



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

NATURAL RESOURCES GROUP
Exploration and Production



May 27, 1981

Expansion of Waterflood Project-
East Vacuum Grayburg/San Andres Unit
Lea County, New Mexico

New Mexico Department of Energy and Minerals (3)
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey
Division Director

Gentlemen:

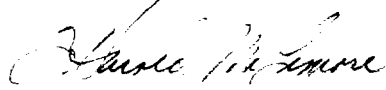
We respectfully request administrative approval of expansion of waterflood injection well pattern, as provided by Order No. R-5897, Rule No. 9, for the East Vacuum Grayburg/San Andres Unit pressure maintenance project, to convert East Vacuum Grayburg/San Andres Unit, Tract 2150, Well No. 002; East Vacuum Grayburg/San Andres Unit, Tract 2230, Well No. 004; and East Vacuum Grayburg/San Andres Unit, Tract 2738, Well No. 008, to water injection service. The following data is submitted in support of this request:

1. Unit plat reflecting the proposed injection well and injection well project area of each well (Tract 2150, No. 002--Unit P, Section 21, T-17-S, R-35-E; Tract 2230, No. 004--Unit M, Section 22, T-17-S, R-35-E; Tract 2738, No. 008--Unit F, Section 27, T-17-S, R-35-E).
2. Compensated Neutron log (Tract 2738, No. 008) or Borehole Compensated Sonic log (Tract 2150, No. 002 and Tract 2230, No. 004) for the injection well.
3. Diagrammatic sketch of each proposed well, injection tubing, packer, and pressure control elements identifying the San Andres perforated injection intervals.
4. The name of the injection formation of each well is San Andres with injection to be into the well intervals as follows: Tract 2150, No. 002--4510' to 4720'; Tract 2230, No. 004--4540' to 4680'; and Tract 2738, No. 008--4367' to 4598'. The maximum anticipated injection pressure will be no more than 0.2 psi per foot to the top of the perforations with a maximum daily volume anticipated to 2500 bbls for all identified wells.

Expansion of Waterflood Project
May 27, 1981
Page: 2

Your consideration and early advice will be appreciated.

Yours very truly,

A handwritten signature in cursive script, appearing to read "T. Harold McLemore".

T. Harold McLemore
Regulation and Proration Supervisor

SKN:gr
Enclosures

cc: Oil Conservation Division
Hobbs, New Mexico
(Attachments without logs)

PHILLIPS PETROLEUM COMPANY

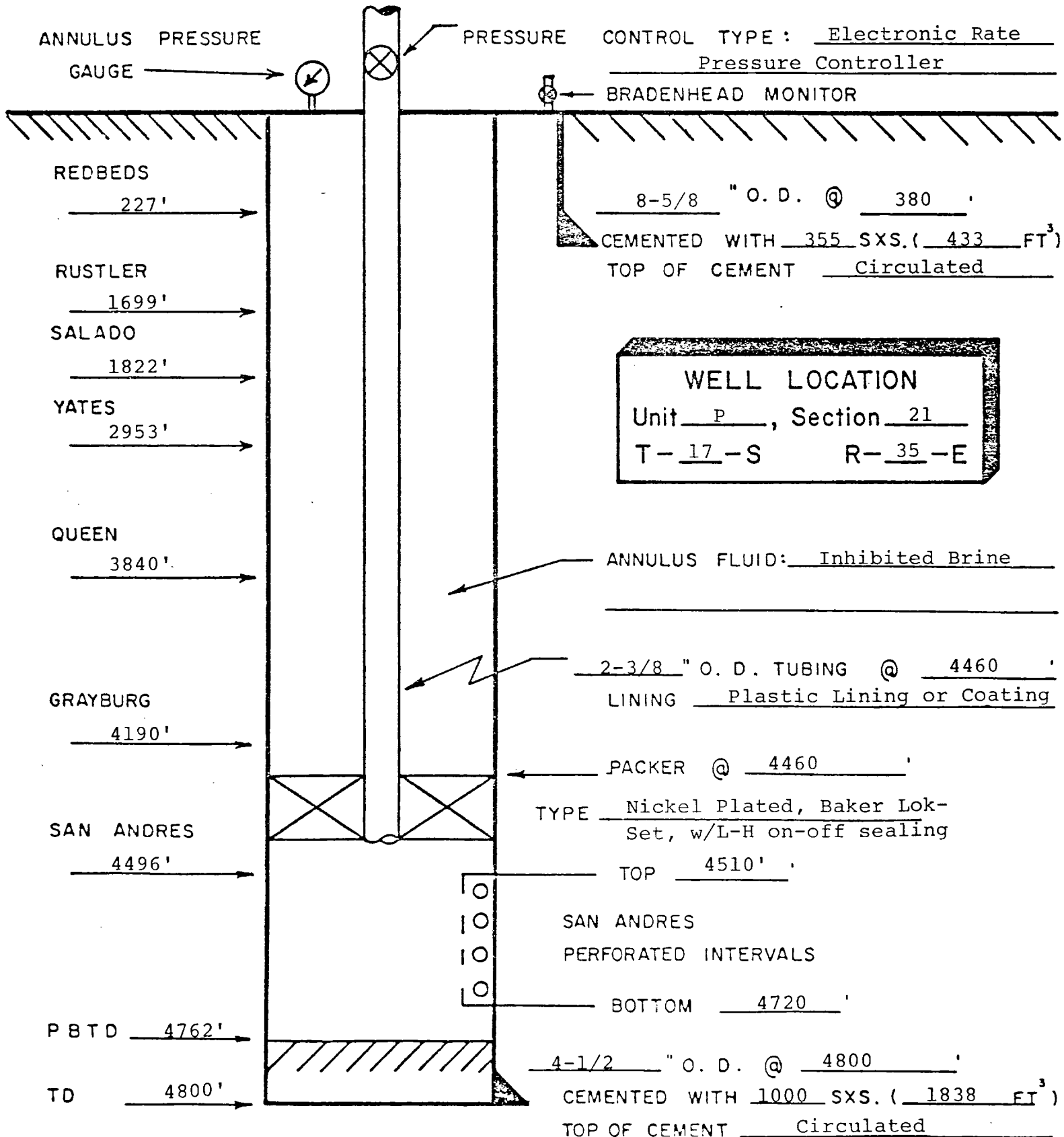
EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT

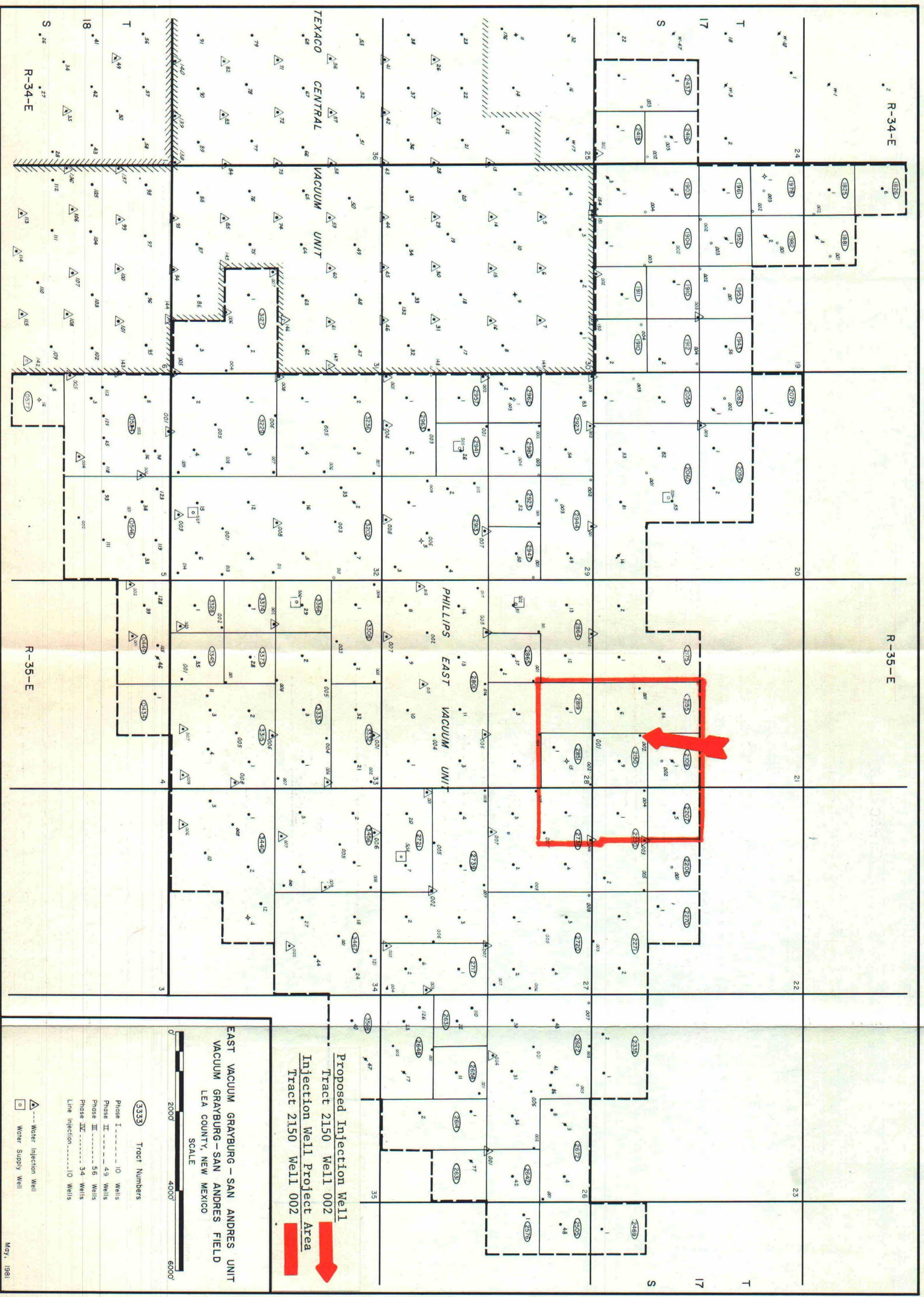
N.M.O.C.D. R-5897

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

TRACT 2150 WELL 002

CONVERSION TO WATER INJECTION STATUS





Proposed Injection Well
Tract 2150 Well 002
Injection Well Project Area
Tract 2150 Well 002

