if we apply.

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.

On January 6, 2021, we spudded our MJ-02 exploratory well. On November 23, 2021, Zion announced via a press release that it completed drilling the MJ-02 well to a total depth of 5,531 meters (~18,141 feet) with a 6-inch open hole at that depth.

A full set of detailed and comprehensive tests including neutron-density, sonic, gamma, and resistivity logs were acquired in December 2021, as a result of which we identified an encouraging zone of interest. Zion is presently in the planning and procurement phases of extensive well testing, and this is expected to take several months.

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.

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 December 2022. We estimate that, when we are not actively drilling a well, our monthly expenditure is approximately $600,000 per month. However, when we are drilling, or testing, we estimate that there is an additional cost of approximately $2,000,000 - $3,000,000 per month. Additionally, the newly enacted onshore licensing and environmental and safety related regulations promulgated by the various energy related ministries in Israel during 2020-2021 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."

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 any necessary petroleum exploration licenses, then our business may be severely impaired.

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 onshore licensing and environmental and safety related regulations promulgated by the various energy related ministries in Israel during 2020-2021 are likely to render obtaining any necessary 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 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.

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.

Our global operations subject us to various risks, and our failure to manage these risks could adversely affect our results of operations.

Our business is subject to certain risks associated with doing business globally, more particularly in Israel.. Accordingly, we face significant operational risks as a result of doing business internationally, such as:

- fluctuations in foreign currency exchange rates;
- potentially adverse tax consequences and changes in tax laws;
- challenges in providing solutions across a significant distance, in different languages, different time zones and among different cultures (particularly, for as long as travel is limited due to the COVID-19 pandemic);
- difficulties in staffing and managing foreign operations, particularly in new geographic locations, and related compliance with employment, immigration and labor laws for employees or other staff living abroad;
- restrictions imposed by local labor practices and laws on our business and operations;
- economic weakness, including inflation, or rapid changes in government, economic and political policies and conditions, political or civil unrest or instability, economic or trade sanctions, closure of markets to imports, terrorism or epidemics and other similar outbreaks or events;
- compliance with a wide variety of complex foreign laws, treaties and regulations;
- compliance with the U.S. Foreign Corrupt Practices Act, or the FCPA, and other anti-corruption and anti-bribery laws;
- unexpected changes in tariffs, trade barriers and other regulatory or contractual limitations on our ability to develop or sell our products in certain foreign markets; and
- becoming subject to the laws, regulations and court systems of multiple jurisdictions.

Our failure to manage the market and operational risks associated with our international operations could limit the future growth of our business and adversely affect our results of operations.

Our business and operations would suffer in the event of system failures, and our operations are vulnerable to interruption by natural disasters, terrorist activity, power loss, adverse public health events and other events beyond our control, the occurrence of which could materially harm our business.

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, hacking, ransomware, cyber-attacks, unauthorized access as well as telecommunication and electrical failures. Our information technology and other internal infrastructure systems, including corporate firewalls, servers, leased lines and connection to the Internet, face the risk of systemic failure that could disrupt our operations. Although we have invested significant resources to enhance the security of our computer systems, there can be no assurances we will not experience unauthorized intrusions into our computer systems, or those of our vendors, contractors and consultants, that we will successfully detect future unauthorized intrusions in a timely manner or that future unauthorized intrusions will not result in material adverse effects on our financial condition, reputation or business prospects.

While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our operations.

We are also vulnerable to accidents, electrical blackouts, labor strikes, terrorist activities, war, natural disasters, adverse public health events and other events beyond our control, and we have not undertaken a systematic analysis of the potential consequences to our business as a result of all of such events and do not have an applicable recovery plan in place. Any disruption to our operations or the operations of our collaborators or suppliers from these kinds of events would likely impact our operating results and our financial condition.

Although we carry insurance to protect us against some losses or damages resulting from certain types of disasters, the extent of that insurance is limited in scope and amount, and we cannot assure you that our insurance coverage will be sufficient to satisfy any damages and losses. Any business interruption may have a material adverse effect on our business, financial position, results of operations, and prospects.

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 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 $10,721,000 for the year ended December 31, 2021, and $6,996,000 for the year ended December 31, 2020. 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 shallow. 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 any 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.

Because a certain portion of our expenses is incurred in currencies other than the U.S. dollar, our results of operations may be adversely impacted by currency fluctuations and inflation.

Although our reporting and functional currency is the U.S. dollar, we pay a substantial portion of our expenses in New Israeli Shekel (NIS). As a result, we are exposed to the currency fluctuation risks. For example, if the U.S. dollar weakens against the NIS, our reported financial results in U.S. dollars may be lower than anticipated. We may, in the future, decide to enter into currency hedging transactions to decrease the risk of financial exposure from fluctuations in the exchange rates of the currencies mentioned above in relation to the U.S. dollar. These measures, however, may not adequately protect us from material adverse effects.

The insurance we carry may be 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 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 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, equipment, supplies and oilfield services may not be available at rates that provide a satisfactory return on our investment.

Significant disruptions of information technology systems or security breaches could adversely affect our business.

We are increasingly dependent upon information technology systems, infrastructure and data to operate our business. In the ordinary course of business, we collect, store and transmit large amounts of confidential information (including, among other things, trade secrets or other intellectual property, proprietary business information and personal information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party vendors who may or could have access to our confidential information. The size and complexity of our information technology systems, and those of third-party vendors with whom we contract, and the large amounts of confidential information stored on those systems, make such systems vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees, third-party vendors and/or business partners, or to cyber-attacks by malicious third parties. Cyber-attacks are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. Cyber-attacks could include the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information.

Significant disruptions of our information technology systems, or those of our third-party vendors or business partners, or security breaches could adversely affect our business operations and/or result in the loss, misappropriation and/or unauthorized access, use or disclosure of, or the prevention of access to, confidential information, including, among other things, trade secrets or other intellectual property, proprietary business information and personal information, and could result in financial, legal, business and reputational harm to us. Security breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. While we have implemented security measures to protect our information technology systems and infrastructure, there can be no assurance that such measures will prevent service interruptions or security breaches that could adversely affect our business. In addition, our liability insurance may not be sufficient in type or amount to cover us against costs of or claims related to security breaches, cyber-attacks and other related breaches. A cybersecurity breach could adversely affect our reputation and could result in other negative consequences, including disruption of our internal operations, increased cybersecurity protection costs, lost revenue, or litigation.

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 800,000,000 shares of common stock. As of March 15, 2022, there were approximately 434,717,503 shares of our common stock issued and outstanding.

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,
- 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,
- 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 New Megiddo License 428, comprising approximately 99,000 acres. This License was awarded on December 3, 2020 and has the same area and coordinates as the replaced License 401.

Please refer to the discussion above under Item 1, under the caption "Summary of Exploration Activities."

The table below summarizes certain data for our license area for the year ended December 31, 2021:

Type of Right	Name	Area (Approx. Acres)	Working Interest	Expiration Date
License 428	Megiddo-Jezreel	98,842	100%	August 1, 2022 (1)

(1) 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 the drill site in the New Megiddo License 428 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 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 also completed the abandonment of the well in accordance with guidance from the Environmental Ministry in 2020.

Summary of Exploration Activities/Present Activities

Please refer to the discussion above under Item 1, under the caption "Summary of Exploration Activities."

Office Properties

(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 was for 65 months (about 5.5 years) from December 1, 2015 to April 30, 2021. Rent was abated for the first five (5) month beginning in December 2015 and extending through April 2016. Beginning in May 2016 and extending through April 2017, rent was paid on a monthly basis in the base amount of $7,882 per month. Beginning in May 2017 and extending through April 2018, rent was paid on a monthly basis in the base amount of $8,186 per month. Beginning in May 2018 and extending through April 2019, rent was paid on a monthly basis in the base amount of $8,489 per month. Beginning in May 2019 and extending through April 2020, rent was paid on a monthly basis in the base amount of $8,792 per month. Beginning in May 2020 and extending through April 2021, rent was paid on a monthly basis in the base amount of $9,095 per month. The Company was 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 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 was paid monthly in the base amount of $10,236.33 per month. Beginning in June 2019 and extending through May 2020, rent was paid monthly in the base amount of $10,601.92 per month. Beginning in June 2020 and extending through May 2021, rent was paid monthly in the base amount of $10,967.50 per month. This lease is treated as an operating lease.

On May 14, 2021, the Company and Hartman signed a letter agreement ("Renewal Letter") whereby the Lease extends from June 1, 2021 through May 31, 2022. The monthly basic rent to be paid is $10,967.50 and a monthly electricity expense of approximately $1,279.54.

(ii) The Company's field office in Caesarea Israel consists of 6,566 square feet. The lease term was five years from February 1, 2014 to January 31, 2019. Rent was paid on a monthly basis in the base amount of approximately NIS 37,800 per month (approximately $12,150) 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 was 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 the 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 $12,600) 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 $27,300) 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.

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, the Fort Worth Regional Office of the SEC informed Zion that it was conducting a formal, non-public investigation and asked that we provide certain information and documents in connection with its investigation. Since that date, we have fully cooperated with the SEC on an on-going basis in connection with its investigation. Investigations of this nature are inherently uncertain and their results cannot be predicted with certainty. Regardless of the outcome, an SEC investigation could have an adverse impact on us because of legal costs, diversion of management resources, and other factors. 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.

The Company cannot predict when this matter will be resolved or what, if any, action the SEC may take following the conclusion of the investigation.

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. On February 1, 2019, a Corrected Amended Class Action 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. On March 13, 2019, a Motion to Dismiss Plaintiffs' Corrected Amended Complaint was filed on behalf of Zion, Victor Carrillo and Michael B. Croswell, Jr., pleading numerous grounds in support of their Motion to Dismiss. On April 29, 2019 Plaintiffs filed a Response to Defendants' Motion to Dismiss, and on May 29, 2019 Defendants filed a Reply to Plaintiffs' Response. On March 4, 2020, the Court granted Defendants' Motion and dismissed all claims granting Plaintiffs leave to amend. On March 30, 2020, the Lead Plaintiffs voluntarily dismissed the Class Action with prejudice as to the Company and all other defendants.

The Company disputed the above claims and made an advance deposit of $500,000 in 2018 to defense counsel for the cost of defending the litigation. The Company carries insurance that is applicable to these claims. During May 2020, the Company received a refund of approximately $142,000 from its defense in reconciliation of the advance deposit to actual legal expenses.

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 alleged breaches of fiduciary duty in connection with public statements made by the Company from March 12, 2018 to May 30, 2018. The Company responded to this request.

On August 9, 2019, Zion received two (2) additional shareholder requests from the same law firm to inspect books and records pursuant to section 220 of the Delaware General Corporation Law for the purpose of investigating potential corporate mismanagement and alleged breaches of fiduciary duty in connection with public statements made by the Company from February 1, 2018 to present. Following discussion with counsel to the shareholder, the Company's counsel produced materials responsive to the shareholders' request in January 2020.

On February 12, 2020, by letter to Zion's Board of Directors, one of the shareholders making the August 9, 2019 request demanded that the Board investigate, address, remedy, and commence proceedings against certain of the Company's current and former officers and directors for alleged breaches of fiduciary duties, violations of section 10(b) and 20(a) of the Exchange Act, waste of corporate assets, unjust enrichment, and violations of all other applicable laws. The shareholder alleges wrongdoing in connection with public statements made by the Company from February 1, 2018 regarding the Company's oil and gas exploration activities, the Company's accounting and disclosure of expenses, and the Board's oversight of operations. The Board hired independent counsel to investigate the claims made against certain of the Company's current and former officers and directors. That investigation concluded and based on the findings and recommendations of independent counsel, the Board decided not to pursue claims against any current or former officer or director. On July 14, 2020, Zion received a request from the same shareholder making the February 12, 2020 demand to inspect books and records pursuant to Section 220 of the Delaware General Corporation Law for the purpose of evaluating the Board's decision to reject the litigation demand. The Company responded to this request in August 2020. The Company has not received any further communication from the shareholder following the August 2020 response.

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

The Company is not subject to any litigation at the present time.

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

Market Information

We completed the initial public offering of our common stock in January 2007. From January 3, 2007 through September 1, 2009, shares of our common stock were traded on the NYSE Amex under the symbol "ZN." From September 2, 2009, through July 10, 2019, our common stock traded on the Nasdaq Global Market, also under the symbol "ZN." Since July 11, 2019, and through September 1, 2020, our common stock traded on the Nasdaq Capital Market, also under the symbol "ZN." Since September 3, 2020, our common stock has been trading on OTCQX under the symbol "ZNOG." The Zion warrant "ZNWAA" has been trading under the symbol "ZNOGW."

Holders

As of December 31, 2021, there were approximately 19,300 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. [RESERVED]

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 our accompanying consolidated financial statements and the notes to those consolidated 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, Inc., a Delaware corporation, is an oil and gas exploration company with a history of 22 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 OTCQX under the symbol "ZNOG" and our Common Stock warrant under the symbol "ZNOGW."

The Company currently holds one active petroleum exploration license onshore Israel, the New Megiddo License 428 (“NML 428”), comprising approximately 99,000 acres. The NML 428 was awarded on December 3, 2020 for a six-month term with the possibility of an additional six-month extension. On April 29, 2021, Zion submitted a request to the Ministry of Energy for a six-month extension to December 2, 2021. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022. The ML 428 lies onshore, south and west of the Sea of Galilee and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

On March 12, 2020, Zion entered into a Purchase and Sale Agreement with Central European Drilling kft, a Hungarian corporation, to purchase an onshore oil and gas drilling rig, drilling pipe, related equipment and spare parts for a purchase price of $5.6 million in cash, subject to acceptance testing and potential downward adjustment. We remitted to the Seller $250,000 on February 6, 2020 as earnest money towards the Purchase Price. The Closing anticipated by the Agreement took place on March 12, 2020 by the Seller’s execution and delivery of a Bill of Sale to us. On March 13, 2020, the Seller retained the earnest money deposit, and the Company remitted $4,350,000 to the seller towards the purchase price and $1,000,000 (the “Holdback Amount”) was deposited in escrow with American Stock Transfer and Trust Company LLC.

I-35 Drilling Rig & Associated Equipment

	I-35 Drilling Rig	Rig Spare Parts	Other Drilling Assets	Total
	US$ thousands	US$ thousands	US$ thousands	US$ thousands
31 December 2019	**-**	**-**	**-**	**-**
Net Purchase Price [(1)]	4,600	-	-	4,600
Restricted Cash as Holdback in Escrow [(1)]	500	500	-	1,000
Purchase Price Allocations	(88)	40	48	-
Capitalized Costs [(2)]	1,481	-	-	1,481
Asset Additions	-	158	329	487
Asset Disposals	-	-	-	-
31 December 2020	6,493	698	377	7,568
Asset Additions	**-**	**191**	**25**	**216**
Asset Depreciation	**(634)**	**-**	**(69)**	**(703)**
Asset Disposals for Self-Consumption	**-**	**(247)**	**-**	**(247)**
December 31, 2021	**5,859**	**643**	**333**	**6,834**

(1) These are the initial cash payments for the purchase of the I-35 drilling rig in early 2020
(2) Capitalized costs include inspection, quarantine, labor, transportation, insurance, and other costs required to place the I-35 drilling rig in service initially, per GAAP.

