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November 26, 1997

Ministry of Employment and investment Energy and Minerals Division, PO Box 9326 STN PROV GOVT Victoria, B.C. V8W 9N3

Attention: Mr. Peter Attariwala

Re: Owl Cecil A Pool Waterflood Scheme Area Modification, Approval #97-09-001

Anderson Exploration (Anderson), provides the following information in support of its 97-10-28 application to modify the subject waterflood scheme area. Anderson has received the 97-11-21 letter of objection by Orbit / Ranger, and hereby documents 4 major points of disagreement with the contents:

1. Anderson does not agree that the revised waterflood scheme will reduce Tract 3 oil recoveries. In fact, the Tract will benefit substantially, without making any capital, or operating cost contributions. The remaining recoverable oil at 8-17 will increase from 6,700 m3 under primary (source: decline analysis) to between 8,000 m3 (Orbit / Ranger estimate, 97-11-21), and 10,900 m3 (Anderson estimate, 97-09-18). This benefit to Tract 3 is a direct result of pressure support from the revised waterflood.

Orbit / Ranger have argued that the 8-17 well would have recovered 25,600 m3 under the original waterflood, and that they are losing 17,600 m3 of oil recovery. In fact, Tract 3 owners were offerred 31,300 m3, or 10% of the pool total remaining oil recovery, and elected not to participate. As a result of this election, Orbit / Ranger were never entitled to the 17,600 m3 of oil that they claim they will lose.

Note: Anderson offered to tie the 8-17 well into its central facilities to eliminate oil and water trucking costs. Anderson believes this would extend the economic life of the well, and increase hydrocarbon recovery above the Orbit / Ranger forecast. Orbit / Ranger declined the offer.

- Anderson does not agree with the Orbit / Ranger statement that the revised waterflood project area
  causes a "potential reduction in overall crude oil recoveries". Anderson believes that pool total recovery
  will be at worst unaffected, with possible increases in recovery due to the increased well density.
- 3. Anderson disagrees with the Orbit / Ranger statement that " (.... the drilling of the 5-16 well...) could serve no purpose other than to allow Anderson to exclude the south-east quarter of 17-86-18 WBM from the waterflood approval, and to capture reserves swept from the excluded lands."

The 5-16 well will not drain Tract 3 reserves, but will merely mitigate the drainage of Tract 1 by the 8-17 well. The technical data indicate that much of the oil produced at 8-17 to date has originated from Tract 1, and that future recovery, both in the primary and waterflood cases, would also drain Tract 1. The 8-17 ultimate oil recovery is predicted to be 43% OOIP under primary (source: decline analysis), and 77% under the original waterflood (source: Petro-Canada simulation). The abnormally high recoveries, together with the geological mapping approved by Orbit / Ranger, prove that without the 5-16 well, Tract 1 would be the real drainage victim.

Anderson has repeatedly stated its desire to fairly unitize Tract 3, thus avoiding the 5-16 drill. However, Anderson believes it has the right to drill to protect its own reserves if necessary, and does not believe that Orbit / Ranger have any legitimate grounds to object.

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- 4. Anderson does not agree with the negotiation history presented in the Orbit / Ranger letter. Anderson's comments are summarized below, and the supporting unitization minutes are attached. This section is presented to support Anderson's position that all outstanding issues have already been addressed, and that further negotiating time will not resolve the current impasse, but rather will delay waterflood implementation.
  - Regarding the Orbit / Ranger statement describing unitization procedures after Petro-Canada presented the first version of the geological mapping:
    "...The next few months were spent getting all of the owner's geologists to approve a well map, and the well parameters; no effort was made to get approval of well productivity parameters".

The minutes of the 96-12-19 Technical Committee meeting show that productivity tract factors were discussed, and that all parties, including Orbit, indicated that they had no problems with the productivity parameters.

Regarding the Orbit / Ranger statement:

"The next meeting was held in March 1997, at which time the maps were approved, and Orbit objected to the lack of recognition of the well productivity in the unitization formula proposed by Petro-Canada. We did not receive any response."

The 97-03-17 meeting minutes show that Barry Olson from Orbit committed to present a counter proposal to the Committee. This was not done until 6 months later at the 97-09-15 meeting. Anderson presented a technical evaluation of the proposed Orbit productivity factors, and a counter proposal 97-09-25. Orbit / Ranger declined the offer. Anderson thus believes that the issue has been fully addressed.

Anderson is committed to commence waterflood operations in the subject pool as soon as possible. Field installation of waterflood pipelines and equipment commenced 97-11-15, and is ongoing. The target start date for water injection is 97-12-15. Anderson is thus compelled to finalize the project area quickly to avoid delays.

Anderson does not believe that additional negotiating time will end the impasse. Negotiations were initiated 96-03-06, providing ample time for agreement. Orbit and Ranger's previously declared intention to sell their Owl interests in industry packages also further complicates future negotiations.

In conclusion, Anderson takes strong exception to the Orbit / Ranger threats of retribution against the MEI for alleged losses incurred in the course of normal process. Anderson has consistently attempted to fairly unitize, or acquire Tract 3, and the exclusion application was only submitted after our extensive efforts were unsuccessful. Anderson believes the Orbit / Ranger threat is an attempt to use the MEI to obtain additional leverage in what should be a purely commercial negotiation, and to delay waterflood implementation purely to achieve financial gain at Anderson's expense.

Questions can be directed to the undersigned at (403) 232-7699.

Yours truly,

Kevin W. Krynowsky, P.Eng.

**Exploitation Engineer** 

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cc: File: Owl Area 850 Kurt Larsen, Orbit Isn Mointoch, Ranger