

Farnsworth No. 19 in Section 12, will all be addressed at the appropriate time when later phases of the waterflood are initiated. These wells are marked on Exhibit II which is a map showing all wellbores in the South Leonard area.

You will find attached a copy of the request to the USGS for renewal of the permit to re-enter Leonard Brothers No. 14 (Exhibit III). We plan to re-enter the well, deepen and case it to 3600'. The current wellbore schematic is on Exhibit IV, and the proposed wellbore configuration is on Exhibit V. Perforations will be selected from logs to be run, treatment performed, and a packer set +100' above the perforations to commence water injection.

The Midwest Refining Company Farnsworth No. 19 in Section 14 will be re-entered and cleaned out to 2900' to be plugged to abandon. Exhibit VI is a wellbore schematic showing the current downhole condition of the well. We plan to plug it with 100' plugs - 50' above and 50' below each casing shoe and casing cutoff point. Exhibit VII is the proposed wellbore schematic.

Exhibits VIII-XII are Wellbore Schematics of Leonard Federal Nos. 9, 10, 11, 13 and Leonard Brothers No. 21, respectively. Exhibit XIII includes copies of all the Form 9-331s sent to the USGS for each proposed injector.

In support of this application we have enclosed:

- a) a plat showing the location of the proposed wells, all wells within the project area and offset operators;
- b) a schematic drawing of each of the proposed injection wells which fully describes the casing, tubing, perforated interval, and appropriate depths.
- c) a copy of the letter sent to all offset operators in which said operators were furnished a copy of this application.

An archaeological study was performed by Dr. J. Loring Haskell of Carlsbad, New Mexico, which you should have received a copy of his report stating that the right-of-ways for injection lines were archaeologically approved for our work. He has not yet looked at the Leonard Brothers No. 14, but he will and mail you the results. Upon your approval of conversion of the six wells to water injection we will commence laying the injection lines per Exhibit II.

We estimated secondary recovery from this project to be 663 MBO. The six wells previously discussed will constitute a pilot waterflood area