

AUG - 1

Case 12489

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: RAY WESTALL
Address: Box 4 Loco Hills, NM 88255
Contact party: RANDALL HARRIS Phone: SOS. 677-2370
- 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 ☐ no ORDER No. R-3226
If yes, give the Division order number authorizing the project 14-08-001-8862
- V. 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 which 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:
1. 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 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.
- * X. 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.
- Name: RANDALL HARRIS Title: GEOLOGIST
Signature: [Signature] Date: 7/24/00
- * 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. CASE No. 3564 ON 04/26/1967

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.

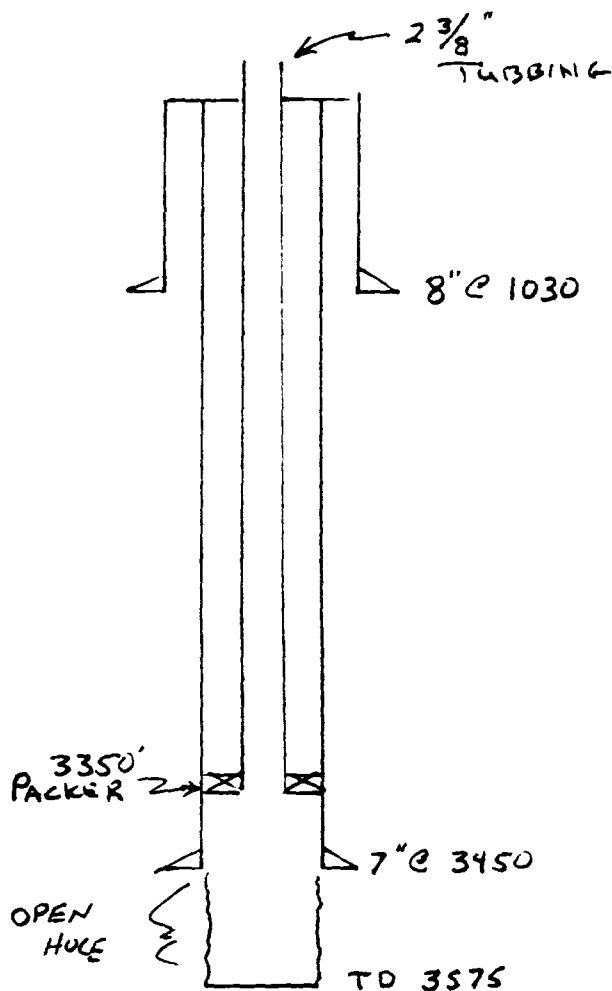
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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.

INJECTION WELL DATA SHEET

RAY WESTALL
TAYLOR FEDERAL NO. 2
1980' FSL & 1980 FEL SECTION 12, T18S-R31E

Schematic



Tubular Data

Surface Casing

Size 8" 24# Cemented with 50 sxs
TOC 780 feet determined by Calc.
Hole size 10" Total depth 1030'

Long String

Size 7" 19# Cemented with 190 sxs
TOC 1550 feet determined by Calc.
Hole size 7 3/4"
Total depth 3450'

