

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS PMV-177

Operator: PHILLIPS PETROLEUM Co. Well: EVGSA (5 WELLS) PMP

Contact: KEITH MARRRY Title: ENG? Phone: 915-368-1232

DATE IN 9-13-94 RELEASE DATE 9-27-94 DATE OUT 10-7-94

Proposed Injection Application is for: WATERFLOOD Expansion Initial

Original Order: R-5897/EOR/6856 Secondary Recovery Pressure Maintenance

SENSITIVE AREAS SALT WATER DISPOSAL

WIPP Capitan Reef Commercial Operation

Data is complete for proposed well(s)? YES Additional Data _____

AREA of REVIEW WELLS

93 Total # of AOR 1 # of Plugged Wells
 Tabulation Complete Schematics of P & A's
 Cement Tops Adequate AOR Repair Required

INJECTION INFORMATION

Injection Formation(s) G-SA 4050-4178

Source of Water AREA PRODUCERS + FRESH Compatible YES

PROOF OF NOTICE

Copy of Legal Notice Information Printed Correctly
N/A Correct Operators N/A Copies of Certified Mail Receipts
 Objection Received Set to Hearing _____ Date

NOTES: WATER ALTERNATE CO2

* AOR DATA SUBMITTED PREVIOUSLY (CASE NO. 7426) DATA ON 10 NEW WELLS INC'D

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL YES

COMMUNICATION WITH CONTACT PERSON:

1st Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____
2nd Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____
3rd Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Phillips Petroleum Company
Address: 4001 Penbrook St., Odessa, Texas 79762
Contact party: Keith H. Maberry Phone: (915) 368-1232
- 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-6856.
- 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: Larry M. Sanders Title Supv. Regulatory Affairs

Signature: Larry M. Sanders Date: 10/10/94

* 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. 10/25/78, Case 6367 (Order # R-5897), Appv'd 1/16/79, amnd. 11/19/81

Case #7426 (Order # R-6856), Appv'd 12-16-81, amnd. 1-11-90, Case #10846 (Order #R10020) Appv'd

DISTRIBUTION: Original and one copy to Santa fe with one copy to the appropriate Division district office.

EAST VACUUM GRAYBURG SAN ANDRES UNIT

**ATTACHMENT III TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT**

PROPOSED CONVERTED PRODUCERS TO INJECTION WELLS

<u>Tract & Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec - Tn - Rg</u>	<u>Footage</u>	<u>Well Status</u>
2738-002	3002502904	F	27 17S 35E	1980 FN, 1980 FW	GBSA PROD
2739-004	3002502898	L	27 17S 35E	1980 FS, 660 FW	GBSA PROD
2801-001	3002508546	P	28 17S 35E	660 FS, 660 FE	GBSA PROD
2801-009	3002502910	N	28 17S 35E	660 FS, 1992 FW	GBSA PROD
3332-032	3002502988	B	33 17S 35E	660 FN, 1980 FE	GBSA PROD

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

EAST VACUUM GRAYBURG SAN ANDRES UNIT
LEASE

WELL #2738-002, 1980 FNL & 1980 FWL, SEC 27, T - 17 - S, R - 35 - E, LEA CO., NM

Tabular Data

Surface Casing @256'

Size 13.375" Cemented with 250 sx
TOC surface feet determined by Circulation
Hole size 17.25"

Long String @4195'

Size 7" Cemented with 330 sx
TOC 2746" feet determined by Calculation
Hole size 8.75"

Intermediate Casing @ 1640'

Size 9.625" Cemented with 615 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Total depth 4608'

Production Liner @ 4215'

Size 5.5" Cemented with 190 sx
TOC surface feet determined by Circulation
Hole size 7"

Injection Interval

4215' to 4608'

Perforated _____
or
Open-Hole X

Tubing 2.875" 4.7#/ ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 4175'
(brand & model)