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



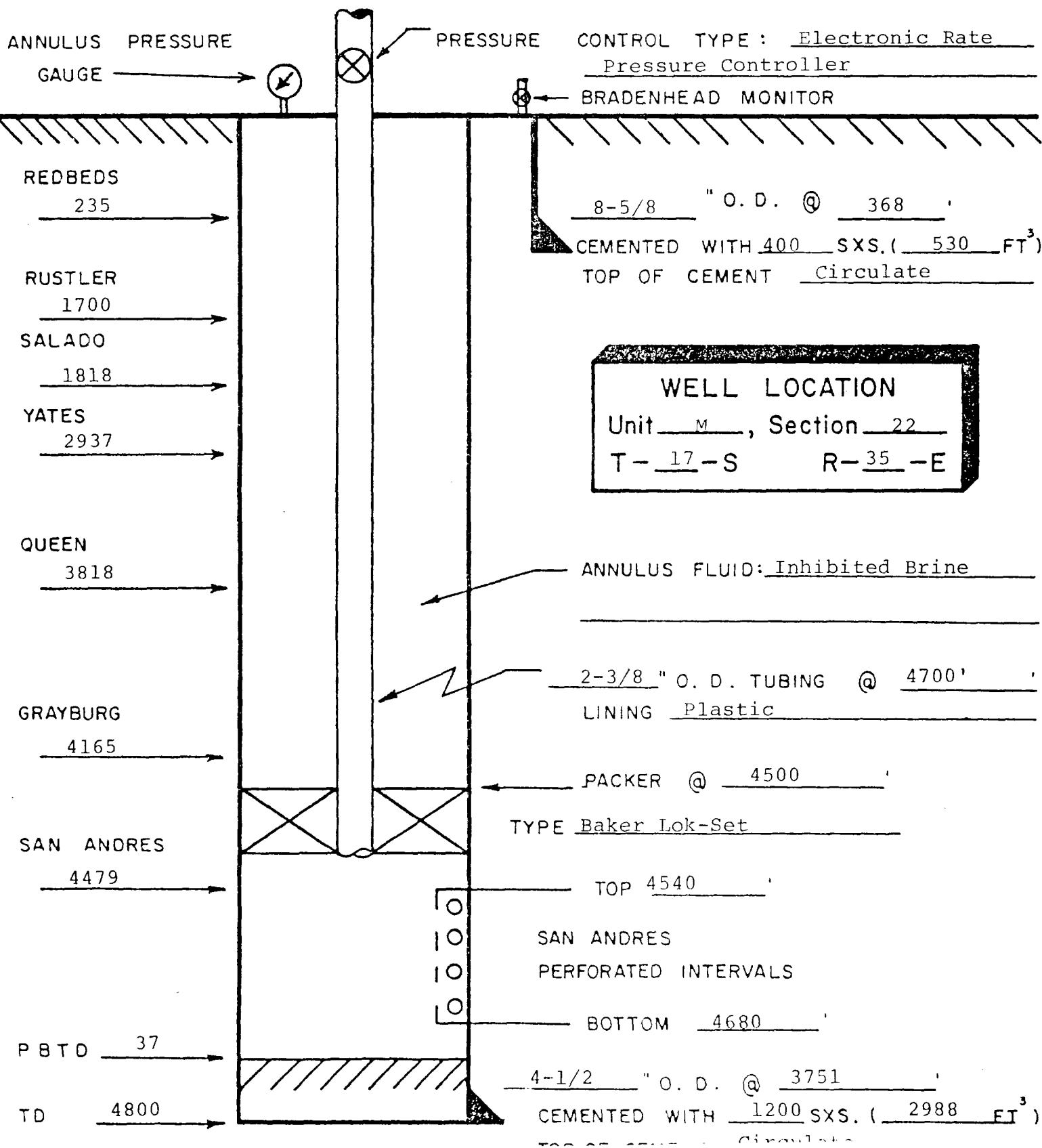
- (3333) Tract Numbers
- Phase I ----- 10 Wells
- Phase II ----- 49 Wells
- Phase III ----- 56 Wells
- Phase IV ----- 34 Wells
- Line Injection ----- 10 Wells
- Water Injection Well
- Water Supply Well

