APPLICATION OF CHESAPEAKE OPERATING, INC. TO CONSOLIDATE VARIOUS CLEVELAND FIELDS INTO THE LIPSCOMB, S.E. (CLEVELAND) FIELD AND TO AMEND THE FIELD RULES FOR THE LIPSCOMB, S.E. (CLEVELAND) FIELD, HEMPHILL, LIPSCOMB AND OCHILTREE COUNTIES, TEXAS

HEARD BY: Andres J. Trevino, P.E.

DATE OF HEARING: November 2, 2011

APPEARANCES: REPRESENTING:

Bill Spencer Chesapeake Operating Inc.

Jim Clark

Michael McElroy Holmes Exploration, LLC

Panther Oil & Gas

Mickey R. Olmstead Courson Oil & Gas Inc.

EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of Chesapeake Operating Inc. for the Commission to consider consolidation of ten Cleveland fields, listed in Attachment "A", into the Lipscomb, S.E. (Cleveland) Field and amending the field rules for the Lipscomb, S.E. (Cleveland) Field as last amended in Order No. 10-0248788, effective December 5, 2006, which currently provide for:

- 1. Designation of the field as the correlative interval from 8,100 feet to 8,139 feet as shown on the log of the R. B. Tyson "B" No. 1
- 2. 330' 933' well spacing for vertical and horizontal wells;
- 160 acre oil and gas units with a maximum diagonal of 4,500 feet; optional 40 acre units with a maximum diagonal of 2,100 feet; additional acreage assignments for horizontal wells;
- 4. 100% acreage allocation.

Chesapeake Operating proposes the following rules:

1. No Change,

- 2. Minimum well spacing of 330'/933', 0' between vertical & horizontal wells, take point language, 50 foot box rule, off lease penetration,
- 3. No Change,
- 4. No Change.

The application was originally protested by several operators. Chesapeake Operating withdrew their request for an expanded designated interval and stacked lateral rules to the satisfaction of the protesting operators. All operators threatening to protest withdrew their protests. The examiner recommends approval of the consolidation and proposed rules.

DISCUSSION OF THE EVIDENCE

The ten fields which are the subject of this hearing were discovered beginning in 1967. The fields all produce from the same Cleveland sandstone and Chesapeake Operating is planning horizontal development in the consolidated field area. Eight of the ten fields have one well or less. Only one field has produced over 100,000 BO, the Riley (Cleveland 10250) Field. All ten fields operate under Statewide Rules while the Lipscomb, S.E. (Cleveland) Field operates under Special rules with partial horizontal provisions. The fields are developed with vertical wells that were geographically distant from other discovery wells. The Cleveland is a low permeability sand, however within the Cleveland sandstone are pockets of higher quality of sands that are distributed both vertically and horizontally. The fields were thought to be separate accumulations of hydrocarbons. Over time as each field was developed, the field boundaries expanded and had "grown together". There is no structurally influenced accumulation. The Cleveland sandstone is widespread and found throughout the area.

Production data of the Lipscomb, S.E. (Cleveland) field shows a steady oil production from 1990 until 2005 when horizontal drilling began. The field was being developed with vertical wells during this time period. Liquid/oil production remained fairly constant averaging 200 BOPM. In 2005 horizontal well development began. Oil production increased from 200 BOPM to 30,000 BOPM. Consolidating the various fields with Statewide field rules will encourage additional horizontal development as only one set of rules will apply throughout the area.

Chesapeake is proposing to expand horizontal drilling in the Cleveland and requests additional horizontal rules in the Lipscomb, S.E. (Cleveland) Field in order to promote the efficient and effective development of the remaining hydrocarbons. The Cleveland sand is low permeability and contains sufficient remaining reserves to justify drilling a horizontal drainhole. The Cleveland sand has had limited success with vertical wells in the area as most wells have produced less than 10,000 BO.

Chesapeake requests special provisions for take points, no perf zones, no between

well spacing between vertical and horizontal wells and "off-lease" penetration point for horizontal drainhole wells. The proposed "take points" and "off-lease" penetration point is necessary to allow drilling of horizontal wells so that the first take point will be at 330' from the leaseline. Having the first take point at a legal location of 330' from the leaseline will maximize the length of the lateral which will maximize hydrocarbon recovery. Similar rules are commonly found in other fields which are being developed with horizontal wells.

Chesapeake proposes a 50 foot "box rule" for horizontal drainhole wells that would allow drainholes to deviate 50 feet from either side of their permitted track without the necessity of obtaining a Statewide Rule 37 exception.

FINDINGS OF FACT

- 1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
- 2. There was no protest at the call of the hearing. Several operators had protested Chesapeake Operating Inc.'s original proposed consolidation. Chesapeake amended their request to the satisfaction of all operators.
- 3. The ten fields which are the subject of this hearing were discovered beginning in 1967. The fields all produce from the same Cleveland Sandstone and have undergone only vertical well development.
 - a. Eight of the ten fields have one well or less. Only one field has produced over 100,000 BO, the Riley (Cleveland 10250) Field.
 - b. All ten fields operate under Statewide Rules while the Lipscomb, S.E. (Cleveland) Field operates under Special rules with partial horizontal provisions.
 - c. The Cleveland sand is low permeability and contains sufficient remaining reserves to justify drilling a horizontal drainhole.
- 4. Take points, no perf zones and off-lease penetration points are necessary to allow drilling of horizontal wells so that the first take point will be at 330' from the leaseline.
- 5. Field Rules that provide for special provisions for take points and off-lease penetration points for horizontal wells will provide consistency in developing the field and will allow maximum lateral length which will maximize hydrocarbon recovery.
- 6. There is no change in the current minimum well spacing of 330'/933' (leaseline/between well), 0' between vertical & horizontal wells will allow the

flexiblilty to drill horizontal wells between existing vertical wells.

7. The proposed 50 foot "box rule" is necessary to allow operators reasonable minor deviations from the wellbore track that has been permitted.

CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was given to all persons legally entitled to notice.
- 2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
- 3. Consolidation of the fields as proposed by Chesapeake Operating Inc. is necessary to prevent waste and protect correlative rights.
- 4. The proposed field rules will prevent waste, protect correlative rights, and satisfy statutory requirements.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the field consolidation and the proposed amended field rules for the Lipscomb, S.E. (Cleveland) Field.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Hearings Examiner

Attachment "A"

Field Name	Field Number
ALLISON PARKS (CLEVELAND)	01810 250
FELDMAN (CLEVELAND)	30526 315
GLAZIER (CLEVELAND)	35243 150
GLAZIER, NW (CLEVELAND)	35245 200
HORSE CREEK, SE (CLEVELAND)	42684 200
HUMPHREYS (CLEVELAND)	43586 400
MATHERS (CLEVELAND)	58241 200
PARSELL (CLEVELAND)	69427 180
RILEY (CLEVELAND 10250)	76703 500
URSCHEL (CLEVELAND)	92790 300