On January 6, 2021, Zion completed its acceptance testing of the I-35 drilling rig and the Holdback Amount was remitted to Central European Drilling on January 8, 2021.

Zion's ability to fully undertake all of these aforementioned activities was subject to its raising the needed capital 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 is included in general and administrative expenses. General and administrative expenses also include non-cash stock-based compensation expense, investor relations related expenses, lease and insurance and related expenses.

- Depreciation, Depletion, Amortization and Accretion: The systematic expensing of the capital costs incurred to explore for natural gas and oil represents a principal component of our cost structure. As a full cost company, we capitalize all costs associated with our exploration, and apportion these costs to each unit of production, if any, through depreciation, depletion and amortization expense. As we have yet to have production, the costs of abandoned wells are written off immediately versus being included in this amortization pool.

Going Concern Basis

Since we have limited capital resources, no revenue to date and a loss from operations, our consolidated 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 consolidated 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 consolidated 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 consolidated 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 years ended December 31, 2021, and 2020, respectively, the Company did not record any post-impairment charges. (See note 4).

The total net book value of our unproved oil and gas properties under the full cost method is $46,950,000 and $15,526,000 at December 31, 2021 and 2020, respectively.

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 consolidated 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):

	2021	2020
Operating costs and expenses:		
General and administrative expenses	7,594	4,291
Other	3,287	1,963
Impairment of unproved oil and gas properties	-	-
Operating costs and expenses	10,881	6,254
Loss (gain) on derivative liability	(431)	302
Other expense, net	271	440
Net loss	10,721	6,996

FOR THE YEAR ENDED DECEMBER 31, 2021 COMPARED TO DECEMBER 31, 2020

Revenue. We currently have no revenue generating operations.

Operating costs and expenses. Operating costs and expenses for the year ended December 31, 2021 were $10,881,000 compared to $6,254,000 for the year ended December 31, 2020. The increase in costs in 2021 is primarily attributable to an increase in general and administrative expenses related to non-cash expenses associated with stock option grants.

General and administrative expenses. General and administrative expenses for the year ended December 31, 2021 were $7,594,000 compared to $4,291,000 for the year ended December 31, 2020. The increase in costs in 2021 is primarily attributable to an increase in general and administrative expenses related to non-cash expenses associated with stock option grants.

Other expenses. Other expenses during the year ended December 31, 2021 were $3,287,000 compared to $1,963,000 for the year ended December 31, 2020. These expenses are comprised of non-compensation and non-professional expenses incurred. The increase in expenses during 2021 is primarily attributable to higher investor relations activities and depreciation expenses related to the rig asset.

Loss (gain) on derivative liability. Loss (gain) on derivative liability during the year ended December 31, 2021 was ($431,000) compared to $302,000 for the year ended December 31, 2020. An embedded derivative is contained within the valuation of Zion's $100 convertible bond offering which closed in March 2016 and was fully paid in May 2021. The (gain) on derivative liability during the year ended December 31, 2021 compared to the loss on derivative liability during the year ended December 31, 2020 is primarily due to the change in the share price of our common stock that occurred during the year ended December 31, 2021.

Other expense, net. Other expense, net for the year ended December 31, 2021 was $271,000 compared to $440,000 for the year ended December 31, 2020. The decrease in these expenses in 2021 is primarily attributable to financial expenses related to the Company's convertible bonds and to exchange rate differences associated with the fluctuating exchange rates of the New Israeli Shekels ("NIS") with the U.S. Dollar ("USD").

Net Loss. Net loss for the year ended December 31, 2021 was $10,721,000 compared to $6,996,000 for the year ended December 31, 2020. The primary driver of the higher net loss in 2021 is the increase in stock option grants in 2021 when compared to 2020.

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 consolidated financial statements for the year ended December 31, 2021 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.

Currently, we are substantially reliant on the proceeds of sales of our common stock under the Dividend Reinvestment and Stock Purchase Plan. During the past two completed fiscal years, we have financed our operations primarily from the proceeds of sales of our stock under the Dividend Reinvestment and Stock Purchase Plan. For the years ended December 31, 2021 and 2020, we raised approximately $26,219,000 and $28,390,000, respectively, under the Plan. Of the amounts raised, approximately 85% of the amounts raised in 2020 were attributable to one participant and 67% of the amounts raised in 2021 were attributable to two participants. The cessation of funding from these participants may result in adverse consequences to our business, such as a delay in our testing efforts, until we locate alternate sources for this funding.

At December 31, 2021, and 2020, we had approximately $4,683,000 in cash and cash equivalents compared to $11,708,000 at December 31, 2020. Our working capital (current assets minus current liabilities) was $3,303,000 at December 31, 2021 and $11,812,000 at December 31, 2020.

As of December 31, 2021, the Company provided Israeli-required bank guarantees to various governmental bodies (approximately $1,189,000 and $1,876,000, respectively) and others (approximately $94,000 and $88,000, respectively) with respect to its drilling operation in an aggregate amount of approximately $1,283,000 and $1,964,000, respectively. The (cash) funds backing these guarantees are held in restricted interest-bearing accounts and are reported on the Company's balance sheets as fixed short-term bank deposits – restricted.

During the years ended December 31, 2021 and 2020, cash used in operating activities totaled $5,813,000 and $9,921,000, respectively. Cash provided by financing activities during the years ended December 31, 2021 and 2020 was $26,125,000 and $28,367,000, respectively, 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 drilling costs for our MJ-02 exploratory well, purchase of equipment and spare parts was $29,022,000 and $9,719,000 for the years ended December 31, 2021 and 2020, respectively.

Accounting standards require management to evaluate our ability to continue as a going concern for a period of one year subsequent to the date of the filing of this Form 10-K. We expect to incur additional significant expenditures to further our exploration and development programs. While we raised approximately $8,707,000 during the period January 1, 2022 through March 15, 2022, we will need to raise additional funds in order to continue our exploration and development activities in our license area. Additionally, we estimate that, when we are not actively drilling a well, our expenditures are approximately $600,000 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. The above estimates are subject to change. Subject to the qualifications specified below, management believes that our existing cash balance, coupled with anticipated proceeds under the DSPP, will be sufficient to finance our plan of operations through December 2022.

The recent outbreak of the coronavirus has to date significantly disrupted business operations and resulted in significantly increased unemployment in the general economy. The extent to which the coronavirus impacts our operations, specifically our capital raising efforts, as well as our ability to continue our exploratory efforts, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information which may emerge concerning the severity of the coronavirus and the actions to contain the coronavirus or treat its impact, among others.

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 drilling and planned non-drilling exploratory work 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.

The financial information contained in these consolidated financial statements has been prepared on a basis that assumes that we will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. This financial information and these consolidated financial statements do not include any adjustments that may result from the outcome of this uncertainty.

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 ZNWAB warrants first became exercisable on May 2, 2016 and, in the case of ZNWAC on May 2, 2017 and in the case of ZNWAD on May 2, 2018, 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 May 29, 2019, the Company extended the termination date of the ZNWAD Warrant by one (1) year from the expiration date of May 2, 2020 to May 2, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAD Warrant by two (2) years from the expiration date of May 2, 2021 to May 2, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On November 1, 2016, the Company launched a unit offering 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 continued to be exercisable through May 1, 2020 at a per share exercise price of $1.00.

On May 29, 2019, the Company extended the termination date of the ZNWAE Warrant by one (1) year from the expiration date of May 1, 2020 to May 1, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAE Warrant by two (2) years from the expiration date of May 1, 2021 to May 1, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

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 May 22, 2017, the Company launched a new unit offering. This unit offering 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 unit offering terminated on July 12, 2017. This unit offering 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 continued to be exercisable through August 14, 2020 at a per share exercise price of $1.00.

On May 29, 2019, the Company extended the termination date of the ZNWAF Warrant by one (1) year from the expiration date of August 14, 2020 to August 14, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAF Warrant by two (2) years from the expiration date of August 14, 2021 to August 14, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

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 offering which terminated on December 6, 2017. This unit offering 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 continues to be exercisable through January 8, 2023 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 launched another unit offering which terminated on February 28, 2018. The unit offering 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 continued 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 2, 2019 to April 2, 2020.

On May 29, 2019, the Company extended the termination date of the ZNWAH Warrant by one (1) year from the expiration date of April 2, 2020 to April 2, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAH Warrant by two (2) years from the expiration date of April 2, 2021 to April 2, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On August 21, 2018, the Company initiated another unit offering, and it terminated on September 26, 2018. The unit offering 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 continued 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 October 29, 2019 to October 29, 2020.

On May 29, 2019, the Company extended the termination date of the ZNWAJ Warrant by one (1) year from the expiration date of October 29, 2020 to October 29, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAJ Warrant by two (2) years from the expiration date of October 29, 2021 to October 29, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On December 10, 2018, the Company initiated another unit offering, and it terminated on January 23, 2019. The unit offering 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 was 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 continued to be exercisable through February 25, 2020 at a per share exercise price of $0.01.

On May 29, 2019, the Company extended the termination date of the ZNWAK Warrant by one (1) year from the expiration date of February 25, 2020 to February 25, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAK Warrant by two (2) years from the expiration date of February 25, 2021 to February 25, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On April 24, 2019, the Company initiated another unit offering, and it terminated on June 26, 2019, after the Company, on June 5, 2019, extended the termination date of the unit offering.

The unit offering 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 fifty (50) shares of Common Stock at a per share exercise price of $2.00. The investor's Plan account was credited with the number of shares of the Company's Common Stock and Warrants acquired under the Units purchased. For Plan participants who enrolled into the Unit Program with the purchase of at least one Unit and also enrolled in the separate Automatic Monthly Investments ("AMI") program at a minimum of $50.00 per month or more, received an additional twenty-five (25) warrants at an exercise price of $2.00 during this Unit Option Program. The twenty-five (25) additional warrants were for enrolling into the AMI program. Existing subscribers to the AMI were entitled to the additional twenty-five (25) warrants once, if they purchased at least one (1) unit during the Unit program. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $2.00. The warrant is referred to as "ZNWAL."

The warrants became exercisable on August 26, 2019 and continued to be exercisable through August 26, 2021 at a per share exercise price of $2.00.

On September 15, 2020, the Company extended the termination date of the ZNWAL Warrant by two (2) years from the expiration date of August 26, 2021 to August 26, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

Under our Plan, the Company under a Request For Waiver Program executed Waiver Term Sheets of a unit option program consisting of a Unit (shares of stock and warrants) of its securities and subsequently an option program consisting of shares of stock to a participant. The participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $1.00. The warrant shall have the company notation of "ZNWAM." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants became exercisable on January 15, 2021 and continue to be exercisable through July 15, 2022 at a per share exercise price of $1.00.

On February 1, 2021, the Company initiated a unit offering, and it terminated on March 17, 2021.

The unit offering consisted of Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) the number of Common Stock shares represented by the high-low average on the purchase date and (ii) Common Stock purchase warrants to purchase an additional twenty-five (25) shares of Common Stock at a per share exercise price of $1.00. The investor's Plan account was credited with the number of shares of the Company's Common Stock and Warrants acquired under the Units purchased. For Plan participants who enrolled into the Unit Program with the purchase of at least one Unit or who enrolled in the separate Automatic Monthly Investments ("AMI") program at a minimum of $50.00 per month or more, received an additional ten (10) warrants at an exercise price of $1.00 during this Unit Option Program. The ten (10) additional warrants were for enrolling into the AMI program. Existing subscribers to the AMI were also entitled to the additional ten (10) warrants once, provided that they purchased at least one (1) unit during the Unit program. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $1.00. The warrant is referred to as "ZNWAN."

On April 12, 2021, the Company initiated a unit offering and it terminated on May 12, 2021.

The unit offering consisted of Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) the number of Common Stock shares represented by the high-low average on the purchase date and (ii) Common Stock purchase warrants to purchase an additional fifty (50) shares of Common Stock at a per share exercise price of $.25. The investor's Plan account was credited with the number of shares of the Company's Common Stock and Warrants acquired under the Units purchased. For Plan participants who enrolled into the unit offering with the purchase of at least one Unit or who enrolled in the separate Automatic Monthly Investments ("AMI") program at a minimum of $50.00 per month or more, received an additional fifty (50) warrants at an exercise price of $.25 during this Unit Option Program. The fifty (50) additional warrants were for enrolling into the AMI program. Existing subscribers to the AMI were also entitled to the additional fifty (50) warrants once, provided that they purchased at least one (1) unit during the Unit program. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant is referred to as "ZNWAO."

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet for a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on May 28, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant has the company notation of "ZNWAP." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants were issued and became exercisable on June 2, 2021 and continue to be exercisable through June 2, 2022 at a per share exercise price of $.25.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet for a program consisting of Zion securities to a participant. After conclusion of the program on June 17, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock that were acquired.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet of a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on June 18, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant shall have the company notation of "ZNWAQ." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants will be issued on April 4, 2022 and be exercisable through July 6, 2022 at a per share exercise price of $.25.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet of a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on June 18, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant shall have the company notation of "ZNWAR." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants were issued and became exercisable on June 22, 2021 and continue to be exercisable through June 22, 2022 at a per share exercise price of $.25. Additionally, Zion incurred $115,000 in equity issuance costs to an outside party related to this waiver program.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet to a participant. After conclusion of the program on September 15, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock that were acquired.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet of a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on November 15, 2021, the participant's Plan account will be credited with the number of shares of the Company's Common Stock and Warrants that will be acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $1.00. The warrant shall have the company notation of "ZNWAS." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants will be exercisable on November 15, 2023 and continue to be exercisable through December 31, 2023 at a per share exercise price of $1.00

During 2020, one participant who participated in that aspect of the DSPP called "Request For Waiver" contributed approximately 85% of the cash raised through the DSPP. During 2021, two participants who participated in the "Request for Waiver" aspect of the DSPP contributed approximately 67% of the cash raised through the DSPP.

On December 9, 2019 Zion filed an Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-235299) solely for the purpose of re-filing a revised Exhibit 5.1 to the Registration Statement. This Amendment No. 1 does not modify any provision of the prospectus that forms a part of the Registration Statement and accordingly, such prospectus has not been included herein.

On December 10, 2021 Zion filed an Amendment No. 1 to the Registration Statement on Form S-3 (File No. 333-235299) for the purpose of converting the existing Form S-1 to the Registration Statement on Form S-3. This Amendment No. 1 does not modify any provision of the prospectus that forms a part of the Registration Statement and accordingly such prospectus has not been included herein.

The company raised approximately $8,707,000 from the period January 1, 2022 through March 15, 2022, under the DSPP program.

For the years ended December 31, 2021, and 2020, approximately $26,219,000, and $28,390,000 was raised under the DSPP program, respectively.

The warrants represented by the company notation ZNWAA are tradeable on the OTCQX market under the symbol ZNOGW. 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 (each "Right" and collectively, the "Rights") to purchase 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 Subscription 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 exercised or subscribed 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 continued 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.

On May 29, 2019, the Company extended the termination date of the ZNWAI Warrant by one (1) year from the expiration date of June 29, 2020 to June 29, 2021.

On September 15, 2020, the Company extended the termination date of the ZNWAI Warrant by two (2) years from the expiration date of June 29, 2021 to June 29, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

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 subscription of Rights, after deducting fees and expenses of $243,000 incurred in connection with the rights offering.

