EUB Alberta Energy and Utilities Board

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September 19, 2006

EnCana Oil and Gas Partnership
c/o **McCarthy Tétrault LLP**
Suite 3300, 421-7th Avenue S.W.
Calgary, AB T2P 4K9

Attention: Mr. D. G. Davies

Dear Mr. Davies:

RE: INFORMATION REQUESTS
ENCANA Oil and Gas Partnership SEPTEMBER 5, 2006 SUBMISSION
APPLICATION NO. 1409180
APPLICATION TO SHUT-IN GAS PRODUCTION
COLD LAKE OIL SANDS AREA CLEARWATER FORMATION

Please find enclosed information requests made by the Board staff to EnCana Oil and Gas Partnership with respect to EnCana's September 5, 2006 submission to Application No. 1409180.

Yours truly,

<Original Signed by Giuseppa Bentivegna>

Giuseppa Bentivegna
Board Counsel

cc: Canadian Natural Resources Limited, c/o Thackray Burgess, Patrick McGovern
Husky Oil Operations Limited**,** Susan Anderson
Imperial Oil Resources**,** Dr. Gokhan Coskuner
Imperial Oil Resources**,** Susan C. Stark

Board Staff Information Requests for EnCana Oil & Gas Partnership (EnCana) (September 19, 2006)

1. On page 2 of its submission EnCana states that the study by Kade Technologies Inc. demonstrates how erroneous conclusions can be reached by endeavouring to transfer inapplicable learnings from SAGD or vertical wellbore CSS to a development using horizontal wellbore CSS. In EnCana's view, what are the inapplicable learnings from vertical wellbore CSS that are being transferred to horizontal wellbore CSS?

   With respect to the effect that de-pressuring a gas cap might have on CSS performance, why would there be a difference between horizontal wellbore CSS and vertical wellbore CSS?

2. With respect to the study by Kade Technologies Inc.:

   a) On page 1 it is stated that the Computer Modeling Group's (CMG) thermal reservoir simulator STARS was applied in the study. What version of STARS was used?

   b) Provide electronic copies of the input files for each of the simulation cases that were run. Also, provide the results files (*.irf and *.mrf) for cases FL2, FL3, FL8, FL13, FL14, NE6, and NE8.

   c) Page 1 refers to Figure E.2 which is a schematic diagram outlining the structural position of the hydrocarbons and barrier relative to the position of the model runs. It is stated that the bitumen intervals in the model are approximately correlative to the Blue valley sands and the Yellow valley sands to the east shown on CNRL's schematic cross-section (Figure E.1). Does this mean that Encana agrees with CNRL's geological model? If no, why not? Why does the model not include the Orange valley sands to the west as illustrated in Figure E.1?

   d) Was the gas cap modeled as a confined or unconfined gas cap? If confined, why is it appropriate to use a confined model?

   e) On page 2 it is stated that the deformation model and imbibition and drainage relative permeability hysteresis techniques applied in the study are similar to those successfully applied to model CSS operations in Cold Lake by Imperial Oil Limited. Discuss any differences between the techniques used in the study and those that have been applied to model CSS operations in Cold Lake by Imperial Oil Limited.

   f) On page 2 it is also stated that sensitivity studies cover possible scenarios of reservoir configurations and operational parameters that include changes to nine parameters. Explain what is meant by "changes in the fluid flow physics in the bitumen zone".

g) On page 5 it is stated that reasons for achieving relatively similar HW CSS bitumen recovery factors in cases involving depletion of the gas cap gas when compared to similar reservoir cases without gas cap production are currently being investigated. However, early analysis results indicate that lower bitumen reservoir pressure below the gas cap, resulting from gas cap gas depletion, allows the steam vapors to rise higher and have better penetration into the upper regions of the reservoir. Why should the Board place any reliance on an explanation that is still being investigated?

h) On page 6 it is stated that HW CSS bitumen recovery factors of approximately 36 and 33 % were achieved for case FL 13 (gas cap at 201 kPaa) and case FL 14 (gas cap at 2585 kPaa) respectively, and that this suggests there is no impact of gas cap gas depletion on HW CSS bitumen recovery. However, Table E.4 indicates that in case FL 13 the permeabilities of all layers were multiplied by 60 while in case FL 14 only the permeability of the well layer was multiplied by 10. Why is it appropriate to compare the recoveries of these two cases with respect to the impact of gas cap production on bitumen recovery considering the large difference in the changes to the permeabilities between the two cases?

