

Entered June 12, 1979

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 6222 REHEARING
Order No. R-5753-B

APPLICATION OF PAUL HAMILTON FOR
SALT WATER DISPOSAL WELL SHUT-IN,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 23, 1978, and was continued to March 15, 1979, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 12th day of June, 1979, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

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

(2) That the Texaco, Inc., New Mexico "BO" State Well No. 3 located in Unit D, Section 24, Township 11 South, Range 32 East, NMPM, Lea County, New Mexico, is an active salt water disposal well authorized by Division Order No. R-4422.

(3) That ground water in the vicinity of the subject well has been contaminated by the intrusion of brine water from an outside source.

(4) That the applicant in this case, Paul Hamilton, is the surface owner in the vicinity of the aforesaid Texaco New Mexico "BO" State SWD Well No. 3, and seeks an order from the Commission shutting in said well, alleging that said well has been and still is the source of said contaminants in the ground water.

(5) That upon receipt of the application of Paul Hamilton in this matter, the same was set for hearing on May 31, 1978, before the Commission.

(6) That the evidence presented at the aforesaid May 31 hearing of this case established that there is an area in the general vicinity of the subject salt water disposal well in which there is an apparent anomalous "nose" in the water levels in the Ogallala formation, and also an unnatural concentration of chloride in the ground waters in the basal Ogallala.

(7) That there was no definitive evidence presented at said May 31 hearing that the subject well had leaked or was leaking injected fluids (salt water) into the Ogallala formation in the area, or that said well was or had been a contributory factor to the aforesaid "nose" and chloride concentration in the Ogallala water, but there was evidence which indicated that the well is mechanically sound.

(8) That subsequent to said hearing the Commission entered Order No. R-5753 denying said application.

(9) That subsequent to the entry of said Order No. R-5753, Paul Hamilton filed timely application for Rehearing of Case No. 6222.

(10) That the matter came on for Rehearing on August 23, 1978.

(11) That although water levels in wells drilled to the contaminated ground water in the "nose" described in Finding No. (6) above had declined subsequent to the May 31, 1978, hearing and prior to the August 31, 1978, hearing, such decline cannot be accepted as evidence that the subject well had previously leaked and was no longer leaking, inasmuch as said decline could very well be the result of the stabilization of the ground water gradient in the Ogallala formation due to cessation of pumping "downstream" from said "nose."

(12) That in order to further evaluate the subject well and to further examine its integrity and to more definitely ascertain whether it is in communication with and leaking into the Ogallala formation, the Commission, at the August 31, 1978, hearing, ordered the injection of a traceable substance into the well and careful monitoring of a nearby observation well, and continued the case to March 15, 1979.

(13) That a radioactive material (Iodine 125) was injected into the subject well and the Ogallala ground water from the nearby observation well was monitored for approximately two months.

(14) That no radioactivity from the Iodine 125 was detected in the Ogallala ground water at any time during the two-month monitoring period.

(15) That a wide variety of tests have been conducted on the subject well, and all tests to date show that the casing, cement, and tubing in the well are sound, and that there is no channeling of salt water from the disposal zone into the Ogallala formation.

(16) That although the specific cause of the "nose" in the Ogallala water table, as described in Finding No. (6) above, and the source of the choride concentration, also as described in Finding No. (6), cannot be determined, there is no reason to believe that the continued disposal of produced salt water into the subject well is having or will have any detrimental effect on the ground waters in the Ogallala formation, and the denial of the application in this case, as decreed by Order No. R-5753, should be affirmed.

(17) That the affirmation of said Order No. R-5753 will not cause waste nor impair correlative rights, nor unreasonably endanger fresh water supplies.

(18) That in order to ensure the continued integrity of the subject well as a salt water disposal well, the Hamilton observation well located immediately southeast of the subject well should be monitored monthly for water levels and chloride content.

IT IS THEREFORE ORDERED:

(1) That Order No. R-5753, entered July 7, 1978, in Case No. 6222, denying the application of Paul Hamilton for an order shutting in the Texaco, Inc., New Mexico State "BO" State SWD Well No. 3, located in Unit D of Section 24, Township 11 South, Range 32 East, NMPM, Lea County, New Mexico, be and the same is hereby affirmed.

(2) That the applicant, Paul Hamilton, and the operator of the aforesaid salt water disposal well, Texaco, Inc., in conjunction with the supervisor of the Hobbs District Office of the Division, shall arrange to have unauthorized access into the Hamilton observation well located some 30 to 50 feet southeast of the disposal well precluded by a mutually agreeable sealing and locking mechanism.

(3) That the Ogallala water level in said observation well shall be determined within the first ten days of each month, and a water sample also taken, and the water level and chloride content of the water reported to the Division Director within ten days.

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(4) That Hamilton, Texaco, and the Division's District Supervisor shall agree upon a mutually satisfactory procedure for obtaining such water levels and water samples, and the chloride analysis shall be performed in the Hobbs District Office of the Division.

(5) That jurisdiction of this cause is hereby 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 herein-
above designated.

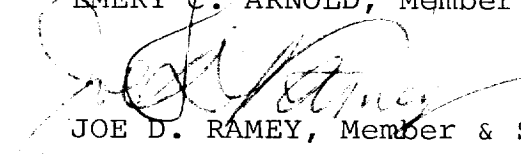
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



ALEX J. ARMIJO, Member



EMERY C. ARNOLD, Member



JOE D. RAMEY, Member & Secretary

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