Other Data

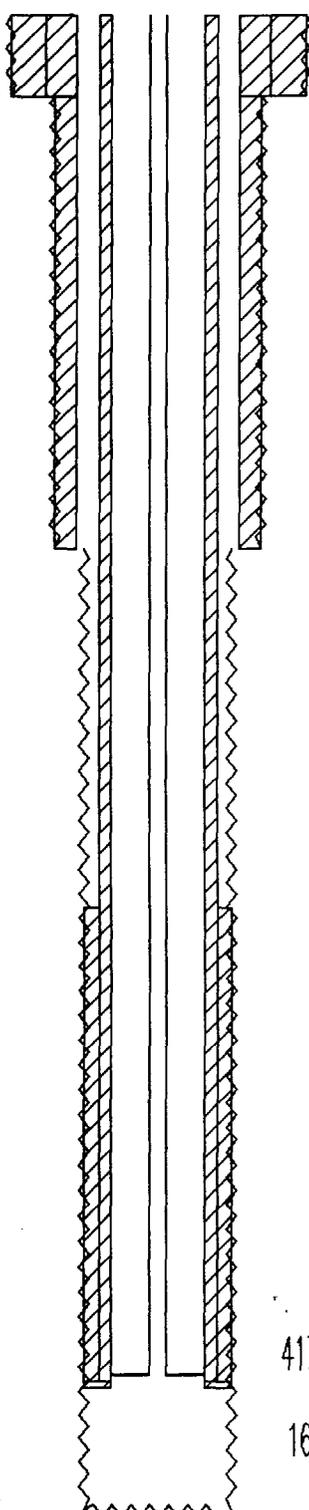
- 1. Name of the injection formation SAN ANDRES
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO
If no, for what purpose was the well originally drilled? OIL PRODUCTION

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. QUEEN @ 3700' GLORIETA @ 6000'

PHILLIPS PET
EVGSAU 2738-002
API# 3002502904

0 - 256' 13.375" OD SURF CSG
0 - 256' CEMENT 250 sx



0 - 256' 17.5 " OD HOLE

0 - 1645' 9.625" OD INT CSG
0 - 1645' CEMENT 615 sx

256 - 1645' 12.25 " OD HOLE

1980 FNL & 1980 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3948 KB
SPUD DATE: 11-11-38
COMPLETION DATE: 12-16-38

0 - 4195' 7" OD PROD CSG
2746 - 4195' CEMENT 330 sx

0 - 4175' 2.875" OD TBG
4175 - 4178' PACKER BAKER A-3 LOK-SET

0 - 4215' 5.5" OD LINER
0 - 4215' CEMENT 190 sx

1645 - 4608' 8.75 " OD HOLE
OPEN HOLE 4215' - 4608'

PBTD: 4608'
TD: 4608'

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

EAST VACUUM GRAYBURG SAN ANDRES UNIT
LEASE

WELL #2739-004, 1980 FSL & 660 FWL, SEC 27, T - 17 - S, R - 35 - E, LEA CO., NM

Tabular Data

Surface Casing @267'

Size 13.375" Cemented with 250 sx
TOC surface feet determined by Circulation
Hole size 17.25"

Intermediate Casing @ 1640'

Size 9.625" Cemented with 615 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Injection Interval

4220' to 4597'

Perforated
or
Open-Hole X

Tubing 2.875" 4.7#/ ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 4170'
(brand & model)

Long String @4196'

Size 7" Cemented with 145 sx
*TOC 3559' feet determined by Calculation
Hole size 8.75"
* 7" x 9 5/8 annulus sqzd from surface w/ 500 sx
Total depth 4597'

Production Liner @ 4220'

Size 5.5" Cemented with 250 sx
**TOC 1162' feet determined by Calculation
Hole size 7"
** 5.5" perf'd @ 1640' & sqzd w/ 250 sx, cmt circ to surface

