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P. O. DRAWER 239
ARTESIA, NEW MEXICO 88211-0239

AREA CODE 505 746-3508

June 4, 1984

Carc 8249

Energy and Minerals Department Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

Re: Application of Yates Petroleum Corporation

Dayton Townsite No. 1 Well

Township 18 South, Range 26 East, NMPM

Section 21: NW/4 SE/4 Eddy County, New Mexico

Gentlemen:

Enclosed, please find three copies of the Application of Yates Petroleum Corporation to Inject Water for the Purpose of Water Disposal, Eddy County, New Mexico. Also enclosed is an Affidavit of Mailing reflecting the mailing of true copies of the above Application to the surface owner and offset operators of the well.

We ask that this case be set for hearing before an examiner and that you furnish us with a docket of said hearing.

Thank you.

Sincerely yours,

LOSEE, CARSON & DICKERSON, P.A.

Chad Dickerson

CD:pvm Enclosures

cc w/enclosures: Mr. Eddie Mahfood

OIL CONSERVATION DIVISION
SANTA EE

BEFORE THE OIL CONSERVATION DIVISION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF YATES PETROLEUM CORPORATION TO INJECT WATER FOR THE PURPOSE OF WATER DISPOSAL, EDDY COUNTY, NEW MEXICO

CASE NO. X. W.

MITTON DIVISION

APPLICATION

COMES NOW Yates Petroleum Corporation, by its attorneys, pursuant to Rule 701, and in support hereof, respectfully states:

- Applicant proposes to dispose of water into its 1. Dayton Townsite No. 1 Well, located 1,980 feet from the north line and 1,980 feet from the east line of Section 21, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico, through perforations from 8,901 and 8,914 feet, 8,978 and 8,992 feet, and 9,045 and 9,062 feet in the Morrow formation.
- 2. There is attached hereto and incorporated by reference, Form C-108 showing the location of the proposed disposal well, and the location of all other wells within a radius of two miles from said proposed disposal well, and the formation from which said wells are producing or have produced, and indicating the lessees within said two mile radius. The log of the proposed disposal well and a diagrammatic sketch thereof with other pertinent information concerning the proposed project are a part thereof.

WHEREFORE, Applicant prays:

A. That this Application be set for hearing before an examiner and that notice of said hearing be given as required by law.

B. That upon hearing the Division enter its order authorizing Applicant to dispose of water into its Dayton Townsite No. 1 Well, located 1,980 feet from the north line and 1,980 feet from the east line of Section 21, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico, through perforations from 8,901 and 8,914 feet, 8,978 and 8,992 feet, and 9,045 and 9,062 feet in the Morrow formation.

C. And for such other and further relief as may be just in the premises.

YATES PETROLEUM CORPORATION

Chad Dickordon

LOSEE, CARSON & DICKERSON, P.A. P. O. Drawer 239 Artesia, New Mexico 88210

(505) 746-3508

Attorneys for Applicant

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501

FORM C-108 Revised 7-1-81

APPLICATION	FUR	AUTHORIZATI	ON TO INJECT
MI I LILMIIUM	1 011	MUTHUNIZATI	ON TO INSECT

I.	Purpose: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? yes no				
II.	Operator: Yates Petroleum Corporation				
	Address: 207 South 4th Street, Artesia, NM 88210				
	Contact party: Eddie M. Mahfood Phone: (505) 746-3558				
III.	Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.				
IV.	Is this an expansion of an existing project? yes yno If yes, give the Division order number authorizing the project				
٧.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.				
VI.	Attach a tabulation of data on all wells of public record within the area of review whice penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.				
VII.	Attach data on the proposed operation, including:				
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). 				
•					
VIII.	Attach appropriate geological data on the injection zone including appropriate lithological detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed				

- injection zone as well as any such source known to be immediately underlying the injection interval.
 - IX. Describe the proposed stimulation program, if any.
- х. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
 - XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief. Eddie M. Mahfood Title Petroleum Engineer Signature: Date: March 21, 1984

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. Previously submitted in Case No. 5800 on November 10, 1976. The Bob,

Gushwa, Unit J, Sec. 21-T18S-R26E, was approved for disposal of produced water by Order R-5322. DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

III. WELL DATA

A. Mechanical:

- Lease name: Dayton Townsite #1, Sec. 21-T18S-R26E, 1980' FNL & 1980' FEL.
- 2. 8-5/8" 24# J-55 casing set at 1224', cemented with 400 sacks cement and circulated. 5-1/2" 15.5# and 17# J-55 casing set at 9135', cemented with 600 sacks, top of cement at 7100'.
- 3. Tubing to be used: 2-7/8" 6.5# EUE J-55 Plastic-coated; to be set at approximately 8853'.
- 4. Will set a 5-1/2" Guiberson Uni-VI packer at 8853' (Plastic-coated).

