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OIL & GAS DOCKET NO. 8A-0225152

APPLICATION OF HENRY PETROLEUM CORPORATION TO CONSIDER UNITIZATION AND SECONDARY RECOVERY AUTHORITY FOR THE HOMANN SAN ANDRES UNIT, HOMANN (SAN ANDRES) FIELD, GAINES COUNTY, TEXAS

OIL & GAS DOCKET NO. 8A-0225151

APPLICATION OF HENRY PETROLEUM CORPORATION TO CONSIDER PERMANENT FIELD RULES FOR THE HOMANN (SAN ANDRES) FIELD, GAINES COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E., Technical Examiner
Meredith Kawaguchi, Legal Examiner
DATE OF HEARING: July 20, 2000

APPEARANCES:	**REPRESENTING:**
APPLICANT:	
Mickey R. Olmstead, attorney	Henry Petroleum Corporation
Douglas Robison, attorney	
Michael McElroy, attorney	
Mark Gully	
Steve Guthrie	
David L. Feavel	
PROTESTANT:	
None	

EXAMINERS REPORT AND RECOMMENDATION
STATEMENT OF THE CASE

This is the unprotested application of Henry Petroleum Corporation for Commission authority to unitize and commence secondary recovery operations on the proposed Homann San Andres Unit in the Homann (San Andres) Field. Injection well applications have been submitted to the Commission's Environmental Services Department. Also, Henry Petroleum is making a separate administrative application for Enhanced Oil Recovery Project and Area Designation.

Additionally, Henry Petroleum seeks Commission approval and adoption of permanent field rules for the Homann (San Andres) Field that provide for:

1. The entire correlative interval from 5,200' to 5,645' subsurface depth as shown on the Schlumberger Electric log of the Honolulu Oil Co., Riley Lease Well No. 1A, in Section 75, Block G of the WTRR Survey, Gaines County, Texas be recognized and designated as the Homann (San Andres)) Field.

2. Minimum well spacing of 330'/660' (lease line/between well),

3. 40 acre proration units with 20 acre tolerance and maximum diagonal of 2,100' and optional 20 acre density with a maximum 1500' diagonal; and

4. An allocation formula based on 100% acreage.

DISCUSSION OF THE EVIDENCE

The Homann (San Andres) Field was discovered in 1977 at 5,328' subsurface depth. The field is governed by Statewide Rules. This is a multi-operator multi-well field.

The proposed unit contains 13 tracts. It is proposed that the entire correlative interval from 5,200' to 5,645' subsurface depth as shown on the Schlumberger Electric log of the Honolulu Oil Co., Riley Lease Well No. 1A, in Section 75, Block G of the WTRR Survey, Gaines County, Texas be recognized and designated as the Homann (San Andres) Field. The proposed interval will also designate the unitized interval. The proposed unitized interval, the San Andres, extends from the San Andres porosity "PI" marker to the base of the San Andres Main porosity. Well log cross-section analysis clearly shows a well defined, continuous dolomite section. This formation is a good candidate for secondary water flood operations.

There are currently 20 producing wells and two water injection/disposal wells. Cumulative production from the unitized area is 1,951,660 BO and 572,912 MCF of gas. The proposed unit will consist of 20 producing wells and 20 water injection wells for what is known as a modified 40 acre 5-spot pattern. The proposed optional 20 acre density is requested because it may be necessary to produce some of the proposed new-drill water injection wells before the actual water injection is commenced. Well density of 40 acres and optional 20 acres will provide for the efficient and effective depletion of the reservoir. Other secondary recovery water injection projects in nearby San Andres Fields [G-M-K (Sand Andres); G-M-K, South (San Andres)] have similar rules which provide for 20 acre density. The secondary water-flood operations are anticipated to recover an additional 2.65 million barrels of oil. Make-up water will come from water supply wells producing from the Ogallala aquifer. Other water flood units in the area also use Ogallala water. There are no other economic or feasible water supply zones or methods which can be used to accomplish the proposed secondary recovery process.

Secondary recovery operations are economically feasible. The future revenue is anticipated to be $47.71 million. The capital expenses and operating costs are estimated to be $12.24 million.

The working interest owner ratification is 100%. The royalty ownership ratification is 99.8%. All interest owners within the area reasonably defined by development were offered the same opportunity to join the unit on the same yardstick basis. On any tract where there is not 100% ratification, production from that tract shall be determined by lease production measurement of the existing lease stock tank.

The proposed participation formula is equitable and will provide for the protection of correlative rights. The participation formula is based on 100% tract acreage.

The proposed minimum well spacing, 330'/660' (leaseline/between well) is necessary to provide for flexibility in locating wells in this area and is the usual minimum well spacing associated with 20 acre spacing.

EXAMINERS' OPINION

The examiners are of the opinion that the unitization and secondary recovery project should be approved. The proposed water flood project will result in the recovery of oil and gas that otherwise would not be recovered.

Based on the evidence presented, the examiners propose the following findings:

FINDINGS OF FACT

1. Notice of this application was given to all royalty owners within the proposed unitized area and offset operators.

2. The Homann (San Andres) Field was discovered in 1977 at 5,328' subsurface depth. The field is governed by Statewide Rules. This is a multi-operator multi-well field.

3. The proposed unit contains 13 tracts.

    a. The entire correlative interval from 5,200' to 5,645' subsurface depth as shown on the Schlumberger Electric log of the Honolulu Oil Co., Riley Lease Well No. 1A, in Section 75, Block G of the WTRR Survey, Gaines County, Texas be recognized and designated as the Homann (San Andres) Field.

    b. The proposed interval will also be designated as the unitized interval. The proposed unitized interval, the San Andres, extends from the San Andres porosity “PI” marker to the base of the San Andres Main porosity.

4. The secondary water-flood operations are anticipated to recover an additional 2.65 million barrels of oil.

    a. Cumulative production from the unitized area is 1,951,660 BO and 572,912 MCF of gas.

    b. The proposed unit will consist of 20 producing wells and 20 water injection wells for what is known as a modified 40 acre 5-spot pattern.

    c. Make-up water will come from water supply wells producing from the Ogallala aquifer. Other water flood units in the area also use Ogallala water. There are no other economic or feasible water supply zones or methods which can be used to accomplish the proposed secondary recovery process.

5. Secondary recovery operations are economically feasible.

    a. The future revenue is anticipated to be $47.71 million.

    b. The capital expenses and operating costs are estimated to be $12.24 million.

6. The proposed participation formula is equitable and will provide for the protection of correlative rights. The participation formula is based on 100% acreage.

7. No person was compelled or required to enter into the unit agreement and the agreement only binds the persons who executed it.

8. Persons entering into the unit agreement own or control production, leases, royalty or other interests in the subject field.

9. The unitization agreement is necessary to accomplish the purposes of establishing a unit to effect secondary recovery operations for water injection and to operate cooperative facilities necessary thereto. Other available or existing methods or facilities for secondary recovery operations are inadequate for the purpose of secondary recovery.

10. The rights of all owners of interests in the field, whether signers of the unit agreement or not, will be protected under its operation.

11. The owners of interest in the oil and gas under each tract of land within the area reasonable 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.

    a. The working interest owner ratification is 100%.

b. The royalty ownership ratification is 99.8%.

c. On any tract where there is not 100% ratification, production from that tract shall be determined by lease production measurement of the existing lease stock tank.

12. Water injection operations will move hydrocarbons across lease lines, and unitization is necessary in order to protect the correlative rights of the various interest owners.

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 for entering into for the purpose of conducting secondary recovery operations.

17. The unit agreement does not restrict any of the rights which persons now have to make and enter into unitization and pooling agreements.

18. There are no State of Texas tract lands within the proposed unit.

19. Well density of 40 acres and optional 20 acres will provide for the efficient and effective depletion of the reservoir. Other secondary recovery water injection projects in nearby San Andres Fields [G-M-K (Sand Andres); G-M-K, South (San Andres)] have similar rules which provide for 20 acre density.

20. The proposed minimum well spacing, 330'/660' (leaseline/between well) is necessary to provide for flexibility in locating wells in this area and is the usual minimum well spacing associated with 20 acre spacing.

21. A 100% acreage allocation formula will provide for the protection of correlative rights.

CONCLUSIONS OF LAW

1. Proper notice was given to all persons entitled to notice pursuant to all applicable codes and regulatory statutes.

2. The requested secondary recovery project is a conservation matter properly within Commission jurisdiction as outlined in Chapter 101 of the Texas Natural Resources Code.

3. The unit described in the unit agreement is necessary to accomplish the purposes specified in §101.011, Tex. Nat. Res. Code Ann. (Vernon 1993).

4. The proposed secondary recovery project satisfies all of the requirements for Commission approval of cooperative secondary recovery agreements as set out in §101.001, et seq. Tex. Nat. Res. Code Ann. (Vernon 1993).

5. Commission approval of the proposed secondary recovery project and unit agreement is in the public interest as being necessary to prevent waste and protect correlative rights.

6. Consideration of field rules, a determination of their effectiveness and appropriate actions is a matter within the Commission jurisdiction.

7. Adoption of the proposed fields rule will prevent waste, foster conservation and protect correlative rights.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend approval of the proposed Homann San Andres Unit and secondary recovery operations project as set out in the attached order. In a separate order, the proposed permanent field rules are being recommended for approval for the Holmann (San Andres) Field.

Respectfully submitted,

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Technical Examiner
Office of General Counsel

Meredith Kawaguchi
Legal Examiner
Office of General Counsel