

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: BTA Oil Producers
Address: 104 South Pecos, Midland, TX 79701
Contact party: Dorothy Houghton Phone: 915-682-3753
- 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: Dorothy Houghton Title Regulatory Administrator
Signature: *Dorothy Houghton* Date: 6-28-90
- * 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.

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.

BTA OIL PRODUCERS

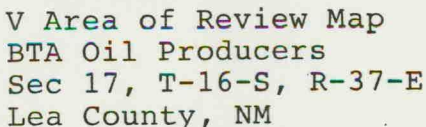
Lovington, 8903 JV-P
 No. 3-SWD
 660' FNL & 760' FEL
 A, Sec. 17, T16S, R37E
 Lea County, NM

Form C-108 Attachment

III. Injection Well Data Sheet

		<u>Hole Size</u>
<u>Surface Casing:</u>	13-3/8" @ 403' w/ 425 sx circ	17-1/2"
<u>Intermediate Casing:</u>	8-5/8" @ 4454' w/1500 sx circ	11"
	5-1/2" @ 11800' w/ 150 sx (Shot off csg @ 11,030', recover 271 jts)	7-7/8"
<u>Total Depth:</u>	11,800'	
<u>Tubing:</u>	2-7/8" fiberglass tubing @ 3200'	
<u>Packer:</u>	Baker Loc-set Packer @ 3200'	
<u>Name of Injection Formation:</u>	Yates	
<u>Injection Interval:</u>	3,300 - 4,000'	
<u>Field:</u>	Undesignated Yates	
<u>Purpose:</u>	The well was drilled by Harvey E. Yates Co. as the East Lovington '17' State #1 to test production from the Pennsylvanian formation in 1988.	
<u>Perforated Intervals:</u>	11,440 - 11,464' Squeezed 11,439 - 11,460' w/100 sx Perf 11,489 - 11,512' Perf 11,455 - 11,456' Set CIBP @ 11,400', cap w/35' cmt Set 25 sx plug @ 11,080' Set 41 sx plug @ 9,838' Set 41 sx plug @ 7,970' Set 39 sx plug @ 6,541' Set 50 sx plug @ 4,554' Set 40 sx plug @ 2,177' Set 10 sx @ surface P&A 10-24-88	

Depth and name of overlying and/or underlying oil and gas zones in
 this area:
 Strawn 11,368'



Lovington, 8903 JV-P, No. 3-SWD
Lea County, NM
Attachment to C-108
June 28, 1990
Page -2-

VI. Tabulation of Data on all Wells in Review Area

Well: Harvey E. Yates Co.
E. Lovington "8" #1

Location: 330' FSL & 660' FEL
-P-, Sec. 8, T16S, R37E
Lea County, New Mexico

Type Well: Oil Producer

Construction: 13-3/8" @ 391' w/ 400 sx - Circ
8-5/8" @ 4497' w/1370 sx - Circ
5-1/2" @ 11798' w/1200 sx -

Date Drilled: 03-27-83

Record of Completion: Perfs 11,476 - 11,488'
IPF 646 EO
Comp 05-14-83
Add'l Perfs 04-17-85 11,465 - 11,504'

Note: Filed intent to P&A 12-28-89

Well: Harvey E. Yates Co.
E. Lovington "8" #2

Location: 1874' FSL & 554' FEL
-I-, Sec. 8, T16S, R37E
Lea County, New Mexico

Type Well: Oil Producer

Construction: 13-3/8" @ 405' w/ 450 sx - Circ
8-5/8" @ 4475' w/1600 sx - Circ
5-1/2" @ 11800' w/ 375 sx - TOC @ 10450'

Date Drilled: 03-07-86

Record of Completion: Perfs 11,498 - 11,538'
IPF 428 EO
Comp 04-09-86

Lovington, 8903 JV-P, No. 3-SWD
Lea County, NM
Attachment to C-108
June 28, 1990
Page -3-