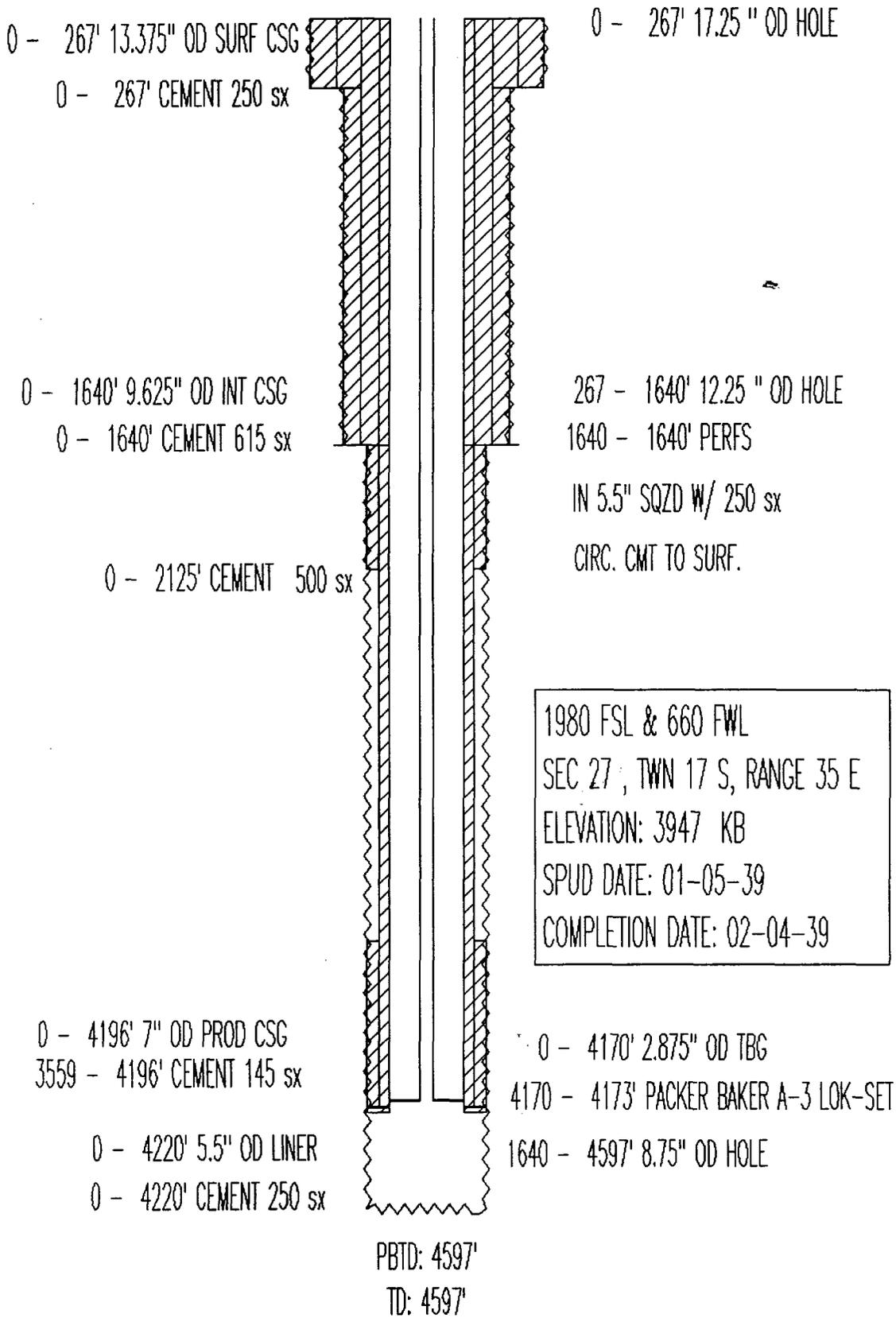
Other Data

- 1. Name of the injection formation SAN ANDRES
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? 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. QUEEN @ 3700' GLORIETA @ 6000'

PHILLIPS PET
 EVGSAU 2739-004
 API# 3002502898



INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

EAST VACUUM GRAYBURG SAN ANDRES UNIT
LEASE

WELL #2801-001, 660 FSL & 660 FEL, SEC 28, T - 17 - S, R - 35 - E, LEA CO., NM

Tabular Data

Surface Casing @ 238'