Injection interval

3450 feet to 3575 feet open hole

Tubing size 2 3/8" lined with Plastic set in a Baker Loc-set packer at 3350 feet

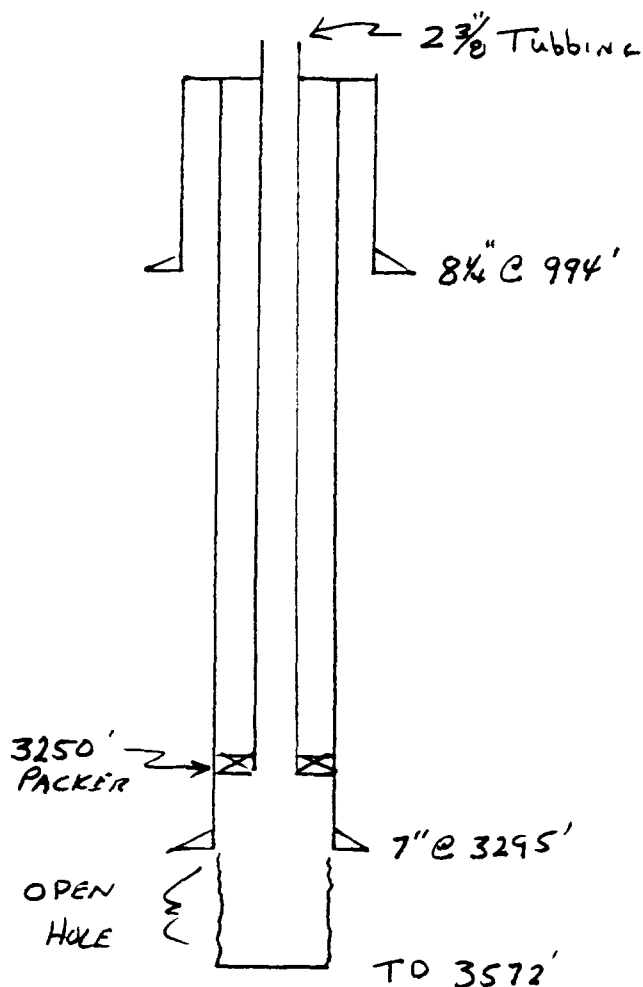
Other Data

1. Name of the injection formation. Queen
2. Name of field or pool. Shugart Y-7rv-Qn-Gb
3. Is this a new well drilled for injection? No
If no, for what purpose was the well originally drilled? Oil production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug (s) used. No other intervals
5. Give the depth to and name of any overlying or underlying oil or gas zones in this area.

INJECTION WELL DATA SHEET

RAY WESTALL
TAYLOR FEDERAL NO. 4
1980' FSL & 660 FWL SECTION 12, T18S-R31E

Schematic



Tubular Data

Surface Casing

Size 8 1/4 32# Cemented with 50 sxs
TOC 744 feet determined by Calc.
Hole size 10" Total Depth 994'

Long String

Size 7" 20# Cemented with 100 sxs
TOC 2295 feet determined by Calc.
Hole size 7 3/4"
Total depth 3295'

