



**Science, Technology, Energy and Mines**

Petroleum Branch

360-1395 Ellice Ave, Manitoba, Canada R3G 3P2

T 204-945-6577 F 204-945-0586

www.manitoba.ca

1 October 2012

Brittany Trask  
SE SK/MB Exploitation Engineer, EIT  
Canadian Natural Resources Limited  
2500, 855 - 2 Street S.W.  
Calgary, AB T2P 4J8  
***BY EMAIL***

Dear Ms. Trask:

**RE: South Pierson Unit No. 3 – Unit and Waterflood EOR Application**

---

The Branch has completed a preliminary review of your application to create South Pierson Unit No. 3 and implement within waterflood EOR operation. Notice of the application has been published on our website and on Melita New Era on September 21, 2012. The deadline for public intervention and comments will be on October 12, 2012.

The Branch requires additional information on the following subjects:

- The tract factors for LSDs 1-2, 5-8 of Section 14-2-29 WPM do not match our calculations. Kindly re-check them again.
- In the production allocation calculation, is it uniform to use that an LSD's portion of the production is directly proportional to the length of the horizontal well or leg drain within the LSD for all types of mineral owners?
- With SPU1 as analogy for SPU3 and SPU2, what is the percent deviation of SPU2 from SPU1 in terms of average annual production per active well say for the first two years of their operation as an EOR units?
- As per discussed over the phone, please extend the notification to the mineral owners to achieve the 0.5 km criteria. Afterwards, please forward to me the additional notification proofs.

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,

A handwritten signature in black ink, appearing to read 'Leo Leonen', with a horizontal line drawn through it.

Leo Leonen  
Technical Engineering Officer

Cc: Virden Office