STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

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Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT X Secondary Recovery Pressure Haintename Application qualifies for administrative approval? XVes OIL U II. Harvey E. Yates Company Operator: P. O. Box 1933 Roswell. NM 88201 Phone: (505) 623-6601 Thomas J. Hall III Contact party: Well data: Complete the data required on the reverse side of this form for each well III. proposed for injection. Additional sheets may be attached if necessary. X ves Is this an expansion of an existing project? 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. Attach a tabulation of data on all wells of public record within the area of review which VI. 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. Attach data on the proposed operation, including: VII. Proposed average and maximum daily rate and volume of fluids to be injected; 2. Whether the system is open or closed; 3. Proposed average and maximum injection pressure; 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water: and 5. 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 lithologic 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 $10,000~\mathrm{mg/1}$ or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval. Describe the proposed stimulation program, if any. IX. Attach appropriate logging and test data on the well. (If well logs have been filed Χ. with the Division they need not be resubmitted.) Attach a chemical analysis of fresh water from two or more fresh water wells (if XI. 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. Title Reservoir Engineer Ray F. Nokes March 31, 1982 Kan Date: Signature:

• 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. Reference is made to Case 7320 of 8/12/82 & Order R-6765 of

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 foot; ge location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hule 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 outpose. Applicants for several identical well; 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.

SECTION III

Well Data

(For Proposed Injection Well)

HARVEY E. YATES COMPANY

Well History Summary Sheet

•	e & # Travis State #1 Lease # State E-1392
	y F. Nokes Date 3-26-82
	13, T-18S, R-28E, Eddy Co., NM
Spud Date <u>3-19-79</u> Compl. Date <u>7-11-</u>	79 TD 11,061' KB PBTD 10,538' KB
	Field Travis Upper Penn
IP 7-13-79 F1 103 B0/1033 MCF/2 BW in	6 hrs * GOR 1003 Zone Canyon
	Total Holes
Stimulation $A/126$ gals 10% acetic acid &	6000 gals 15% DS-30 acid.
	48538 Water none recorded
	Lift Equipment
MiscElevation: 3585.5'	GL
Surface: 13-3/8 48 # Gr. N/A @380' 475 sx & Sx.TOC surf	*calculated 24 hr rate = 412 BO/413.2 MCF/8 BW *PLAN OF OPERATION Acidize to break down all perforations in the injection interval. Swab to recover load and clean up perf's. Pull out of hole and prepare to run injection assembly. Go in hole with internal plastic coated Baker Model AD-1 tension packer and 2-3/8" plastic coated tubing and set at 9760'.
Intermediate: 9-5/8 - 32.3 & 36 Gr H-40, J-55 2900' Cmt w/ 2050 S TOC (1" to surf. Ho Size 12-1/4 ", Max Mu Wt. #/G	approach depletion, the lower zone x. from 9880' to 9888' will be perforated le and flooded
2-3/8" Internally Plas Coated Tubing	tic
Baker Model AD-1 Plasti Coated Tension Packer © 9760'.	
Canyon Perf's 9816' to	
12' cmt CIBP @ 10,550' Atoka Perf's 10,622' to 12' cmt 10,63	
Morrow Perf's 10,674' 10,814'.	to
Production: 5-1/2 17 # N80 & J55 c 11,061'	or.
TD11,061' , KB	Tubing*,#,Gr, @
1 M. Americanismon and Americanismos and	. 20101 (9)

SECTION III, cont.

- B) 1. Travis Upper Penn (Canyon)
 - 2. Injection interval: 9816' to 9862' initially plus additional lower zone from 9880' to 9888'. (All cased)
 - 3. Original purpose of drilling well was for development of the Travis Upper Penn Pool, Canyon formation. Cummulative production to date: 53,270 BO/48,538 MCF.
 - 4. See diagramatic sketch of well bore, Section III (A).
 - 5. There are no other oil or gas zones producing above the Travis Upper Penn Pool, Canyon formation in the Travis Deep Unit Area at the present. The Cisco completion listed under the Travis Deep Unit #2 is the same Canyon pay. The next lower producing interval in the Travis Upper Penn Area is the Morrow formation, which is a Morrow Sand productive of gas at a depth of 10,645' in the proposed injection well.