Injection interval

3295 feet to 3572 feet open hole

Tubing size 2 3/8" lined with Plastic set in a Baker Loc-set packer at 3250 feet

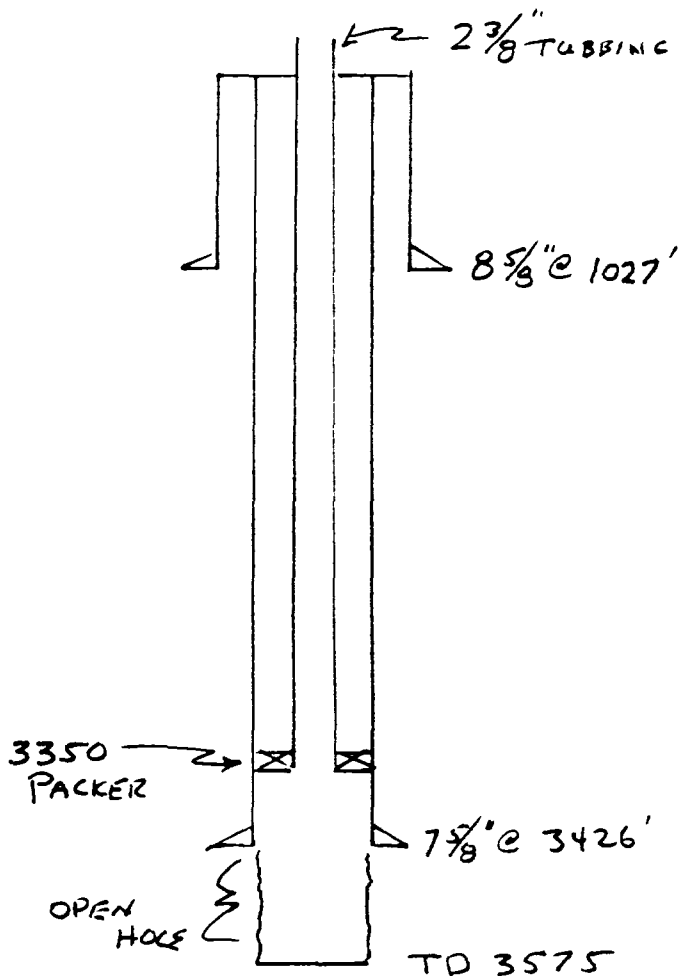
Other Data

1. Name of the injection formation. Queen
2. Name of field or pool. Shugart Y-7rv-Qn-Gb
3. Is this a new well drilled for injection? No
If no, for what purpose was the well originally drilled? Oil production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug (s) used. No other intervals
5. Give the depth to and name of any overlying or underlying oil or gas zones in this area.

INJECTION WELL DATA SHEET

RAY WESTALL
TAYLOR FEDERAL NO. 11
660FNL & 1980 FEL SECTION 13, T18S-R31E

Schematic



Tubular Data

Surface Casing

Size 8 5/8" 24# Cemented with 50 sxs
TOC 777 feet determined by Calc.
Hole size 10" Total depth 1027'

Long String

Size 7 5/8" 20# Cemented with 75 sxs
TOC 2676 feet determined by Calc.
Hole size 7 3/4"
Total depth 3426'

Injection interval

3426 feet to 3575 feet open hole

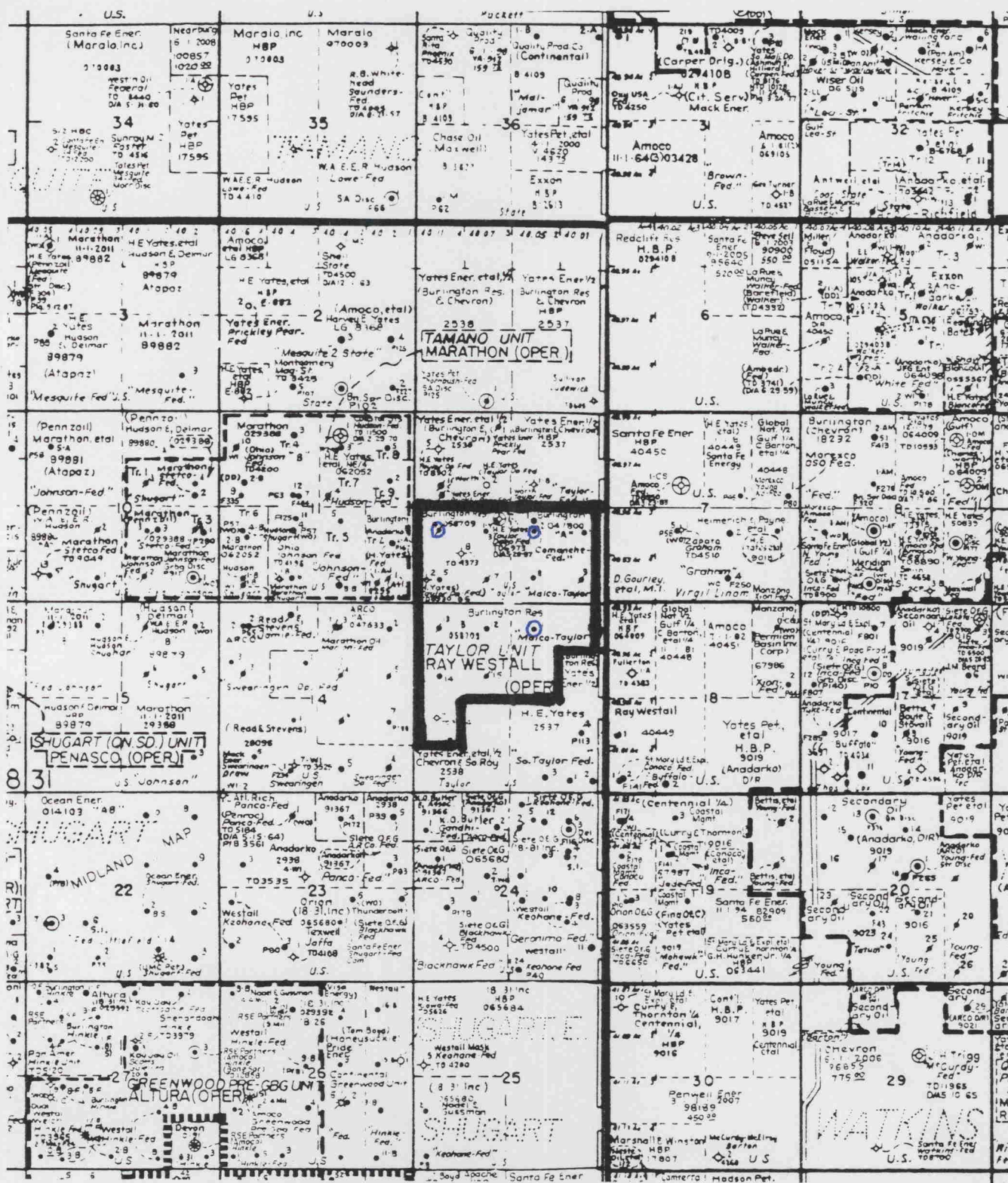
Tubing size 2 3/8" lined with Plastic set in a Baker Loc-set packer at 3350 feet

