

THE APPLICATION OF CENTURY EXPLORATION HOUSTON, INC. TO CONSIDER UNITIZATION AND SECONDARY RECOVERY AUTHORITY FOR THE MIL-VID PROP, ET AL 'A-152' OIL UNIT, ADAMS RANCH (YEGUA DY-2) FIELD, JASPER COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner
James M. Doherty - Legal Examiner

DATE OF HEARING: February 25, 2009

APPEARANCES:

David Gross
Rick Johnston
Chris Lipari

REPRESENTING:

Century Exploration Houston, Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Century Exploration Houston, Inc. ("Century") requests Commission authority for unitization of the Mil-Vid Prop, et al 'A-152' Oil Unit and approval of secondary recovery operations on the Unit.

This application was unopposed and the examiners recommend approval.

DISCUSSION OF THE EVIDENCE

The Adams Ranch (Yegua DY-2) Field was discovered in June 2008 when Century completed its Mil-Vid Prop, et al "A-152" Lease, Well No. 1. The well produces from perforations between 9,870 feet and 9,902 feet (MD). On initial test, the well produced at a rate of 435 BOPD, 386 MCFGPD and 0 BOPD. Well No. 1 is currently the only well in the field and produces under a top MER allowable of 1,400 BOPD. The top allowable in the field is 440 BOPD with an allowable gas-oil ratio of 2,000 cubic feet per barrel. Cumulative production from the field through January 2009 is 105.2 MBO and 106.9 MCFG.

The unitized formation is the Yegua DY-2 sand underlying the Unit Area correlative to the interval identified between the true vertical depths of 9,446 feet and 9,500 feet as shown on the log of the Century Exploration Houston, Inc. - Mil-Vid Prop, et al "A-152" Lease, Well No. 1, with a bottomhole location situated in the Sara Gray League, A-152,

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Jasper County, Texas.

The proposed Mil-Vid Prop, et al 'A-152' Oil Unit consists of 6 tracts which contain 449 acres. The proposed unit contains the entire reservoir, as demonstrated by the 3-D time structure map of the Yegua DY-2 sand which will be flooded. The limits of the reservoir are well defined by 3-D seismic data and the reservoir is geo-pressured. The productive area of the reservoir is approximately 449 acres and has an average porosity of 30%, average water saturation of 30% and an average net pay of 30 feet. The original reservoir bottomhole pressure was 6,485 psi and the current bottomhole pressure measured on January 15, 2009 was 5,315 psi.

Century plans to implement a pressure maintenance waterflood initially using two injection wells and one producing well. Century hopes to keep the reservoir pressured above the bubble point which is calculated to be 4,500 psi. By maintaining the bottomhole pressure above the bubble point, Century estimates the secondary recovery from the unit to be 550,000 BO. The injected fluid will be produced salt water from a water supply well which will be completed in Frio sands that are found between 6,000 feet and 8,000 feet.

The total cost to implement and operate the secondary recovery project is approximately \$11 million. Estimated net income as a result of the secondary recovery project is approximately \$30 million over the life of the project. These estimates are based on an oil price of \$50 per barrel.

There is no participation formula for the Unit, since all of the tracts have the same working and royalty interests. However, it was necessary for Century to unitize the separate tracts, as each tract is a separate lease that does not contain any pooling provisions. At the time of the hearing, 100% of the working interest ownership and 100% of the royalty interest ownership had signed the unit agreement. There are no state lands in the Unit.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators and royalty interest owners within and offsetting the proposed unit. Notice was published in the *Jasper Newsboy*, a newspaper of general circulation in Jasper County, for four consecutive weeks beginning January 14, 2009.
2. The proposed unit consists of 6 tracts which contain 449 acres.
3. The unitized formation is the Yegua DY-2 sand underlying the Unit Area correlative to the interval identified between the true vertical depths of 9,446 feet and 9,500 feet as shown on the log of the Century Exploration Houston, Inc. - Mil-Vid Prop, et al "A-152" Lease, Well No. 1, with a bottomhole location situated in the Sara Gray League, A-152, Jasper County, Texas.

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4. At the time of the hearing, 100% of the working interest ownership and 100% of the royalty interest ownership had signed the unit agreement.
5. By maintaining the bottomhole pressure above the bubble point, Century estimates the secondary recovery from the unit to be 550,000 BO.
6. The estimated cost to implement and operate the secondary recovery project is approximately \$11 million. The cost does not exceed the value of additional reserves to be recovered.
7. There is no participation formula for the Unit, as all of the tracts have the same working and royalty interests.
8. The secondary recovery project will not be successful unless the area is unitized.
9. The secondary recovery project will be a waterflood initially utilizing two injection wells and one producing well.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.

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15. The unit agreement is subject to all valid orders, rules and regulations of the Railroad Commission.
16. 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.
17. The unit agreement is a voluntary agreement entered into for the purpose of conducting secondary recovery operations.
18. The unit agreement does not provide for the location of wells.
19. There are no state lands in the unit.
20. The unit agreement is in the interest of public welfare as being reasonably necessary to prevent waste and to promote conservation.
21. The reservoir described in the unit agreement is identified as a single reservoir for Commission purposes and is a suitable reservoir for a water injection secondary recovery operation.
22. The unit agreement contains only the acreage reasonably necessary to accomplish the proposed secondary recovery project.

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.
4. Approval of the proposed unit agreement for 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.

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EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend approval of the proposed Mil-Vid Prop, et al 'A-152' Oil Unit and secondary recovery authority, as set out in the attached order.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner

James M. Doherty
Legal Examiner