Warrants Table

The warrant activity and balances for the year 2020 are shown in the table below :

Warrants	Exercise Price	Warrant Termination Date	Outstanding Balance, 12/31/2019	Warrants Issued	Warrants Exercised	Warrants Expired	Outstanding Balance, 12/31/2020
ZNWAA	$ 2.00	01/31/2023	1,498,804	-	-	-	1,498,804
ZNWAD	$ 1.00	05/02/2023	243,853	-	-	-	243,853
ZNWAE	$ 1.00	05/02/2023	2,144,470	-	(371)	-	2,144,099
ZNWAF	$ 1.00	08/14/2023	359,585	-	(150)	-	359,435
ZNWAG	$ 1.00	01/08/2023	240,578	-	(510)	-	240,068
ZNWAH	$ 5.00	04/19/2023	372,400	-	-	-	372,400
ZNWAI	$ 3.00	06/29/2023	640,730	-	-	-	640,730
ZNWAJ	$ 1.00	10/29/2023	546,000	-	(100)	-	545,900
ZNWAK	$ 0.01	02/25/2023	457,725	-	(19,850)	-	437,875
ZNWAL	$ 2.00	08/26/2023	517,925	-	(50)	-	517,875
Outstanding warrants			7,022,070	-	(21,031)	-	7,001,039

Changes during 2021 to:

Warrants	Exercise Price	Warrant Termination Date	Outstanding Balance, 12/31/2020	Warrants Issued	Warrants Exercised	Warrants Expired	Outstanding Balance, 12/31/2021
ZNWAA	$ 2.00	01/31/2023	1,498,804	-	-	-	1,498,804
ZNWAD	$ 1.00	05/02/2023	243,853	-	-	-	243,853
ZNWAE	$ 1.00	05/01/2023	2,144,099	-	-	-	2,144,099
ZNWAF	$ 1.00	08/14/2023	359,435	-	-	-	359,435
ZNWAG	$ 1.00	01/08/2023	240,068	-	-	-	240,068
ZNWAH	$ 5.00	04/19/2023	372,400	-	-	-	372,400
ZNWAI	$ 3.00	06/29/2023	640,730	-	-	-	640,730
ZNWAJ	$ 1.00	10/29/2023	545,900	-	-	-	545,900
ZNWAK	$ 0.01	02/25/2023	437,875	-	(6,220)	-	431,655
ZNWAL	$ 2.00	08/26/2023	517,875	-	-	-	517,875
ZNWAM	$ 1.00	07/15/2022	-	4,376,000	-	-	4,376,000
ZNWAN	$ 1.00	07/15/2022	-	267,785	(125)	-	267,660
ZNWAO	$ 0.25	06/12/2023	-	190,480	(15,510)	-	174,970
ZNWAP	$ 0.25	06/02/2022	-	1,639,916	(1,200,000)	-	439,916
ZNWAR	$ 0.25	06/23/2022	-	1,020,000	-	-	1,020,000
Outstanding warrants			7,001,039	7,494,181	(1,221,855)	-	13,273,365

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”), to shareholders 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”).

On March 31, 2016, the rights offering terminated.

On May 2, 2016, the Company issued approximately $3,470,000 aggregate principal amount of convertible bonds or “Notes” in connection with the rights offering. The Company received net proceeds of approximately $3,334,000, from the issuance of the Notes, after deducting fees and expenses of $136,000 incurred in connection with the offering. These costs have been discounted as deferred offering costs (See note 7).

On May 4, 2020, the Company paid its annual 10% interest to its bondholders of record on April 20, 2020. The interest was paid-in-kind (“PIK”) in the form of Common Stock. An average of the Company stock price of $0.182 was determined based on the 30 trading days prior to the record date of April 20, 2020. This figure was used to divide into 10% of the par value of the bonds held by the holders. The Company issued 1,781,504 shares to the accounts of its bondholders.

On April 2, 2021, the ability of bondholders to convert the bonds ended so the 30-day average share price could be computed. On May 2, 2021, Zion’s bonds expired. Zion chose to pay the principal in kind with our stock. On May 2, 2021, a total of 32,139 $100 face value bonds were outstanding. The 30-day moving average price used to settle the bonds was $.606. On May 3, 2021, Zion settled the principal on the bonds by issuing approximately 5,300,000 shares of our common stock. The annual 10% coupon payment was paid in shares using the same 30-day average price. On May 3, 2021, Zion issued approximately 530,000 shares for the remaining bond holders’ interest payment.

As of the date of this report, the Company fully paid its annual interest over the course of five years, as well as the principal amount of the bonds, and its obligation is completed.

Tabular Disclosure of Contractual Obligations

The following summarizes our contractual consolidated financial obligations for continuing operations at December 31, 2021, 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)					
	2022	**2023**	**2024**	**2025**	**Thereafter**	**Total**
Exploration Related Commitments	4,221	—	—	—	—	4,221
Operating Leases	266	212	18	—	—	496
Employment Agreements	1,800	—	—	—	—	1,800
Total	6,287	212	18	—	—	6,517

Off-Balance Sheet Arrangements

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

Recently Issued Accounting Pronouncements

The Company does not believe that the adoption of any recently issued accounting pronouncements in 2021 had a significant impact on our financial position, results of operations, or cash flow, except for ASC Update No. 2016-02—Leases, which requires organizations to recognize lease assets and lease liabilities on the balance sheet for 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. The Company adopted ASU 2016-02 in the first quarter of 2019. See Note 2 for more complete details on balances at December 31, 2021, and 2020.

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, 2021 through December 31, 2021, the USD has fluctuated by approximately 3.3% against the NIS (the USD has weakened relative to the NIS). Also, during the period January 1, 2020 through December 31, 2020, the USD fluctuated by approximately 7.0% against the NIS (the USD has weakened relative to the NIS). Continued weakening of the US dollar against the NIS will result in higher 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, 2021, we had cash, cash equivalents and short-term and long-term bank deposits of approximately $5,952,000. The weighted average annual interest rate related to our cash and cash equivalents for the year ended December 31, 2021, exclusive of funds at US banks that earn no interest, was approximately 0.1%.

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.

None.

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

None.

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, 2021. 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, 2021, 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

Our management, under the supervision of the Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting for our company. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, the company's principal executive and principal financial officers and effected by the company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 our company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our company's assets that could have a material effect on the financial statements.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this evaluation, our management used the criteria set forth in the Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2021, based on those criteria.

Changes in Internal Control Over Financial Reporting

There were no changes in internal controls over financial reporting that occurred during the fourth quarter of 2021 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

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 "2022 Proxy Statement") for our 2022 annual meeting of stockholders. The 2022 Proxy Statement will be filed with the SEC not later than 120 days subsequent to December 31, 2021.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will incorporate by reference the 2022 Proxy Statement for the 2022 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2021.

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 2022 Proxy Statement for the 2022 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2021.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item will incorporate by reference the 2022 Proxy Statement for the 2022 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2021.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will incorporate by reference the 2022 Proxy Statement for the 2022 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2021.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) Consolidated Financial Statements:

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 February 16, 2022)
4.1	Registration Statement on Form S-3 (File No. 333-261452) as amended, (incorporated by reference as filed with the SEC on December 1, 2021 and amended on December 15, 2021)
4.2	Prospectus Supplement dated December 15, 2021, (incorporated by reference as filed with the SEC on December 16, 2021)
4.3	Original Indenture (incorporated by reference to the Company's Form S-3 filed with the SEC on December 1, 2021 and amended on December 15, 2021 to the Registrant's Prospectus, Registration No. 333-261452, Exhibit 4.2 filed with the SEC on December 1, 2021)
4.4*	Description of Registered Securities
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 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)
	(iii) Employment Agreement dated as of May 1, 2019 and made effective May 1, 2019 between Zion Oil & Gas, Inc. and Robert Dunn (incorporated by reference to Exhibit 10.4 (i) to the Company's Form 10-Q filed on August 10, 2020)
	(iv) First Amendment to Employment Agreement dated June 11, 2020 and made effective June 11, 2020 between Zion Oil & Gas, Inc. and Robert Dunn (incorporated by reference to Exhibit 10.4 (ii) to the Company's Form 10-Q filed on August 10, 2020)
	(v) Employment Agreement dated July 1, 2019 and made effective July 1, 2019 between Zion Oil & Gas, Inc. and William H. Avery (incorporated by reference to Exhibit 10.1) to the Company's Form 8-K filed on July 1, 2019)
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)

Number	Description
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)
10.4	2021 Omnibus Incentive Plan (incorporated by reference to the Company's Form S-8 filed with the SEC on June 14, 2021)
10.5	Office Lease Agreement between Zion Oil & Gas, Inc., as 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)
10.6	Megiddo-Jezreel License 401, 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)
10.7	Extension Letter to Megiddo-Jezreel License 401, as extended to December 2, 2020 (incorporated by reference to the Company's Form 10-K filed with the SEC on March 27, 2020)
10.8	Purchase and Sale Agreement between Zion Oil & Gas, Inc. (buyer) and Central European Drilling (seller) dated March 12, 2020 of an onshore drilling rig, drill pipe, and related equipment (incorporated by reference to the Company's Form 10-K filed with the SEC on March 27, 2020)
10.9	Bill of Sale between Zion Oil & Gas, Inc. (buyer) and Central European Drilling (seller) dated March 12, 2020 of an onshore drilling rig, drill pipe, and related equipment (incorporated by reference to the Company's Form 10-K filed with the SEC on March 27, 2020)
10.10	Escrow Agreement between Zion Oil & Gas, Inc. (buyer), Central European Drilling (seller) and American Stock Transfer & Trust LLC (escrow agent) dated March 12, 2020 (incorporated by reference to the Company's Form 10-K filed with the SEC on March 27, 2020)
10.11*	New Megiddo License 428, dated December 3, 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)
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*	Inline XBRL Instance Document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* filed herewith

ITEM 16. FORM 10-K SUMMARY

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

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/ Robert W.A. Dunn
Robert W.A. Dunn
Chief Executive Officer
(Principal Executive Officer)

Date: March 17, 2022

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

Date: March 17, 2022

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/ Robert W.A. Dunn Robert W.A. Dunn	Chief Executive Officer and Director, (Principal Executive Officer)	March 17, 2022
/s/ Michael B. Croswell Jr. Michael B. Croswell Jr.	Chief Financial Officer (Principal Financial and Principal Accounting Officer)	March 17, 2022
/s/ William H. Avery William H. Avery	President, General Counsel and Director	March 17, 2022
/s/ Martin M. van Brauman Martin M. van Brauman	Corporate Secretary, Treasurer and Director	March 17, 2022
/s/ John M. Brown John M. Brown	Chairman of the Board of Directors	March 17, 2022
/s/ Paul Oroian Paul Oroian	Director	March 17, 2022
/s/ John Seery John Seery	Director	March 17, 2022
/s/ Kent Siegel Kent Siegel	Director	March 17, 2022
/s/ Gene Scammahorn Gene Scammahorn	Director	March 17, 2022
/s/ Virginia Prodan Virginia Prodan	Director	March 17, 2022
/s/ Lee Russell Lee Russell	Director	March 17, 2022
/s/ Dr. Amotz Agnon Dr. Amotz Agnon	Director	March 17, 2022
/s/ Jeffrey Moskowitz Jeffrey Moskowitz	Director	March 17, 2022
/s/ Brad Dacus Brad Dacus	Director	March 17, 2022
/s/Sarah Caygill Sarah Caygill	Director	March 17, 2022

Zion Oil & Gas, Inc.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Zion Oil & Gas, Inc. and subsidiaries (the Company) as of December 31, 2021 and 2020, and the related statements of operations, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2021, and the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Matter

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and had an accumulated deficit 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 consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated 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 consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements, and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Assessment of Oil and Gas Properties- Refer to Notes 1A, 2D and 4 of the consolidated financial statements.

Critical Audit Matter Description

Unproved oil and gas property cost consist of all costs associated with acquisition, exploration and development of oil and gas reserves, including directly related overhead costs that are capitalized. As of December 31, 2021 the total unproved oil and gas property was $46.95 Million.

We have identified the determination of impairment on unproved oil and gas asset as a critical audit matter as (i) there was a high degree of auditor judgment and subjectivity involved in performing procedures and evaluating audit evidence related to the evaluation of whether impairment needs to be charged on the unproved Oil and Gas Properties due to the significant amount of judgment by management when developing the estimates, (ii) significant audit effort was necessary to evaluate management's anticipated and significant assumptions, including the progress of drilling activity and the corresponding fund raising by the company.

How the Critical Audit Matter was address in the Audit

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures including evaluation of the test report obtained for deciding on further drilling activity, evaluating managements estimates of impairment analysis by testing the funding raised during the period and the evaluation of the board minutes on the progress of the drilling plan, testing the capitalization of Oil and Gas properties during the year. Evaluating management's assumptions related to the basis of further drilling involved evaluating whether the assumptions were reasonable considering (i) the current progress of drilling activity, (ii) the subsequent fund raising activity, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit.

/s/ RBSM LLP

We have served as the Company's auditor since 2018.
PCAOB ID 587
New York, NY
March 17, 2022

Zion Oil & Gas, Inc.

Consolidated Balance Sheets as of

	December 31, 2021	**December 31, 2020**
	US$ thousands	**US$ thousands**
Current assets		
Cash and cash equivalents	**4,683**	11,708
Fixed short term bank and escrow deposits – restricted	**1,269**	2,954
Prepaid expenses and other	**689**	1,900
Other deposits	**617**	597
Governmental receivables	**900**	2,040
Other receivables	**483**	195
Total current assets	**8,641**	19,394
Unproved oil and gas properties, full cost method (see Note 4)	**46,950**	15,526
Property and equipment at cost		
Drilling rig and related equipment, net of accumulated depreciation of $704 and nil (see note 2J)	**6,834**	7,568
Property and equipment, net of accumulated depreciation of $604 and $564	**138**	131
	6,972	7,699
Right of Use Lease Assets (see Note 10)	**327**	438
Other assets		
Assets held for severance benefits	**541**	446
Total other assets	**541**	446
Total assets	**63,431**	43,503
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	**2,783**	1,369
Lease obligation – current (see Note 10)	**203**	191
Asset retirement obligation	**571**	571
Derivative liability (see Note 8)	**-**	431
10% Senior convertible bonds, net of unamortized deferred financing cost of nil and $9 and unamortized debt discount of nil and $205 at December 31, 2021 and 2020, respectively (see Note 7)	**-**	3,033
Accrued liabilities	**1,781**	1,987
Total current liabilities	**5,338**	7,582
Long-term liabilities		
Lease obligation – non-current (see Note 10)	**169**	307
Provision for severance pay	**548**	505
Total long-term liabilities	**717**	812
Total liabilities	**6,055**	8,394
Commitments and contingencies (see Note 11)		
Stockholders' equity		
Common stock, par value $.01; Authorized: 800,000,000 shares at December 31, 2021: Issued and outstanding: 364,322,883 and 237,381,555 shares at December 31, 2021 and 2020, respectively	**3,643**	2,374
Additional paid-in capital	**277,258**	245,539
Accumulated deficit	**(223,525)**	(212,804)
Total stockholders' equity	**57,376**	35,109
Total liabilities and stockholders' equity	**63,431**	43,503

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

Zion Oil & Gas, Inc.

