

THE APPLICATION OF GINNINGS COMPANY TO CONSIDER UNITIZATION AND SECONDARY RECOVERY AUTHORITY FOR THE COOKSEY-COLLIER UNIT IN THE DYEMOUND (STRAWN) FIELD, MONTAGUE COUNTY, TEXAS

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

DATE OF HEARING: January 22, 2010

APPEARANCES:

Richard P. Marshall, Jr.
Marke D. Ginnings
Michael D. Luebke

REPRESENTING:

Ginnings Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Ginnings Company requests Commission authority for unitization of the Cooksey-Collier Unit and approval of secondary recovery operations on the Unit in the Dyemound (Strawn) Field.

This application was unopposed and the examiners recommend approval.

DISCUSSION OF THE EVIDENCE

The Dyemound (Strawn) Field was discovered in 1979 at an approximate depth of 6,364 feet. Production peaked in 1980 with a production rate of approximately 8,600 BO per month. Current production is less than 200 BO per month from three Collier lease wells in the Unit area. There are two HEP Oil GP, LLC Reimers wells north of the unit area that are carried by the Commission in the Dyemound (Strawn) Field, but those wells do not produce from the same pressure connected source of supply underlying the Unit area.

The area proposed for the subject unitization covers acreage that includes the entirety of the productive reservoir within the trap underlying the acreage. The reservoir limits are well defined and are believed to include both drained and undrained areas. All mineral and leasehold owners in the three tracts to be unitized were offered an opportunity to participate in the Unit on the same yardstick basis. The area is in the late stage of primary production. Cumulative primary production from the three wells is 333,099 BO,

which ranges from 21% to 32% of original oil in place from both of the productive Collier leases. Remaining primary production from wells on the unit is estimated to be 18,000 BO.

The unitized formation is the Strawn formation, which is composed of sandstone. The reservoir is delineated by a stratigraphic trap. One zone within the Strawn, referred to as the Main Strawn, is the zone of interest for secondary recovery. There are other porosity developments within the Strawn zone, but those porosity streaks do not exist in all wellbores and are of limited lateral extent. The formation is described as the sandstone formation encountered in the interval from 6,297 feet to 6,455 feet on the log of the Ginnings Company Collier No. 2 Well, as shown on the Dual Induction Focused Log dated October 28, 1979, and originally drilled by Taubert & Steed (API No. 42-337-31278), located in Block 14, Calhoun County School Land Survey, League 12, A-122, Montague County, Texas.

Average porosity is 13% and water saturation is 34%. The initial reservoir pressure was 2,600 psi and current pressure beneath the unit area is less than 300 psi. Ginnings studied five waterflood projects in Montague County in the general vicinity of the proposed Unit. Those projects are comparable in depth, approximately 6,200 feet, and in porosity, 13%-14%. Primary recovery in the five study area projects averaged 23%, ranging from 9% to 34%. Based on performance, Ginnings calculated there are 116,000 barrels of secondary oil under the unitized area, 91,000 of which are contained in the influenced area, the area bounded by the existing wells and the proposed development in Tract 3. The proposal is to convert one of the producing wells to an injection well, produce from the two other wells, and later drill a second injection well on the east end of the Unit. Make up water will come from either a salt water supply well to be drilled on the unit, or from outside sources via purchase.

The proposed Cooksey-Collier Unit consists of three tracts which contain a total of 322.4 acres. The participation formula is based on three factors: 5% current production, for the six months from July 2008 to January 2009; 50% reservoir volume in acre feet from the Main Strawn Sand only; and 45% on the useable wells cased to or through the unitized formation. There are approximately 1,958 acre-feet of Strawn in the proposed unit area. The Unit Agreement has been ratified by over 85% of the royalty interest ownership and 97% 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 \$700,000. Secondary reserves are estimated to be 91,000 BO. Estimated discounted revenue from the secondary recovery project is \$1,368,000 at \$50/bbl, after recovery of the investment.

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 Bowie News, Inc.*, a newspaper of general circulation in Montague County, for four consecutive weeks beginning December 24, 2009. There were no protests to the application.

2. The proposed unit consists of 3 tracts which contain a total of 322.4 acres.
3. The unitized formation is the subsurface portion of the Unit Area commonly known as the Strawn reservoir. The formation is described as the interval from 6,297 feet to 6,455 feet on the log of the Ginnings Company Collier No. 2 Well, as shown on the Dual Induction Focused Log dated October 28, 1979, and originally drilled by Taubert & Steed (API No. 42-337-31278), located in Block 14, Calhoun County School Land Survey, League 12, A-122, Montague County, Texas.
4. Secondary recovery operations will result in the recovery of an estimated 91,000 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 a ratio of current production for the six months from July 2008 to January 2009; reservoir volume in acre feet from the Main Strawn Sand only; and useable wells cased to or through the unitized formation.
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 supply well on the unit or from outside sources. No fresh water will be used.
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 97% of the working interest ownership and over 85% 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 Cooksey-Collier Unit and secondary recovery operations project as set out in the attached order.

Respectfully submitted,

Andres J. Trevino
Technical Examiner

Mark Helmueller
Hearings Examiner