New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



Administrative Order SWD-1163

March 9, 2009

Jerry W. Sherrell Mack Energy Corp PO Box 960 Artesia, NM 88211-0960

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Rule 26.8B., Mack Energy Corp seeks an administrative order to utilize its Roundtank SWD Well No. 1 (**API 30-005-64095**) located 1980 feet from the South line and 1980 feet from the West line, Unit K of Section 19, Township 15 South, Range 29 East, NMPM, Chaves 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 Mack Energy Corp, is hereby authorized to utilize its Roundtank SWD Well No. 1 (API 30-005-64095) located 1980 feet from the South line and 1980 feet from the West line, Unit K of Section 19, Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico, for disposal of produced water into the Devonian formation from approximately 10500 feet to 11200 feet through 2-7/8 inch or smaller diameter, plastic-lined tubing set within 100 feet of the disposal interval.

As preparation and prior to commencing disposal, the operator shall perform the following work on the subject well:

- 1) Unless hole-conditions prevent this, run openhole resistivity and porosity logs from total depth to surface and supply copies of these electric logs to the Division (send to Hobbs district for scanning).
- 2) Send a copy of a mudlog with plots of lithology, drilltimes, and any hydrocarbon

shows through this Devonian interval - OR

3) If a mudlog is NOT available, perforate and swab test the new perforations for hydrocarbon potential and catch a water sample for analysis. The Division's district office shall be noticed prior to this test and given the opportunity to witness the swab test. The results of the swab test and water analysis shall be sent to the Division attached to a sundry notice.

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 2100 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 an acceptable Step-Rate-Test.

The operator shall notify the supervisor of the Division's district II office in Artesia 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 II 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.

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

Administrative Order SWD-1163 Mack Energy Corp March 9, 2009 Page 3 of 3

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.

MARK E. FESMIRE, I Director

MEF/wvjj

cc: Oil Conservation Division – Artesia State Land Office – Oil, Gas, and Minerals Division