



RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

OIL & GAS DOCKET NO. 8A-0263464

THE APPLICATION OF FASKEN OIL AND RANCH, LTD. TO CONSIDER UNITIZATION AND SECONDARY RECOVERY AUTHORITY FOR THE LOS YBANEZ SPRABERRY UNIT, LOS YBANEZ (SPRABERRY) FIELD, DAWSON COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner
Marshall F. Enquist - Legal Examiner

DATE OF HEARING: December 17, 2009

APPEARANCES:

REPRESENTING:

Jim Cowden

Fasken Oil and Ranch, Ltd.

By Telephone:

Jimmy Carlile
Harry Nutter
Aaron Dover

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Fasken Oil and Ranch, Ltd. ("Fasken") requests Commission authority for unitization of the Los Ybanez Spraberry Unit and approval of secondary recovery operations on the Unit.

This application was unopposed and the examiners recommend approval.

DISCUSSION OF THE EVIDENCE

The Los Ybanez (Spraberry) Field was discovered in June 2006 at an average depth of 7,700 feet. There are five producing wells and one temporarily abandoned well carried on the proration schedule. Field Rules provide for 330'-933' well spacing, 40 acre density and allocation based on 100% acres. The top allowable is 185 BOPD with a casinghead gas limit of 800 MCFGPD. Cumulative production from the field through October 2009 is 527.3 MBO and 1.0 BCFG.

The unitized formation is the subsurface portion of the Unit Area commonly known as the Upper Spraberry Formation between the subsurface depths of 7,075 feet and 7,811 feet as shown on the log of the Fasken Oil and Ranch, Ltd. - State 9 Lease, Well No. 1X, located 500 feet from the south line and 764 feet from the east line of Section 9, Block 35, T-5-N, T&P RR Co. Survey, Dawson County, Texas.

The proposed Los Ybanez Spraberry Unit consists of five tracts which contain 360 acres. The productive interval contained within the Upper Spraberry Formation is known as the Gin Sand. This sand is a stratigraphic trap that has no structural component and has a solution gas drive as the primary drive mechanism. The proposed unit contains all of the productive portions of the Los Ybanez (Spraberry) Field, as demonstrated by a Gin Sand net sand isopach map provided by Fasken. The sand has an average porosity of 21.5%, an average water saturation of 14.6% and an average net pay thickness of 16.5 feet.

Fasken proposes to implement a waterflood initially by drilling one new infill producing well and converting one producing well and the temporarily abandoned well to injection. Fasken will inject produced salt water and additional makeup water from the Santa Rosa Formation located at an average depth of approximately 1,600 feet.

Fasken calculated the original oil in place to be 3.9 MMBO. Primary recovery from the field is projected to be 880.8 MBO or 23% of the original oil in place. Fasken estimates that secondary recovery will be equal to 80% of the primary recovery or approximately 690.7 MBO. The project will result in an ultimate recovery for the field of 40% of the original oil in place. The total cost to implement and operate the secondary recovery project is expected to be \$11.7 million. The estimated before income tax profit is \$29.7 million over the life of the secondary recovery project. These estimates are based on an oil price of \$75 per barrel.

The participation formula for the Unit is based entirely on the original oil in place underlying each Tract. At the time of the hearing, 100% of the working interest ownership and 74.7% of the royalty interest ownership had signed the unit agreement. Tract No. 1 is comprised of state lands and there is a pending unit approval by the Board for Lease of the Texas Department of Criminal Justice. Fasken anticipates 100% sign up of the royalty interest ownership by the time the project is initiated but will conduct monthly well tests to allocate production to wells on tracts for which 100% sign-up was not achieved.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators and royalty interest owners within the proposed unit. Notice was published in the *Lamesa Press Reporter*, a newspaper of general circulation in Dawson County, for four consecutive weeks beginning November 4, 2009.

2. The proposed Los Ybanez Spraberry Unit consists of five tracts which contain 360 acres.
3. The unitized formation is the subsurface portion of the Unit Area commonly known as the Upper Spraberry Formation between the subsurface depths of 7,075 feet and 7,811 feet as shown on the log of the Fasken Oil and Ranch, Ltd. - State 9 Lease, Well No. 1X, located 500 feet from the south line and 764 feet from the east line of Section 9, Block 35, T-5-N, T&P RR Co. Survey, Dawson County, Texas.
4. The productive interval contained within the Upper Spraberry Formation is known as the Gin Sand. This sand is a stratigraphic trap that has no structural component and has a solution gas drive as the primary drive mechanism.
5. At the time of the hearing, 100% of the working interest ownership and 74.7% of the royalty interest ownership had signed the unit agreement. Fasken anticipates 100% sign up of the royalty interest ownership by the time the project is initiated
6. Secondary recovery operations will result in the recovery of an estimated 690.7 MBO which would otherwise go unrecovered.
7. The total cost to implement and operate the secondary recovery project is expected to be \$11.7 million. The estimated before income tax profit is \$29.7 million over the life of the secondary recovery project. The cost does not exceed the value of additional reserves to be recovered.
8. The participation formula for the Unit is based entirely on the original oil in place underlying each Tract.
9. The secondary recovery project will not be successful unless the area is unitized.
10. The secondary recovery project will be a waterflood by initially drilling one new infill producing well and converting one producing well and the temporarily abandoned well to injection. Fasken will inject produced salt water and additional makeup water from the Santa Rosa Formation located at an average depth of approximately 1,600 feet.
11. 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.

12. 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.
13. 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.
14. 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.
15. 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.
16. The unit agreement is subject to all valid orders, rules and regulations of the Railroad Commission.
17. 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.
18. The unit agreement is a voluntary agreement entered into for the purpose of conducting secondary recovery operations.
19. The unit agreement does not provide for the location of wells.
20. Tract No. 1 is comprised of state lands and there is a pending unit approval by the Board for Lease of the Texas Department of Criminal Justice.
21. The unit agreement is in the interest of public welfare as being reasonably necessary to prevent waste and to promote conservation.
22. 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.
23. The unit agreement contains only the acreage reasonably necessary to accomplish the proposed secondary recovery project.

24. Monthly well tests will be conducted to allocate production to wells on tracts for which 100% sign-up was not achieved.


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.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend approval of the proposed Los Ybanez Spraberry Unit and secondary recovery operations project as set out in the attached order.

Respectfully submitted,



Richard D. Atkins, P.E.
Technical Examiner



Marshall F. Enquist
Legal Examiner