Consolidated Statements of Operations

	For the year ended December 2021 US$ thousands	For the year ended December 2020 US$ thousands
General and administrative	**7,594**	4,291
Other	**3,287**	1,963
Loss from operations	**(10,881)**	(6,254)
Other income (expense), net		
(Loss)/gain on derivative liability	**431**	(302)
Foreign exchange gain/(loss)	**(31)**	54
Financial (expenses), net	**(240)**	(494)
Loss before income taxes	**(10,721)**	(6,996)
Income taxes	**—**	—
Net loss	**(10,721)**	(6,996)
Net loss per share of common stock - basic and diluted (in US$)	**(0.04)**	(0.04)
Weighted-average shares outstanding–basic and diluted (in thousands)	**277,457**	187,429

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

Zion Oil & Gas, Inc.

Consolidated Statements of Changes in Stockholders' Equity
For the years ended December 31, 2021 and 2020

	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, 2019	123,973	1,240	217,892	(205,808)	13,324
Funds received from sale of DSPP units and shares and exercise of warrants	110,973	1,109	27,281	—	28,390
Value of bonds converted to shares	1	*	—	—	—
Bond interest paid in shares	1,782	18	307	—	325
Funds received from option exercises	653	7	—	—	7
Value of options granted to employees, directors and others as non-cash compensation	—	—	59	—	59
Net loss	—	—	—	(6,996)	(6,996)
Balances as of December 31, 2020	237,382	2,374	245,539	(212,804)	35,109
Funds received from sale of DSPP units and shares and exercise of warrants	**120,676**	**1,207**	**25,012**	**—**	**26,219**
Costs associated with the issuance of shares	**—**	**—**	**(115)**		**(115)**
Value of bonds converted to shares	**15**	*	**9**	**—**	**9**
Bond interest paid in shares	**530**	**5**	**316**	**—**	**321**
Bond principal paid in shares	**5,296**	**53**	**3,161**	**—**	**3,214**
Funds received from option exercises	**425**	**4**	**17**	**—**	**21**
Value of options granted to employees, directors and others as non-cash compensation	**—**	**—**	**3,319**	**—**	**3,319**
Net loss	**—**	**—**	**—**	**(10,721)**	**(10,721)**
Balances as of December 31, 2021	**364,324**	**3,643**	**277,258**	**(223,525)**	**57,376**

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

Zion Oil & Gas, Inc.

Consolidated Statements of Cash Flows

	For the year ended December 31,	
	2021	**2020**
	US$ thousands	**US$ thousands**
Cash flows from operating activities		
Net loss	**(10,721)**	(6,996)
Adjustments required to reconcile net loss to net cash used in operating activities:		
Depreciation	**743**	60
Cost of options issued to employees, directors and others as non-cash compensation	**3,319**	59
Amortization of debt discount related to convertible bonds	**190**	459
Change in derivative liability	**(431)**	302
Change in assets and liabilities, net:	**-**	-
Other deposits	**(20)**	(400)
Prepaid expenses and other	**1,211**	(1,389)
Governmental receivables	**1,140**	(2,006)
Other receivables	**(288)**	27
Lease obligation - current	**(116)**	(48)
Lease obligation – non current	**(138)**	(143)
Right of Use Lease Asset	**239**	196
Severance pay, net	**(52)**	28
Accounts payable	**64**	105
Accrued liabilities	**(953)**	(161)
Asset retirement obligation	**-**	(14)
Net cash used in operating activities	**(5,813)**	(9,921)
Cash flows from investing activities		
Acquisition of property and equipment	**(46)**	(76)
Acquisition of drilling rig and related equipment	**(182)**	(6,414)
Investment in unproved oil and gas properties	**(28,794)**	(3,229)
Net cash used in investing activities	**(29,022)**	(9,719)
Cash flows from financing activities		
Payments related to capital lease	**-**	(30)
Proceeds from exercise of stock options	**21**	7
Costs paid related to the issuance of new shares	**(115)**	-
Proceeds from issuance of stock and exercise of warrants	**26,219**	28,390
Net cash provided by financing activities	**26,125**	28,367
Net increase (decrease), in cash, cash equivalents and restricted cash	**(8,710)**	8,727
Cash, cash equivalents and restricted cash – beginning of period	**14,662**	5,935
Cash, cash equivalents and restricted cash – end of period	**5,952**	14,662
Non-cash investing and financing activities:		
Convertible bond principal paid in shares	**3,214**	-
Unpaid investments in oil and gas properties	**3,666**	1,352
Unpaid investments in property and equipment	**-**	1,154
Convertible bond interest paid in shares	**321**	325
Capitalized convertible bond interest attributed to oil and gas properties	**104**	324
10% senior convertible bonds converted to shares	**9**	-
Addition of right of use lease assets and lease obligations	**128**	17
Supplemental schedule of cash flow information		
Cash paid for interest	**-**	2

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

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

	December 31, 2021	December 31, 2020
	US$ thousands	US$ thousands
Cash and cash equivalents	**4,683**	11,708
Restricted cash included in fixed short-term bank deposits	**1,269**	2,954
	5,952	14,662

Zion Oil & Gas, Inc.

Notes to Consolidated 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 22 years of oil & gas exploration in Israel. As of December 31, 2021, the Company has no revenues from its oil and gas operations.

Zion maintains its corporate headquarters in Dallas, Texas. The Company also has 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.

On January 24, 2020, Zion incorporated a wholly owned subsidiary, Zion Drilling, Inc., a Delaware corporation, for the purpose of owning a drilling rig, related equipment and spare parts, and on January 31, 2020, Zion incorporated another wholly owned subsidiary, Zion Drilling Services, Inc., a Delaware corporation, to act as the contractor providing such drilling services. When Zion is not using the rig for its own exploration activities, Zion Drilling Services may contract with other operators in Israel to provide drilling services at market rates then in effect.

Zion has the trademark "ZION DRILLING" filed with the United States Patent and Trademark Office. Zion has the trademark filed with the World Intellectual Property Organization in Geneva, Switzerland, pursuant to the Madrid Agreement and Protocol. In addition, Zion has the trademark filed with the Israeli Trademark Office in Israel.

Exploration Rights/Exploration Activities

The Company currently holds one active petroleum exploration license onshore Israel, the New Megiddo License 428 ("NML 428"), comprising approximately 99,000 acres. The NML 428 was awarded on December 3, 2020 for a six-month term with the possibility of an additional six-month extension. On April 29, 2021, Zion submitted a request to the Ministry of Energy for a six-month extension to December 2, 2021. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022. The ML 428 lies onshore, south and west of the Sea of Galilee and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

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 successfully cased and cemented the well while awaiting the approval of the testing protocol. 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, 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. During the years ended December 31, 2021, and 2020, respectively, the Company did not record any post-impairment charges.

Megiddo-Jezreel Petroleum License, No. 401 ("MJL 401") and New Megiddo License 428 ("NML 428")

The Megiddo-Jezreel License 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 401 lies onshore, south and west of the Sea of Galilee, and we continue our exploration focus here based on our studies as it appears to possess the key geologic ingredients of an active petroleum system with significant exploration potential.

The NML 428 (covering the same area as MJ-01) was awarded on December 3, 2020 for a six-month term with the possibility of an additional six-month extension. On April 29, 2021, Zion submitted a request to the Ministry of Energy for a six-month extension to December 2, 2021. On May 30, 2021, the Ministry of Energy approved our request for extension to December 2, 2021. On November 29, 2021, the Ministry of Energy approved our request for extension to August 1, 2022, This license effectively replaced the Megiddo-Jezreel License 401 as it has the same area and coordinates.

The MJ-02 drilling plan was approved by the Ministry of Energy on July 29, 2020. On January 6, 2021, Zion officially spudded its MJ-02 exploratory well. On November 23, 2021, Zion announced via a press release that it completed drilling the MJ-02 well to a total depth of 5,531 meters (~18,141 feet) with a 6 inch open hole at that depth.

A full set of detailed and comprehensive tests including neutron-density, sonic, gamma, and resistivity logs were acquired in December 2021, as a result of which we identified an encouraging zone of interest. Zion is presently in the planning and procurement phases of extensive well testing, and this is expected to take several months.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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

Zion's Former Asher-Menashe License

Zion plugged the exploratory well on its former Asher-Menashe License area, the reserve pit has been evacuated, and during the year 2019, Zion completed the abandonment of this well site in accordance with guidance from the Energy Ministry, Environmental Ministry and local officials (see Note 11C).

Zion's Former Joseph License

Zion has plugged all of its exploratory wells on its former Joseph License area, and the reserve pits have been evacuated, but acknowledges its obligation to complete the abandonment of these well sites in accordance with guidance from the Energy Ministry, Environmental Ministry and local officials (see Note 11C).

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 of hydrocarbons.

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 consolidated 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, 2021, the Company incurred a net loss of approximately $10.7 million and had an accumulated deficit of approximately $223.5 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 consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty (see also Note 13).

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 2 - Summary of Significant Accounting Policies

A summary of the significant accounting policies applied in the presentation of the accompanying consolidated financial statements follows:

A. Basis of Presentation and Foreign Currency Matters

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("US GAAP").

All amounts referred to in the notes to the consolidated financial statements are in United States Dollars ($) unless stated otherwise.

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.

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. Oil and Gas Properties and Impairment

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

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

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

During the years ended December 31, 2021, and 2020, the Company did not record any post-impairment charges.

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 $46,950,000 and $15,526,000 as of December 31, 2021, and 2020, respectively.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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

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 $743,000, and $60,000 for the years ended December 31, 2021, and 2020, respectively. See Footnote 2R for a discussion of the purchase of our drilling rig and related equipment.

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.

H. Use of Estimates

The preparation of the accompanying consolidated 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 expenses. Such estimates include the valuation of unproved oil and gas properties, deferred tax assets, asset retirement obligations, borrowing rate of interest consideration for leases accounting 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 consolidated financial statements in future periods.

The full extent to which the COVID-19 pandemic may directly or indirectly impact our business, results of operations and financial condition, will depend on future developments that are uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain it or treat COVID-19, as well as the economic impact on local, regional, national and international markets. We have made estimates of the impact of COVID-19 within our consolidated financial statements, and although there is currently no major impact, there may be changes to those estimates in future periods. Actual results may differ from these estimates.

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 consolidated 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, 2021, and 2020.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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

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 11C).

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 18,586,557 and 10,308,375 Common Stock equivalents in 2021, and 2020 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 consolidated 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.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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

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.

The Company uses a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. The hierarchy requires the Company to use observable inputs when available, and to minimize the use of unobservable inputs, when determining fair value. The three tiers are defined as follows:

- Level 1—Observable inputs that reflect quoted market prices (unadjusted) for identical assets or liabilities in active markets;
- Level 2—Observable inputs other than quoted prices in active markets that are observable either directly or indirectly in the marketplace for identical or similar assets and liabilities; and
- Level 3—Unobservable inputs that are supported by little or no market data, which require the Company to develop its own assumptions.

The Company's financial instruments, including cash and cash equivalents, accounts payable and accrued liabilities, are carried at historical cost. At December 31, 2021 and 2020, the carrying amounts of these instruments approximated their fair values because of the short-term nature of these instruments. Derivative instruments are carried at fair value, generally estimated using the Binomial Model.

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. Warrants

In connection with the Dividend Reinvestment and Stock Purchase Plan ("DSPP") financing arrangements, the Company has issued warrants to purchase shares of its common stock. The outstanding warrants are stand-alone instruments that are not puttable or mandatorily redeemable by the holder and are classified as equity awards. The Company measures the fair value of the awards using the Black-Scholes option pricing model as of the measurement date. Warrants issued in conjunction with the issuance of common stock are initially recorded and accounted as a part of the DSPP investment as additional paid-in capital of the common stock issued. All other warrants are recorded at fair value and expensed over the requisite service period or at the date of issuance, if there is not a service period. Warrants granted in connection with ongoing arrangements are more fully described in Note 6, *Stockholders' Equity*.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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

Q. 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 2021 and 2020, respectively, with the exception of recurring monthly consulting fees paid to certain management personnel.

R. Depreciation and Accounting for Drilling Rig and Related Equipment

On March 12, 2020, Zion entered into a Purchase and Sale Agreement with Central European Drilling kft ("CED"), a Hungarian corporation, to purchase an onshore oil and gas drilling rig, drilling pipe, related equipment and spare parts for a purchase price of $5.6 million in cash, subject to acceptance testing and potential downward adjustment. We remitted to the Seller $250,000 on February 6, 2020 as earnest money towards the purchase price. The Closing anticipated by the Agreement took place on March 12, 2020 by the Seller's execution and delivery of a Bill of Sale to us. On March 13, 2020, the Seller retained the earnest money deposit, and the Company remitted $4,350,000 to the seller towards the purchase price and $1,000,000 (the "Holdback Amount") was deposited in escrow with American Stock Transfer and Trust Company LLC, as escrow agent, through November 30, 2020, or as extended by mutual agreement of the parties, pending a determination, if any, by us of any operating deficiency in the drilling rig. On January 6, 2021, Zion completed its acceptance testing of the I-35 drilling rig and the Holdback Amount was remitted to Central European Drilling on January 8, 2021.

Since the rig was purchased and closed during March 2020, this purchase was recorded on Zion's books as a long-term fixed asset as a component of Property and Equipment. The full purchase price of the drilling rig was $5.6 million, inclusive of approximately $540,000 allocated in spare parts and $48,000 allocated in additional separate assets. The value of the spare parts and separate assets are captured in separate ledger accounts, but reported as one line item with the drilling rig on the balance sheet.

In accordance with GAAP accounting rules, per the matching principle, monthly depreciation begins the month following when the asset is "placed in service." The rig was placed in service in December 2020 with January 2021 representing the first month of depreciation. Zion determined that the life of the I-35 drilling rig (the rig Zion purchased), is 10 years. Zion will depreciate the rig on a straight-line basis.

The $540,000 in spare parts was the original cost to CED. These items were received and counted by Zion upon receipt. All records and files are maintained by Zion. Zion plans to obtain a physical count of the equipment items at the end of each quarter, or as close to such date as practical, in accordance with our normal procedures.

Zion uses the First In First Out ("FIFO") method of accounting for the inventory spare parts, meaning that the earliest items purchased will be the first item charged to the well in which the inventory of spare parts gets consumed.

It is also noteworthy that various components and systems on the rig will be subject to certifications by the manufacturer to ensure that the rig is maintained at optimal levels. Per standard practice in upstream oil and gas, each certification performed on our drilling rig increases the useful life of the rig by five years. The costs of each certification will be added to the drilling rig account and our straight-line amortization will be adjusted accordingly.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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

I-35 Drilling Rig & Associated Equipment

	I-35 Drilling Rig	Rig Spare Parts	Other Drilling Assets	Total
	US$ thousands	US$ thousands	US$ thousands	US$ thousands
December 31, 2019	**-**	**-**	**-**	**-**
Net Purchase Price [1]	4,600	-	-	4,600
Restricted Cash as Holdback in Escrow [1]	500	500	-	1,000
Purchase Price Allocations	(88)	40	48	-
Capitalized Costs [2]	1,481	-	-	1,481
Asset Additions	-	158	329	487
Asset Disposals	-	-	-	-
December 31, 2020	6,493	698	377	7,568
Asset Additions	**-**	**191**	**25**	**216**
Asset Depreciation	**(634)**	**-**	**(69)**	**(703)**
Asset Disposals for Self-Consumption	**-**	**(247)**	**-**	**(247)**
December 31, 2021	**5,859**	**643**	**333**	**6,834**

(1) These are the initial cash payments for the purchase of the I-35 drilling rig in early 2020

(2) Capitalized costs include inspection, quarantine, labor, transportation, insurance, and other costs required to place the I-35 drilling rig in service initially, per GAAP.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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

S. Recently Adopted Accounting Pronouncements

ASU 2016-02 and ASU 2018-01 – 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 adopted 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. These leases have been accounted for under ASU 2016-02 in 2020 and 2021 by establishing a right-of-use asset and a corresponding current lease liability and non-current lease liability. Zion is not subject to any loan covenants and therefore, the increase in assets and liabilities does not have a material impact on its business.

