ZION OIL & GAS INC Form 10-K March 07, 2012
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K
MARK ONE:
x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the Fiscal Year ended December 31, 2011
"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.)			
6510 Abrams Rd., Suite 300				
	75231			
Dallas, TX	(Zip Code)			
(Address of Principal Executive Offices)	(2.p 0000)			

(214) 221-4610

(Registrant's telephone number, including area code)

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

#### **NASDAQ Global Market**

NASDAQ Global Market

Common Stock, par value \$0.01 per share

Common Stock Purchase Warrants Expiring
August 15, 2012 (ZNWAL)

Common Stock Purchase Warrants Expiring
December 31, 2012 (ZNWAW)

NASDAQ Global Market

Common Stock Purchase Warrants Expiring

December 31, 2012 (ZNWAZ)

(Title of Class) (Name of each exchange on which registered)

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

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

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 x

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 x No "

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

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

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

Large accelerated filer " Accelerated filer x Non-accelerated filer " Smaller Reporting Company "

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes. Nox

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 30, 2011 was approximately \$144million. This amount is based on the registrant's common stock on the NASDAQ Global Market on that date.

The registrant had 30,447,211 shares of common stock, par value \$0.01, outstanding as of February 21, 2012.

## 2011 ANNUAL REPORT (SEC FORM 10-K)

## **INDEX**

# **Securities and Exchange Commission**

## **Item Number and Description**

PART I	
Item 1 Business	1
Item 1ARisk Factors	21
Item 1BUnresolved Staff Comments	34
Item 2 Properties	34
Item 3 Legal Proceedings	38
Item 4 Mine Safety Disclosures	38
PART II	
Item 5 Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	39
Item 6 Selected Financial Data	41
Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations	42
Item 7AQuantitative and Qualitative Disclosures about Market Risk	50
Item 8 Financial Statements and Supplementary Data	51
Item 9 Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	51
Item 9AControls and Procedures	52
Item 9BOther Information	53
PART III	
Item 10 Directors, Executive Officer and Corporate Governance	53
Item 11 Executive Compensation	53
Item 12 Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	53
Item 13 Certain Relationships and Related Transactions and Director Independence	54
Item 14 Principal Accounting Fees and Services	54
PART IV	
Item 15 Exhibits, Financial Statement Schedules	54

#### 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," "so "will" or other similar words. These forward-looking statements include, among others, statements regarding:

our ability to explore for and develop natural gas and oil resources successfully and economically;

the availability of equipment, such as drilling rigs and transportation pipelines;

our estimates of the timing and number of wells we expect to drill and other exploration activities and planned expenditures and the time frame within which they will be drilled;

(i)

changes in our drilling plans and related budgets;
the quality of our 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 liquidity and our ability to raise capital to finance our exploration and development activities;
our capital expenditure program;
future market conditions in the oil and gas industry;
the impact of governmental regulations, permitting and other legal requirements in Israel; and
Local (in Israel) as well as global demand for oil and natural gas;
other factors discussed under "Risk Factors" in Item 1A of this report.
More specifically, our forward-looking statements include, among others, statements relating to our schedule, busine

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

Such statements involve risks and uncertainties, including, but not limited to, those relating to the uncertainties inherent in exploratory drilling activities, the volatility of oil and natural gas prices, operating risks of oil and natural gas operations, our dependence on our key personnel, factors that affect our ability to manage our growth and achieve our business strategy, risks relating to our limited operating history, technological changes, our significant capital

requirements, the potential impact of government regulations, adverse regulatory determinations, litigation, competition, the uncertainty of reserve information and future net revenue estimates, property acquisition risks, industry partner issues, availability of equipment, weather and other factors detailed herein and in our other filings with the Securities and Exchange Commission (the "SEC").

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

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

(ii)

D	A	D		П	1
$\mathbf{r}$	4	ĸ	ш	l	

ITEM 1. BUSINESS

#### Overview

Zion Oil and Gas, Inc., a Delaware corporation (referred to herein as "we", "our", "us", "Zion", "Zion Oil", or the "Company" an initial stage oil and gas exploration company with a history of over 11 years of oil and gas exploration in Israel. We were incorporated in Florida on April 6, 2000 and reincorporated in Delaware on July 9, 2003. We completed our initial public offering in January 2007. Our common stock currently trades on the NASDAQ Global Market under the symbol "ZN" and our warrants trade on such market under the symbols "ZNWAW", "ZNWAZ" and "ZNWAL".

We currently hold three petroleum exploration licenses, all onshore Israel, comprised of the Joseph License (covering approximately 83,272 acres), the Asher-Menashe License (covering approximately 78,824 acres) and the Jordan Valley License (covering approximately 55,845 acres of land in the Jordan Valley area). We have continuously held the Joseph License since October 2007 and the Asher-Menashe License since June 2007. We were awarded the Jordan Valley License in April 2011. The Joseph License and Asher-Menashe License areas are geographically contiguous and within a similar geologic environment.

We currently have pending before the Petroleum Commissioner of the State of Israel (the "Commissioner") applications for one exploration license and two preliminary exploration permits. The exploration license was submitted in February 2011 for an area covering approximately 74,925 acres of land within the vicinity of the Dead Sea, in central Israel, which we have named the Dead Sea License Application. At the same time, we submitted the first of the two applications for preliminary exploration permits described above. The permit that would result from this first application would cover part of the area previously covered by our previous Issachar-Zebulun Permit, which expired on February 23, 2011. Much of the remainder of the area covered by such permit is included in our recently granted Jordan Valley License. We named the new permit application the Zebulun Permit Application. It covers approximately 157,480 acres of land. In June 2011, we submitted the second of two applications for preliminary exploration permits described above. This application was for a preliminary exploration permit on an area adjacent to our Joseph License area. We named the new permit application the "Asher-Joseph Permit Application". The Asher-Joseph Permit Application area is on approximately 80,000 acres of land and is to the west and south of Zion's Joseph License area. It is onshore Israel and traverses a section of land, adjacent to the coastline, between Haifa and Tel Aviv. No assurance can be provided that any of the Dead Sea License Application, the Zebulun Permit Application or Asher-Joseph Permit Application will ultimately be granted.

To date, we have drilled three exploratory wells in the Joseph License area and have partly completed drilling one exploratory well in the Asher-Menashe License area. At present, we have no revenues or operating income and are classified as a "development stage" company. 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. Such pricing factors are largely beyond our control, and may result in fluctuations in our earnings in the event that we do have success with our exploration program and make a commercial discovery.

We hold 100% of the working interest in our license areas, which means we are responsible for 100% of the costs of exploration and, if established, production. Our net revenue interest is 81.5%, which means we would receive 81.5% of the gross proceeds from the sale of oil and gas from license areas upon their conversion to production leases, if there is any commercial production. The 18.5% to which we are not entitled comprises (i) a 12.5% royalty reserved by the State of Israel and (ii) an overriding royalty interest (or equivalent net operating profits interest) of 6% of gross revenue from production given over to two charitable foundations. No royalty would be payable to any landowner with respect to production from our license areas as the State of Israel owns all the mineral rights. In addition, we may establish a key employee incentive plan that may receive an overriding royalty interest (or equivalent net operating profits interest) of up to 1.5%. In that event, our effective net (pre-tax) revenue interest would be 80%.

Our executive offices are located at 6510 Abrams Road, Suite 300, Dallas, Texas 75231, and our telephone number is (214) 221-4610. Our field office in Israel is located at 22 Bareket Street, North Industrial Park, Caesarea 38900, and the telephone number is +972-4-623-8500.

#### **Background of our License Areas**

In 1983, during a visit to Israel, John M. Brown (our Founder and Chairman) 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 exemplified by its Founder and Chairman, 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 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 (License No. 298/"Ma'anit" or the "Ma'anit License") in May 2000, the Israeli government gave 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.

The map below (Map #1) shows the outline of our current Joseph, Asher-Menashe and Jordan Valley License areas, the three exploratory wells drilled to date on the Joseph License area and the one partly-completed exploratory well drilled in the Asher-Menashe License area. The Israeli government conducted most of the seismic surveys during the 1970s and 1980s to provide data to encourage oil companies to invest in exploratory drilling. Private and public Israeli, American and international companies conducted additional seismic surveys and drilled most of the wells in the period since 1980. We have also acquired and processed additional 2-D seismic lines as recently as 2010 in the Joseph License area, 2011 in the Asher-Menashe-License area, and March 2012 in the Jordan Valley License area, in an effort to identify and refine any potential drilling prospects.

## EXPLORATION LICENSE AREAS CURRENTLY HELD BY ZION

**Map #1** 

As reflected on the Map, the Joseph License and Asher-Menashe License areas are geographically contiguous and within a similar geologic environment. They are located on a relatively continuous regional structural high that runs almost parallel to the current coast of Israel primarily onshore from just off of Haifa to south of Tel Aviv. The regional structural high is evidenced by gravimetric anomalies in both license areas. This structure and other geologic elements common to both areas, including particularly the Triassic-age Ma'anit structure that extends from the Joseph License area into the Asher-Menashe License area, lend themselves to an integrated exploratory program (and, if successful, may lend themselves to an integrated development program).

The Jordan Valley License, which was awarded in April 2011, lies within the geographic area of the Jordan Valley. The Jordan Valley occupies the central part of the Jordan Rift. This rift is a tectonic plate boundary separating the Arabian Plate from the African Plate. The stratigraphy of the Jordan River Valley is not well known, however, in 1982 a well was drilled to a depth of 4,249 meters (13,940 feet) located within the area of the Jordan Valley License.

In the event of a discovery in our license areas, current Israeli law entitles us to convert the relevant portions of our licenses to 30-year production leases, extendable to 50 years, subject to compliance with a field development work program and production.

#### Joseph License

The "Joseph License" covers approximately 83,272 acres on the Israeli coastal plain south of the Asher-Menashe License between Caesarea in the north and Netanya in the south.

In 2005, in accordance with terms of the Ma'anit-Joseph License, the predecessor of our Joseph License, we drilled the Ma'anit #1 well on the Ma'anit prospect. Drilling breaks and shows of hydrocarbons were recorded from approximately 12,000 feet to the total depth of approximately 15,500 feet. Due to mechanical problems that prevented us from isolating highly conductive water bearing zones from the tighter hydrocarbon bearing formations, the shows were never successfully tested and the well was abandoned in June 2007, following unsuccessful remedial workover operations conducted between April and June 2007. Immediately following the relinquishment of the Ma'anit-Joseph License, we applied for a new license covering approximately 83,000 acres of the original Ma'anit-Joseph License, including the Ma'anit structure on which our Ma'anit #1 well was drilled and on which we ultimately drilled the Ma'anit-Rehoboth #2 well and the Ma'anit-Joseph #3 well.

On October 11, 2007, we were awarded the Joseph License. The Joseph License had an initial term of three years, which could be extended for an additional four years as provided by the Petroleum Law. The license extensions are only granted in increments of a maximum of one year. The Joseph License has been continuously extended for additional one-year periods and is currently scheduled to expire on October 10, 2012, subject to two additional

extensions of one year each.

In October 2007, we filed with the Petroleum Commissioner a presentation of the Permian-age prospect on the Ma'anit structure on the Joseph License. The presentation provided a detailed geological and economic justification of drilling a test well to the Permian horizons on the Ma'anit structure, in addition to the appraisal well to the Triassic depth that we committed to drill under the terms of the license.

Under the terms of the Joseph License, as extended to October 2012, we are required to (i) submit to the Commissioner, by February 1, 2012, a report analyzing the results of the last three exploratory wells that we drilled on the Joseph License within the Ma'anit structure and a regional geologic analysis of the Ma'anit structure, (ii) sign an agreement with an appropriate geological services provider to acquire approximately 15 kilometers of 2-D seismic by March 1, 2012 and are required to (iii) perform the seismic survey, process and integrate the data and submit the process report and ancillary material to the National archives at the Geophysics Institute by June 1, 2012, (iv) process and integrate the results of the new seismic survey with existing seismic lines, update the geophysical maps and submit a geophysical summary and file a report with the Commissioner by August 1, 2012, (v) to identify a new drilling prospect by September 1, 2012 that includes a description of the geological background, the purposes of the drilling, the petroleum system/s that are related therein and a geological forecast and engineering plan and (vi) to sign a drilling contract to drill a new well (or re-enter an existing wellbore) by October 1, 2012.

To date, we have submitted to the Commissioner the required February 1, 2012 report analyzing the results of our last three drilled exploratory wells in the Joseph License area and have entered into an agreement with the Geophysical Institute of Israel (GII) to relating to the acquisition of approximately 16 kilometers of 2-D seismic lines to more fully evaluate the geology of the southern Joseph License area as we explore for drilling prospects in the license area and in the abutting Asher-Joseph Permit area (for which we have filed an application). As discussed further below, we anticipate that our next exploratory well will be drilled on either the Jordan Valley License area or the Asher-Menashe License area, subject to the results of the planned seismic survey which we intend to perform on each of the license areas. Accordingly, we currently do not believe that we will be able to enter into a drilling contract to drill a new exploratory well in the Joseph License area (or re-enter an existing wellbore) on or before October 1, 2012, as required by the terms of the Joseph License. At this point, we are unable to assess the implication of any possible non-compliance with the express terms of the Joseph License extension. See *Risk Factors*.

#### **Asher-Menashe License**

The "Asher-Menashe License" covers an area of approximately 78,824 acres located on the Israeli coastal plain and the Mount Carmel range between Caesarea in the south and Haifa in the north.

In May 2005, we applied for a preliminary permit with priority rights to conduct exploration activities on areas covering approximately 124,000 acres abutting the former Ma'anit-Joseph License and lying to its north and west in order to continue our exploration of the exploratory trend we developed under the Ma'anit License and Joseph Permit areas. In applying for the permit, we proposed a two-staged program of geological and geophysical work extending over an 18-month period aimed at developing a drillable prospect in the permit area.

On August 1, 2005, we were granted Preliminary Permit No. 186/"Asher" or the "Asher Permit" with priority rights for an area covering approximately 121,100 acres. The permit, covering lands on the Israeli coastal plain and the Mount Carmel range stretching north to the outskirts of Haifa, was for a period of 18 months terminating on January 31, 2007.

In connection with the work program requirements for the Asher Permit and continuing exploration of the Joseph License area, we reprocessed approximately 124 miles (200 kilometers) of existing 2-D seismic lines. We used all the data for detailed mapping of prospect leads.

On January 31, 2007, in accordance with the terms of the Asher Permit, we submitted a Final Report and Prospect Identification. In conjunction with the report and in exercise of our priority rights under the permit, we filed an application with the Petroleum Commissioner for a petroleum exploration license on approximately 81,000 acres north of the Ma'anit-Joseph License, of which approximately 78,000 acres were subject of the Asher Permit and some approximately 3,000 acres abutted the Permit acreage to the north.

On June 10, 2007, we were granted the Asher-Menashe License. The Asher-Menashe License had an initial three-year term, which may be extended for an additional four years as provided by the Petroleum Law. The license extensions are only granted in increments of a maximum of one year. The Asher-Menashe License has been continuously extended for additional one-year periods and is currently scheduled to expire on June 9, 2012, subject to two additional extensions of one year each.

Under the terms of the Asher-Menashe License, as most recently extended, we were required to (i) prepare an engineering analysis of the Elijah #3 well and examine the option of deepening the well or sidetracking therefrom and submit a summary report by December 1, 2011, (ii) sign an agreement with an appropriate geological services provider to acquire approximately 10 kilometers of 2-D seismic by December 1, 2011, (iii) commence the seismic survey by February 1, 2012, (iv) process and integrate the results of the new seismic survey with existing seismic lines and file a report with the Commissioner by March 1, 2012, (v) identify a new drilling prospect in the Asher-Menashe License area by April 1, 2012 that includes a description of the geological background, the purposes of the drilling the petroleum system/s that are related therein and a geological forecast and engineering plan and (vi) sign a drilling contract to drill by April 1, 2012 and to commence such drilling by June 1, 2012.

To date, we have prepared an engineering analysis relating to the Elijah #3 well and submitted the summary report to the Petroleum Commissioner. On November 28, 2011, we entered into an agreement with the Geophysical Institute of Israel relating to the acquisition (using Vibroseis equipment) of approximately 11 kilometers of seismic data located within the license area. The seismic contract also allows the Company to acquire a Vertical Seismic Profile (VSP) in place of the 2-D seismic survey. A VSP involves lowering specialized geophysical equipment into a wellbore (such as the Elijah #3 well) while recording a seismic wave source (such as from a Vibroseis truck) along the surface. As discussed below under "Exploratory Plans going forward", we have identified suitable drilling equipment in order to obtain the seismic lines but this equipment will only become available in the May-June 2012 timeframe. Hence we will not be able to process and interpret the results of the new seismic survey prior to the extension of the license term on June 9, 2012. We have formally informed the Petroleum Commissioner of the delay in procuring the necessary rig and have requested additional time in the form of a one-year license extension. At this point, we are unable to assess the implication of our non-compliance with the express terms of the Asher-Menashe License extension. See *Risk Factors*.

#### **Jordan Valley License**

The Jordan Valley License covers approximately 56,000 acres, just south of the Sea of Galilee. The Jordan Valley License, which commenced on April 13, 2011, has an initial three year term which expires on April 12, 2014, and may be extended for additional one-year periods up to a maximum of seven years.

Under the terms of the Jordan Valley License, we are required to identify a drilling prospect in the license area and contract for the drilling of such prospect by October 13, 2012 and to drill a well to a target depth of approximately 5,000 meters (16,400 feet) by April 13, 2013. Additional terms of the License require Zion to prepare and submit various geological, geophysical and geochemical maps and analyses during the license's primary term.

#### **Newly Submitted License and Permit Applications**

In August 2009, we were awarded a preliminary exclusive petroleum exploration permit on approximately 165,000 acres onshore Israel. The Issachar-Zebulun Permit allowed us to conduct, on an exclusive basis through February 23, 2011, preliminary investigations to ascertain the prospects for discovering petroleum in the area covered by the permit. Unlike a license area, where test drilling may take place, no test drilling is allowed on a permit area.

On February 17, 2011, prior to the expiration of the Issachar-Zebulun Permit, we submitted an application to the Commissioner for an exploration license on approximately 55,485 acres of land (the Jordan Valley License Application) and an application for a new preliminary exploration permit on approximately 157,000 acres of land (the Zebulun Permit), most of which were within the area included within our previous Issachar-Zebulun Permit. As noted above, the Jordan Valley License application was awarded in April 2011. Together, the new Jordan Valley License and the new Zebulun Permit Application cover much of the land previously held under the Issachar-Zebulun Permit.

Our geologists identified the Dead Sea area as one worthy of exploration and in February 2011, we applied for a license in the Dead Sea area on approximately 75,000 acres of land (the Dead Sea License Application).

Finally, in June 2011, we submitted an application to the Commissioner for a preliminary exploration permit on an area adjacent to the Joseph License area. The Company named the new permit application the "Asher-Joseph Permit Application." The Asher-Joseph Permit Application area covers approximately 80,000 acres of land and is to the west and south of Zion's Joseph License area. It is onshore Israel and traverses a section of land, adjacent to the coastline, between Haifa and Tel Aviv.

We have been informed that the Dead Sea License Application and the Asher-Joseph Permit Application have not yet been considered by the Commissioner, due to a review by outside consultants, taking place within the Commissioner's office, concerning the process of granting both permits and licenses.

No assurance can be provided that any of the Zebulun Permit Application, the Dead Sea License Application, or the Asher-Joseph Permit Application will ultimately be granted.

The map below (Map #2) shows the outline of the Zebulun Permit Application and Dead Sea License Application that we submitted to the Commissioner in February 2011 and the Asher-Joseph Permit Application that we submitted in June 2011. No assurance can be provided that we will ultimately be granted, in whole or in part, the requested applications.

## EXPLORATION LICENSE AND PERMIT AREAS APPLIED FOR BY ZION

Map #2

#### **Summary of Exploration and Drilling Activities to Date**

Joseph License Area

To date, the Company has completed drilling three exploratory wells in the Joseph License area, the last of which, the Ma'anit-Joseph #3 well, was completed in June 2011.

The first exploratory well, named the Ma'anit #1 well, was drilled to a depth of 15,842 feet (4,829 meters) to Triassic-age formations with encouraging but inconclusive results. However, notwithstanding these results, due to the mechanical condition of the well-bore, we determined that the well was incapable of producing oil and/or gas in commercial quantities and, consequently, in June 2007, we abandoned the well.

In 2009, we drilled our second well (the Ma'anit-Rehoboth #2 well), 'directionally' to a depth of 17,913 feet (5,460 meters). The purpose of the Ma'anit-Rehoboth #2 well was both to appraise the apparent findings of the Ma'anit #1 in the Triassic-age formations (at a depth of between approximately 12,000 and 15,400 feet) and to test the deeper Permian-age horizons at a depth of approximately 16,000 to 18,000 feet.

The well penetrated a number of geologic formations that were preliminarily deemed to have hydrocarbon potential and, during well operations, a small quantity of crude oil was retrieved. However, in April 2010, following the completion of testing procedures, we determined that commercial quantities of hydrocarbons were not present in the Ma'anit-Rehoboth #2 well and, accordingly, we suspended drilling operations in the well. We recognized a non-cash impairment charge to our unproved oil and gas properties in the quarter ended June 30, 2010.

As the Ma'anit-Rehoboth #2 well did not reach the Permian-age geological formation beneath the Joseph License area, we drilled a subsequent well, the Ma'anit-Joseph #3 well, at a location near the Ma'anit-Rehoboth #2 well (in the Joseph License Area).

The drilling of the Ma'anit-Joseph #3 well commenced in August 2010 and continued through June 13, 2011, whereupon we reached our target depth of approximately 19,357 feet (5,900 meters) in Northern Israel. We carried out open-hole wireline logging operations to learn more regarding the well's lithology (rock types) and hydrocarbon potential. The interpretation of the logging indicated that there was little chance that the Ma'anit-Joseph #3 well contained hydrocarbons in commercial quantities. However, during drilling, we recorded significant natural gas shows. We decided to test the well to gain extra insight into exactly what stratigraphic interval(s) the gas was coming from and to learn more about the future exploration potential in this part of northern Israel. In July 2011, we

conducted an open-hole drill stem test and the test results confirmed that the well did not contain hydrocarbons in commercial quantities in the zone tested. Following review and further analysis of the operations and geological reports prepared by Zion's geoscientists, it was concluded that commercial quantities of hydrocarbons were not present within the Ma'anit-Joseph #3. Accordingly, we recorded a non-cash impairment charge of \$42,488,000 in the quarter ended September 30, 2011 to our unproved oil and gas properties in respect of both the Ma'anit-Joseph #3 and Elijah #3 wells.

Asher-Menashe License Area

To date, we have partly completed one exploratory well in the Asher-Menashe License Area. In October 2009, we commenced drilling the Elijah #3 well, within the Asher-Menashe License area, toward the Triassic geological formation, which we estimated was below approximately 10,000 feet (3,048 meters). As of January 15, 2010, we had drilled to a depth of 10,938 feet (3,334 meters). In early February 2010, we temporarily suspended drilling operations in the well following our unsuccessful efforts to retrieve a stuck pipe, pending further analysis of the situation.