SECTION V

Maps

SECTION VI Well Histories in Area

SECTION VI

Well Name Well No. Legal Location	Travis Deep Ohio Com Well #1 M, 760' FSL & 660' FWL Sec 13, T-188, R-28E Eddy County, NM	Travis Deep Unit Well #2 G, 1980' FNL & 1780' FEL Sec 13, T-18S, R-28E Eddy County, NM	Travis "13" State Well #1 F, 1980' FN & WL Sec 13, T-18S, R-28E Eddy County, NM
Field & Pool	South Empire Morrow	Travis Upper Penn (Canyon)	Travis Upper Penn (Canyon)
Spud Date	9-19-81	5-6-77	7-14-80
Completion Date	11-19-81	8-24-77	12-26-80
Type Completion	Morrow Gas Well	Canyon Penn Oil Well	Canyon Penn Oil Well
	11,000'	11,270'	11,100'
PBTD	10,955'	11,223'	10,725'
Completion Interval	10,850-10,858' (OA)	9824-9903' (OA)	9824-9870' (OA)
Casing Design	13-3/8" to 343' w/390 sx 8-5/8" to 3114' w/4780 sx 5-1/2" to 11,000' w/800 sx	12-3/4" to 360' w/425 sx 8-5/8" to 3500' w/300 sx 5-1/2" to 11,268' w/950 sx	13-3/8" to 350' w/350 sx 8-5/8" to 3100' w/1930 sx 5-1/2" to 11,100' w/925 sx
Top of Cement @	8325' by CBL	7060' to Temp Survey	7140' by CBL

rorm 9-330 (Rev. 5-63)

UNITED STATES SUBMIT IN D. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

CSee other instructions on reverse side)

Form approved. Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.

1		
	NM-23417	

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b. TYPE OF COM	PLETION:			_						Tra	vis	Deer	o Unit
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•	Yates Comp	any,	inc.							9. WEL	L NO.		
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11,270 KB	RVAL(S), OF THIS	COMPLE	rion Tor	, BOTTOM,			7D)*	<u> </u>		10 -	11,21		WAS DIRECTIONAL
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8-24-77			owing									Pr	oducing
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SIGNED A	ul 61	Ju (_	TIT	rle	Vi	ce Pr	esiden	.t		DATE	Ju.	ly 26, 1977
		()											

 \sim (1) Lower Morrow 7-28-77 to 8-09-77

Perforations: 10,934, 36, 38, 40, 70, 71, 72, 73, 79, 82, 85, 88 - 12 Shots

Treatment: 10,970 - 10,988 - 250 Gals 10% acetic acid 10,934 - 10,940 - 150 Gals 10% acetic acid 10,934 - 10,988 - 2500 Gals $7\frac{1}{2}\%$ E Z Flo acid

10,934 - 10,988 - 30,000 Gals 3% E Z Flo Morrow frac fluid w/14,500# 100 FLA sand, 18,000# 20-40 sand and 2,000# glass beads.

X: :::

Model DB packer @ 10,830 KB(above Lower Morrow perforations)

(2) Upper Morrow 8-09-77 to 8-15-77

Perforations: 10,648 - 10,653 - 11 Shots

Treatment: 10,648 - 10,653 - 1000 Gals $7\frac{1}{2}\%$ E Z Flo Morrow type acid 10,648 - 10,653 - 5000 Gals $7\frac{1}{2}\%$ E Z Flo Morrow type acid

Packer @ 10,579(above Upper Morrow perforations)

(3) Cisco 8-16-77 to 8-18-77

Perforations: 9824, 28, 31, 33, 35, 37, 41, 44, 50, 52, 54, 57, 63, 65, 68, 71, 78, 83, 94, 96, 98 & 9903 - 22 Shots

Treatment: 9,824 - 9,903 - 250 Gals 10% acetic acid 9,824 - 9,903 - 4000 Gals 20% HCL acid

(4) The production packer is set @ 9772' and we are producing from the perforations in the Cisco formation.

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			***************************************		2 3/8	·~	9733'	9733'	
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SIGNED TITLE Vice President of Operations DATE November 21, 1981					- '		•	•			
SIGNED TITLE VICE President of Operations DATE November 21, 198						17.2	- D 1				M 1 01 101
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SECTION VII

Injection Data

(Reference is made to Order No. R-6765 and "Proposed Plan of Operation")

- See attached "Proposed Plan of Operations."
 Closed System Gas Blanket (See Order R-6765).
 See attached "Proposed Plan of Operation" & Order R-6765.
 See attached Ogallala water analysis from Double Eagle Water Co.
- 5) N.A.