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. The Company does not have any land easements and believes that this ASU 2018-01 has no effect on the Company.

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. The Company is currently evaluating the impact of adopting ASU 2018-05 on our consolidated financial statements.

ASU 2020-03, "Codification Improvements to Financial Instruments"

In March 2020, the FASB issued ASU 2020-03, "Codification Improvements to Financial Instruments": The amendments in this update are to clarify, correct errors in, or make minor improvements to a variety of ASC topics. The changes in ASU 2020-03 are not expected to have a significant effect on current accounting practices. The ASU improves various financial instrument topics in the Codification to increase stakeholder awareness of the amendments and to expedite the improvement process by making the Codification easier to understand and easier to apply by eliminating inconsistencies and providing clarifications. The ASU is effective for smaller reporting companies for fiscal years beginning after December 15, 2022 with early application permitted. The Company is currently evaluating the impact the adoption of this guidance may have on its consolidated financial statements.

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-06, Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40), Accounting for Convertible Instruments and Contracts in an Entity's Own Equity. The ASU simplifies accounting for convertible instruments by removing major separation models required under current GAAP. Consequently, more convertible debt instruments will be reported as a single liability instrument with no separate accounting for embedded conversion features. The ASU removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception, which will permit more equity contracts to qualify for it. The ASU simplifies the diluted net income per share calculation in certain areas. The ASU is effective for annual and interim periods beginning after December 31, 2021, and early adoption is permitted for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. The Company does not believe that this ASU will have any impact on its consolidated financial statements.

The Company does not believe that the adoption of any recently issued accounting pronouncements in 2021 had a significant impact on our consolidated financial position, results of operations, or cash flow, except for ASC Update No. 2016-02—Leases, which requires organizations to recognize lease assets and lease liabilities on the balance sheet for 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. The Company adopted ASU 2016-02 in the first quarter of 2019. See Note 10 for more complete details on balances at December 31, 2021, and 2020.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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.

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 consolidated 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, 2021, and 2020, the Company had a provision for severance pay of $548,000 and $505,000, respectively, of which all was long-term. As of December 31, 2021, and 2020, the Company had $541,000 and $446,000, 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 Consolidated 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, 2021	**December 31, 2020**
	US$ thousands	**US$ thousands**
Excluded from amortization base:		
Drilling costs, and other operational related costs	**32,075**	4,232
Capitalized salary costs	**2,158**	1,967
Capitalized interest costs	**1,418**	1,314
Legal and seismic costs, license fees and other preparation costs	**11,260**	7,974
Other costs	**39**	39
	46,950	15,526

Changes in Unproved oil and gas properties during the years ended December 31, 2021, and 2020, are as follows:

	December 31, 2021	**December 31, 2020**
	US$ thousands	**US$ thousands**
Excluded from amortization base:		
Drilling costs, and other operational related costs	**27,843**	**3,005**
Capitalized salary costs	**191**	**208**
Capitalized interest costs	**104**	**324**
Legal and seismic costs, license fees and other preparation costs	**3,286**	**1,338**
Other costs	**-**	**14**
	***31,424**	***4,889**

* Inclusive of non-cash amounts of approximately $3,770,000, and $1,676,000 during the years 2021, and 2020, 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 Consolidated Financial Statements

Note 5 - Accrued Liabilities

Accrued liabilities are comprised as follows:

	December 31, 2021	**December 31, 2020**
	US$ thousands	**US$ thousands**
Drilling provisions	**1,304**	[(a)] 1,340
Employees related	**283**	198
Interest on convertible bonds	**-**	216
Audit and Legal Costs	**167**	162
Other	**27**	71
	1,781	1,987

(a) This includes $1,000,000 in accrued invoices related to rig purchases. Subsequently, on January 6, 2021, Zion completed its acceptance testing of the I-35 drilling rig and this amount was remitted to Central European Drilling on January 8, 2021.

Note 6 - Stockholders' Equity

The Company's shareholders approved the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of shares of common stock, par value $0.01, that the Company is authorized to issue from 400,000,000 shares to 800,000,000 shares, effective June 9, 2021.

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 4,000,000 shares of Common Stock for a total of 6,000,000 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 10,000,000 shares of Common Stock for a total of 16,000,000 shares of Common Stock available thereunder.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

During the year ended December 31, 2021, the Company granted the following non-qualified options from the 2011 Plan for employees, directors and consultants, to purchase as non-cash compensation:

i. Options to purchase 600,000 shares of Common Stock to six senior officers and three staff members at an exercise price of $0.915 per share. The options vested upon grant and are exercisable through January 4, 2031. The fair value of the options at the date of grant amounted to approximately $456,000.

ii. Options to purchase 75,000 shares of Common Stock were granted to one senior officer at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through January 6, 2031. The fair value of the options at the date of grant amounted to approximately $68,000. These options were granted per the provisions under the Israeli Appendix to the Plan.

iii. Options to purchase 1,800,000 shares of Common Stock to six senior officers and three staff members at an exercise price of $0.59 per share. The options vested upon grant and are exercisable through May 21, 2031. The fair value of the options at the date of grant amounted to approximately $885,000.

iv. Options to purchase 200,000 shares of Common Stock were granted to one senior officer at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through May 21, 2031. The fair value of the options at the date of grant amounted to approximately $117,000. These options were granted per the provisions under the Israeli Appendix to the Plan.

During the year ended December 31, 2020, 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 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 6, 2030. The fair value of the options at the date of grant amounted to approximately $57,000.

ii. Options to purchase 10,000 shares of Common Stock were granted to one staff member at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through September 1, 2030. The fair value of the options at the date of grant amounted to approximately $2,000.

Zion Oil & Gas, Inc.

Notes to Consolidated 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 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 2,000,000 shares of Common Stock for a total of 3,000,000 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 4,000,000 shares of Common Stock for a total of 7,000,000 shares of Common Stock available thereunder.

During the year ended December 31, 2021, the Company granted the following qualified (market value) and non-qualified options from the 2011 Non-Employee Directors Stock Option Plan for directors to purchase shares of common stock as non-cash compensation:

i. Options to purchase 350,000 shares of Common Stock to seven board members at an exercise price of $0.915 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 $252,000.

ii. Options to purchase 50,000 shares of Common Stock were granted to one board member 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 $45,000. These options were granted per the provisions under the Israeli Appendix to the Plan.

iii. Options to purchase 1,400,000 shares of Common Stock to six board members and one consultant at an exercise price of $0.59 per share. The options vested upon grant and are exercisable through May 21, 2027. The fair value of the options at the date of grant amounted to approximately $643,000.

iv. Options to purchase 200,000 shares of Common Stock were granted to one board member at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through May 21, 2027. The fair value of the options at the date of grant amounted to approximately $116,000. These options were granted per the provisions under the Israeli Appendix to the Plan.

During the year ended December 31, 2020, the Company did not grant any qualified (market value) options from the 2011 Non-Employee Directors Stock Option Plan to its directors.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

C. 2021 Omnibus Incentive Stock Option Plan

Effective June 9, 2021, the Company's shareholders authorized the adoption of the Zion Oil & Gas, Inc. 2021 Omnibus Incentive Stock Option Plan ("Omnibus Plan") for employees, directors and consultants, initially reserving for issuance thereunder 38,000,000 shares of common stock.

The Omnibus 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 plan also permits cash payments under certain conditions.

The compensation committee of the Board of Directors (comprised of independent 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 ten years from the date of grant.

During the year ended December 31, 2021, the Company granted the following options from the 2021 Equity Omnibus Plan for employees, directors and consultants, to purchase shares of common stock as non-cash compensation:

i. Options to purchase 25,000 shares of Common Stock to one board member at an exercise price of $0.29 per share. The options vested upon grant and are exercisable through June 15, 2031. The fair value of the options at the date of grant amounted to approximately $6,000.

ii. Options to purchase 1,425,000 shares of Common Stock to eleven board members and four senior officers at an exercise price of $0.39 per share. The options vested upon grant and are exercisable through July 09, 2031. The fair value of the options at the date of grant amounted to approximately $468,000.

iii. Options to purchase 100,000 shares of Common Stock to seven staff members and one consultant at an exercise price of $0.39 per share. The options vested upon grant and are exercisable through July 13, 2031. The fair value of the options at the date of grant amounted to approximately $33,000.

iv. Options to purchase 375,000 shares of Common Stock two board member and six staff members at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through July 17, 2031. These options were granted per the provisions under the Israeli Appendix to the Plan. The fair value of the options at the date of grant amounted to approximately $140,000.

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, 2031. These options were granted per the provisions under the Israeli Appendix to the Plan. The fair value of the options at the date of grant amounted to approximately $2,000.

vi. Options to purchase 413,000 shares of Common Stock to one board member, three senior officers and two employees at an exercise price of $0.25 per share. The options vested upon grant and are exercisable through September 1, 2031. The fair value of the options at the date of grant amounted to approximately $87,000.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

D. Warrants and Options

The Company has reserved 23,015,115 shares of common stock as of December 31, 2021, for the exercise of warrants and options to employees and non-employees, of which 23,015,115 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	7,500	January 01, 2028	Options
	0.01	30,000	February 28, 2028	Options
	0.01	80,000	November 18, 2029	Options
	0.16	75,000	December 10, 2029	Options
	1.67	105,000	October 01, 2024	Options
	1.70	115,000	December 20, 2022	Options
To employees and directors				
	0.01	10,000	November 11, 2023	Options
	0.01	5,000	June 11, 2024	Options
	0.01	20,000	June 05, 2026	Options
	0.01	130,000	January 01, 2027	Options
	0.01	50,000	January 04, 2027	Options
	0.01	60,000	April 17, 2027	Options
	0.01	200,000	May 21, 2027	Options
	0.01	30,000	October 01, 2027	Options
	0.01	77,500	January 01, 2028	Options
	0.01	25,000	January 04, 2028	Options
	0.01	4,000	April 06, 2028	Options
	0.01	25,000	January 6, 2029	Options
	0.01	75,000	January 4, 2031	Options
	0.01	10,000	September 01, 2031	Options
	0.01	85,000	September 18, 2029	Options
	0.01	125,000	November 18, 2029	Options
	0.01	35,000	January 05, 2030	Options
	0.01	10,000	September 02, 2030	Options
	0.01	200,000	May 21, 2031	Options
	0.01	355,000	July 17, 2031	Options
	0.16	340,000	December 10, 2025	Options
	0.18	25,000	December 02, 2025	Options
	0.25	413,000	September 1, 2031	Options
	0.28	25,000	September 03, 2025	Options
	0.28	25,000	September 03, 2029	Options
	0.29	25,000	June 15, 2027	Options
	0.39	1,510,000	July 9, 2031	Options
	0.59	1,400,000	May 21, 2027	Options
	0.59	1,800,000	May 21, 2031	Options
	0.92	350,000	January 4, 2027	Options
	0.92	600,000	January 4, 2031	Options
	1.33	25,000	May 01, 2023	Options
	1.38	105,307	January 02, 2025	Options
	1.55	200,000	June 05, 2022	Options
	1.67	300,943	October 01, 2024	Options
	1.70	103,500	December 20, 2022	Options
	1.75	250,000	June 07, 2023	Options
	1.78	25,000	September 04, 2024	Options
	2.31	250,000	January 01, 2024	Options
	4.15	25,000	July 02, 2024	Options
To investors				
	0.01	431,655	February 25, 2023	Warrants
	0.25	174,970	June 12, 2023	Warrants
	0.25	439,916	June 2, 2022	Warrants
	0.25	1,020,000	June 23, 2022	Warrants

	1.00	**243,853**	**May 02, 2023**	**Warrants**
	1.00	**545,900**	**October 29, 2023**	**Warrants**
	1.00	**2,144,099**	**March 03, 2023**	**Warrants**
	1.00	**359,435**	**August 14, 2023**	**Warrants**
	1.00	**4,376,000**	**July 15, 2022**	**Warrants**
	1.00	**267,660**	**July 15, 2022**	**Warrants**
	1.00	**240,068**	**January 08, 2023**	**Warrants**
	2.00	**1,498,804**	**January 31, 2023**	**Warrants**
	2.00	**517,875**	**August 25, 2023**	**Warrants**
	3.00	**640,730**	**June 29, 2023**	**Warrants**
	5.00	**372,400**	**April 19, 2023**	**Warrants**
Total outstanding	**0.98***	**23,015,115**		

* Weighted Average

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

The stock option transactions since January 1, 2020 are shown in the table below:

	Number of shares	**Weighted Average exercise price**
		US$
Outstanding, December 31, 2019	5,195,250	1.12
Changes during 2020 to:		
Granted to employees, officers, directors and others	120,000	0.01
Expired/Cancelled/Forfeited	(865,000)	1.74
Exercised	(652,500)	0.01
Outstanding, December 31, 2020	3,797,750	1.14
Changes during 2021 to:		
Granted to employees, officers, directors and others*	**7,023,000**	0.49
Expired/Cancelled/Forfeited	**(654,500)**	2.30
Exercised	**(424,500)**	0.05
Outstanding, December 31, 2021	**9,741,750**	0.64
Exercisable, December 31, 2021	**9,741,750**	0.64

The aggregate intrinsic value of options exercised during 2021, and 2020 was approximately $114,000, and $155,000 respectively.

The aggregate intrinsic value of the outstanding options and warrants as of December 31, 2021, totaling 23,015,115 was approximately $337,000.

