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

CASE NO. 5922 Order No. R-5464

APPLICATION OF A. L. DAUGHERTY FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, CHAVES COUNTY, NEW MEXICO.

## ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 11, 1977. at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 14th day of June, 1977, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 Order (3) of Commission Order No. R-3221, as amended, prohibits in that area encompassed by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.
- (3) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

- (4) That the State Engineer has designated, pursuant to Section 65-3-11(15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (5) That the applicant herein, A. L. Daugherty, seeks an exception to the provisions of the aforesaid Order (2) to permit the disposal of water produced in conjunction with the production of oil and gas in an intermittent saline lake located in Section 24, Township 8 South, Range 29 East, NMPM, and Section 19, Township 8 South, Range 30 East, NMPM, Chaves County, New Mexico.
- (6) That said lake's bed lies at the bottom of a synclinal feature comprising some 940 acres within a closure elevation of at least 4060 feet above sea level, and that said lakebed comprises no more than 80 acres in the bottom of said syncline at an elevation of 4007 feet.
- (7) That the spill point of said synclinal feature is at an elevation of 4065 feet above sea level.
- (8) That the synclinal feature including the intermittent salt lake lies between two natural dikes, Railroad Mountain, running east-west at a distance of approximately 4.5 miles to the north, and El Camino del Diablo, running east-west at a distance of approximately 9.0 miles to the south-southwest.
- (9) That the area between said dikes is devoid of useable ground waters, the only water available for watering livestock being surface waters captured by earthen dams or water brought into the area by water pipelines.
- (10) That the lake bed is composed of salt (NaCl) and black mud overlying impermeable red beds, and the only means of water escape from the lake bed is by evaporation.
- (11) That the disposal of produced salt water in the subject intermittent salt lake will not constitute a hazard to any ground waters nor impair their quality, and will not cause waste nor violate correlative rights provided
  - (A) That all disposal water should be allowed to settle in tanks prior to being placed in the lake, in

order that any residual oil in said water might be removed and not be passed through to the lake bed:

- (B) That a permanent steel marker, graduated in feet and tenths of feet, should be suitably located in the lake bed and set in concrete, extending at least five feet above the lake bed;
- (C) That the water level in the lake bed should not be permitted to exceed five feet in depth;

and should be approved.

## IT IS THEREFORE ORDERED:

- (1) That the applicant, A. L. Daugherty, is hereby authorized to dispose of produced salt water in an intermittent salt lake located in Section 24, Township 8 South, Range 29 East, NMPM, and Section 19, Township 8 South, Range 30 East, NMPM, Chaves County, New Mexico, hereinafter referred to as Crosby Salt Lake.
- (2) That the applicant shall install a permanent steel marker, graduated in feet and tenths of feet, at a suitable location in said Crosby Salt Lake, embedded in concrete and extending at least five feet above the lake bed.
- (3) That the applicant shall install and maintain in good condition wooden or metal settling tanks, and shall allow all oil field brines to remain in such tanks for a sufficient period of time to permit any residual oil contained in said brines to be skimmed off, and not be passed on with the brines to the disposal lake.
- (4) That the applicant shall install and maintain—in good condition meters or other measuring devices to permit an accurate determination of the quantity of water disposed of in Crosby Salt Lake.
- (5) That the applicant shall file a monthly report with the Commission in accordance with Rule 1120 of the Commission Rules and Regulations, reporting each source and quantity of disposal water and the total quantity disposed of.
- (6) That at no time shall disposal be permitted in the aforesaid Crosby Salt Lake if the total quantity of water in

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the lake, from both natural precipitation and previous disposal, is five feet or more in depth.

- (7) That the Commission by administrative order may rescind the authority to dispose of produced salt water in Crosby Salt Lake if it reasonably appears to the Commission that such rescission would serve to protect fresh water supplies from contamination.
- (8) That 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

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL