STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION

APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION THROUGH THE SUPERVISOR OF DISTRICT II FOR AN EMERGENCY ORDER SUSPENDING CERTAIN APPROVED APPLICATIONS FOR PERMITS TO DRILL, AND FOR ADOPTION OF SPECIAL RULES FOR DRILLING IN CERTAIN AREAS BOR THE PROTECTION OF FRESH WATER, CHAVES AND EDDY COUNTIES, NEW MEXICO

CASE NO. 15487

RESPONDENTS' JOINT NOTICE OF MODIFICATIONS TO "SPECIAL RULES"

Pursuant to NMRA 19.15.3.11(C), COG Operating LLC, OXY USA Inc., Fasken Oil & Ranch, Devon Energy Production Company, L.P., Mack Energy Corporation, EOG Y Resources, Inc., formerly known as Yates Petroleum Corporation, Lime Rock Resources II-A, L.P., the Independent Petroleum Association of New Mexico, and the New Mexico Oil and Gas Association (hereinafter collective referred as "Respondents"), hereby jointly file the attached proposed modifications to the "Special Provisions For A Selected Area Of The Roswell Artesian Basin" published by the Division under its Fifth Amended Application For Rulemaking on October 24, 2016. These proposed modifications are provided in both a redline/strikeout format (Attachment A) and a clean version (Attachment B) for ease of review.

By submitting these proposed modification, Respondents do not mean to suggest "Special Provisions" are necessary or appropriate for the subject area. The Division's current statewide rules have proven to provide a reasonable level of protection for the aquifers at issue and no evidence has been presented or alluded to that suggests otherwise. Any concerns over whether existing APDs adequately protect the aquifers can be addressed by simply reviewing those APDs to determine whether they conform with *existing* Division rules.

In the event the Commission determines that "Special Provisions" are appropriate for the subject area, Respondents jointly submit these proposed modifications for the following reasons:

To clarify for the "Selected Area" the general drilling requirements found in NMRA
 19.15.16.9 (Sealing Off Strata) and 19.15.16.10 (Casing and Tubing Requirements).

2. To maintain for the "Selected Area" the drilling and casing requirements proven over decades to be protective of the aquifers at issue without imposing on oil and gas operators unnecessary and excessive costs and drilling risks.

3. To modify the opening paragraph of Subpart C to conform with the acreage identified in Subpart A and to avoid any confusion about the geographic area subject to the proposed "Special Provisions."

4. To eliminate the unsubstantiated suggestion in Subpart C that <u>two</u> protective strings are necessary to provide a reasonable level of protection to underground aquifers, to maintain the decades of drilling practices that have proven to be protective of the aquifers without imposing unnecessary and excessive costs and drilling risks, and to account for geologic differences between the western and eastern regions of the subject area, by requiring that:

a. A protective surface casing string is set either below the deepest aquifer <u>or</u> not more than 50 feet above the first hydrocarbon show on a mud log;

b. Cement is circulated to surface for the protective surface casing string;

c. The production casing string is cemented *at least* 500 feet above the shoe of the protective surface casing string; and

d. A temperature survey or cement bond log is provided to the Division in the event that cement on the production string is not circulated to surface.

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5. To eliminate the suggestion in Subpart C that an approved cement bond log is necessary or appropriate when cement on the protective surface casing string or the production string is circulated to surface.

6. To modify subpart D to allow the District Supervisor to require a second protective string in the subject area if drilling hazards or other conditions indicate a single protective casing is not sufficient to provide a reasonable level of protection of the aquifers.

7. To eliminate Subpart E as unnecessary under the proposed modifications to Subparts C and D.

8. To modify the annular space requirement in proposed Subpart F (now Subpart E) to conform with what has proven over decades to be the proper spacing for drilling, equipping, servicing, and cementing the annular space in a safe, reliable and protective manner.