PROPOSED PLAN OF OPERATION Travis Penn Unit Travis Upper Penn Pool Eddy County, New Mexico April 2, 1982

Harvey E. Yates Company plans to initiate a pilot water injection program in the following manner:

- 1) Inject Ogallala water supplied by the Double Eagle Water Company operated by the City of Carlsbad, New Mexico. Water will be injected into the proposed injector well, the Travis State No. 1, located 1780' FSL and 2080' FWL of Section 13, Township 18 South, Range 28 East, Eddy County, New Mexico.
- 2) Injection rate is estimated to be 1000 barrels water per day with an injection pressure not to exceed 1000 psi in the early stages of injection. It is expected that the injection rate will decrease as the reservoir void is filled. The maximum pressure anticipated later in the pilot project is not expected to exceed 1200 psi. Produced water will be re-injected into the Travis Upper Penn Pool as flood response occurs and water production increases.
- 3) For injection schematics refer to the Applicant's Exhibit No. 6 (Ralph W. Viney & Associates Engineering Report), of the Oil Conservation Division Case No. 7320, submitted August 12, 1981, and the attached copy of the Applicant's request for Administrative Approval for expansion of the Travis Deep Unit pilot waterflood approved under Order No. R-6765.
- 4) The development of additional injector wells will depend on the production response to the injection of water during the pilot project.

To preserve and protect the correlative rights of all parties concerned it is requested that the above Plan of Operation be accepted for immediate approval.

Enclosures

ENERGY AND MINERALS DEPARTMENT



LARRY KEHOE

SECRETARY

OIL CONSERVATION DIVISION

August 28, 1981

Mr. Thomas J. Hall III

Attorney

Re:

CASE NO.

ORDER NO. R-6765

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Harvey É. Yates Compa P. O. Box 1933 Roswell, New Mexico		Applicant:
		Harvey E. Yates Company
Dear Sir:		
Enclosed herewith are Division order recent?		of the above-referenced n the subject case.
Yours very truly, JOE D. RAMEY Director		
JDR/fd		·
Copy of order also ser	nt to:	
Hobbs OCD x Artesia OCD x Aztec OCD		
Other		
*		

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

CASE NO. 7320 Order No. R-6765

APPLICATION OF HARVEY E. YATES COMPANY FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 12, 1981, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 28th day of August, 1981, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Harvey E. Yates Company, seeks authority to institute a waterflood project on its Travis Deep Unit Area, Travis-Upper Pennsylvanian Pool, by the injection of water into the Cisco-Canyon formation through one well located in the NW/4 NE/4 of Section 13, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.
- (3) That, considering their depth, the wells in the project area are approaching or are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (5) That 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 from injection, production, or plugged and abandoned wells.

- (6) That the injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 1200 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.
- (7) That the subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Harvey E. Yates Company, is hereby authorized to institute a waterflood project on its Travis Deep Unit Area, Travis-Upper Pennsylvanian Pool, by the injection of water into the Cisco-Canyon formation through one well located in the NW/4 NE/4 of Section 13, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.
- (2) That injection into said well shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of the injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.
- (3) That the operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing or packer in the injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.
- (4) That the injection well herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 1200 psi, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.
- (5) That the subject waterflood project is hereby designated the Travis Deep Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

Case No. 7320 Order No. R-6765

- (6) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.
- (7) That 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 herein-above designated.

STATE OF NEW MEXICO
OLL CONSERVATION DIVISION

JOE D. RAMEY

Director

SEAL

SECTION VIII

Geological Comments

(See attached exhibits from Case 7320.)

VIII. Exhibit A is an illustration of our proposed Travis Penn Unit.

The illustration shows the initial six wells and five tracts that will be involved in the proposed secondary recovery project.

The reservoir that will be flooded in the proposed waterflood project is composed of Pennsylvanian (Canyon) age rock. This rock was deposited at a shelf edge in shallow water, where a carbonate buildup occurred, resulting in a limestone bank. The stratigraphic cross-section shows that the limestone bank is 100 to 140 feet thick and trends northeast-southwest through the Travis Penn Unit. Enclosed is a structure map contoured on the top of the Canyon pay zone (the proposed waterflood reservoir). The map shows the proposed injection well and other wells within a 1/2 mile radius of the proposed injection well.

Primary effective porosity in this type of depositional environment usually is the result of leaching and dissolution effects caused by periodic subaerial exposure and exposure to fresh water. Effective porosity is enhanced selectively during diagenesis along these horizontally stratified porous zones due to migrating solutions causing additional leaching and dissolution.

