



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

December 9, 1982

Order No. R-5897, Rule 9
Request for Expansion - Form C-108
"Application for Authorization to Inject"
East Vacuum Grayburg-San Andres Unit
Lea County, New Mexico

New Mexico Dept. of Energy and Minerals
Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey
Division Director

Gentlemen:

Enclosed for processing and administration approval is subject application for expansion of waterflood injection well pattern in captioned unit. Proposed wells for conversion are:

1. East Vacuum Grayburg-San Andres Unit Tract No. 2622 Well No. 007
2. East Vacuum Grayburg-San Andres Unit Tract No. 2720 Well No. 008
3. East Vacuum Grayburg-San Andres Unit Tract No. 3202 Well No. 010

The following data is submitted in support of the request:

1. Form C-108
2. Well data information
3. Map identifying wells and leases within two (2) miles and with one-half ($\frac{1}{2}$) mile radius circle drawn around each proposed injection well
4. List of data on the proposed operation
5. Certified copy of Public Notice by newspaper
6. List of offset operators
(Surface ownership on all tracts is held by the State of New Mexico)
7. Notice has been given by certified mail to those entities in Item 6
(Copies of certified receipts are attached)

East Vacuum Grayburg-San Andres Unit
Request for Expansion
December 9, 1982
Page 2

Your consideration and early advice will be appreciated.

Very truly yours,



T. Harold McLemore
Regulation and Proration Supervisor

AMW:cb

cc: Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

Office of Land Commission
State of New Mexico
P.O. Box 1148
Santa Fe, New Mexico 87501

Marathon Oil Company (offset)
P.O. Box 552
Midland, Texas 79702

Mobil Producing Texas & New Mexico, Inc. (offset)
Nine Greenway Plaza, Suite 2700
Houston, Texas 77046

Attachments

PHILLIPS PETROLEUM COMPANY

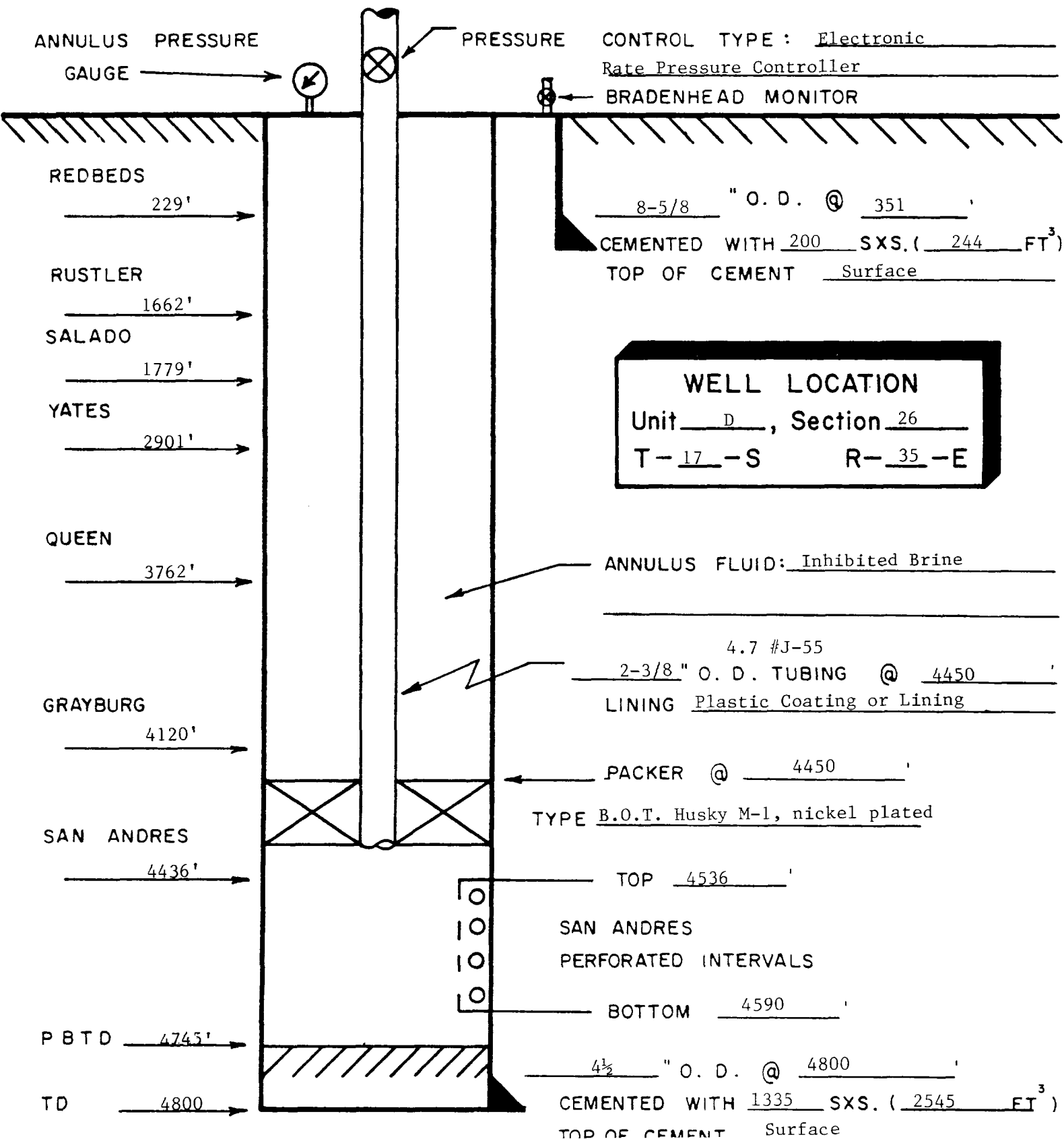
EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT

N. M. O. C. D. R - 5897

VACUUM GRAYBURG - SAN ANDRES POOL, LEA COUNTY, NEW MEXICO

TRACT 2622 WELL 007

CONVERSION TO WATER INJECTION STATUS

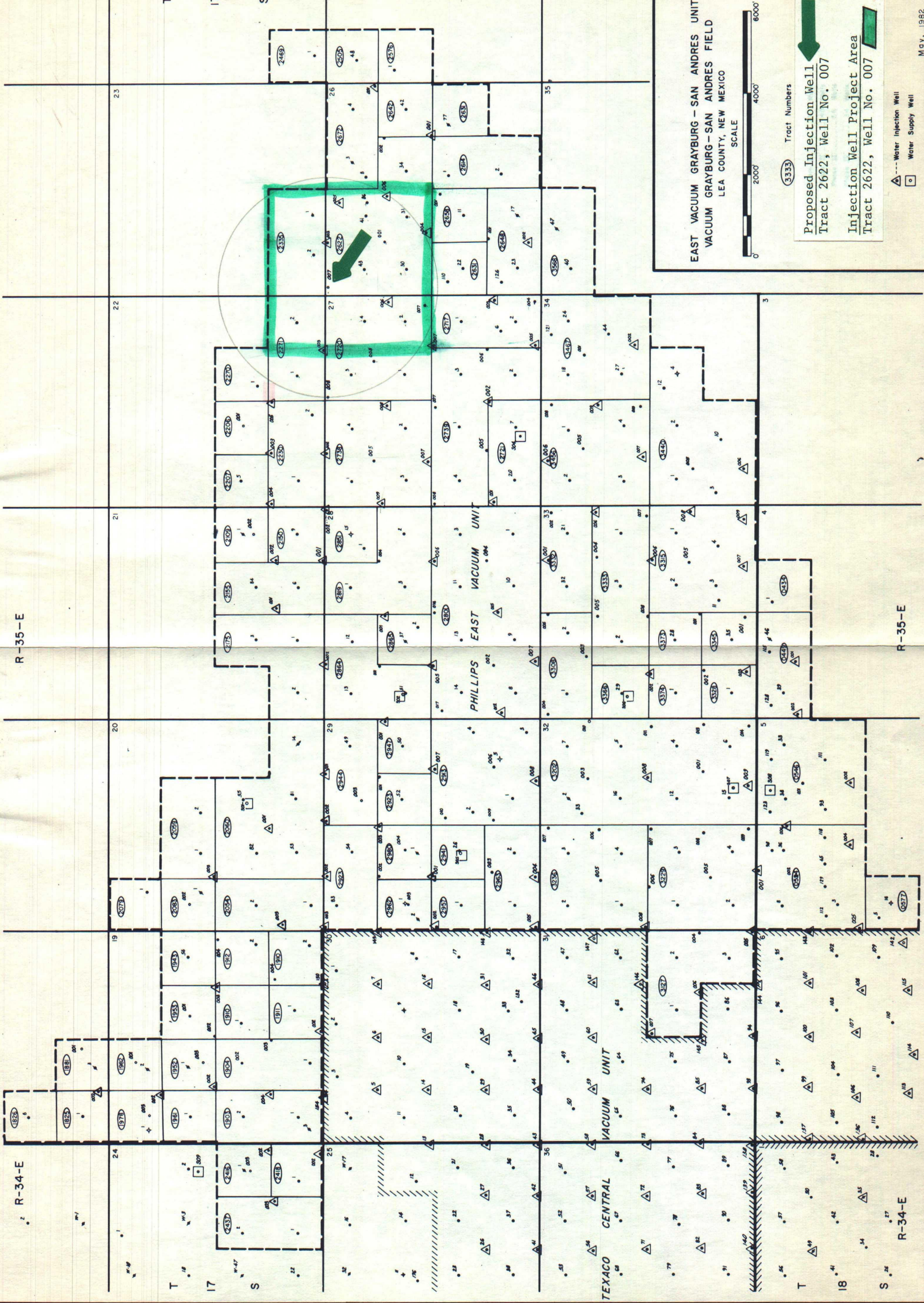


III. Well Data

- A. (1) East Vacuum Grayburg-San Andres Tract 2622, Well No. 007,
50' FNL & 200' FWL, Section 26, T-17-S, R-35-E, Lea County, NM
- (2) Casing
Surface: 8-5/8" O.D. 24#, K-55 set at 351'. Cemented with 200
sacks in a 12-1/4" hole, cement circulated to surface.
- Production: 4-1/2" O.D. 11.6# N-80 set at 4800'. Cemented with
1335 sacks in a 7-7/8" hole, cement circulated to
surface.
- (3) Tubing: 2-3/8" 4.7# J-55 set at 4450'. Plastic lined.
- (4) Packer: B.O.T. Husky M-1, Nickel Plated set at 4450'.
- B. (1) Formation: San Andres Pool: Vacuum
- (2) Injection Interval: 4536' to 4590', perforated
- (3) Well drilled originally for injection
- (4) N/A
- (5) N/A in this wellbore

