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Second Wave Petroleum Inc.

News Release

**For Immediate Release
Calgary, Alberta**

**TSX Venture Exchange: SCS
70,779,294 Common Shares**

Second Wave Petroleum Inc. Announces Filing of 2009 Financial Statements and Review of Operations

CALGARY, ALBERTA – April 30, 2010. Second Wave Petroleum Inc. ("Second Wave" or the "Company") is pleased to announce the filing of its audited annual financial statements and management's discussion and analysis for the year ended December 31, 2009 and provide a review of operations. The audited financial statements and MD&A have been filed on SEDAR at www.sedar.com and are also available on the Company's website at www.secondwavepetroleum.com.

Operations Highlights

- 2009 average production increased by 29% to 990 boe/d. Proved plus probable ("P+P") reserve additions replaced production by more than 4.5 times.
- Increased year end reserves by 29% to 5,634 mboe on a P+P basis with a reserve life index of 15.3 years based on fourth quarter average production of 1,009 boe/d.
- Net present value of P+P reserves discounted at 10% increased by 43% to \$104.9 million as of December 31, 2009.
- Net asset value (on a P+P basis) increased by 7% to \$2.02 per share at year end while the Company significantly strengthened its balance sheet through three separate equity financings totaling \$33 million during the year.
- Initiated development on two separate internally generated oil resource plays at Judy Creek and Milo. During the year the Company drilled a total of 10 gross (9.3 net) oil wells with a 100% success rate with 6 (6.0 net) oil wells being drilled in its Judy Creek oil resource play. Subsequent to year end an additional 8 (8.0 net) oil wells have been drilled successfully. The Company currently has 10 (10.0 net) Pekisko horizontal oil wells producing in Judy Creek and 2 gross (0.75 net) horizontal producing Pekisko oil wells in Milo.
- Increased the Company's Judy Creek undeveloped land base by 112% since year end 2008 to 75,000 net contiguous acres (120 net sections) comprised of 71,000 net acres of Pekisko mineral

rights (110 net sections) and 53,000 net acres of Beaverhill Lake mineral rights, which also include the rights to the Duvernay Shale.

- Shot an additional 20 square miles of new proprietary 3-D seismic coverage in Judy Creek, bringing our total coverage to 29 square miles in the area. Purchased an additional 152 miles of regional 2-D seismic data in Judy Creek. The Company has since initiated the licensing process on 28 horizontal delineation wells based on its interpretation of this data.

Selected Financial Information

(\$000s, except share amounts)	Three months ended December 31,			Year ended December 31,		
	2009	2008	% Change	2009	2008	% Change
Petroleum and natural gas sales	4,522	4,688	(4)	15,651	21,618	(28)
Royalties	(662)	(560)	18	(1,758)	(2,801)	(37)
Lease operating costs	(2,081)	(2,468)	(16)	(8,622)	(7,443)	16
Transportation	(86)	(163)	(47)	(389)	(384)	1
Operating netback	1,693	1,497	13	4,882	10,990	(56)
Operating netback per boe	18.24	15.61	17	13.52	37.65	(64)
Total capital expenditures	13,373	7,590	79	24,977	48,721	(49)
Net income (loss)	1,329	(1,587)	184	(6,582)	(246)	(2,576)
Cash flow from operating activities per share	0.01	0.08	(88)	0.03	0.20	(85)
Net income (loss) per share:	0.02	(0.05)	140	(0.15)	(0.01)	(1,400)
Production volumes						
Oil (bbl/d)	498	546	(8)	504	450	12
Natural gas liquids (bbl/d)	50	44	14	44	35	26
Natural gas (mcf/d)	2,765	2,711	2	2,650	2,000	33
Combined (6:1)	1,009	1,042	(3)	990	819	21
Crude oil and liquids weighting (%)	54	56	(3)	55	59	(7)

Review of Operations

2009 was a defining year for the Company as it initiated horizontal drilling operations on internally developed oil resource plays at both Judy Creek and Milo. Since the corporate re-capitalization in January 2008 management has remained diligent in implementing its strategy of identifying and securing large contiguous land positions in its pursuit of identifying oil resources opportunities. The Company has been successful in acquiring significant land positions on three distinct oil resource plays at Judy Creek (77,000 acres), Milo (18,240 acres) and Tableland (11,840 acres). Upon acquiring the prospective acreage management has remained disciplined in directing its capital to define the potential size of the oil resources in place and to access an economic development plan. In Judy Creek and Milo in particular, the Company has been an industry leader by drilling some of the first commercially viable vertical Pekisko oil wells as well as successfully drilling the first horizontal Pekisko oil wells on each play. In 2010, the

Company continues to pursue additional unconventional oil resource plays where it will be able to establish and maintain a competitive advantage.