The depth to the top of the injection zone (limestone bank) ranges between 9693 and 9827 in the Travis Penn Unit. Average porosity calculated from log analysis, ranges between 4 and 6%. Log analysis indicates net pay in the reservoir averages between 25 and 50 feet and occurs in three zones within the gross hydrocarbon bearing section.

HALLIBURTON DIVISION LABORATOP"

HALLIBURTON SERVICES MIDLAND DIVISION

HOBBS, NEW MEXICO 88240

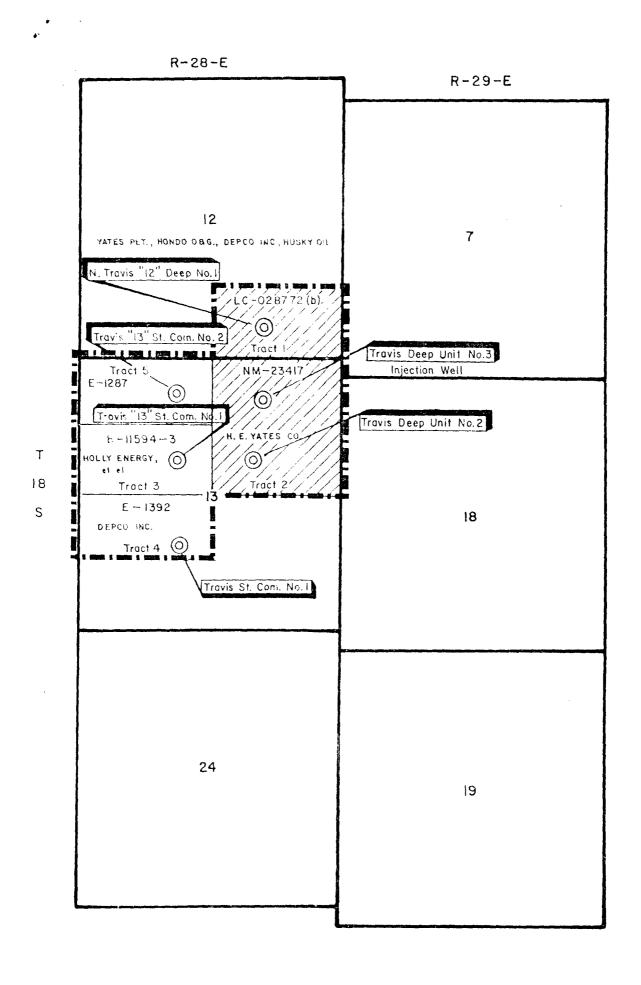
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No. W82-341 LABORATORY WATER ANALYSIS 4-2-82 To Harvey E. Yates Date_ This report is the property of Halliburton Company and neither Box 1933 it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval Roswell, New MexicorECEIVED APR 0 5 1982 of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company. Submitted by______ Date Rec.___4-2-82 Well No. As Marked Depth Formation County______ Field______Source____ Double Eagle Water Travis #1 Specific Gravity 1.003 1.001 pH ______6_9 7.3 Calcium (Ca) 1,200 220 ____12 Magnesium (Mg) 360 400 _____150 Bicarbonates (HCO₂) 315 195 Soluble Iron (Fe) Nil Nil *Milligrams per liter

Consider

Con Remarks: Respectfully submitted, HALLIBURTON COMPANY Analyst: Brewer CC:

NOTICE



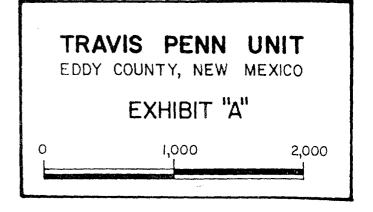
LEGEND

FEDERAL LAND 240.00 = 50.00% OF UNIT AREA

STATE LAND

240.00 = 50.00% OF UNIT AREA TOTAL AC.100%

LNIT BOUNDARY



Edward Kinney, a consultant Geologist in Artesia, has completed publications on freshwater aquifers in southeast New Mexico. He stated in a telephone conversation that in T-18-S, R-28-E, the freshwater aquifers are very spotty and there are no good freshwater aquifers in this area. He said the Ogallala formation, which is a good aquifer, begins on the Caprock and extends to the east. He went on to say that the San Andres is not a freshwater aquifer in this area (it contains saltwater) and if we set intermediate casing at the top of the San Andres, at approximately 4600 feet, we will have all aquifers sealed off from contamination.