Well: BTA Oil Producers
Lovington #1

Location: 2130' FNL & 1980' FEL
-G-, Sec. 17, T16S, R37E
Lea County, New Mexico

Type Well: Oil Producer

Construction: 13-3/8" @ 407' w/ 450 sx - Circ
8-5/8" @ 4400' w/1800 sx - Circ
5-1/2" @ 11750' w/2000 sx - Circ

Date Drilled: 01-06-90

Record of Completion: Perfs 11,486 - 11,528'
IPF 543 BO
Comp 02-20-90

Well: BTA Oil Producers
Lovington #2

Location: 1980' FNL & 810' FEL
-H-, Sec. 17, T16S, R37E
Lea County, New Mexico

Type Well: Oil Producer

Construction: 13-3/8" @ 418' w/ 450 sx - Circ
8-5/8" @ 4415' w/1900 sx - Circ
5-1/2" @ 11650' w/2000 sx - TOC @ 800'

Date Drilled: 03-27-90

Record of Completion: Perfs 11,474 - 11,508'
IPF 538 BO
Comp 04-25-90

VII. Proposed Operation

Storage tanks will be located on the well site along with a powered salt water disposal pump. A salt water gathering system will transport from our tank battery, located at our 8903 Lovington #1 well, 1900 feet southwest. At the present time, only the Lovington #2 well is producing water at a rate of 95 barrels per day. If the wells' disposal capacity is such to handle additional water, other operator's wells in the area may be trucked in to the storage tanks. The system will be open.

The average injection rate is estimated at 500 BWPD.

The proposed maximum injection rate is 1000 BWPD.

The proposed average injection pressure is 1000 psi.

The proposed maximum injection pressure is 1250 psi.

The sources of injected water will be from the Strawn.

VIII.

Geological Name: Yates Sand

Lithological Detail: Sandstone, red, fine - medium grained, fair to good porosity, interbedded with anhydrite, medium-well sorted.

Thickness: 700'

Depth: 3294 - 4000'

Geological Data of Drinking Water Zone: The underground source of drinking water overlying the zone of disposal is the Ogalla, which occurs from 50 to 250 feet and is approximately 200' thick.

IX. Proposed Stimulation Program

Perforate Zone 3300-4000'
Acidize Zone w/3500 gal 15% HCl

X. Logs were previously filed by original operator:

Harvey Yates Co.

XI. Analysis of fresh water well attached:

Exhibit -B- Column No. 1
(only water well within one mile)

Lovington, 8903 JV-P, No. 3-SWD
Lea County, NM
Attachment to C-108
June 28, 1990
Page -5-

- XII. After examining all available geological and engineering data, we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. A copy of our application has been furnished by certified mail to the surface owner and to each leasehold operator within one-half mile of our proposed injection well. See listing on Exhibit -C-.