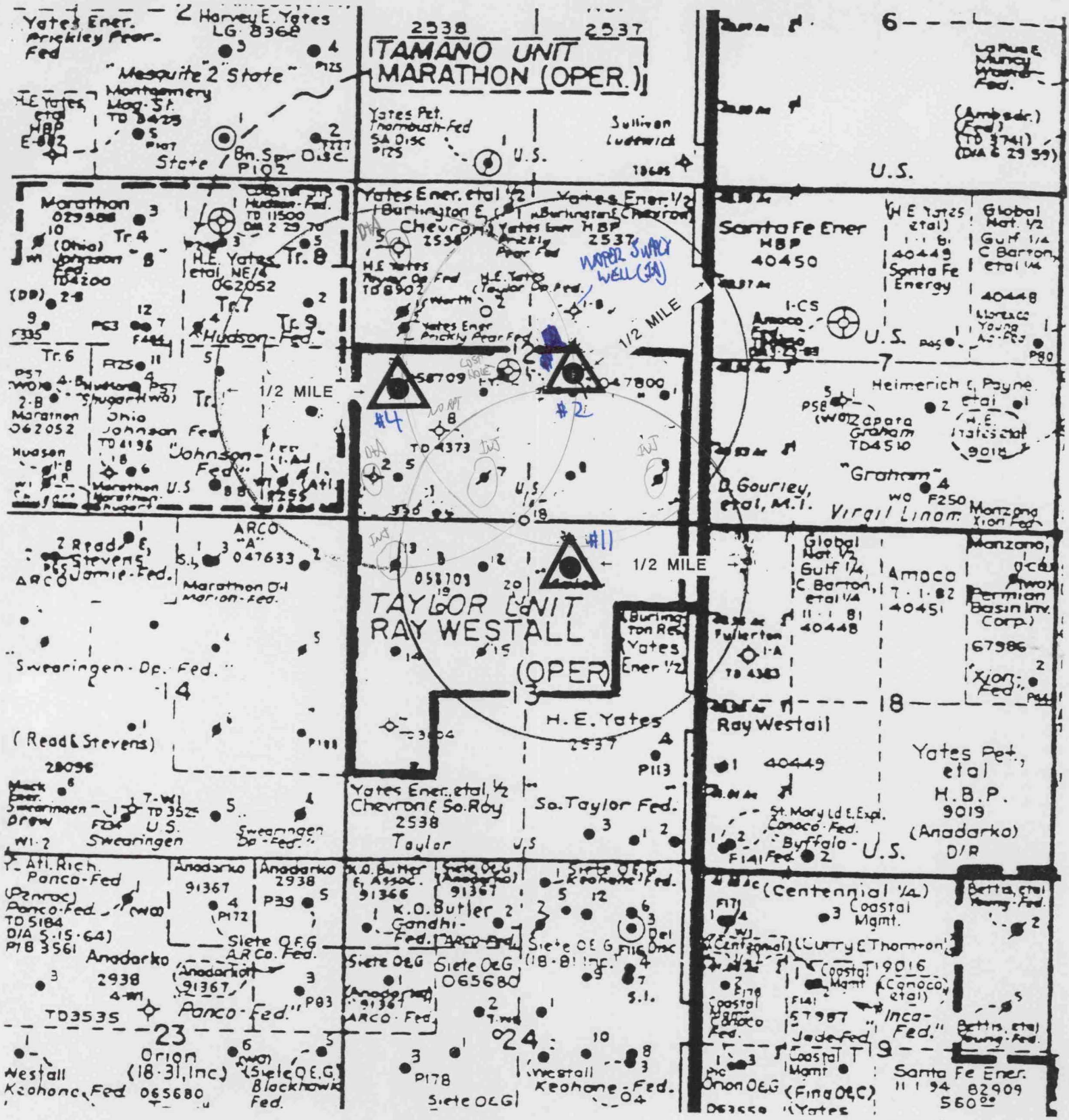
Other Data

1. Name of the injection formation. Queen
2. Name of field or pool. Shugart Y-7rv-Qn-Gb
3. Is this a new well drilled for injection? No
If no, for what purpose was the well originally drilled? Oil production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug (s) used. No other intervals
5. Give the depth to and name of any overlying or underlying oil or gas zones in this area.

ATTACHMENT V

Maps that identifies all wells of public record within two miles of each proposed injection well, and the area of review one-half mile radius around each proposed injection well.





- R-13B #3-A SE/SW S.12
- WAX-253 #2-A NW/SW S.12
- " #4-A SE/SE S.12
- " #3-B SE/NW S.13

ATTACHMENT VI

Data on all wells of public record within the area of review. Included are schematics of the plugged wells that penetrated the proposed injection zone within the area of review.

Well Name	Location	Spud Date	Sur.Casing	Int. Casing	Prod. Casing	Completion
Atlantic Richfield Johnson Federal #1	SESE Sec. 11 T18S-R31E	01/09/1939	8 1/4" @ 993' 50 sxs		7" @ 3347 100 sxs	3474-3720 Shugart Y-Q-7R-GB Oil-P&A
