

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

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 14593
ORDER NO. R-13388**

**APPLICATION OF CHEVRON U S A, INC. FOR APPROVAL OF A SALT
WATER DISPOSAL WELL, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 17, 2011, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 5th day of May, 2011, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Chevron U S A, Inc. ("Chevron" or "applicant"), seeks authority to utilize its Skelly Unit Well No. 902 (**API No. 30-015-29322**) located 1650 feet from the North line and 990 feet from the West line, Unit E of Section 15, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico, for oil field water disposal into the Wolfcamp and Cisco formations from 8418 feet to 9766 feet.

(3) This application was set to hearing by the applicant due to the presence of a Wolfcamp producing well within the ½ mile Area of Review. The Oxy Butter Pecan Federal Well No. 1 (API No. 30-015-32316) operated by Apache Corp. is a vertical well producing from the Southeast Henshaw-Wolfcamp Pool (Pool Code 96520) at a stable daily rate of approximately 3 barrels of oil, 20 Mcf of gas, and 10 barrels of water. Apache Corp. was notified of this application and of this hearing but did not object or enter an appearance at the hearing.

(4) Chevron presented exhibits and testimony as follows at the hearing from a landman and an engineer:

- a. The subject well was completed in April of 1997 in the Fren-Morrow Gas Pool. In January of 2000 it was plugged back and perforated in the Southeast Henshaw-Wolfcamp Pool (Pool Code 96520). In November of 2000 the well was kicked off above the existing perforations and drilled horizontally in the upper Wolfcamp formation in a southeastern direction to a terminus 3340 feet from the North line and 2840 feet from the West line, Unit J of Section 15. The open hole lateral extends approximately from 8418 to 8552 feet true vertical depth, 8418 to 10534 feet measured depth.
- b. Chevron intends to plug back the well with a cast iron bridge plug set at approximately 9960 feet and utilize the well for salt water disposal into the Wolfcamp and Cisco formations. The Wolfcamp injection interval would consist of the existing open-hole lateral and perforations within the Wolfcamp formation as well as new perforations from 8718 to 9386 feet. The Cisco formation injection interval would consist of new perforations from 9661 feet to 9766 feet. The overall disposal interval would therefore extend vertically from 8418 feet to 9766 feet and include the open-hole lateral.
- c. The source waters going into this well would originate primarily from Chevron's local production from the Yeso formation.
- d. The Wolfcamp formation production from this well was never significant and has declined with the last reported production in October of 2009.
- e. Chevron expects disposal waters to preferentially enter the Cisco interval.
- f. Due to risk of losing the entire well, Chevron does not intend to attempt a plug-back operation on the lateral open-hole Wolfcamp interval.
- g. Chevron does not expect disposal into this well to have an adverse effect on Apache Corp's offsetting Wolfcamp oil producer, the Oxy Butter Pecan Federal Well No. 1 (API No. 30-015-32316).
- h. Chevron does not expect any waste of oil or gas to occur as a result of disposal into the Wolfcamp and Cisco formations.
- i. The well is adequately equipped and cemented to isolate any fresh water intervals.

(5) The half-mile Area of Review around this well contains no plugged wells and two wells that are active or have not yet been plugged, that penetrate the disposal interval. All Area of Review wells are adequately cased and cemented in order to isolate the disposal interval.

(6) The application has been duly filed under the provisions of 19.15.26.8 NMAC. Affected parties have been notified and no objections have been received. There were no other appearances at the hearing or objections to this application.

(7) 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.

(8) This application as presented by Chevron should be approved.

(9) In order to confirm whether the Cisco formation is indeed the primary disposal interval within the 1300 feet of permitted interval, an injection survey should be run on this well within one year of commencing disposal operations.

IT IS THEREFORE ORDERED THAT:

(1) Chevron U S A, Inc. ("Chevron" or "operator"), is hereby authorized to utilize its Skelly Unit Well No. 902 (**API No. 30-015-29322**) located 1650 feet from the North line and 990 feet from the West line, Unit E of Section 15, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico, for oil field water disposal (limited only to UIC Class II fluids) into the Wolfcamp and Cisco formations from 8418 feet to 9766 feet (as measured inside the vertical well) through lined tubing and a packer set within 100 feet above the permitted disposal interval.

(2) This well shall be plugged back to approximately 9960 feet with a cast iron bridge plug and cement. If the well was equipped otherwise, the operator shall install the plug-back at the time of the next packer unseat, but not later than five years from the date of this order.

(3) Within one year of commencing disposal into this well, the operator shall run an injection survey consisting of tracer and temperature logs (or equivalent) and shall supply a copy of this survey to the Division for evaluation and inclusion in the case file – else this disposal permit shall expire, *ipso-facto*.

(4) The operator shall take all steps necessary to ensure that the disposed water enters only the permitted disposal interval depths and is not permitted to escape to other formations or onto the surface.

(5) 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.

(6) The wellhead injection pressure on the well shall be limited to **no more than 1684 psi**. In addition, the disposal 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.

(7) 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.

(8) The operator shall notify the supervisor of the Division's district office of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with rules 19.15.26.13 NMAC and 19.15.7.24 NMAC.

(9) Without limitation on the duties of the operator as provided in 19.15.29 NMAC and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district 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 or 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.

(10) The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

(11) The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

(12) The Division Director shall be authorized to amend this permit administratively after proper notice and opportunity for hearing.

(13) The disposal authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

(14) One year after disposal into the well has ceased, the authority to dispose

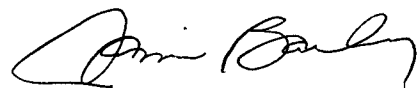
will terminate *ipso facto*.

(15) 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.

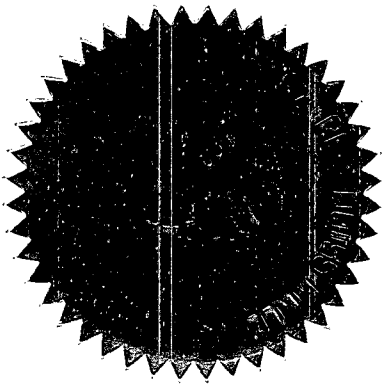
(16) Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements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

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



JAMI BAILEY
Director



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