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. 14943 ORDER NO. R-13685

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR APPROVAL OF A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

<u>BY THE DIVISION</u>:

This case came on for hearing at 8:15 a.m. on January 24, 2013, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 6th day of March, 2013, 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, Devon Energy Production Company, L.P. ("Devon" or "applicant"), seeks authority to utilize its Rio Blanco 33 Federal Well No. 2 (API No. 30-025-36360), (the "subject well"), located 1980 feet from the North line and 1980 feet from the West line, Unit letter F of Section 33, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico, for oil field water disposal into the Devonian formation from 14,570 feet to 14,660 feet.

(3) This application was set to hearing by the applicant due to the presence of the following Devonian gas well located within the ¹/₂ mile Area of Review. The Rio Blanco 33 Federal Well No. 1 (API No. 30-025-36359) operated by Devon is a vertical well producing from the Northeast Bell Lake-Devonian Gas Pool (Pool Code 97328).

(4) Devon presented exhibits and testimony at the hearing from a geologist and an engineer. An affidavit of notice was also presented for the record. The testimony and exhibits indicate the following:

- a. The subject well was completed in 2004 in the Northeast Bell Lake-Devonian Gas Pool (Pool Code 97328). The Devonian gas production has declined rapidly and the well has produced only sporadically since early 2009 when the well was making approximately 2000 barrels of water per day. Lately, the well has been produced only a few days per month.
- b. The offset producing Devonian gas well, the Rio Blanco 33 Federal Well No. 1, is located 2328 feet from the subject well so it is very close to the ¹/₂ mile limit of the Area of Review. This well is also only being produced sporadically – a few days per month. Division records indicate production averages between 150 and 700 Mcf of Gas per Day and between 325 and 1400 barrels of water per day. Devon expects no adverse effect on this well from offsetting disposal.
- c. The Devonian is highly fractured in this area and the water seems to have come from below rather than laterally.
- d. In June of 2011, the Division issued Order No. R-13410 in Case No. 14600 allowing Devon to utilize the Rio Blanco 4 Federal Com. Well No. 3 (API No. 30-025-36425) for disposal into the Devonian formation through an open hole interval. That well was, at the time, an inactive Devonian gas well within the Northeast Bell Lake-Devonian Gas Pool and is located just over 1 mile South of the subject well.
- e. Devon does not intend to attempt any further production from the Devonian formation within the subject well and intends to convert this uneconomic producer to disposal into the existing open hole interval.
- f. The source waters going into this well would originate primarily from Devon's local wells producing from the Delaware and Bone Spring formations.
- g. Devon does not expect any waste of oil or gas to occur as a result of disposal into the Devonian formation.
- h. The State of New Mexico is the surface owner and the United States of America is the mineral owner. In addition to all other "affected persons", both the N.M. State Land Office and the U.S. Bureau of Land Management have been notified.

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 only one active well which penetrated the disposal interval. The Area of Review well is adequately cased and cemented in order to isolate the disposal interval.

(6) It appears this Devonian gas pool was at first prolific, but has been rapidly depleted, and the remaining wells have watered out and are uneconomic. Water disposal into this pool was granted already in Case No. 14600 without causing waste of surrounding production. The subject well is itself watered out with water coming from below the completed interval.

(7) This application has been duly filed under the provisions of 19.15.26.8 NMAC. Devon provided proper notice of the administrative application in September of 2012 and again provided notice to all the same parties of the hearing application. There were no other appearances at the hearing or objections to this application.

(8) The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator (OGRID 6137) is in compliance with 19.15.5.9 NMAC.

(9) This application as presented by Devon should be approved.

IT IS THEREFORE ORDERED THAT:

(1) Devon Energy Production Company, L.P. ("Devon" or "operator") [OGRID 6137], is hereby authorized to utilize its Rio Blanco 33 Federal Well No. 2 (**API No. 30-025-36360**) located 1980 feet from the North line and 1980 feet from the West line, Unit letter F of Section 33, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico, for oil field water disposal (limited only to UIC Class II fluids) into the Devonian formation open hole interval from 14,570 feet to 14,660 feet through lined tubing and a packer set within 100 feet above the permitted disposal interval.

(2) 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.

(3) After installation of 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.

(4) The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal

packer is unseated. 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.

(5) The wellhead injection pressure on the well shall be limited to **no more than 2914 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.

(6) 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.

(7) 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.

(8) 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.

(9) 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.

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

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

(12) 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.

Case No. 14943 Order No. R-13685 Page 5 of 5

(13) One year after disposal into the well has ceased, the authority to dispose will terminate *ipso facto*.

(14) 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.

(15) 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

mi Bang

JAMI BAILEY Director