These proposed modifications remove unnecessary impediments to the development of New Mexico's oil and gas resources in the subject area, thereby preventing waste and protecting correlative rights, and further meet the statutory obligation of the Commission to assure a reasonable level of protection to the fresh water supplies designated by the state engineer.

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Respectfully submitted,

By:

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ATTORNEY FOR New Mexico Oil & Gas Association

CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of November, 2016, I served a true and correct copy of

the foregoing Respondent's Joint Notice of Modifications to "Special Rules" via email to:

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Attorney for New Mexico Oil & Gas Association

Michael H. Feldewert Jordan L. Kessler

This is an amendment to 19.15.39 NMAC, adding new section 11, effective / /.

19.15.39.11 SPECIAL PROVISIONS FOR A SELECTED AREA OF THE ROSWELL ARTESIAN

BASIN:

A.

- Designated area. The designated area shall comprise:
 - (1) the area within the following townships and ranges in Chaves county:
 - (a) township 5 south, ranges 22 and 23 east;
 - (b) township 6 south, ranges 22 east through 24 east;
 - (c) township 7 south, ranges 22 east through 24 east;
 - (d) township 8 south, ranges 21 east through 25 east;
 - (e) township 9 south, ranges 21 east through 25 east;
 - (f) township $9\frac{1}{2}$ south, range 24 east;
 - (g) township 10 south, ranges 21 east through 25 east;
 - (h) township 11 south, ranges 21 east through 26 east;
 - (i) township 12 south, ranges 21 east, $21\frac{1}{2}$ east, and 22 east through 26 east;
 - (j) township 13 south, ranges 21 east through 27 east;
 - (k) township 14 south, ranges 21 east through 27 east;
 - (I) township 15 south, ranges 21 east through 27 east;
 - (m) township 18 south, range 20 east;
 - (n) township 19 south, range 20 east; and

(2) the area within the following townships and ranges in Eddy county:

- (a) township 16 south, ranges 21 east and 23 east through 27 east;
- (b) township 17 south, ranges 21 east and 23 east through 27 east;
- (c) township 18 south, ranges 21 east and 23 east through 27 east;
- (d) township 19 south, ranges 21 east and 23 east through 27 east;
- (e) township 20 south, ranges 21 east and 23 east through 27 east;
- (f) township $20\frac{1}{2}$ south, ranges 21 east through 23 east;
- (g) township 21 south, ranges 22 east through 25 east;
- (h) township 22 south, ranges 22 east through 24 east; and
- (i) township 23 south, ranges 22 east and 23 east.

B. Applicability. All wells drilling commenced after _____ (the effective date of 19.15.39.11 NMAC) from surface locations within the designated area, or which will penetrate the designated area above the base of the San Andres formation, shall be permitted, drilled and operated in accordance with 19.15.39.11 NMAC.

C. Wells that penetrate the shallow aquifer. For wells that will penetrate the shallow aquifer of the Roswell ground water basin within the area thereof as mapped by the office of the state engineer, or will penetrate the shallow aquifer within one mile of the area so mapped, the operator shall include in the casing program at least the following.

(1) If a conductor pipe is used, it will be adequately cemented in place to prevent drainage of fluids from the surface or other shallow formations into the shallow aquifer.

(2) The operator shall set a surface casing string at least 50 feet below the base of the shallow deeper Artesian aquifer or not more than 50 feet above the first show of hydrocarbons on a mud log, such that the surface casing is landed in the first competent formation, and circulate cement to the surface.

(3) The operator shall set an intermediate casing string in the San Andres formation at a depth of approximately 1200 feet below the surface, and not more than 50 feet above the first show of hydrocarbons encountered in the San Andres formation on the mud log.

(4) After setting each string of water protection casing, the operator shall furnish a cement bond log to the division's Artesia district office, and shall not continue drilling until the division approves the cement bond log and the corresponding casing completions.

(53) The operator shall cement production casing to a depth not less than 500 feet above the intermediate casing previous casing shoe.

