



## North Peace Announces Operations Update and Filing of 2009 Financial Results

Calgary, Alberta, April 21, 2010 – North Peace Energy Corp. (“North Peace” or the “Company”) announces operations update and filing of 2009 financial results.

### Operations Update

The second cycle of the L1 well has now been on production for 21 weeks. The cycle’s Steam-to-oil Ratio (“SOR”), which continues to decrease as production is maintained, is now approximately 4.4. This represents a 45% improvement over the initial cycle. For comparison purposes, our SOR when adjusted for heat content of injected steam equates to a Steam Assisted Gravity Drainage (“SAGD”) SOR of 3.7. This adjusted SOR is now equivalent to the current industry average of 3.7 for existing SAGD projects in commercial operations. The production rate to date for the cycle is 29 bbl/d over a period of 26 weeks which includes both steam injection time and production time.

The revised steam injection strategy on the L1 well is accessing the resource more efficiently and is resulting in significantly improved SOR’s. The next cycle will utilize the same strategy with a larger steam slug. The purpose of this next cycle is to demonstrate repeatability but also has the potential for further improved SOR’s and increased daily oil rates.

The L2 well was on production for six months and is now shut-in for a pump change. Prior to the pump change the well will be converted to steam circulation to gather additional injection and production data which will help to determine the steaming strategy for this well’s second cycle.

### 2009 Financial Results

The Company's financial statements, notes to the financial statements, management's discussion and analysis and Annual Information Form have been filed on SEDAR ([www.sedar.com](http://www.sedar.com)) and are available on the Company's website ([www.northpec.com](http://www.northpec.com)). The Annual Information Form includes the Company's reserves data for the period ended December 31, 2009 as evaluated by Sproule Associates Limited and other oil and gas information prepared in accordance with National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities forms F1, F2 and F3.

### 2009 Operating Milestones

- Completed pilot construction in the first quarter
- Initiated first steam on the L1 well in January
- Achieved first oil production from the pilot in May
  - Produced cumulative oil of 16,000 barrels from the L1 and L2 wells during the year
  - Approximately 22,000 barrels produced to date
- Completed the first cycle on the L1 well and started the second cycle
- Steamed the L2 well and commenced oil production
- Completed the winter drilling program at Red Earth which consisted of an additional 10 delineation wells to bring the total well count to 27 delineation wells
- Drilled five conventional exploration wells outside the Red Earth area
  - Three wells (1.6 wells net to North Peace) of the exploration program were successful resulting in 177,800 barrels of Proved plus Probable Reserves and a NPV10 value before tax of \$3.7 million

## 2009 Financial Highlights

- Working capital of \$5 million and no debt as at December 31, 2009
  - Current working capital of approximately \$4 million
- Capital expenditures of \$13.9 million during 2009, focused on the completion of pilot construction, pilot operations and the drilling programs
  - The delineation and exploration drilling fully satisfied the flow-through commitment
- Completed a \$11.6 million financing on June 23, 2009 issuing 21.1 million common shares

**Louis Dufresne, President of North Peace**, commented: “During 2009, we made very significant strides in the development of our project. We completed construction of the pilot facilities, initiated operations and achieved the very significant milestone of first oil in May. Most importantly, we have advanced our understanding of the resource and modified our steaming strategy to the point where we have already achieved a commercial SOR on our L1 well. This accomplishment reached so early in our piloting efforts is remarkable and provides the confidence to continue with our development plan, unlocking the significant value of our Red Earth assets.”

### Annual Meeting

The Company’s Annual General Meeting of Shareholders is scheduled for 10:00 AM on Thursday May 27, 2010 in Cardium Room at the Petroleum Club, 319 - 5 Avenue SW, Calgary, AB.

### About North Peace

North Peace has an early stage in-situ oil sands play in northern Alberta. The Company has a 100% working interest in 86,400 acres of Crown oil sands leases in the Peace River area plus interests in other non-core areas. The oil sands leases have the benefit of over 300 legacy wells and are surrounded by accessible oil and natural gas production infrastructure. The target Bluesky zone is a regional sand, deposited in a near shore marine environment at approximately 400 metres in depth. Management estimates the initial area of focus has approximately 22 sections with 10 to 16 metres of oil-bearing thickness, technically sufficient to advance a 10,000 bbl/d commercial project with ultimate potential of 30,000 bbl/d. North Peace is currently advancing the development of its resource using Cyclic Steam Stimulation (“CSS”), a robust and proven in-situ thermal recovery process. The Company is currently operating a two well CSS pilot on its lands.

### Forward-Looking Statements

Certain statements contained in this news release constitute forward-looking statements that involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. No assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this release should not be unduly relied upon. Information and statements in this news release relating to "reserves or resources" are deemed to be forward looking information and statements, as they involve the implied assessment, based on certain estimates and assumptions, that the reserves and resources described exist in the quantities predicted or estimated, and that the reserves and resources described can be profitably produced in the future. In particular, this news release contains forward-looking statements pertaining, directly or indirectly, to the following: business and operations strategies including the operations at North Peace's pilot project and potential commencement of a subsequent commercial project; and the completion of the sale of the conventional assets. Actual results could differ materially as a result of changes in North Peace's plans, changes in commodity prices, regulatory changes, general economic,

market and business conditions as well as production, development and operating performance and other risks associated with oil and gas operations including anticipated success of resource prospects and the expected characteristics of resource prospects; uncertainties inherent in estimating quantities of reserves and resources; anticipated capital requirements, project rates of return and estimated project life; estimates of original discovered resource; estimates of recovery factors; lack of diversification; and overall technical and economic feasibility of the Company's project. The completion of the sale of the conventional assets is subject to a number of conditions and here can be no assurance that the sale will be completed as proposed or at all. These statements speak only as of the date of this release or as of the date specified in the documents accompanying this release, as the case may be. The Company undertakes no obligation to publicly update or revise any forward-looking statements except as expressly required by applicable securities laws.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as the term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

The TSX Venture Exchange has neither approved nor disapproved the contents of this press release.

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