VII. Proposed Operation:

- (1) Average Rate: 1500 Barrels Fluid Per Day
Maximum Rate: 2000 Barrels Fluid Per Day
- (2) Closed
- (3) Average Pressure: 300 psi
Maximum Pressure: 900 psi
- (4) Source of Fluid: Lea County underground water basin, permit No. L-4829
(all inclusive), L-7816, L-7860, L-7685, and reinjected produced fluid.
Compatibility proven by present injection into same formation.
- (5) N/A



EAST VACUUM GRAYBURG - SAN ANDRES UNIT
VACUUM GRAYBURG - SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO

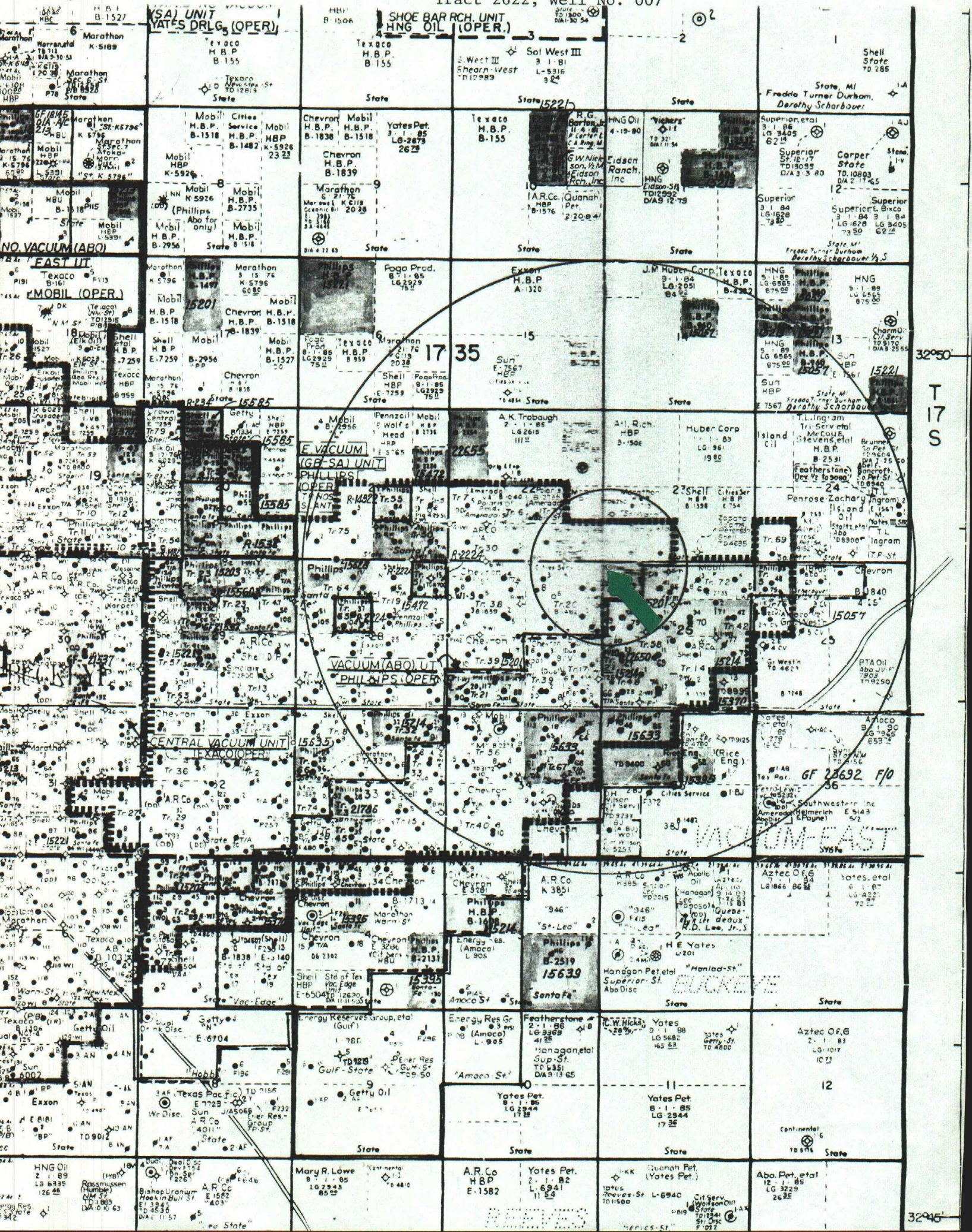


Tract Numbers
3333

Proposed Injection Well
Tract 2622, Well No. 007

Injection Well Project Area
Tract 2622, Well No. 007

Water Injection Well
Water Supply Well



PHILLIPS PETROLEUM COMPANY

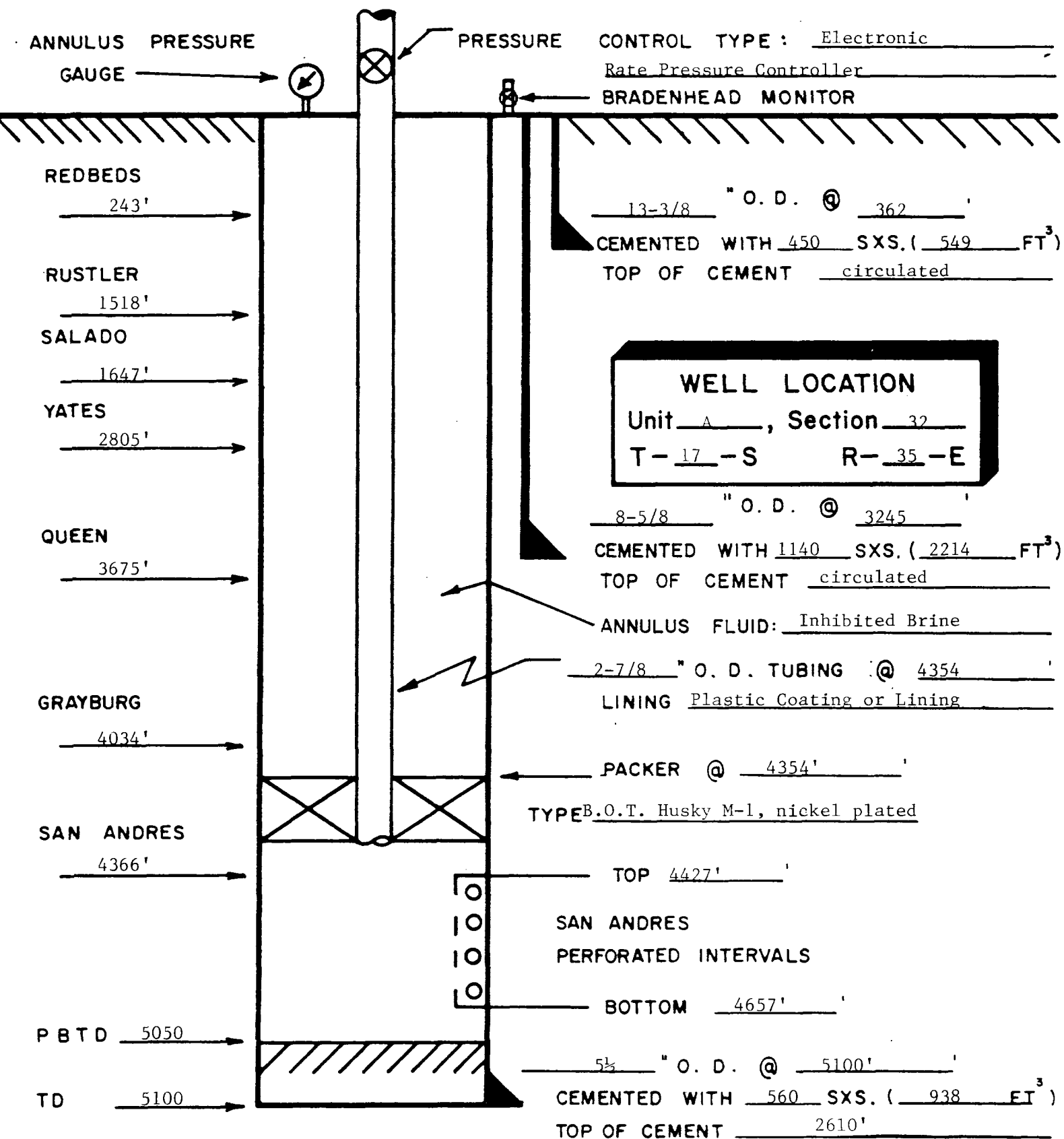
EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT

N. M. O. C. D. R - 5897

VACUUM GRAYBURG - SAN ANDRES POOL, LEA COUNTY, NEW MEXICO

TRACT 3202 WELL 010