EXHIBIT -A-

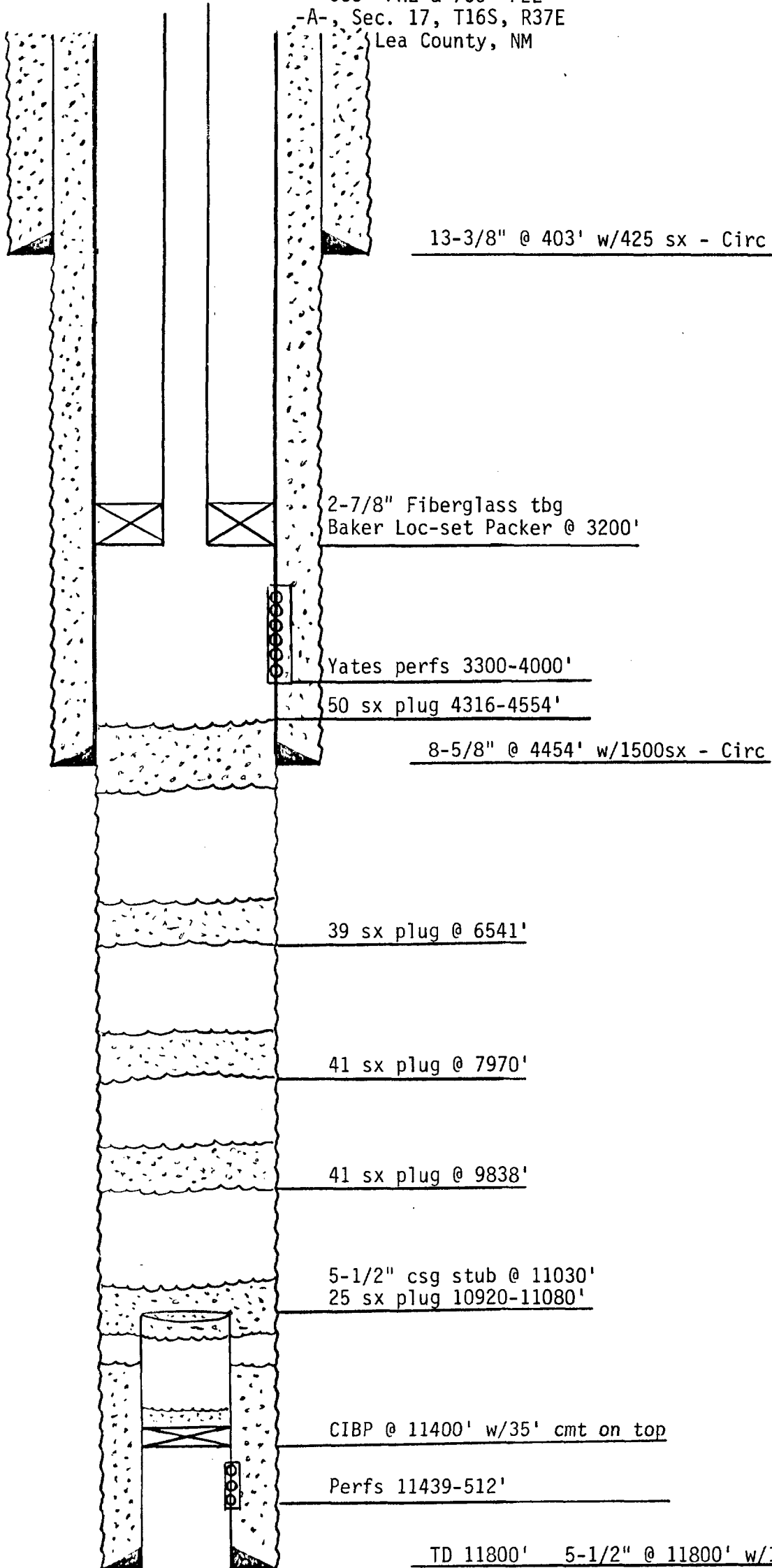
BTA OIL PRODUCERS
Lovington, 8903 JV-P

No. 3-SWD

660' FNL & 760' FEL

-A-, Sec. 17, T16S, R37E

Lea County, NM



By Waylan C. Martin, M.A.
Waylan C. Martin, M.A.

EXHIBIT -C-

ETA OIL PRODUCERS
Lovington, 8903 JV-P
Well No. 3
Lea County, NM

Surface Owner: Mrs. Vickie Norice Harris
Route 1, Box 33
Plains, Texas 79355

Offset leasehold Operators within one-half mile of the well location:

Amerada Hess Corporation
1201 Louisiana, Suite 700
Houston, Texas 77002
Attn: Mr. J. Y. Christopher


Pennzoil Exploration Production Co.
700 Milam
Houston, Texas 77252
Attn: Mr. K. Stanaland

Nearburg Producing Company
402 E. Illinois, Suite 300
Midland, Texas 79701
Attn: Mr. Mark Nearburg

Matador Petroleum Corporation
8340 Meadow Road, Suite 158
Dallas, Texas 75231
Attn: Mr. Joe A. Young

Yates Energy Corporation
500 N. Main, Suite 1010
Roswell, NM 88202
Attn: Ms. Shari Hamilton

I hereby certify the above were mailed copies of our application
on June 28, 1990, by certified mail.


Dorothy Houghton