On page 4, it is stated that in the case of the Non Edge pool with no barrier present and HW CSS operations utilizing a steam injection rate 400 m^3/d, the bitumen recovery factor is 14.4% for the case of gas cap gas depletion to approximately 1000 kPaa and 14.5% of OBIP with no gas cap depletion. Does this statement refer to cases NE 6 and NE 8 on Table E.2? If yes, why is it appropriate to compare these two cases with respect to the impact of gas cap depletion on bitumen recovery when the permeability of case NE 6 is 10 times that of case NE 8? If no, what cases are being referred to?

Also on page 4, it is stated that, for the Flank reservoir (Max) having no barrier and HW CSS operations utilizing a steam injection rate of 400 m^3/d, a bitumen recovery factor of 25.6% of OBIP is achieved for the case of gas cap depletion to an abandonment pressure of 201 kPaa and 25.2 % for the case of no gas cap depletion (gas cap pressure at the initial value of 2585 kPaa). Which cases are being referred to in this comparison? Is the reservoir situation, other than the pressure of the gas cap, the same between the cases? If not, why is it appropriate to compare the two cases with respect to the impact of gas cap depletion on bitumen recovery?

i) On page 7 under Fluid Properties, it is stated that published data for component properties from oil characterization for the Wolf Lake bitumen[3] (where superscript 3 refers to paper SPE/DOE 17393) was used in the model. The reference does not appear to provide this information. Clarify where this information is found in the reference.

What initial solution gas oil ratio and saturation pressure were used for the bitumen in the model?

j) Tables E.2 and E.3 do not show results for the abandonment pressure (201 kPaa) case or the high steam injection rate (1000 m^3/d) case for the Non-Edge and Edge models. Why is this?

k) On Table E.3, cases ED 1, 2, 3 and 4 have the same gas pay and initial water saturation but cases ED 1 and 2 have a different gas cap OGIP than cases ED 3 and 4. Explain why the OGIP is different.

Also on Table E.3, although cases ED 5 and 6 have the same bitumen pay as cases ED 1, 2, 3 and 4 the initial water saturations are different but the OBIP is the same for all six cases. Why isn't the OBIP for cases ED 5 and 6 lower since these cases have higher initial water saturations?

l) With respect to Tables E.3 and E.4 there is a column titled "Cumulative Gas Produced from GasCap in CSS" that contains both positive and negative values. What do the negative values for the cumulative gas produced from the gas cap in CSS mean? Also with respect to Table E.4, provide the results for case FL 5 (only the description is provided).

m) Tables 2.1 to 2.3 provide the reservoir description parameters, which include the horizontal permeability and kv/kh values for the gas, bitumen, and shale zones in the model. Provide the data source for these values.

Explain why it is appropriate to use homogenous descriptions of the gas and bitumen zones.

The cases described in the study show permeability multipliers of up to 60 times the initial values used in the study. Considering the high initial permeabilities for the gas and bitumen zones, why is it appropriate to use permeability multipliers of up to 60?

n) On page 2 it is stated that the CSS operations were conducted in a total of 26 injection and production cycles covering a total of 26 years. Discuss why a limit of 26 cycles was used rather than an economic limit.

With respect to Table 2.6, clarify the steam volume for injector cycle 1. Why is the cumulative steam (3750 m^3) less than the cycle size (15000 m^3)?

o) Provide copies of references 2, 3, and 5.