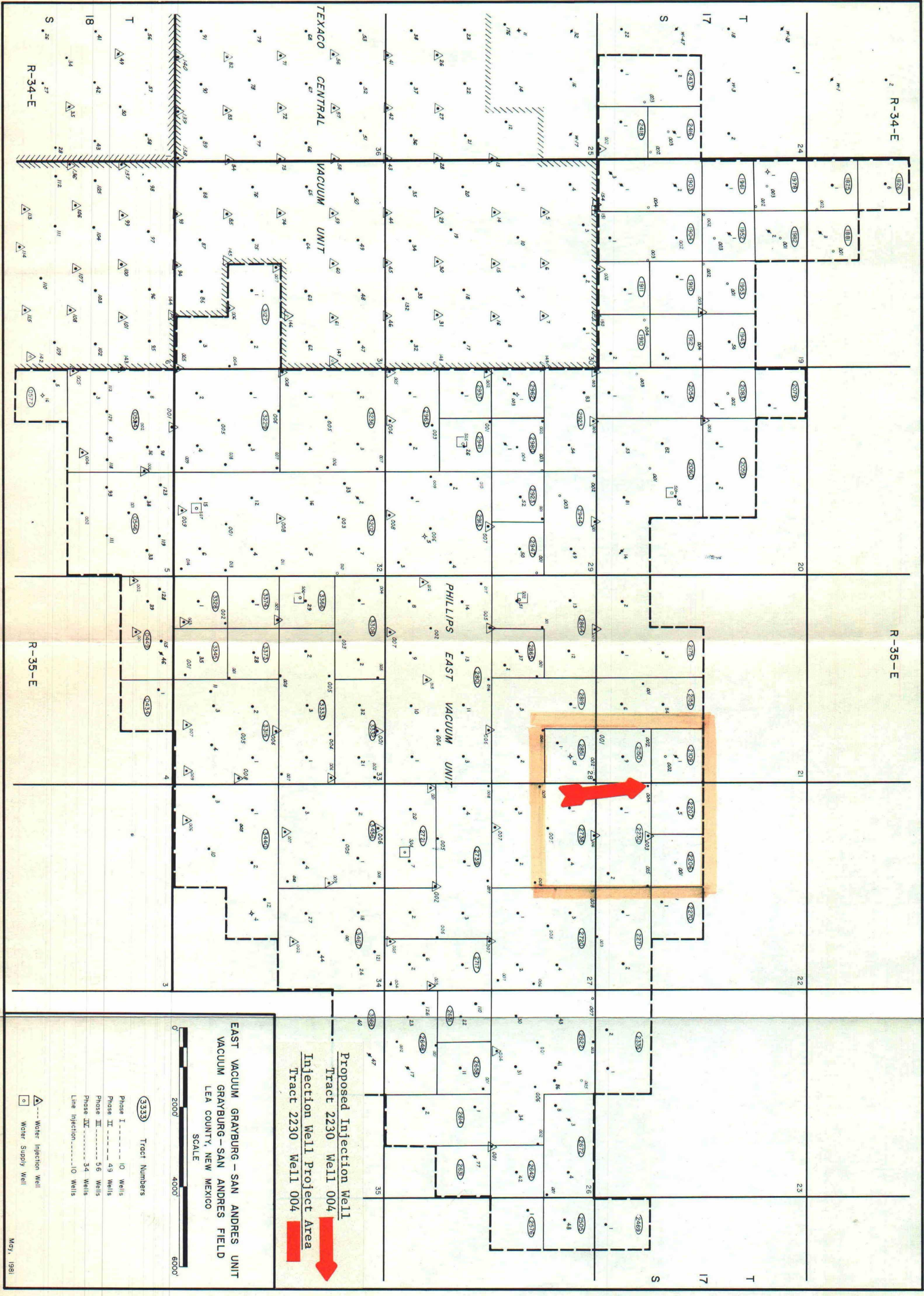
PHILLIPS PETROLEUM COMPANY

EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT N. M. O. C. D. R-5897

VACUUM GRAYBURG - SAN ANDRES POOL, LEA COUNTY, NEW MEXICO
TRACT 2230 WELL 004

