

**ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 10960 (De Novo)
Order No. R-10151-A**

**APPLICATION OF MEWBOURNE OIL COMPANY FOR
A WATERFLOOD PROJECT AND QUALIFICATION
FOR THE RECOVERED OIL TAX RATE, LEA
COUNTY, NEW MEXICO**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on August 11, 1994, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 15th day of September, 1994, the Commission, having considered the testimony, the record, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) In Case No. 10960 the applicant, Mewbourne Oil Company, seeks authority to inject through unlined tubing rather than plastic-coated tubing. In support of this request the applicant presented evidence which showed that:

- (a) The costs to plastic coat the tubing is estimated to be approximately \$1.50 per foot.
- (b) The already existing Querecho Plains Bone Spring Waterflood (Division Order R-9737-A) which will deliver source water to the proposed Querecho Plains Queen Waterflood has demonstrated exceptionally low (1.5 mils/year) corrosion rates over the past 9 months.
- (c) Injection time should be a relatively short 5.5 years because the reservoir has been repressured by previous injection which shortens the injection time frame for the flood.

- (d) Said 1.5 mils/year corrosion rate extrapolated over a 5.5 year flood life represents only 4% loss in tubing wall thickness and stays within API specifications for "new" pipe.
- (e) An effective corrosion inhibition program has been and will be pursued for said water system.
- (f) Oxygen and CO₂ exist only in low and acceptable concentrations; H₂S has not been detected to date.
- (g) Offset injection records suggests no correlation exists between coating of tubulars and the number of injection well mechanical failures.
- (h) A packer will be set within 100 feet of top perforations and an inert liquid circulated into the tubing casing annulus so as to operate and monitor all injection wells to assure mechanical integrity.
- (i) A search for fresh water was conducted within a 2 mile radius of the waterflood unit boundary and no fresh water wells were found.

(3) All other provisions contained within said Order No. R-10151 should remain in full force and effect.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Mewbourne Oil Company, must take all steps necessary to ensure that the injected water only enters and remains confined to the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(2) Injection can be accomplished through bare tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus in each well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) Prior to commencing injection operations, the casing in each injection well shall be pressure tested for mechanical integrity. Hobbs District Office shall be notified in order that all mechanical integrity tests may be witnessed.

(4) Such mechanical integrity test described in Order 3 above shall be conducted on all injection wells on an annual basis. Hobbs District OCD Office shall be notified in order that all mechanical integrity tests may be witnessed.

(5) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.

(6) All other provisions contained within Division Order No. R-10151 shall remain in full force and effect.

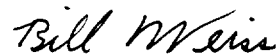
(7) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

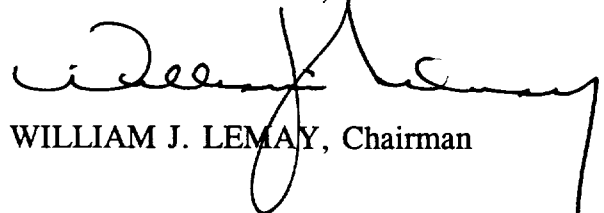
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



JAMI BAILEY, Member



WILLIAM W. WEISS, Member



WILLIAM J. LEMAY, Chairman

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