RAILROAD COMMISSION OF TEXAS

OIL AND GAS DOCKET NO. 08-0319480

APPLICATION OF SHELL WESTERN E&P (774719) TO CONSIDER AMENDING FIELD RULES FOR THE TWO GEORGES (BONE SPRING) FIELD, OR IN THE ALTERNATIVE FOR A BLANKET FIELD WIDE EXCEPTION TO STATEWIDE RULE 13, TWO GEORGES (BONE SPRING) FIELD, CULBERSON, LOVING, REEVES, WARD AND WINKLER COUNTIES. TEXAS

FINAL ORDER

The Commission finds that after statutory notice of the application made by Shell Western E&P (Operator No. 774719), in the above-numbered docket heard on July 23, 2019, the presiding Technical Examiner and Administrative Law Judge (collectively, "Examiners"), have made and filed a report and recommendation containing findings of fact and conclusions of law, for which service was not required; that the proposed application is in compliance with all statutory requirements; and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas.

The Commission, after review and due consideration of the Examiners' report and recommendation, the findings of fact and conclusions of law contained therein, hereby adopts as its own the findings of fact and conclusions of law contained therein, and incorporates said findings of fact and conclusions of law as if fully set out and separately stated herein.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the Field Rules for the Two Georges (Bone Spring) Field (Field No.92100050) in Culberson, Loving, Reeves, Ward and Winkler Counties, Texas, adopted on July 17, 2007, in the Final Order for Oil & Gas Docket No. 08-0251527, as amended most recently on April 24, 2018 in Oil & Gas Docket No. 08-0306090, are hereby amended and set out in their entirety as follows:

RULE 1: The entire correlative interval from 8,979 feet to 11,600 feet as shown on the log of the Chesapeake Operating, Inc. - University 19-18 Lease, Well No. 1 (API No. 42301-31204), Section 18, Block 19, University Lands Survey, A-U18, Loving County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Two Georges (Bone Spring) Field.

RULE 2: No well for oil or gas shall hereafter be drilled nearer than THREE HUNDRED THIRTY (330) feet to any property line, lease line, or subdivision line. There is no minimum between well spacing limitation. The aforementioned distances in the above rule are minimum distances to allow an operator flexibility in locating a well; and the above spacing rule and the other rules to follow are for the purpose of permitting only one well to each drilling and proration unit. Provided however, that the Commission will grant exceptions to permit drilling within shorter distances and drilling more wells than herein

prescribed, whenever the Commission shall have determined that such exceptions are necessary either to prevent waste or to prevent the confiscation of property. When exception to these rules is desired, application therefor shall be filed and will be acted upon in accordance with the provisions of Commission Statewide Rules 37 and 38, which applicable provisions of said rules are incorporated herein by reference.

In applying this rule, the general order of the Commission with relation to the subdivision of property shall be observed.

Provided, however, that for purposes of spacing for horizontal wells, the following shall apply:

- a. A take point in a horizontal drainhole well is any point along a horizontal drainhole where oil and/or gas can be produced into the wellbore from the reservoir/field interval. The first take point may be at a different location than the penetration point, and the last take point may be at a location different than the terminus point.
- b. No horizontal drainhole well for oil or gas shall hereafter be drilled such that the first and last take points are nearer than TWO HUNDRED (200) feet to any property line, lease line or subdivision line.
- c. For each horizontal drainhole well, the distance perpendicular to such horizontal drainhole from any take point to any point on any property line, lease line or subdivision line shall be a minimum of THREE HUNDRED THIRTY (330) feet. A permit or an amended permit is required for any take point closer to the lease line than the lease line spacing distance, including any perforations added in the vertical portion or the curve of a horizontal drainhole well.

For the purpose of assigning additional acreage to a horizontal well pursuant to the table listed in this Order, the distance from the first take point to the last take point in the horizontal drainhole shall be used in such determination, in lieu of the distance from penetration point to terminus.

In addition to the penetration point and the terminus of the wellbore required to be identified on the drilling permit application (Form W-1H) and plat, the first and last take points must also be identified on the drilling permit application (remarks section) and plat. Operators shall file an as-drilled plat showing the path, penetration point, terminus and the first and last take points of all drainholes in horizontal wells, regardless of allocation formula.

If the applicant has represented in the drilling application that there will be one or more no pert zones or "NPZs" (portions of the wellbore within the field interval without take points), then the as-drilled plat filed after completion of the well shall be certified by a person with knowledge of the facts pertinent to the application that the plat is accurately

drawn to scale and correctly reflects all pertinent and required data. In addition to the standard required data, the certified plat shall include the as-drilled track of the wellbore, the location of each take point on the wellbore, the boundaries of any wholly or partially unleased tracts within a Rule 37 distance of the wellbore, and notations of the shortest distance from each wholly or partially unleased tract within a Rule 37 distance of the wellbore to the nearest take point on the wellbore.