Approximately 15 miles (25 kilometers) of 2-D seismic data was acquired in June 2010 and was processed by a geophysical consultant in the United States and integrated into the Zion's geological assessment by our geologists. Analysis of the acquired data helped us to refine the geologic model of the area and indicated that the Asher volcanic section, wherein the drilling tools were stuck, is likely substantially greater (i.e., thicker and deeper) than originally predicted by the older, original data. Following review and further analysis of the operations and geological reports prepared by our geoscientists, it was concluded that commercial quantities of hydrocarbons were not present within the Elijah #3 wellbore and that no further drilling will take place in this well. Accordingly, we recorded a non-cash impairment charge of \$42,488,000 in the quarter ended September 30, 2011 to our unproved oil and gas properties in respect of both the Elijah #3 and the Ma'anit-Joseph #3 wells.

On November 28, 2011, we signed an agreement with the Geophysical Institute of Israel (GII) relating to the acquisition (using Vibroseis equipment) of approximately 11 kilometers of 2-D seismic lines located within Asher-Menashe License area. A VSP involves lowering specialized geophysical equipment into a wellbore (perhaps the Elijah #3 well) while recording a seismic wave source (such as from a Vibroseis truck) along the surface. The VSP acquisition is expected to begin as soon as an appropriate rig and geophysical equipment are available, which the Company currently anticipates will be in the second quarter of 2012.

Jordan Valley License

On October 4, 2011, in connection with planned seismic, magnetic, and gravimetric surveys on the Jordan Valley License area, we entered into an agreement with GII to obtain seismic data. The agreement provides for a seismic survey of not less than 10 kilometers, which we anticipate will be undertaken in March 2012.

## **Exploratory Plans Going Forward**

Identifying the Site of our Next Exploratory Well

We are in the process of determining the drilling site of our next exploratory well. We anticipate that our next exploratory well will either be in the Jordan Valley License area or the Asher-Menashe License area, pending the completion of the additional seismic data, its analysis, and interpretation.

By the terms of the Asher-Menashe License, we were required to prepare an interpretation of the new seismic survey and its integration with existing seismic lines by March 1, 2012. The additional seismic survey we are contemplating in the Asher-Menashe license area requires bringing an appropriate rig to the Elijah #3 well site, partially drill out the cement plug and acquire a basic suite of wireline logs from approximately 2,050-3,221 meters. Based on the geological and geophysical analysis of the new data, we may conduct workover operations at the Elijah #3 well site or reenter an adjoining wellbore. Due to the lack of suitable available equipment in Israel, we have been unable to secure the requisite equipment and personnel within the time frame set out in the license terms. We have identified an Israeli based rig operator that has the requisite drilling equipment; however, their rig will become available only in the May-June 2012 time frame. Hence, we will not be able to process and interpret the results of the new seismic survey prior to the expiration of the license term on June 9, 2012. We have formally informed the Petroleum Commissioner of the delay in procuring the necessary rig and have requested additional time in the form of a one-year License extension. At this point, we are unable to assess the implication of our prospective non-compliance with the express terms of the Asher-Menashe License extension. See *Risk Factors*.

Based on the advice received from the GII, our seismic services provider, we believe that we will be able to perform our planned seismic in the Jordan Valley License area in March 2012.

Following the completion and interpretation of the seismic data in the Asher-Menashe license area and the Jordan Valley License area, almost certainly, we will be able to identify our next drilling site. We anticipate that we will make a final determination as to the drill site in the third quarter of 2012.

Concurrently, we plan to acquire approximately 16 kilometers of new 2-D seismic and reprocess up to 145 km of existing 2-D seismic to more fully evaluate the geology of the southern Joseph License area as we explore for drilling prospects in the license area and in the abutting Asher-Joseph Permit area (for which we have filed an application). Based on advice from GII, we anticipate that the seismic survey in the Joseph License area will begin in June 2012. We believe that through the planned seismic in the Joseph License area will obtain a clearer picture of the exploratory drilling prospects in the Joseph License and the abutting Asher-Joseph Permit Application (for which we filed an application but as of the date of this Annual Report have not been granted such permit and no assurance can be provided that we will ultimately be awarded this license). Under the terms of the Joseph License, we are required to either sign a contract to drill a new exploratory well or actually drill within one of the existing wells in such license area by October 2012. At this point, we are unable to assess the implication of our possible prospective non-compliance with the express terms of the Joseph License extension. See *Risk Factors*.

In order to be able to drill our next exploratory well, we also need to finalize arrangements with a drilling rig operator to utilize a drilling rig with the appropriate drilling capacity, as well as experienced drilling crew. We are in discussions with various drilling rig operators, including the operator of the rig that we anticipate utilizing for the Asher-Menashe seismic data, but have not yet entered into any legally binding agreements for the use of a rig. In the event that we decide to import a drilling rig into Israel, we will need to obtain the appropriate regulatory consents and approvals for the importation of the rig. We will also need to obtain appropriate permits, regulatory consents and approvals with respect to the actual drilling site that we will ultimately determine. In addition, we will need to obtain the necessary approvals from the surface owners.

We cannot provide any accurate estimate as to when we will spud our next exploratory well, but we anticipate that if we elect to drill our next well in the Asher-Menashe License areas, we will not be in a position to commence drilling prior to the third quarter of 2012. If we elect to drill in the Jordan Valley License area, then we anticipate that we will not be in a position to commence drilling prior to the end of the third quarter of 2012 or the early part of the fourth quarter of 2012.

We also would like to negotiate a drilling contract for a multi-well development program. We are currently in early stage discussions with a rig operator toward that end.

If we drill a well that we believe could be capable of producing oil or gas in commercial quantities, then a completion attempt would be made. The completion cost would depend on the well depth, scope, and complexity of operations. The range of the possible completion cost is between a minimum of \$300,000 and a maximum of several million dollars, in order to set production casing, perforate, install the production tubing and wellhead and conduct extended tests of the well. We cannot provide any assurance at this time that any well will be completed or produce oil and/or natural gas in commercial quantities. It is well established that oil and gas exploration activities are inherently risky operations, particularly in areas like Israel where we are drilling deep, wildcat wells and where significant onshore oil and gas production has yet to be reliably established.

We estimate that, in order to be commercially productive, any of the wells we intend to drill to the approximate depth of 14,764 feet (4,500 meters) or deeper, based on industry standards, would need to be capable of producing at least 150 barrels of oil per day or gas equivalent. Such production levels will not pay out the cost of drilling the well, but only the costs of operating the well on a current basis. In order to justify the costs of drilling of additional wells, there would need to be the expectation that each additional well would have initial production rates in excess of 500 barrels of oil per day or gas equivalent, or some combination of the two, based upon minimum oil prices of \$100.00 per barrel.

Non Drilling Exploration Related Activities

If our Dead Sea License Application is granted, of which no assurance can be provided, we anticipate to acquire and incorporate over 150 miles (over 240 kilometers) of existing 2-D seismic data in the area to identify and mature new drilling prospects.

If our Asher-Joseph Permit Application and Zebulun Permit Application are granted, we will then need to acquire, process and incorporate process over 30 miles (approximately 50 kilometers) of new seismic data in these areas to identify potential drilling prospects.

We continue in our efforts to secure control of an appropriate drilling rig and experienced crew. At present, in order to secure control of a rig, we anticipate that we will either need to contract with a third party who owns an appropriate rig or purchase such a rig. If we are not able to secure control of an appropriate rig, then we will likely seek, as previously, to contract for a suitable rig on an "as required" basis.

## Geological Background of Exploration Plans in our License Areas

In order to better understand and interpret the geology of our license areas, our staff of geologists and geophysicists is using an Israeli country-wide 2-D seismic database residing in our "Kingdom" (seismic interpretation and geologic mapping) software from Seismic Micro Technology. Our geoscientists are utilizing two workstations containing the software, one in the U.S.A. and one in Israel. The database consists of approximately 250 seismic lines totaling approximately 2,050 miles (3,300 kilometers) of coverage and also includes the stratigraphic sections from all the deep wells drilled in Israel. In addition, we have access to additional geophysical data such as gravity and magnetic surveys that are useful in establishing the overall geologic picture.

From studies conducted by us to date, we have several areas under investigation, each as shown on Map #1 and Map #2, appearing at pages 3 and 8. The primary areas of interest, apart from the areas already drilled and being drilled, include the Jordan Rift Valley – Dead Sea province and the general area of the continental shelf which encompasses the Judean and Sharon plains.

#### **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 with limited financial resource and consortia of local Israeli and foreign participants with substantial financial resources. Most groups are engaged primarily in off-shore activities, which is not an area in which we are currently active. Some groups are exploring for oil shale projects which is not a current interest of ours. Of the participants in onshore activities, only two companies other than Zion are active in the northern half of Israel in which our activities are concentrated. We are aware of no oil and gas exploration companies which are at present actively considering exploration activities in the areas that are the subject of our Joseph and Asher-Menashe Licenses or our Jordan Valley License.

Historically, primarily for geopolitical reasons, Israel (particularly on-shore) has not been an area of interest for international integrated or large or mid-size independent oil and gas exploration companies. Since the announcement of the Tamar and Leviathan discoveries, this situation has changed. However, given the current limited availability in Israel of oil field service companies, equipment and personnel, in periods of increased exploration interest and activity as at present, there is competition for available equipment and services. In this market Zion has no particular advantage. We attempt to enhance our position by developing and maintaining good professional relations with oil field service providers and a high level of credibility in making and meeting commercial commitments.

If any of our exploratory wells are 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.

Because Israel imports 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 need be adopted initially with regard to any oil that Zion may discover. Zion believes that it would have a ready local market for its oil at market prices and would have the option of exporting to the international market.

In January 2009, in deep water offshore Israel, the Tamar discovery was announced by a consortium headed by Noble Energy. Following the Tamar discovery, in December 2010, the Leviathan offshore discovery was also announced.

These very significant offshore finds reinforced the Israeli government's encouragement to the power and industrial sectors to convert to natural gas. To date, most of the offshore underwater natural gas pipeline infrastructure intended to connect the offshore gas fields to the markets in Israel has been completed.

#### 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 is vested in the Minister of National Infrastructures, the Petroleum Commissioner and an advisory council. The following discussion includes a brief summary review of certain provisions of the Petroleum Law as currently in effect. This review is not complete and it should not be relied on as a definitive restatement of the law related to petroleum exploration and production activities in Israel.

Petroleum resources are owned by the State of Israel, regardless of whether they are located on state lands or the offshore continental shelf. No person is allowed to explore for or produce petroleum without being granted a specific right under the Petroleum Law. Israeli law provides for three types of rights, two relevant to the exploration stage and the third for production.

**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). A license area may not exceed 400,000 dunam (approximately 98,800 acres). One dunam is equal to 1,000 square meters (approximately 0.24711 of an acre). No one entity may hold more than 12 licenses or hold more than a total of four million dunam in aggregate license area.

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

**Petroleum rights fees.** The holders of preliminary permits, 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 of the right and, in the case of a license, the period during which the license has been maintained. For a permit, the fees are New Israeli Shekels (NIS) 5.82 (approx. US \$1.56 at the Bank of Israel representative rate published on February 21, 2012) per 1,000 dunam (approx. 247.11 acres) per month. For a license, the initial year fees are New Israeli Shekels (NIS) 106.09 (approx. US \$28.36 at the Bank of Israel representative rate published on February 21, 2012) per dunam (approx. 247.11 acres) per year. Every subsequent year, the license fee increases incrementally.

**Requirements and entitlements of holders of petroleum rights.** The holder of a petroleum right (permit, 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 for 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 Minister of National Infrastructures. No petroleum right shall be cancelled until the Minister has ruled on the appeal.

The holder of a license or lease on which there is a producing well is required to pay a royalty to the government of 12.5% of production. The government may elect to take the royalty in kind, or take payment in cash for its share of production.

In March 2011, the Knesset (the Israeli Parliament) passed into law the recommendations of the Sheshinski committee on taxation of oil and gas discoveries in Israel. The law raised the state's take from profits on oil and gas discoveries to 52%-62% after a return on investment had been achieved, compared with the previous rate of 30%.

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 25%, effective January 1, 2012. During 2011, the tax rate was 24%. The Israeli Parliament adopted the findings of the so called Trachtenberg Committee and did away with the previously scheduled phased decrease in the tax rate. Capital gains are taxed at a rate equal to the regular corporate tax rate.

**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.

#### **Exploration Expenditures**

The following table summarizes the amounts we expended on our exploration efforts between 2009 and 2011:

Toronto I Conserva	2011 US \$(000)	2010 US \$(000)	2009 US \$(000)
Joseph Licenses  Carlo picel & Coophysical Operations		105	271
Geological & Geophysical Operations	-	195	271
Exploratory Drilling Operations	19,570	18,050	12,215
Asher-Menashe License Geological & Geophysical Operations Exploratory Drilling Operations	66 297	180 5,153	123 5,838
Issachar-Zebulun Permit Area (Expired on February 23, 2011) Geological & Geophysical Operations Jordan Valley License	-	567	66
Geological & Geophysical exploration	207	-	-
Total	20,140	24,145	18,513

The drilling rig and crew which we utilized to complete the Ma'anit-Joseph #3, the Ma'anit-Rehoboth #2 and the Elijah #3 wells were obtained from Aladdin Middle East Ltd. ("AME"), a Turkish based drilling rig operator. The drilling contract that we entered into with AME in September 2008 provided for drilling on a day-work basis with payment to AME at the rate of \$28,500 per drilling day and other scheduled rates for non-operating days. In July 2011, we

completed the drilling and testing operations at the Ma'anit-Joseph #3 well and on July 29, 2011, we released the rig. In December 2011, the rig was removed out of Israel.

## **Budget for 2012**

Our budgeted capital spending for 2012 is approximately \$12,439,000. Our 2012 capital budget contemplates the acquisition and processing of various geological and geophysical data, including field seismic data, within our existing license areas and the spudding of an exploratory well, to be ultimately drilled to a depth of up to approximately 16,405 feet (5,000 meters) on our Jordan Valley License or possibly in the Asher-Menashe License area.

The above budget for 2012 does not include an estimate of our projected drilling related costs with respect to complete the drilling of our next exploratory well to the desired depth which we anticipate will be a principal component of our budget for 2013 and possibly beyond. Presently, we are in discussions with various drilling rig operators in order to identify and bring into Israel a drilling rig with the appropriate drilling depth capacity. We anticipate that we will finalize our drilling plans and enter into appropriate agreements with drilling rig operators by the fourth quarter of 2012.

If we are awarded all or part of the exploration areas that we applied for in 2011, we intend to both purchase already existing seismic data and acquire, process and integrate new seismic data. The above estimate does not include any provision for these purposes.

#### **Israeli Governmental Regulations**

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

Environmental/Safety

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 location, the planning commissions have required the submission of a site remediation plan, subject to approval of the environmental authorities. The costs of future restoration and remediation can be estimated as the restoration and remediation are typical for the industry and part of "oil field best practices". At this time, we anticipate that the future cost of the environmental requirements, site remediation and plugging will not be greater than approximately \$290,000 per well drilled on our existing license areas. Our operations are also subject to claims for personal injury and property damage caused by the release of chemicals or petroleum substance by us or others in connection with the conduct of petroleum operations on our behalf.

In August 2011, the Government of Israel approved a draft law entitled "Prevention of Land Contamination and Remediation of Contaminated Land". In order for the draft law to become law, the Israeli Parliament must approve it after a second and third hearing. If adopted, the Government sponsored proposed law will provide for a regulatory regime that will require persons engaged in activities involving "polluted materials" (which are defined to include also

petroleum crude oil or any other materials defined as such by the commissioner) including their production, treatment, handling, storage and transportation, that may affect land or water resources to prepare environmental impact statements and remediation plans either prior to commencing activities or following the occurrence of an event that may cause pollution to land or water resources or endanger public health. Under the proposal, persons responsible, directly or indirectly, will be liable for the clean-up costs; violations of the law may result in criminal sanction. We do not know and cannot predict whether any 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 nor 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 and we are not aware of any potentially material contingencies related to environmental issues. 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.

On January 9, 2012 the Ministry of Energy and Water Resources submitted for review a proposed code titled "Onshore Oil and Gas Exploration and Production-Environment (Health) and Safety Code – Draft". The purpose of the proposed draft code is to regulate and codify onshore environmental and safety matters relating to oil and gas exploration and production in Israel. Under the proposed draft of the code, as a condition to receiving a license for oil and gas exploration, an applicant will have to submit, in writing, an environmental assessment as well as a safety plan that will have to be periodically updated during and after operations. In addition, as a condition to receiving production rights (in the case of a discovery) an applicant will have to submit an environmental impact report as well as a production safety plan. These and related changes in Israel's regulatory regime regarding the petroleum regulations with respect to environmental and safety matters may delay drilling and production operations or result in the termination of drilling permits. We may be required to make substantial expenditures to comply with governmental laws and regulations.

## Proposed Fuel Market Law Legislation

In January 2007, the Ministry of Energy and Water Resources (the "Ministry") distributed for comment a proposal for the enactment of new legislation under the proposed name "Fuel Market Law". In January 2011, the Ministry presented to a ministerial committee a draft law entitled "Fuel Market Law". Under the proposal as currently drafted, the following activities among others as they relate to crude oil and its products would require licenses by the Director of the Fuel Authority in the Ministry of Energy and Water Resources: import, export, refining, storage, dispensing and loading, transport, marketing and sale. Further under the proposal a condition for the receipt of a license is that the licensee be a corporation incorporated under the Israeli Companies Law. As currently drafted, the proposal does not provide for exceptions for entities holding petroleum rights under the Petroleum Law; however, it is not certain that, even if enacted as currently proposed, the provisions of the proposed law would supersede the provisions of the Petroleum Law. We submitted comments to the Ministry with the aim of clarifying that any law to be presented for enactment clarify that the rights of holders of licenses and leases granted under the Petroleum Law will not be compromised. As of the date of the filing of this annual report on Form 10-K, no further legislative action has been taken on this particular topic.

We do not know and cannot predict the results of any attempt to enact the proposed Fuel Economy Law, as currently drafted or as may be amended or, if enacted, the effect of such law on our rights under the Petroleum Law or the results of any legal challenge to the law by a holder of a license or lease issued under the Petroleum Law.

#### Planning & Building

On January 31, 2012 the Ministry of Energy and Water Resources submitted for review proposed draft regulations titled "Petroleum Regulations (Permission to deviate from the planning and building provisions)". The purpose of the proposed draft regulations is to regulate and codify those circumstances that a petroleum license holder is permitted to deviate from the Building and Planning Law for the purpose of petroleum drilling. The majority of the proposed draft

regulations relate to the license exploratory permitting stage. The proposed regulations considerably increase the time period to obtain the necessary permission for exploratory drilling operations, limit the area allowed to place temporary building or caravans and limit the period of any permit for exploratory drilling operations. These and related changes in Israel's regulatory regime regarding the petroleum regulations with respect to the building and planning regulations could delay drilling operations or resulting in the termination of drilling permits. We may be required to make substantial expenditures to comply with governmental laws and regulations.

#### **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. In an attempt to stop missile strikes from the Gaza Strip against Israelis, in January 2009 Israel became engaged in an armed conflict with Hamas in the Gaza Strip, during which missile attacks aimed at populated areas in parts of southern Israel (some of which are in vicinity of warehouse space we use) continued daily, disrupting most day-to-day civilian activity in these areas. These developments have further strained relations between Israel and the Palestinians. Any on-going or future violence between Israel and the Palestinians, armed conflicts, terrorist activities, tension along Israel's northern borders, or political instability in the region would likely disrupt international trading activities in Israel and may materially and negatively affect our business conditions and could harm our prospects and business.

In addition, civil unrest, often accompanied by violence, has spread throughout the region. Protestors have demanded economic and political reforms, and to date, there have been several regime changes. Civil unrest could continue to spread throughout the region or grow in intensity, leading to regime changes resulting in governments that are hostile to the US, civil wars, or regional conflict. There have also been rising international tensions over Iran, which was censured by the United Nations over suspicions that it is trying to develop nuclear weapons. Certain countries have considered actions ranging from economic sanctions to pre-emptive strikes on suspected nuclear sites, and Iranian officials have threatened retaliation by, among other actions, closing the Strait of Hormuz, through which a significant portion of the global crude oil supply is transported.

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.

#### **Employees**

As of December 31, 2011, we had 23 employees, three of whom are on a part-time basis. None of our current employees 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 engineering, logging, cementing and well-testing.

#### **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. 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. 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.

#### **Available Information**

Zion's internet website address is "www.zionoil.com". We make available, free of charge, on our website, 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., 6510 Abrams Rd., Suite 300, Dallas, TX 75231, Atm: 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 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 an exploration stage 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 success of our exploration efforts, none of which can be assured.

We were incorporated in April 2000 and are still an exploration stage company. 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. 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 stage 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 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 \$52,182,000 for the year ended December 31, 2011, \$27,658,000 for the year ended December 31, 2010 and \$4,424,000 for the year ended December 31, 2009, and

\$108,669,000 for period from April 6, 2000 (inception) to December 31, 2011. All of our audited financial statements since inception 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 current obligations and meet our exploration and development commitments and plans. 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 absence of any oil and natural gas reserves and revenues, there can be no assurance this capital will be available on commercially acceptable terms (or at all) and if it is not, we may be forced to substantially curtail or cease exploration expenditures which could lead to our inability to meet all of our commitments.

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

#### We require significant capital to realize our business plan.

Our planned work program is expensive. We believe that our current cash resources are sufficient to allow us to undertake non-drilling exploratory activities in our current license, spud one additional exploratory well in one of our exploration license areas in 2012 and otherwise meet our plans through December 31, 2012. This assessment is premised on our spudding our next exploratory well in the October-November 2012 time-frame. We estimate that, when we are not actively drilling a well, our monthly expenditure is approximately \$600,000 per month. However, when we are engaged in active drilling operations, we estimate that there is an additional cost of approximately \$2,500,000 per month. Accordingly, we anticipate that we will have to seek additional financing in 2012. We have no commitments for any financing and no assurance can be provided that we will be able to raise funds when needed. Further, we cannot assure you that our actual cash requirements will not exceed our estimates. Even if we were to discover hydrocarbons in commercial quantities, case 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.

We will not be able to comply with the terms of one or more of our licenses which may result in the loss or forfeiture of such license(s). The loss or forfeiture of any of our licenses may have an adverse effect on our business and prospects.

