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: [X] Secondary Recovery [ ] Pressure Maintenance [ ] Disposal [ ] Storage
Application qualifies for administrative approval? [X] yes [ ] no

II. Operator: Cross Timbers Production Company

Address: P. O. Box 50847, Midland, Texas 79710

Contact party: Gary L. Markestad Phone: (915)682-8873

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? [X] yes [ ] no
If yes, give the Division order number authorizing the project R-3134.

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: Gary L. Markestad Title Operations Engineer

Signature: Gary L. Markestad Date: 4/26/91

* 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. Data submitted in original application. Division Order R-3134 dated 10/14/66 & Administrative Order WFX No. 361 dated 10/14/71.

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

ITEM VII
Operation Data

1) Proposed average daily rate - 200 BWPD.
   Proposed maximum daily rate - 400 BWPD @ 1400 psig.

2) Closed system.

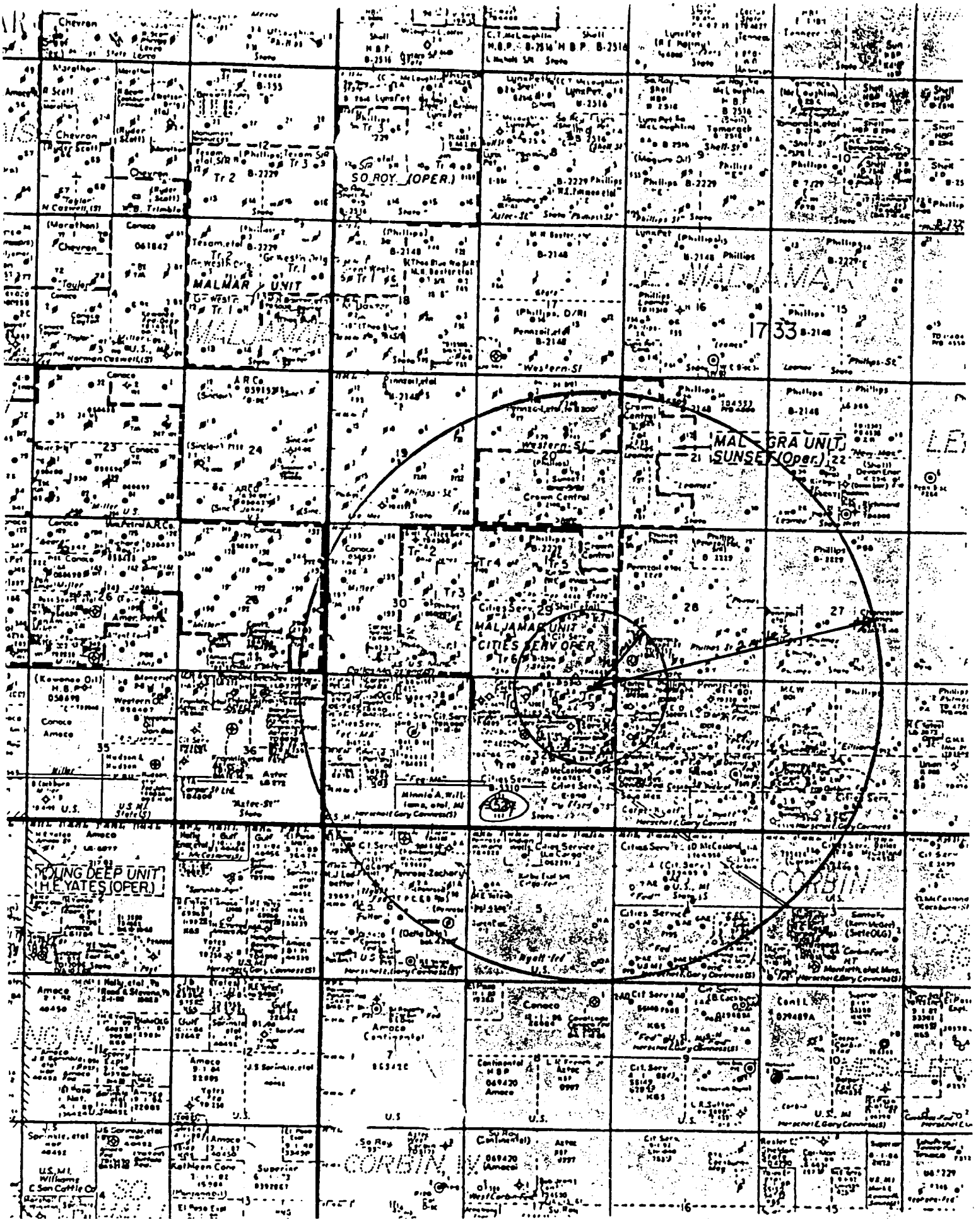
3) Expected average injection pressure - 1000 psig.
   Maximum injection pressure - 1500 psig.

