MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

May 16, 1991

CERTIFIED RETURN RECEIPT

State of New Mexico
OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, NM 87501

Dear Sir,

Enclosed please find our application for authorization to inject for the Roy "AET" #3 located in Section 7-19S-25E of Eddy County.

If you have any questions, you may contact me at (505) 748-1471 Ext. 187. Thank you.

Sincerely,

Paul Ragsdale

Paul Ragsdale
Petroleum Engineer

PR/th

Enclosures

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: Yates Petroleum Corporation

Address: 105 S. 4th Street Artesia, NM 88210

Contact party: Paul Ragsdale Phone: (505) 748-1471

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
If yes, give the Division order number authorizing the project _____.

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: Paul Ragsdale Title Petroleum Engineer

Signature: Paul Ragsdale Date: 4-16-91

* 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. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this applic 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 sho 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

(4) Give the depths of any other perforated intervals and detail on the sacks of cement 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.

C-108
Application For Authorization To Inject
Yates Petroleum Corporation
Roy "AET" #3
P 7-19S-25E
Eddy County, New Mexico

I. The purpose of drilling this well is to make a disposal well for Dagger Draw Upper Pennsylvanian waters (re-injected produced waters) into the Devonian and Ellenberger formations.

Yates Petroleum plans to make this well a disposal well in the Devonian and Ellenberger formations.

II. Operator: Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
Paul Ragsdale (505) 748-1471

III. Well Data: See Attachment A

IV. This is not an expansion of an existing project.

V. See attached map, Attachment B

VI. 1 well within the area of review penetrates the proposed injection zone. (Attachment C)

VII. 1. Proposed average daily injection volume approximately 8000 BWPD.
Maximum daily injection volume approximately 10,000 BWPD.

2. This will be a closed system.

3. Proposed average injection pressure-1500 psi
Proposed maximum injection pressure--2200 psi.

4. Sources of injected water would be produced water from the Dagger-Upper Pennsylvanian. (See Attachment D)

5. See Attachment E.

VIII. 1. The proposed injection interval is the portion of the Devonian and Ellenberger formations consisting of porous sands and dolomites from estimated depths of 9750' to 11,150'.

2. Possible Fresh water zones overlie the proposed injection formations at depths to approximately 300' feet.

IX. The proposed disposal interval will be acidized with 30,000 gallons of 15% HCL acid.

X. Logs for the Roy "AET" #3 are enclosed.

XI. One water well exists within a one mile radius of the subject location. It is located in 17-19S-25E. (Attachment F)

XII. Yates Petroleum Corporation has examined geologic and engineering data and has found that there is no evidence of faulting in the proposed interval.

XIII. Proof of Notice

A. Certified letters sent to the surface owner and offset operators-attached. (Attachment G)

B. Copy of legal advertisement attached. (Attachment H)

XIV. Certification is signed.

Yates Petroleum Corporation
Roy "AET" #3
P 7-T19S-R25E

Attachment A
Page 1

III. Well Data

A. 1. Lease Name/Location:
Roy "AET" #3
P 7-T19S-R25E
810' FSL & 660' FEL

2. Casing Strings:
a. Present Well Condition
40' of 20" w/5 yards Ready Mix
9-5/8" 36#, J55 @ 1213' w/1100 sx
7" 23# casing @ 11,180' and cemented with 3685 sx of cement in 3 stages with cement circulated to surface.

TD: 11,180'

3. Tubing:
Propose to use 3 1/2" 9.2# J-55 plastic-coated tubing set at 9700'.

4. Packer:
Propose to use Guiberson Uni VI or Baker plastic-coated or nickel-plated packer set at 9700'.

B. 1. Injection Formation:
a. Devonian Dolomite @ 9760'
b. Montoya Dolomite @ 10,286'
c. Ellenberger Dolomite @ 10,601'
d. Bliss Sand @ 11,007'

2. Injection Interval will be through perforations from approximately 9760'-11,150'.

3. Well was originally drilled as an exploratory gas well, but after testing, decision made for salt water disposal well.

4. Perforations: 9760'-11,150'

5. Next higher (shallower) oil or gas zone within 1/2 mile--None within 2 miles--Canyon.
Next lower (deeper) oil or gas zone within 1/2 mile--None within 2 miles--None.

Attachment A

YATES PETROLEUM CORP.