Since year end 2008 the Company has grown its land position in Judy Creek by 121% to 75,000 net acres, which includes 71,000 net acres of Pekisko mineral rights. To define the Pekisko oil resource in Judy Creek the Company has shot 29 square miles of proprietary 3-D seismic and purchased an additional 152 miles of regional 2-D seismic. In addition to its seismic data base the Company has drilled four vertical stratigraphic test wells into the Pekisko formation and evaluated the drilling and completion data from 17 vertical well bores within the greater area that had been previously drilled into the Pekisko formation. From this data the Company has developed and implemented a horizontal drilling strategy with 10 (10.0 net) horizontal delineation wells having now been drilled successfully into the Pekisko formation in Judy Creek.

Production in the Judy Creek field has grown from 30 boe/d a year ago to in excess of 1,000 boe/d at the end of the first quarter of 2010. Based on its recent drilling success the Company has initiated the licensing process on its next 28 (28.0 net) Pekisko horizontal delineation wells. If successful this will provide the Company a horizontal drilling inventory that exceeds 200 wells at Judy Creek. In conjunction with its active drilling strategy the Company has started the design and procurement process on the facility expansions and water flood applications required to facilitate the production associated with a successful drilling program.

Within its year end 2009 reserve bookings the Company has begun to see the positive results from its Judy Creek program with corporate reserves increasing 29% on a P+P basis to 5,634 mboe and its Judy Creek reserves growing from 99 mboe to 1,650 mboe on a P+P basis in 2009. At December 31, 2009 the Company had 4 net proved producing horizontal Pekisko oil wells in Judy Creek and 6 net proved and/or probable non-producing horizontal locations within its reserve report. Currently the Company has 10 net horizontal oil wells on production and expects to drill an additional 15-20 net horizontal oil wells during the remainder of 2010. If successful this drilling program will provide the Company a platform to grow its reserves and production in 2010 and beyond.

In Milo, the Company drilled its first vertical Pekisko oil well early in 2008 to evaluate the potential of this light oil resource play. Based on a successful production test on this vertical well the Company initiated a land capture strategy and to date has accumulated 18,340 acres on the play. Subsequent to year end the Company proceeded with a strategic farm-out of this acreage whereby the Company retains a 55% after pay-out working interest on the land base while only contributing 25% of the capital on the first 8 horizontal wells to be drilled in Milo. This farm-out allowed the Company to direct the majority of its own capital to its Judy Creek core area, while still retaining material upside exposure to the Milo Pekisko play. Second Wave will retain operatorship and technical stewardship of this project both on a before pay-out and after pay-out basis. To date the company has drilled 2 (0.75 net) horizontal oil wells at Milo with the second well currently being tested subsequent to the execution of a successful multi-stage acid frac completion. Although the Milo play is in its infancy the results to date have been encouraging and the Company is currently proceeding with plans to drill up to an additional 8 (4.4 net after pay-out) horizontal oil wells in 2010.

The global financial crisis in 2008/2009 and the accompanying drop in commodity prices significantly impacted the annual cash flows for Second Wave in 2009. Corporate sales price per barrel of oil equivalent decreased by 40% to \$48.71 per boe as both gas and oil prices remained weak throughout much of 2009. As a result of this drop in pricing corporate netbacks declined by 60% even though operating costs on a per unit basis dropped marginally on a year-over-year basis. To maintain a healthy balance sheet and fund its above noted drilling program the Company completed 3 separate equity financings in 2009 for total proceeds of \$33 million. Although its share count increased by 55% in 2009 the Company was able to reduce its overall debt by 27% on a year-over-year basis while still improving

its net asset value by 7% to \$2.02 per share on a P+P basis. With activities to date the Company believes that it has been able to position shareholders to maximize their exposure to upside at our Judy Creek and Milo oil resources plays. The Company will be providing additional guidance on the remainder of its 2010 capital program when its first quarter 2010 financial and operating results are released on or about May 31, 2010.