Jim Wright is employed by the State Engineer's Office in Roswell and is familiar with freshwater aquifers in the subject ara. He also stated that freshwaster aquifers are spotty in T-18-S, R-28-E. Jim indicated in a telephone conversation that the closest freshwater to this area he knew of was found in the Grayburg, which will be behind cemented casing above the San Andres in the subject area, near Twelve Mill Hill and Illinois Camp.

SECTION IX

Stimulation: Acidize w/7000 gals 15% DS-30 w/210 7/8" RCN Ball Sealers to break down perforations from 9816' to

98621.

Swab to recover load and clean up perforations.

Pull out of hole.

SECTION X

Refer to Exhibit #6 of Case 7320 of 8/12/81. Logs also submitted to New Mexico Oil Conservation Division.

SECTION XI

Refer to Exhibit #6 of Case 7320 of 8/12/81.

SECTION XII

N.A.

SECTION XIII

See attached copy of statement printed and published in a County newspaper.

HEYCO

PETROLEUM PRODUCERS



HARVEY E. YATES COMPANY

P O. BOX 1933

SUITE 300. SECURITY NATIONAL BANK BUILDING

505/623 660

ROSWELL, NEW MEXICO 88201

NEWSPAPER RELEASE

(Eddy County Newspaper)

Harvey E. Yates Company P. O. Box 1933 Security National Bank, Ste. 300 Roswell, NM 88201 Phone: (505) 623-6601

Contact Party: Thomas J. Hall III

Harvey E. Yates Company proposes to expand the pilot injection project of the Travis Deep Unit by injecting into the Travis State #1. The Travis State #1, State Lease #E-1392, is located 1780' FSL & 2080' FWL of Section 13, Township 18 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.

Ogallala water will be injected at a rate of approximately 1000 barrels per day at not more than 1200 psi into the Travis Upper Penn Pool at a depth of 9816' to 9888'.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, NM $\,$ 87501 within 15 days.

Affidavit of Publication

No	9485

STATE OF NEW MEXICO. County of Eddy:

orani, or budy.
Gary D. Scott being duly
sworn, says: That he is the Business Managerof The
Artesia Daily Press, a daily newspaper of general circulation,
published in English at Artesia, said county and state, and that the hereto attached Legal Notice
was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose
Daily Press, a daily newspaper duty quantied for that purpose
within the meaning of Chapter 167 of the 1937 Session Laws of
days the State of New Mexico for consecutive weeks on
the same day as follows:
First Publication April 2, 1982
Second Publication
Third Publication
Fourth Publication
and that payment therefore in the amount of 3
has been made.
Subscribed and sworn to before me this7th day
of
My Commission expires Signature Backers.
MOTARY PUBLIC - NEW MEXICO

My Commission Expires 1-10-63

Copy of Publication

LEGAL NOTICE

Harvey E. Yates Company P.O. Box 1933 Security National Bank, Ste. 300 Roswell, N.M. 88201 Phone: (505) 623-6601 Contact Party: Thomas J. Hall III Harvey E. Yates Company proposes to expand the pilot injection project of the Travis Deep Unit by injecting into the Travis State #1. The Travis State #1, State Lease #E-1392, is located 1780' FSL & 2080' FWL of Section 13, Township 18 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.

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Published in The Artesia Daily Press, Artesia, N.M., April 2,

1982.

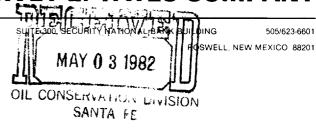
Legal No. 9485.

HEYCO



HARVEY E. YATES COMPANY

P. O. BOX 1933



April 28, 1982

Mr. Roy Johnson c/o Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

Dear Mr. Johnson:

Enclosed please find copies of the receipts returned to us, which you requested from Joe Hall.

If you have any questions, please contact us.