4) Injection water is primarily produced water with some fresh water to augment the injection volume. The fresh water is being supplied to the SEMGSAU by Conoco, Inc. and is used extensively in this area for secondary recovery purposes.

5) Injection is not for disposal purposes.

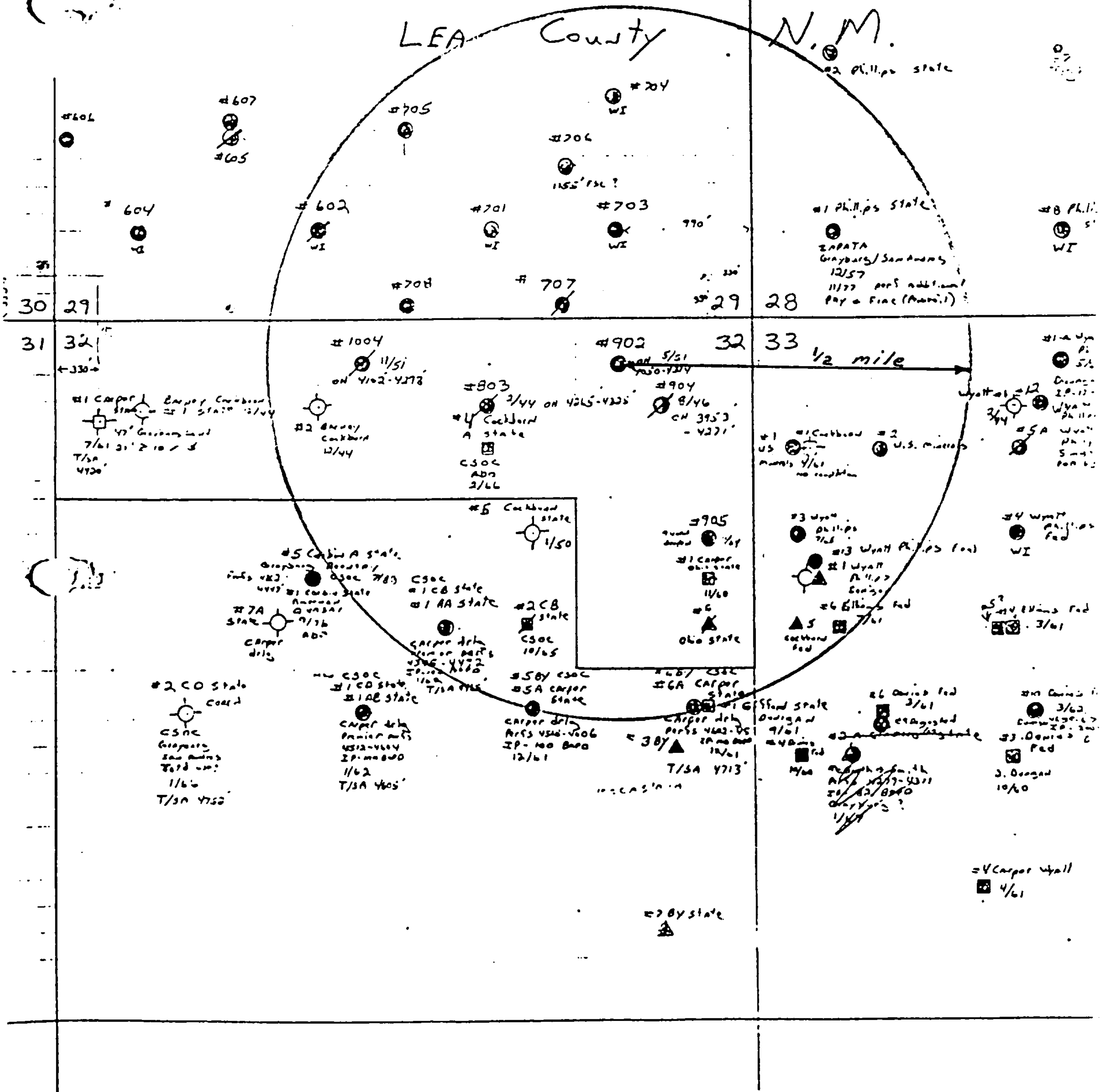
ITEM IX

1) Stimulation is not planned at this time.


