

THE APPLICATION OF FRESH WIND RESOURCES TO CONSIDER UNITIZATION AND SECONDARY RECOVERY AUTHORITY FOR THE LUNSFORD CADDO UNIT IN THE LUNSFORD (CADDO) FIELD, THROCKMORTON COUNTY, TEXAS

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

DATE OF HEARING: December 11, 2009

APPEARANCES:

John Soule

REPRESENTING:

Fresh Wind Resources

VIA PHONE CONFERENCE:

Bruce Robertson
Larry Danbridge
Jeff Ritchie
Ross Roye

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Fresh Wind Resources requests Commission authority for unitization of the Lunsford Caddo Unit and approval of secondary recovery operations on the Unit in the Lunsford (Caddo) Field.

This application was unopposed and the examiners recommend approval.

DISCUSSION OF THE EVIDENCE

The Lunsford (Caddo) Field was discovered in 1954 at an approximate depth of 4,095 feet. There have been 25 wells drilled in the area with five wells being completed in the field since its discovery. Currently the Gilbert No. 1 operated by Romac Oil Co. is the only well in the Lunsford (Caddo) Field. Fresh Wind Resources has obtained leases in the proposed Project Area to initiate the waterflood unit.

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. Mineral interest owners of productive areas were given an opportunity to participate in the unit on the same yardstick basis as those

mineral interest agreeing to participate in the unit. The Gilbert No. 1 operated by Romac Oil Co. is the only remaining well in the field. Romac has not agreed to participate in the Lunsford (Caddo) Unit. Cumulative primary production from the four historic wells in the Project Area is 380,609 BO, or 18.5% of original oil in place. There is no remaining primary production from the wells on the unit as all wells in the unit are plugged and are not producing.

The unitized formation is the subsurface portion of the Unit Area commonly known as the Lunsford (Caddo) Field. The formation is described as the Upper Caddo Lime which is of the Strawn series in the Pennsylvanian age. The Upper Caddo Lime is encountered in the interval from 4,096 feet to 4,188 feet on the James P. Gordon Lunsford, GR No. 1, (API No. 42-447-00366) located in the T.E. & L. Co. Survey, A-361, Section 945, Throckmorton County, Texas.

The unitized interval includes the top of the Upper Caddo Lime thru the oil water contact (found at 4,140 feet on the type log) and slightly below the oil water contact at 4,188 feet. The Upper Caddo Lime is found in all wells through out the Project Area. The Caddo Lime's average porosity is 14.7% and average water saturation is 30.3%. The initial reservoir pressure was 1,750 psi. Fresh Wind Resources plans to waterflood the Project Area by utilizing four producing wells, four injection wells and one Strawn saltwater supply well. Fresh Wind will drill all the required wells and will only reenter one of the plugged injection wells. Fresh Wind will use a line drive/peripheral type pattern to maximize sweep of the reservoir.

The proposed Lunsford Caddo Unit consists of 5 tracts which contain a total of 520 acres. There are 3,106 acre-feet of Caddo Lime in the proposed unit area. The participation formula is based on 90% acre-feet reservoir volume and 10% surface acreage. The Unit Agreement has been ratified by nearly 100% of the royalty interest ownership and 100% of the working interest ownership. Fresh Wind Resources is the only working interest owner in the Project Area. There are no state lands in the Project Area.

It is estimated that the total cost to implement the project will be \$3,389,000. Secondary reserves are estimated to be 530,936 BO. Estimated gross working interest revenue from the secondary recovery project is \$30.4 million at \$75/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 Graham Leader*, a newspaper of general circulation in Throckmorton County, for four consecutive weeks beginning November 11, 2009. There were no protests to the application.

2. The proposed unit consists of 5 tracts which contain a total of 520 acres.
3. The unitized formation is the subsurface portion of the Unit Area commonly known as the Lunsford (Caddo) reservoir. The formation is described as the Upper Caddo Lime is encountered in the interval from 4,096 feet to 4,188 feet on the James P. Gordon Lunsford, GR No. 1, (API No. 42-447-00366) located in the T.E. & L. Co. Survey, A-361, Section 945, Throckmorton County, Texas.
4. Secondary recovery operations will result in the recovery of an estimated 530,936 BO 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 90% acre-feet reservoir volume and 10% surface acreage.
7. The secondary recovery project will not be successful unless the area is unitized.
8. The secondary recovery program will use salt water from a Strawn water supply well.
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 no 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 100% of the working interest ownership and nearly 100% 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 Lunsford Caddo Unit and secondary recovery operations project as set out in the attached order.

Respectfully submitted,

Andres J. Trevino
Technical Examiner

Mark Helmueller
Hearings Examiner