Size 10.75" Cemented with 125 sx
TOC surface feet determined by Circulation
Hole size 13.75"

Long String @4097'

Size 5.5" Cemented with 250 sx
TOC 2121" feet determined by Calculation
Hole size 6.75"

Intermediate Casing @ 1954'

Size 7.625" Cemented with 445 sx
TOC surface feet determined by Circulation
Hole size 9.875"

Total depth 4640'

Production Liner @

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Injection Interval

4097' to 4640'

Perforated _____
or _____
Open-Hole X

Tubing 2.875" 4.7#/ ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 4050'
(brand & model)

Other Data

- 1. Name of the injection formation SAN ANDRES
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? 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. QUEEN @ 3700' GLORIETA @ 6000'

PHILLIPS PET
EVGSAU 2801-001
API# 3002508546

0 - 238' 10.75" OD SURF CSG
0 - 238' CEMENT 125 sx

0 - 238' 13.75" OD HOLE

0 - 1954' 7.625" OD INT CSG
0 - 1954' CEMENT 445 sx

238 - 1954' 9.875" OD HOLE

660 FSL & 660 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3950 KB
SPUD DATE: 01-12-39
COMPLETION DATE: 02-11-39

0 - 4097' 5.5" OD PROD CSG
2121 - 4097' CEMENT 250 sx

0 - 4050' 2.875" OD TBG
4050 - 4053' PACKER BAKER A-3 LOK-SET

1954 - 4640' 6.75" OD HOLE

OPEN HOLE 4097' - 4640'

TD: 4640'

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

EAST VACUUM GRAYBURG SAN ANDRES UNIT
LEASE

WELL #2801-009, 660 FSL & 1992 FWL, SEC 28, T - 17 - S, R - 35 - E, LEA CO., NM

Tabular Data

Surface Casing @ 242'

Size 10.75" Cemented with 125 sx
TOC surface feet determined by Circulation
Hole size 13.75"

Long String @4147'

Size 5.5" Cemented with 250 sx
TOC 2171" feet determined by Calculation
Hole size 6.75"

Intermediate Casing @ 1579'

Size 7.625" Cemented with 400 sx
TOC 350' feet determined by Calculation
Hole size 9.875"

Total depth 4660'

Production Liner @

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Injection Interval

4147' to 4660'

Perforated _____
or
Open-Hole X

Tubing 2.875" 4.7#/ ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 4100'
(brand & model)