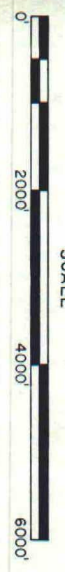
CONVERSION TO WATER INJECTION STATUS



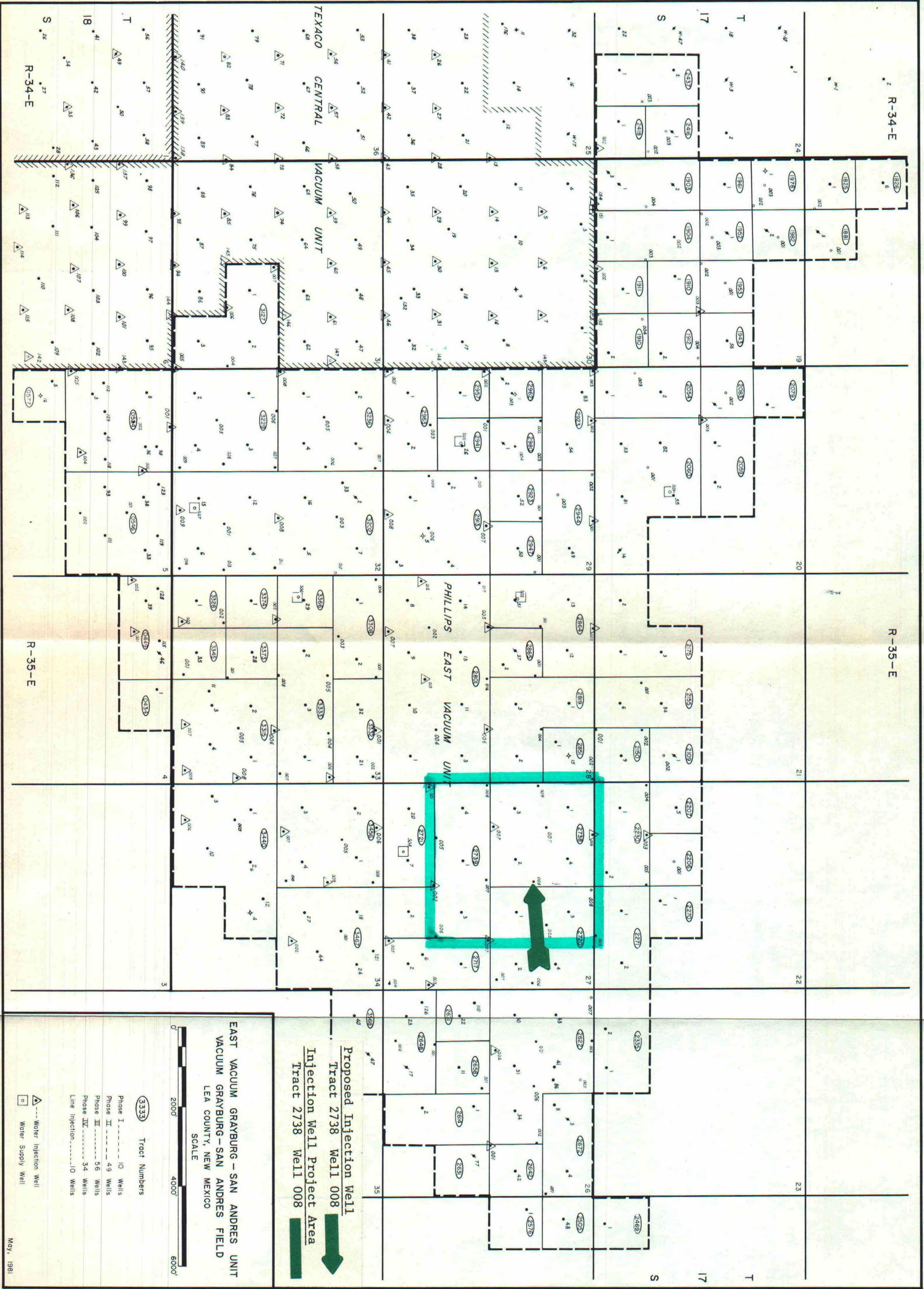


Proposed Injection Well
Tract 2230 Well 004
Injection Well Project Area
Tract 2230 Well 004