CONVERSION TO WATER INJECTION STATUS



III. WELL DATA

- A. (1) East Vacuum Grayburg-San Andres Tract 3202, Well No. 010,
50' FEL, 1200' FNL, Section 32, T-17-S, R-35-E, Lea County, NM
- (2) Casing:
- Surface: 13-3/8" O.D. 46#, H-40 set at 362'. Cemented with 450
sacks in a 17-1/2" hole, cement circulated to surface.
- Intermediate: 8-5/8" O.D. 24#, 32#, K-55 set at 3245'. Cemented
with 1140 sacks in a 12-1/4" hole. Cement
circulated to surface.
- Production: 5-1/2" O.D. 14#, K-55 set at 5100'. Cemented with
560 sacks in a 7-7/8" hole, top of cement 2610 per
Phillips Petroleum Company temperature survey.
- (3) Tubing: 2-7/8" O.D., 6.5#, J-55 set at 4354'.
- (4) Packer: B.O.T. Husky M-1, nickel plated set at 4354'.
- B. (1) Formation: San Andres Pool: Vacuum
- (2) Injection Interval: 4427' to 4657', perforated
- (3) Well drilled originally for injection
- (4) N/A
- (5) N/A

VII. Proposed Operation:

(1) Average Rate: 1500 Barrels Fluid Per Day
Maximum Rate: 2000 Barrels Fluid Per Day