On behalf of our management and board I would like to thank our shareholders and employees for their support in 2009.

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Barrels of Oil Equivalent (BOEs). *The term BOE refers to barrel of oil equivalent, with natural gas converted to crude oil equivalent at a ratio of six thousand cubic feet to one barrel. BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of six mcf (six thousand cubic feet) to one bbl (one barrel) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.*

Reserves Disclosure. *The reserves estimates attributed to Second Wave's properties are estimates only. Actual reserves may be greater or less than those estimated, and the difference may be material.*

The determination of oil and gas reserves involves the preparation of estimates that have an inherent degree of associated risk and uncertainty. The estimation and classification of reserves is a complex process involving the application of professional judgment combined with geological and engineering knowledge to assess whether specific classification criteria have been satisfied. It requires significant judgments and decisions based on available geological, geophysical, engineering, and economic data as well as forecasts of commodity prices and anticipated costs. As circumstances change and additional data becomes available, reserves estimates also change. Revisions may be positive or negative.

It should not be assumed that the estimates of future net revenues presented in this news release represent the fair market value of the Company's reserves. There is no assurance that the price forecast and cost assumptions applied by the Company's independent reserves evaluators in evaluating the reserves of Second Wave will be attained and variances could be material.

Forward-Looking Statements. *This news release contains forward-looking statements as to the Company's internal projections, expectations and beliefs relating to future events or circumstances. Forward-looking statements are typically (but not necessarily) identified by words such as "anticipate", "believe", "plan", "estimate", "expect", "plan", "intend", "potential", "may", "will", "should" or similar words suggesting future outcomes. Although the Company believes that these forward-looking statements are reasonable, undue reliance should not be placed on them as they are subject to known and unknown risks and uncertainties, many of which are beyond the Company's control. Forward-looking statements are not guarantees of future outcomes. There can be no assurance that the plans, intentions or expectations contained in the forward-looking statements or upon which they are based will in fact occur or be realized, and actual results may differ from those expressed or implied in the forward-looking statements. The difference may be material.*

Second Wave is subject to the inherent risks associated with the exploration, development, exploitation and production of oil and gas. More particularly, material risk factors that could cause actual results to differ materially from those expressed or implied in the forward-looking statements contained in this news release include: adverse changes in commodity prices, interest rates or currency exchange rates; accessibility of capital when required and on acceptable terms; lower than expected production of crude oil and natural gas; production delays; lower than expected reserve volumes on the Company's properties; increased operating costs; ability to attract and retain qualified personnel or to secure drilling rigs and other services on acceptable terms; competition for labour, equipment and materials necessary to advance the Company's projects; unforeseen engineering, environmental or geological problems; ability to obtain all required regulatory approvals on a timely basis and on satisfactory terms; and changes in laws and governmental regulations (including with respect to taxes and royalties). This list is not exhaustive. Readers should also review the risk factors described in other documents filed by the Company from time to time with securities regulatory authorities in Canada, including its most recent annual information form, copies of which are available electronically at www.sedar.com and at www.secondwavepetroleum.com.

Specific forward-looking statements contained in this news release include statements regarding: 2010 drilling plans generally; the number of wells expected to be drilled during the remainder of 2010; and the location and type of wells planned to be drilled. In making such forward-looking statements, Second Wave has made various assumptions regarding, among other things: the accuracy of geological and geophysical data and interpretations of that data; future oil and natural gas prices; future capital requirements; future exchange rates; the accessibility and cost of capital (including credit); the Company's ability to economically produce oil and gas from its properties and the timing and cost to do so; and its ability to obtain qualified staff, equipment and supplies in a timely and cost-efficient manner.

The forward-looking statements included herein are made as of the date of this news release and Second Wave undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by securities laws.