

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 8882
Order No. R-8290

APPLICATION OF YATES PETROLEUM
CORPORATION FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 30, 1986, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 28th day of August, 1986, 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) The applicant, Yates Petroleum Corporation is the owner and operator of the Freeman "ACF" Well No. 1, located 660 feet from the South and West lines (Unit M) of Section 22, Township 16 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) The applicant proposes to utilize said well to dispose of produced salt water into the Lower Abo and Upper Wolfcamp formations, with injection into the perforated interval from approximately 10,050 feet to 10,350 feet.
- (4) The previously abandoned C & K Petroleum Inc. Monteith Well No. 1, located 660 feet from the South and East lines (Unit P) of Section 21, Township 16 South, Range 37 East, NMPM, Lea County, New Mexico, is within a one-half mile radius of the applicant's proposed disposal well.
- (5) The evidence presented at the hearing indicates that the Monteith Well No. 1, as described above, has an open

interval in the wellbore between plugs set at approximately 8525 feet and 10,840 feet.

(6) The Amerind Oil Company Carter Well No. 1, located 810 feet from the North line and 600 feet from the East line (Unit A) of Section 28, Township 16 South, Range 37 East, NMPM, Lea County, New Mexico, is also within a one-half mile radius of the proposed disposal well and is presently completed in and producing from the Northeast Lovington-Pennsylvanian Pool at a depth of 11,361 feet.

(7) In the Amerind Carter Well No. 1, 11,592 feet of 5 1/2-inch casing was set in a 7 7/8-inch hole and cemented with 300 sacks. Top of the cement is at 10,200 feet as detected by temperature survey, which appears to be correlatively below the top of the proposed injection zone in the subject well.

(8) Unlimited injection into said Freeman "ACF" Well No. 1 could possibly result in migration of fluids from the injection interval to other intervals up to 4200 feet through the well bores of said Monteith Well No. 1 and said Carter Well No. 1.

(9) The evidence presented in this case demonstrated that any such migration would not impact any oil or gas zones and that all fresh water zones are protected by surface and intermediate casing and cement.

(10) The evidence presented demonstrated that limited injection may take place in said Freeman "ACF" Well No. 1 without endangerment of oil, gas, or fresh water resources.

(11) Prior to commencing injection operations, the casing in the proposed injection well should be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(12) The injection should be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 10,000 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(13) The injection well or system should be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 500 psi.

(14) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in pressure at said Monteith Well No. 1 or said Carter Well No. 1 sufficient to raise fluids from the injection interval to within 1000 feet of the base of the lowest fresh water zone, and there is no objection by any mineral interest owner below 4300 feet and/or above 10,050 feet.

(15) The operator should give advanced notification to the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.

(16) Approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Yates Petroleum Corporation, is hereby authorized to utilize its Freeman "ACF" Well No. 1, located 660 feet from the South and West lines (Unit M) of Section 22, Township 16 South, Range 37 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the Lower Abo and Upper Wolfcamp formations, with injection into the perforated interval from approximately 10,050 feet to 10,350 feet.

(2) Injection into the subject disposal well shall be through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 10,000 feet; the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing or packer.

(3) Prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's district office at Hobbs.

(4) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 500 psi.

(5) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result

in pressure in the abandoned C & K Petroleum Inc. Monteith Well No. 1, located 660 feet from the South and East lines (Unit P) of Section 21 or in the Amerind Oil Company Carter Well No. 1, located 810 feet from the North line and 660 feet from the East line (Unit A) of Section 28, both in Township 16 South, Range 37 East, NMPM, sufficient to raise fluids from the injection interval to within 1000 feet of the lowest fresh water zone and that there is no objection from any mineral interest owner below 4300 feet and above 10,050 feet.

(6) The operator shall also measure the pressure on the intermediate casing-production casing annulus on said Carter Well No. 1 at least each six months and report the results of such measurement to the Hobbs district office of the Division.

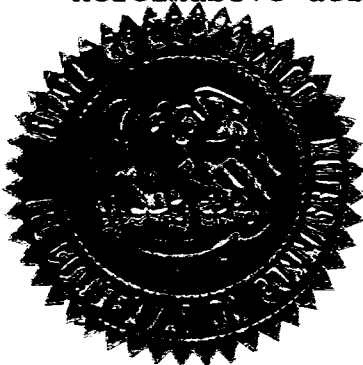
(7) The operator shall notify the supervisor of the Hobbs district office of the Division in advance of the date and time of the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.

(8) The operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(9) The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702, 703, 704, 705, 706, 708, and 1120 of the Division Rules and Regulations.

(10) 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

R. L. Stamets
R. L. STAMETS,
Director