

SECOND WAVE PETROLEUM INC.

FORM OF PROXY

**For the Annual and Special Meeting of Shareholders
to be held at 10:00 a.m. (Calgary time) on Thursday, June 11, 2009**

THIS PROXY IS SOLICITED BY THE MANAGEMENT OF THE CORPORATION

This form of proxy is provided for use by the registered holders ("Shareholders") of common shares ("Common Shares") of Second Wave Petroleum Inc. (the "Corporation") at the annual and special meeting (the "Meeting") of Shareholders to be held at 10:00 a.m. (Calgary time) on Thursday, June 11, 2009, and at any adjournments thereof. The form is furnished in connection with the solicitation of proxies by management of the Corporation, as required under applicable corporate laws, and is accompanied by a Notice of Meeting and Information Circular of the Corporation dated May 14, 2009 (collectively, the "Information Circular") providing more detailed information on the matters to be addressed at the Meeting.

In order to be valid and acted upon at the Meeting, a valid and duly executed proxy must be deposited with Olympia Trust Company, Suite 2300, 125 – 9th Avenue S.E., Calgary, Alberta T2G 0P6, fax (403) 265-1455 (Attention: Proxy Department), at least 48 hours (excluding Saturdays, Sundays and holidays) before the time of the Meeting or any adjournment thereof, or delivered to the chair of the Meeting on the day of the Meeting prior to its commencement. A person appointed as proxyholder need not be a Shareholder.

APPOINTMENT OF PROXY FOR THE MEETING

The undersigned registered Shareholder of Second Wave Petroleum Inc. hereby appoints Colin B. Witwer, President and Chief Executive Officer and a director of the Corporation, or failing him, Randy L. Denecky, Vice President, Finance and Chief Financial Officer of the Corporation, or instead of either of them, _____, as proxyholder of the undersigned, with full power of substitution, to attend, act and vote for and on behalf of the undersigned with respect to all Common Shares held by the undersigned, at and in respect of all matters that may properly come before the Meeting and at any adjournments thereof, and on every ballot or poll that may take place in consequence thereof, with the same powers that the undersigned would have if the undersigned were personally present at the Meeting or any such adjournment, and instructs the said proxyholder to vote the Common Shares represented by this proxy as follows:

1. **FOR** or **WITHHOLD FROM VOTING FOR** (or if no choice is specified, FOR) an ordinary resolution to elect each of the nominees identified in the Information Circular as a director of the Corporation for the ensuing year, to hold office until the close of the next annual meeting of shareholders.
2. **FOR** or **WITHHOLD FROM VOTING FOR** (or if no choice is specified, FOR) an ordinary resolution ratifying and confirming the appointment of Deloitte & Touche LLP, Chartered Accountants, as the auditor of the Corporation effective for the financial year commencing January 1, 2009, and further appointing Deloitte & Touche LLP to serve as the auditor of the Corporation from and after the Meeting, to hold office until the close of the next annual meeting of shareholders, all at a remuneration determined by the board of directors of the Corporation.
3. **FOR** or **AGAINST** (or if no choice is specified, FOR) an ordinary resolution to approve and confirm the stock option plan of the Corporation, as more particularly described in the Information Circular.
4. **FOR** or **AGAINST** (or if no choice is specified, FOR) an ordinary resolution to ratify a prior grant of incentive stock options, as more particularly described in the Information Circular.

The Common Shares represented by this proxy shall be voted as directed in the spaces provided above or, if no direction is given, shall be voted FOR each of the above matters.

(continued on reverse side)

(continued from previous side)

This proxy is solicited by management on behalf of the Corporation, and the persons named in this proxy form are executive officers of the Corporation. A Shareholder entitled to vote at the Meeting may appoint a different person (who need not be a Shareholder) to attend and act on its behalf at the Meeting by striking out the names of both individuals designated by the Corporation in this proxy form and legibly printing in the blank space provided the name of the different person that the Shareholder wishes to act as its proxyholder, or by submitting another acceptable instrument of proxy.

Beneficial owners of Common Shares who are not registered Shareholders but instead hold their Common Shares through brokerage accounts or otherwise through an intermediary, and who wish to appear and vote in person at the Meeting, should appoint themselves as their own representatives at the Meeting by following the directions provided by their broker or other intermediary.

The undersigned Shareholder also hereby confers discretionary authority on the person(s) named herein as proxyholder to vote the undersigned's Common Shares and otherwise act in the proxyholder's discretion on any amendments or variations to matters identified in the Information Circular and on any other matters that may properly come before the Meeting or any adjournment thereof. *(strike out this sentence if such discretionary authority is to be withheld)*

The undersigned hereby acknowledges receipt of the Notice of Meeting and Information Circular of the Corporation dated May 14, 2009, and revokes any proxy previously given to attend and vote at the Meeting.

Dated _____, 2009. *

*Signature of Shareholder ***

*Name of Shareholder (please print) ****

Number of Common Shares

Notes:

* If this proxy is not dated, it will be deemed to be dated as of the date on which the Information Circular was mailed to Shareholders.

** This proxy must be executed by the Shareholder or by his or her attorney duly authorized in writing, or, if the Shareholder is a corporation, in its corporate name by a director, officer or attorney thereof duly authorized in writing.

If Common Shares are held jointly, each of the joint owners must sign.

Attorneys, officers, executors, administrators, trustees or persons acting in similar representative capacities should indicate their capacity following their signature and must attach the original or a notarially certified copy of the instrument so empowering them to act, or such other evidence of their qualification and authority to act as may be acceptable to the chair of the Meeting.

*** The name of the Shareholder must be recorded exactly as it appears on the shareholder register maintained by the Corporation, being the name in which the share certificate representing the Common Shares is registered.