

**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. 14606  
ORDER NO. R-13412**

**APPLICATION OF MEWBOURNE OIL COMPANY 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 3, 2011 and again on March 31, 2011, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 23<sup>rd</sup> day of June, 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, Mewbourne Oil Company ("Mewbourne" or "applicant"), seeks authority to utilize its Fairchild 13 SWD Well No. 1 (API No. 30-015-29729, the "subject well"); located 660 feet from the South line and 660 feet from the West line, Unit M of Section 13, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, for oil field water disposal into a Canyon formation open hole interval from approximately 7800 feet to 8200 feet.

(3) The Division has previously approved Canyon salt water disposal wells offsetting this location. The Cotton MX Federal Com Well No 1 (API No. 30-015-23315), located in Unit C of Section 14 was approved as a Canyon disposal well by administrative permit SWD-370. The Ann SWD Well No 1 (API No. 30-015-23580), located in Unit G of Section 18 was approved as a Canyon disposal well by administrative permit SWD-246. The Ann SWD Well No. 1 is now operated by Mesquite SWD, Inc. and being used as a commercial disposal well.

(4) Mewbourne presented exhibits and testimony at the hearing from a geologist and an engineer. An affidavit of notice was presented at the hearing on March 31, 2011.

(5) The applicant's testimony and exhibits indicate the following:

- a. The proposed disposal well is within one mile of the North Dagger Draw-Upper Pennsylvanian Pool (Pool Code 15472). This pool produces gassy oil and very high quantities of associated water from the Canyon formation. The Canyon oil field produced waters are typically relatively low in dissolved solids.
- b. The proposed well was spud in December of 1997 as a Canyon test. The well was drilled to 8200 feet and plugged as a dry hole. The Canyon in this location is lower on structure than the main portion of the North Dagger Draw-Upper Pennsylvanian Pool. Offsetting wells that attempted to produce from the Canyon have produced at a very high water cut. Mewbourne does not intend to attempt any further Canyon formation production from this well.
- c. Mewbourne intends to re-enter this plugged well to 8200 feet, run 7 inch casing to 7800 feet, set an external packer and cement this new casing, and utilize this well for disposal into the Canyon formation through an open hole interval.
- d. Mewbourne expects disposal waters to preferentially enter the Canyon formation through the higher porosity interval located near the midpoint of the proposed disposal depth range.
- e. The source waters going into this well would originate primarily from Mewbourne's local production from the Yeso formation. Currently Mewbourne's Yeso waters are being commercially disposed into the Ann SWD Well No. 1 which itself uses the Canyon formation for disposal.
- f. Mewbourne does not expect any waste of oil or gas to occur as a result of disposal into this Canyon formation at this location.
- g. Mewbourne owns the surface at this well location. Exhibit 3 details those who control the interests within ½ mile of this location and Exhibit A, presented on March 31, shows proof of notice to those affected parties.
- h. Known fresh waters are located within 750 feet of surface. The well will be adequately equipped and cemented to isolate any fresh water intervals.

(6) 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 application has been duly filed under the provisions of 19.15.26.8 NMAC.

(8) The half mile Area of Review around this well contains no plugged wells and one active well that penetrated the disposal interval. The Area of Review well is adequately cased and cemented in order to isolate the disposal interval.

(9) 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.

(10) This application as presented by Mewbourne should be approved.

**IT IS THEREFORE ORDERED THAT:**

(1) Mewbourne Oil Company ("Mewbourne" or "operator"), is hereby authorized to utilize its Fairchild 13 SWD Well No. 1 (**API No. 30-015-29729**) located 660 feet from the South line and 660 feet from the West line, Unit M of Section 13, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, for oil field water disposal (limited only to UIC Class II fluids) into the Canyon formation open hole interval from approximately 7800 feet to 8200 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 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.

(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.

(5) The wellhead injection pressure on the well shall be limited to **no more than 1560 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 MIT 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.

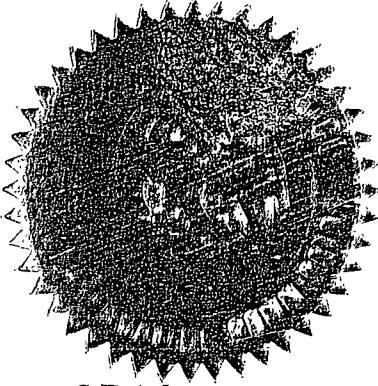
(13) One year after disposal into the well has ceased, the well will be considered abandoned and the authority to dispose will terminate *ipso facto*.

(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

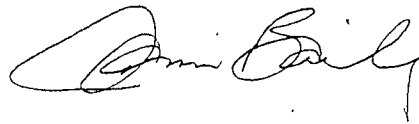
upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing or prior to notice and hearing in event of an emergency, terminate the disposal authority granted herein.

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



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



JAMI BAILEY  
Director