(64) After setting If cement is not circulated to the surface on the production casing, the operator at its option shall furnish a temperature survey or a cement bond log to the division's Artesia district office, and shall not proceed with completion until the division approves the cementing bond log.

D. <u>District Supervisor DiscretionExceptions</u>. Notwithstanding Paragraph (2) of Subsection C of 19.15.39.11 NMAC, the district supervisor of the division's Artesia district office may approve require a casing program for a well that penetrates the mapped area of the shallow aquifer that provides for a surface casing string

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through the shallow aquifer and an intermediate casing string through the deeper Artesian aquifer only one waterprotection easing string to be set in the San Andres formation in accordance with Paragraph (3) of Subsection C of 19.15.39.11 NMAC, or for setting either or both easing strings at a shallower depth than is provided in Subsection C of 19.15.39.11 NMAC, if the district supervisor finds that the proposed casing program is not will be reasonably sufficient to prevent fluid movement into or out of the well bore from or to either designated aquifer. In approving any exception to Paragraph (2) of Subsection C of 19.15.39.11 NMAC, tThe district supervisor may attach such conditions of approval as, in his or her judgment, are reasonably necessary to prevent such fluid movement. In any well for which an intermediate casing string is required, exception is approved pursuant to Subsection C of 19.15.39.11 NMAC, the operator shall circulate cement on that intermediate e production casing string to the surface.

E. Wells that penetrate only the artesian aquifer. For wells that will not penetrate the shallow aquifer, but will penetrate the artesian aquifer of the Roswell ground water basin, or will penetrate the San Andres formation within the area of the artesian aquifer, as mapped by the office of the state engineer, or within one mile thereof, the operator shall include in the casing program all of the provisions required by Subsection C of 19.15.39.11 NMAC, except that the surface casing string specified in Paragraph (2) of Subsection C of 19.15.39.11 NMAC shall not be required, the intermediate casing string required by Paragraph (3) of Subsection C of 19.15.39.11 NMAC may serve as the surface casing, and cement on the production casing shall be circulated to the surface.

FE. Annular space. In order to provide an adequate annular space for cementing, the diameter of the hole in which a casing string is set shall be at least two inches greater than the <u>nominal</u> outer diameter of the couplings on the casing string unless an exception is granted by the District Supervisor.

GF. Compliance with statewide rules. 19.15.39.11 NMAC shall not be construed to relieve the operator of any well from the obligation to comply with any applicable statewide rules, including, but not limited to, 19.15.16.9, 19.15.16.10 and 19.15.16.11 NMAC.

HG. Transitional provisions. Any APD for a proposed well within the designated area that was previously approved and suspended by emergency order of the division shall be reinstated if it meets the requirements of 19.15.39.11 NMAC. Any operator may amend any such APD within 30 days after the effective date of 19.15.39.11 NMAC to comply with 19.15.39.11 NMAC. If the division reinstates or approves as amended a previously suspended APD, the APD shall continue in force for two years from the date of original approval, plus the number of days that such APD was suspended. [19.15.35.11 NMAC - N, //]

This is an amendment to 19.15.39 NMAC, adding new section 11, effective / /.

19.15.39.11 SPECIAL PROVISIONS FOR A SELECTED AREA OF THE ROSWELL ARTESIAN

BASIN:

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- Designated area. The designated area shall comprise:
 - (1) the area within the following townships and ranges in Chaves county:
 - (a) township 5 south, ranges 22 and 23 east;
 - (b) township 6 south, ranges 22 east through 24 east;
 - (c) township 7 south, ranges 22 east through 24 east;
 - (d) township 8 south, ranges 21 east through 25 east;
 - (e) township 9 south, ranges 21 east through 25 east;
 - (f) township $9\frac{1}{2}$ south, range 24 east;
 - (g) township 10 south, ranges 21 east through 25 east;
 - (h) township 11 south, ranges 21 east through 26 east;
 - (i) township 12 south, ranges 21east, 21 ½ east, and 22 east through 26 east;
 - (j) township 13 south, ranges 21 east through 27 east;
 - (k) township 14 south, ranges 21 east through 27 east;
 - (I) township 15 south, ranges 21 east through 27 east;
 - (m) township 18 south, range 20 east;
 - (n) township 19 south, range 20 east; and
 - (2) the area within the following townships and ranges in Eddy county:
 - (a) township 16 south, ranges 21 east and 23 east through 27 east;
 - (b) township 17 south, ranges 21 east and 23 east through 27 east;
 - (c) township 18 south, ranges 21 east and 23 east through 27 east;
 - (d) township 19 south, ranges 21 east and 23 east through 27 east;
 - (e) township 20 south, ranges 21 east and 23 east through 27 east;
 - (f) township 20¹/₂ south, ranges 21 east through 23 east;
 - (g) township 21 south, ranges 22 east through 25 east;
 - (h) township 22 south, ranges 22 east through 24 east; and
 - (i) township 23 south, ranges 22 east and 23 east.

B. Applicability. All wells drilling commenced after _____ (the effective date of 19.15.39.11 NMAC) from surface locations within the designated area, or which will penetrate the designated area above the base of the San Andres formation, shall be permitted, drilled and operated in accordance with 19.15.39.11 NMAC.

C. Wells that penetrate the shallow aquifer. For wells that will penetrate the shallow aquifer of the Roswell ground water basin as mapped by the office of the state engineer, the operator shall include in the casing program at least the following.

(1) If a conductor pipe is used, it will be adequately cemented in place to prevent drainage of fluids from the surface or other shallow formations into the shallow aquifer.

(2) The operator shall set a surface casing string 50 feet below the base of the deeper Artesian aquifer or not more than 50 feet above the first show of hydrocarbons on a mud log, such that the surface casing is landed in the first competent formation, and circulate cement to the surface.

(3) The operator shall cement production casing to a depth not less than 500 feet above the previous casing shoe.

(4) If cement is not circulated to the surface on the production casing, the operator at its option shall furnish a temperature survey or a cement bond log to the division's Artesia district office, and shall not proceed with completion until the division approves the cementing.

D. District Supervisor Discretion. Notwithstanding Paragraph (2) of Subsection C of 19.15.39.11 NMAC, the district supervisor of the division's Artesia district office may require a casing program that provides for a surface casing string through the shallow aquifer and an intermediate casing string through the deeper Artesian aquifer if the district supervisor finds that the proposed casing program is not reasonably sufficient to prevent fluid movement into or out of the well bore from or to either designated aquifer. The district supervisor may attach such conditions of approval as, in his or her judgment, are reasonably necessary to prevent such fluid movement. In any well for which an intermediate casing string is required, the operator shall circulate cement on that intermediate casing string to the surface.

E. Annular space. In order to provide adequate annular space for cementing, the diameter of the hole in which a casing string is set shall be at least two inches greater than the nominal outer diameter of the casing

string unless an exception is granted by the District Supervisor.

F. Compliance with statewide rules. 19.15.39.11 NMAC shall not be construed to relieve the operator of any well from the obligation to comply with any applicable statewide rules, including, but not limited to, 19.15.16.9, 19.15.16.10 and 19.15.16.11 NMAC.

G. Transitional provisions. Any APD for a proposed well within the designated area that was previously approved and suspended by emergency order of the division shall be reinstated if it meets the requirements of 19.15.39.11 NMAC. Any operator may amend any such APD within 30 days after the effective date of 19.15.39.11 NMAC to comply with 19.15.39.11 NMAC. If the division reinstates or approves as amended a previously suspended APD, the APD shall continue in force for two years from the date of original approval, plus the number of days that such APD was suspended.

[19.15.35.11 NMAC - N, / /]