



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL AND GAS DOCKET NOS. 02-0320367**

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**APPLICATION OF MERIT ENERGY COMPANY, LLC (561136) FOR APPROVAL OF  
UNITIZATION AND SECONDARY RECOVERY FOR THE SINOR WILCOX UNIT,  
SINOR NEST (LOWER WILCOX) FIELD, LIVE OAK COUNTY, TEXAS**

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**HEARD BY:** Ezra Johnson, Administrative Law Judge  
John Moore, Technical Examiner

**HEARING DATE:** July 12, 2019

**APPEARANCES:**

John Soule, Attorney

Matt Rettke, Senior Landman

Chris Dennen, South Division  
Exploitation Manager

Michael Carroll, Engineer

Ian Chapman, Reservoir Engineer

**REPRESENTING:**

Merit Energy Company, LLC  
MMGJ South Texas II, LLC

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### **EXAMINER'S REPORT AND RECOMMENDATION**

#### **STATEMENT OF THE CASE**

Merit Energy Company, LLC (Operator No. 561136) ("MEC") ("Applicant") requests Commission approval of unitization and secondary recovery operations on the proposed Sinor Wilcox Unit ("the Unit") in the Sinor Nest (Lower Wilcox) Field, Live Oak County,

Texas. Notice of hearing was served on all working and royalty interest owners within the proposed unit. There are three tracts in the proposed unit totaling 3,105.7 acres. The Sinor Wilcox Unit Agreement ("Unit Agreement") has been ratified by 100% of the working interest owners, the royalty interest owners and the executive rights owners within the proposed Unit. Approximately 4,000,000 incremental barrels of oil will be recovered with the proposed secondary recovery waterflood project within the Unit. The application satisfies all statutory requirements pertaining to unitization and secondary recovery. The application is unopposed. The Technical Examiner and the Administrative Law Judge (collectively "Examiners") recommend approval.

### **DISCUSSION OF THE EVIDENCE**

The proposed Unit includes all of the Sinor Nest (Lower Wilcox) Field in Live Oak County, Texas. The proposed Unit consists of three tracts which contain 3,105.7 acres. There are currently 14 wells on the proration schedule in the field, all operated by MEC. The proposed unitized interval is the Lower Wilcox formation from 7940 feet to 8129 feet in the Sinor Ranch A-1 Well, which is the field interval recognized by the Commission for the Sinor Nest (Lower Wilcox) Field.

The subject field was discovered in June 2013 at an approximate depth of 8,000 feet. Cumulative production of oil through April 2019 was almost 5 million barrels of oil. Peak production of oil occurred in November 2017. Production and reservoir pressure have declined since peak production. Secondary recovery by waterflood operations will recover hydrocarbons that will otherwise not be produced. Unitization of the three tracts is required for the secondary recovery project to be implemented and successful.

An isopach map of the subject field shows the proposed Unit includes all of the productive acreage in that field. Tract participation in Unit production until a response to the injection of water is seen (increase in production or pressure) is production from each tract as a percentage of production from the Unit (Phase 1). After a response to the injection of water is seen, tract participation will be based 50% on original oil-in-place under each tract as a percentage of total original oil-in-place and 50% on forecast remaining primary production from each tract as a percentage of total forecast remaining primary production (Phase 2). The participation formula will protect the correlative rights of all royalty interest owners.<sup>1</sup>

Successful implementation of the proposed waterflood will result in the recovery of approximately 4,060,000 barrels of oil that would otherwise not be produced. The value of the incremental production is \$191,194,800.<sup>2</sup> The total incremental cost of the planned waterflood is approximately \$54,455,000. The increased value of production is therefore \$136,739,800 more than the cost of the project.

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<sup>1</sup> MMGJ is the only working interest owner.

<sup>2</sup> The value of incremental oil is approximately \$213 million. The value of gas and NGLs that will not be produced as a result of the waterflood is approximately \$22 million. The incremental value of the overall increased production is therefore approximately \$191 million.

Notice of the application and hearing were sent to all owners of working and royalty interests within the proposed Unit. Notice was also sent to all executive rights owners. MMGJ South Texas II, LLC ("MMGJ") is the only working interest owner in the proposed Unit. MMGJ has executed the Unit Agreement. An offer to participate in Unit production on the same yardstick basis was sent to all royalty interest owners. All royalty interest owners in Tracts 1 and 2 have also executed the Unit Agreement. In Tract 3, 100% of the executive rights owners and the owners of 100% of the royalty interest have executed the Unit Agreement.

