

ZION OIL FILES SHELF REGISTRATION STATEMENT

Dallas, Texas and Caesarea, Israel - January 28, 2010 - Zion Oil & Gas, Inc. (NASDAQ GM: **ZN**) announced today that it has filed a Form S-3 shelf registration statement with the Securities and Exchange Commission (SEC). When declared effective by the SEC, Zion will have the option to offer and sell, from time to time in one or more offerings, up to \$50 million of common stock, debt securities, warrants to purchase any of these securities, or any combination of such securities. The securities may be offered in one or more offerings, and at prices subject to prevailing market conditions to be set forth in a supplemental prospectus filing with the SEC at the time of such offering, should such an offering occur. Zion Oil does not currently have any commitments or specific plans to sell securities.

Zion intends to use the net proceeds from any sale of securities under the shelf registration statement for Zion's multi-well drilling plan, including costs associated with drilling operations, drilling equipment, completion operations, production equipment, seismic acquisition or general corporate purposes.

A registration statement relating to these securities has been filed with the SEC, but has not yet become effective. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This press release shall not constitute an offer to sell or a solicitation of an offer to buy the securities, nor shall there be any sale of these securities in any jurisdiction in which an offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction. Any offer of these securities will be made solely by means of the prospectus included in the registration statement and any prospectus supplement that may be issued with respect to such offering.

A copy of the final prospectus and prospectus supplement relating to any offering under the registration statement will be filed with the SEC and may be obtained, when available, by contacting Zion Oil & Gas, Inc., Attn: Investor Relations, 6510 Abrams Road, Suite 300, Dallas, Texas 75231, telephone number 214-221-4610.

About Zion Oil & Gas, Inc.

Zion Oil & Gas, a Delaware corporation, explores for oil and gas in Israel in areas located onshore between Haifa and Tel Aviv. It currently holds two petroleum exploration licenses, the Joseph and the Asher-Menashe Licenses, between Netanya in the south and Haifa in the north, covering a total of approximately 162,000 acres and the Issachar-Zebulun Permit Area, adjacent to and to the east of Zion's Asher-Menashe license area, covering approximately 165,000 acres. Zion's total petroleum exploration rights area is approximately 327,000 acres.

Zion's common stock trades on the NASDAQ Global Market exchange under the symbol "ZN" and Zion's warrants trade under the symbol "ZNWAW".

FORWARD LOOKING STATEMENTS: Statements in this press release that are not historical fact, including statements regarding Zion's operations and planned operations are forward-looking statements as defined in the "Safe Harbor" provision of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on assumptions that are subject to significant known and unknown risks, uncertainties and other unpredictable factors, many of which are described in Zion's periodic reports filed with the SEC and are beyond Zion's control, including, without limitation, the ability to cause the shelf registration statement declared effective by the SEC. These risks could cause Zion's actual performance to differ materially from the results predicted by these forward-looking statements. Zion can give no assurance that the expectations reflected in these statements will prove to be correct and assumes no responsibility to update these statements.

Contact:

Brittany Russell
Zion Oil & Gas, Inc.
6510 Abrams Rd., Suite 300
Dallas, TX 75231
(1) 214-221-4610
Email: brittany@zionoil.com