

Due 7-29-82

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**PHILLIPS PETROLEUM COMPANY**

ODESSA, TEXAS 79762  
4001 PENBROOK

NATURAL RESOURCES GROUP  
Exploration and Production

July 2, 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 (3)  
Oil Conservation Division  
P. O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey  
Division Director

RECEIVED  
JUL 17 1982  
STATE OF NEW MEXICO  
SANTA FE

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 Track No. 3229 Well No. 007
  2. East Vacuum Grayburg-San Andres Unit Track No. 3202 Well No. 011
- } etc

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)

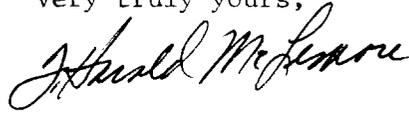
COPY to state  
ok

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

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Your consideration and early advice will be appreciated

Very truly yours,



T. Harold McLemore  
Regulation and Proration Supervisor

THM:ls

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

Shell Oil Company  
P.O. Box 576  
Houston, Texas 77001

✓ *OK*  
*Surface owner*

✓ *OK*

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 79761  
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: Ralph J. Roper Date: July 2, 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 Well 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.

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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.

WELL DATA SHEET  
EAST VACUUM GRAYBURG-SAN ANDRES UNIT

III. Well Data.

A. (1) East Vacuum Grayburg-San Andres Tract 3229 Well No. 007,  
Sec. 32, T-17-S, R-35-E, 2600 FSL and 2500 FWL.

(2) Casing.

Surface: 9-5/8" O. D. set at 365'. Cemented with 400 sacks,  
in a 12-1/4" hole, circulated to the surface.

Production: 7", 23#/ft., k-55 set at 4800'. Cemented with 1600  
sacks, in a 8-7/8" hole, cement circulated to surface.

(3) Tubing: 2-7/8", 6.5#/ft., J-55 set at 4270', plastic lined.

(4) Packer: Baker Loc-Set, Nickel Plated set at 4270'.

B. (1) Formation: San Andres Field: Vacuum

(2) Injection interval: 4345' to 4600', perforated.

(3) Well drilled originally for production.

(4) N/A

(5) N/A in this wellbore.

III. Well Data.

A. (1) East Vacuum Grayburg-San Andres Tract 3202 Well No. 011,  
Sec. 32, T-17-S, R-35-E, 2600 FSL and 200 FEL.

(2) Casing:

Surface: 9-5/8" O. D. set at 359', cemented with 400 sacks,  
in a 12-1/4" hole, circulated to the surface.

Production: 7", 23#/ft., K-55 set at 4775', cemented with 1450  
sacks, in a 8-7/8" hole, circulated to the surface.

