

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. 9400
Order No. R-4326-A

APPLICATION OF WAGNER & BROWN TO
AMEND DIVISION ORDER NO. R-4326,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 8, 1988, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 13th day of September, 1988, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) By Order No. R-4326, dated June 14, 1972, the Division authorized the applicant to utilize the Soldier Hill State "AE" Well No. 1 located 800 feet from the North line and 1800 feet from the West line (Unit C) of Section 23, Township 12 South, Range 32 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation at approximately 11,224 feet to 11,234 feet.

(3) The applicant, Wagner & Brown, seeks to amend said Order No. R-4326 to expand the existing disposal interval in the subject well to include all formations from a depth of approximately 6000 feet to 11,234 feet.

(4) Oxy USA, an offset operator to the disposal well, appeared at the hearing in opposition to the proposed expansion of the injection interval in the subject well.

(5) The subject well is currently being utilized to dispose of produced water from the applicant's Cleveland Well No. 1 located in Unit G of said Section 23, which is currently producing from the East Caprock-Devonian Pool.

(6) The evidence presented indicates that the subject well is constructed in the following manner:

11 3/4-inch casing set at 236 feet, cemented with 250 sacks, cement top at surface;

8 5/8-inch casing set at 3619 feet, cemented with 250 sacks, cement top at 2750 feet;

7 7/8-inch casing set at 11,288 feet, cemented with 300 sacks, cement top at 9700 feet.

(7) The evidence further indicates that the 7 7/8-inch production casing in the subject well has extensive damage at various intervals from approximately 6000 feet to 9950 feet, and as such cannot demonstrate mechanical integrity as outlined in Rule 704 (A) of the Division Rules and Regulations.

(8) The evidence presented further indicates that from the surface to a depth of approximately 6000 feet, said production casing is in adequate condition to demonstrate mechanical integrity.

(9) The applicant presented evidence and testimony which indicates that due to the condition of the casing and the mechanical configuration of the subject well, the existing production casing cannot be repaired and a liner cannot be installed in the well.

(10) The applicant seeks authority to expand the injection interval in the subject well for the sole purpose of altering the mechanical configuration of the well, thereby allowing continued disposal operations into the Devonian formation while adequately demonstrating mechanical integrity from the surface to a depth of approximately 6000 feet.

(11) The applicant has no intention of actually utilizing any formation for disposal purposes other than the currently approved Devonian formation.

(12) To this end, the applicant proposes to alter the mechanical configuration of the subject well as follows:

Perforate the existing 7 7/8-inch production casing at a depth of approximately 6000 feet and cement with 150 sacks;

Set 2 3/8-inch lined tubing at 10,750 feet with a dual packer system, the upper packer to be set at approximately 6000 feet and the lower packer to be set at approximately 10,750 feet.

(13) The applicant testified that subsequent to changing the mechanical configuration of the well, all injection would occur into the Devonian formation and further proposes to run a radioactive tracer survey annually on the subject well in order to assure injected water is entering only the Devonian formation.

(14) The proposed expansion of the injection interval for the subject well in this case is unnecessary and should therefore be denied.

(15) At the time of the hearing, all parties agreed that simply authorizing the applicant to alter the mechanical configuration of the well as described in Finding No. (12) above would allow the continued use of the well as a Devonian disposal well.

CASE NO. 9400
Order No. R-4326-A
Page -4-

(16) The proposed mechanical alteration and method of operation will adequately protect fresh water supplies in the area and will further prevent waste by allowing the applicant to continue producing its Cleveland Well No. 1 as described in Finding No. (5) above.

(17) Oxy USA has no objection to the proposed mechanical alteration and method of operation.

(18) In order to prevent waste, protect correlative rights, and assure the protection of fresh water supplies, Division Order No. R-4326 should be amended to allow the altering of the mechanical configuration of the Soldier Hill "AE" State Well No. 1.

IT IS THEREFORE ORDERED THAT:

(1) The application of Wagner & Brown for the amendment of Order No. R-4326 by the expansion of the injection interval in the Soldier Hill "AE" State Well No. 1 is hereby denied.

(2) Ordering Paragraph (1) of Division Order No. R-4326 dated June 14, 1972, is hereby amended to read in its entirety as follows:

" That the applicant, Wagner & Brown, is hereby authorized to utilize its Soldier Hill "AE" State Well No. 1 located 800 feet from the North line and 1800 feet from the West line (Unit C) of Section 23, Township 12 South, Range 32 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation; injection should be accomplished through 2 3/8-inch lined tubing set in a dual packer configuration, the upper packer to be set at a depth of approximately 6000 feet, and the lower packer to be set at a depth of approximately 10,750 feet, with injection into the perforated interval from approximately 11,224 feet to 11,234 feet;

CASE NO. 9400
Order No. R-4326-A
Page -5-

PROVIDED HOWEVER THAT, prior to commencing injection operations into the subject well, the applicant shall perforate the 7 7/8-inch production casing at a depth of approximately 6000 feet and cement with 150 sacks of cement.

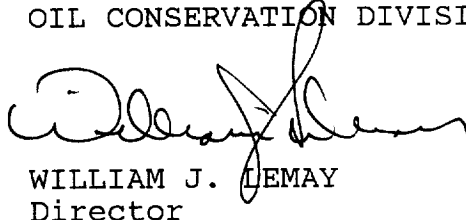
PROVIDED FURTHER THAT, prior to commencing injection operations into the subject well, the applicant shall pressure test the casing from the surface to a depth of approximately 6000 feet to assure the integrity of said casing; the applicant shall further notify the supervisor of the Hobbs district office of the Division of the date and time of commencement of workover operations and of the mechanical integrity test so that the same may be witnessed.

PROVIDED FURTHER THAT, the applicant shall annually run a radioactive tracer survey on the subject well in order to assure that injection is being confined to the Devonian formation; the applicant shall notify the supervisor of the Hobbs district office of the Division of the date and time said survey is to be run on the well so the same may be witnessed; the applicant shall submit a copy of said survey to the Santa Fe office of the Division upon completion."

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

S E A L