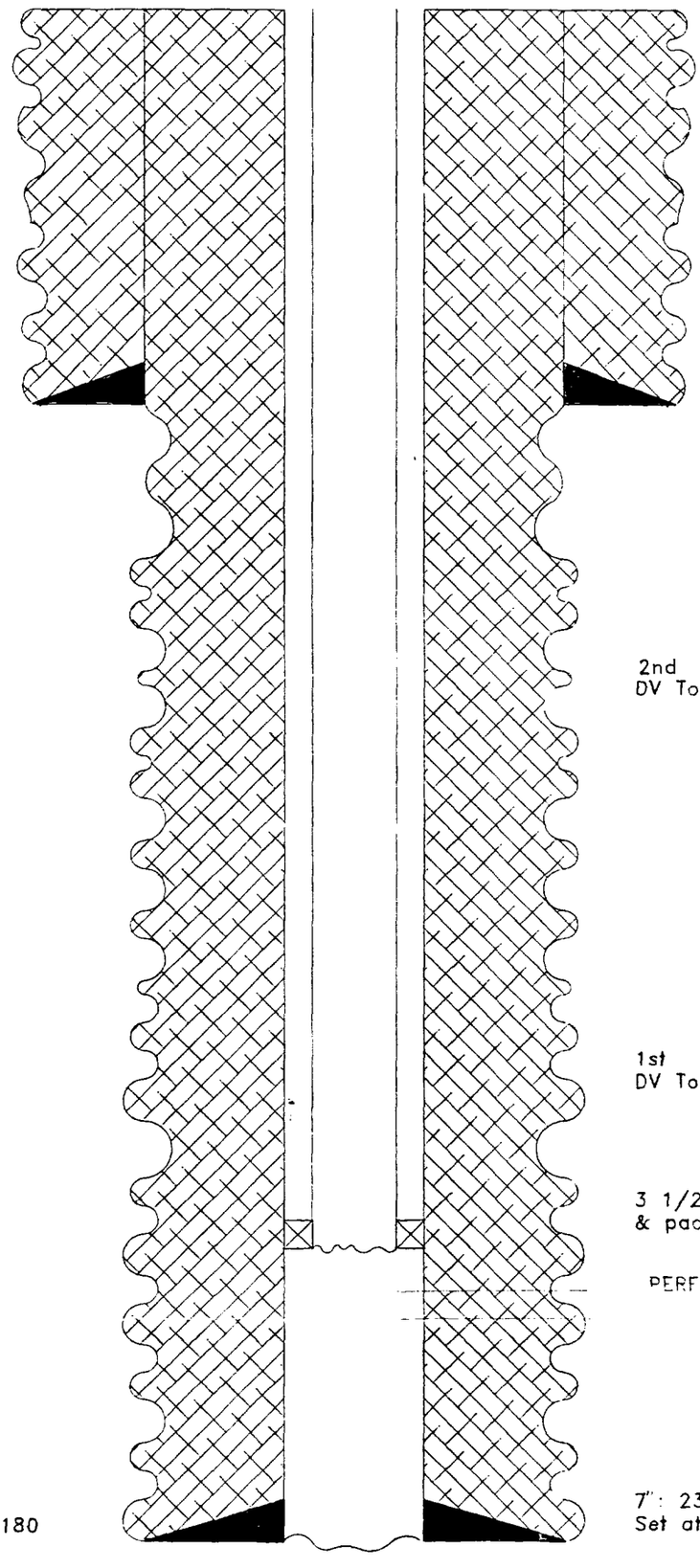
Roy "AET" #3

Sec. 7 T19S–R25E 810' FSL & 660' FEL

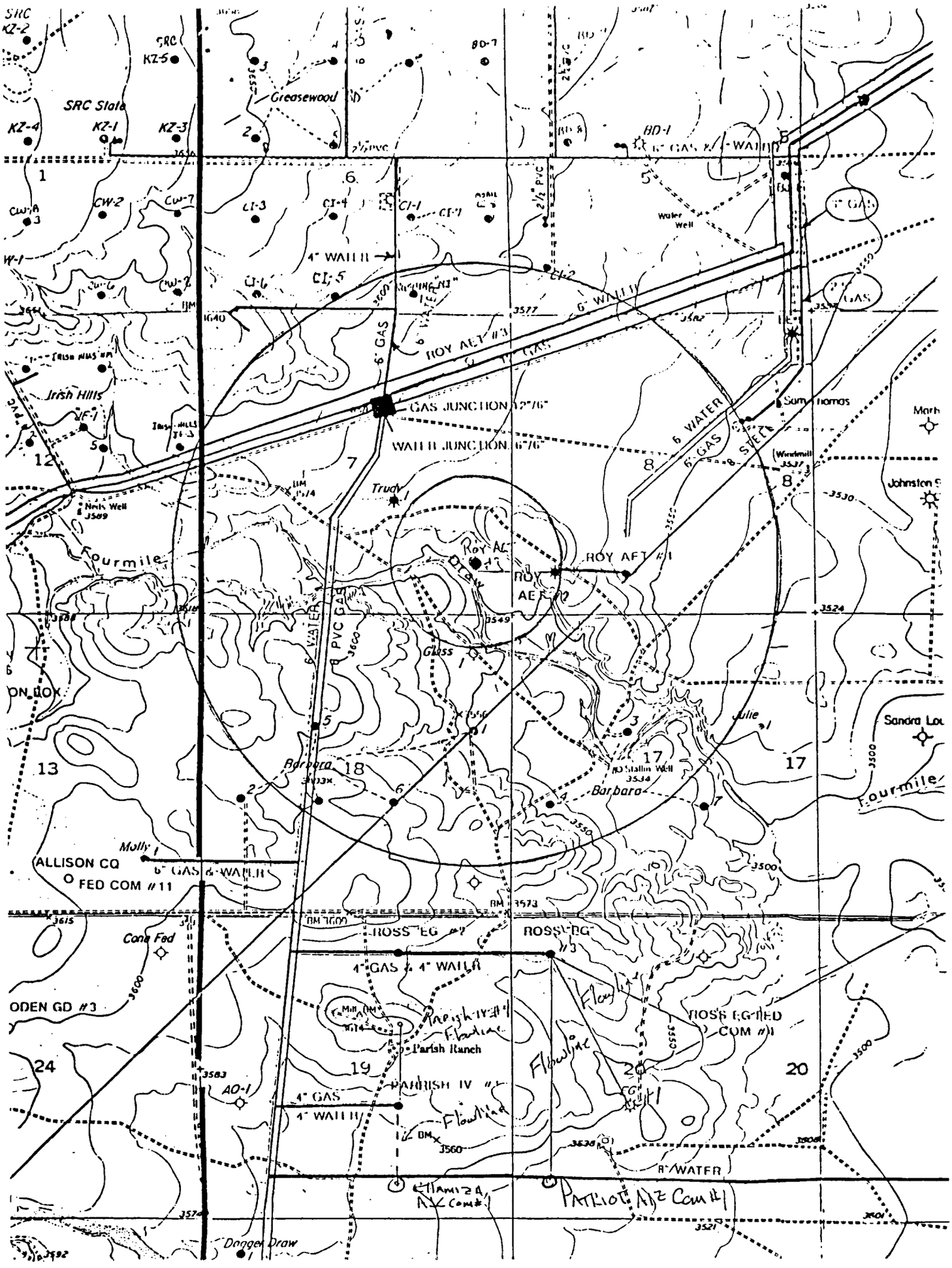
Eddy County, New Mexico

Proposed Salt Water Disposal Well

Map #91016



PLAN TO RUN APPROXIMATELY 11,150' OF 7" 23# CASING, CIRCULATING CEMENT BACK TO SURFACE, WILL COMPLETE FOR SALT WATER DISPOSAL WITH 3 1/2" 9.6# J-55 PLASTIC-COATED TUBING AND GUIBERSON VI OR BAKER PLASTIC-COATED OR NICKEL-PLATED PACKER SET @ APPROXIMATELY 9700' WITH AN INERT FLUID WITH INHIBITORS IN THE ANNULUS. PROPOSED TO INJECT DAGGER DRAW – UPPER PENNSYLVANIAN PRODUCED WATERS THROUGH MISS/DEVONIAN, MONTOYA, ELLENBERGER, AND BLISS SAND PERFORATIONS FROM APPROXIMATELY 9750'–11,150'.



