



Science, Technology, Energy and Mines

Petroleum Branch
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7 September 2012

Timothy Tong, P. Eng.
Project Lead – Manitoba Asset Team
Enerplus Corporation
#3000, 333 7 Avenue SW
Calgary AB T2P 2Z1

Dear Mr. Tong:

RE: Routledge Unit No. 1 - Waterflood EOR Application

The Branch has completed a review of your application to implement within Routledge Unit No. 1 waterflood EOR operation. Notice of the application has been published on our website and on Virden Empire Advance on July 27, 2012 and we received no comments and interventions until the deadline had ended last August 17, 2012.

The Branch requires additional information on the following subjects:

- There might be some issues in the future in injection, channeling or out of zone migration, etc. due to the faulting at 15-9-25W1, does Enerplus has contingency plans for these to mitigate the possible problems in the future especially an injector will be put in place at this section?
- The Pilot Project at 22-9-25WPM was beneficial for 19 years before it was discontinued in 1994, what made Enerplus decided to stopped it? For 19 years it was operational and increasing the production, what stopped Enerplus not to expand the Pilot in the unit?
- Enerplus used a fixed production of 24 bbls/day as the economic limit in the application. A dynamic project like this needs to adjust to ever changing economy, depleting world's oil supply, the oil prices and production cost will most probably look bleak, how can this project sustain its profitability in view of the above?
- There two or more units used as a basis for the response of Routledge Unit 1, i.e. adjacent Lodgepole pools and the Pilot Project, what made Enerplus to used more units as a basis or reference than sticking only to one particular unit?

- ARC Resources (WI owner) approved the mail ballot on June 14, 2012 wherein the deadline of submission was June 13, 2012. A day had already elapsed. Is this still valid?
- The working interest owners approved mail ballots are not complete, please send the remainders.

Please submit the required information in both paper and electronic (pdfs are fine) formats to the undersigned. If you have any questions in respect of this matter please contact me directly at (204) 945-6570.

Yours truly,



Leo Leonen
Technical Engineering Officer

Cc: Virden Office
Jenny Hiebert, *Enerplus, Calgary*