



NEWS RELEASE

Great Plains First Quarter Results Show Production Increases

CALGARY, ALBERTA, May 14, 2010 - Great Plains Exploration Inc. (TSX - GPX) (Great Plains) announces its financial and operational results for the three months ended March 31, 2010.

Key accomplishments for the quarter were:

- Completed construction of the Crossfire area oil pipeline;
- Established the Cardium light oil play as a growth driver for the Company;
- Charted out a new direction as a light oil-weighted player with a multi-zone prospect inventory over Company-owned lands.

The operational and financial highlights for the quarter are as follows:

Operations

- Produced an average of 1,301 BOE/d for the quarter, up from average production of 1,145 BOE/d for the fourth quarter of 2009.
- Commenced production from the 15-33-50-5 W5M Nisku well at Pembina at the end of the quarter, with current corporate production of approximately 1,550 BOE/d (59% oil; 41% gas). Production from the second Nisku discovery in Crossfire is expected to commence shortly and represents approximately 300 to 400 BOE/d of light oil behind-pipe.
- Invested a total of \$7.5 million (excluding dispositions and capitalized G&A) on the Company's capital projects, of which \$4.8 million was spent on the Crossfire pipeline. The Company participated in the drilling and completing of one oil well (0.5 net), which was the successful Cardium well at 13-07-50-5 W5M, for \$0.9 million net costs in the first quarter.

Financial

- Funds flow was \$6.96 per BOE, a minimal change on a per BOE basis from the fourth quarter of 2009. Total funds flow was \$0.8 million (\$0.01 per share) for the period.
- Net loss for the quarter was \$1.97 million compared to \$2.58 million for the first quarter of 2009 and a net loss of \$10.95 million in the fourth quarter of 2009 (which reflects the year-end ceiling test write-down).
- Bank debt was \$19.0 million at quarter-end against the then available line of \$26.0 million, which was renewed in May of 2010 at \$25 million.
- Hedge positions cover 43% of current gas production at an average floor price of \$4.89 CDN/GJ until October 31, 2010 and 39% of current oil production with an average floor price of \$67.50/bbl.

President's Message

First Quarter in Review

Throughout the latter half of 2009, Great Plains took measured steps to restructure its operations and concentrate its resources on developing oil-focused projects. Our first quarter results have begun to reflect those efforts and our current production mix has moved from a 70% gas-weighting to a 59% oil-weighting. This is largely the result of the completion of pipeline construction at Crossfire with new oil production commencing at the beginning of the second quarter. The first well brought on-stream was 15-33-50-5 W5M which has been producing at a steady rate of approximately 400 BOE/d net to Great Plains. This is a restricted rate which will provide a flatter production profile resulting in potentially higher reserve recoveries.

Our second well at 11-12-51-5 W5M which tested at 1,400 BOE/d (40% WI) has also been tied-in but is currently not producing due to an unforeseen downstream bottleneck in the third-party facility at Crossfire. A design flaw in the non-operated oil sales pipeline from the Crossfire oil battery has resulted in a cautionary reduction in throughput to prevent another pipeline rupture similar to that which disrupted production from our Crossfire 9-1 well in the fourth quarter of 2009. The Crossfire facility operator has advised Great Plains that a replacement sales pipeline will be completed within the next 60 to 90 days at which time we expect that our 11-12 well will be brought on-stream at a rate of 300 to 400 BOE/d net to the Company.

The strategic value of our 40% ownership in the oil-gathering system upstream of the Crossfire battery has increased significantly in the last few months. Cardium drilling success in the area by Great Plains and others indicates that the Crossfire gathering system may be handling higher volumes of oil than were originally contemplated and that the economic life of the pipeline could be significantly extended beyond original projections, which were based on Nisku reserves only.

The Cardium play in northeast Pembina continues to evolve with a number of new wells drilled or licensed for drilling in the next several months by a number of area operators. Results in the northeast Pembina area have generally been successful; however, there is a wide range of early production performance ranging from 50 BOE/d to as high as 1,200 BOE/d depending on reservoir quality and completion techniques. The Great Plains well at 13-07-50-5 W5M averaged 130 BOE/d through its first 30 days of production and is currently stabilizing at 75 BOE/d. While our geological analysis demonstrates that we encountered reservoir quality and continuity which were above expectations, we now believe that the well completion and multi-stage fracture stimulation was not as effective as we had hoped. We expect to refine and improve our results with the next well in the program (9-23-50-6 W5M) which will be drilled in late May or early June.

Our Cardium plans for the remainder of 2010 include the drilling of up to six locations out of a current inventory of 23, on a trend defined by well control and 3-D seismic. With additional land purchases made during April 2010, the Company now holds 5,800 net acres of Cardium rights at Pembina with an average working interest of 60%. Additional drilling activity may allow us to expand our current drilling inventory if industry results in the main play fairway continue to be successful.

Alongside our Cardium plays, Great Plains continues to maintain and refine its other Pembina plays and plans to drill one Nisku well in September 2010 from an inventory of nine locations. Depending upon capital availability up to three Ellerslie wells may be drilled, all targeting light oil and all in close proximity to existing infrastructure. Initial success in the Ellerslie has the potential to lead to an expanded development inventory since Great Plains has now assembled approximately 5,200 net acres within the play trend. Additionally, Great Plains will be drilling a Jurassic test in west Pembina with multi-zone potential in June or July depending on surface conditions and rig availability.

In Northeast British Columbia (NEBC), the Company has approximately 450 BOE/d of tested gas production behind-pipe. The current superiority of oil economics over gas dictates that our spending focus must remain in Pembina through the balance of 2010 with the possible exception of a tie-in of approximately 150 BOE/d of Debolt gas at Mel/Gunnel. Furthermore, at Klua we made the decision to temporarily shut-in approximately 250 BOE/d of gas production. As with last year at this time, current gas prices are insufficient to justify depleting our reserves in an uneconomic manner.