By the terms of the Asher-Menashe License, we were required to prepare an interpretation of the new seismic survey and its integration with existing seismic lines by March 1, 2012. The additional seismic survey we are contemplating in the Asher-Menashe license area requires bringing an appropriate rig to the Elijah #3 well site. Due to the lack of suitable available equipment in Israel, we have been unable to secure the requisite equipment and personnel within the time frame set out in the license terms. We have identified an Israeli based rig operator that has the requisite drilling equipment; however, their rig will become available only in the May-June 2012 time frame . Hence, we will not be able to process and interpret the results of the new seismic survey prior to the extension of the license term on June 9, 2012. We have formally informed the Petroleum Commissioner of the delay in procuring the necessary rig and have requested additional time in the form of a one-year license extension. At this point, we are unable to assess the implication of our prospective non-compliance with the express terms of the Asher-Menashe License extension.

Under the terms of the Joseph License, we were required to, among other things, (i) sign an agreement with an appropriate geological services provider to acquire approximately 15 kilometers of 2-D seismic by March 1, 2012 and are required to (ii) perform the seismic survey, process and integrate the data and submit the process report and ancillary material to the National archives at the Geophysics Institute by June 1, 2012, (iii) process and integrate the results of the new seismic survey with existing seismic lines, update the geophysical maps and submit a geophysical summary and file a report with the Commissioner by August 1, 2012, (iv) identify a new drilling prospect by September 1, 2012 that includes a description of the geological background, the purposes of the drilling, the petroleum system/s that are related therein and a geological forecast and engineering plan and (v) sign a drilling contract to drill a new well (or re-enter an existing well) by October 1, 2012. We have entered into an agreement to obtain approximately 16 kilometers of seismic data in the southern portion of the license area. However, as we plan to drill our next exploratory well in either the Asher-Menashe or Jordan Valley License area, we cannot provide any assurance that we will be able to enter into an agreement to drill a new exploratory well in the Joseph License area (or re-enter an exiting wellbore) by the required date of October 1, 2012. At this point, we are unable to assess the implication of our possible prospective non-compliance with the express terms of the Joseph License extension.

Finally, under the terms of the Jordan Valley License, we are required to sign a drilling contract to drill a new well by mid-October 2012. We are also required to complete drilling a new exploratory well to approximately 5,000 meters in such license area by mid-April 2013. Based on the advice provided to us by the Geophysical Institute of Israel, our seismic testing services provider, the seismic will be performed in March 2012.

Following the completion and interpretation of the seismic data in the Asher-Menashe license area and the Jordan Valley License area, we hope to be able to identify our next drilling site. We anticipate that we will make a final determination as to the drill site in the third quarter of 2012. It is highly likely that the site of our next exploratory well will be in either the Jordan Valley or the Asher Menashe License area.

We have no control over the timing of the performance of the seismic surveys. The time frames in which the seismic surveys are to be performed are projections based on the advice provided by our seismic provider as to when the suitable equipment and/or personnel will become available. No assurance can be provided that these time frames will be met.

At this point, we are unable to assess the implication of our possible non-compliance with the express terms of one or more of our licenses. The loss or forfeiture of one or more of current licenses may adversely affect our business and prospects.

We have not yet signed an agreement with a drilling contractor and, thus, we may be unable to continue our planned drilling operations within the contemplated time-frame.

Following the completion of the Ma'anit-Joseph #3 well, the drilling rig that we used to drill our last three exploratory wells was exported by the owner from Israel, in January 2012. As of March 5, 2012, we are in discussions with a drilling contractor with respect to our drilling program. However, until such time as we sign a legally binding agreement, there can be no assurance that we will be able to come to an agreement with the drilling contractor to drill our planned well(s) on commercially reasonable terms, or at all. Under the current terms of two of our licenses, unless we commence the drilling of a well by certain specified dates (which dates are subject to extension by the Petroleum Commissioner), we risk losing each of the licenses. The date specified for the Asher-Menashe License is June 1, 2012 and the date specified for the Jordan Valley License is April 12, 2013. For the Joseph License, we are required to execute a contract with a drilling contractor to drill a new well (or re-enter an existing wellbore in such license area) by October 1, 2012. Any delay in our drilling timetables can have a material adverse effect on our rights under our licenses and on the implementation of our business plan.

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 engineering, geological, geophysical and other scientific analytical services, including 2-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 persons 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 drilling rigs and related equipment.

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

We typically commence exploration drilling operations without undertaking extensive analytical testing thereby potentially increasing the risk (and associated costs) of drilling a non-producing well.

Larger oil and gas exploration companies typically conduct extensive analytical pre drilling testing. These include 3-D seismic imaging, the drilling of an expendable "pilot" well or "stratigraphic test" to collect data (logs, cores, fluid samples, pressure data) to determine if drilling a well capable of producing oil or gas well (full completion with casing and well testing) is justified. The use of pilot or stratigraphic tests is often used in areas where there is little or no offset well data, like Israel, where our exploration license and permits areas are located. While 3-D seismic imaging data is more useful than 2-D data in identifying potential new drilling prospect, its acquisition and processing costs are many multiples greater than that for 2-D data, and GII, our primary provider of geophysical data, has limited ability to acquire and process onshore 3-D data. In addition to using 2-D seismic technology prior to drilling, we have historically also utilized gravity and magnetic data, built cross section maps from offset wells and utilized geophysical analysis from similar geologic targets. We believe that the additional months, delays and associated costs associated with more extensive pre-drilling testing typically undertaken by larger oil and gas exploration companies is not necessarily justified when drilling vertical exploration wells (as we have historically been doing). Nonetheless, the absence of more extensive pre-drilling testing may potentially increase the risk of drilling a non-producing well, which would in turn result in increased costs and expenses. Additionally, we are typically engaged in drilling very deep onshore wildcat wells in Israel where only approximately 500 total wells have ever been drilled, the vast majority of which are relatively substantially shallower. As such, exploration risks are inherently very substantial.

The failure to obtain the approval of applications submitted for new exploration licenses and exploration permits would have a material adverse effect on our business and prospects

We currently have pending before the Commissioner applications for one exploration license and two preliminary exploration permits. In February 2011, we submitted to the Commissioner a license application for an area covering approximately 74,925 acres of land within the vicinity of the Dead Sea, in central Israel, which we have named the Dead Sea License Application as well as an application for a preliminary exploration permit covering part of the area previously covered by the our previous Issachar-Zebulun Permit, which expired on February 23, 2011. We named the new permit application the Zebulun Permit Application. Subsequently, in June 2011, we submitted an application to the Commissioner for a preliminary exploration permit on an area adjacent to our Joseph License area. We named the new permit application the "Asher-Joseph Permit Application".

No assurance can be provided that we will be ultimately awarded the Dead Sea License Application or the Zebulun Permit Application or the Asher-Joseph Permit Application. The Petroleum Commissioner's refusal to award these applications could have a material adverse effect on our business 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. 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 in degree and intensity, has led to security and economic problems for Israel. Beginning in September 2000, the overall relationship and security situation between Israel and the Palestinians deteriorated significantly and continues to be marked by ongoing violence, also varying in its degree of severity. During the summer of 2006, Israel was engaged in an armed conflict with Hezbollah, a Lebanese Islamist Shiite militia group and political party; and during the winter of 2008-2009, Israel was engaged in an armed conflict with Hamas, a militia group and political party operating in the Gaza Strip. These conflicts involved missile strikes against civilian targets in various parts of. To date, these matters have not had any material effect on our business and results of operations, but there can be no assurance that they will not do so in the future.

In addition, civil unrest, often accompanied by violence, has spread throughout the region. Protestors have demanded economic and political reforms, and to date, there have been several regime changes in other countries. Civil unrest could continue to spread throughout the region or grow in intensity, leading to regime changes resulting in governments that are hostile to the US, civil wars, or regional conflict. There have also been rising international tensions over Iran, which was censured by the United Nations over suspicions that it is trying to develop nuclear weapons. Certain countries have considered actions ranging from economic sanctions to pre-emptive strikes on suspected nuclear sites, and Iranian officials have threatened retaliation by, among other actions, closing the Strait of Hormuz, through which a significant portion of the global crude oil supply is transported.

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, resulting in delays; and
lack of availability of drilling rig and experienced crew, oilfield equipment or services if third party providers decide to exit the region.
Loss of property and/or interruption of our business plans resulting from hostile acts could have a significant negative impact on our earnings and cash flow. In addition, we may not have enough insurance to cover any loss of property or

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

other claims resulting from these risks.

We incurred net losses of \$52,182,000 for the year ended December 31, 2011, \$27,658,000 for the year ended December 31, 2010 and \$4,424,000 for the year ended December 31, 2009, and \$108,669,000 for period from April 6, 2000 (inception) to December 31, 2011. We cannot provide any assurance that we will ever be profitable.

#### Earnings, if any, will be diluted due to charitable contributions and key employee incentive plans.

We are legally bound to fund in the form of a royalty interest or equivalent net operating profits interest, 6% of our gross sales revenues, if any, to two charitable foundations. In addition, we may allocate 1.5% royalty interest or equivalent net operating profits interest to a key employee incentive plan designed as bonus compensation over and above our executive compensation payments. This means that the total royalty burden on our property (including the government royalty of 12.5%) may be up to 20% of gross revenue. 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 if 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 involving instances of 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. 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 hydrocarbon indicators. 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, Zion is typically engaged in drilling very deep onshore wildcat wells in Israel where only approximately 500 total wells have ever been drilled, the vast majority of which are relatively substantially shallower. As such, exploration risks are inherently very substantial.

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

Prices for oil and natural gas fluctuate widely. Fluctuations in the prices of oil and natural gas will affect many aspects of our business, including our ability to attract capital to finance our operations, our cost of capital, and the value of our unproved oil and natural gas properties. Prices for oil and natural gas may fluctuate widely in response to relatively minor changes in the supply of and demand for oil and natural gas, market uncertainty and a wide variety of additional factors (such as the current political turmoil in the Middle East) that are beyond our control, such as the domestic and foreign supply of oil and natural gas, the ability of members of the Organization of Petroleum Exporting Countries to agree to and maintain oil price and production controls, 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.

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

Exploration for and production of crude oil and natural gas can be hazardous, involving natural disasters and other unfortuitous events such as blowouts, well cratering, fire and explosion and loss of well control which can result in

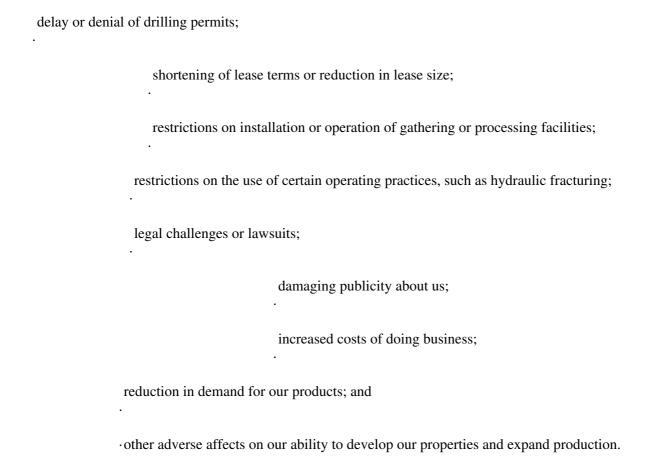
damage to or destruction of wells, injury to persons, loss of life, or damage to property and the environment. Exploration and production activities are also subject to risk from political developments such as terrorist acts, piracy, civil disturbances, war, expropriation or nationalization of assets, 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 severity 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 coverages 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 is not 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 OECD countries which include the US, the UK 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 safety, human rights, environmental compliance and business practices. Future activist efforts could result in the following:



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.

Eco	nomic	risks ma	v adverse	lv affect o	our operations	s and/or inhibit	our ability	to raise a	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 cause the legislation of 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 Zion's 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 Ministry of Energy and Water Resources is considering proposed legislation relating to licensing requirements for entities engaged in the fuel sector that, if adopted as currently proposed, may result in our having to obtain additional licenses to market and sell hydrocarbons that may be discovered by us. We cannot now predict whether or in what form the proposed legislation may be adopted or, if adopted, its possible impact on our operations.

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.

The Ministry of Environmental Protection is considering proposed legislation relating to polluted materials, including their production, treatment, handling, storage and transportation, that may affect land or water resources. Persons engaged in activities involving these types of materials will be required to prepare environmental impact statements and remediation plans either prior to commencing activities or following the occurrence of an event that may cause pollution to land or water resources or endanger public health. We do now know and cannot predict whether any 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.

Our petroleum rights (including licenses and permits) could be canceled, terminated or not extended, and we would not be able to successfully execute our business plan.

Any license or other petroleum right we hold or may be granted is granted for fixed periods and requires compliance with a work program detailed in the license or other petroleum right. If we do not fulfill the relevant work program due to inadequate funding or for any other reason, the Israeli government may terminate the license or any other petroleum right before its scheduled expiration date. No assurance can be provided that we will be able to obtain an extension to this if in fact we are unable to begin drilling by such date.

Under the terms of the Asher-Menashe License, as recently extended, we are required, among other things, to identify a new drilling prospect by April 1, 2012 and to commence drilling such prospect by June 1, 2012. Under the terms of the Joseph License, as recently extended, we are required, among other things, to identify a new drilling prospect by September 1, 2012 and to execute a drilling contract for such prospect (or re-enter an existing wellbore) by October 1, 2012. However, we may not be able to identify drilling prospects or execute drilling contracts by the specified dates. Such non-compliance could result in the Commissioner's termination of these licenses. Any such development may have an adverse material effect on our business and prospects.

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 drilling schedule 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 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 security 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 Ministry of Energy and Water Resources regional and local planning commissions, the environmental authorities and the Israel Lands Authority. If we are unable to obtain some or all of these permits or the time required to obtain them is longer than anticipated, we may have to alter or delay our planned work schedule, which would increase our costs.

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

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

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

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

Our industry is cyclical and, from time to time, there is a shortage of drilling rigs, equipment, supplies and oilfield services. There may also be a shortage of trained and experienced personnel. During these periods, the costs of such items are substantially greater and their availability may be limited, particularly in locations that typically have limited availability of equipment and personnel, such as the Eastern Mediterranean, where our operations are located.

During periods of increasing levels of industry exploration and production, the demand for, and cost of, drilling rigs and oilfield services increases. The recovery of global crude oil prices during 2011 is resulting in increased global exploration and production activity, thus increasing demand pressure for drilling rigs and oilfield services, which could result in sector inflation. As a result, drilling rigs and oilfield services may not be available at rates that provide a satisfactory return on our investment.

#### Risks Related to our Common Stock

We will likely issue additional common stock in the future, which would dilute 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 100,000,000 shares of common stock. As of February 21, 2012, there were 30,447,211 shares of our common stock issued and outstanding.

We have effective shelf registration statements from which additional shares of our common stock and other securities can be issued. In addition, we may also issue additional shares of our common stock or securities convertible into or exchangeable for our common stock in connection with the hiring of personnel, future acquisitions, future private placements of our securities for capital raising purposes or for other business purposes. Future issuances of our common stock, or the perception that such issuances could occur, could have a material adverse effect on the price of our common stock.

Because we have no plans to pay dividends on our common stock, stockholders must look solely to appreciation of our common stock to realize a gain on their investments.

We do not anticipate paying any dividends on our common stock in the foreseeable future. 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,

changes in expectations as to our future financial performance or changes in financial estimates, if any,

announcements relating to our business or the business of our competitors,

conditions generally affecting the oil and natural gas industry,

the success of our operating strategy, and

the operating and stock performance of other comparable companies.

Many of these factors are beyond our control, and we cannot predict their potential effects on the price of our common stock. In addition, the stock market is subject to extreme price and volume fluctuations. This volatility has had a significant effect on the market price of securities issued by many companies for reasons unrelated to their operating performance and could have the same effect on our common stock.

In addition, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted against such companies. Such litigation, if instituted, and irrespective of the outcome of such litigation, could result in substantial costs and a diversion of management's attention and resources and have a material adverse effect on our business and financial condition.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

As of the date of this filing, we have no unresolved comments from the staff of the SEC.

#### **ITEM 2. PROPERTIES**

#### Oil and Gas Interests

Our current oil and gas interests consist of three petroleum exploration licenses, all onshore Israel, comprised of the Joseph License (covering approximately 83,272 acres), the Asher-Menashe License (covering approximately 78,824 acres) and the Jordan Valley License (covering approximately 55,845 acres of land in the Jordan Valley area). We have continuously held the Joseph License since October 2007 and the Asher-Menashe License since June 2007. We were awarded the Jordan Valley License in April 2011. The Joseph License and Asher-Menashe License areas are geographically contiguous and within a similar geologic environment.

The table below summarizes certain data for our license areas for the year ended December 31, 2011:

Type of Right License	Name Asher-Menashe	, ,	Working Interest 100%(1)	Expiration Date June 9, 2012(2) (4)
License	Joseph	83,272	100%(1)	October 10, 2012(2) (4)
License	Jordan Valley	55,845	100%(1)	April 12, 2014(3) (4)

(1) All of the rights are subject to a 12.5% royalty interest due to the government of Israel under the Petroleum Law. Zion has also donated the equivalent of a 6% royalty interest (or equivalent net operating profits interest) to two foundations. In addition, Zion may allocate a 1.5% royalty interest (or equivalent net operating profits interest) to a key employee incentive plan that may be established.

- (2) Extendable through October 2014, subject to compliance with the terms of the license as may be amended.
- (3) Extendable through April 2018, subject to compliance with the terms of the license as may be amended.
- (4) 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, will 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 any prospective drill site in the 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 surface rights to any prospective drill site in the 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 surface rights to the possible drill sites in the Jordan Valley License area which we are currently contemplating are held by the Israel Electric Company and the Israel Lands Authority.

## **Summary of Exploration Activities/ Present Activities**

Joseph License

To date, we completed drilling three exploratory wells in the Joseph License area, the last of which, the Ma'anit-Joseph #3 well, was completed in June 2011. In July 2011, after reaching the target depth of approximately 19,357 feet (5,900 meters) on the Ma'anit-Joseph #3 well, the Company conducted an open-hole drill stem test and the test results confirmed that the well does not contain hydrocarbons in commercial quantities in the zone tested.

The first exploratory well, named the Ma'anit #1 well, was drilled to a depth of 15,842 feet (4,829 meters) to Triassic-age formations with encouraging but inconclusive results. However, notwithstanding these results, due to the mechanical condition of the well-bore, we determined that the well was incapable of producing oil and/or gas in commercial quantities and, consequently, in June 2007, we abandoned the well.

In 2009, we drilled our second exploratory well (the Ma'anit-Rehoboth #2 well), 'directionally' to a depth of 17,913 feet (5,460 meters). The purpose of the Ma'anit-Rehoboth #2 well was both to appraise the apparent findings of the Ma'anit #1 in the Triassic-age formations (at a depth of between approximately 12,000 and 15,400 feet) and to test the deeper Permian-age horizons at a depth of approximately 16,000 to 18,000 feet. The well penetrated a number of geologic

formations that were preliminarily deemed to have hydrocarbon potential and, during well operations, a small quantity of crude oil was retrieved. However, in April 2010, following the completion of testing procedures, the Company determined that commercial quantities of hydrocarbons were not present in the Ma'anit-Rehoboth #2 well and, accordingly, we suspended drilling operations in that well and recognized a non-cash impairment charge to our unproved oil and gas properties in the quarter ended June 30, 2010.

As the Ma'anit-Rehoboth #2 well did not reach the Permian-age geological formation beneath the Joseph License area, we drilled a subsequent well, the Ma'anit-Joseph #3 well, at a location near the Ma'anit-Rehoboth #2 well (in the Joseph License Area). The drilling of the Ma'anit-Joseph #3 well commenced in August 2010 and on June 13, 2011, we reached the target depth of approximately 19,357 feet (5,900 meters) in Northern Israel, after which we carried out open-hole wireline logging operations to learn more regarding the well's lithology (rock types). In July 2011, we conducted an open-hole drill stem test and the test results confirmed that the well does not contain hydrocarbons in commercial quantities in the zone tested. Following review and further analysis of the operations and geological reports prepared by the Company's geoscientists relating to the drilling and testing of the Ma'anit-Joseph #3 well, it was concluded that commercial quantities of hydrocarbons are not present within the Ma'anit-Joseph #3 wellbore and that no further drilling will take place in this well. Accordingly, we recorded a non-cash impairment charge of \$42,488,000 in the quarter ended September 30, 2011 to our unproved oil and gas properties in respect of both the Ma'anit-Joseph #3 and Elijah #3 wells.

#### Asher-Menashe License Area

To date, we have partly completed one exploratory well in the Asher-Menashe License Area. In October 2009, we commenced drilling the Elijah #3 well, within the Asher-Menashe License area, toward the Triassic geological formation, which we estimated was below approximately 10,000 feet (3,048 meters). As of January 15, 2010, we had drilled to a depth of 10,938 feet (3,334 meters). In early February 2010, we temporarily suspended drilling operations in the well following our unsuccessful efforts to retrieve a stuck pipe, pending further analysis of the situation.

Approximately 15 miles (25 kilometers) of 2-D seismic data was acquired in June 2010 and was processed by a geophysical consultant in the United States and integrated into the Zion's geological assessment by our geologists. Analysis of the acquired data helped us to refine the geologic model of the area and indicated that the Asher volcanic section, wherein the drilling tools were stuck, is likely substantially greater (i.e., thicker and deeper) than originally predicted by the older, original data. Following review and further analysis of the operations and geological reports prepared by our geoscientists, it was concluded that commercial quantities of hydrocarbons were not present within the Elijah #3 wellbore and that no further drilling will take place in this well. Accordingly, we recorded a non-cash impairment charge of \$42,488,000 in the quarter ended September 30, 2011 to our unproved oil and gas properties in respect of both the Elijah #3 and the Ma'anit-Joseph #3 wells.

On November 28, 2011, we signed an agreement with the GII relating to the acquisition (using Vibroseis equipment) of approximately 11 kilometers of 2-D seismic lines located within Asher-Menashe License area. A VSP involves lowering specialized geophysical equipment into a wellbore (perhaps the Elijah #3 well) while recording a seismic wave source (such as from a Vibroseis truck) along the surface. The VSP acquisition is expected to begin as soon as an appropriate rig and geophysical equipment are available, which the Company currently anticipates will be in the second quarter of 2012.

Jordan Valley License

On October 4, 2011, in connection with planned seismic, magnetic, and gravimetric surveys on the Jordan Valley License area, we entered into an agreement with GII to obtain seismic data. The agreement provides for a seismic survey of not less than 10 kilometers.

#### **Office Properties**

We leased approximately 3,600 square feet of office space in Dallas under a lease which expired on October 31, 2011. The monthly rent was \$4,700 for the twelve-month period ended October 31, 2011.

On October 11, 2011, we entered into the Third Amendment to Lease Agreement (the "Lease Amendment") with Hermosa, L.P., a Texas limited partnership (the "Lessor") for the renewal of the lease of our current office premises in Dallas Texas as well as the addition of additional adjacent space in the building.

Pursuant to the Lease Amendment, the lease term on the existing office space as well as the additional premises described below has been extended to October 31, 2015. In addition to the office premises it previously occupied, the Lease Amendment also covers an additional 1,351 rentable square feet in Suite #310 and 1,324 rentable square feet of space on Suite 304. The total rentable area under the Lease Amendment covers 6,458 rentable square feet.