YATES PETROLEUM CORPORATION

ROY "AET" #3

PROPOSED SALT WATER DISPOSAL WELL

SEC. 7 - 19S - 25E

810' FSL & 660' FEL

EDDY COUNTY, NEW MEXICO

ATTACHMENT B

ATTACHMENT C

Roy "AET" #3
Form C-108

Tabulation of Data on Wells Within Area of Review

Well Name	Operator	Type	Spud	Completed	Total Depth	Producing Zone	Perforations	Completion Information
Roy "AET" #2 M 8-19S-25E	YPC	Oil	11/26/90	01/16/91	8250'	Pennsylvanian	7796'-7912'	9 5/8 @ 1195 w/1100 SX 7 @ 8250 w/2250 SX 2 7/8 @ 7946

ATTACHMENT D

HALLIBURTON DIVISION LABORATORY
HALLIBURTON SERVICES
MIDLAND DIVISION
ARTESIA, NEW MEXICO 88210

LABORATORY WATER ANALYSIS

No. W65, W66, & W67-

To Yates Petroleum Corporation

Date

105 South Fourth Street

Artesia, NM 88210

Submitted by Date Rec.

Well No. Depth Formation

County Field Source

	Ross EC Fed. #2	Foster AN Com. #1	Parish TV Comm.
Resistivity	.91 @ 60°	.9 @ 60°	.89 @ 60°
Specific Gravity	1.005 @ 60°	1.005 @ 60°	1.005 @ 60°
pH	7.5	7.3	7.0
Calcium (Ca)	1,000	1,000	1,000 *)
Magnesium (Mg)	600	500	650
Chlorides (Cl)	4,000	5,000	5,000
Sulfates (SO_4)	Heavy	Heavy	Heavy
Bicarbonates (HCO_3)	1,200	1,000	1,100
Soluble Iron (Fe)	Nil	Nil	Nil

Remarks:

*Milligrams per liter

Respectfully submitted,

Analyst: Art Carrasco - District Engineer

HALLIBURTON COMPANY

cc:

NOTICE

This report is limited to the described sample tested. Any use of this report upon the Halliburton name or any

Attachment E

HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES

ARTESIA DISTRICT

LABORATORY REPORT

No. W531-90

TO Mr. Harvey Apple

Yates Petroleum Corporation

105 South Fourth Street

Artesia, NM 88210

Date September 20, 1990

Submitted by Danny Panzer Date Rec. September 20, 1990

Well No. State D #1 Depth 10963' - 11052' Formation Bliss Sand

Field County Source

Resistivity	0.052		
Specific Gravity ..	1.1706		
pH	6.5		
Calcium	29,025		
Magnesium	392		
Chlorides	157,000		
Sulfates	700		
Bicarbonates	305		
Soluble Iron	500		
KCL	.5%		

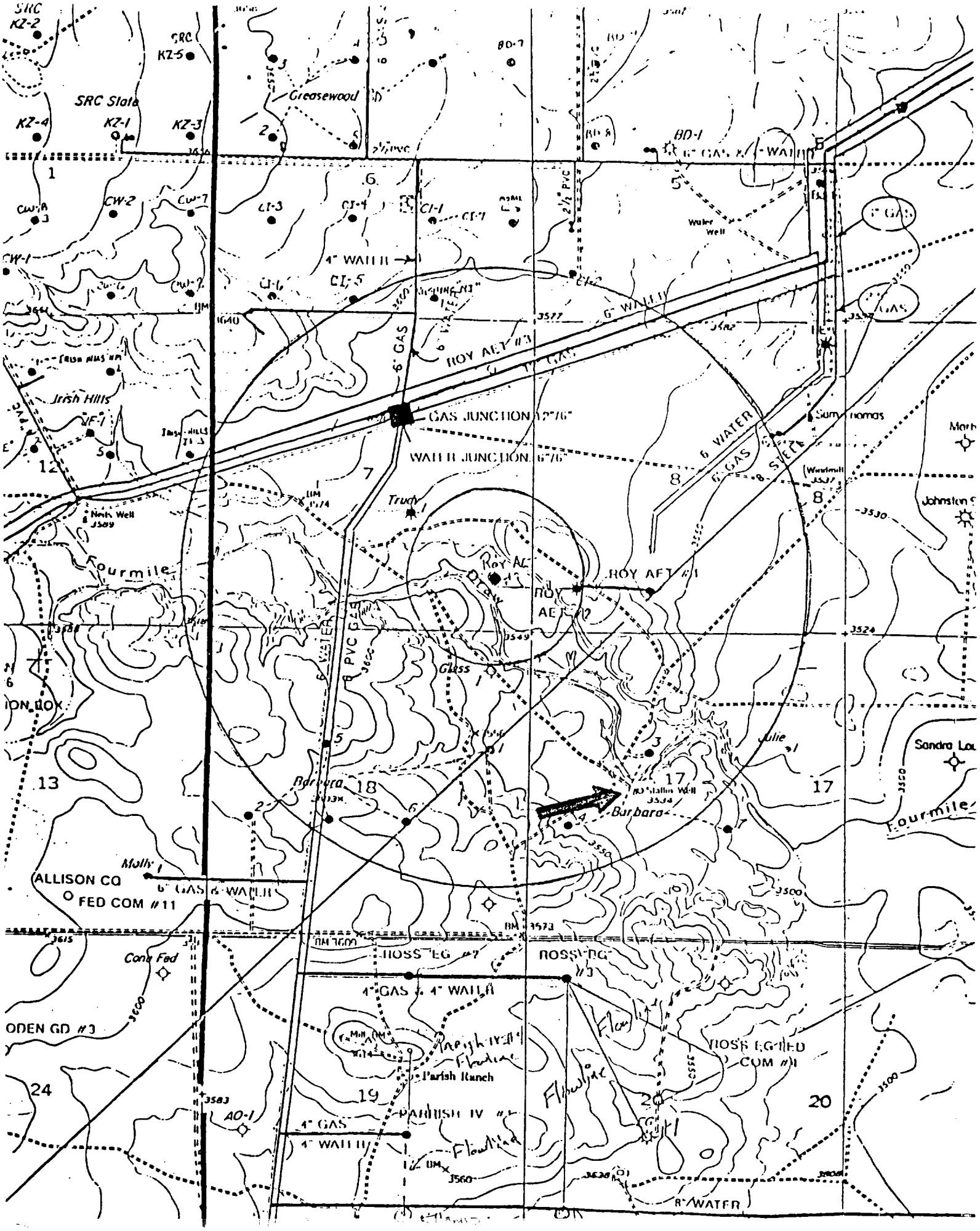
Remarks:

Respectfully submitted

Analyst: Eric Jacobson - Field Engineer

HALLIBURTON SERVICES

ATTACHMENT F



C/P

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY:	YATES PET.
LEASE:	LARUE WATER WELL
SAMPLE POINT:	WELL
SAMPLE DATE:	10-9-90
SAMPLE TEMP.:	N/A

pH:	7.5
H2S:	NO
SPECIFIC GRAVITY:	1.015

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO3	280.60	4.60
Cl	256.00	7.21
SO4	200.00	4.17
Ca	528.00	26.40
Mg	65.61	5.38
Na	0.00	0.00

IONIC STRENGTH =	0.04
TOTAL HARDNESS =	1590.0 mg/ltr.
TOTAL DISSOLVED SOLIDS =	1056.6 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO3)2	4.60	372.78
CaSO4	4.17	283.63
CaCl2	7.21	400.23
Mg(HCO3)2	0.00	0.00
MgSO4	0.00	0.00
MgCl2	0.00	0.00
NaHCO3	0.00	0.00
Na2SO4	0.00	0.00
NaCl	0.00	0.00

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO3 @ 80 DEG F. = 1.2
CaCO3 @ 120 DEG F. = 1.5

SATURATION POINT

CaSO4 @ 70 DEG F. = 1775.1 MG/LTR.
CaSO4 @ 110 DEG F. = 1829.4 MG/LTR.

(THIS SAMPLE CONTAINED 283.6 MG/LTR. CaSO4)

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY:	YATES PET.
LEASE:	WINDMILL
SAMPLE POINT:	OVERFLOW
SAMPLE DATE:	10-8-90
SAMPLE TEMP.:	N/A

pH:	7.7
H2S:	NO
SPECIFIC GRAVITY:	1

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO3	329.40	5.40
Cl	213.00	6.00
SO4	1375.00	28.65
Ca	600.00	30.00
Mg	133.65	10.95
Na	0.00	0.00

IONIC STRENGTH =	0.08
TOTAL HARDNESS =	2050.0 mg/ltr.
TOTAL DISSOLVED SOLIDS =	2641.4 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO3)2	5.40	437.62
CaSO4	24.60	1674.52
CaCl2	0.00	0.00
Mg(HCO3)2	0.00	0.00
MgSO4	4.05	243.52
MgCl2	6.00	285.72
NaHCO3	0.00	0.00
Na2SO4	0.00	0.00
NaCl	0.00	0.00

CALCULATED SCALING TENDENCIES

SCALING INDEX
CaCO3 @ 80 DEG F. = 1.4
CaCO3 @ 120 DEG F. = 1.8

SATURATION POINT
CaSO4 @ 70 DEG F. = 2369.1 MG/LTR.
CaSO4 @ 110 DEG F. = 2425.9 MG/LTR.