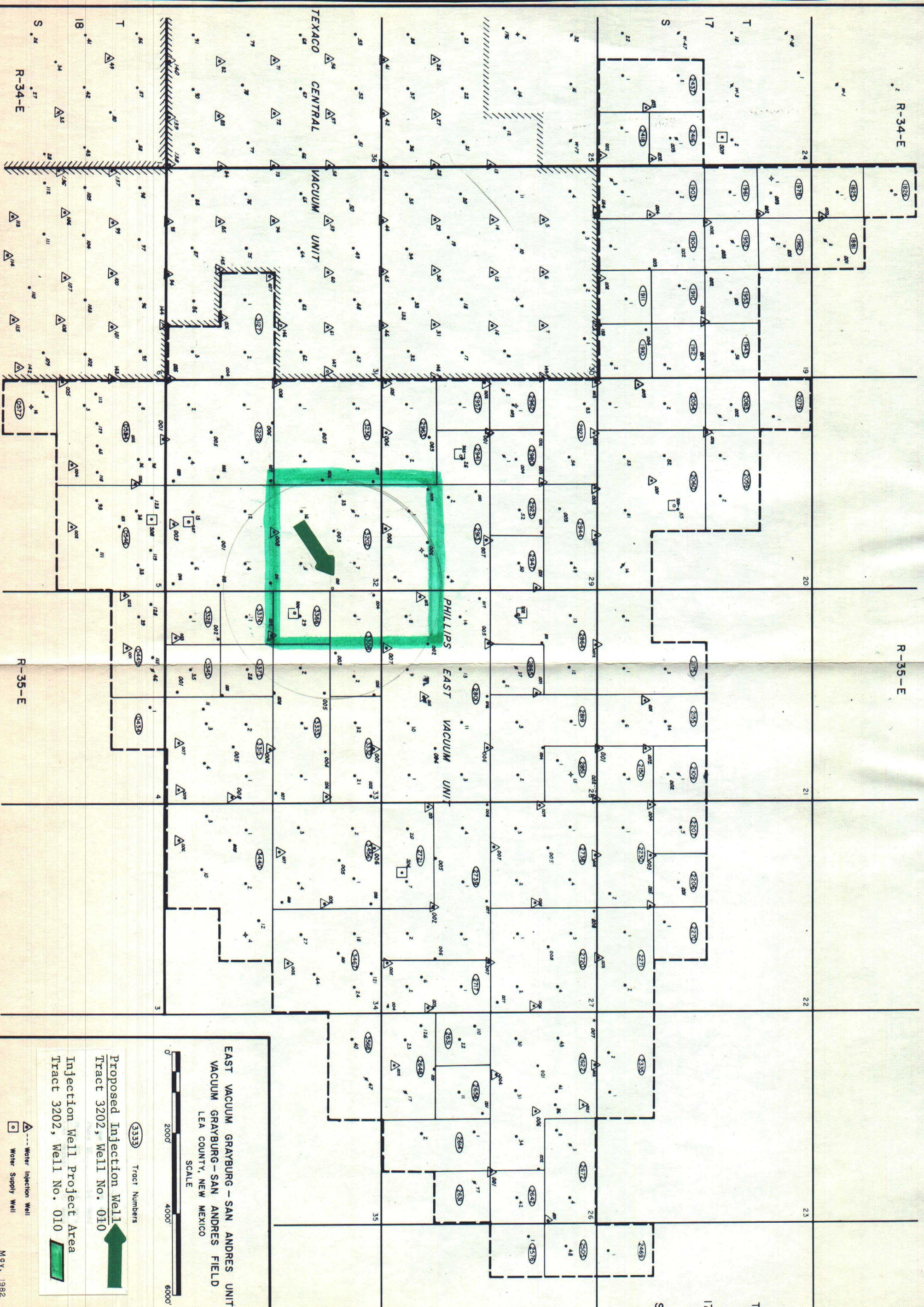
(2) Closed

(3) Average Pressure: 300
Maximum Pressure: 900 psi

(4) Source of Fluid: Lea County Underground Water Basin, Permit

Nos. L-4829 (all inclusive), L-7695, L-7860, L-7685, and Reinject
Produced Fluid. Compatibility Proven By Present Injection Into Same
Formation.

(5) N/A



May, 1982

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no
on the East Vacuum Grayburg-San Andres Unit, Lea County, New Mexico
- II. Operator: Phillips Petroleum Company
Address: Room 401, 4001 Penbrook Odessa, Texas 79762
Contact party: Mr. E. E. Clark Phone: 367-1257(McLemore)
- 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 R-5897.
- 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:
(see attached proposed operation sheet)
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. None
- * 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: W. J. Mueller Title Senior Engineering Specialist
Signature: _____ Date: December 9, 1982
- * 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. Examiner Hearing, October 25, 1978, Case No.6367, R-5897

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:

- See Attached Data Sheet--
- (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