A properly permitted horizontal drainhole will be considered to be in compliance with the spacing rules set forth herein if the as-drilled location falls within a rectangle established as follows:

- a. Two sides of the rectangle are parallel to the permitted drainhole and 47 feet on either side of the drainhole;
- b. The other two sides of the rectangle are perpendicular to the sides described in (a) above, with one of those sides passing through the first take point and the other side passing through the last take point.

Any point of a horizontal drainhole outside of the described rectangle must conform to the permitted distance of the nearest property line, lease line or subdivision line measured perpendicular from the wellbore.

For any well permitted in this field, the penetration point need not be located on the same lease, pooled unit or unitized tract on which the well is permitted and may be located on an Offsite Tract. When the penetration point is located on such Offsite Tract, the applicant for such a drilling permit must give 21 days' notice by certified mail, return receipt requested to the mineral owners of the Offsite Tract. For the purposes of this rule, the mineral owners of the Offsite Tract are (1) the designated operator; (2) all lessees of record for the Offsite Tract where there is no designated operator; and (3) all owners of unleased mineral interests where there is no designated operator or lessee. In providing such notice, applicant must provide the mineral owners of the Offsite Tract with a plat clearly depicting the projected path of the entire wellbore. In the event the applicant is unable, after due diligence, to locate the whereabouts of any person to whom notice is required by this rule, the applicant must publish notice of this application pursuant to the Commission's Rules of Practice and Procedure. If any mineral owner of the Offsite Tract objects to the location of the penetration point, the applicant may request a hearing to demonstrate the necessity of the location of the penetration point of the well to prevent waste or to protect correlative rights. Notice of Offsite Tract penetration is not required if (a) written waivers of objection are received from all mineral owners of the Offsite Tract; or, (b) the applicant is the only mineral owner of the Offsite Tract. To mitigate the potential for well collisions, applicant shall promptly provide copies of any directional surveys to the parties entitled to notice under this section, upon request.

RULE 3: The acreage assigned to the individual oil well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. The standard drilling and proration units are established hereby to be THREE HUNDRED

TWENTY (320) acres. No proration unit shall consist of more than THREE HUNDRED TWENTY (320) acres except as hereinafter provided. The two farthermost points in any proration unit shall not be in excess of SIX THOUSAND FIVE HUNDRED (6,500) feet removed from each other; provided however, that in the case of long and narrow leases or in cases where because of the shape of the lease such is necessary to permit the utilization of tolerance acreage, the Commission may after proper showing grant exceptions to the limitations as to the shape of proration units as herein contained. All proration units shall consist of continuous and contiguous acreage which can reasonably be considered to be productive of oil. No double assignment of acreage will be accepted.

If after the drilling of the last well on any lease and the assignment of acreage to each well thereon in accordance with the regulations of the Commission there remains an additional unassigned acreage of less than THREE HUNDRED TWENTY (320) acres, then and in such event the remaining unassigned acreage up to and including a total of FORTY (40) acres may be assigned as tolerance acreage to the last well drilled on such lease or may be distributed among any group of wells located thereon, so long as the proration units resulting from the inclusion of such additional acreage meet the limitations prescribed by the Commission.

An operator, at his option, shall be permitted to form optional drilling and fractional proration units of FORTY (40) acres, with a proportional acreage allowable credit for a well on fractional proration units. The two farthermost points of a FORTY (40) acre fractional proration unit shall not be greater than TWO THOUSAND ONE HUNDRED (2,100) feet removed from each other.

The acreage assignable to the individual horizontal well for the purpose of allocating allowable oil production thereto shall be determined by the following table:

Horizontal Drainhole Length	Maximum Proration Unit Size
0 - 1,500	320
1,501 - 3,000	480
3,001 - 4,500	640
> 4,500	704

For the determination of acreage credit in this field, operators shall file for each well a Form P-16 Data Sheet Acreage Designation. On that form or an attachment thereto, the operator shall list the number of acres that are being assigned to each well on the lease or unit for proration purposes, in lieu of an amended Form P-16. Operators shall be required to file, along with the Form P-16, a plat of the lease, unit or property; provided that such plat shall not be required to show individual proration units. Operators may, however, file such proration unit plats for individual wells in the field if they so choose.

RULE 4: The maximum daily oil allowable for each well in the subject field shall be determined by multiplying the number of acres in its proration unit by 3.0 barrels per acre, and the actual allowable for an individual well shall be determined by the sum total of the two following values:

- a. Each well shall be assigned an allowable equal to the top allowable established for a well having a proration unit containing the maximum acreage authorized exclusive of tolerance acreage multiplied by NINETY FIVE percent (95%) and by then multiplying this value by a fraction, the numerator of which is the acreage assigned to the well and the denominator of which is the maximum acreage authorized for a proration unit exclusive of tolerance acreage.
- b. Each well shall be assigned an allowable equal to FIVE percent (5%) of the maximum daily oil allowable above.