MALJAMAR UNIT
SO ROY (OPER.)
MAL-GRA UNIT
SUNSET (Oper.)
MALJAMAR UNIT
CITIES SERV OPER
YOUNG DEEP UNIT
H.E. YATES (OPER.)
CORBIN
CORBIN

SEMGSAU

T 17 S R-33E
LEA County N.M.



Ⓢ Grayburg / San Andres
▣ ABD
△ Queen

K[3] 9/21/90 WI - WATER injection well

1" = 1000'

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of

One weeks.
Beginning with the issue dated

April 17, 1991
and ending with the issue dated

April 17, 1991

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 24 day of

April, 1991

Rhonda Copeland
Notary Public.

My Commission expires

July 24, 1991
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
April 17, 1991

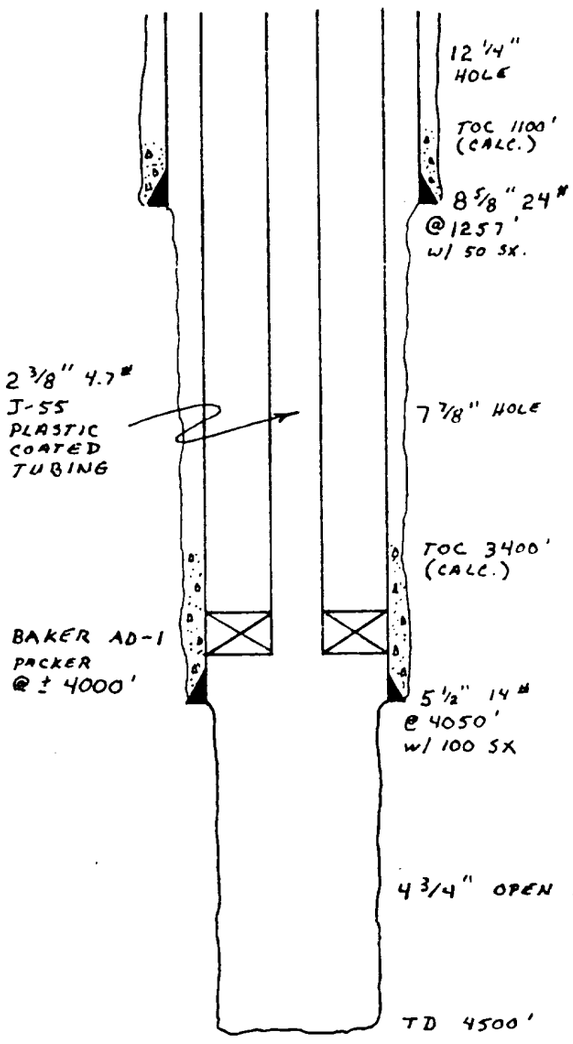
Cross Timbers Production Company, P.O. Box 50847, Midland, Texas 79710, (915)682-8873, is hereby giving notice of our intent to inject produced water and/or fresh water into the SEMGSAU Tract 9 Well No. 2 located 330' FNL & 990' FEL of Section 32, T-17-S, R-33-E for secondary recovery purposes. Water is to be injected into the Grayburg and San Andres formations from 4,050' to 4,500' at an expected rate of 200 BWPD and 1400 psig pressure. Interested persons objecting to this application must file a request for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within 15 days of this notice.

INJECTION WELL DATA SHEET

Cross Timbers Production Company — SEMGSAU Tract 9
OPERATOR — LEASE

2 — 300' FNL, 990' FEL — Section 32, T-17-S, R-33-E
WELL NO. — FOOTAGE LOCATION — SECTION — TOWNSHIP — RANGE

Schematic



Tabular Data

Surface Casing
Size 8-5/8" Cemented with 50 sx.
TOC 1,100' feet determined by calculated
Hole size 12-1/4"

Intermediate Casing
Size _____ Cemented with _____ sx.
TOC _____ feet determined by _____
Hole size _____

Long string
Size 5-1/2" Cemented with 100 sx.
TOC 3,400' feet determined by calculated
Hole size 7-7/8"
Total depth 4,500'

Injection interval
4,050 feet to 4,500 feet
(perforated or (open-hole), indicate which)

Tubing size 2-3/8" lined with plastic (material) set in a
Baker AD-1 (brand and model) packer at 4,000 feet
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Grayburg/San Andres
2. Name of Field or Pool (if applicable) Maljamar, SE
3. Is this a new well drilled for injection? [ ] Yes [X] 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
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Corbin (Abo) 8,580', Corbin (Queen) 3,700'