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



- 3333 Tract Numbers
- Phase I - 10 Wells
- Phase II - 43 Wells
- Phase III - 56 Wells
- Phase IV - 34 Wells
- Line Injection - 10 Wells
- Water Injection Well
- Water Supply Well



Proposed Injection Well
Tract 2738 Well 008
Injection Well Project Area

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



- (3333) Tract Numbers
- Phase I ----- 10 Wells
- Phase II ----- 43 Wells
- Phase III ----- 56 Wells
- Phase IV ----- 34 Wells
- Line Injection ----- 10 Wells

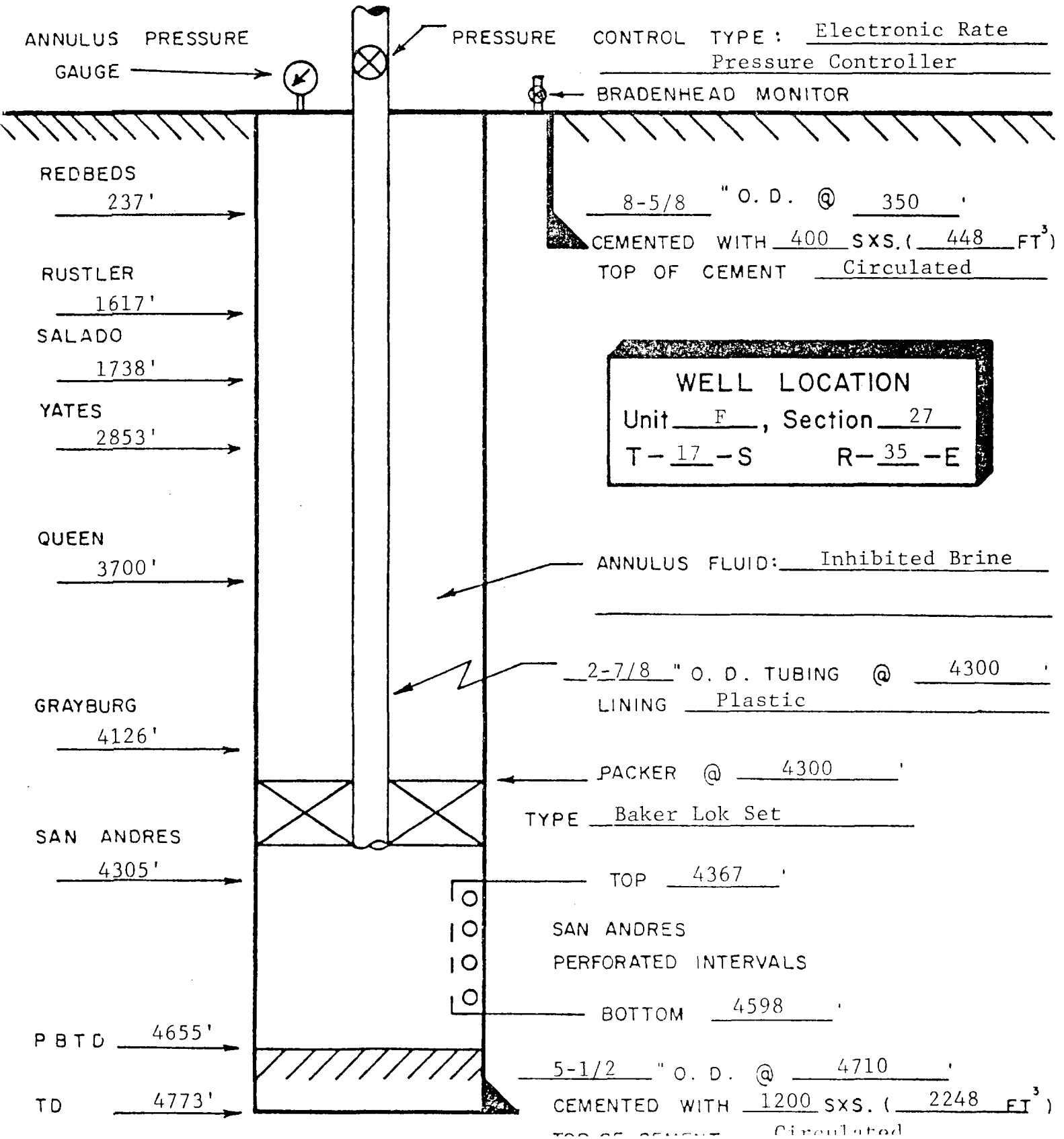
- △--- Water Injection Well
- Water Supply Well

