

January 12, 2005

B. Fialka
Koch Exploration Canada Corporation
1400, 111 - 5 Avenue SW
Calgary AB T2P 3Y6

Dear Mr. Fialka:

**CADOTTE BLUESKY B POOL
HUSKY CADOTTE 10-6-86-17W5 WELL
REQUEST TO SHUT-IN
APPLICATION NO. 1378856**

The Alberta Energy and Utilities Board (EUB) has reviewed your application, dated December 16, 2004, requesting that the current gas production at the subject well be shut-in.

For a more complete application, the EUB notes that the following items need to be addressed:

1. Provide net gas and bitumen pay maps, including all cutoffs being used and their derivation to determine net pay in each of the sands (i.e. S_w , ϕ , k_v , k_h , V_{shale} , etc). Also include top and/or bottom water thickness maps, structure maps of Bluesky and Debolt.
2. Based on the net pay maps requested in question 1, provide a calculation of the initial gas and bitumen in place for each net pay map. The calculation should include the total rock volume, the average porosity and water-saturation, and bitumen formation-volume-factor used to arrive at these values. In addition, provide the source for each of the reservoir and fluid parameters used in the calculation. Please elaborate on the Bluesky oil sand pay thickness (8m) at the 15-31-85-17W5, 6-5 and 10-8-86-17W5 wells, based on observation of core from the 10-8 well.
3. Elaborate on Koch's concern that excess water (50 m³/d) being produced with gas may introduce additional risk to future horizontal wells drilled in the vicinity of the gas cap.
4. What is your interpretation of the source of the produced water? If an associated water zone is interpreted and if it is different to the ones mentioned in 1 above, please provide a map showing the extent of the zone.
5. Explain how the recovery factors, surface losses and breakdown of gas cap gas and solution gas production, provided in your application, was determined. Show your calculations.
6. Provide evidence to support your view that solution gas is evolving from the downdip heavy oil and is being produced at well 10-6-86-17W5.

7. Provide an assessment of the reservoir and bitumen quality in the area. Besides the parameters mentioned in 1 and 2, provide discussions with respect to shaliness, PVT data and viscosities in the vicinity, either from potential bitumen producing locations or modelling.
8. Provide any pressure data or other evidence indicating that the bitumen zone is being affected by gas production.
9. Provide an assessment of the potential impact of gas production on primary bitumen recovery, either theoretical or based on field experience.
10. Provide a comparison of the bitumen and reservoir qualities between this area and Seal Lake, i.e., bitumen viscosities, net bitumen pay thicknesses, water saturation, shaliness, presence of top water and bottom water.
11. Provide a map showing Koch's oil sands ownership in the area.
12. In order to address issues such as bitumen conservation or gas cap size, provide input on the type of information required. Discuss what the pressure testing/monitoring data should be gathered in this specific oil sands area (i.e. frequency and measurement accuracy) and clearly state your logic behind this, considering how this information might be useful as well as the costs associated with it. Also discuss the need for core data requirements, particularly in regards to whether or not this may be useful in determining solution gas versus associated gas caps.

Although the information requested above is required to address the issues identified in Application No. 1378856, your submission should not be limited to this information. Any party making a submission should include whatever it sees necessary to explain its position on the given issues, including the data (raw and interpreted) along with a detailed explanation regarding the analysis of the data.

Any additional information should be submitted to the attention of Bernadette Law, on or before February 4, 2005. Failure to do so may result in your application being returned, without prejudice to future re-application. Upon receipt of the information, processing of your application will proceed and further questions may arise. Should there be any questions, please direct them to Bernadette Law at 297-2893.

Yours truly,



Bernadette Law, P.Eng.
Reservoir Engineer
Resources Applications

cc: Husky – Vic Wiebe