HEYCO AJ 11 Federal #1	SESE Sec. 11 T18S-R31E	03/24/1989	13 3/8" @ 377' 365 sxs Circ.	8 5/8" @ 2350' 1600 sxs Circ.	5 1/2" @ 8959' 1500 sxs	8121-8189 Tamano Bonesprings Oil
HEYCO Hudson 11 Federal #5	NENE Sec. 11 T18S-R31E	10/22/1989	13 3/8" @ 350' 375 sxs Circ.	8 5/8" @ 2354' 1100 sxs Circ.	5 1/2" @ 8910' 1450 sxs	8048-8109 Tamano Bonesprings Oil
HEYCO Hudson 11 Federal #2	SENE Sec. 11 T18S-R31E	07/01/1987	13 3/8" @ 350' 350 sxs Circ.	8 5/8" @ 2356' 1000 sxs Circ.	5 1/2" @ 8813' 1985 sxs	7934-7998 Tamano Bonesprings
HEYCO AJ 11 Federal #2	NESE Sec. 11 T18S-R31E	08/19/1989	13 3/8" @ 360' 375 sxs Circ.	8 5/8" @ 2350' 1200 sxs Circ.	5 1/2" @ 8966' 1425 sxs	7995-8126 Tamano Bonesprings Oil
HEYCO Taylor Deep 12 Fed. #1-Y	NESW Sec. 12 T18S-R31E	06/03/1987	13 3/8" @ 350' 350 sxs Circ.	8 5/8" @ 2410' 948 sxs Circ.	5 1/2" @ 9500' 2175 sxs Circ.	9424-9432 Tamano Bonesprings Oil
HEYCO Taylor Deep 12 Fed. #1	NESW Sec. 12 T18S-R31E	05/11/1987	13 3/8" @ 356' 350 sxs Circ.	8 5/8" @ 2410' 1000 sxs Circ.		Lost Hole D&A
HEYCO Taylor Deep 12 Fed. #2	SWSW Sec. 12 T18S-R31E	08/22/1990	13 3/8" @ 360' 375 sxs Circ.	8 5/8" @ 2380' 1300 sxs Circ.		8902' TD D&A
HEYCO Taylor Deep 12 Fed. #5	NWNW Sec. 12	06/22/1990	13 3/8" @ 350 350 sxs Circ.	8 5/8" @ 2360' 1300 sxs Circ.		8902' TD D&A