The aggregate intrinsic value of the outstanding options and warrants as of December 31, 2020, totaling 10,798,789 was approximately $1,757,000.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

The following table summarizes information about stock options outstanding as of December 31, 2021:

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	10,000	1.86	0.01
—	—	—	—	0.01	5,000	2.45	0.01
—	—	—	—	0.01	20,000	4.42	0.01
—	—	—	—	0.01	130,000	5.00	0.01
—	—	—	—	0.01	50,000	5.00	0.01
—	—	—	—	0.01	60,000	5.29	0.01
—	—	—	—	0.01	200,000	5.38	0.01
—	—	—	—	0.01	40,000	5.74	0.01
—	—	—	—	0.01	85,000	6.00	0.01
—	—	—	—	0.01	25,000	6.00	0.01
—	—	—	—	0.01	30,000	6.15	0.01
—	—	—	—	0.01	4,000	6.26	0.01
—	—	—	—	0.01	25,000	7.01	0.01
—	—	—	—	0.01	85,000	7.71	0.01
—	—	—	—	0.01	205,000	7.88	0.01
—	—	—	—	0.01	35,000	8.01	0.01
—	—	—	—	0.01	75,000	9.01	0.01
—	—	—	—	0.01	200,000	9.38	0.01
—	—	—	—	0.01	355,000	9.54	0.01
—	—	—	—	0.01	10,000	9.66	0.01
—	—	—	—	0.16	340,000	3.94	0.16
—	—	—	—	0.16	75,000	7.94	0.16
—	—	—	—	0.18	25,000	3.91	0.18
—	—	—	—	0.25	50,000	9.66	0.25
—	—	—	—	0.25	363,000	9.66	0.25
—	—	—	—	0.28	25,000	3.67	0.28
—	—	—	—	0.28	25,000	7.67	0.28
—	—	—	—	0.29	25,000	5.45	0.29
—	—	—	—	0.39	1,510,000	9.82	0.39
—	—	—	—	0.59	1,400,000	5.38	0.59
—	—	—	—	0.59	1,800,000	9.38	0.59
—	—	—	—	0.92	350,000	5.00	0.92
—	—	—	—	0.92	600,000	9.01	0.92
—	—	—	—	1.33	25,000	1.32	1.33
—	—	—	—	1.38	105,307	3.01	1.38
—	—	—	—	1.55	200,000	0.43	1.55
—	—	—	—	1.67	405,943	2.75	1.67
—	—	—	—	1.70	218,500	0.97	1.70
—	—	—	—	1.75	250,000	1.51	1.75
—	—	—	—	1.78	25,000	2.68	1.78
—	—	—	—	2.31	250,000	2.00	2.31
—	—	—	—	4.15	25,000	2.50	4.15
				0.01-4.15	9,741,750		0.64

Zion Oil & Gas, Inc.

Notes to Consolidated 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, 2021	For the year ended December 31, 2020
Weighted-average fair value of underlying stock at grant date	**$ 0.56**	$ 0.50
Dividend yields	**—**	—
Expected volatility	**121%-143%**	90%-103%
Risk-free interest rates	**0.16% -0.85%**	0.26% -1.61%
Expected life (in years)	**3.00-5.00**	5.00
Weighted-average grant date fair value	**$ 0.47**	$ 0.49

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, 2021	For the year ended December 31, 2020
Weighted-average fair value of underlying stock at grant date	$ **0.58**	$ —
Dividend yields	**—**	—
Expected volatility	**100%-113%**	—
Risk-free interest rates	**1.07% -1.42%**	—
Expected life (in years)	**6.00-10.00**	—
Weighted-average grant date fair value	**$ 0.49**	$ —

Zion Oil & Gas, Inc.

Notes to Consolidated 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.

D. 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,	
2021	**2020**
US$ thousands	**US$ thousands**
3,217	59

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,	
2021	**2020**
US$ thousands	**US$ thousands**
102	—

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,	
2021	**2020**
US$ thousands	**US$ thousands**
—	—

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

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

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.

The ZNWAB warrants first became exercisable on May 2, 2016 and, in the case of ZNWAC on May 2, 2017 and in the case of ZNWAD on May 2, 2018, 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 May 29, 2019, the Company extended the termination date of the ZNWAD Warrant by one (1) year from the expiration date of May 2, 2020 to May 2, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAD Warrant by two (2) years from the expiration date of May 2, 2021 to May 2, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On November 1, 2016, the Company launched a unit offering 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 continued to be exercisable through May 1, 2020 at a per share exercise price of $1.00.

On May 29, 2019, the Company extended the termination date of the ZNWAE Warrant by one (1) year from the expiration date of May 1, 2020 to May 1, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAE Warrant by two (2) years from the expiration date of May 1, 2021 to May 1, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

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.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

On May 22, 2017, the Company launched a new unit offering. This unit offering 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 unit offering terminated on July 12, 2017. This 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 continued to be exercisable through August 14, 2020 at a per share exercise price of $1.00.

On May 29, 2019, the Company extended the termination date of the ZNWAF Warrant by one (1) year from the expiration date of August 14, 2020 to August 14, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAF Warrant by two (2) years from the expiration date of August 14, 2021 to August 14, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

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 offering which terminated on December 6, 2017. This unit offering 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, 2023 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 launched another unit offering which terminated on February 28, 2018. The unit offering 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 continued 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 2, 2019 to April 2, 2020.

On May 29, 2019, the Company extended the termination date of the ZNWAH Warrant by one (1) year from the expiration date of April 2, 2020 to April 2, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

On September 15, 2020, the Company extended the termination date of the ZNWAH Warrant by two (2) years from the expiration date of April 2, 2021 to April 2, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On August 21, 2018, the Company initiated another unit offering, and it terminated on September 26, 2018. The offering 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 continued 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 October 29, 2019 to October 29, 2020.

On May 29, 2019, the Company extended the termination date of the ZNWAJ Warrant by one (1) year from the expiration date of October 29, 2020 to October 29, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAJ Warrant by two (2) years from the expiration date of October 29, 2021 to October 29, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On December 10, 2018, the Company initiated another unit offering, and it terminated on January 23, 2019. The offering 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 was 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 continued to be exercisable through February 25, 2020 at a per share exercise price of $0.01.

On May 29, 2019, the Company extended the termination date of the ZNWAK Warrant by one (1) year from the expiration date of February 25, 2020 to February 25, 2021. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

On September 15, 2020, the Company extended the termination date of the ZNWAK Warrant by two (2) years from the expiration date of February 25, 2021 to February 25, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

On April 24, 2019, the Company initiated another unit offering and it terminated on June 26, 2019, after the Company, on June 5, 2019, extended the termination date of the unit offering.

The unit offering 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 fifty (50) shares of Common Stock at a per share exercise price of $2.00. The investor's Plan account was credited with the number of shares of the Company's Common Stock and Warrants acquired under the Units purchased. For Plan participants who enrolled into the Unit Program with the purchase of at least one Unit and also enrolled in the separate Automatic Monthly Investments ("AMI") program at a minimum of $50.00 per month or more, received an additional twenty-five (25) warrants at an exercise price of $2.00 during this Unit Option Program. The twenty-five (25) additional warrants were for enrolling into the AMI program. Existing subscribers to the AMI were entitled to the additional twenty-five (25) warrants once, if they purchased at least one (1) unit during the Unit program. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $2.00. The warrant is referred to as "ZNWAL."

The warrants became exercisable on August 26, 2019 and continued to be exercisable through August 26, 2021 at a per share exercise price of $2.00.

On September 15, 2020, the Company extended the termination date of the ZNWAL Warrant by two (2) years from the expiration date of August 26, 2021 to August 26, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

Under our Plan, the Company under a Request For Waiver Program executed Waiver Term Sheets of a unit option program consisting of a Unit (shares of stock and warrants) of its securities and subsequently an option program consisting of shares of stock to a participant. The participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $1.00. The warrant shall have the company notation of "ZNWAM." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants became exercisable on January 15, 2021 and continue to be exercisable through July 15, 2022 at a per share exercise price of $1.00.

On February 1, 2021, the Company initiated a unit offering and it terminated on March 17, 2021.

The unit offering consisted of Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) the number of Common Stock shares represented by the high-low average on the purchase date and (ii) Common Stock purchase warrants to purchase an additional twenty-five (25) shares of Common Stock at a per share exercise price of $1.00. The investor's Plan account was credited with the number of shares of the Company's Common Stock and Warrants acquired under the Units purchased. For Plan participants who enrolled into the Unit Program with the purchase of at least one Unit or who enrolled in the separate Automatic Monthly Investments ("AMI") program at a minimum of $50.00 per month or more, received an additional ten (10) warrants at an exercise price of $1.00 during this Unit Option Program. The ten (10) additional warrants were for enrolling into the AMI program. Existing subscribers to the AMI were also entitled to the additional ten (10) warrants once, provided that they purchased at least one (1) unit during the Unit program. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $1.00. The warrant is referred to as "ZNWAN."

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

On April 12, 2021, the Company initiated a unit offering and it terminated on May 12, 2021.

The unit offering consisted of Units of the Company's securities where each Unit (priced at $250.00 each) was comprised of (i) the number of Common Stock shares represented by the high-low average on the purchase date and (ii) Common Stock purchase warrants to purchase an additional fifty (50) shares of Common Stock at a per share exercise price of $.25. The investor's Plan account was credited with the number of shares of the Company's Common Stock and Warrants acquired under the Units purchased. For Plan participants who enrolled into the unit offering with the purchase of at least one Unit or who enrolled in the separate Automatic Monthly Investments ("AMI") program at a minimum of $50.00 per month or more, received an additional fifty (50) warrants at an exercise price of $.25 during this Unit Option Program. The fifty (50) additional warrants were for enrolling into the AMI program. Existing subscribers to the AMI were also entitled to the additional fifty (50) warrants once, provided that they purchased at least one (1) unit during the Unit program. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant is referred to as "ZNWAO."

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet for a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on May 28, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant has the company notation of "ZNWAP." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants were issued and became exercisable on June 2, 2021 and continue to be exercisable through June 2, 2022 at a per share exercise price of $.25.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet for a program consisting of Zion securities to a participant. After conclusion of the program on June 17, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock that were acquired.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet of a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on June 18, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant shall have the company notation of "ZNWAQ." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants will be issued on April 4, 2022 and be exercisable through July 6, 2022 at a per share exercise price of $.25.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet of a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on June 18, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock and Warrants that were acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $.25. The warrant shall have the company notation of "ZNWAR." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants were issued and became exercisable on June 22, 2021 and continue to be exercisable through June 22, 2022 at a per share exercise price of $.25. Additionally, Zion incurred $115,000 in equity issuance costs to an outside party related to this waiver program.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet to a participant. After conclusion of the program on September 15, 2021, the participant's Plan account was credited with the number of shares of the Company's Common Stock that were acquired.

Under our Plan, the Company under a Request For Waiver Program executed a Waiver Term Sheet of a unit program consisting of a Unit (shares of stock and warrants) to a participant. After conclusion of the program on November 15, 2021, the participant's Plan account will be credited with the number of shares of the Company's Common Stock and Warrants that will be acquired. Each warrant affords the participant the opportunity to purchase one share of our Common Stock at a warrant exercise price of $1.00. The warrant shall have the company notation of "ZNWAS." The warrants will not be registered for trading on the OTCQX or any other stock market or trading market. The warrants will be exercisable on November 15, 2023 and continue to be exercisable through December 31, 2023 at a per share exercise price of $1.00.

During 2020, one participant who participated in that aspect of the DSPP called "Request For Waiver" contributed approximately 85% of the cash raised through the DSPP. During 2021, two participants who participated in the "Request for Waiver" aspect of the DSPP contributed approximately 67% of the cash raised through the DSPP.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

On December 9, 2019 Zion filed an Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-235299) solely for the purpose of re-filing a revised Exhibit 5.1 to the Registration Statement. This Amendment No. 1 does not modify any provision of the prospectus that forms a part of the Registration Statement and accordingly, such prospectus has not been included herein.

On December 10, 2021 Zion filed an Amendment No. 1 to the Registration Statement on Form S-3 (File No. 333-235299) for the purpose of converting the existing Form S-1 to the Registration Statement on Form S-3. This Amendment No. 1 does not modify any provision of the prospectus that forms a part of the Registration Statement and accordingly such prospectus has not been included herein.

The company raised approximately $8,707,000 from the period January 1, 2022 through March 15, 2022, under the DSPP program.

For the years ended December 31, 2021, and 2020, approximately $26,219,000, and $28,390,000 was raised under the DSPP program, respectively.

The warrants represented by the company notation ZNWAA are tradeable on the OTCQX market under the symbol ZNOGW. 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.

F. 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 (each "Right" and collectively, the "Rights") to purchase 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 Subscription 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 exercised or subscribed 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 continued 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.

On May 29, 2019, the Company extended the termination date of the ZNWAI Warrant by one (1) year from the expiration date of June 29, 2020 to June 29, 2021.

On September 15, 2020, the Company extended the termination date of the ZNWAI Warrant by two (2) years from the expiration date of June 29, 2021 to June 29, 2023. Zion considers this warrant as permanent equity per ASC 815-40-35-2. As such, there is no value assigned to this extension.

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 subscription of Rights, after deducting fees and expenses of $243,000 incurred in connection with the rights offering.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

G. Warrant Tables

The warrant activity and balances for the year 2020 are shown in the table below:

Warrants	Exercise Price	Warrant Termination Date	Outstanding Balance, 12/31/2019	Warrants Issued	Warrants Exercised	Warrants Expired	Outstanding Balance, 12/31/2020
ZNWAA	$ 2.00	01/31/2023	1,498,804	-	-	-	1,498,804
ZNWAD	$ 1.00	05/02/2023	243,853	-	-	-	243,853
ZNWAE	$ 1.00	05/01/2023	2,144,470	-	(371)	-	2,144,099
ZNWAF	$ 1.00	08/14/2023	359,585	-	(150)	-	359,435
ZNWAG	$ 1.00	01/08/2023	240,578	-	(510)	-	240,068
ZNWAH	$ 5.00	04/19/2023	372,400	-	-	-	372,400
ZNWAI	$ 3.00	06/29/2023	640,730	-	-	-	640,730
ZNWAJ	$ 1.00	10/29/2023	546,000	-	(100)	-	545,900
ZNWAK	$ 0.01	02/25/2023	457,725	-	(19,850)	-	437,875
ZNWAL	$ 2.00	08/26/2023	517,925	-	(50)	-	517,875
Outstanding warrants			7,022,070	-	(21,031)	-	7,001,039

The warrant activity and balances for the year 2021 are shown in the table below:

Warrants	Exercise Price	Warrant Termination Date	Outstanding Balance, 12/31/2020	Warrants Issued	Warrants Exercised	Warrants Expired	Outstanding Balance, 12/31/2021
ZNWAA	$ 2.00	01/31/2023	1,498,804	-	-	-	1,498,804
ZNWAD	$ 1.00	05/02/2023	243,853	-	-	-	243,853
ZNWAE	$ 1.00	05/01/2023	2,144,099	-	-	-	2,144,099
ZNWAF	$ 1.00	08/14/2023	359,435	-	-	-	359,435
ZNWAG	$ 1.00	01/08/2023	240,068	-	-	-	240,068
ZNWAH	$ 5.00	04/19/2023	372,400	-	-	-	372,400
ZNWAI	$ 3.00	06/29/2023	640,730	-	-	-	640,730
ZNWAJ	$ 1.00	10/29/2023	545,900	-	-	-	545,900
ZNWAK	$ 0.01	02/25/2023	437,875	-	(6,220)	-	431,655
ZNWAL	$ 2.00	08/26/2023	517,875	-	-	-	517,875
ZNWAM	$ 1.00	07/15/2022	-	4,376,000	-	-	4,376,000
ZNWAN	$ 1.00	07/15/2022	-	267,785	(125)	-	267,660
ZNWAO	$ 0.25	06/12/2023	-	190,480	(15,510)	-	174,970
ZNWAP	$ 0.25	06/02/2022	-	1,639,916	(1,200,000)	-	439,916
ZNWAR	$ 0.25	06/23/2022	-	1,020,000	-	-	1,020,000
Outstanding warrants			7,001,039	7,494,181	(1,221,855)	-	13,273,365

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 6 - Stockholders' Equity (cont'd)

H. 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	B,C	March 2013 – December 2014	2.00	January 31, 2023
ZNWAD Warrants	A,B,C	January 2015 – March 2016	1.00	May 02, 2023
ZNWAE Warrants	B,C	November 2016 – March 2017	1.00	May 01, 2023
ZNWAF Warrants	A,B,C	May 2017 – July 2017	1.00	August 14, 2023
ZNWAG Warrants	C	October 2017 – December 2017	1.00	January 08, 2023
ZNWAH Warrants	A,B,C	February 2018	5.00	April 2, 2023
ZNWAI Warrants	A,B,C	April 2018 – May 2018	3.00	June 29, 2023
ZNWAJ Warrants	B,C	August 2018 – September 2018	1.00	October 29, 2023
ZNWAK Warrants	B,C	December 2018 – January 2019	0.01	February 25, 2023
ZNWAL Warrants	C	July 2019 – August 2019	2.00	August 26, 2023
ZNWAM Warrants		January 2021 – March 2021	1.00	July 15, 2022
ZNWAN Warrants		May – June 2021	1.00	July 15, 2022
ZNWAO Warrants		June 2021	0.25	June 12, 2023
ZNWAP Warrants		June 2021	0.25	June 02, 2022
ZNWAQ Warrants		June 2021	0.25	July 6, 2022
ZNWAR Warrants		June 2021	0.25	June 22, 2022

* Zion's ZNWAB Warrants expired on May 2, 2017, and the ZNWAC Warrants expired on May 2, 2018
A On December 4, 2018, the Company extended the termination date of the Warrants by one (1) year.
B On May 29, 2019, the Company extended the termination date of the Warrants by one (1) year.
C On September 15, 2020, the Company extended the termination date of the Warrants by two (2) years.