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 2738 WELL 008

CONVERSION TO WATER INJECTION STATUS





PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

NATURAL RESOURCES GROUP
Exploration and Production

May 27, 1981

Conversion to Water Injection Service-
East Vacuum Grayburg/San Andres Unit
Tract 2672, Well No. 001
Lea County, New Mexico

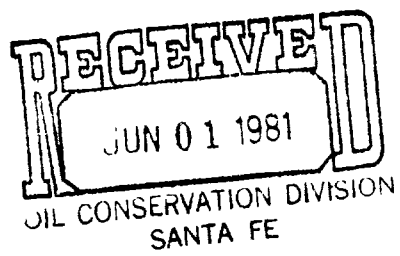
New Mexico Department of Energy and Minerals (3)
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey
Division Director

Gentlemen:

We respectfully request administrative approval of expansion of waterflood pressure maintenance project, as provided by Order No. R-5897, Rule No. 9, for the East Vacuum Grayburg/San Andres Unit, Tract 2672, Well No. 001 to water injection service. The following data is submitted in support of this request:

1. Unit plat reflecting the proposed injection well and injection well project area (Unit A, Section 26, T-17-S, R-35-E).
2. Borehole Compensated Sonic log of the injection well.
3. Diagramatic sketch of the proposed well, injection tubing, packer, and pressure control elements identifying the San Andres perforated injection interval.
4. The name of the injection formation is San Andres with injection to be into the respective well interval 4540' to 4720'. The maximum anticipated injection pressure will be no more than 0.2 psi per foot to the top of the perforations with a maximum daily volume anticipated at 2500 bbls.



Conversion to Water Injection Service

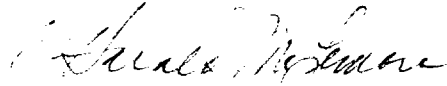
May 27, 1981

Page: 2

By copy hereof, respective offset operators are notified of this application. Their waivers of objection are requested.

Your consideration and early advice will be appreciated.

Yours very truly,



T. Harold McLemore

Regulations and Proration Supervisor

SKN:gr

Attachments

cc: Oil Conservation Division, Hobbs, NM (Attachments w/o logs)
Cities Service Company, Box 1919, Midland, TX 79702
(Attachments w/o logs)
Shell Oil Company, Box 576, Entex Bldg. 1200 Milam, Houston,
TX 77001 (Attachments w/o logs)

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 2672 WELL 001

CONVERSION TO WATER INJECTION STATUS

ANNULUS PRESSURE
GAUGE

PRESSURE

CONTROL TYPE: Electronically
Controlled Pressure-Rate Regulator

BRADENHEAD MONITOR

REDBEDS

240'

RUSTLER

1708'

SALADO

1823'

YATES

2950'

QUEEN

3830'

GRAYBURG

4171'

SAN ANDRES

4491'

P B T D

4784'

TD

4800'

8-5/8" O. D. @ 368'

CEMENTED WITH 390 SXS. (476 FT³)
TOP OF CEMENT circulated

WELL LOCATION

Unit A, Section 26
T-17-S R-35-E

ANNULUS FLUID: Inhibited
Brine

2-3/8" O. D. TUBING @ 4490'
LINING plastic coated

PACKER @ 4490'

TYPE Nickel plated Baker Lok-Set w/LH
on-off Sealing Connection (1.81 "F"
Profile)

TOP 4540'