Rent is to be paid on a monthly basis and is \$6,996 per month for each month from November 1, 2011 through October 31, 2012; thereafter, \$7,534 for each month through October 31, 2013; \$7,534 for each month through October 31, 2014 and \$8,072 for each month through October 31, 2015. Notwithstanding the foregoing, the parties have agreed that so long as there is no event of default under the Lease Amendment then the monthly payments for Suite 304 in the monthly amount of \$1,434 through October 31, 2012 and \$1,544 thereafter through October 31, 2013 are to be abated. Accordingly, assuming an event of default has not occurred, the monthly rent for the period through October 31, 2012 will be \$5,561 and for the period from November 1, 2012 through October 31, 2013 will be \$5,989. We are also obligated to pay our pro-rated portion of all operating expenses.

During July 2005, we entered into a rental agreement for office premises in the industrial area of Caesarea, Israel. The rental was for a six-month period commencing August 1, 2005 with two additional three-month option periods at a monthly rental cost of \$3,000. We subsequently extended the rental agreement through January 31, 2009, and then exercised the option to extend the lease for two additional periods of six months each (through January 31, 2010). We subsequently entered into two additional six-month extensions through April 30, 2011. The monthly rental cost during this extended period was \$3,000.

In December 2010, we entered into a sublease agreement for the lease of office premises in Caesarea, Northern Industrial Park, Israel. The sublease agreement provides for the rental of approximately 5,500 square feet in an office building. The sublease term is scheduled to begin on April 3, 2011 and continue through March 31, 2014. Notwithstanding the foregoing, the sublease agreement term is expressly subject to the primary lease agreement that the sub lessor has with the landlord of the premises and such sublease lease agreement term will expire upon the termination, for whatever reason, of the primary lease. In addition, under the sublease agreement, at the end of the initial 12 months of the sublease term, either the sub lessor or we, may, at its sole discretion upon the furnishing to the other of written notice within seven days after the end of the initial 12 month period, terminate the sublease agreement, whereupon we will be required to vacate the subleased premises within six months of the giving of such notice. The right to terminate early as described above shall also inure to each of us and the sub-lessor at the end of each of the 18th and 24th month following the commencement of the sublease lease agreement term. Under the sublease agreement, we are authorized to further sublease all or part of the subleased premises to a third party that is pre-approved by the Sub-lessor.

Rent is to be paid on a monthly basis in the base amount of approximately NIS 28,400 per month (approximately \$7,500 per month at the exchange rate in effect on the date of this report). We are also obligated to pay all cost of living adjustments, as well as its pro-rated portion of all taxes, utilities, insurance and maintenance payments during the sublease term.

In March 2010, we leased approximately 500 square feet of office space in State College, Pennsylvania for its President and Chief Operating Officer. The initial lease was for 12 months and expired at the end of February 2011. The monthly rental amount was \$525. In February 2011, the lease was extended by 12 months to the end of February 2012 and the monthly rental amount was increased to \$550. In October 2011, we decided to close the office in State College, Pennsylvania and in January 2012, by mutual agreement with the lessor, the lease was surrendered at a final cost of \$550 on December 1, 2011.

#### ITEM 3. LEGAL PROCEEDINGS

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

# ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

#### **PART II**

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

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

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

Fiscal Year	High	Low
2011:		
First Quarter	\$5.89	\$4.31
Second Quarter	\$6.98	\$4.76
Third Quarter	\$5.90	\$1.44
Fourth Ouarter	\$3.11	\$1.76

Fiscal Year	High	Low
2010:		
First Quarter	\$7.39	\$4.95
Second Quarter	\$7.24	\$4.91
Third Quarter	\$6.44	\$4.40
Fourth Quarter	\$5.42	\$4.54

The closing per share sales price of our Common Stock on March 5, 2012 was \$2.50.

#### **Holders**

As of March 5, 2012 there were approximately 4,176 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.

# **Performance Graph**

The following graph presents a comparison of the yearly percentage change in the cumulative total return on our common stock over the period from January 3, 2007, the date our common stock was first publicly traded at an Initial Public Offering (IPO) price of \$7.00 per share of common stock, to December 31, 2011, with the cumulative total return of the S&P 500 index and the Dow Jones US Oil & Gas Explorers Index (IEO) over the same period. The graph assumes that \$100 was invested on January 3, 2007 in our common stock at the \$7.00 IPO price and in each of the other two indices.

This historic stock price performance is not necessarily indicative of future stock performance.

	S&P500	US Oil & Gas Explorers Index	Zion Oil & Gas
January 3, 2007	\$100	\$100	\$100
December 31, 2007	\$103.65	\$144.67	\$95.57
December 31, 2008	\$63.76	\$84.03	\$92.71
December 31, 2009	\$78.72	\$118.55	\$102.14
December 31, 2010	\$88.78	\$140.64	\$68.29
December 31, 2011	\$88.78	\$136.10	\$31.57

The performance graph and the information contained in this section is not "soliciting material," is being "furnished," not "filed" with the SEC and is not to be incorporated by reference into any of our filings under the Securities Act or the Exchange Act, whether made before or after the date hereof, and irrespective of any general incorporation language contained in such filing.

# ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with the financial statements and the notes thereto and the information contained in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations." Historical results are not necessarily indicative of future results. The selected financial data for the years ended December 31, 2008 and 2007 and at December 31, 2009, 2008 and 2007 are derived from our audited financial statements not included in this report. All data is in thousands of USD, except share data:

	2011	2010	2009	2008	2007	Period from April 6, 2000 (inception) to December 31, 2011	
Statement of Operations Data							
Revenues	_	_	_	_	_	_	
General and administrative expenses							
Legal and professional	1,265	895	861	1,015	1,209	8,115	
Salaries	3.730	2,393	2,360	1,663	1,475	14,191	
Other	4,530	2,366	1,344	1,397	1,074	11,894	
Impairment of unproved oil and gas properties	42,488	22,022	0	0	9,494	74,004	
Other (expense) income, net	(169)	18	141	57	205	(465	)
Net loss	(52,182)	(27,658)	(4,424)	(4,018)	(13,047)	(108,669	)
Net loss per share of common stock	(1.86)	(1.25)	(0.34)	(0.39)	(1.34)	(8.42	)
Balance Sheet Data							
Cash and cash equivalents	22,231	21,243	20,734	1,726	4,590	-	
Unproved oil and gas properties	3,535	25,882	23,759	5,246	2,590	-	

Current liabilities	3,847	2,595	2,601	1,827	1,317	-
Total liabilities	4,275	2,934	2,786	2,121	1,633	-
Stockholders' equity	22,492	46,369	43,439	5,555	5,788	-

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

#### Introduction

The following discussion and analysis should be read in conjunction with Item 6. "Selected Financial Data" and our accompanying financial statements and the notes to those financial statements included elsewhere in this Annual Report. Some of our discussion is forward-looking and involve 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 is an initial stage oil and gas exploration company with a history of over 11 years of oil and gas exploration in Israel. As of December 31, 2011, we have no revenues or operating income and are considered to be an "exploration stage" company.

We are headquartered in Dallas, Texas and have a field office in Caesarea, Israel.

We hold three petroleum exploration licenses, named the "Joseph License", the "Asher-Menashe License" and the "Jordan Valley License", covering approximately 218,000 acres of land onshore Northern Israel. To date, we have completed drilling three exploratory wells and have partly completed drilling one exploratory well in the Asher-Menashe License area.

We currently have pending before the Petroleum Commissioner of the State of Israel (the "Commissioner") applications for one exploration license and two preliminary exploration permits. The exploration license was submitted in February 2011 for an area covering approximately 74,925 acres of land within the vicinity of the Dead Sea, in central Israel, which we have named the Dead Sea License Application. At the same time, we submitted the first of the two applications for preliminary exploration permits described above. The permit that would result from this first application would cover part of the area previously covered by our previous Issachar-Zebulun Permit, which expired on February 23, 2011. Much of the remainder of the area covered by such permit is included in our recently granted Jordan Valley License. We named the new permit application the Zebulun Permit Application. It covers approximately 157,480 acres of land. In June 2011, we submitted the second of two applications for preliminary exploration permits described above. This application was for a preliminary exploration permit on an area adjacent to our Joseph License area. We named the new permit application the "Asher-Joseph Permit Application". The

Asher-Joseph Permit Application area is on approximately 80,000 acres of land and is to the west and south of Zion's Joseph License area. It is onshore Israel and traverses a section of land, adjacent to the coastline, between Haifa and Tel Aviv. No assurance can be provided that any of the Dead Sea License Application, the Zebulun Permit Application or Asher-Joseph Permit Application will ultimately be granted.

#### **Current Exploration Efforts and Financing**

We are currently in the process of identifying our next drilling prospect. We plan to acquire additional geological and geophysical data in the Jordan Valley License area within the first or second quarter of 2012 and additional geological and geophysical data, including a vertical seismic profile, in the Asher-Menashe License area, once an appropriate rig and related equipment becomes available, which we expect will be in the second quarter of 2012. Once we complete the processing and interpretation of the results of this data, we anticipate that we will be able to identify our next exploratory drilling prospect. Currently, we anticipate that our next drilling prospect will be in either the Asher-Menashe License area or the Jordan Valley License area.

Once we identify our drilling prospect, we will need to work towards the completion of the permitting process. We also need to finalize arrangements for a drilling rig and experienced drilling crew. While we have been in discussion with an appropriate rig owner, as of now we have not yet entered into any legally binding documents. Subject to finalizing drilling arrangements and importing into Israel and appropriate rig and completing the permitting process, we currently estimate that we will not be in a position to commence drilling before the third quarter of 2012. These are estimated time frames based on the information available to us and are accordingly subject to change.

We anticipate that we will need to raise significant funds in order to complete any exploratory well that we spud. We anticipate that we will need to raise these funds in 2012. To date, we have funded our operations through the issuance of our securities. We anticipate that we will 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 terms favorable to use (or at all).

Our recent financings are discussed below.

Between October 24, 2008 and January 9, 2009, we raised from a follow-on public offering gross proceeds of \$6,663,000 from the sale of units of our securities, of which \$240,000 was for debt conversion. Each unit offered in the follow-on offering consisted of (i) one share of common stock, par value \$.01 per share and (ii) one warrant to purchase one share of common stock at a per share exercise price equal to \$7.00 (trading under the symbol ZNWAW). The ZNWAW warrants expire on December 31, 2012.

In June 2009, we raised gross proceeds of \$21 million from a rights offering to common stockholders of up to 4.2 million shares of our common stock. The rights offering was fully subscribed, resulting in our distribution of all of the 4.2 million shares that were offered.

In November 2009, we raised an additional \$18 million from a rights offering to common stockholders of up to 3.6 million shares of our common stock. The rights offering was fully subscribed, resulting in our distribution of all of the 3.6 million shares that were offered.

In July 2010, we raised approximately \$12.4 million from a rights offering to common stockholders of up to 10 million shares of our common stock. The rights offering resulted in our distribution of 2,471,117 shares.

In December 2010, we raised approximately \$18.2 million from a fourth rights offering to common stockholders of up to 3,820,391 shares of our common stock and warrants to purchase an additional 3,820,391 shares of our common

stock. The rights offering was subscribed for a total of 3,642,821 shares of our common stock and warrants (trading under the symbol ZNWAZ) to purchase an additional 3,642,821 shares of our common stock. The ZNWAZ Warrants expire on December 31, 2012.

In July 2011, we raised approximately \$24.6 million from an additional rights offering to common stockholders of up to 6,250,000 shares of our common stock and warrants to purchase an additional 12,500,000 shares of our common stock. The rights offering was subscribed for a total of 4,915,349 shares of our common stock and warrants to purchase an additional 9,830,698 shares of our common stock (trading under the symbol ZNWAL). The ZNWAL Warrants expire on August 15, 2012.

Between January 1, 2011 and February 21, 2012, we raised approximately \$414,000 from the exercise of our publicly traded warrants trading under the symbol ZNWAW. We reduced the exercise price of these warrants, for a limited time period extending from January 3, 2011 through March 7, 2011, to \$4 (from an original per share exercise price of \$7). In December 2011, we extended the exercise period of the ZNWAW Warrants to December 31, 2012. In addition, between January 1, 2011 to February 21, 2012, we raised approximately \$1,391,000 from the exercise of the ZNWAZ Warrants. In addition, between August 16, 2011 to February 21, 2012, we raised approximately \$31,000 from the exercise of the ZNWAL Warrants.

# **Principal Components of our Cost Structure**

Our operating and other expenses primarily consist of the following:

Impairment of Unproved oil and gas properties: Impairment expense is recognized if a determination is made that a well will not be able to be commercially productive. The amounts include amounts paid in respect of the drilling operations as well as geological and geophysical costs and various amounts that were paid to Israeli regulatory authorities.

General and Administrative Expenses: Overhead, including payroll and benefits for our corporate staff, costs of managing our exploratory operations, audit and other professional fees, and legal compliance are included in general and administrative expense. General and administrative expense also includes 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. 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**

Our financial statements have been prepared on a going concern basis, which contemplates realization of assets and liquidation of liabilities in the ordinary course of business. Since we are in the development stage, we have limited capital resources, no revenue to date and a loss from operations. 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. The uncertainty of these conditions in the past has raised substantial doubt about our ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

#### **Critical Accounting Policies**

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

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

Impairment of Oil and Gas Properties

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

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

Our oil and gas properties represent an investment in unproved properties. These costs are excluded from the amortized cost pool until proved reserves are found or until it is determined that the costs are impaired. All costs excluded are reviewed at least quarterly to determine if impairment has occurred. The amount of any impairment is amend 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.

In July 2011, following production and other testing conducted at the Ma'anit-Joseph #3 well, we conducted an open-hole drill stem test and the test results confirmed that the well does not contain hydrocarbons in commercial quantities in the zone tested. Following review and further analysis of the operations and geological reports prepared by our geoscientists in consultation with outside consultants relating to the drilling and testing of the Ma'anit-Joseph #3 well, it was determined that commercial quantities of hydrocarbons are not present in the Ma'anit-Joseph #3 well or the Elijah #3 well. Accordingly, we recorded a non-cash impairment charge of \$42,488,000 in the quarter ended September 30, 2011 to our unproved oil and gas properties in respect of the two wells. In order to identify potential drilling prospects in the Asher-Menashe License area, we plan to enter into the Elijah #3 wellbore to acquire additional geologic and geophysical data, including a vertical seismic profile. We anticipate that suitable drilling equipment and crew will become available for these purposes in May-June 2012.

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.

In June 2007, following the analysis of the results of the testing of our Ma'anit #1 well workover and an evaluation of the mechanical condition of the well, we determined that the well was incapable of producing oil and/or gas in commercial quantities. In order to optimize drilling operations on the Company's planned Ma'anit-Rehoboth #2 well, we ceased operations on the Ma'anit #1 well and, as required by the Petroleum Law, formally relinquished the Ma'anit-Joseph License. As planned, we used the Ma'anit #1 wellbore, down to approximately 9,842 feet (3,000 meters), as the upper part of the wellbore for the Ma'anit-Rehoboth #2 well. This well was directionally drilled from that point to penetrate the middle and the lower Triassic. The Company drilled this well to a depth of 5,460 meters (17,913 feet). In April 2010, following production and other testing, management concluded that commercial quantities of hydrocarbons were not present in the Ma'anit-Rehoboth #2 well. Accordingly, the Company recorded a non-cash impairment charge of \$22,022,000 in the quarter ended June 30, 2010 to its unproved oil and gas properties.

Following the impairment charges noted above, the total net book value of our unproved oil and gas properties under the full cost method is \$3,535,000 at December 31, 2011.

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

Valuation of deferred taxes

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

Asset Retirement Obligation

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

#### RESULTS OF OPERATIONS

The following table sets forth our Statements of Operations data for the years ended December 31st. All data is in thousands of USD:

	2011	2010	2009
General and administrative expenses			
Legal and Professional	1,265	895	861
Salaries	3,730	2,393	2,360
Other	4,530	2,366	1,344
Impairment of unproved oil and gas properties	42,488	22,022	
Other Income (expense), net	(169)	18	141
Net loss	(52,182)	(27,658)	(4,424)

FOR THE YEAR ENDED DECEMBER 31, 2011 COMPARED TO DECEMBER 31, 2010

*Revenue.* We currently have no revenue generating operations as we are still a development stage company.

General and administrative expenses. General and administrative expenses for the year ended December 31, 2011 were \$52,013,000 compared to \$27,676,000 for the year ended December 31, 2010. The increase in general and administrative expenses in 2011 compared to 2010 is primarily attributable to the impairment charge of \$42,488,000 recorded during the three months ended September 30, 2011 in respect of both the Ma'anit-Joseph #3 well and the Elijah #3 well. Salary expenses for the year ended December 31, 2011 were \$3,730,000 compared to \$2,393,000 for the year ended December 31, 2010. The increase in salary expenses during 2011 is mainly attributable to \$1,253,000 in non-cash expenses related to the grant of incentive options. These options were granted by the Board to ensure the retention of key members of both management and staff and to ensure that the interests of management were aligned with the interests of stockholders. The remainder of the increase in salary expenses is attributable to the expansion of staff to support operations. Legal and professional fees for 2011 were \$1,265,000 compared to \$895,000 for 2010. The increase in legal and professional fees is primarily attributable to the increased utilization of legal services resulting from the increase in operational activity in the first half of 2011. Other general and administrative expenses for the year ended December 31, 2011 were \$4,530,000 compared to \$2,366,000 for 2010. The \$2,164,000 increase in

other general and administrative expenses, which is comprised of non-compensation, non-professional and non-operational expenses incurred in our offices, is primarily attributable to drilling and production related expenses that we recorded in the fourth quarter of 2011 in the amount of \$1,189,000 following the recording of the impairment charge during the quarter ended September 30, 2011 and investor relations related expenses in the amount of \$932,000.

Other income (expense), net. Other income/(expense) for the year ended December 31, 2011 was (\$169,000) compared to \$18,000 for the year ended December 31, 2010. The decrease in interest income/(loss), net is primarily attributable to currency exchange losses generated by exchange rate fluctuations of the US dollar to the New Israeli Shekel during 2011.

*Net Loss.* Net loss for the year ended December 31, 2011 was \$52,182,000 compared to \$27,658,000 for the year ended December 31, 2010.

FOR THE YEAR ENDED DECEMBER 31, 2010 COMPARED TO DECEMBER 31, 2009

*Revenue.* We currently have no revenue generating operations as we are still a development stage company.

General and administrative expenses. General and administrative expenses for the year ended December 31, 2010 were \$27,676,000 compared to \$4,565,000 for the year ended December 31, 2009. The increase in general and administrative expenses in 2010 compared to 2009 is primarily attributable to the impairment charge of \$22,022,000 recorded during the three months ended June 30, 2010 in respect of the Ma'anit-Rehoboth #2 well. Salary expenses for the year ended December 31, 2010 were \$2,393,000 compared to \$2,360,000 for the year ended December 31, 2009. Legal and professional fees for 2010 were \$895,000 compared to \$861,000 for 2009. Other general and administrative expenses for the year ended December 31, 2010 was \$2,366,000 compared to \$1,344,000 for 2009, representing an increase of 76%. The increase in other general and administrative expenses, which is comprised of non-compensation, non-professional and non-operational expenses incurred in our three offices, is primarily attributable to an increase in marketing and investor relations related expenses (\$669,000), and in insurance related expenses (\$163,000).

Other income (expense), net. Other income/(expense) for the year ended December 31, 2010 was \$18,000 compared to \$141,000 for the year ended December 31, 2009. The decrease in interest income, net is attributable to the reduction in the rate of interest offered on cash deposits by financial institutions.

*Net Loss.* Net loss for the year ended December 31, 2010 was \$27,658,000 compared to \$4,424,000 for the year ended December 31, 2009.

#### **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 (or securities convertible into common stock) as well as proceeds from the exercise of warrants and options to purchase common equity.

Our ability to continue as a going concern is dependent upon obtaining the necessary financing to undertake 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, 2011 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. These matters may raise doubt about our ability to continue as a going concern.

At December 31, 2011, we had approximately \$22,231,000 in cash and cash equivalents compared to \$21,243,000 at December 31, 2010. Our working capital (current assets minus current liabilities) was \$19,000,000 at December 31, 2011 and \$20,575,000 at December 31, 2010.

During the year ended December 31, 2011, we recorded expenses paid, relating to the rights offering completed in July 2011, in the amount of \$248,000. Net cash provided by financing activities was \$26,156,000. Net cash used for investment in our unproved oil and gas properties was \$19,578,000 for the year ended December 31, 2011 and \$24,145,000 for the year ended December 31, 2010; these amounts were primarily drilling related expenditures.

We expect to incur expenditures to further our exploration programs. We estimate that, when we are not actively drilling a well, our monthly expenditure is approximately \$600,000 per month. However, when we are engaged in active drilling operations, we estimate that there is an additional cost of approximately \$2,500,000 per month. The drilling cost estimates are subject to change and we have not, as of March 1, 2012, finalized the terms relating to a drilling rig, appropriate crew and related matters. Assuming that we spud our next exploratory well in October-November 2012, of which no assurance can be provided, management believes that our existing cash balance will be sufficient to satisfy our current obligations and satisfy our exploration budget through December 31, 2012. We are considering various alternatives with respect to raising additional capital but to date have made no specific plans or arrangements. As of March 5, 2012, we are unable to state the amount of any funds that will be required for these purposes. As a result, no specific plans or arrangements have been made to raise additional capital and we have not entered into any agreements in that regard. We expect that when we seek to raise additional capital it will be through the sale of equity securities, debt or other financing arrangements. We are unable to estimate the terms on which such capital will be raised, the price per share or possible number of shares involved or the terms of any agreements to raise capital under other arrangements. Because of the early stage of our operations and our lack of any oil and natural gas reserves, there can be no assurance this capital will be available and if it is not, we may be forced to substantially curtail or cease exploration, appraisal and development expenditures.

As of February 21, 2012, we have outstanding publicly listed warrants for 504,429 shares of our Common Stock exercisable through December 31, 2012 (the ZNWAW Warrants) at a per share exercise price of \$7.00; there are additional publicly listed warrants for 3,294,996 shares of our Common Stock exercisable through December 31, 2012 (the ZNWAZ Warrants) at a per share exercise price of \$4.00; and additional publicly listed warrants for 9,821,754 shares of our Common Stock exercisable through August 15, 2012 (the ZNWAL Warrants) at a per share exercise price of \$3.50. If all of these warrants are exercised for cash, of which no assurance can be provided, then we would received cash proceeds of \$51,087,000. In order to increase the likelihood of these warrants being exercised, the stock price of our publicly traded Common Stock will need to remain above the exercise prices. As of March 5, 2012, the stock price of our publicly traded Common Stock is below these exercise prices. No assurance can be provided that we will be able to raise any significant funds from the exercises of these warrants.