I. 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 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"), to shareholders 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").

On March 31, 2016, the rights offering terminated.

On May 2, 2016, the Company issued approximately $3,470,000 aggregate principal amount of convertible bonds or Notes in connection with the rights offering. The Company received net proceeds of approximately $3,334,000, from the issuance of the Notes, after deducting fees and expenses of $136,000 incurred in connection with the offering. These costs have been discounted as deferred offering costs (See note 7).

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 7 - Senior Convertible Bonds

Rights Offering -10% Senior Convertible Notes due May 2, 2021 and paid on May 3, 2021

On October 21, 2015, the Company 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"), to shareholders 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").

On March 31, 2016, the rights offering terminated.

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

The Notes contained a convertible option that gave rise to a derivative liability, which was accounted for separately from the Notes (see below). 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, 2021, and 2020, the Company recorded approximately $9,000 and $27,000 respectively, in amortization expense related to the deferred financing costs, approximately $205,000 and $459,000, respectively, in debt discount amortization, net, and approximately $24,000 and $3,000, respectively, related to financing gains associated with notes converted to shares.

The Notes were governed by the terms of the Indenture. The Notes were senior unsecured obligations of the Company and had an interest rate of 10% per year, payable annually in arrears on May 2 of each year, commencing May 2, 2017. The Notes matured on May 2, 2021, and the annual interest and principal were paid on May 3, 2021 (see below).

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 were not issued, and the final number of shares were rounded up to the next whole share.

On April 2, 2021, the ability of bondholders to convert the bonds ended so the 30-day average share price could be computed. On May 2, 2021, Zion's bonds expired. Zion chose to pay the principal in kind with our stock. On May 2, 2021, a total of 32,139 $100 face value bonds were outstanding. The 30-day moving average price used to settle the bonds was $.606. On May 3, 2021, Zion settled the principal on the bonds by issuing approximately 5,300,000 shares of our common stock. The annual 10% coupon payment was paid in shares using the same 30-day average price. On May 3, 2021, Zion issued approximately 530,000 shares for the remaining bond holders' interest payment.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 7 - Senior Convertible Bonds (cont'd)

Through the years ended December 31, 2021 and 2020, approximately 332 and 28 convertible bonds of $100 each, respectively, were converted at a conversion rate of approximately $2.27 per share. As a result, the Company issued approximately 14,600 and 1,200 shares of its Common Stock during the same period, respectively, and recorded approximately $24,000 and $3,000 in financial income during the same period.

	December 31, 2021 US$ thousands	December 31, 2020 US$ thousands
10% Senior Convertible Bonds, on the day of issuance	$ -	$ 3,470
Unamortized Debt discount, net	$ -	$ (205)
Bonds converted to shares	$ -	$ (223)
Offering cost, net	$ -	$ (9)
10% senior Convertible bonds – Long Term Liability	$ -	$ 3,033

Capitalized interest for the years ended December 31, 2021 and 2020, was $104,000 and $324,000, respectively.

Interest expense for the years ended December 31, 2021 and 2020, was nil and nil.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

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 are 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. Changes in the fair value recorded are 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 Consolidated Financial Statements

Note 8 - Derivative Liability (cont'd)

As of December 31, 2021, and 2020 the Company's liabilities that are measured at fair value are as follows:

	December 31, 2021		December 31, 2020	
	Level 3	Total	Level 3	Total
	US$ thousands	US$ thousands	US$ thousands	US$ thousands
Fair value of derivative liability	-	-	431	431

Change in fair value of derivative liability during 2020 are as follows:

	US$ thousands
Derivative liability fair value at December 31, 2019	**129**
Gain on derivative liability	**302**
Derivative liability fair value at December 31, 2020	**431**

Change in fair value of derivative liability during 2021 are as follows:

	US$ thousands
Derivative liability fair value at December 31, 2020	**431**
Loss on derivative liability	**(431)**
Derivative liability fair value at December 31, 2021	**-**

The following table presents the assumptions that were used for the model as of December 31, 2021 and 2020:

	December 31, 2021	December 31, 2020
Convertible Option Fair Value of approximately	-	431,000
Annual Risk-free Rate	-	.09%
Volatility	-	163.57%
Expected Term (years)	-	.33
Convertible Notes Face Value	-	3,246,700
Expected annual yield on Regular Notes	-	28.77%
Price of the Underlying Stock	-	0.90

During the years ended December 31, 2021, and 2020, the Company recorded (losses) unrealized gains of approximately $431,000, net, and ($302,000), net, respectively, within the Statements of Operations on derivative liability.

Zion Oil & Gas, Inc.

Notes to Consolidated 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, 2021 and 2020.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2021 and 2020 are presented below:

	December 31, 2021 US$ thousands	December 31, 2020 US$ thousands
Deferred tax assets:		
Net operating loss carry forwards	**52,812**	44,580
Other	**3,275**	2,640
Total gross deferred tax assets	**56,087**	47,220
Less – valuation allowance	**(45,908)**	(43,669)
Net deferred tax assets	**10,179**	3,551
Deferred tax liabilities:		
Property and equipment	**51**	12
Other	**(449)**	(303)
Unproved oil and gas properties	**(9,781)**	(3,260)
Total gross deferred tax liabilities	**(10,179)**	(3,551)
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 $251,485,565 prior to the expiration of some of the net operating loss carry forwards between 2022 and 2042. 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, 2021 and 2020.

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") carry forwards 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 year 2019, the Company became aware of one individual owning greater than 5%, as evidenced by the filing of a Section 13(G) report with the SEC. However, there have been no changes in stock ownership to trigger sections 382/383.

At December 31, 2021, the Company has available federal net operating loss carry forwards of approximately $251,485,565 to reduce future U.S. taxable income.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 9 - Income Taxes (cont'd)

The Tax Cuts and Jobs Act (TCJA) removed the 2-year carryback provision, extended the 20-year carryforward provision out indefinitely, and limited carryforwards to 80% of net income in any future year. Net operating losses originating in tax years beginning prior to Jan. 1, 2018, are still subject to the former carryover rules of 100% of net income and 20 taxable years following the taxable year of loss. I.R.C. §172.

The Employee Retention Tax Credit (ERTC) was enacted by The CARES Act in March 2020. Zion has filed the requisite quarterly forms, for each of the quarters ended March 31, June 30, and September 30, 2021, with the IRS to reduce its payroll tax expense by approximately $329,000 for 2021.

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, 2021, the Company has available net operating loss carry forwards of approximately $205,944,000 to reduce future Israeli taxable income.

On July 11, 2014, Zion Oil & Gas, Inc. registered the Geneva Branch in the Canton of Geneva, Switzerland. The legal Swiss name for the foreign branch is "Zion Oil & Gas, Inc., Wilmington, Branch of Geneva." The Geneva Branch has its registered office and its business office at 6 Avenue Jules Crosnier, 1206 Champel, Case Postale 295, 1211 Geneva 12, Switzerland. The purpose of the branch is to operate a foreign treasury center for the Company. As such, the Geneva branch is not expected to have taxable income in any future year.

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

	Year ended December 31, 2021	**Year ended December 31, 2020**
	US$ thousands	**US$ thousands**
Pre-tax loss as reported	**(10,709)**	(6,996)
U.S. statutory tax rate	**21%**	21%
Theoretical tax expense	**(2,249)**	(1,469)
Increase in income tax expense resulting from:		
Permanent differences	**1**	16
Change in valuation allowance	**(2,248)**	1,453
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 2018.

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 2016 tax year can be regarded as final.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 10 - Right of use leases assets and leases obligations

The Company is a lessee in several non-cancellable operating leases, primarily for transportation and office space.

The table below presents the operating lease assets and liabilities recognized on the balance sheets as of December 31, 2021 and 2020:

	December 31, 2021 US$ thousands	December 31, 2020 US$ thousands
Operating lease assets	**$ 327**	$ 438
Operating lease liabilities:		
Current operating lease liabilities	**$ 203**	$ 191
Non-current operating lease liabilities	**$ 169**	$ 307
Total operating lease liabilities	**$ 372**	$ 498

The depreciable lives of operating lease assets and leasehold improvements are limited by the expected lease term.

The Company's leases generally do not provide an implicit rate, and therefore the Company uses its incremental borrowing rate as the discount rate when measuring operating lease liabilities. The incremental borrowing rate represents an estimate of the interest rate the Company would incur at lease commencement to borrow an amount equal to the lease payments on a collateralized basis over the term of a lease within a particular currency environment. The Company used incremental borrowing rates as of January 1, 2019 for operating leases that commenced prior to that date.

The Company's weighted average remaining lease term and weighted average discount rate for operating leases as of December 31, 2021 are:

	December 31, 2021	December 31, 2020
Weighted average remaining lease term (years)	**1.8**	**2.8**
Weighted average discount rate	**5.9%**	**5.9%**

The table below reconciles the undiscounted future minimum lease payments (displayed by year and in the aggregate) under non-cancellable operating leases with terms of more than one year to the total operating lease liabilities recognized on the condensed balance sheets as of December 31, 2021:

	US$ thousands
2022	**266**
2023	**212**
2024	**18**
2025	**-**
2026	**-**
Thereafter	**-**
Total undiscounted future minimum lease payments	**496**
Less: portion representing imputed interest	**(20)**
Total undiscounted future minimum lease payments	**476**

Operating lease costs were $264,000 and $246,000 for the years ended December 31, 2021, and 2020, respectively. Operating lease costs are included within general and administrative expenses on the statements of income.

Cash paid for amounts included in the measurement of operating lease liabilities was $288,000 and $272,000 for the years ended December 31, 2021, and 2020, respectively, and this amount is included in operating activities in the statements of cash flows.

Right-of-use assets was $239,000 and $196,000 for the years ended December 31, 2021, and 2020, respectively, and this amount is included in operating activities in the statements of cash flows.

Right-of-use assets obtained in exchange for new operating lease liabilities were $128,000 and $17,000 for the years ended December 31, 2021, and 2020, respectively.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 11 - Commitments and Contingencies

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

As previously disclosed by the Company, on June 21, 2018, the Fort Worth Regional Office of the SEC informed Zion that it was conducting a formal, non-public investigation and asked that we provide certain information and documents in connection with its investigation. Since that date, we have fully cooperated with the SEC on an on-going basis in connection with its investigation. Investigations of this nature are inherently uncertain and their results cannot be predicted with certainty. Regardless of the outcome, an SEC investigation could have an adverse impact on us because of legal costs, diversion of management resources, and other factors. 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.

B. Litigation

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 alleged breaches of fiduciary duty in connection with public statements made by the Company from March 12, 2018 to May 30, 2018. The Company responded to this request.

On August 9, 2019, Zion received two (2) additional shareholder requests from the same law firm to inspect books and records pursuant to section 220 of the Delaware General Corporation Law for the purpose of investigating potential corporate mismanagement and alleged breaches of fiduciary duty in connection with public statements made by the Company from February 1, 2018 to present. Following discussion with counsel to the shareholder, the Company's counsel produced materials responsive to the shareholders' request in January 2020.

On February 12, 2020, by letter to Zion's Board of Directors, one of the shareholders making the August 9, 2019 request demanded that the Board investigate, address, remedy, and commence proceedings against certain of the Company's current and former officers and directors for alleged breaches of fiduciary duties, violations of section 10(b) and 20(a) of the Exchange Act, waste of corporate assets, unjust enrichment, and violations of all other applicable laws. The shareholder alleged wrongdoing in connection with public statements made by the Company from February 1, 2018 regarding the Company's oil and gas exploration activities, the Company's accounting and disclosure of expenses, and the Board's oversight of operations. The Board hired independent counsel to investigate the claims made against certain of the Company's current and former officers and directors. That investigation concluded and based on the findings and recommendations of independent counsel, the Board decided not to pursue claims against any current or former officer or director.

On July 14, 2020, Zion received a request from the same shareholder making the February 12, 2020 demand to inspect books and records pursuant to Section 220 of the Delaware General Corporation Law for the purpose of evaluating the Board's decision to reject the litigation demand. The Company responded to this request in August 2020. The Company has not received any further communication from the shareholder following the August 2020 response.

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

The Company is not subject to any litigation at the present time.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 11 - 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 Joseph License area and the present New Megiddo License 428 to be approximately $571,000 based on current cost rather than Net Present Value. The Company expects to incur such costs during 2022. 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, 2021	December 31, 2020
	US$ thousands	US$ thousands
Asset Retirement Obligations, Beginning Balance	**571**	585
Liabilities Settled	**-**	(14)
Revision of Estimate	**-**	-
Retirement Obligations, Ending Balance	**571**	571

Liabilities of approximately nil and $14,000 were settled for the year ended December 31, 2021 and 2020, respectively; those liabilities were related to the Joseph License areas.

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 clean-up 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 filings.

The Company believes that these regulations will result in an increase in the expenditures associated with obtaining new exploration rights and drilling new wells. The Company expects that an additional financial burden could occur as a result of requiring cash reserves that could otherwise be used for operational purposes. In addition, these 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.

As of December 31, 2021 and 2020, the Company accrued nil and nil for license regulatory matters.

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, 2021 and 2020, the Company did not have any outstanding obligation in respect of the charitable foundations, since to this date, no proved reserves have been found.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 11 - Commitments and Contingencies (cont'd)

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 was for 65 months (about 5.5 years) from December 1, 2015 to April 30, 2021. Rent was abated for the first five (5) month beginning in December 2015 and extending through April 2016. Beginning in May 2016 and extending through April 2017, rent was paid on a monthly basis in the base amount of $7,882 per month. Beginning in May 2017 and extending through April 2018, rent was paid on a monthly basis in the base amount of $8,186 per month. Beginning in May 2018 and extending through April 2019, rent was paid on a monthly basis in the base amount of $8,489 per month. Beginning in May 2019 and extending through April 2020, rent was paid on a monthly basis in the base amount of $8,792 per month. Beginning in May 2020 and extending through April 2021, rent was paid on a monthly basis in the base amount of $9,095 per month. The Company was 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 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 was paid monthly in the base amount of $10,236.33 per month. Beginning in June 2019 and extending through May 2020, rent was paid monthly in the base amount of $10,601.92 per month. Beginning in June 2020 and extending through May 2021, rent was paid monthly in the base amount of $10,967.50 per month. This lease is treated as an operating lease.