(THIS SAMPLE CONTAINED 1674.5 MG/LTR. CaSO4)

ATTACHMENT G

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

May 16, 1991

CERTIFIED RETURN RECEIPT

Conoco, Inc.
10 Desta Drive West
Midland, TX 79705-4514

Dear Sir,

Enclosed please find a copy of form C-108 (Application for Authority to Inject) on Yates' Roy "AET" #3 located in Unit P of Section 7-19S-25E , Eddy County, New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-1471.

Sincerely,

Paul Ragsdale

Paul Ragsdale
Petroleum Engineer

PR/th

Enclosure

MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

S. P. YATES
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EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

May 16, 1991

CERTIFIED RETURN RECEIPT

Mr. Howard Howell
P. O. Box 75
Lakewood, NM 88254

Dear Mr. Howell,

Enclosed please find a copy of form C-108 (Application for Authority to Inject) on Yates' Roy "AET" #3 located in Unit P of Section 7-19S-25E , Eddy County, New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-1471.

Sincerely,

Paul Ragsdale

Paul Ragsdale
Petroleum Engineer

PR/th

Enclosure

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

May 16, 1991

CERTIFIED RETURN RECEIPT

State of New Mexico
OIL CONSERVATION DIVISION
Drawer DD
Artesia, NM 88210

Dear Sir,

Enclosed please find our application for authorization to inject for the Roy "AET" #3 located in Section 7-19S-25E of Eddy County.

If you have any questions, you may contact me at (505) 748-1471 Ext. 187. Thank you.

Sincerely,

Paul Ragsdale

Paul Ragsdale
Petroleum Engineer

PR/th

Enclosures

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

May 14, 1991

Artesia Daily Press
503 W. Main
Artesia, New Mexico 88210

Gentlemen,

Yates Petroleum Corporation desires to place a public notice in your newspaper for one day. The notice is enclosed.

Please place this notice in your paper Sunday, May 19, 1991 and forward a copy of it along with your billing as soon as possible to:

Yates Petroleum Corporation
105 S. 4th Street
Artesia, NM 88210
Attn: Paul Ragsdale

If you have any questions, please contact me at 748-1471, Ext. 187. Thank you for your cooperation in this matter.

Sincerely,

Paul Ragsdale

Paul Ragsdale
Petroleum Engineer

PR/th

Enclosure

Attachment H

Legal Notice

Yates Petroleum Corporation, 105 South Fourth Street, Artesia, NM 88210, has filed form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for an injection well. The proposed well, the "Roy AET #3" located 810' FSL & 660' FEL of Section 7, Township 19 South, Range 25 East of Eddy County, New Mexico, will be used for saltwater disposal. Disposal waters from the Dagger Draw Upper Pennsylvanian will be re-injected into the Devonian and Ellenberger formations at a depth of 9750-11,150 feet with a maximum pressure of 2200 psi and a maximum rate of 10,000 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, NM 87501, within 15 days. Additional information can be obtained by contacting Paul Ragsdale at (505) 748-1471.

Affidavit of Publication

No. 13537

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 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 within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for 1 consecutive days weeks on the same day as follows:

First Publication May 19, 1991

Second Publication

Third Publication

Fourth Publication

Gary D. Scott

Subscribed and sworn to before me this 20th day of May 19 91

Barbara Ann Boone
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1991

Copy of Publication

[illegible] DIVISION

'91 MAY 2[illegible] 11 36

LEGAL NOTICE

Yates Petroleum Corporation, 105 South Fourth Street, Artesia, NM 88210, has filed form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for an injection well. The proposed well, the "Roy AET #3" located 810' FSL & 660' FEL of Section 7, Township 19 South, Range 25 East of Eddy County, New Mexico, will be used for saltwater disposal. Disposal waters from the Shugart Draw Upper Pennsylvanian will be re-injected into the Devonian and Ellenberger formations at a depth of 9750-11,150 feet with a maximum pressure of 2200 psi and a maximum rate of 10,000 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, P.O. Box [illegible], Santa Fe, NM 87501, within 15 days. Additional information can be obtained by contacting [illegible] Stogsdale at (505) 748-[illegible].

Published in the Artesia Daily Press, Artesia, NM, May 19, 1991.

Legal 13537