#### **Tabular Disclosure of Contractual Obligations**

The table below provides estimates of the timing of future payments that we are obligated to make based on agreements in place at December 31, 2011. We believe that drilling related commitments will be a principal component of our contractual obligation over the next several years. However, we are currently in the process of acquiring and interpreting seismic and other non-drilling related exploratory tests in order to identify our next drilling prospect. We are also in discussion with various drilling rig operators in order to identify and bring into Israel a drilling rig with the appropriate drilling depth capacity. Once we finalize our drilling plans and enter into appropriate agreements with drilling rig operators, which we anticipate will take place by the fourth quarter of 2012, we will be able to accurately assess our drilling related obligation going forward.

As of December 31, 2011, we do not have any off-balance sheet debt or other such unrecorded obligations and we have not guaranteed the debt of any other party.

The following summarizes our contractual financial obligations for continuing operations at December 31, 2011 and their future maturities.

	Payment due by period (in Thousands of USD)					
	2012	2013	2014	2015	Thereafter	Total
<b>Drilling Commitments</b>	\$2,304				_	- \$2,304
Operating Leases	\$216	\$183	\$120	\$81	_	- \$600
<b>Employment Agreements</b>	\$480				_	- \$480
TOTAL	\$3,000	\$183	\$120	\$81	\$ _	- \$3,384

## **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**

During 2011, there were no recently issued accounting pronouncements which were issued and which have relevancy to our business.

# 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 nominated in New Israeli Shekels "NIS". As a result, we have significant exposure to the risk of fluctuating exchange rates with the US Dollar, our primary reporting currency. The recent weakness of the US Dollar in the international markets has been equally reflected against NIS and this may continue in the future. Since December 31, 2011, 2010, and 2009 to February 21, 2012, the US Dollar has devalued by approximately (2.2%), 5.3% and (1.0%) respectively against the NIS. Continuing devaluation of the US dollar against the NIS will result in higher operating costs from NIS denominated expenses. We do not currently hedge against currency exchange rate risks.

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, 2011, we had cash, cash equivalents and short-term bank deposits of approximately \$22,500,000. The weighted average annual interest rate related to our cash and cash equivalents for the year ended December 31, 2011 was approximately 0.24%.

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

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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

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

As disclosed in the Current Report on Form 8-K that we filed on August 4, 2011, on August 1, 2011, the audit committee (the "Audit Committee") of our board of directors was notified by Somekh Chaikin ("SC"), a member of KPMG International, that SC would have to resign as our independent registered public accounting firm following the filing of our quarterly report on Form 10-Q for the three months ending September 30, 2011, in accordance with the requirements of the Texas State Board Public Accountancy ("Texas State Board"). SC's action was taken in light of an agreed cease and desist order that SC entered into with the Texas State Board following an inquiry by the Texas State Board regarding SC's ability to provide attestation services for companies with principal executive offices in the State of Texas without being registered by the Texas State Board. SC informed the Company that, as a result of these

developments, it could no longer provide auditing services to companies with principal executive offices in Texas. The Company's principal executive offices are located in Dallas, Texas.

On October 17, 2011, the Audit Committee engaged Malone Bailey, LLP as our independent registered public accounting firm.

Except as discussed in the next succeeding paragraph, the audit reports of SC on our financial statements and the effectiveness of our internal control over financial reporting for the 2010 and 2009 fiscal years did not contain an adverse opinion, or a disclaimer of opinion, or qualification or modification as to uncertainty, audit scope, or accounting principles.

SC's report on our financial statements and the effectiveness of the Company's internal control over financial reporting as of and for the years ended December 31, 2010 and 2009, contained a separate paragraph stating that "The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company is in its development stage and has no operating revenue, limited capital resources and a loss from operations, all of which raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty."

During the fiscal years ended December 31, 2010 and 2009 and subsequent thereto, there were no disagreements with SC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure that, if not resolved to SC's satisfaction, would have caused SC to make reference in connection with their opinion to the subject matter of the disagreement, nor were there any "reportable events" (as that term is described in Item 304(a)(1)(v) of Regulation S-K).

#### ITEM 9A. CONTROLS AND PROCEDURES

#### EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES.

We carried out an evaluation required by the 1934 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 1934 Act, as of December 31, 2011. 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, 2011, to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the 1934 Act is 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.

# MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING; CHANGES IN INTERNAL CONTROLS OVER FINANCIAL REPORTING.

During the year ended December 31, 2011, there have been no changes in our internal controls over financial reporting that have materially affected, or are reasonably likely to materially affect, these controls, although a number of new controls were implemented during 2011.

Our management, including our principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control* - *Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its evaluation under the framework in *Internal Control* - *Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2011 in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The effectiveness of our internal control over financial reporting as of December 31, 2011 has been independently assessed by MaloneBailey, LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8 of this Annual Report on Form 10-K.

#### **Limitations on Controls**

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

ITEM 9B. OTHER INFORMATION

None.

#### **PART III**

#### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to such information as set forth in our definitive Proxy Statement (the "2012 Proxy Statement") for our 2012 annual meeting of stockholders. The 2012 Proxy Statement will be filed with the SEC not later than 120 days subsequent to December 31, 2011.

#### ITEM 11.EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the 2012 Proxy Statement for the 2012 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2011.

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

The information required by this item is incorporated herein by reference to the 2012 Proxy Statement for the 2012 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2011.

#### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated herein by reference to the 2012 Proxy Statement for the 2012 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2011.

# ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the 2012 Proxy Statement for the 2012 annual meeting of stockholders, which will be filed with the SEC not later than 120 days subsequent to December 31, 2011.

#### **PART IV**

#### ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial Statements:

Report of Independent Registered Public Accounting Firm – MaloneBailey, LLP

Report of Independent Registered Public Accounting Firm – KPMG Somekh Chaikin

Report of Independent Registered Public Accounting Firm - Lane Gorman Trubitt, PLLC

Balance Sheets as of December 31, 2011 and 2010

Statement of Operations for the Years Ended December 31, 2011, 2010 and 2009 and the Period from April 6, 2000 (Inception) to December 31, 2011

Statements of Changes in Stockholders' Equity for the Period from April 6, 2000 (Inception) to December 31, 2011

Statements of Cash Flows for the for the Years Ended December 31, 2011, 2010 and 2009 and the Period from April 6, 2000 (inception) to September 30, 2011

Notes to Financial Statements

#### **Exhibit**

Description

#### Number

Certificate of Amendment to Amended and Restated Certificate of Incorporation of Zion Oil & Gas, Inc.

- 3.1 Incorporation (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)
- Amended and Restated Bylaws of Zion Oil & Gas, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Form 10-KSB for the year ended December 31, 2007 as filed with the SEC on March 28, 2008)
- Joseph License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 16, 2007)
- Asher –Menashe License (incorporated by reference to Exhibit 10.2 to the Company's Form 10-QSB for the quarter ended June 30, 2007 as filed with the SEC on August 20, 2007) Memorandum
- 10.3 Executive Employment and Retention Agreements (Management Agreements)
  - (i) Employment Agreement dated as of November 1, 2007, between Zion Oil & Gas, Inc. and Richard J. Rinberg (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, 2007)
  - (ii) Retention and Management Services Agreement dated as of November 1, 2005, between Zion Oil & Gas and Richard Rinberg (incorporated by reference to Exhibit 10.4 to the Company's Form 10-KSB for the year ended December 31, 2005 as filed with the SEC on September 14, 2006)
  - (iii) Employment Agreement dated as of January 1, 2010 between Zion Oil & Gas, Inc. and John Brown (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on January 27, 2010)
  - (iv) Employment Agreement dated as of January 1, 2010 between Zion Oil & Gas, Inc. and William L. Ottaviani (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on February 1, 2010)
  - (v) Employment Letter Agreement entered into on January 31, 2011 between Zion Oil & Gas, Inc. and Victor G. Carrillo (incorporated by reference to Exhibit 10.4 to the Company's Annual Report on Form 10-K as filed with the SEC on March 16, 2011)
  - (vi) Second Amended and Restated Employment Agreement dated as of April 1, 2011 between Zion Oil & Gas, Inc. and Ilan Sheena (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011 as filed with the SEC on May 10, 2011)

- International Daywork Drilling Contract Land dated as of September 12, 2008 between Zion Oil & Gas, Inc.
- 10.4 and Aladdin Middle East Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on September 16, 2008)
  - Amendment No. 1, dated as of December 7, 2008, to International Daywork Drilling Contract Land dated as of
- 10.5 September 12, 2008 between Zion Oil & Gas, Inc. and Aladdin Middle East Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on December 16, 2008)
- 10.6 2005 Stock Option Plan (incorporated by reference to Exhibit 10.5 to the Company's Form 10-KSB for the year ended December 31, 2005 as filed with the SEC on September 14, 2006)
- Extension to Joseph License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 27, 2011)
- Extension to Asher-Menashe License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on July 12, 2011)

  Amendment No. 4, dated as of April 23, 2010, to International Daywork Drilling Contract Land dated as of
- 10.9 September 12, 2008 between Zion Oil & Gas, Inc. and Aladdin Middle East Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on May 24, 2010) Settlement Agreement dated as of July 8, 2010, between Zion Oil & Gas, Inc. and Sandra F. Green
- 10.10 (incorporated by reference to Exhibit 10.1 to the Company's Current Report Form 8-K as filed with the SEC on July 9, 2010)
  - Office Sublease Agreement dated as of December 30, 2010 between Zion Oil & Gas, Inc. and Spectrum
- 10.11 Dynamics (Israel) Ltd., as sublessor (incorporated by reference to Exhibit 10.14 to the Company's Annual Report Form 10-K for the year ended December 31, 2010 as filed with the SEC on March 16, 2011)
- 10.12 Jordan Valley License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on June 1, 2011)
  - Settlement Agreement dated as of August 3, 2011 between Zion Oil & Gas, Inc. and Patti Beals (incorporated
- 10.13 by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on August 5, 2011)
  - Third Amendment to Lease Agreement dated as of October 11, 2011 between Zion Oil & Gas, Inc. and
- 10.14 Hermosa LP (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 17, 2011)
  - Settlement Agreement dated as of October 3, 2011 between Zion Oil & Gas, Inc. and William L. Ottaviani
- 10.15 (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 19, 2011)
- 10.16 2011 Equity Incentive Plan (filed as Annex B to the Company's Definitive Proxy Statement on Schedule 14 A field with the SEC on May 9, 2011)
- 10.17 2011 Non-Employee Directors Stock Option Plan (filed as Annex C to the Company's Definitive Proxy Statement on Schedule 14 A field with the SEC on May 9, 2011)
- 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)

- 23.1\* Consent of MaloneBailey, LLP
- 23.2\* Consent of Lane Gorman Trubitt, PLLC
- 23.3\* Consent of Somekh Chaikin, a member of KPMG International
- 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* (1)	XBRL Instance Document
101.SCH*(1)	XBRL Taxonomy Extension Schema
101.CAL*(1)	XBRL Taxonomy Extension Calculation Linkbase
101.DEF*(1)	XBRL Taxonomy Extension Definition Linkbase
101.LAB*(1)	XBRL Taxonomy Extension Label Linkbase

XBRL Taxonomy Extension Presentation Linkbase

101.PRE\*(1)

1. In accordance with Rule 406T of Registration S-T, these exhibits are deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise not subject to liability under these sections.

56

<sup>\*</sup>filed herewith

#### **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/ Richard J. Rinberg By: /s/ Ilan Sheena Richard J. Rinberg Ilan Sheena,

Chief Executive Officer Chief Financial Officer

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

Date: March 7, 2012 Date: March 7, 2012

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:

/s/ John M. Brown John M. Brown	Chairman of the Board	March 7, 2012
/s/ Richard Rinberg Richard Rinberg	Chief Executive Officer (Principal Executive Officer) and Director	March 7, 2012
/s/ Victor G. Carrillo Victor G. Carrillo	Chief Operating Officer, President and Director	March 7, 2012
/s/ Ilan Sheena Ilan Sheena	Chief Financial Officer (Principal Financial and Accounting Officer)	March 7, 2012
/s/ Paul Oroian Paul Oroian	Director	March 7, 2012
/s/ Marc Singer Marc Singer	Director	March 7, 2012
/s/ Yehezkel Druckman Yehezkel Druckman	Director	March 7, 2012
/s/ Forrest A. Garb Forrest A. Garb	Director	March 7, 2012

/s/ Julian Taylor

Julian Taylor Director March 7, 2012

/s/ Robert Render

Robert Render Director March 7, 2012

57

# INDEX TO FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm – MaloneBailey, LLP	F-2
Report of Independent Registered Public Accounting Firm - KPMG Somekh Chaikin	F-4
Report of Independent Registered Public Accounting Firm - Lane Gorman Trubitt, PLLC	F-6
Balance Sheets	F-7
Statements of Operations	F-8
Statements of Changes in Stockholders' Equity	F-9
Statements of Cash Flows	F-20
Notes to Financial Statements	F-22

#### **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders

Zion Oil & Gas, Inc.

(a development stage company)

Dallas, Texas

We have audited the accompanying balance sheet of Zion Oil & Gas, Inc. (the "Company") as of December 31, 2011, and the related statements of operations, changes in stockholders' equity, and cash flows for the year then ended and for the period from April 6, 2000 (inception) to December 31, 2011. We also have audited the Company's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audit.

The cumulative statements of operations, stockholders' equity, and cash flows for the period from April 6, 2000 (inception) to December 31, 2011 include amounts for the period from April 6, 2000 (inception) to December 31, 2011 and for each of the years in the ten-year period ended December 31, 2010, which were audited by other auditors whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for the period from April 6, 2000 (inception) through December 31, 2010 is based solely on the report of other auditors.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our

opinions.

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

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Zion Oil & Gas, Inc as of December 31, 2011, and the results of their operations and their cash flows for the year then ended and for the period from April 6, 2000 (inception) to December 31, 2011, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company is in its development stage and has no operating revenue, limited capital resources and a loss from operations, all of which raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ MALONEBAILEY, LLP

www.malonebailey.com

Houston, Texas

March 7, 2012

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

Zion Oil & Gas, Inc.

We have audited the accompanying balance sheet of Zion Oil & Gas, Inc. (a development stage company) as of December 31, 2010, and the related statements of operations, changes in stockholders' equity, and cash flows for each of the years in the two year period ended December 31, 2010 and for the period from April 6, 2000 (inception) to December 31, 2010. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

The cumulative statements of operations, stockholders' equity, and cash flows for the period from April 6, 2000 (inception) to December 31, 2010 include amounts for the period from April 6, 2000 (inception) to December 31, 2000 and for each of the years in the four-year period ending December 31, 2004 which were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for the period from April 6, 2000 (inception) through December 31, 2004 is based solely on the report of other auditors.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinions.

In our opinion, based on our audits and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the financial position of Zion Oil & Gas, Inc. (a development stage company) as of December 31, 2010, and the results of its operations and its cash flows for each of the years in the two year period ended December 31, 2010 and for the period from April 6, 2000 (inception) to December 31, 2010, in conformity with U.S generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company is in its development stage and has no operating revenue, limited capital resources and a loss from operations, all of which raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Somekh Chaikin

Certified Public Accountants (Isr.),

A Member of KPMG International

Tel Aviv, Israel

March 16, 2011

Report of Independent Registered Public Accounting Firm

might result from the outcome of this uncertainty.

Board of Directors and Stockholders
Zion Oil & Gas, Inc.
We have audited the cumulative amounts from April 6, 2000 (inception) to December 31, 2004 included in the statements of operations, changes in stockholders' equity, and cash flows of Zion Oil & Gas, Inc. (a development stage company). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these cumulative financial statements based on our audit.
We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.
In our opinion, the cumulative amounts since inception to December 31, 2004 referred to above present fairly, in all material respects, the results of operations and cash flows of Zion Oil & Gas, Inc. since inception to December 31, 2004, in conformity with accounting principles generally accepted in the United States of America.
As described in the first paragraph in Note 1B to the 2011 financial statements, the financial statements for all periods from April 6, 2000 (inception) until December 31, 2004 were previously restated.
The cumulative amounts referred to above have been prepared assuming that the Company will continue as a going

concern. As discussed in Note 1 to the financial statements, the Company is in its development stage and has

insignificant operating revenue. In addition, the Company has limited capital resources and has initiated a new phase of activity, all of which raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also discussed in Note 1. The financial statements do not include any adjustments that

/s/ Lane Gorman Trubitt, PLLC

Dallas, Texas

April 15, 2005, except for the first

paragraph in Note 1B as to

which the date is July 26, 2006

(A Development Stage Company)

#### **Balance Sheets as of**

	December 31 2011 US\$ thousands	December 31 2010 US\$ thousands
Current assets Cash and cash equivalents Fixed short term bank deposits Prepaid expenses and other Refundable value-added tax Total current assets	22,231 269 347 - 22,847	21,243 250 876 801 23,170
Unproved oil and gas properties, full cost method (See Note 4)	3,535	25,882
Property and equipment Net of accumulated depreciation of \$172,000 and \$116,000	239	159
Other assets Assets held for severance benefits	146	92
Total assets	26,767	49,303
Liabilities and Stockholders' Equity		
Current liabilities Accounts payable Asset retirement obligation Accrued liabilities (See Note 5) Deferred officers' compensation – short-term Total current liabilities Provision for severance benefits	261 870 2,716 - 3,847 428	388 50 2,136 21 2,595 339
Total liabilities	4,275	2,934

Commitments and contingencies (See Note 9)

Stockholders' equity

Common stock, par value \$.01; Authorized: 100,000,000 and 50,000,000 at December			
31, 2011 and 2010 respectively: Issued and outstanding: 30,432,760 and 24,867,218	304	248	
shares at December 31, 2011 and 2010 respectively			
Additional paid-in capital	130,857	102,608	
Deficit accumulated in development stage	(108,669)	(56,487	)
Total stockholders' equity	22,492	46,369	
Total liabilities and stockholders' equity	26,767	49,303	

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

(A Development Stage Company)

## **Statements of Operations**

	For the yea	r ended De	cember 31,	Period from April 6, 2000 (inception) to December 31
	2011	2010	2009	2011
	US\$	US\$	US\$	US\$
	thousands	thousands	thousands	thousands
Revenues	-	-	-	-
General and administrative expenses				
Legal and professional	1,265	895	861	8,115
Salaries	3,730	2,393	2,360	14,191
Other	4,530	2,366	1,344	11,894
Impairment of unproved oil and gas properties	42,488	22,022	-	74,004
Loss from operations	(52,013	(27,676	) (4,565	(108,204)
Other income (expense), net				
Termination expenses of offerings	_	_	-	(527)
Other income (expense), net	_	_	76	80
Foreign exchange income, (loss)	(194	(11	) 29	(176 )
Interest income, net	25	29	36	158
Loss before income taxes	(52,182	(27,658	) (4,424	(108,669)
Income taxes	(32,102	- (27,030	-	(100,00)
income taxes	-	-	-	-
Net loss	(52,182	(27,658	) (4,424	(108,669)
Net loss per share of common stock - basic and diluted (in US\$)	(1.86	(1.25	) (0.34	(8.42)
Weighted-average shares outstanding – basic and diluted (in thousands)	*27,986	*22,168	*13,139	*12,901

<sup>\*</sup> Adjusted to reflect bonus element in rights offering, see note 2K.

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

(A Development Stage Company)

# Statement of Changes in Stockholders' Equity

	Preferr Stock Shares Thousa	mount	Shares	n Stock Amount US\$	Paid-in capital US\$	Deficit aAccumul in developm stage US\$ sthousands	nen		nde
Balances on April 6, 2000	-	-	-	-	-	-	•	-	iius
Issued for cash (\$0.001 per share)	-	-	2,400	* _	2	-		2	
Issuance of shares and warrants in a private offering (\$1 per share)	-	-	100	* _	100	-		100	
Costs associated with the issuance of shares	-	-	-	-	(24	-		(24	)
Waived interest on conversion of debt	-	-	-	-	* _	-		* _	
Value of warrants granted to employees Net loss Balances as of December 31, 2000	- - -	- - -	- - 2,500	- - * _	2 - 80	- (5 (5	)	2 (5 75	)
Issuance of shares and warrants in a private offering in January 2001 (\$1 per share)	-	-	135	* _	135	-		135	
Issuance of shares and warrants in a private offering which closed in September 2001 (\$1 per share)	-	-	125	* _	125	-		125	
Payment of accounts payable through issuance of shares and warrants	-	-	40	* _	40	-		40	
Payment of note payable through issuance of shares and warrants	-	-	25	* _	25	-		25	
Issuance of shares and warrants in a private offering which closed in November 2001 (\$1 per share)	-	-	175	* _	175	-		175	
Costs associated with the issuance of shares	-	-	-	-	(85	· -		(85	)

Waived interest on conversion of debt	-	-	-	-	1	-	1
Value of warrants granted to employees	-	-	-	-	37	-	37
Value of warrants granted to directors and consultants	-	-	-	-	3	-	3
Net loss	-	-	-	-	-	(207)	(207)
Balances as of December 31, 2001	-	-	3,000	* _	536	(212)	324

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

# Statement of Changes in Stockholders' Equity (cont'd)

	Prefei Stock	red	Commo	n Stock		al / i	Deficit Accumulate in Developmei	
		Amount US\$ sands thousand		Amount US\$ nds thousand	-		Stage US\$ thousands	Total US\$ thousands
Change in par value of common shares from \$ 0.0001 per share to \$0.01 per share	-	-	-	30	(30	)	-	-
Issuance of shares and warrants in a private offering which closed in January 2002 (\$1 per share)	-	-	20	* _	20		-	20
Issuance of shares and warrants in a private offering which closed in November 2002 (\$10 per share)	25	* _	22	* _	254		-	254
Payment of accounts payable through issuance of preferred shares and warrants	13	* _	-	-	127		-	127
Payment of accounts payable through issuance of common shares and warrants	-	-	111	1	131		-	132
Payment of note payable through issuance of shares and warrants	5	* _	-	-	50		-	50
Payment of accounts payable to employee through issuance of shares upon exercise of warrants	-	-	400	4	76		-	80
Costs associated with the issuance of shares	-	-	-	-	(160	)	-	(160 )
Waived interest on conversion of debt	-	-	-	-	3		-	3
Deferred financing costs on debt conversions / modifications	-	-	-	-	21		-	21

Value of warrants granted to employees	-	-	-	-	1	-		1	
Value of warrants granted to directors and consultants	-	-	-	-	13	-		13	
Net loss	-	-	-	-	-	(403	)	(403	)
Balances as of December 31, 2002	43	* _	3,553	35	1,042	(615	)	462	

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

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

(A Development Stage Company)