On May 14, 2021, the Company and Hartman signed a letter agreement ("Renewal Letter") whereby the Lease extends from June 1, 2021 through May 31, 2022. The monthly basic rent is to be paid for $10,967.50 and a monthly electricity expense of approximately $1,279.54.

(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 was treated as an operating lease.

The Lincoln MKZ was returned to the dealership in November 2020 and the lease was effectively terminated without any payment for excess mileage.

(iii) On November 13, 2020, the Company and GM Financial (as Lessor) signed a motor vehicle lease agreement for a 2020 Chevy Equinox. The first payment of $447.77 was due on November 13, 2020 and this was paid on or around that date. The lease calls for 38 additional payments, from December 2020 through January 2024, of $447.77 so that the sum of all 39 payments is $17,463.03. At the inception of the lease, and in addition to the sum of the 39 payments, lease signing bonuses provided an initial $1,500 reduction of the lease cost on November 13, 2020. The value at the end of the lease has a residual value of $15,193.60 per the terms of the lease agreement. Additionally, the Company must pay to the Lessor $.25 cents per mile for each mile in excess of 20,000 annual miles. This lease is treated as an operating lease.

At December 31, 2021, and continuing through the date of this Form 10-K report, all payments have been 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 Consolidated Financial Statements

Note 11 - Commitments and Contingencies (cont'd)

(iv) The Company's field office in Caesarea Israel consists of 6,566 square feet. The lease term was five years from February 1, 2014 to January 31, 2019. Rent was paid on a monthly basis in the base amount of approximately NIS 37,800 per month (approximately $12,150) 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 was 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 the 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 $12,600) 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 $27,300) 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 2021, and 2020 were $369,000 and 319,000 respectively.

The future minimum lease payments as of December 31, 2021, are as follows :

	US$ thousands
2022	**266**
2023	**212**
2024	**18**
2025	**-**
2026 and thereafter	**-**
	496

G. Bank Guarantees

As of December 31, 2021, the Company provided Israeli-required bank guarantees to various governmental bodies (approximately $1,189,000) and others (approximately $94,000) with respect to its drilling operation in an aggregate amount of approximately $1,283,000. The (cash) funds backing these guarantees are held in restricted interest-bearing accounts and are reported on the Company's balance sheets as fixed short-term bank deposits – restricted.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 11 - Commitments and Contingencies (cont'd)

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 was for 44 months (approximately 3.7 years, hereinafter the "lease period") starting on March 25, 2017 and ended on October 24, 2020. The lease provided for a monthly payment in the amount of approximately NIS 4,000 (approximately $1,300) per month, at the exchange rate in effect for the date of this report and was linked to an increase (but not a decrease) in CPI. The lease contained a purchase option at the end of the lease period in the amount of approximately NIS 75,000 (approximately $24,100) at the exchange rate in effect on the date of this report and is linked to an increase (but not a decrease) in CPI. The Company chose to exercise the purchase option in October 2020.

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 $20,000 and $31,000 as of December 31, 2021 and 2020, 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, 2021, and 2020, the accumulated depreciation of the capital lease asset amounted to approximately $51,000 and $40,000, respectively.

I. Recent Market Conditions – Coronavirus Pandemic

During March 2020, a global pandemic was declared by the World Health Organization related to the rapidly growing outbreak of a novel strain of coronavirus ("COVID-19"). The pandemic has significantly impacted the economic conditions in the United States and Israel, as federal, state and local governments react to the public health crisis, creating significant uncertainties in the United States, Israel and world economies. In the interest of public health and safety, jurisdictions (international, national, state and local) where we have operations, restricted travel and required workforces to work from home. As of the date of this report, many of our employees are working from home. However, while there are various uncertainties to navigate, the Company's business activities are continuing. The situation is rapidly changing and additional impacts to the business may arise that we are not aware of currently. We cannot predict whether, when or the manner in which the conditions surrounding COVID-19 will change including the timing of lifting any restrictions or work from home arrangements.

The full extent of COVID-19's impact on our operations and financial performance depends on future developments that are uncertain and unpredictable, including the duration and spread of the pandemic, its impact on capital and financial markets and any new information that may emerge concerning the severity of the virus, its spread to other regions as well as the actions taken to contain it, among others.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 12 - 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 2020-2021 have rendered obtaining and drilling under new exploration licenses more time-consuming and expensive.

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.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 12 - Risks and Uncertainties (cont’d)

The unavailability or high cost of 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.

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, 2021 through December 31, 2021, the USD has fluctuated by approximately 3.3% against the NIS (the USD has weakened relative to the NIS). Also, during the period January 1, 2020 through December 31, 2020, the USD fluctuated by approximately 7.0% against the NIS (the USD has weakened relative to the NIS). Continued weakening of the US dollar against the NIS will result in higher 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, 2021, we had cash, cash equivalents and short-term and long-term bank deposits of approximately $5,952,000. The weighted average annual interest rate related to our cash and cash equivalents for the year ended December 31, 2021, exclusive of funds at US banks that earn no interest, was approximately 0.1%.

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.

Zion Oil & Gas, Inc.

Notes to Consolidated Financial Statements

Note 13 - Selected Quarterly Information (Unaudited)

The following represents selected quarterly consolidated financial information for 2021 and 2020:

	For the three months ended			
	March 31	**June 30**	**September 30**	**December 31**
	US$ thousands	**US$ thousands**	**US$ thousands**	**US$ thousands**
2021:				
Oil and gas sales	**-**	**-**	**-**	**-**
Net (loss) gain	**(2,560)**	**(4,056)**	**(2,303)**	**(1,802)**
Net (loss) gain per share – basic and diluted	**(0.01)**	**(0.02)**	**(0.01)**	**(0.01)**
Weighted-average shares outstanding–basic and diluted (in thousands)	**238,941**	**248,672**	**286,390**	**333,994**
2020:				
Oil and gas sales	-	-	-	-
Net (loss) gain	(1,608)	(1,924)	(1,796)	(1,668)
Net (loss) gain per share – basic and diluted	(0.01)	(0.01)	(0.01)	(0.01)
Weighted-average shares outstanding–basic and diluted (in thousands)	138,813	172,361	202,877	235,477

Note 14 - Subsequent Events

(i) On January 4, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to six senior officers and one staff member, to purchase 175,000 shares of Common Stock at an exercise price of $0.1500 per share. The options vested upon grant and are exercisable through January 4, 2032. The fair value of the options at the date of grant amounted to approximately $22,000.

(ii) On January 4, 2022, the Company granted options under the 2021 Omnibus 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 4, 2032. These options were granted per the provisions of the Israeli Appendix to the Plan. The fair value of the options at the date of grant amounted to approximately $4,000.

(iii) On January 5, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to one senior officer and one staff member, to purchase 300,000 shares of Common Stock at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through January 5, 2032. These options were granted per the provisions of the Israeli Appendix to the Plan. The fair value of the options at the date of grant amounted to approximately $39,000.

(iv) On January 5, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to one board member to purchase 200,000 shares of Common Stock at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through January 5, 2032. These options were granted per the provisions of the Israeli Appendix to the Plan. The fair value of the options at the date of grant amounted to approximately $29,000.

(v) On January 5, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to five senior officers and four staff members to purchase 1,600,000 shares of Common Stock at an exercise price of $0.1529 per share. The options vest on January 5, 2023 (in one year) and are exercisable through January 5, 2032. The fair value of the options at the date of grant amounted to approximately $209,000, and will be recognized during the years 2022 and 2023.

(vi) On January 5, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to seven board members to purchase 1,400,000 shares of Common Stock at an exercise price of $0.1529 per share. The options vest on January 5, 2023 (in one year) and are exercisable through January 5, 2032. The fair value of the options at the date of grant amounted to approximately $182,000, and will be recognized during the years 2022 and 2023.

(vii) On January 17, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to six staff members to purchase 200,000 shares of Common Stock at an exercise price of $0.1400 per share. The options vest on January 17, 2023 (in one year) and are exercisable through January 17, 2032. The fair value of the options at the date of grant amounted to approximately $26,000, and will be recognized during the years 2022 and 2023.

(viii) On January 17, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to four staff members to purchase 160,000 shares of Common Stock at an exercise price of $0.01 per share. The options vested upon grant and are exercisable through January 17, 2032. These options were granted per the provisions of the Israeli Appendix to the Plan. The fair value of the options at the date of grant amounted to approximately $23,000.

(ix) On January 17, 2022, the Company granted options under the 2021 Omnibus Incentive Plan to two consultants to purchase 40,000 shares of Common Stock at an exercise price of $0.1400 per share. The options vest on January 17, 2023 (in one year) and are exercisable through January 17, 2032. The fair value of the options at the date of grant amounted to approximately $5,000, and will be recognized during the years 2022 and 2023.

(x) Approximately $8,707,000 was collected through the Company's DSPP program during the period January 1, 2022 through March 15, 2022. This amount excludes cash received in early January which was shown as a receivable at December 31, 2021.

Exhibit 4.4

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of March 17, 2022, Zion Oil & Gas, Inc. ("Zion," "we," "us" or the "Company") had one class of securities registered under Section 12 (g) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): Common Stock, $0.01 par value per share ("Common Stock"). Each of the Company's securities registered under Section 12(g) of the Exchange Act are quoted on the OTC Market tier, IX.

General

As of the date of this Annual Report on Form 10-K, our authorized capital stock consists of 800,000,000 shares of Common Stock. As of March 15, 2022, there were approximately 434,717,503 shares of our common stock outstanding.

In addition, as of December 31, 2021, we had issued and outstanding:

- options to purchase 9,741,750 shares of our Common Stock, at a weighted average exercise price of $.64 per share; and
- warrants to purchase 13,273,365 shares of our Common Stock, at a weighted average exercise price of $1.24 per share.

The following summary description of our capital stock is based on the provisions of our certificate of incorporation and bylaws, the applicable provisions of the Delaware General Corporation Law, and the agreements described below. This information may not be complete in all respects and is qualified entirely by reference to the provisions of our certificate of incorporation and bylaws, Delaware law and such agreements.

Common Stock

Each share of Common Stock entitles the holder to one vote on all matters submitted to a vote of the stockholders including the election of directors. Except as otherwise required by law the holders of our Common Stock possess all voting power. According to our bylaws, when a quorum is present or represented at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall be sufficient to elect members of the Board of Directors or to decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the Certificate of Incorporation, a different vote is required in which case such express provision shall govern and control the decision of such question. Our bylaws provide that stockholders holding at least a majority of the shares entitled to vote, represented in person or by proxy, constitute a quorum at the meeting of our stockholders. Our bylaws also provide that any action which may be taken by the vote of the stockholders at a meeting may be taken without a meeting if authorized by the written consent of stockholders holding at least a majority of the voting power, unless the provisions of the statutes or of the Articles of Incorporation require a greater proportion of voting power to authorize such action in which case such greater proportion of written consents shall be required.

Our certificate of incorporation and bylaws do not provide for cumulative voting in the election of directors. Because the holders of our common stock do not have cumulative voting rights and directors are generally to be elected by a majority of the votes casts with respect to the directors at any meeting of our stockholders for the election of directors, holders of more than fifty percent, and in some cases less than 50%, of the issued and outstanding shares of our common stock can elect all of our directors.

Provisions of our Restated Certificate of Incorporation and Restated Bylaws

Classified board of directors. Our restated certificate of incorporation and restated bylaws provide that our board of directors is classified into three classes of directors, each with staggered three-year terms. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our restated bylaws also specify certain requirements regarding the form and content of a stockholder’s notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions might also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer’s own slate of directors or otherwise attempting to obtain control of our company.

Amendment of Bylaws. Our bylaws provide that our board of directors may amend our bylaws by an affirmative vote of at least two-thirds of the Directors then serving, including any bylaws adopted by our stockholders, but our stockholders may from time to time specify particular provisions of these bylaws, which must not be amended by our board of directors. Our current bylaws were adopted by our board of directors. Therefore, our board of directors can amend our bylaws to make changes to the provisions relating to the quorum requirement and votes requirements to the extent permitted by Delaware Law.

Dividend Rights

The holders of our common stock are entitled to receive such dividends as may be declared by our board of directors out of funds legally available for dividends. Our board of directors is not obligated to declare a dividend. Any future dividends will be subject to the discretion of our board of directors and will depend upon, among other things, future earnings, the operating and financial condition of our company, its capital requirements, general business conditions and other pertinent factors. We do not anticipate that dividends will be paid in the foreseeable future.

Miscellaneous Rights and Provisions

In the event of our liquidation or dissolution, whether voluntary or involuntary, each share of our common stock is entitled to share ratably in any assets available for distribution to holders of our common stock after satisfaction of all liabilities.

Our common stock is not convertible or redeemable and has no preemptive, subscription or conversion rights. There are no conversions, redemption, sinking fund or similar provisions regarding our common stock.

Our common stock, after the fixed consideration thereof has been paid or performed, are not subject to assessment, and the holders of our common stock are not individually liable for the debts and liabilities of our company.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company located at 6201 15th Avenue Brooklyn NY, 11219.

Exhibit 10.11

[TRANSLATION FROM HEBREW]
State of Israel
Energy Ministry

Fuel and Gas Authority
25 Kislev 5782
29 November 2021
_556_2021

To:
Mr. Jeffrey Moskowitz
Managing Director Zion Oil & Gas Inc.
Industrial Park Caesarea

Re: Approval Extension License New Megiddo 428
Reference: Your request from 17 November 2021 for an Extension

After consultation with the Advisory Council pursuant to the Petroleum Law and in accordance with the reasoning set forth in your referenced letter I hereby approve the extension of the "New Megiddo" / 428 license to August 1, 2022 for the purpose only of completing the activities regarding MJ2 drilling and in accordance with the schedule as set forth in the above mentioned request .

Another application for an extension shall be considered if and inasmuch as it shall be proven that you have encountered extraordinary circumstances and after consultation with the Advisory Council pursuant to the Petroleum Law.

Sincerely,

Chen Bar- Yoseph,
Substitute Petroleum Commissioner.

CC.
Mr. Lior Shilat Managing Director Ministry of Energy
Members of the Professional Staff, Natural Resources Authority, Ministry of Energy
Mr. Elad Golan, Head of Regulatory Section, Ministry of Energy
Advocate Yonit Vannu Shrem Legal Department, Ministry of Energy

EXHIBIT 31.1

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

I, Robert W. A. Dunn, certify that:

1. I have reviewed this quarterly 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 17, 2022

/s/ Robert W. A. Dunn
Robert W. A. Dunn, 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 quarterly 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 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 17, 2022

/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, 2021 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, I, Robert W. A. Dunn, 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/ Robert W. A. Dunn

Robert W. A. Dunn
Chief Executive Officer
(Principal Executive Officer)
March 17, 2022

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, 2021 (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 17, 2022

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.