Merit and MMGJ agreed on the record that, pursuant to the provisions of Texas Government Code §2001.144(a)(4)(A), the Final Order in this case shall be effective on the date the Master Order relating to this Final Order is signed.

### FINDINGS OF FACT

1. Notice of the application and hearing were served on the working interest owners, the royalty interest owners and all executive rights owners of the proposed Unit.
2. The proposed Unit is composed of three tracts covering approximately 3,105.7 acres of land. The proposed Unit includes all of the productive acreage in the Sinor Nest (Lower Wilcox) Field.
3. MEC is the only operator in the proposed Unit.
4. The zone of interest is the Lower Wilcox formation from 7940 feet to 8129 feet in the Sinor Ranch A-1 (42-297-35165), which is recognized by the Railroad Commission of Texas as the Sinor Nest (Lower Wilcox) Field.
5. At the time of the hearing, the Unit Agreement had been ratified by 100% of the working interest owners and 94% of the royalty interest owners. The remaining 6% of the royalty interest owners are expected to ratify the Unit Agreement before unit operations begin.
6. The secondary recovery project will not be successful unless the area is unitized.
7. The proposed secondary recovery operations will use produced salt water and salt water from one or more water supply wells for injection.
8. Secondary recovery operations are expected to result in the recovery of 4,060,000 barrels of oil that otherwise would not be produced.
9. The value of additional hydrocarbons that will be recovered (\$191.2 million) greatly exceeds the cost to implement the project (\$54.5 million).

10. The participation formula after a response to water injection, as defined in the Unit Agreement, is based on 50% of original oil in place and 50% of the remaining recoverable primary production.
11. The Unit 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 the Agreement, 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 interests in oil and gas under each tract 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 interests in oil and gas under the other tracts in the Unit.
13. The proposed waterflood will move hydrocarbons across lease lines, and unitization is necessary to protect the correlative rights of the various interest owners.
14. The Unit Agreement is necessary to establish a unit to effect secondary recovery operations for water injection and to operate the necessary cooperative facilities necessary. Other available existing methods or facilities for secondary recovery operations are inadequate for the purposes 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 provisions 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. There are no state lands in the proposed unit.
20. The proposed unitization and secondary recovery are in the public interest because they will result in the recovery of hydrocarbons that would otherwise not be produced, thereby preventing waste and promoting conservation.

21. The area covered by the proposed Unit Agreement contains only acreage reasonably necessary to accomplish the proposed secondary recovery program.
22. The reservoir described in the Unit Agreement is identified a single reservoir for Commission purposes and is suitable for secondary recovery operations.
23. Merit and MMGJ agreed on the record that, pursuant to the provisions of Texas Government Code §2001.144(a)(4)(A), the Final Order in this case shall be effective on the date the Master Order relating to this Final Order is signed.

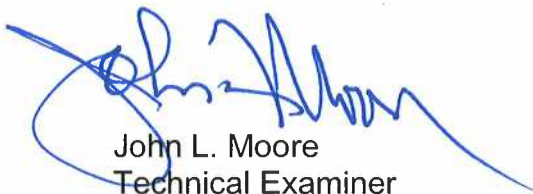
### **CONCLUSIONS OF LAW**

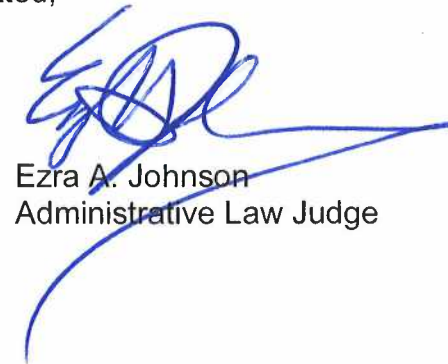
1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code §81.051
2. All notice requirements have been satisfied. 16 Tx. Admin. Code § 1.45.
3. The proposed secondary recovery project satisfies all of the requirements set out in Tex. Nat. Res. Code Ann. §§101.001-052.
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 conservation.
5. Pursuant to §2001.144(a)(4)(A) of the Texas Government Code, the Final Order and the agreement of the applicant, this Final Order is effective on the date a Master Order relating to the Final Order is signed.

### **RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the Examiners recommend approval of the proposed Sinor Wilcox Unit and approval of secondary recovery operations on the Unit in the Sinor Nest (Lower Wilcox) Field, Live Oak County, Texas, as set out in the attached Final Order.

Respectfully submitted,

  
John L. Moore  
Technical Examiner

  
Ezra A. Johnson  
Administrative Law Judge