# Statement of Changes in Stockholders' Equity (cont'd)

	Prefer Stock	red	Commo	n Stock		Deficit al Accumulate in Developmen	
	Shares	Amount US\$ ands thousand	Shares Thousai			Stage US\$ s thousands	Total US\$ thousands
Issuance of shares in connection with executive employment	-	-	50	1	49	-	50
Issuance of share on warrants exercise	-	-	165	2	31	-	33
Issuance of dividend shares to record holders as of December 31, 2002	4	* -	-	-	* _	-	-
Issuance of shares and warrants in a private offering which closed in February 2003 (\$10 per share): for cash consideration for reduction of accounts payable	10 5	* _ * _	- -	- -	105 45	- -	105 45
Issuance of shares and warrants as compensation for extension of \$100,000 line of credit	1	* _	-	-	10	-	10
Payment of account payable through issuance of shares and warrants	* _	* _	-	-	1	-	1
Conversion of preferred shares to common shares in reincorporation merger	(63)	*(-)	763	7	(7	) -	-
Issuance of shares in a private offering which closed in July 2003 (\$3 per share): for cash consideration for reduction of accounts payable	- -	- -	33 3	* _ * _	99 9	-	99 9
Issuance of shares upon exercise of warrants: for cash consideration	_	_	25	* _	25	-	25

for reduction of accounts payable	-	-	124	1	142		-		143	
Issuance of shares upon exercise of warrants for cash consideration	-	-	63	1	82		-		83	
Payment of account payable through issuance of shares	-	-	80	1	139		-		140	
Costs associated with the issuance of shares	-	-	-	-	(58	)	-		(58	)
Value of warrants granted to employees	-	-	-	-	47		-		47	
Deferred financing costs on debt conversions / modifications	-	-	-	-	(10	)	-		(10	)
Net loss	-	-	-	-	-		(873	)	(873	)
Balances as of December 31, 2003	-	-	4,859	48	1,751		(1,488	)	311	

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

# Statement of Changes in Stockholders' Equity (cont'd)

			Additional	Deficit Accumulated in	
	Shares	Amounts	Capital	Development Stage US\$ thousands	Total US\$
Issuance of shares on warrants exercise	123	1	183	-	thousands 184
Issuance of shares and warrants in a private offering	251	3	1,002	-	1,005
Payment of officer salaries through issuance of shares and warrants	46	1	184	-	185
Payment of accounts payable to officers and consultants upon exercise of warrants	80	1	99	-	100
Payment of director honorariums through issuance of shares and warrants	11	* _	45	-	45
Payment of account payable through issuance of shares and warrants	1 13	* _	50	-	50
Payment of bridge loan through issuance of shares and warrants	125	1	499	-	500
Payment of bridge loan interest and commitment fee through issuance of shares and warrants	8	* _	30	-	30
Payment of bridge loan finders fee through issuance of shares and warrants	2	* _	7	-	7
Payment of service bonus through issuance of shares and warrants	20	* _	20	-	20
Costs associated with the issuance of shares	-	-	(59)	-	(59 )
Value of warrants granted to employees	-	-	41	-	41

Deferred financing costs on debt conversions / modifications	-	-	30	-	30
Net loss	-	-	-	(1,737	) (1,737 )
Balances as of December 31, 2004	5,538	55	3,882	(3,225	) 712

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

### Statement of Changes in Stockholders' Equity (cont'd)

	Commo	n Stock	Additional Paid-in	Deficit Accumulated in Development	
		Amounts US\$ nds thousands		Stage US\$ thousands	Total US\$ thousands
Issuance of shares on warrants exercised:					
For cash	493	5	872	-	877
For payment of deferred officer salaries	17	* _	21	-	21
For exchange of shares of common stock	120	1	(1	) -	-
Issuance of shares and warrants in a private offering that closed in March 2005:					
For cash	519	5	2,070	-	2,075
For payment of deferred officer salaries	10	* -	40	-	40
For payment of accounts payable	6	* _	25	-	25
Issuance of shares and warrants in a private offering that closed in June 2005:					
For cash	259	3	1,292	-	1,295
For payment of directors honoraria	14	* -	70	-	70
For payment of accounts payable	3	* _	15	-	15
Issuance of shares in a private offering that closed in October 2005:					
For cash	584	6	2,914	-	2,920
For payment of deferred officer salaries	40	* -	200	-	200
For payment of accounts payable	22	* _	110	-	110
Issuance of shares in a private offering that closed in December 2005	80	1	439	-	440
Shares to be issued for services provided by director	-	-	42	-	42
Value of warrants and options granted to employees	-	-	216	-	216
Value of warrants granted to directors and consultants	-	-	16	-	16
	_	-	44	-	44

Deferred financing costs on debt conversions /modifications

Costs associated with the issuance of shares	-	-	(275)	-		(275	)
Net loss	-	-	-	(1,605	)	(1,605	)
Balances as of December 31, 2005	7,705	76	11,992	(4,830	)	7,238	

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

# Statement of Changes in Stockholders' Equity (cont'd)

		Amounts	Paid-in	Deficit Accumulated in Development Stage US\$ thousands	Total US\$ thousands
Issuance of shares on warrants exercised: For cash For debt	253 60	3	1,151 276	- -	1,154 277
Issuance of shares and warrants in private offering closings in first quarter 2006: For cash	66	1	362	-	363
For payment of accounts payable	3	* _	14	-	14
Shares issued for services provided by officer	200	2	248	-	250
Issuance of shares and warrants in a private offering that closed in September 2006 for cash	23	* _	126	-	126
Value of options granted to employees	-	-	162	-	162
Value of warrants granted to underwriter	-	-	20	-	20
Value of shares gifted to directors, employees and service providers	-	-	147	-	147
Costs associated with the issuance of shares	-	-	(681)	-	(681)
Funds received from public offering for subscription shares: For cash For debt	410 27	4 * -	2,867 188	-	2,871 188

Net loss	-	-	-	(2,510	) (2,510 )
Balances as of December 31, 2006	8,747	87	16,872	(7,340	) 9,619

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

## Statement of Changes in Stockholders' Equity (cont'd)

	Common Stock		Additional Paid-in	Deficit Accumulated in Development	
	Shares Amou	Amounts US\$ thousands	Capital US\$ thousands	Stage US\$ thousands	Total US\$ thousands
Funds received from public offering for subscription shares:					
For cash For debt	-		9,338 235	-	9,352 235
Compensation in respect of shares previously issued for services provided by officer	-	-	208	-	208
Value of options granted to employees	-	-	337	-	337
Value of warrants granted to underwriter	-	-	79	-	79
Value of shares granted to employees	5	*	25	-	25
Value of shares gifted to employees	-	-	7	-	7
Costs associated with the issuance of shares	-	-	(1,027)	-	(1,027 )
Net loss	-	-	-	(13,047)	(13,047)
Balances as of December 31, 2007	10,121	101	26,074	(20,387)	5,788

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

## Statement of Changes in Stockholders' Equity (cont'd)

	Commo	n Stock	Additional Paid-in	Deficit Accumulated in			
	Shares Thousan	Amounts US\$ nds thousands	Capital US\$ thousands	Development Stage US\$ thousands	Ţ	Total US\$ thousands	s
Funds received from Unit Offering for subscription shares:							
For cash For debt	405 12	4	4,040 120	-		4,044 120	
Value of warrants and options granted to employees	-	-	266	-		266	
Value of options granted to directors and consultants	-	-	44	-		44	
Value of shares granted to employees	4	*	25	-		25	
Value of shares gifted to employees	-	-	101	-		101	
Costs associated with the issuance of shares	-	-	(815	)		(815	)
Net loss	-	-	-	(4,018	)	(4,018	)
Balances as of December 31, 2008	10,542	105	29,855	(24,405	)	5,555	

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

## Statement of Changes in Stockholders' Equity (cont'd)

	Common Shares Thousan	n Stock Amounts US\$ ds thousands	Additional Paid-in capital US\$ thousands	Deficit Accumulated in Development Stage US\$ thousands	Total US\$ thousands
Funds received from Unit Offering for subscription shares: For cash For debt	237 13	3	2,370 126	- -	2,373 126
Funds received from Rights Offering	4,200	42	20,958	-	21,000
Funds received from Second Rights Offering	3,600	36	17,964	-	18,000
Funds received from warrant exercises	59	1	414	-	415
Underwriter warrants exercised in cashless exercise	13	-	-	-	-
Director warrants and options exercised in cashless exercises	37	-	-	-	-
Value of options granted to employees	-	-	494	-	494
Value of options granted to directors and consultants	-	-	328	-	328
Value of shares granted to consultants for services	5	*	46	-	46
Value of shares gifted to employees	-	-	4	-	4
Costs associated with the issuance of shares	-	-	(478)	-	(478 )

Net loss	-	-	-	(4,424	)	(4,424	)
Balances as of December 31, 2009	18,706	187	72,081	(28,829	)	43,439	

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

## Statement of Changes in Stockholders' Equity (cont'd)

	Addit		Additional	_			
	Common	Stock	Paid-in	in Development			
	Shares Thousand	Amounts US\$ ds thousands	Capital US\$ thousands	Stage US\$ thousands		Total US\$ thousands	3
Funds received from the Third Rights Offering	2,471	25	12,331	-		12,356	
Funds received from the Fourth Rights Offering	3,643	36	18,178	-		18,214	
Funds received from warrant exercises	*	*	3	-		3	
Funds received from option exercises	44	*	-	-		-	
Value of options granted to employees	-	-	479	-		479	
Value of shares granted to consultants for services	3	*	15	-		15	
Costs associated with the issuance of shares	-	-	(479)	-		(479	)
Net loss	-	-	-	(27,658	)	(27,658	)
Balances as of December 31, 2010	24,867	248	102,608	(56,487	)	46,369	

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

### Statement of Changes in Stockholders' Equity (cont'd)

			Additional	Deficit accumulated	
	Common Stock		paid-in	in development	
	Shares	Amounts	capital	stage	Total
	Thousand	US\$ ds thousands	US\$ thousands	US\$ thousands	US\$ thousands
Funds received from warrant exercises	457	5	1,820	-	1,825
Funds received from option exercises	194	2	-	-	2
Funds received from the Fifth Rights Offering	4,915	49	24,528	-	24,577
Value of options granted to employees, directors and others	-	-	2,149	-	2,149
Costs associated with the issuance of shares	-	-	(248)	-	(248 )
Net loss	-	-	-	(52,182	(52,182)
Balances as of December 31, 2011	30,433	304	130,857	(108,669	22,492

<sup>\*</sup> Represents an amount less than US\$ 1 thousand.

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

(A Development Stage Company)

#### **Statements of Cash Flows**

	•	ear ended l	De		Ĺ	Period from April 6, 2000 (inception to December 31,	
	2011 US\$	2010 US\$		2009 US\$		2011 US\$	
	thousand	lsthousands	5	thousands	S	thousand	s
Cash flows from operating activities							
Net loss	(52,182)	(27,658	)	(4,424	)	(108,669	) )
Adjustments required to reconcile net loss to net cash used in operating activities:							
Depreciation	56	34		22		178	
Officer, director and other fees, paid via common stock	-	15		50		2,330	
Cost of warrants issued to employees, directors & others	1,732	479		822		4,317	
Interest on short term bank deposits	(6)	-		-		(6	)
Interest paid through issuance of common stock	-	-		-		17	
Write-off of costs associated with public offering	-	-		-		507	
Loss on disposal of equipment	-	-		-		4	
Asset retirement obligation	240	-		50		290	
Impairment of unproved oil and gas properties	42,488	22,022		-		74,004	
Change in assets and liabilities, net:							
Decrease in inventories	-	-		-		150	
Prepaid expenses and other	529	(229	)	(124	)	(347	)
Decrease in deferred offering costs	-	-		14		-	
Change in refundable value-added tax	801	160		(935	)	-	
Severance pay, net	35	108		23		282	
Accounts payable	, ,	229		47		909	
Accrued liabilities	1,014	221	,	1,691	,	3,150	
Increase (decrease) in deferred officers' compensation, net	` /	(456	)	(1,010	)		`
Net cash used in operating activities	(5,441)	(5,075	)	(3,774	)	(22,644	)
Cash flows from investing activities							
Increase in short term deposits	(13	(250	)	-		(263	)

Acquisition of property and equipment Investment in oil and gas properties	(136 ) (19,578)	(115 (24,145	)	(15 (18,513	)	(419 (77,126	)
Net cash used in investing activities	(19,727)	(24,510	)	(18,528	)	(77,808	)
Cash flows from financing activities							
Deferred financing costs on debt conversions and modification				-		89	
Loan proceeds – related party	-	-		-		259	
Loan principal repayments – related party	-	-		-		(259	)
Loan proceeds – other	-	-		-		500	
Proceeds from sale of stock and warrants	26,404	30,573		41,788		126,584	
Costs associated with the issuance of stock and warrants	(248)	(479	)	(478	)	(4,490	)
Net cash provided by financing activities	26,156	30,094		41,310		122,683	
Net increase in cash and cash equivalents	988	509		19,008		22,231	
Cash and cash equivalents – beginning of period	21,243	20,734		1,726		-	
Cash and cash equivalents – end of period	22,231	21,243		20,734		22,231	

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

	31 2011 US\$	ne year ende 2010 US\$ at <b>lds</b> usands	d December 2009 US\$ thousands	Period from April 6, 2000 (inception) to December 31 2011 US\$ thousands
Supplemental information	uious	anususanus	tilousanus	tilousanus
Cash paid for interest Cash paid for income taxes	-	14 -	6	78 -
Non-cash investing and financing activities:				
Payment of note payable through issuance of common stock	-	-	-	575
Payment of accounts payable through issuance of note payable	-	-	-	35
Financing costs paid through issuance of common stock	-	-	-	25
Increase in accounts payable for financing costs	-	-	-	382
Waived interest on debt conversions	-	-	-	4
Shares issued for debt conversion	-	-	120	940
Cost of options capitalized to Oil & Gas Properties	417	-	-	417
Value of warrants granted to underwriters	-	-	-	99
Investment in Oil & Gas Properties	146	-	-	146
Deferred financing costs	-	-	-	85
Transfer of inventory to oil and gas properties	-	-	-	150

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

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

#### Note 1 - Nature of Operations and Basis of Presentation

### A. Nature of Operations

Zion Oil & Gas, Inc., a Delaware corporation ("we", "our", "Zion" or the "Company") is a development stage oil and gas exploration company with a history of more than 11 years of oil & gas exploration in Israel.

As of December 31, 2011, the Company has no revenues from its oil and gas operations, so the Company's activities are considered to be those of a "Development Stage Enterprise". Consequently, the Company's financial statements must be identified as those of a development stage enterprise. In addition, the statements of operations, stockholders' equity and cash flows are required to disclose all activity since the Company's date of inception. The Company will continue to prepare its financial statements and related disclosures as those of a development stage enterprise until such time that the Company achieves a discovery and has revenues from sales of oil and/or gas.

#### Licenses

The Company currently holds three petroleum exploration licenses, all onshore Israel, comprised of the Joseph License (covering approximately 83,272 acres), the Asher-Menashe License (covering approximately 78,824 acres) and the Jordan Valley License (covering approximately 55,845 acres of land in the Jordan Valley area). The areas covered by the Joseph License and the Asher-Menashe License have been subject to a series of exploration permits and licenses that have been granted to and held by the Company under the Israeli Petroleum Law, 5712-1952 (the "Petroleum Law"). As discussed below in further detail, the Company currently has pending before the Petroleum Commissioner of the State of Israel (the "Commissioner") applications for one additional exploration license and two preliminary exploration permits.

(1) The Asher-Menashe License covers an area of approximately 78,824 acres located on the Israeli coastal plain and the Mount Carmel range between Caesarea in the south and Haifa in the north. The Asher-Menashe License had an

initial three-year term, which commenced on June 10, 2007, and has been continuously extended for additional one-year periods and is currently scheduled to expire on June 9, 2012. At the option of the Commissioner, the Asher-Menashe License may be extended for additional one-year periods up to 2014.

- (2) The Joseph License covers approximately 83,272 acres on the Israeli coastal plain south of the Asher-Menashe License between Caesarea in the north and Netanya in the south. The Joseph License had an initial three-year term, which commenced on October 11, 2007 and has been continuously extended for additional one-year periods and is currently scheduled to expire on October 10, 2012. The Joseph License may be extended for additional one-year periods up to 2014.
- (3) The Jordan Valley License covers approximately 56,000 acres, just south of the Sea of Galilee. The Jordan Valley License, which commenced on April 13, 2011, has an initial three year term which expires on April 12, 2014, and may be extended for additional one-year periods up to a maximum of seven years.

In the event of a discovery on any of the licenses held, Zion will be entitled to convert the relevant portions of the license to a 30-year production lease, extendable to 50 years, subject to compliance with a field development work program and production.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

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

A. Nature of Operations – cont'd

### **Summary of Drilling and Exploration Activities**

### Joseph License

To date, the Company completed drilling three exploratory wells in the Joseph License area. The first exploratory well, named the Ma'anit #1 well, was completed in June 2007. Due to the mechanical condition of the well-bore, the Company determined that the well was incapable of producing oil and/or gas in commercial quantities and, consequently, in June 2007, it abandoned the well. The second exploratory well (the Ma'anit-Rehoboth #2 well), was drilled in 2009 'directionally' to a depth of 17,913 feet (5,460 meters). The well penetrated a number of geologic formations that were preliminarily deemed to have hydrocarbon potential. However, in April 2010, following the completion of testing procedures, the Company determined that commercial quantities of hydrocarbons were not present in the Ma'anit-Rehoboth #2 well and, accordingly, it suspended drilling operations in that well. In connection with this decision, the Company recognized a non-cash impairment charge to its unproved oil and gas properties in the quarter ended June 30, 2010. See Note 4. In August 2010, the Company commenced drilling the third exploratory well, at a location near the Ma'anit-Rehoboth #2 well and was completed in June 2011. In July 2011, the Company conducted an open-hole drill stem test and the test results confirmed that the well does not contain hydrocarbons in commercial quantities in the zone tested. Accordingly, the Company recorded a non-cash impairment charge of \$42,488,000 in the quarter ended September 30, 2011 to its unproved oil and gas properties (see Note 4).

### **Asher-Menashe License**

To date, the Company has partly completed one exploratory well in the Asher-Menashe License Area. In October 2009, the Company commenced drilling the Elijah #3 well, within the Asher-Menashe License area. In February 2010, the Company temporarily suspended drilling operations in the well following unsuccessful efforts to retrieve a

stuck pipe. Following review and further analysis of the operations and geological reports prepared by the Company's geoscientists relating to the drilling and testing of the Ma'anit-Joseph #3 well (in the Joseph License area), it was concluded that commercial quantities of hydrocarbons are not present within the Elijah #3 wellbore and that no further drilling will take place in this well. Accordingly, the Company recorded a non-cash impairment charge of \$42,488,000 in the quarter ended September 30, 2011 to its unproved oil and gas properties (see Note 4) in respect of both the Elijah #3 and the Ma'anit-Joseph #3 wells.

#### B. Basis of Presentation

The financial statements for all periods from inception (April 6, 2000) until December 31, 2005 were previously restated to reflect additional expenses related to stock warrants issued to employees and non-employees during the above mentioned period and compensation cost with respect to equity awards provided with new debt issuances and/or debt modification.

To date, the Company has not achieved a discovery of either oil or gas in commercial quantities and is considered to be in the development stage. The Company incurs cash outflows from operations and at this time all exploration activities and overhead expenses are financed by way of equity issuance. The recoverability of the costs incurred to date is uncertain and dependent upon achieving significant commercial production.

Zion Oil & Gas, Inc.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

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

#### B. Basis of Presentation – cont'd

The Company's ability to continue as a going concern is dependent upon obtaining the necessary financing to undertake further exploration and development activities and generate profitable operations from its oil and natural gas interests in the future. The Company's current operations are dependent upon the adequacy of its current assets to meet its current expenditure requirements and the accuracy of management's estimates of those requirements. Should those estimates be materially incorrect, the Company's ability to continue as a going concern may be impaired. The financial statements have been prepared on a going concern basis, which contemplates realization of assets and liquidation of liabilities in the ordinary course of business. During the year ended December 31, 2011, the Company incurred a net loss of approximately \$ 52.2 million and had an accumulated deficit of approximately \$ 108.7 million. These matters raise doubt about the Company's ability to continue as a going concern.

The Company expects to incur expenditures to further its exploration programs. Management is of the opinion that its currently available cash resources including approximately \$24.3 million in net proceeds received from the Company's rights offering to stockholders which it completed in July 2011 (see Note 6D) are sufficient to finance its plan of operations through December 31, 2012. To carry out further planned operations beyond that date, including drilling its next planned exploratory well to the desired depth, the Company must raise additional funds through additional equity raises. There can be no assurance that this capital will be available and if it is not, the Company may be forced to substantially curtail or cease exploration block acquisition and/or exploration and development expenditures. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### **Note 2 - Summary of Significant Accounting Policies**

A. Financial Statements in United States Dollars

The currency of the primary economic environment in which the operations of the Company are conducted is the United States dollar ("dollar"). Therefore, the dollar has been determined to be the Company's functional currency. Non-dollar transactions and balances have been translated into dollars in accordance with the principles set forth in Accounting Standards Codification ("ASC") 830 "Foreign Currency Matters". Transactions in foreign currency (primarily in New Israeli Shekels – "NIS") are recorded at the exchange rate as of the transaction date. Monetary assets and liabilities denominated in foreign currency are translated on the basis of the representative rate of exchange at the balance sheet date. Non-monetary assets and liabilities denominated in foreign currency are stated at historical exchange rates. All exchange gains and losses from remeasurement 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 three banks, of which two banks are located in the United States and one in Israel and money market mutual funds. For purposes of the statement of cash flows, the Company considers all highly liquid investments with an original 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.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

### Note 2 - Summary of Significant Accounting Policies - cont'd

C.Oil and Gas Properties and Impairment

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

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

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

In July 2011, following production and other testing conducted at the Ma'anit-Joseph #3 well, the Company conducted an open-hole drill stem test. The test results confirmed that the Ma'anit-Joseph #3 well does not contain hydrocarbons in commercial quantities in the zone tested. Following the conclusions as to the Ma'anit-Joseph #3 well, the Company also concluded it is not likely that commercial quantities of hydrocarbons are present within the Elijah #3 wellbore. As a result of the above determinations, in the quarter ended September 30, 2011, the Company recorded a non-cash impairment charge to its unproved oil and gas properties of the two wells totaling \$42,488,000.

Previously, in April 2010, following production and other testing, management concluded that commercial quantities of hydrocarbons were not present in the Ma'anit-Rehoboth #2 well and, accordingly, the Company recorded a non-cash impairment charge of \$22,022,000 in the quarter ended June 30, 2010 to its unproved oil and gas properties.

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.

Currently, the Company has no economically recoverable reserves and no amortization base. Excluding the impairment charges in the aggregate amount of \$74,004,000, the Company's unproved oil and gas properties consist of capitalized exploration costs of \$3,535,000 and \$25,882,000 as of December 31, 2011 and 2010, respectively.