(3) Tubing: 2-7/8", 6.5#/ft., J-55, set at 4280', plastic lined

(4) Packer: Baker Loc-Set, Nickel Plated set at 4280'. ✓

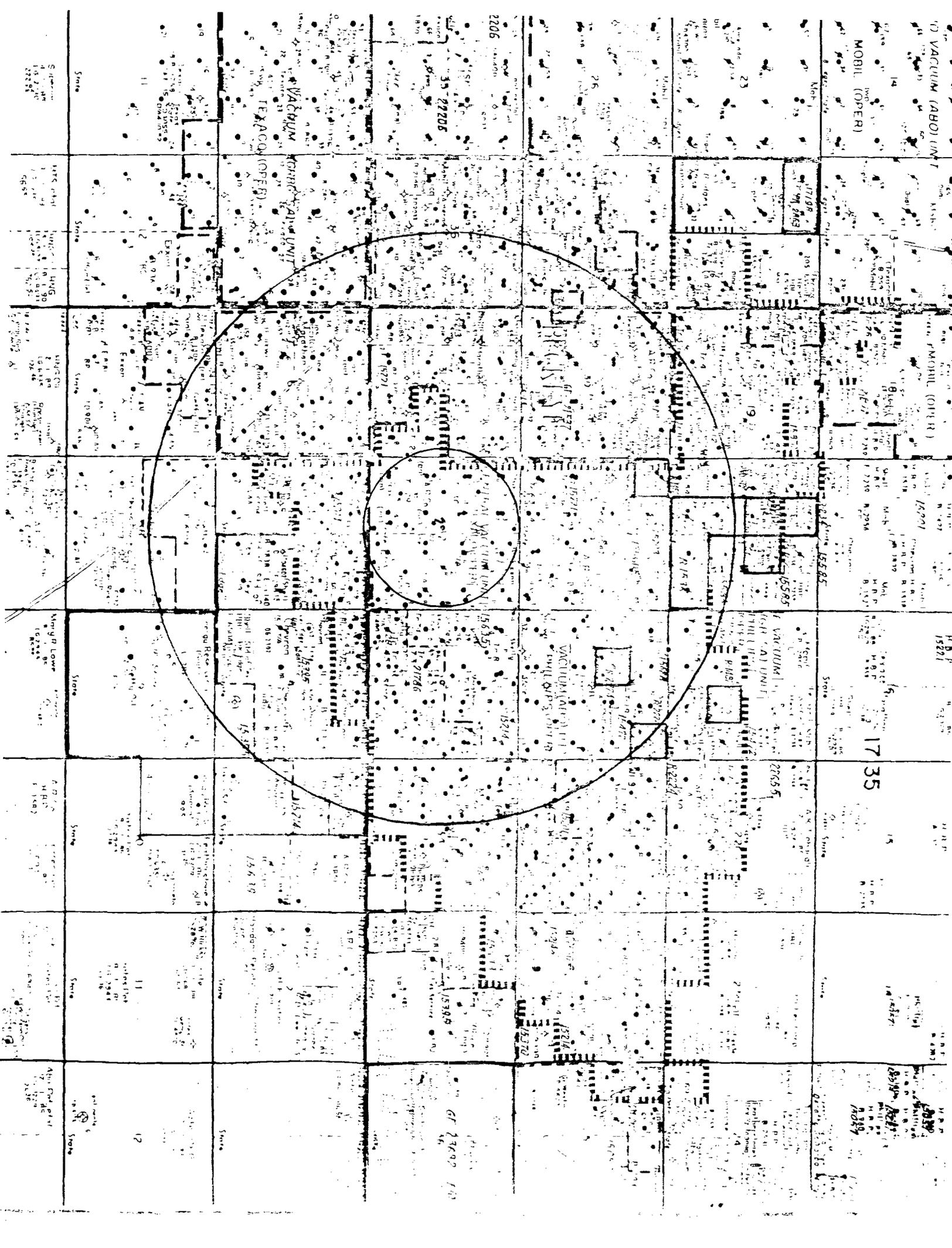
B. (1) Formation: San Andres Field: Vacuum

(2) Injection interval: 4353' to 4453', perforated.

(3) Well drilled originally for production. *de*

(4) Perforations at 4576' to 4584' shut off by cast iron bridge plug  
set at 4550' and capped with 2 sacks cement. Top of cement at 4539'.

(5) N/A in this wellbore.



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MOBIL (OPER)

MOBIL (OPER)

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VACUUM (ABO) UNIT

VACUUM (OPER)

TEXACO (OPER)

VACUUM (OPER)

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DATA ON PROPOSED OPERATION  
EAST VACUUM GRAYBURG-SAN ANDRES UNIT  
TRACT 3229 WELL NO. 007 AND TRACT 3202 WELL NO. 011

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: 870 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 reinjected  
produced fluid. Compatibility proven by present injection into same  
formation. | ok
- (5) N/A

**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

JUNE 16, 1982

and ending with the issue dated

JUNE 16, 1982

*Robert L. Summers*  
Publisher.

Sworn and subscribed to before

me this 16TH day of

JUNE, 1982

*Synette Naegle*  
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**  
**JUNE 16, 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 well(s) for the purpose of pressure maintenance and enhancement recovery Well(s) No(s): Tract 3229 Well No. 007, Tract 3202 Well No. 011 Lease/Unit Name: East Vacuum Grayburg/San Andres Unit Location: Section 32, T-17-S, R-35E NMPM, Lea County, New Mexico.

The injection formation is Grayburn-San Andres at a depth of 4350 feet below the surface of the ground. Expected maximum injection rate is 2000 barrels per day, and expected maximum injection pressure is 865 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.

OFFSET OPERATORS  
EAST VACUUM GRAYBURG-SAN ANDRES UNIT

Shell Oil Company  
P. O. Box 576  
Houston, Texas 77001



P 204 644 055

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL  
See Reverse

PS Form 3800, Apr. 1976

SENDER'S NAME AND ADDRESS  
*Shell Oil Company*  
*P. O. Box 576*  
 CITY, STATE AND ZIP CODE  
*Houston, Texas 77001*

POSTAGE

CERTIFIED FEE

CONSULT POSTMASTER FOR FEES

OPTIONAL SERVICES

RETURN RECEIPT SERVICE

SPECIAL DELIVERY  
 REGISTERED DELIVERY

SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY

TOTAL POSTAGE AND FEES \$

POSTMARK OR DATE

**CERTIFIED**  
 P 204 644 055  
 MAIL

PS Form 3811, Jan. 1979

1. SENDER Complete items 1, 2, and 3. Add your address in the "RETURN TO" space on reverse.

2. The following service is requested (check one.)  
 Show to whom and date delivered..... c  
 Show to whom, date and address of delivery..... c  
 RESTRICTED DELIVERY  
 Show to whom and date delivered..... c  
 RESTRICTED DELIVERY  
 Show to whom, date, and address of delivery \$ \_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO  
*Shell Oil Company*  
*P. O. Box 576*  
*Houston, Texas 77001*