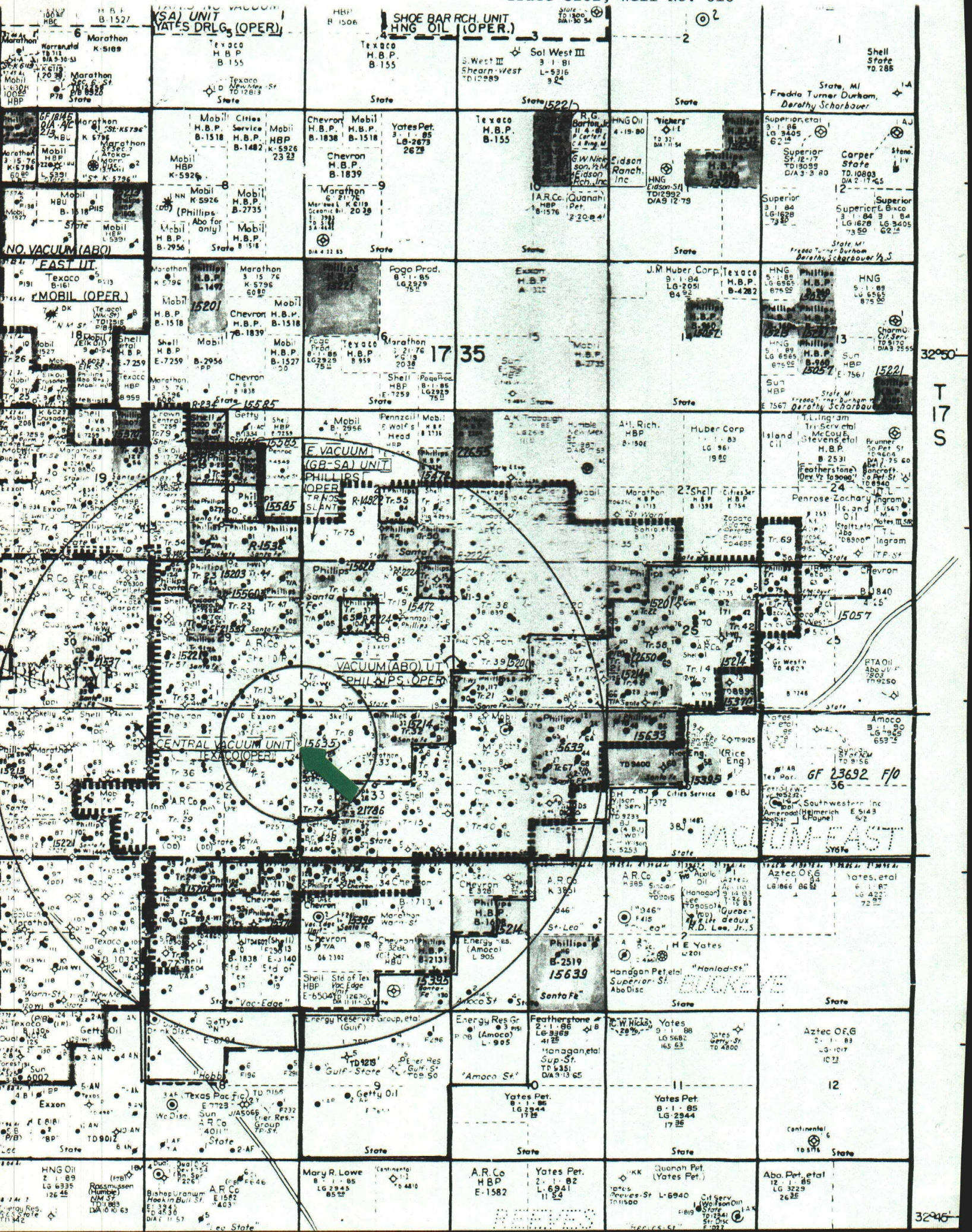
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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.



OFFSET OPERATORS

East Vacuum Grayburg San Andres Unit

Marathon Oil Company
Attn: Mr. G. A. Naert
P.O. Box 552
Midland, Texas 79702

Mobil Producing Texas & New Mexico, Inc.
Nine Greenway Plaza, Suite 2700
Houston, Texas 77046

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

1, _____

ROBERT L. SUMMERS

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 in a supplement thereof for a period

of _____

ONE _____ weeks.

Beginning with the issue dated

DECEMBER 9, 1982

and ending with the issue dated

DECEMBER 9, 1982

Robert L. Summers
Publisher.

Sworn and subscribed to before

me this 9TH day of

DECEMBER, 1982

Symeth Haegele
Notary Public.

My Commission expires _____

March 29, 1986
(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

December 9, 1982

NOTICE is hereby given of the application of Phillips Petroleum Company, Attention: E. E. Clark, Manager of Operations, 4001 Penbrook Street, Odessa, Texas 79762 — telephone (915) 367-1290, to the Oil Conservation Division, New Mexico Energy & Minerals Department, for approval of the following injection wells(s) for the purpose of pressure maintenance and enhance recovery Well(s) No(s). Tract 3202, Well No. 010: Tract 2622, Well No. 007, Tract 2720, Well No. 008 Lease/Unit Name: East Vacuum Grayburg/San Andres Unit. Location: Section 26, 27 & 32, T-17-S, R-35-E NMPM, Lea County, New Mexico.

The injection formation is Grayburg/San Andres at an approximate depth of 4427'-4657' feet below the surface of the ground. Expected maximum injection rate is 1500 barrels per day, and expected maximum injection pressure is 900 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days of this publication.

