Bill Richardson

Governor

Jon Goldstein Cabinet Secretary

Jim Noel
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order SWD-1207 March 29, 2010

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Rule 26.8B., Noble Energy, Inc. seeks an administrative order to utilize its Rio Bravo Well No. 5 (API 30-045-33583) located 1505 feet from the North line and 1245 feet from the West line, Unit E of Section 27, Township 31 North, Range 13 West, NMPM, San Juan County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 26.8B. Satisfactory information has been provided that affected parties as defined in Rule 26.8B.(2) have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 26.8 will be met and the operator is in compliance with Division Rule 5.9.

IT IS THEREFORE ORDERED THAT:

The applicant, Noble Energy, Inc., is hereby authorized to utilize its Rio Bravo Well No. 5 (API 30-045-33583) located 1505 feet from the North line and 1245 feet from the West line, Unit E of Section 27, Township 31 North, Range 13 West, NMPM, San Juan County, New Mexico, for disposal of oil field produced water (UIC Class II liquids only) into the Mesaverde formation through perforations from a gross interval of 3487 feet to 4286 feet through plastic-lined tubing and packer set within 100 feet of the disposal interval.

The Menefee coals shall be avoided when perforating and an effort shall be made to avoid influencing these coals when fracturing.

As preparation and prior to disposal, the operator shall perforate near depths of 4200 feet and swab test the upper sands in the Point Lookout formation. The operator shall supply swab test results including gas volumes and water analysis to the Division on sundry reports. If significant gas volumes are found (as determined by Noble in conjunction with the manager of the Division's Aztec district office) while swabbing these select perforations, the entire Point Lookout from 4200 to 4286 shall be plugged back with a Division approved procedure prior to



commencing disposal operations into the upper members of the Mesaverde formation.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the proposed disposal 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 wellhead injection pressure on the well shall be limited to **no more than 700 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.

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.

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 Division Rules 26.13 and 7.24.

Without limitation on the duties of the operator as provided in Division Rules 30 and 29, 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 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.

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.

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

In accordance with Division Rule No 26.12.C., the disposal authority granted herein shall terminate one year 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. One year after disposal into the well has ceased, the authority to dispose will terminate *ipso facto*.

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.

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 disposal authority granted herein.

MARK E. FESMIRE, P.E.

Acting Director

MEF/wvjj

cc: Oil Conservation Division – Aztec