3. ARTICLE DESCRIPTION  
 REGISTERED NO. CERT. FEE NO. INSURED NO.  
*P204 644 055*

(Always obtain signature of addressee or agent)

I have received the article described above  
 SIGNATURE  Addressee  Authorized agent

4. DATE OF DELIVERY POSTMARK

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

PHILLIPS PETROLEUM COMPANY

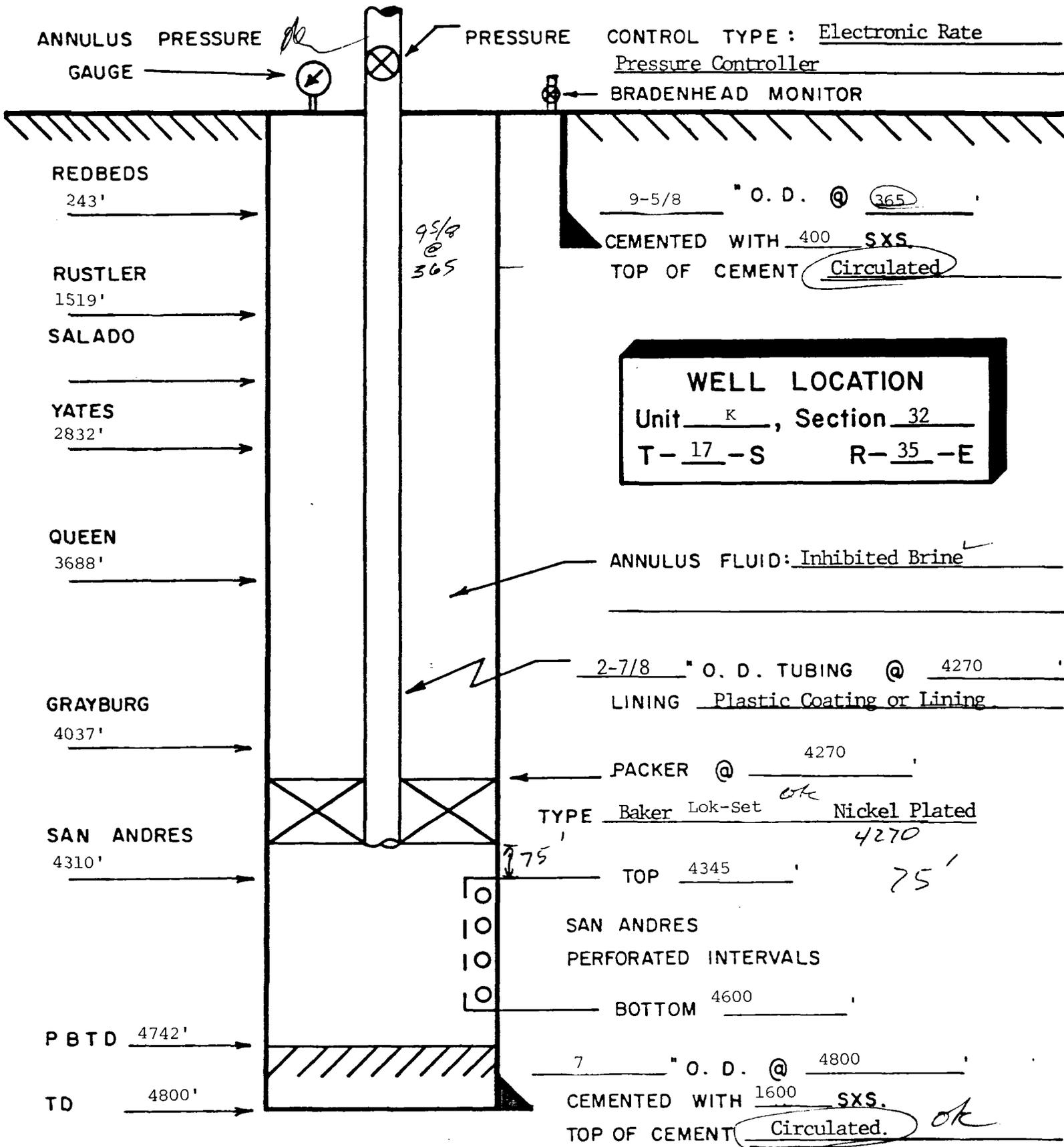
EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT

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

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

TRACT 3229 WELL 007

CONVERSION TO WATER INJECTION STATUS



PHILLIPS PETROLEUM COMPANY

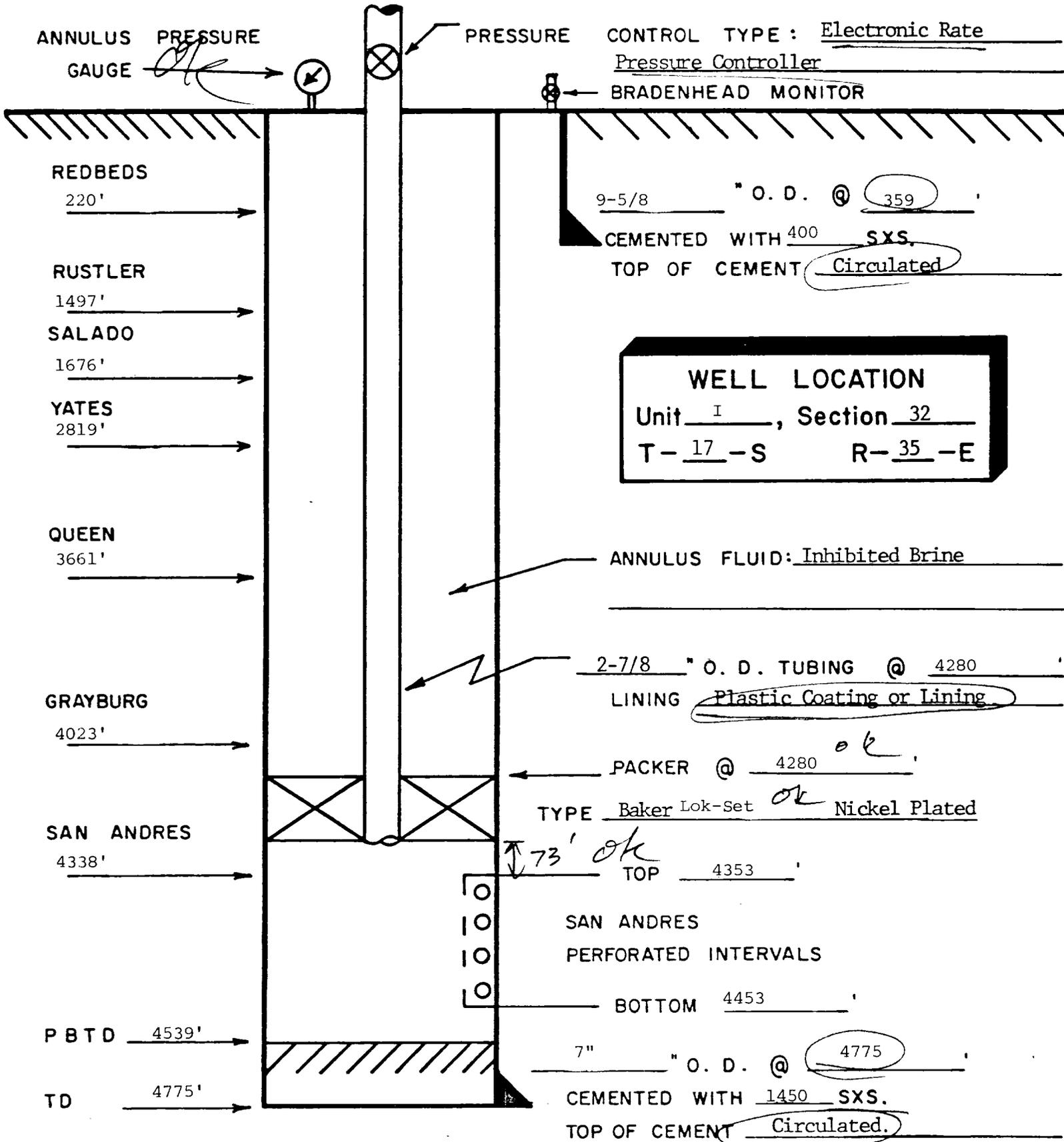
EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT

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

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

TRACT 3202 WELL 011

CONVERSION TO WATER INJECTION STATUS



OIL CONSERVATION DIVISION  
DISTRICT I

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

DATE July 13, 1982

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed HSP \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX X

Gentlemen:

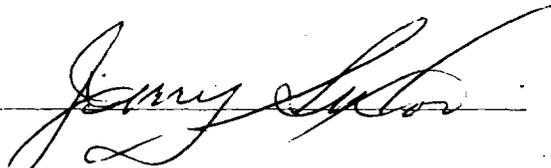
I have examined the application for the:

Phillips Pet. Co. E. Vacuum G/SA Unit Tr. 3229 #7 & Tr. 3202 #11 32-17-35  
Operator Lease and Well No. Unit, S - T - R

and my recommendations are as follows:

O.K.----J.S.

Yours very truly,



Jmc

ok R.J.

JUL 15 1982  
SANTA FE