Well Name	Location	Spud Date	Sur.Casing	Int. Casing	Prod. Casing	Completion
Yates Energy Prickly Pear Federal #1	NENW Sec. 12 T18S-R31E	08/19/1990	8 5/8" @ 357' 490 sxs Circ.		4 1/2" @ 4994' 1800 sxs Circ.	3520-3534 Shugart Y-7R-Q-GB Oil-P&A
Yates Energy Prickly Pear Federal #2	SWNW Sec. 12 T18S-R31E	02/22/1991	8 5/8" @ 390' 300 sxs Circ		4 1/2" @ 5504' 1510 sxs Circ.	4194-4198 Shugart Y-7R-Q-GB Oil-P&A
Maxwell Oil Malco-Taylor #1-B	SWNE Sec. 12 T18S-R31E	04/20/1949	8 5/8" @ 1055' 50 sxs		TD 3449' Plug back to water	450-460 Water Supply
Worth Drilling Co. A.C. Taylor # 8-A	NESW Sec. 12 T18S-R31E	02/22/1950	8 5/8" @ 946' 50 sxs		7" @ 3414' 100 sxs	4373 TD D&A
Ray Westall Taylor Unit #1	NESE Sec. 12 T18S-R31E	04/22/1969	8 5/8" @ 750' 350 sxs Circ.		4 1/2" @ 3650 200 sxs	3594-3600 Shugart Y-7R-Q-GB Oil
Ray Westall Taylor Unit #3	NESW Sec. 12 T18S-R31E	07/17/1948	8 5/8" @ 973' 50 sxs		7" @ 3435' 100 sxs	3549-3588 Shugart Y-7R-Q-GB Oil
Ray Westall Taylor Unit #5	SWSW Sec. 23 T18S-R31E	09/30/1938	8 5/8" @ 985' 50 sxs		7" @ 3435' 100 sxs	3535-3549' Shugart Y-7R-Q-GB Oil
Ray Westall Taylor Unit #6	SWSW Sec. 12 T18S-R31E	12/10/1949	8 5/8" @ 1005' 50 sxs		7" @ 3419 100 sxs	3551-3567 Shugart Y-7R-Q-GB Oil
Ray Westall Taylor Unit #7	SESW Sec. 12 T18S-R31E	05/01/1947	8 5/8" @ 1010' 50 sxs	7" @ 3448' 100 sxs	4 1/2 Liner 3370-3595' Circ cmt	3469-70 Shugart Y-7R-Q-GB INJ (1966)

ATTACHMENT VIII

The proposed injection zone is a fine grained sand in the Yates Formation. It has an average thickness of 100 feet. There is possible drinking water overlying the injection in the surface sands at a depth of 0-250'. There is no known source underlying the injection interval.

ATTACHMENT IX

No proposed stimulation.

ATTACHMENT XI

There is no active fresh water wells within one mile.

ATTACHMENT XII

All available geologic and engineering data have been examined and there is no evidence of open faults or any other hydrologic connection between the disposal zone and any source of drinking water.

