

**THE APPLICATION OF GREAT WESTERN DRILLING COMPANY TO CONSIDER
UNITIZATION AND SECONDARY RECOVERY AUTHORITY FOR THE SUNTURA
(LOWER CLEAR FORK) UNIT IN THE SUNTURA (LOWER CLEAR FORK) FIELD,
TERRY COUNTY, TEXAS**

HEARD BY: Andres J. Trevino P.E., Technical Examiner
Mark Helmueller, Hearings Examiner

DATE OF HEARING: June 29, 2007

APPEARANCES:

Clark Jobe
Sam Roberts
Mike S. Heathington
Russell Richards

REPRESENTING:

Great Western Drilling Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Great Western Drilling Company requests Commission authority for unitization of the Suntura (Lower Clear Fork) Unit and approval of secondary recovery operations on the Unit in the Suntura (Lower Clear Fork) Field.

This application was unopposed and the examiners recommend approval.

DISCUSSION OF THE EVIDENCE

The Suntura (Lower Clear Fork) Field was discovered in 1999 at an approximate depth of 7,400 feet. Production peaked in 2002 with a monthly production rate of 40,000 BO per month. Current production is approximately 13,000 BO per month from 21 wells in the Unit area.

The area proposed for the subject unitization covers acreage that includes the majority of the productive reservoir. The reservoir limits are well defined and are believed to include both drained and undrained areas. Leaseholders of productive areas not in the unit were offered to participate in the unit. The area is in the late stage of primary production. Cumulative primary production from the 21 wells is 1,936,000 BO, or 4.2% of original oil in place. Remaining primary production from wells on the unit is estimated to be 1,664,000 BO.

The unitized formation is the Lower Clear Fork formation which is a shelf margin deposit composed of dolomitized carbonate packstone. The proposed Lower Clear Fork interval contains four separate distinct porosity zones in the field. The zones are identified as Zones A, B, C and D. The zones do not exist in all wellbores and are of limited lateral extent. The formation is described as the carbonate formation encountered in the interval from 7,386 feet to 8,243 feet on the log of the Great Western Drilling Co. Suntura No. 6, (API No. 42-445-31965) located in the C & M RR Co. Survey, A-70, Terry County, Texas.

Average porosity is 6.5% and average water saturation is 15%. The initial reservoir pressure was 3,956 psi and current pressure beneath the unit area is less than 500 psi. Great Western performed extensive waterflood studies including 3D computer simulation to predict the waterflood's performance. The waterflood program will consist of 22 producing wells and 16 injection wells. Initially make up water will be supplied from the Oglalla and the Edwards Trinity aquifers to supplement the waterflood project. A total of 16 new injection wells and one new producing well will be drilled.

The proposed Suntura (Lower Clear Fork) Unit consists of 8 tracts which contain a total of 1,360 acres. There are approximately 190,400 acre-feet of Lower Clear Fork in the proposed unit area. The participation formula is based on a ratio of remaining primary reserves plus a ratio of original oil in place and a ratio of ultimate primary reserves. The Unit Agreement has been ratified by over 91% of the royalty interest ownership and 94% of the working interest ownership. There are no state lands in the Unit Area.

It is estimated that the total cost to implement the project will be \$14,620,000. Secondary reserves are estimated to be 3,000,000 BO. Estimated revenue from the secondary recovery project is \$135 million at \$45/bbl.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators and royalty interest owners within the proposed unit and to offset operators and mineral owners of unleased tracts. Notice was also published in *The Brownfield News*, a newspaper of general circulation in Terry County, for four consecutive weeks beginning May 23, 2007. There were no protests to the application.
2. The proposed unit consists of 8 tracts which contain a total of 1,360 acres.
3. The unitized formation is the subsurface portion of the Unit Area commonly known as the Lower Clear Fork reservoir. The formation is described as the interval from 7,386 feet to 8,243 feet on the Great Western Drilling Co. Suntura No. 6, (API No. 42-445-31965) located in the C & M RR Co. Survey, A-70, Terry County, Texas.

4. Secondary recovery operations will result in the recovery of an estimated 3 MMBO which would otherwise go unrecovered.
5. The cost to implement the project does not exceed the value of additional reserves to be recovered.
6. The participation formula is based on a ratio of remaining primary reserves plus a ratio of original oil in place and a ratio of ultimate primary reserves.
7. The secondary recovery project will not be successful unless the area is unitized.
8. The secondary recovery program will use fresh water from Oglalla and Edwards Trinity Aquifer initially.
9. The agreement was voluntarily executed by all parties affixing their signatures thereto and no person has been compelled or required to enter into the agreement. The unit agreement binds only those persons who have executed it, their heirs, successors, assigns and legal representatives. The rights of all owners of interests in the field will be protected under the operation of the unit, regardless of whether an owner signed the unit agreement.
10. The owners of interest in the oil and gas under each tract of land within the area reasonably defined by development have been given an opportunity to enter into the unit on the same yardstick basis as owners of interest in the oil and gas under the other tracts in the unit.
11. The proposed injection program will move hydrocarbons across lease lines, and unitization is necessary in order to protect the correlative rights of the various interest owners.
12. The unitization agreement is necessary to accomplish the purposes of establishing a unit to effect secondary recovery operations and to operate the necessary cooperative facilities. Other available or existing methods or facilities for secondary recovery operations are inadequate for the purpose of secondary recovery.
13. The unit agreement does not provide, either directly or indirectly, for the cooperative refining or marketing of crude petroleum, distillate, condensate, or gas, or any by-product thereof.
14. The unit agreement is subject to all valid orders, rules and regulations of the Railroad Commission.

15. The unit agreement contains no provision regarding field rules, nor does it limit the amount of production of oil or gas from the unitized area. The unit agreement does not release the operator from his obligation to reasonably develop lands or leases as a whole.
16. The unit agreement is a voluntary agreement entered into for the purpose of conducting secondary recovery operations.
17. The unit agreement does not provide for the location of wells.
18. There are State lands in the unit.
19. The reservoir described in the unit agreement is a suitable reservoir for the proposed secondary recovery operation.
20. The unit agreement contains only the acreage reasonably necessary to accomplish the proposed secondary recovery project.
21. The unit agreement has been ratified by 94% of the working interest ownership and over 91% of the royalty interest ownership.
22. **On tracts where 100% sign-up is not attained, applicant will conduct monthly well tests to account for production from that tract.**

CONCLUSIONS OF LAW

1. Proper notice was given to all persons legally entitled to notice.
2. All things have occurred or have been accomplished that are necessary to give the Commission jurisdiction in this matter.
3. Applicant's proposed secondary recovery project satisfies all of the requirements set out in TEX. NAT. RES. CODE ANN. §§101.001 et seq. (Vernon 1993).
4. Approval of the proposed unit agreement and secondary recovery operations is in the public interest and is necessary to prevent waste and to promote the conservation of oil or gas or both.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend approval of the proposed Suntura (Lower Clear Fork) Unit and secondary recovery operations project as set out in the attached order.

Respectfully submitted,

Andres J. Trevino
Technical Examiner

Mark Helmueller
Hearings Examiner