

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. 8778
Order No. R-8137

APPLICATION OF JOHN YURCNKA FOR
SALT WATER DISPOSAL, LEA COUNTY,
NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on December 4, 1985, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 23rd day of January, 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, John Yuronka, is the owner and operator of the Hodges Well No. 1, located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 3, Township 24 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 Langlie Mattix Pool, with injection into the perforated interval from approximately 3351 feet to 3546 feet.

(4) The vertical limits of the Langlie Mattix Pool include the lower 100 feet of the Seven Rivers formation and all of the Queen formation.

(5) The injected water would be produced water from the Langlie Mattix Pool originating from the applicant's Hodges Lease comprising the S/2 SE/4 of Section 8, and the Thomas

Lease comprising the N/2 SW/4 and the NW/4 SE/4 of Section 17, both in Township 24 South, Range 37 East, NMPM.

(6) Approval of the proposed injection well will extend the economic life of the applicant's Hodges Lease which is currently at its economic limit and the applicant's Thomas Lease which is nearing its economic limit, thereby preventing waste.

(7) Geologic evidence presented at the hearing indicates that the Seven Rivers and Queen formations in the Yuronka Cooper Well No. 1 are structurally downdip from the injection zone in the proposed disposal well.

(8) Doyle Hartman, owner and operator of the Yuronka Cooper Well No. 1 located 660 feet from the South line and 1980 feet from the West line of said Section 8 appeared and made objection to the granting of the application to dispose of produced water into the Langlie Mattix Pool.

(9) Hartman contended that granting the application to dispose of water into the Langlie Mattix Pool may adversely affect his correlative rights by watering out any gas reserves which might be contained on the Yuronka Cooper Lease.

(10) The Yuronka Cooper Well No. 1 was drilled by the applicant in May of 1977, and a subsequent completion attempt in the Langlie Mattix Pool was unsuccessful due to excessive water production through the perforations at 3519 feet which were in communication with a water zone at 3526 feet.

(11) Two attempts to shut off the water production within the wellbore by the applicant were unsuccessful.

(12) Susequently the Yuronka Cooper Well No. 1 was sold to Doyle Hartman by the applicant in August of 1978.

(13) As of the time of the hearing, Doyle Hartman has not attempted to complete the Yuronka Cooper Well No. 1 in the Langlie Mattix Pool and the well remains temporarily abandoned.

(14) The Doyle Hartman Yuronka Cooper Lease lies just outside a southern and eastern boundary of Texaco Producing Company's Myers Langlie Mattix Waterflood Unit.

(15) Texaco currently operates the Langlie Mattix injection wells, these being the Myers Langlie Mattix Unit Nos. 231, 233, and 248, which are located approximately 2,952 feet northeast, 1320 feet north, and 1320 feet west, respectively, of Hartman's Yuronka Cooper Well No. 1.

(16) As of August, 1985, the cumulative water injection into the Langlie Mattix zone from the three previously mentioned injection wells totaled 3,635,470 barrels of water.

(17) According to geologic evidence presented, the Langlie Mattix zone in the Yuronka Cooper Well No. 1 is downstructure from Texaco's Well No. 231, upstructure from Texaco's Well No. 248, and is approximately structurally even with Texaco's Well No. 233.

(18) The volumes of water that the applicant proposes to inject into the Hodges Well No. 1 would constitute only a small fraction of the amount of water that has already been injected into the Langlie Mattix Pool by the Texaco wells described above.

(19) The evidence at this time is insufficient to show that the Hartman Yuronka Cooper Well No. 1 is capable of production in the Langlie Mattix Pool and, therefore, the application of John Yuronka for authority to inject into his Hodges Well No. 1 should be approved.

(20) The injection should be accomplished through 2-inch plastic lined tubing installed in a packer set at approximately 3300 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.

(21) 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 670 psi.

(22) Prior to commencement of injection operations, the operator should pressure test the casing in the well from the surface to the packer setting depth to assure the integrity of the casing and should notify the Division's Hobbs district office of the time of such test so that it may be witnessed by a representative of the Division.

(23) 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 migration of the injected waters from the Langlie Mattix Pool.

(24) The operator should notify the supervisor of the Hobbs district office of the Division of the date and time of

the installation of disposal equipment so that the same may be inspected.

(25) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(26) 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, John Yuronka, is hereby authorized to utilize his Hodges Well No. 1, located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 8, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the Langlie Mattix Pool, injection to be accomplished through 2-inch tubing installed in a packer set at approximately 3300 feet, with injection into the perforated interval from approximately 3351 feet to 3546 feet;

PROVIDED HOWEVER THAT, the tubing shall be plastic-lined; 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.

(2) 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 670 psi.

(3) 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 migration of the injected fluid from the Langlie Mattix Pool.

(4) The operator shall, prior to commencing injection operations, pressure test the casing in the well from the surface to the packer setting depth to assure the integrity of the casing and shall notify the Division's Hobbs district office of the time of such test so that it may be witnessed by a representative of the Division.

(5) The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(6) 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.

(7) 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.

(8) 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,
Director