RULE 5: A flowing oil well will be granted administratively, without necessity of filing fees unless the Commission requires filing fees in the future for Statewide Rule 13(b)(4)(A) exceptions, a six month exception to Statewide Rule 13(b)(4)(A) regarding the requirement of having to be produced through tubing. A revised completion report will be filed once the oil well has been equipped with the required tubing string to reflect the actual completion configuration. This exception would be applicable for new drills, reworks, recompletions or for new fracture stimulation treatments for any flowing oil well in the field. For good cause shown, which shall include the well flowing at a pressure in excess of 300 psi, an operator may obtain administratively from the district director, without the necessity of filing fees unless the Commission requires filing fees in the future for Statewide Rule 13(b)(4)(A) exceptions, one or more extensions each with a duration of up to six months. If the request for an extension of time is denied, the operator may request a hearing. If a hearing is requested the exception shall remain in effect pending final Commission action on the request for an extension.

RULE 6: An oil well will be granted administratively, without the necessity of filing fees unless the Commission requires filing fees in the future for Statewide Rule 51(a) exceptions, a six month exception to the provisions of Statewide Rule 51(a) regarding the 10 day rule for filing the potential test after testing of the well. This will allow for the backdating of allowables on the oil wells without requiring a waiver to be secured from all field operators. This rule will grant the Commission the authority to issue an allowable back to the initial completion date for all oil wells in the field to prevent unnecessary shutins to alleviate potential overproduction issues related to the completion paperwork filings and producing the oil wells without tubing. If an extension of time is granted under Rule 5, the exception to Statewide Rule 51(a) under this rule is automatically extended for the additional time.

RULE 7: Operators of flowing oil wells may comply with the following casing program as an alternative to Statewide Rule 13(b)(4) (*tubing requirements for land wells and bay wells*) so long as each participating well meets the requirements of the program as described by this Rule and otherwise satisfies the intent of Statewide Rule 13(a)(1).

a. For horizontal oil wells cased with tapered long-string production casing from the toe of the well to surface designed for all normal

producing well loads, the operator shall comply with the following conditions:

- (1) the bottom of tubing shall be installed no more than 100 feet (vertical) above the point of transition from the larger diameter production casing to the smaller diameter production casing in the tapered long-string casing;
- (2) the point of transition described in subsection (1) shall be located no more than 1,200 feet (vertical) above the top of the correlative interval of the field; and
- (3) the production casing cement shall extend 200 feet above the intermediate casing shoe.
- b. In the event the base of the intermediate casing is above the top of the correlative interval of the field, the operator shall pressure test the annulus of the intermediate casing and production casing to at least 1,200 psi and run a cement evaluation survey to assess radial cement integrity and placement behind the production casing from the top of the correlative interval of the field to at least 200 feet above the base of the intermediate casing.
 - (1) The operator shall submit all pressure test results and cement evaluation surveys electronically to the district director as soon as practicably possible, but no later than 48 hours after receipt of the pressure test results and cement evaluation survey.
 - (2) If the pressure test results or cement evaluation survey indicates insufficient isolation, (sufficient isolation as described in Statewide Rule 13(a)(1)), completion operations may not re-commence until the district director approves a remediation plan, the operator implements the approved plan, and pressure test results and cement evaluation surveys indicate sufficient isolation.
 - (3) Upon the request of the operator, the district director may approve completion operations in the portion of the wellbore where sufficient isolation exists while remediation operations described in subsection (b)(2) are ongoing with the following restrictions:
 - (A) the operator shall monitor all annuli during completion operations;
 - (B) if the pressure deviates above or below the level anticipated by pressure or thermal transfer, the operator shall immediately cease completion operations and notify the district director;

- (C) if the operator is required to cease operations pursuant to subsection (b)(3)(B) of this Rule, the operator shall then comply with subsections (b)(1) and (b)(2) described herein.
- c. Unless district director approval is required under subsection (b) of this Rule, Commission approval is not required for an operator participating in and complying with the requirements of the alternative casing program set forth in this Rule.
- d. All exceptions to Statewide Rules as discussed in Rules 5, 6, and 7 of this order shall be applicable to all wells in the field (including any wells for which completion forms were filed prior to the issuance of this order), regardless of when completion forms are filed.

Pursuant to §2001.144(a)(4)(A), of the Texas Government Code, and by agreement of the Parties in writing or on the record, the parties have waived the right to file a motion for rehearing and this Final Order is final and effective on the date the Master Order relating to the Final Order is signed.

Signed on June 16, 2020.

RAILROAD COMMISSION OF TEXAS

(Order approved and signatures affixed by Hearings Division's Unprotested Master Order dated June 16, 2020)