

**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. 14364  
ORDER NO. R-13151-A**

**APPLICATION OF JUDAH OIL, LLC FOR APPROVAL OF A COMMERCIAL  
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 September 17, 2009, at Santa Fe, New Mexico, before Examiner Richard Ezeanyim.

NOW, on this 2<sup>nd</sup> day of November, 2009, 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, Judah Oil, LLC ("Judah" or "Applicant"), seeks authority to utilize its existing MWJ State Well No. 1Y (API No. 30-015-23888) located 860 feet from the South line and 2020 feet from the West line (Unit N) of Section 30, Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico, to dispose of produced water into the Delaware formation through perforations from 3,630 feet to 4,975 feet.

(3) On May 4, 2009, Judah Oil, LLC submitted an administrative application to the Division asking for approval of this well for injection of commercial salt water.

(4) On May 22, 2009, the Oil Conservation Division (Division) received a protest letter from Nearburg Producing Company (Nearburg), an offset operator, opposing the application. However, on July 13, 2009, Nearburg dropped its objection to the injection well provided that the perforations are limited to depths from 3,630 feet to 4,975 feet.

(5) On June 30, 2009, the Division received a letter of protest from the surface lessee, Mr. Scott Branson of Carlsbad, New Mexico. Mr. Branson was concerned that the injection well will inhibit the growth of vegetation, disturb cattle ranch operations, and harm the environment.

(6) On July 22, 2009, the Applicant, through its attorney, filed a motion to dismiss the objection filed by Scott Branson on the grounds that he is just a holder of a grazing lease issued by the New Mexico State Land Office and therefore does not have any standing to object to the application for authorization to inject.

(7) By Division Order No. R-13151, issued in the same Case No. 14364 on July 29, 2009, the Division denied the motion to dismiss the objection to the application filed by Scott Branson. Consequently, this application was set for hearing.

(8) The State Land Office, the owner of both the surface and mineral estate, does not have any objection to the proposed injection well.

(9) This case was heard on September 17, 2009. At the hearing the counsel for Judah Oil, LLC stated that Mr. Branson has withdrawn his objection to the injection well.

(10) No other party entered an appearance in this case or otherwise opposed this application.

(11) Judah Oil, LLC appeared at the hearing through legal counsel and presented the following testimony:

(a) There is no hydrocarbon production from the proposed injection interval within two miles of the subject well. Water saturations calculated within the injection zone in this well demonstrate that the zone is water productive.

(b) The process will consist of an open system with an anticipated average injection rate of 3,000 barrels of water per day at a maximum injection pressure of 726 pounds per square inch (psi).

(c) Within the half-mile area of review (AOR), only one well, the Ruby 30 State Well No. 1 (API No. 30-015-26797) penetrated the injection interval. This well is producing gas from the Bone Spring formation through perforations from 6,560 feet to 6,638 feet, and is well constructed to prevent upward migration of the injected fluids.

(d) The waters to be disposed consist primarily of waters from the Delaware and Bone Spring formations, and to a lesser extent water produced from the Morrow formation.

(e) There is no evidence of open faults or any other hydrologic connections between the injection interval and any underground sources of drinking water.

**The Division concludes as follows:**

(12) Judah Oil, LLC met the requirements of Rule 5.9 and has made application for commercial saltwater disposal pursuant to all requirements within Rule 26.8.

(13) The proposed construction of the injection well should prevent upward migration of the injected fluids to the surface.

(14) The water analysis submitted by the Applicant demonstrates that there will be no compatibility issues between the waters to be disposed and the formation water.

(15) This application should be approved.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Judah Oil, LLC, is hereby authorized to utilize its MWJ State Well No. 1 (API No. 30-015-23888) located 860 feet from the South line and 2020 feet from the West line (Unit N) of Section 30, Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico, to dispose of produced water into the Delaware formation from 3,630 feet to 4,975 feet through 2-3/8 inch diameter plastic lined tubing set within 100 feet of the injection interval.

(2) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(3) 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.

(4) The casing-tubing annulus shall be pressure tested from the surface to the packer setting depth to assure mechanical integrity. Thereafter, mechanical integrity tests (MITs) shall be conducted every five years.

(5) The wellhead injection pressure on the well shall be limited to **no more than 726 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 injection pressure to the maximum allowable pressure for this well. The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from

the injection formation. Such proper showing shall consist of a valid step-rate test acceptable to this office.

(6) The operator shall provide written notice of the date of commencement of injection to the Artesia district office of the Division. The operator shall report the estimated initial static reservoir pressure of the injection interval on a sundry report. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 26.13 NMAC and 7.28 NMAC of the Division Rules and Regulations.

(7) The operator shall immediately notify the Artesia district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(8) Injection shall be confined to the Delaware formation through specific injection intervals as detailed above. A temperature and radioactive tracer injection profile log shall be run within six months of commencing injection in order to determine if injection fluid is moving vertically near the wellbore, and out of the permitted injection interval. The log of the survey results shall be submitted to the Engineering Bureau of the Division in Santa Fe.

(9) In accordance with Rule No 26.12 NMAC, the injection authority granted herein for each well shall terminate one year after the effective date of this order if the operator has not commenced injection operations into that well, and will terminate *ipso facto*, one year after injection operations into that well have ceased.

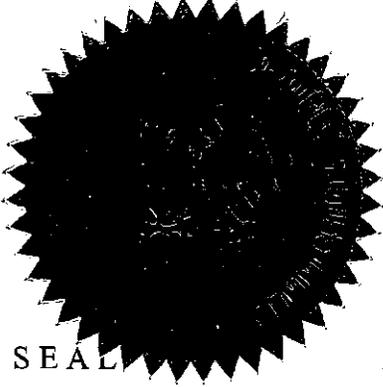
(10) The injection authority granted under this order is **not** transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of each injection well that will be transferred prior to approving transfer of authority to inject.

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

(12) 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.

(13) 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 water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, or without prior notice and hearing in the event of an emergency, terminate the injection authority granted herein.

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



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read 'Mark E. Fesmire'.

MARK E. FESMIRE, P.E.  
DIRECTOR