Outlook

As discussed in our 2009 year-end report, Great Plains' direction for 2010 is clear. We are converting non-producing Nisku reserves into cash flow by completing the construction of the Crossfire oil gathering line and further Nisku exploration upside to come. Great Plains' current oil weighting of approximately 59% is expected to increase with our technical and capital spending focus on the Pembina Cardium. Inventory depth is being increased through land purchases in core areas and technical work in emerging oil prospects at Randell and in the Viking formation at Hamilton Lake.

From a business development perspective, the Great Plains' team is busy evaluating and executing an increasing stream of acquisition and swap ideas in and around our core areas. Rapid changes in completion and exploitation technology means that our evaluation team must move even faster to identify and capture these opportunities in order to provide the type of prospect inventory which is required for sustainable growth. The Company must increase its footprint in those areas where we have the ability to create value and we will continue to exit those areas where we have marginal opportunities for growth.

While opinions on the future of gas prices remain polarized, we continue to believe that Great Plains' NEBC land holdings and prospect inventory to contain future value, particularly as this relates to our shale gas position at Klua. In Great Plains' case, however, management believes that oil prices will outperform gas in relative terms and our capital allocation model continues to show that while our gas prospects are economic, we must preferentially invest in the oil projects we have in hand.

As always, Great Plains' management will continually monitor and adjust the Company's course to best adapt to market conditions as they evolve.

On behalf of the Board of Directors,

(Signed)"Stephen P. Gibson"

Stephen P. Gibson
President and CEO
May 14, 2010

FINANCIAL & OPERATIONAL HIGHLIGHTS

(\$000s except per unit amounts)	Three Months Ended Mar 31 2010	Three Months Ended Mar 31 2009	% Change	Three Months Ended Dec 31 2009
Oil and gas sales	5,778	5,823	(1)	4,908
Funds flow	815	999	(18)	740
Per share (basic)	0.01	0.01	-	0.01
Net income (loss)	(1,968)	(2,579)	(24)	(10,952)
Per share (basic and diluted)	(0.02)	(0.03)	(33)	(0.11)
Capital expenditures, net of dispositions	3,090	3,322	(7)	379
Bank debt and working capital deficit	20,082	25,831	(22)	18,139
Common shares outstand. (000s) basic	109,684	91,504	20	108,537
Production				
Crude oil and NGLs (bbls/d)	473	500	(5)	427
Natural gas (Mcf/d)	4,973	5,946	(16)	4,310
Total (BOE/d)	1,301	1,491	(13)	1,145
Realizations				
Crude oil and NGLs (\$/bbl)	78.39	61.65	27	65.93
Natural gas (\$/mcf)	5.45	5.70	(4)	5.84
Average (\$/BOE)	49.30	43.40	14	46.56
Netbacks (\$/BOE)				
Oil and gas sales	49.30	43.40	14	46.56
Royalties	(10.03)	(6.42)	56	(9.77)
Operating and processing costs	(19.05)	(19.14)	-	(17.62)
Transportation	(6.00)	(4.20)	43	(4.73)
Operating Netback	14.22	13.64	4	14.44
Processing and other income	1.62	1.75	(7)	0.96
General and administrative	(7.36)	(6.68)	10	(6.54)
Interest	(1.52)	(1.28)	19	(1.85)
Funds flow Netback	6.96	7.43	(6)	7.01

The complete quarterly financial statements and corresponding MD&A documents are available on SEDAR at www.sedar.com and on the Great Plains website at www.greatplainsexp.com.

For further information:

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Investors should note that BOEs may be misleading, particularly if used in isolation. A BOE conversion rate of 6 Mcf: 1bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

Advisory Regarding Forward Looking Statements

This press release contains forward-looking statements which include, but are not limited to: operations plans and outlook, behind-pipe production at Pembina and Northeast British Columbia, timing of production at Pembina, corporate oil to gas weighting, prospective production and resources recoverable for Cardium and Ellerslie wells, plans for future development of Cardium, Ellerslie and Nisku wells, plans for analysis of shale gas plays at Klua, future potential activity at Klua, potential for NEBC, Randell and Hamilton Lake lands, near and medium-term trends on oil and gas prices, cashflow forecasts, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, it cannot give any assurance that such expectations will prove to be correct. The forward-looking statements contained herein reflect management's current view and are based on certain assumptions including future commodity prices, timing and amount of capital expenditures, production of new and existing wells, performance characteristics of oil and gas properties, the size of oil and gas prospective resources, the continued availability of capital, land and skilled personnel and the ability to obtain equipment in a timely matter. Results of the Company may be affected by a variety of variables and risks associated with oil and gas exploration, production and transportation, such as loss of market, volatility of oil and gas prices, currency fluctuations, imprecision of reserve estimates, geological, technical drilling and processing problems, environmental risks, political and economic risks including changes in government policy, competition from other producers, ability to access sufficient debt and equity capital from internal and external sources, ability to replace and expand oil and gas reserves, ability to generate sufficient cash flow from operations to meet its current and future obligations, and risks associated with existing and potential future lawsuits and regulatory actions made against the Company; as a consequence, actual results could differ materially from those anticipated or implied in the forward-looking statements. Readers are also cautioned that the list of factors above is not exhaustive.

The Company's forward-looking statements are expressly qualified in their entirety by this cautionary statement and are made as of the date of this news release. Unless otherwise required by applicable securities laws, the Company does not intend nor does it undertake any obligation to update or review any forward-looking statements to reflect subsequent information, event, results or circumstances or otherwise.