Zion Oil & Gas, Inc.
(A Development Stage Company)
Notes to Financial Statements as of December 31, 2011
Note 2 - Summary of Significant Accounting Policies – cont'd
D. Property and Equipment
Property and equipment other than oil and gas property and equipment is recorded at cost and depreciated over its estimated useful lives of three to fourteen years. Depreciation charged to expense amounted to \$56,000, \$34,000 and \$22,000, and \$178,000 for the years ended December 31, 2011, 2010 and 2009 and for the period from April 6, 2000 (inception) to December 31, 2011, respectively.
E. 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.
F. Costs Associated with Public and Private Equity Offerings
Costs associated with each specific private or public equity offering are accumulated until either the closing of the offering or its abandonment. If the offering is abandoned, the costs are expensed in the period the offering is abandoned. If the offering is completed and funds are raised, the accumulated costs are recorded as a reduction to the paid-in capital attributable to the equity offering. Capital issuance costs not attributable to any specific offering are charged to expense as incurred. Costs associated with public and private equity offerings charged to additional paid in capital amounted to \$248,000, \$479,000 and \$478,000, and \$4,490,000 for the years ended December 31, 2011, 2010 and 2009 and for the period April 6, 2000 (inception) to December 31, 2011, respectively.
G. Use of Estimates

The preparation of the accompanying financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions about future events. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenues and expenses. Such estimates include the valuation of unproved oil and gas properties, deferred tax assets 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. We adjust such estimates and assumptions when facts and circumstances dictate. Illiquid credit markets, volatile equity, foreign currency, and energy markets have combined to increase the uncertainty inherent in such estimates and assumptions. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates. Changes in those estimates resulting from continuing changes in the economic environment will be reflected in the financial statements in future periods.

#### H. Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

### Note 2 - Summary of Significant Accounting Policies - cont'd

H. Income Taxes - cont'd

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 8). The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Based on 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. Prior to the adoption of ASC 740-10-25-6 (previously known as FIN 48), the Company recognized the effect of income tax positions only if such positions were probable of being sustained. The Company accounts for interest and penalties related to unrecognized tax benefits, if and when required, as part of income tax expense in the statement of operations. No liability for unrecognized tax benefits was recognized as of December 31, 2011 and 2010.

#### I. Environmental Costs and Loss Contingencies

Liabilities for loss contingencies, including environmental remediation costs not within the scope of 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.

#### J. Asset Retirement Obligation

Obligations for dismantlement, restoration and removal of facilities and tangible equipment at the end of an 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, although it does take into account estimated residual salvage values. The obligation is recorded if sufficient information about the timing and (or) method of settlement is available to reasonably estimate fair value. Company management currently estimates (following the conclusions that the Ma'anit-Joseph #3 and Elijah #3 wells do not contain commercial quantities of hydrocarbons) that the current cost to remediate the drill sites and carry out environmental cleanup/restoration is approximately \$870,000.

Zion Oil & Gas, Inc.
(A Development Stage Company)
Notes to Financial Statements as of December 31, 2011
Note 2 - Summary of Significant Accounting Policies – cont'd
K. Net Loss per Share Data
Basic and diluted net loss per share of common stock, par value \$0.01 per share 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 15,814,021 and 4,537,665 and 994,703, common stock equivalents in 2011, 2010 and 2009, respectively, would be anti-dilutive.
Due to the new shares of common stock shares that were issued in connection with the first rights offering in June 2009, the weighted average shares outstanding was adjusted by a factor of 1.089 which, in turn, adjusted the earnings per share calculations for the bonus element associated with the shares issued as part of such rights offering, as prescribed by ASC 260-10, "Earnings Per Share".
Due to the new shares of common stock shares that were issued in connection with the second rights offering in December 2009, the weighted average shares outstanding was further adjusted by a factor of 1.037 which, in turn, adjusted the earnings per share calculations for the bonus element associated with the second rights offering shares, a prescribed by ASC 260-10, "Earnings Per Share".
The third nights offening completed in July 2010 did not include only house alarment
The third rights offering completed in July 2010 did not include any bonus element.

December 2010, the weighted average shares outstanding was further adjusted by a factor of 1.071 which, in turn, adjusted the earnings per share calculations for the bonus element associated with the fourth rights offering shares, as prescribed by ASC 260-10, "Earnings Per Share".

Due to the new shares of common stock shares that were issued in connection with the fourth rights offering in

Due to the new shares of common stock that were issued in connection with the most recent rights offering completed in July 2011, the weighted average shares outstanding was further adjusted by a factor of 1.071 and 1.037, respectively, which, in turn, adjusted the earnings per share calculations for the twelve months, period ended December 31, 2010 and 2011, as prescribed by ASC 260-10, "Earnings Per Share".

#### L. Stock Based Compensation

The Company follows ASC 718-20-55, "Compensation – Stock Compensation" ("ASC 718-20-55"), which requires measurement of compensation cost for all stock-based awards based upon the fair value on date of grant and recognition of compensation over the service period for awards expected to vest. Under this method, the Company has recognized compensation cost for awards granted beginning January 1, 2006, based on the Black-Scholes option-pricing method.

The Company accounts for equity instruments issued to non-employees in accordance with the provisions of ASC 505, Equity, using a fair-value approach.

As noted, the value of stock option grants is recognized as a compensation expense, on a graded-vesting basis, over the requisite service period of the entire award, net of estimated forfeitures unless vested.

Zion Oil & Gas, Inc.
(A Development Stage Company)
Notes to Financial Statements as of December 31, 2011
Note 2 - Summary of Significant Accounting Policies – cont'd
M. Fair Value Measurements
The Company's financial instruments include mainly each and each equivalents accounts marinelle about terms
The Company's financial instruments include mainly cash and cash equivalents, accounts receivable, short term investments, assets held for severance benefits, marketable securities and accounts payable. The carrying amounts of
these financial instruments approximate their fair value.
N. December Adopted Accounting Dronouncements
N. Recently Adopted Accounting Pronouncements
We do not believe that the adoption of recently issued accounting pronouncements in 2011 will have a significant impact on our financial position, results of operations, or each flow.
impact on our financial position, results of operations, or cash flow.
Note 3 – Provision for Severance Pay
Tion 3 – Trovision for Severance Pay
Israeli law generally requires payment of severance pay upon dismissal of an employee or upon termination of
employment in certain other circumstances. The following principal plans relate to the employees in Israel:
A. The liability in respect of certain of the Company's employees is discharged in part by participating in a defined contribution pension plan and making regular deposits with recognized pension funds.
The deposits are based on certain components of the salaries of the said employees. The custody and management of the amounts so deposited are independent of the Company's control and accordingly such amounts funded (included
in expenses on an accrual basis) and related liabilities are not reflected in the balance sheet.

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 B. thereof. Certain senior executives are entitled to receive additional severance pay. The Company's liability for all of its Israeli employees is partly provided for by monthly deposits in insurance policies and the remainder by an accrual in the financial statements. The value of these policies is recorded as an asset in the Company's balance sheet.

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

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

As of December 31, 2011 and 2010, the Company has a provision for severance pay of \$428,000 and \$339,000, respectively, of which all was long-term. As of December 31, 2011 and 2010, the Company has \$146,000 and D.\$92,000, 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.

(A Development Stage Company)

## Notes to Financial Statements as of December 31, 2011

## 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	December
	31	31
	2011	2010
	US\$	US\$
	thousands	thousands
Excluded from amortization base:		
Drilling operations, completion costs and other related costs	1,205	20,383
Capitalized salary costs	393	883
Legal costs, license fees and other preparation costs	1,932	2,694
Other costs	5	1,922
	3,535	25,882

Impairment of unproved oil and gas properties comprised as follows:

	Year ended December 31, 2011	Year ended December 31, 2010	Period from April 6, 2000 (inception) to December 30, 2011
	US\$	US\$	US\$
	thousands	thousands	thousands
Drilling operations, completion costs and other related costs	35,934	20,419	64,312
Capitalized salary costs	2,500	620	3,803
Legal costs, license fees and other preparation costs	26	-	535
Other costs	4,028	983	5,354
	42,488	22,022	74,004

In the year ended December 31, 2009 there were no impairment charges.

### **Note 5 – Accrued Liabilities**

Accrued liabilities comprised as follows:

	December	December
	31	31
	2011	2010
	US\$	US\$
	thousands	thousands
Employees related	37	2
Governmental institutions	1,048	131
Accrued operating expenses	1,275	1,895
Other	356	108
	2,716	2,136

Zion Oil & Gas, Inc.
(A Development Stage Company)
Notes to Financial Statements as of December 31, 2011
Note 6 - Stockholders' Equity
A. Authorized Common Shares
In June 2011, the Company's shareholders voted to increase the authorized shares of Common Stock from 50 million to 100 million. The increase became effective on June 27, 2011.
B. Warrants terms' change
Between January 3, 2011 and March 7th, 2011, the exercise price of the ZNWAW Warrants was reduced to \$4 .On December 20, 2011, the Company extended the exercise period of the Unit Warrants to December 31, 2012.
C. Rights Offerings, 2010
The Company undertook two separate rights offerings to its stockholders of record during 2010, which are summarized below.
In July 2010, the Company raised \$12,356,000 from rights offering to common stockholders of up to 10 million shares of its common stock. The rights offering resulted in the distribution of 2,471,117 shares of common stock.
In December 2010, utilizing the shelf registration statement, we raised \$18,214,000 from a fourth rights offering to common stockholders of 3,642,821 shares of our common stock and warrants to purchase an additional 3,642,821

shares of our common stock.

### D. Rights Offering, 2011

The Company undertook one rights offering to its stockholders of record during 2011, all of which is summarized below.

On May 16, 2011, the Company filed a registration statement on Form S-3 with the Securities and Exchange Commission with respect to a shelf offering. The registration statement, as subsequently amended on May 25, 2011, was declared effective on May 26, 2011 (the "2011 Shelf Registration Statement").

Utilizing the 2011 Shelf Registration Statement, in June 2011, the Company launched a rights offering (the "June 2011 Rights Offering") to holders of its Common Stock on the close of business on June 15, 2011. Under the June 2011 Rights Offering, the Company distributed to each holder of record as of close of business on June 15, 2011, at no charge, 0.25 of a subscription right for each share held as of such date (i.e. one subscription right for each four shares). Each whole subscription right entitled the stockholder to purchase one unit (a "Unit") at the purchase price of \$5.00 per Unit, with each Unit consisting of (a) one share of Common Stock, and (b) warrants to purchase two additional shares of the Company's Common Stock at an exercise price of \$3.50 per share (each a "RO Warrant" and collectively, the "RO Warrants"). Shareholders who exercised their rights in full were entitled to purchase additional shares pursuant to an over-subscription right to the extent holders did not fully subscribe for their basic subscription rights.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

Note 6 - Stockholders' Equity - cont'd

D. Rights Offering, 2011 - cont'd

The June 2011 Rights Offering terminated on its scheduled expiration date of July 25, 2011. The Company received subscriptions for a total of 4,915,349 Units, resulting in gross proceeds of approximately \$24,577,000, before payment of offering related expenses of approximately \$248,000. As a result of the June 2011 Rights Offering, the Company issued 4,915,349 shares of common stock and 9,830,698 RO Warrants for an additional 9,830,698 shares of Common Stock.

E. 2005 Stock Option Plan

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

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

During the year ended December 31, 2011, the Company awarded options to purchase a total of 384,500 shares of common stock to directors, executive officers, other staff members and service providers, at a per share exercise price of \$2.50. The options were fully vested upon grant and first became exercisable as of January 1, 2012 and continue to be exercisable through December 31, 2014. During the year ended December 31, 2011, the Company awarded options

to purchase a total of 124,601 shares of common stock to management employees, at various per share exercise prices.

During the year ended December 31, 2010, the Company awarded options to purchase a total of 131,415 shares of common stock to management employees, at various per share exercise prices.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

Note 6 - Stockholders' Equity - cont'd

F. 2011 Equity Incentive Plan and 2011 Non-Employee Directors 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, initially reserving for issuance thereunder 2,000,000 shares of common stock and for non-employee directors initially reserving for issuance thereunder 1,000,000 shares of common stock.

The 2011 Equity Incentive 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 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, 2011, the Company granted options from the 2011 Incentive plan to purchase a total of 1,216,500 shares of our common stock to non-management employees, one management employee and three employee-directors, as well as options to consultants to purchase up to a total of 77,000 shares of the Company's common stock, all at an exercise price of \$2.61. The options are scheduled to vest in equal quarterly installments over eight consecutive quarters, beginning with the quarter ended December 31, 2011.

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, initially reserving for issuance thereunder 1,000,000 share of common stock. Under the 2011 Directors Plan, only non-qualified options may be issued, and they will be exercisable for a period of six years from the date of grant.

The compensation committee of the Board of Directors is responsible for determining the type of award, when 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 six years from the date of grant.

During the year ended December 31, 2011, the Company granted options from the Company's 2011 Non-Employee Directors Stock Option Plan to purchase a total of 300,000 shares of our common stock to six non-employee directors at an exercise price of \$2.61. The options are scheduled to vest in equal quarterly installments over eight consecutive quarters, beginning with the quarter ended December 31, 2011.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

## Note 6 - Stockholders' Equity - cont'd

## G. Warrants and Options

The Company has reserved 15,814,021 shares of common stock as of December 31, 2011 for the exercise of warrants and options to employees and non-employees, of which 14,033,334 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 Number of Expiration			Warrants or
	Price	Shares	Date	<b>Options</b>
	US\$			
To non-employees				
	8.25	53,000	June 16, 2012	Options
	2.50	25,000	December 31, 2014	Options
	2.61	77,000	December 04, 2021	Options
To employees and directors	3			
	8.25	42,000	June 16, 2012	Options
	7.15	12,000	December 31, 2014	Options
	2.61	300,000	December 04, 2017	Options
	2.61	1,216,500	December 04, 2021	Options
	0.01	30,266	January 31, 2020	Options
	0.01	10,000	December 3, 2017	Options
	4.45	25,000	January 26, 2016	Options
	4.55	15,000	January 31, 2016	Options
	2.50	359,500	December 31, 2014	Options
	4.92	25,000	August 30, 2013	Options
To investors				
	3.50	9,823,680	August 15, 2012	Warrants
	4.00	3,294,996	December 31, 2012	Warrants
	7.00	505,079	December 31, 2012	Warrants
	3.63*	15,814,021		

## \*Weighted Average

The warrant and option transactions since April 6, 2000 (inception) are shown in the table below:

	Number of shares	Weighted Average exercise price US\$
Changes from April 6, 2000 (inception) to December 31, 2009 to:		
Employees, officers and directors as part compensation	2,086,818	2.22
Underwriters (in connection with IPO)	46,621	8.75
Private placement investors and others	1,105,492	2.84
Investors in follow on public offering	666,343	7.00
Expired/Cancelled/Forfeited	(745,684)	2.75
Exercised	(2,164,887)	2.01
Outstanding, December 31, 2009	994,703	6.14

(A Development Stage Company)

## Notes to Financial Statements as of December 31, 2011

### Note 6 - Stockholders' Equity - cont'd

### G. Warrants and Options - cont'd

Changes during 2010 to:		
Employees, officers and directors	106,415	2.49
Investors in Fourth Rights Offering	3,642,821	4.00
Expired/Cancelled/Forfeited	(161,917)	6.21
Exercised	(44,357)	0.08
Outstanding, December 31, 2010	4,537,665	4.39
Changes to:		
Employees, officers and directors	2,127,601	2.55
Investors in Fifth Rights Offering	9,830,698	3.50
Expired/Cancelled/Forfeited	(31,750)	7.60
Exercised	(650,193)	2.81
Outstanding, December 31, 2011	15,814,021	3.63
Exercisable, December 31, 2011	14,033,334	3.76

The aggregate intrinsic value of options and warrants exercised during 2011, 2010 and 2009 was approximately \$1,538,000, \$227,000, and \$557,000, respectively.

The aggregate intrinsic value of the options and warrants as of December 31, 2011 totaling 14,033,334 was \$88,585.

The following table summarizes information about stock warrants and options outstanding as of December 31, 2011:

Shares underlying outstanding warrants and options (non vested)

Shares underlying outstanding warrants and options (all fully vested)

Edgar Filing: ZION OIL & GAS INC - Form 10-K

		Weighted				Weighted	
		average				average	
		remaining	Weighted			remaining	Weighted
Range of	Number	contractual	Average	Range of	Number	contractual	Average
exercise price	outstanding	lifa (yaars)	Exercise	exercise	Outstanding	Life	exercise
exercise price	outstanding	me (years)	price	price	Outstanding	(years)	price
US\$			US\$	US\$			US\$
2.61	1,131,812	9.93	2.61	2.61	161,688	9.93	2.61
2.61	262,500	5.93	2.61	2.61	37,500	5.93	2.61
0.01	1,875	8.09	0.01	0.01	28,391	8.09	0.01
-	-	-	-	7.00	505,079	1.00	7.00
				4.55	15,000	4.09	4.55
-	-	-	-	4.00	3,294,996	1.00	4.00
-	-	-	-	3.50	9,823,680	0.62	3.50
-	-	-	-	7.15	12,000	3.00	7.15
-	-	-	-	4.45	25,000	4.07	4.45
-	-	-	-	2.5	384,500	3.00	2.5
-	-	-	-	0.01	10,000	5.93	0.01
-	-	-	-	4.92	25,000	1.67	4.92
-	-	-	-	8.25	95,000	0.46	8.25
0.01-2.61	1,396,187		2.61	0.01-8.25	14,417,834		3.73

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

## Note 6 - Stockholders' Equity - cont'd

G. Warrants and Options - 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		Period from April 6,	
			ended December 31,		
		2011	2010	December 31, 2011	
Weighted-average fair value of underlying stock	at grant date	\$3.09	\$6.41	\$ 3.00 - \$8.23	
Dividend yields		-	-	-	
Expected volatility		75%-80%	73%-79%	28.2% - 80%	
Risk-free interest rates		0.38% - 2.24%	2.38%-3.84%	0.38% - 5.15%	
Expected lives (in years)		1.50 - 6.00	2.19-4.88	1.50 - 6.00	
Weighted-average grant date fair value		\$1.97	\$5.11	\$ 0.76 - \$5.11	

### Granted to non-employees

The following table sets forth information about the weighted-average fair value of warrants 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,		Period from April 6,
			2000 (inception) to
	2011	2010	December 31, 2011
Weighted-average fair value of underlying stock at grant date	\$3.07	-	\$1.00 - \$8.75
Dividend yields	-	-	-
Expected volatility	76% - 77%	-	32.20% - 99.80%
Risk-free interest rates	1.60% - 2.04%	-	1.60% - 5.50%
Expected lives (in years)	4.00 - 10.00	-	0.56 - 10.00
Weighted-average grant date fair value	\$2.33	-	\$0.68 - \$3.91

The expiration date for 50,000 warrants previously granted to two directors was extended from December 31, 2008 to December 31, 2009 and an expense of \$22,000 was recorded as an adjustment to the original expense recognized.

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 during 2010 and 2011 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.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

### Note 6 - Stockholders' Equity - cont'd

## G. Warrants and Options – cont'd

Prior to 2008, due to the lack of sufficient history of the Company's stock volatility, the Company estimated its own expected stock volatility based on the historic volatility for other oil exploration companies. Beginning in 2008 and continuing through December 31, 2010, the Company's stock volatility is based on actual trading of the Company's stock.

## H. 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:

			Period from
			April 6, 2000
			(inception) to
For the Year	ended Dec	ember 31,	December 31
2011	2010	2009	2011
US\$	US\$	US\$	US\$
2,039,000	479,000	591,000	4,393,000

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

Period from April 6, 2000

(inception) to

For the Year ended December 31, December 31

2011 2010 2009 2011 US\$ US\$ US\$ US\$ 110,000 - 231,000 341,000

As of December 31, 2011, there was \$2,167,000 of unrecognized compensation cost, related to non vested stock options granted under the Company's various stock option plans. That cost is expected to be recognized as follows:

US\$

During 2012 1,856,000 During 2013 **311,000 2,167,000** 

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

### Note 6 - Stockholders' Equity - cont'd

### I. Warrant Descriptions

The price and the expiration dates for the 3 series of warrants to non employees and investors are as follows:

	Period of Grant		Expiration Date	
ZNIWAWI Dielas Official Western	Outsland 2000   December 2000	7.00	D	
ZNWAW Rights Offering Warrants	October 2008 – December 2008	7.00	December 31, 2012*	
ZNWAZ Rights Offering Warrants	December 2010	4.00	December 31, 2012	
ZNWAL Rights Offering Warrants	August 2011	3.50	August 15, 2012	

<sup>\*</sup> These warrants were originally scheduled to expire on January 31, 2012 and have been extended to December 31, 2012.

The ZNWAW Warrants were issued as a component of a unit that consisted of one share of common stock and one warrant in the Company's follow on public offering which was completed in January 2009. On February 9, 2009, the unit split into its two separate components.

The ZNWAZ Warrants were issued as a component of a unit that consisted of one share of common stock and one warrant in the Company's fourth rights offering (See Note 6C) and the ZNWAL Warrants were issued as a component of a unit that consisted of one share of common stock and two warrants in the Company's most recent rights offering completed in July 2011. (See Note 6D).

#### **Note 7 - Related Party Transactions**

At December 31, 2010, there was \$21,000 in deferred officers' compensation which was fully paid in January of 2011. All other previously deferred balances were paid during 2010.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

#### Note 8 – Income Taxes

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2011 and 2010 are presented below:

	As of December 31, 2011 US\$ thousands	As of December 31, 2010 US\$ thousands	
Deferred tax assets:			
Net operating loss carry forwards	35,647	26,176	
Other	1,574	37	
Total gross deferred tax assets	37,221	26,213	
Less valuation allowance	(36,091)	(18,322)	
Net deferred tax assets	1,130	7,891	
Deferred tax liabilities:			
Property and equipment	(22)	(1)	
Unproved oil and gas properties	(1,108)	(7,890)	
Total gross deferred tax liabilities	(1,130)	(7,891)	
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 \$104,842,000 prior to the expiration of some of the net operating loss carry forwards between 2022 and 2031. Based upon the level of historical taxable losses since the Company's inception, management believes it is more likely than not that the Company will not realize the benefits of these deductible differences and tax carry forwards and thus, full valuation allowances have been recorded at December 31, 2011 and 2010.

At December 31, 2011, the Company has available federal net operating loss carry forwards of approximately \$104,842,000 to reduce future U.S. taxable income. These amounts expire from 2022 to 2031.

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, 2011, the Company has available net operating loss carry forwards of approximately \$90,000,000 to reduce future Israeli taxable income.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

#### Note 8 - Income Taxes - cont'd

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

	For the year ended December 31, 2011 US\$ (thousands)		For the year ended December 31, 2010 US\$ (thousands)		For the year ended December 31, 2009 US\$ (thousands)	
Pre-tax loss as reported	(52,182	)	(27,658	)	(4,424	)
U.S. statutory tax rate	34	%		%	34	%
Theoretical tax expense	(17,742	)	(9,404	)	(1,504	)
Increase in income tax expense resulting from:			1.60		2=0	
Permanent differences	6		169		378	
Other differences	(33	)	_			
Change in valuation allowance	17,769		9,235		1,126	
Income tax expense	_		-		-	

The Company applies the provisions of FIN 48 (now included in ASC 740). The Company has no material unrecognized tax benefit which would favorably affect the effective income tax rate in future periods and do 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 2008.