Sincerely,

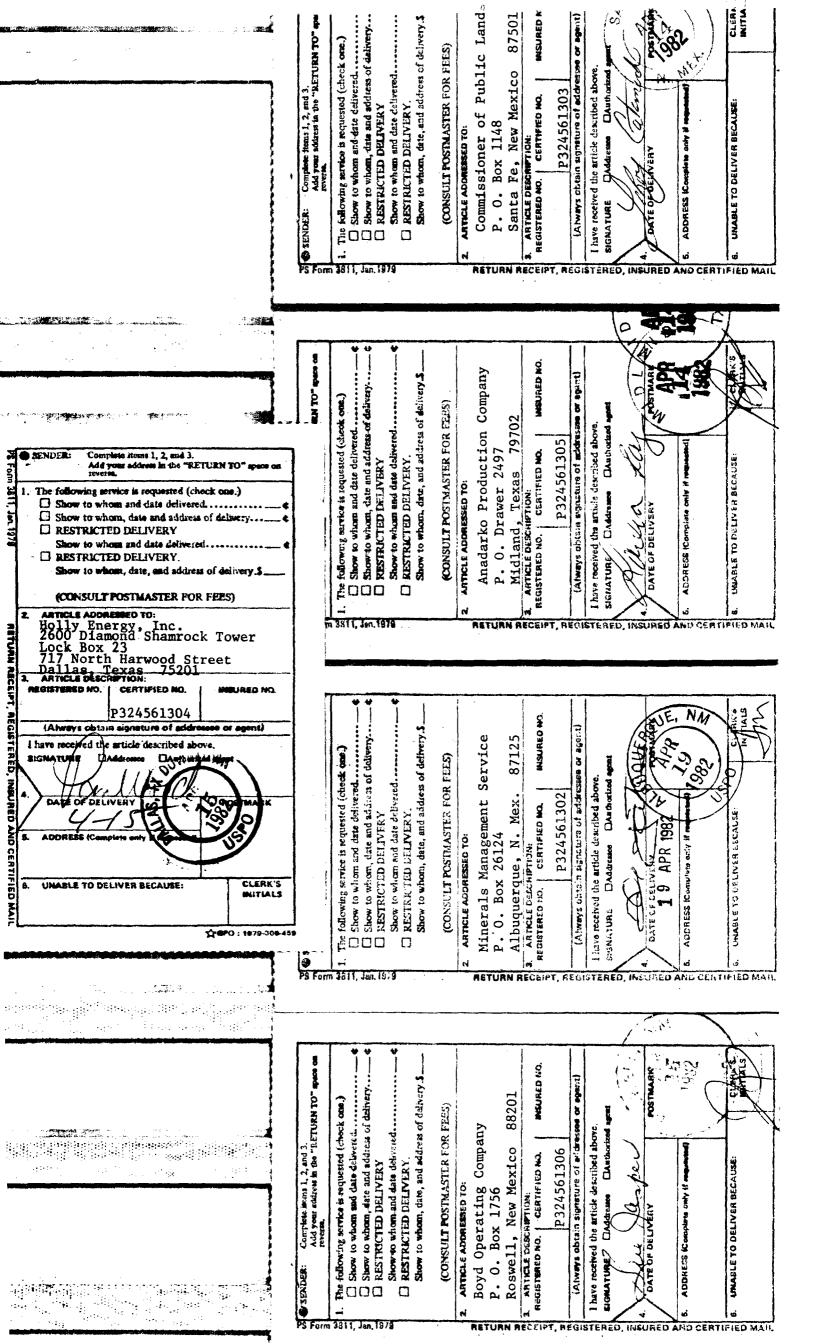
Ray F. Nokes

Reservoir Engineer

Ray J. nokes/ay

RFN:dy

Enclosure



STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR ANITA LOCKWOOD CABINET SECRETARY POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE. NEW MEXICO 87504 (505) 827-5800

ADMINISTRATIVE ORDER SWD-534

APPLICATION OF HARVEY E. YATES COMPANY FOR SALT WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Harvey E. Yates Company made a request to the New Mexico Oil Conservation Division on September 9, 1993, for permission to reclassify for salt water disposal its Travis State Well No. 1 located 1780 feet from the South line and 2080 feet from the West line (Unit K) of Section 13, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, Harvey E. Yates Company is hereby authorized to utilize its Travis State Well No. 1 located 1780 feet from the South line and 2080 feet from the West line (Unit K) of Section 13, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Cisco and Canyon formations at approximately 9816 feet to 9888 feet through 2 3/8-inch plastic-lined tubing set in a packer located at approximately 9760 feet.

IT IS FURTHER ORDERED THAT:

The operator shall 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.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1963 psi.

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 Cisco and Canyon formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 4th day of October, 1993.

WILLIAM J/LEMAY, Director

WJL/BES/amg

xc:

Oil Conservation Division - Artesia

NM State Land Office - Oil and Gas Division (Pete Martinez)

File: WFX-499