P 204 644 090
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		Marathon Oil Co.	
STREET AND NO.		P.O. Box 552	
P.O., STATE AND ZIP CODE		Midland, TX 79702	
POSTAGE		\$	
CERTIFIED FEE		€	
SPECIAL DELIVERY		€	
RESTRICTED DELIVERY		€	
SHOW TO WHOM AND DATE DELIVERED		€	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		€	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		€	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		€	
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE			

PS Form 3800, Apr. 1976

P 204 644 091
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		Mobil Prod. TX/NM, Inc.	
STREET AND NO.		Nine Broadway Plaza Suite 2700	
P.O., STATE AND ZIP CODE		Houston, TX 77046	
POSTAGE		\$	
CERTIFIED FEE		€	
SPECIAL DELIVERY		€	
RESTRICTED DELIVERY		€	
SHOW TO WHOM AND DATE DELIVERED		€	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		€	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		€	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		€	
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE			

PS Form 3800, Apr. 1976

PHILLIPS PETROLEUM COMPANY

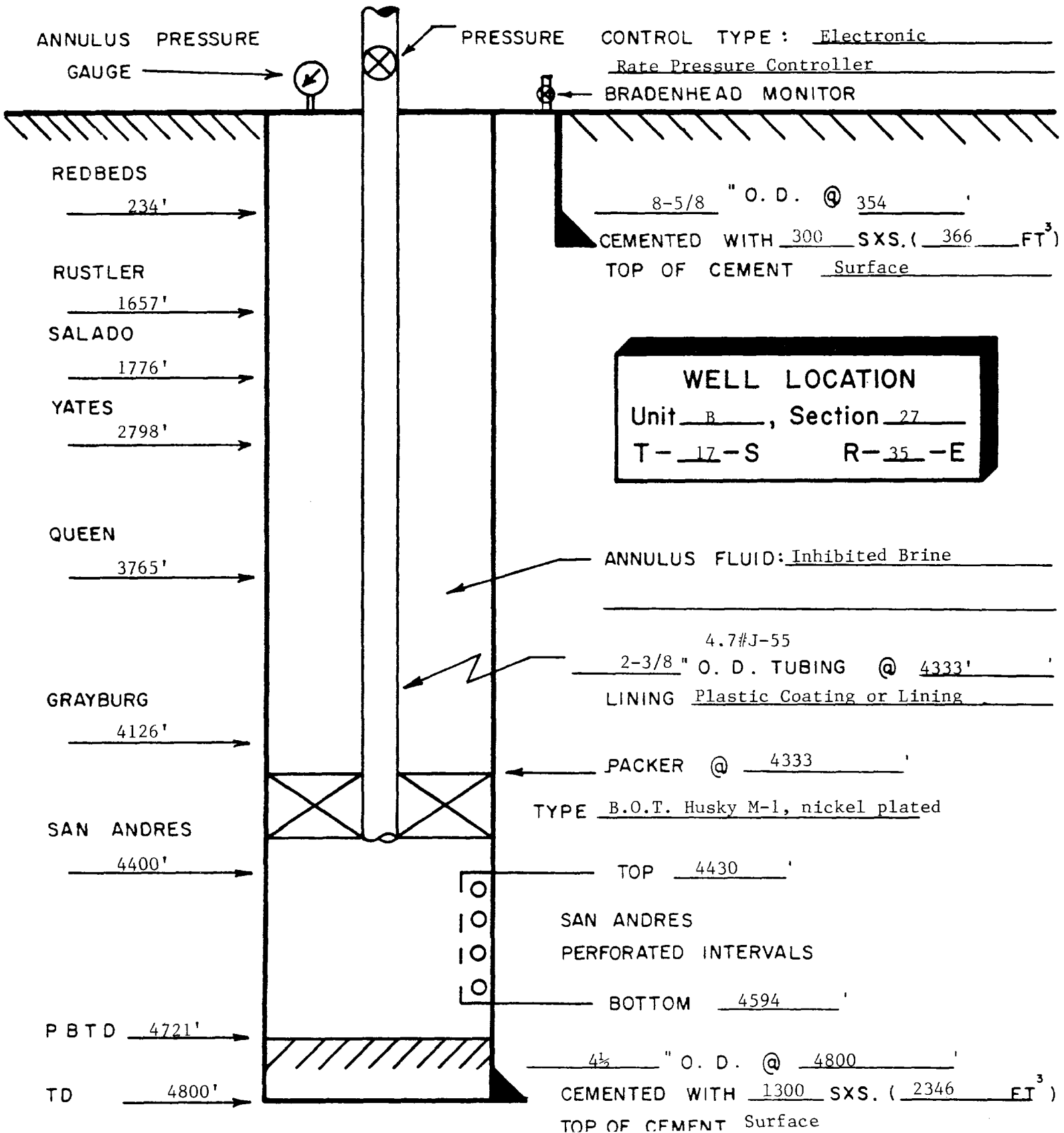
EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT