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 2007 tax year can be regarded as final.

## Note 9 - Commitments and Contingencies

#### A. Litigations

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

#### B. Environmental and Asset Retirement Matters

The Company is engaged in oil and gas exploration and production and may become subject to certain liabilities as they relate to environmental cleanup of well sites or other environmental restoration procedures as they relate to the drilling of oil and gas wells or the operation thereof.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

#### Note 9 - Commitments and Contingencies - cont'd

#### B. Environmental and Asset Retirement Matters – cont'd

The Company currently (following the conclusions that the Ma'anit-Joseph #3 well and the Elijah #3 well do not contain commercial quantities of hydrocarbons) estimates that environmental clean up/restoration of the well sites will be approximately \$870,000 based on current cost rather than Net Present Value. Liabilities for expenditures are recorded when environmental assessment and/or remediation is probable and the timing and costs can be reasonably estimated.

In March 2011, the Ministry of Environmental Protection issued initial guidelines relating to oil and gas drilling. This is the first time that the Ministry published specific environmental guidelines for oil and gas drilling operations, relating to onshore and offshore Israel.

The guidelines are detailed and provide environmental guidelines for all aspects of drilling operations, commencing from when an application for a preliminary permit is filed, and continuing through license, drilling exploration, production lease, petroleum production and abandonment of the well. The guidelines address details that must be submitted regarding the drill site, surrounding area, the actual drilling operations, the storage and removal of waste and the closing or abandoning of a well. Following meetings between the Ministry and industry representatives in 2011, the Ministry indicated that certain of their initial published guidelines will be revised.

#### C. Royalty Commitments

The Company is 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 the Company 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, 2011 and 2010, the Company did not have any outstanding obligation with respect to royalty payments, since it is at the "development stage" and, to this date, no proved reserves have been found.

On March 30, 2011, the Israeli parliament enacted the Petroleum Profits Taxation Law, 2011, which imposes additional income tax on oil and gas production. Under the new tax regime, the present 12.5% royalty imposed on oil revenues remains unchanged. A levy at an initial rate of 20% will be imposed on profits from oil and gas and will gradually rise to 50%, 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 50% 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, which will be accepted by the State, is the bi-annual average local price. The previous allowance depletion was abolished.

#### D. 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 shall be assigned to each charitable organization (6% interest in the aggregate). At December 31, 2011 or 2010, the Company did not have any outstanding obligation in respect of the charitable foundations, since it is at the "exploration stage" and, to this date, no proved reserves have been found.

Zion Oil & Gas, Inc.
(A Development Stage Company)
Notes to Financial Statements as of December 31, 2011
Note 9 - Commitments and Contingencies – cont'd
E. Surface Rights of Drilling Operations
The surface rights to the drill site from which the Company drilled the Ma'anit #1, Ma'anit-Rehoboth #2 wells and Ma'anit-Joseph #3 well, are held under long-term lease by Kibbutz Ma'anit (the "Kibbutz") with the Israel Lands Authority.
The necessary permission to use the drill site for the Ma'anit-Joseph #3 well to conduct petroleum exploration operations was granted to the Company by the Kibbutz in consideration for a fee of approximately \$50,000 for the period up to October 10, 2010 and \$5,000 for each year thereafter.
The Israel Lands Authority has granted formal consent for the use of the surface with regard to the Ma'anit-Joseph #3 well; the expiration date of the consent is August 3, 2012.
The surface rights to the drill site from which the Company drilled the Elijah #3 well are held under long-term lease by Kibbutz Ein Carmel with the Israel Lands Authority. The necessary permission to enter and use the drill site to conduct petroleum operations on the Elijah #3 well was granted to the Company by Kibbutz Ein Carmel through July 20, 2015 in consideration for a one-time fee of approximately \$145,000.
The Company has yet to obtain the surface rights to any exploratory well which it may drill on the Jordan Valley License area.
F. Payments to executives and deferral of compensation

Under existing compensation agreements, the Company is committed to pay certain of its executive officers and other employees an aggregate amount of \$1,016,000 on an annual basis. As of December 31, 2011 there was no deferred compensation to executives and employees.

During the year ended December 31, 2010, amounts totaling \$477,000 of previously deferred compensation was paid to executives and employees. During the year ended December 31, 2009, amounts totaling \$1,745,000 of previously deferred compensation were paid. The balance at December 31, 2010 of \$21,000 was paid in January 2011.

#### G. Underwriting Agreement

In January 2008, in connection with the filing of the 2008 Registration Statement, the Company entered into an underwriting agreement with Network 1 Financial Securities, Inc. (the "January 2008 Underwriting Agreement"). The January 2008 Underwriting Agreement provided for a two year extension to the existing investment banking/consultant agreement for an additional fee of \$60,000, payable upon the closing of the offering in a minimum aggregate amount of \$5,000,000.

Under the terms of the January 2008 Underwriting Agreement, the Company was required to, and did, remit an advance payment of \$50,000 against the non-accountable expense allowance to be paid to Network 1 in connection with services to be rendered in the course of the follow on public offering. In addition to a 6% underwriting commission and a 3% non-accountable expense allowance, under the January 2008 Underwriting Agreement, Network 1 was entitled to certain underwriters warrants. During March 2008, the board decided to terminate the agreement with Network 1. In April 2008, the January 2008 Underwriting Agreement with Network 1 was terminated in accordance with its terms. Upon the decision to terminate the January 2008 Underwriting Agreement, the advance payment of \$50,000 was recorded as an expense by the Company. On April 2, 2008, a new underwriting agreement, as subsequently amended, (the "April 2008 Underwriting Agreement") was entered into with Brockington Securities, Inc. ("Brockington"). The April 2008 Underwriting Agreement did not include provisions relating to an investment banking/consultant agreement nor did it contain underwriter's warrants.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

## Note 9 - Commitments and Contingencies - cont'd

#### G. Underwriting Agreement – cont'd

Additionally, the April 2008 Underwriting Agreement provided for a 5% underwriting commission and a 3% non-accountable expense allowance. In connection with the initial and second closings of the follow on public offering that were held on October 24, and December 2, 2008, Brockington received \$323,000 from the proceeds of such offering, of which \$202,000 was in respect of the underwriting commission and \$121,000 was in respect of expense reimbursement. Subsequently, in the final closing of the follow on public offering that was held on January 16, 2009, Brockington received \$190,000 from the proceeds, of which \$119,000 was in respect of commissions and \$71,000 was in respect of expense reimbursement.

#### H. Operating Leases

(i) The Company's corporate offices in Dallas, Texas consist of approximately 6,458 of rentable square feet. The lease term for 3,600 square feet expired on October 31, 2011. The monthly rent was \$4,700 during the 12-month period ended October 31, 2011. On October 11, 2011, the Company and the landlord entered into an amended lease for the renewal of the lease of its current office premises in Dallas Texas as well as the addition of additional adjacent space in the building. Pursuant to the Lease Amendment, the lease term on the existing office space as well as the additional premises described below was extended to October 31, 2015.

Rent is paid on a monthly basis and is \$6,996 per month for each month from November 1, 2011 through October 31, 2012; thereafter, \$7,534 for each month through October 31, 2013; \$7,534 for each month through October 31, 2014 and \$8,072 for each month through October 31, 2015. Notwithstanding the foregoing, the parties have agreed that so long as there is no event of default under the Lease Amendment then the monthly payments for of \$1,434 through October 31, 2012 and \$1,544 thereafter through October 31, 2013 are to be abated. Accordingly, assuming an event of default has not occurred, the monthly rent for the period through October 31, 2012 will be \$5,561 and for the period from November 1, 2012 through October 31, 2013 will be \$5,989.

(ii) The Company's field office in Caesarea Israel consists of 5,565 square feet. The sublease term continues through March 31, 2014. Under the sublease agreement, at the end of the initial 12 months of the sublease term, either the sublessor or the Company may, at its sole discretion upon the furnishing to the other of written notice within seven days after the end of the initial 12 month period, terminate the sublease agreement, whereupon the Company will be required to vacate the subleased premises within six months of the giving of such notice. The right to terminate early as described above shall also inure to each of the Company and the sub-lessor at the end of each of the 18th and 24th month following the commencement of the sublease lease Agreement term. Under the sublease agreement, the Company is authorized to further sublease all or part of the subleased premises to a third party that is pre-approved by the Sub-lessor.

Zion Oil & Gas, Inc.

120

81 600

2014 2015

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

Note 9 - Commitments and Contingencies - cont'd H. Operating Leases – cont'd Rent is paid on a monthly basis in the base amount of approximately NIS 28,400 per month (approximately \$7,500 per month at the exchange rate in effect on the date of this report). The Company is also obligated to pay all cost of living adjustments, as well as its pro-rated portion of all taxes, utilities, insurance and maintenance payments during the sublease term. Rent expense for 2009, 2010 and 2011 was \$96,000, \$96,000 and \$159,000, respectively. (iii) In March 2010, the Company leased approximately 500 square feet of office space in State College, Pennsylvania for its President and Chief Operating Officer. The initial lease was for 12 months, expiring February 28, 2011 and the monthly rental amount was \$525. In February 2011, the lease was extended by 12 months to the end of February 2012 and the monthly rental amount was increased to \$550. In December 2011, the Company closed the State College office. The future minimum lease payments as of December 31, 2011 are as follows: US\$ thousands 2012 216 2013 183

#### I. Contracts with Geophysical Institute of Israel

In connection with planned seismic, magnetic, and gravimetric surveys on the Jordan Valley License area, on October 14, 2011 the Company entered into an agreement with the Geophysical Institute of Israel ("GII") to obtain seismic data. The agreement provides for a seismic survey of not less than 10 kilometers, up to 15 kilometers, subject to increase or decrease by the Company. The agreement provides for the survey to be performed by GII on a per kilometer basis at a rate of NIS 92,500 (approximately \$25,000) per kilometer. An initial amount of NIS 143,000 (approximately \$39,000) was paid upon signing of the agreement and a subsequent payment of NIS 572,000 (approximately \$154,000) will be paid prior to the commencement of the work, and the balance is payable following completion of the survey. The survey is expected to begin in March 2012.

In connection with its continuing exploration activity in the Asher-Menashe License area, on November 28, 2011, the Company entered into an agreement with GII relating to the acquisition (using Vibroseis equipment) of 2-D seismic data located within the license area. The seismic contract also allows the Company to acquire a Vertical Seismic Profile (VSP) in place of the 2-D seismic survey. A VSP involves lowering specialized geophysical equipment into a wellbore (such as the Elijah #3 well) while recording a seismic wave source (such as from a Vibroseis truck) along the surface. The agreement provides for the urvey to be performed by GII on a per kilometer basis at a rate of NIS 48,500 (approximately \$13,000) per kilometer. An initial amount of NIS 60,000 (approximately \$16,000) was paid upon signing of the agreement and a subsequent payment of NIS 240,000 (approximately \$63,000) is due within seven days prior to the commencement of the work and the balance is payable following completion of the survey. The VSP acquisition is expected to begin as soon as an appropriate rig and geophysical equipment are available, which the Company currently anticipates will be in the second quarter of 2012.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

## Note 9 - Commitments and Contingencies - cont'd

#### J. Drilling Contract

On September 12, 2008, the Company entered into a drilling contract with Aladdin Middle East Ltd. pursuant to which Aladdin shipped into Israel its 2,000 horsepower rig for use in the drilling contemplated by the Company's business plan. The rig arrived in Israel and cleared customs in April 2009 and was used to drill the Ma'anit-Rehoboth #2 well, the Elijah #3 and the Ma'anit-Joseph #3 well. The contract provided for the wells to be drilled on a daywork basis with payment to Aladdin at the rate of \$28,500 per drilling day, and other scheduled rates for non-operating days. Drilling operations on the Ma'anit-Joseph #3 well were concluded in July 2011, whereupon the Company released the rig.

During the year ended December 31, 2011, 2010 and 2009, the Company made payments to Aladdin and GYP of \$6,590,000, \$11,232,000 and \$3,983,000 respectively.

K. Internal Dispute Affecting Owners of the Drilling Rig

The deep-drilling capacity rig that the Company has been using since September 2009 in its drilling program was the subject of a drilling agreement entered into in September 2008 (the "Drilling Contract") between the Company and Aladdin Middle East Ltd. ("AME"). Through AME, the rig arrived in Israel and cleared customs in April 2009 and AME provided the drilling crew to operate the rig in Israel. The drilling rig and crew was used to drill the Ma'anit-Rehoboth #2 well, the Elijah #3 well and was used to drill the Ma'anit-Joseph #3 well.

AME is part of a group of privately owned affiliated entities. An internal dispute developed between different family members and these entities. In April 2011, the Company was advised by Guyney Yildizi Petrol Uretim Sondaj Mut, ve Tic A.S. ("GYP"), an affiliated entity of AME, that GYP is in fact the owner of the rig being used in the Company's drilling program and that AME's rights to the rig, pursuant to which it acted as operator, terminated as of December 31, 2010 upon the termination of lease between AME and GYP. GYP demanded that the Company make the

payments called for in the drilling contract between us and AME directly to GYP based on representations by GYP that GYP was in control of the mentioned rig and all crew and operations at the Ma'anit-Joseph #3 well.

Following contact with AME and GYP, the Company determined that it is in the best interests of the Company that it honor GYP's request and remit the payments payable under the drilling contract between it and AME directly to GYP. In April 2011, the Company advised AME of its decision. The Company obtained an indemnity from GYP with respect to any damages and costs resulting from such payments to GYP, including any disruption of its drilling program. GYP also agreed to assume all rights and obligations, including those accrued, of AME in the Drilling Contract. On April 25, 2011, AME demanded that the Company retract its decision within three business days and that failing such retraction, AME will avail itself of recourse to all rights at its disposal, including legal process.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

## Note 9 - Commitments and Contingencies - cont'd

K. Internal Dispute Affecting Owners of the Drilling Rig – cont'd

In July 2011, the Company completed its drilling and testing operations at the Ma'anit-Joseph #3 well and on July 29, 2011, the Company released the rig. In December 2011, the rig was being prepared for export out of Israel.

#### L. Settlement Agreement

On October 14, 2011, by mutual agreement of the Company and William L. Ottaviani, Mr. Ottaviani's employment with the Company as President and Chief Operating Officer was terminated. The employment agreement with Mr. Ottaviani was scheduled to naturally expire on December 31, 2011. As provided for in the original employment agreement, the termination of Mr. Ottaviani's employment resulted in his resignation from the Company's Board of Directors.

In connection with the termination of employment, on October 14, 2011, the Company and Mr. Ottaviani entered into a settlement agreement pursuant to which the Company agreed to remit to Mr. Ottaviani the following: (i) salary payments due to him through October 15, 2011, (ii) all unpaid salary owing as of the date of termination, (ii) \$20,833 on each of the November 14 and December 14, 2011, and January 14, 2012 (representing, in each case, the monthly salary to which Mr. Ottaviani was entitled to under the employment agreement), less required deductions, (iii) \$1,638 in each of November and December 2011 and January 2012 in respect of the current health coverage plan and (iv) on January 14, 2012, plus 14 days of unused vacation time under the employment agreement. Under the settlement agreement, Mr. Ottaviani furnished to the Company a general release.

The Company made payments of \$12,460 in respect of the agreement for the year ended December 31, 2011. As of December 31, 2011, the liability to Mr. Ottaviani in connection with this settlement agreement amounted to \$64,281.

#### **Note 10 – Risks and Uncertainties**

## A. Transfer of Petroleum Related Rights

In May 2011, the Ministry of National Infrastructure published draft regulations, titled Petroleum Regulations (Transferring Petroleum Rights). The draft regulations apply to the transfer of petroleum and related rights, including rights to a preliminary permit, license and production lease as well as rights to profits, royalties or information. The right to transfer these rights pursuant to the draft regulations, in many circumstances, will be much more limited than under the present regime.

(A Development Stage Company)

Notes to Financial Statements as of December 31, 2011

#### **Note 11 - Subsequent Events**

- (i) In January 2012, the Company awarded options to purchase a total of 40,000 shares of common stock to a management employee, at a per share exercise price of \$0.01. The options granted are scheduled to vest in equal quarterly installments over four consecutive quarters, beginning with the quarter ending March 31, 2012, and are exercisable through December 3, 2017. Under the employment agreement in effect with the employee, the employee is entitled to options for 40,000 shares of common stock with respect to each year of employment.
- (ii) In order to more fully evaluate the geology of the southern Joseph License area, on February 29, 2012 the Company entered into an agreement with the Geophysical Institute of Israel ("GII") to obtain approximately 16 kilometers of seismic data. The agreement provides for the survey to be performed by GII on a per kilometer basis at a rate of NIS 48,000 (approximately \$12,800) per kilometer. An initial advance of NIS 84,000 (approximately \$22,400) was paid upon signing of the agreement and a subsequent payment of NIS 340,000 (approximately \$91,000) is due within seven days prior to the commencement of the work and the balance is payable following completion of the survey.

## **Note 12 - Selected Quarterly Information (Unaudited)**

The following represents selected quarterly financial information for 2011 and 2010:

For the three months ended

March<br/>31June 30September<br/>30December<br/>31US\$US\$US\$thousandsthousandsthousands

2011

Oil and gas sales - - - -

Net loss	(2,421)	(1,910	)	(44,646	)	(3,205	)
Net loss per share – basic and diluted	(0.10)	(0.07	)	(1.52	)	(0.11	)
2010 Oil and gas sales	-	-		-		-	
Net loss	(1,360)	(23,526	)	(1,433	)	(1,339	)
Net loss per share – basic and diluted	(0.07)	(1.13	)	(0.06	)	(0.06	)

## **Exhibit Index**:

Exhibit	
	Description
Number	
3.1	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Zion Oil & Gas, Inc. Incorporation (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)
3.2	Amended and Restated Bylaws of Zion Oil & Gas, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Form 10-KSB for the year ended December 31, 2007 as filed with the SEC on March 28, 2008)
10.1	Joseph License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 16, 2007)  Asher –Menashe License (incorporated by reference to Exhibit 10.2 to the Company's Form
10.2	10-QSB for the quarter ended June 30, 2007 as filed with the SEC on August 20, 2007) Memorandum
10.3	Executive Employment and Retention Agreements (Management Agreements)  (i) Employment Agreement dated as of November 1, 2007, between Zion Oil & Gas, Inc. and Richard J. Rinberg (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, 2007)  (ii) Retention and Management Services Agreement dated as of November 1, 2005, between Zion Oil & Gas and Richard Rinberg (incorporated by reference to Exhibit 10.4 to the Company's Form 10-KSB for the year ended December 31, 2005 as filed with the SEC on September 14, 2006)  (iii) Employment Agreement dated as of January 1, 2010 between Zion Oil & Gas, Inc. and John Brown (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on January 27, 2010)  (iv) Employment Agreement dated as of January 1, 2010 between Zion Oil & Gas, Inc. and William L. Ottaviani (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on February 1, 2010)  (v) Employment Letter Agreement entered into on January 31, 2011 between Zion Oil & Gas, Inc. and Victor G. Carrillo (incorporated by reference to Exhibit 10.4 to the Company's Annual Report on Form 10-K as filed with the SEC on March 16, 2011)  (vi) Second Amended and Restated Employment Agreement dated as of April 1, 2011 between Zion Oil & Gas, Inc. and Ilan Sheena (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011 as filed with
10.4	the SEC on May 10, 2011) International Daywork Drilling Contract – Land dated as of September 12, 2008 between Zion Oil & Gas, Inc. and Aladdin Middle East Ltd. (incorporated by reference to Exhibit 10.1 to the
10.5	Company's Current Report on Form 8-K as filed with the SEC on September 16, 2008)  Amendment No. 1, dated as of December 7, 2008, to International Daywork Drilling Contract –  Land dated as of September 12, 2008 between Zion Oil & Gas, Inc. and Aladdin Middle East

	Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on December 16, 2008)
10.6	2005 Stock Option Plan (incorporated by reference to Exhibit 10.5 to the Company's Form 10-KSB for the year ended December 31, 2005 as filed with the SEC on September 14, 2006)
10.7	Extension to Joseph License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 27, 2011)

- Extension to Asher-Menashe License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on July 12, 2011)
  - Amendment No. 4, dated as of April 23, 2010, to International Daywork Drilling Contract Land dated as of
- 10.9 September 12, 2008 between Zion Oil & Gas, Inc. and Aladdin Middle East Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on May 24, 2010) Settlement Agreement dated as of July 8, 2010, between Zion Oil & Gas, Inc. and Sandra F. Green
- 10.10 (incorporated by reference to Exhibit 10.1 to the Company's Current Report Form 8-K as filed with the SEC on July 9, 2010)
  - Office Sublease Agreement dated as of December 30, 2010 between Zion Oil & Gas, Inc. and Spectrum
- 10.11 Dynamics (Israel) Ltd., as sublessor (incorporated by reference to Exhibit 10.14 to the Company's Annual Report Form 10-K for the year ended December 31, 2010 as filed with the SEC on March 16, 2011)
- Jordan Valley License (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on June 1, 2011)

  Settlement Agreement dated as of August 3, 2011 between Zion Oil & Gas, Inc. and Patti Beals (incorporated
- 10.13 by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on August 5, 2011)
  - Third Amendment to Lease Agreement dated as of October 11, 2011 between Zion Oil & Gas, Inc. and
- 10.14 Hermosa LP (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 17, 2011)
  - Settlement Agreement dated as of October 3, 2011 between Zion Oil & Gas, Inc. and William L. Ottaviani
- 10.15 (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 19, 2011)
- 10.16 2011 Equity Incentive Plan (filed as Annex B to the Company's Definitive Proxy Statement on Schedule 14 A field with the SEC on May 9, 2011)
- 10.17 2011 Non-Employee Directors Stock Option Plan (filed as Annex C to the Company's Definitive Proxy Statement on Schedule 14 A field with the SEC on May 9, 2011)
- 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)
- 23.1\* Consent of MaloneBailey, LLP
- 23.2\* Consent of Lane Gorman Trubitt, PLLC
- 23.3\* Consent of Somekh Chaikin, a member of KPMG International
- 31.1\* Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 31.2\* Certification of Chief Financial 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 Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 101.INS\* (1) XBRL Instance Document

  101.SCH\*(1) XBRL Taxonomy Extension
- 101.SCH\*(1) XBRL Taxonomy Extension Schema
- 101.CAL\*(1) XBRL Taxonomy Extension Calculation Linkbase
- 101.DEF\*(1) XBRL Taxonomy Extension Definition Linkbase
- 101.LAB\*(1) XBRL Taxonomy Extension Label Linkbase
- 101.PRE\*(1) XBRL Taxonomy Extension Presentation Linkbase

\*filed herewith

1. In accordance with Rule 406T of Registration S-T, these exhibits are deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise not subject to liability under these sections.