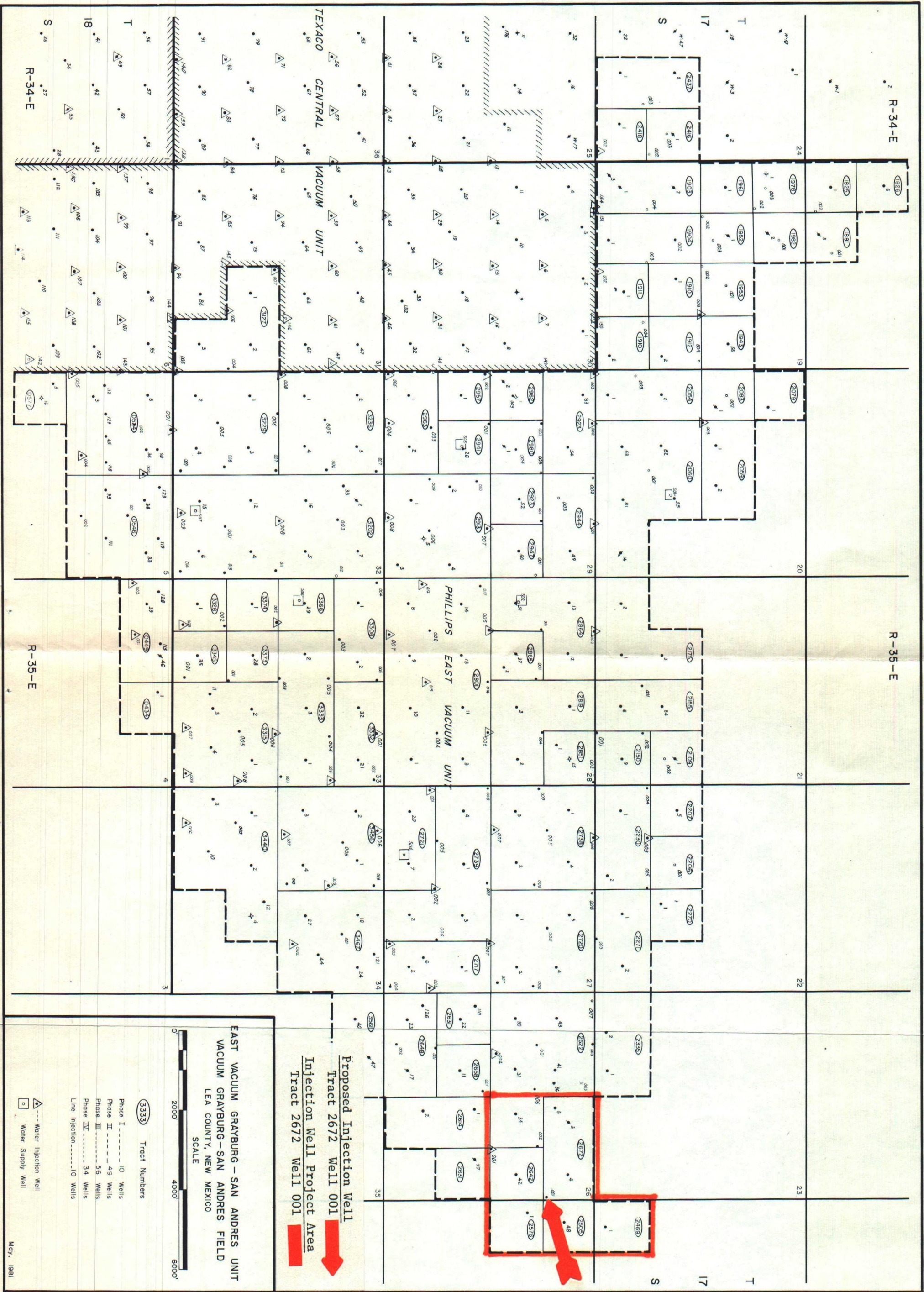
SAN ANDRES

PERFORATED INTERVALS

BOTTOM 4720'

5-1/2" O. D. @ 4788'

CEMENTED WITH 1160 SXS. (2198 FT³)
circulated



Proposed Injection Well
Tract 2672 Well 001
Injection Well Project Area
Tract 2672 Well 001

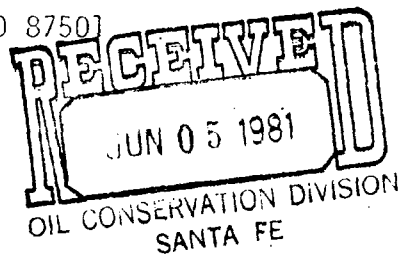
EAST VACUUM GRAYBURG-SAN ANDRES UNIT
VACUUM GRAYBURG-SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO

SCALE
0 2000' 4000' 6000'

- (3333) Tract Numbers
- Phase I - 10 Wells
- Phase II - 49 Wells
- Phase III - 56 Wells
- Phase IV - 34 Wells
- Line Injection - 10 Wells
- Water Injection Well
- Water Supply Well

OIL CONSERVATION DIVISION
DISTRICT I

OIL CONSERVATION DIVISION
P. O. BOX 2038
SANTA FE, NEW MEXICO 87501



DATE June 1, 1981

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed NSP _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____ X

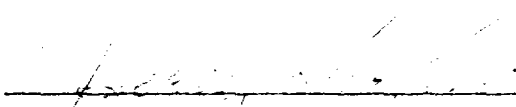
Gentlemen:

	Tr. 2672 #1-A	26-17-35
I have examined the application for the:	Tr. 2150 #2-P	21-17-35
	Tr. 2230 #4-M	22-17-35
Phillips Pet. Co. E. Vacuum Gray., SA Unit	Tr. 2738 #8-F	27-17-35
Operator	Lease and Well No.	Unit, S - T - R

and my recommendations are as follows:

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

Yours very truly,


/mc