ATTACHMENT XIV

PROOF OF NOTICE

Leasehold operators within one-half mile of the well location are: H.E. Yates, Santa Fe Energy, Yates Energy, ARCO and Heimerich & Payne. Each of the operators were provided a copy of our application by certified mail. Proof of notice is enclosed. The surface owner is the United States of America, BLM.

PROOF OF PUBLICATION

Proof of publication will be from the Artesia Daily Press and will be forwarded.

Proof Of Notice

Copies of this application have been sent to:

Certified Mail #

H. E. Yates
Box 1933
Roswell, NM 88202-1933

7000 0600 0024 2324 4149

Arco
Box 1610
Midland, TX. 79702-1610

7000 0600 0024 2324 4132

Santa Fe Energy
550 W. Texas Ave.
Ste. 1330
Midland, TX. 79701

7000 0600 0024 2324 4125

Heimerich & Payne
1579 E. 21st St.
Tulsa, OK. 74114

7000 0600 0024 2324 4118

Yates Energy
Box 2323
Roswell, NM 88202-2323

7000 0600 0024 2324 4101

BLM
620 E. Greene
Carlsbad, NM 88202

NMOCD
811 S. 1st
Artesia, NM 88210

7000 0600 0024 2324 4118

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Postage \$ 99
 Certified Fee 1.40
 Return Receipt Fee
 (Endorsement Required)
 Restricted Delivery Fee
 (Endorsement Required)
 Total Postage & Fees \$

Postmark
 Here

Recipient's Name Please Print Clearly, to be completed by mailer
HEIMERICH & PAYNE
 Street, Apt. No. or PO Box No.
1579 E. 21ST ST
 City, State, ZIP+4
TUCSA, OK 74114

PS Form 3800, February 2000

See Reverse for Instructions

7000 0600 0024 2324 4132

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Postage \$ 99
 Certified Fee 1.40
 Return Receipt Fee
 (Endorsement Required)
 Restricted Delivery Fee
 (Endorsement Required)
 Total Postage & Fees \$



Recipient's Name Please Print Clearly, to be completed by mailer
ARCO
 Street, Apt. No. or PO Box No.
BOX 1610
 City, State, ZIP+4
MIDLAND, TX. 79702-1610

PS Form 3800, February 2000

See Reverse for Instructions

7000 0600 0024 2324 4125

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Postage \$ 99
 Certified Fee 1.40
 Return Receipt Fee
 (Endorsement Required)
 Restricted Delivery Fee
 (Endorsement Required)
 Total Postage & Fees \$ 2.39

Postmark
 Here

Recipient's Name Please Print Clearly, to be completed by mailer
SANTA FE ENERGY
 Street, Apt. No. or PO Box No.
550 W. TEXAS AVE STE 1330
 City, State, ZIP+4
MIDLAND, TX. 79701

PS Form 3800, February 2000

See Reverse for Instructions

7000 0600 0024 2324 4149

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Postage \$ 99
 Certified Fee 1.40
 Return Receipt Fee
 (Endorsement Required)
 Restricted Delivery Fee
 (Endorsement Required)
 Total Postage & Fees \$ 2.39

Postmark
 Here

Recipient's Name Please Print Clearly, to be completed by mailer
H. E. YATES
 Street, Apt. No. or PO Box No.
BOX 1933
 City, State, ZIP+4
ROSWELL, NM 88202-1933

PS Form 3800, February 2000

See Reverse for Instructions

7000 0600 0024 2324 4101

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Postage \$ 99
 Certified Fee 1.40
 Return Receipt Fee
 (Endorsement Required)
 Restricted Delivery Fee
 (Endorsement Required)
 Total Postage & Fees \$

Postmark
 Here

Recipient's Name Please Print Clearly, to be completed by mailer
YATES ENERGY
 Street, Apt. No. or PO Box No.
Box 2323
 City, State, ZIP+4
ROSWELL, NM 88202-2323

