



Western Plains Petroleum Ltd.

Western Plains Petroleum to Commence Drilling Program with Alberta Star

For Immediate Release

August 20, 2010

CALGARY, ALBERTA – Western Plains Petroleum Ltd. (TSXV:WPP) (“**Western Plains**” or the “**Company**”) announces that it is near completion of the survey of the well sites in preparation for the kick-off its previously announced drilling program with its working interest partner, Alberta Star Development Corp. (“**Alberta Star**”). There are 5 in-fill development wells planned under the drilling program (originally proposed to be 4 wells), all to be drilled on section 6 - 50 - 25 W3M in the Lloydminster area of Saskatchewan, with spudding of the initial well expected to occur in early September, 2010, subject to receipt of licensing approval. All wells are anticipated to be drilled, completed and on production by mid-October 2010.

The 5 new drills will be adjacent to the Company’s recently drilled and completed farm-out well with Arctic Hunter Uranium Inc., which well is maintaining or exceeding its initial production rate of 70 bbls/day of heavy oil. Western Plains will be targeting the same zone with the 5 new drills, with the expectation that initial production rates will be comparable to that of the Arctic Hunter farm-out well.

Western Plains and Alberta Star each hold a 50% working interest in section 6-50-25 W3M (excluding the drilling spacing unit earned by Arctic Hunter) and are participating in the 5 well drilling program on a 50/50 basis.

About Western Plains Petroleum Ltd.

Western Plains is a Lloydminster, Alberta, based junior heavy oil producer with interests located in the Lloydminster area in both Saskatchewan and Alberta. The common shares of the Company trade on the TSX Venture Exchange under the symbol WPP. For more information, please contact:

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Reader Advisory

Certain information in this Press Release is forward-looking within the meaning of certain securities laws, and is subject to important risks, uncertainties and assumptions. This forward-looking information includes, among other things, information with respect to Western Plains' beliefs, plans, expectations, anticipations, estimates and intentions, including the completion of Western Plains' success of future drilling and development activities, the performance of existing wells, the performance of new wells, general economic conditions, availability of required equipment and services and

prevailing commodity prices. The words "may", "could", "should", "would", "suspect", "outlook", "believe", "anticipate", "estimate", "expect", "intend", "plan", "target" and similar words and expressions are used to identify forward-looking information. The forward-looking information in this Press Release describes Western Plains' expectations as of the date of this Press Release.

Material factors which could cause actual results or events to differ materially from such forward-looking information include, among others, risks arising from general economic conditions and adverse industry events, risks arising from operations generally, changes in plans with respect to exploration or development projects or capital expenditures; the uncertainty of reserve estimates; the uncertainty of estimates and projections relating to production, costs and expenses, and health, safety and environmental risks), commodity price and exchange rate fluctuations; reliance on contractual rights such as licenses and leases in the conduct of its business, reliance on third parties, reliance on key personnel, possible failure of the business model or business plan or the inability to implement the business model or business plan as planned, competition, environmental matters, and insurance or lack thereof.

Western Plains cautions that the foregoing list of material factors is not exhaustive, is subject to change and there can be no assurance that such assumptions will reflect the actual outcome of such items or factors. When relying on Western Plains forward-looking information to make decisions, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Western Plains has assumed a certain progression, which may not be realized. It has also assumed that the material factors referred to in the previous paragraph will not cause such forward-looking information to differ materially from actual results or events.

The forward-looking statements contained in this press release are made as of the date hereof and the Company undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.