State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

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Cabinet Secretary-Designate

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Jami Bailey, Division Director Oil Conservation Division



Administrative Order PMX-268 October 16, 2013

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of 19.15.26.8B NMAC, Chevron U.S.A ("applicant" or "operator"), seeks an administrative order to utilize its North Lusk "29" Federal Well No. 1 (API No. 30-025-34673) located 330 feet from the South line and 2005 feet from the West line, Unit letter N of Section 29, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, for Temporary Gas Storage purposes. Because this is a unique case since Temporary Gas Storage is not in the suite of administrative orders, Pressure Maintenance Expansion (PMX) is chosen to represent this Temporary Gas Storage. This action will also help identify this order in the RBDMS database.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of 19.15.26.8B NMAC and the applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met, and the operator is in compliance with 19.15.5.9 NMAC.
- (2) Due to the high drilling activity in the area, the sales line pressure has increased to 250 pounds per square inch (psi), while Chevron's line pressure is 70 psi.
- (3) As a result, Chevron is now seeking to build a compressor station to compress its gas from 70 psi to the sales line pressure of 250 psi.
- (4) In order to produce the liquids hydrocarbons from the Cross Bones 1-29 Well No. 2H (API No. 30-025-40711), and the Cross Bones 2-29 Well No. 1H (API No. 30-025-40706), Chevron is forced to flare the produced gas from these wells, thereby causing waste.
- (5) Chevron conducted some remedial work on the Cross Bones 2-29 Well No. 1H and incidentally introduced some Nitrogen (N2), and Hydrogen Sulfide (H2S) into the produced gas. The N2 and the H2S content of the produced gas exceeds the Pipeline Specifications, and Enterprise Gas Gathering System will not accept Chevron's produced gas from the wells.

- (6) To avoid flaring, Chevron intends to re-inject this produced gas from the Bone Spring formation into the Strawn formation using the North Lusk "29" Federal Well No. 1, and reproduce the gas when all the sales line requirements are met.
- (7) The gas produced from the Bone Spring formation and the gas in the Strawn formation are sweet gases as demonstrated from the gas analysis, and are therefore compatible.
- (8) Ownership in both pools is identical, and as a result, correlative rights will not be violated, and the application qualifies for administrative approval.
- (9) The injection well is properly well constructed to allow the injection of the produced gas into the Strawn formation. There are no wells in the Area of Review (AOR) that penetrate the injection interval.
- (10) There are no faults, or other hydrologic connections in the area that may act as conduits between the injection zone and any underground sources of drinking water.
- (11) In the interest of conservation, and in order to prevent waste, protect correlative rights and the environment, this application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Chevron U.S.A., is hereby authorized to utilize its North Lusk "29" Federal Well No. 1 (API No. 30-025-34673) located 330 feet from the South line and 2005 feet from the West line, Unit letter N of Section 29, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, for injection of produced gas from the Bone Spring formation into the Strawn formation for Temporary Gas Storage purposes through perforations from approximately 11,422 feet to 11,573 feet, and through internally coated tubing and a packer set within 100 feet of the permitted interval.

The operator shall run a Cement Bond Log (CBL) in the injection well to determine the exact top of cement (TOC) on the production casing. If the indicated cement top is deeper than 4,080 feet, the operator shall bring the cement top to 4,080 feet. The operator shall notify the Division's district I office of the date and time when this work is to be done so that it can be witnessed and approved before commencing injection operations into this well.

The operator shall continuously meter the injected produced gas for reservoir gas accounting when the gas is eventually re-produced.

The authority granted by this order for Temporary Gas Storage shall expire one (1) year from the date of issuance of this order.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected gas enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to commencing the injection operations. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to no more than 2284 psi. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate-Test conducted with water.

The operator shall notify the supervisor of the Division's district I office of the date and time of the installation of injection equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of injection to the Division's district I office. The operator shall submit monthly reports of the injection operations on Division Form C-131-A, in accordance with Division Rules 19.15.26.13.A(5), 19.15.7.24, and 19.15.11 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district I office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

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Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

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Director

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cc: Oil Conservation Division – Hobbs District Office

Bureau of Land Management BLM - Roswell