N. M. O. C. D. R- 5897

VACUUM GRAYBURG — SAN ANDRES POOL, LEA COUNTY, NEW MEXICO

TRACT 2720 WELL 008

CONVERSION TO WATER INJECTION STATUS

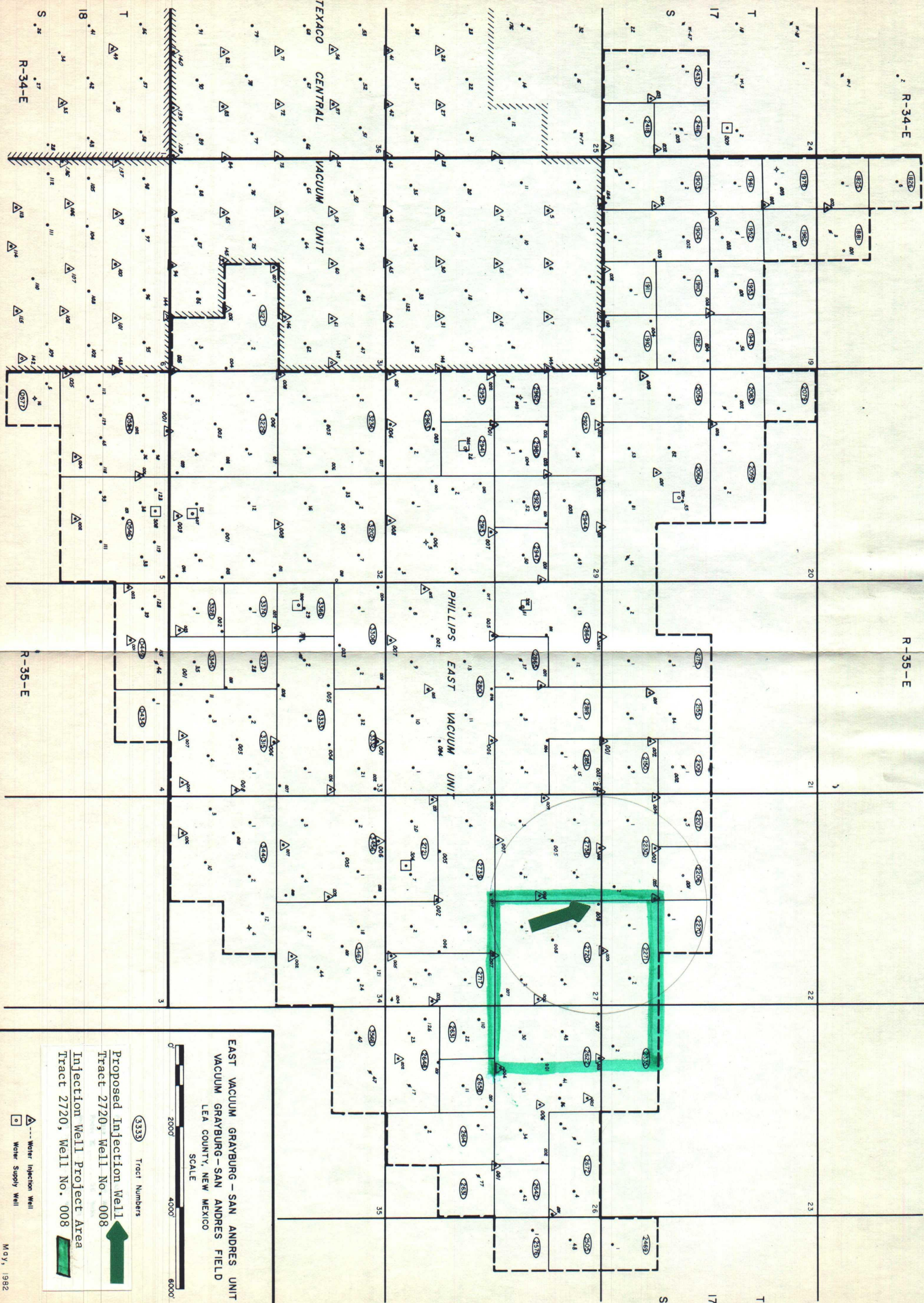


III. Well Data

- A. (1) East Vacuum Grayburg-San Andres Tract 2720, Well No. 008,
50' FNL & 2500' FEL, Section 27, T-17-S, R-35-E, Lea County, NM
- (2) Casing:
Surface: 8-5/8" O. D. 24#, K-55 set at 354'. Cemented with 300
sacks in a 12-1/4" hole, cement circulated to surface.
- Production: 4-1/2" O.D. 11.6#, N-80 set at 4800'. Cemented with
1300 sacks in a 7-7/8" hole, cement circulated to
surface.
- (3) Tubing: 2-3/8" O.D. 4.7# J-55 set at 4333', plastic lined.
- (4) Packer: B.O.T. Husky M-1, nickel plated set at 4333'.
- B. (1) Formation: San Andres Pool: Vacuum
- (2) Injection Interval: 4430' to 4594', perforated.
- (3) Well drilled originally for injection.
- (4) N/A
- (5) N/A

VII. Proposed Operation

- (1) Average rate 1500 barrels per day
Maximum rate 2000 barrels per day
- (2) Closed
- (3) Average Pressure: 300 psi
Maximum Pressure: 900 psi
- (4) Source of Fluid: Lea County underground water basin, permit
Nos. L-4829(all inclusive), L-7695, L-7816, L-7860, L-7685, and
reinjecting produced fluid. Compatibility proven by present injection
into same formation.
- (5) N/A



EAST VACUUM GRAYBURG-SAN ANDRES UNIT
VACUUM GRAYBURG-SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO



(3333) Tract Numbers

Proposed Injection Well
Tract 2720, Well No. 008

Injection Well Project Area
Tract 2720, Well No. 008

Water Injection Well
Water Supply Well

May, 1982