PS Form 3800, February 2000

See Reverse for Instructions

Affidavit of Publication

NO. 17057

STATE OF NEW MEXICO

County of Eddy:

Gary D. Scott being duly

sworn,says: That he is the Publisher of The

Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and county and state, and that the here to 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 within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for _____ 1 consecutive weeks/days on the same

day as follows:

First Publication July 20 2000

Second Publication

Third Publication

Fourth Publication

Subscribed and sworn to before me this

20th day of July 2000

Barbara Ann Burns
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 2003

Copy of Publication:

LEGAL NOTICE

Ray Westall-Operator, P.O. Box 4, Loco Hills, New Mexico 88255. Phone (505) 677-2370. Contact party for Ray Westall-Operator, Randall L. Harris, is seeking administrative approval from the New Mexico Oil Conservation Division to Utilize a well Located, 1980' FSL & 1980' FEL, Section 12 Township 18 South, Range 31 East, Eddy County New Mexico known as the Taylor Unit #2 for water injection. Proposed injection is in the Queen Formation through open hole 3450-3575'. Expected maximum injection rate of 300 BBls per day, at 800 PSI. 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 of this notice.
Published in the Artesia Daily Press, Artesia, N.M. July 20, 2000.

Legal 17057

Affidavit of Publication

NO. 17056

STATE OF NEW MEXICO

County of Eddy:

Gary D. Scott being duly

sworn, says: That he is the Publisher of The

Artesia Daily Press, a daily newspaper of general

circulation, published in English at Artesia, said county

and county and state, and that the here to 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 within the meaning of Chapter 167 of

the 1937 Session Laws of the state of New Mexico for

1 consecutive weeks/days on the same

day as follows:

First Publication July 20 2000

Second Publication

Third Publication

Fourth Publication

Subscribed and sworn to before me this

20th day of July 2000

Notary Public, Eddy County, New Mexico

My Commission expires September 23, 2003

Copy of Publication:

New Mexico Oil Conservation Division to Utilize a well Located, 2310' FSL & 2180 FEL, Section 12 Township 18 South, Range 31 East, Eddy County, New Mexico known as the Taylor Unit #17 for water disposal. Proposed injection is in the Queen Formation through perforations 3586-3596'. Expected maximum injection rate of 300 Bbls per day, at 800 PSI. 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 of this notice.

Published in the Artesia Daily Press, Artesia, N.M. July 20, 2000.

LEGAL NOTICE

Ray Westall-Operator, P.O. Box 4, Loco Hills, New Mexico 88255. Phone (505) 677-2370. Contact party for Ray Westall-Operator, Randall L. Harris, is seeking administrative approval from the

Legal 17056

Affidavit of Publication

NO. 17058

STATE OF NEW MEXICO

County of Eddy:

Gary D. Scott being duly

sworn, says: That he is the **Publisher** of The

Artesia Daily Press, a daily newspaper of general

circulation, published in English at Artesia, said county

and county and state, and that the here to 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 within the meaning of Chapter 167 of

the 1937 Session Laws of the state of New Mexico for

1 consecutive weeks/days on the same

day as follows:

First Publication July 20 2000

Second Publication

Third Publication

Fourth Publication

Subscribed and sworn to before me this

20th day of July 2000

Notary Public, Eddy County, New Mexico

My Commission expires September 23, 2003

Copy of Publication:

is in the Queen Formation through perforations 3295-3572'. Expected maximum injection rate of 300 BbBls per day, at 800 PSI. 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 of this notice.

Published in the Artesia Daily Press, Artesia, N.M. July 20, 2000.

Legal 17058

LEGAL NOTICE

Ray Westall-Operator, P.O. Box 4, Loco Hills, New Mexico 88255. Phone (505) 677-2370. Contact party for Ray Westall-Operator, Randall L. Harris, is seeking administrative approval from the New Mexico Oil Conservation Division to Utilize a well Located, 1980' FSL & 660' FWL, Section 12 Township 18 South Range 31 East, Eddy County, New Mexico known as the Taylor Unit #4 for water disposal. Proposed injection