B. Geological:

- 1. Injection formation will be Morrow; pool name will be Atoka-Penn Field.
- 2. Injection interval: Perforations 8901-14, 8978-92, 9045-62'.
- 3. The well was drilled for a producing well.
- 4. A CIBP at 8950' will be drilled out.
- 5. Depth of next higher zone: Yeso (oil) at 2320-2474', San Andres (oil) at 1455-1590'. No other known productive zones above or below Morrow interval.
- IV. This application is not intended as an expansion of an existing project although it will allow a backup for SWD well Bob Gushwa, OCD Order R-5322.
- V. Lease ownership map attached identifies the well's area of review, including location of the SWD well Bob Gushwa in Unit J, Sec. 21-18S-26E.

VII. DATA ON PROPOSED OPERATION

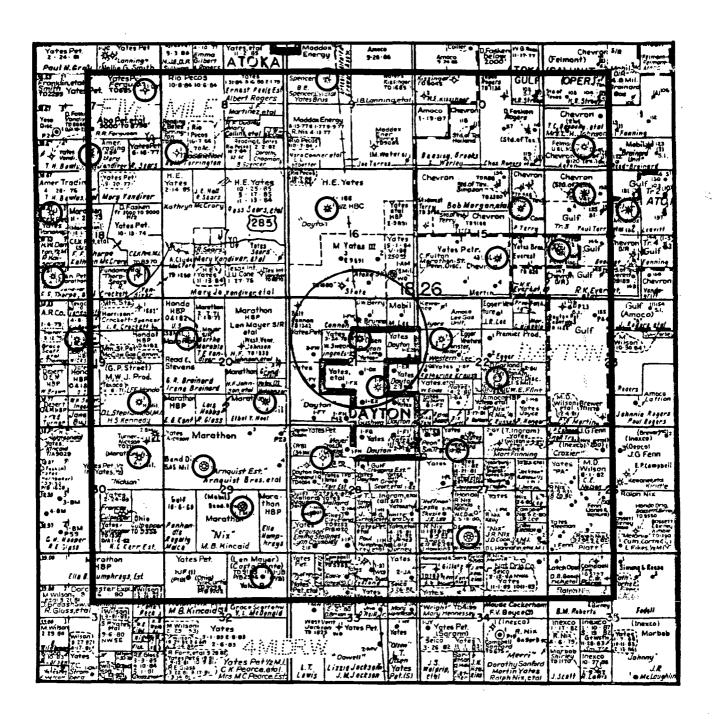
- 1. Proposed average fluid to be injected 1500 BPD; maximum 2000 BPD.
- 2. The system is closed.
- 3. Average injection pressure 1600 psi; maximum 2200 psi.
- 4. Injection fluid produced water only.

XII. AFFIRMATION OF HYDROLOGICAL EXAMINATION

I, Eddie M. Manfool, do hereby state that I have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water. Date March 29, 1984.

XIII. PROOF OF NOTICE

The surface owner is Yates Petroleum Corporation. The leasehold operators within one-half mile of subject well location, other than Yates Petroleum are D. W. Berry of Artesia, NM; Mobil Oil Corporation, Midland, Texas; Amoco Production Co., Houston, Texas; Clarence Forister, (Egger Venture) of Artesia, NM, and these Operators are notified of this intent by Certified Mail with copy hereof.



YATES PETROLEUM

DAYTON TOWNSITE #1
Proposed Water Injection Well
Sec. 21-18S-26E
Eddy Co.,NM
1980' FNL &1980' FEL

YATES PETROLEUM CORP.
DAYTON TOWNSITE #1
EDDY COUNTY, NEW MEXICO
Sec. 21-18S-26E
1980' FNL & 1980' FEL
Spud 10-4-60

Elev. 3364' G.L. 3379' K.B.

San Andres @ 940' K.B.

11" hole to 1226' K.B.

8 5/8" 24# J-55 @ 1224' K.B.

cemented with 400 sacks, circulated

Glorieta @ 2234' K.B.

Abo @ 4420' K.B.

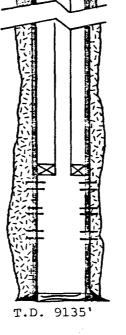
Wolfcamp @ 5813' K.B.

Pennsylvanian @ 7128' K.B.

Strawn @ 8070' K.B.

Atoka @ 8599' K.B.

Mw Clastics @ 8884' K.B.



Calculated top of cement @ 7100'

To equip with 8853' 2-7/8" 6.5#
J-55 Placticoated Tubing with
Guiberson UNI-VI Placticoated Packer
@ 8853-59'

Mw Sand perfs 8901-14 treated with 6500 gal. 7½% Morrow Service Acid Mw Sand perfs 8978-92 Natural Mw Sand perfs 9045-62 Natural

7 7/8' hole to 9135' K.B.

 $5\frac{1}{2}$ " $15\frac{1}{2}$ & 17# J-55 set @ 9135' K.B. cemented with 600 sacks