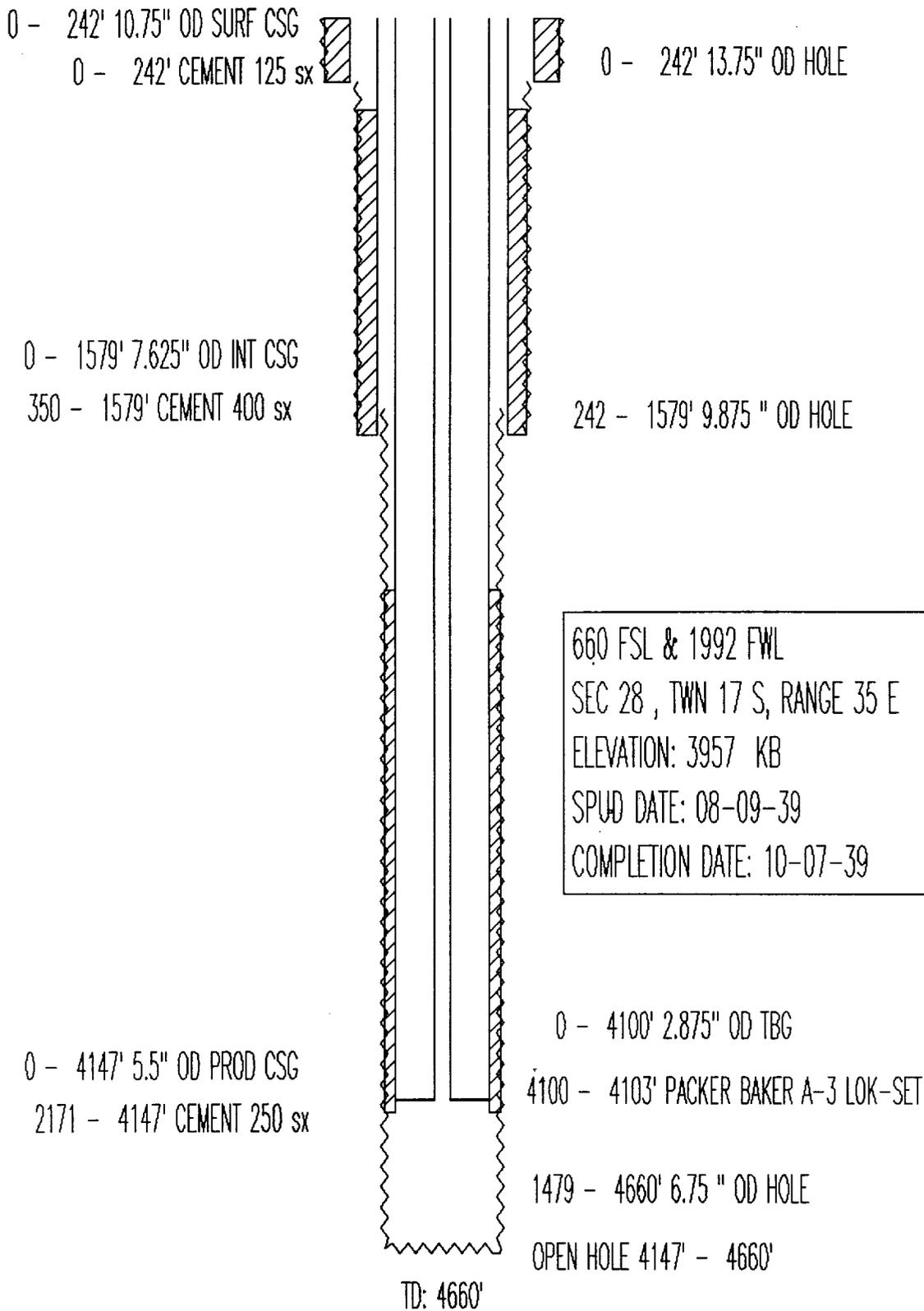
Other Data

- 1. Name of the injection formation SAN ANDRES
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? 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. QUEEN @ 3700' GLORIETA @ 6000'

PHILLIPS PET
EVCSAU 2801-009
API# 3002502910



INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

EAST VACUUM GRAYBURG SAN ANDRES UNIT
LEASE

WELL #3332-032, 660 FNL & 1980 FEL, SEC 33, T - 17 - S, R - 35 - E, LEA CO., NM

Tabular Data

Surface Casing @1562'

Size 9.625" Cemented with 900 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Long String @4116'

Size 7" Cemented with 400 sx
TOC 2360" feet determined by Calculation
Hole size 8.75"

Intermediate Casing @

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Total depth 4588'

Production Liner @

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Injection Interval

4116' to 4588'

Perforated _____
or
Open-Hole X

Tubing 2.875" 4.7#/ ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 4075'
(brand & model)

Other Data

1. Name of the injection formation SAN ANDRES

2. Name of the Field or Pool VACUUM

3. Is this a new well drilled for injection? 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).

Casing leak 2772' sqzd w/ 1000 sx (12/90)

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. QUEEN @ 3700'

GLORIETA @ 6000'

PHILLIPS PET
EVGSAU 3332-032
API# 3002502988

0 - 1562' 9.625" OD SURF CSG
0 - 1562' CEMENT 900 sx

0 - 1562' 12.25 " OD HOLE

660 FNL & 1980 FEL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3954 KB
SPUD DATE: 09-16-39
COMPLETION DATE: 10-11-39

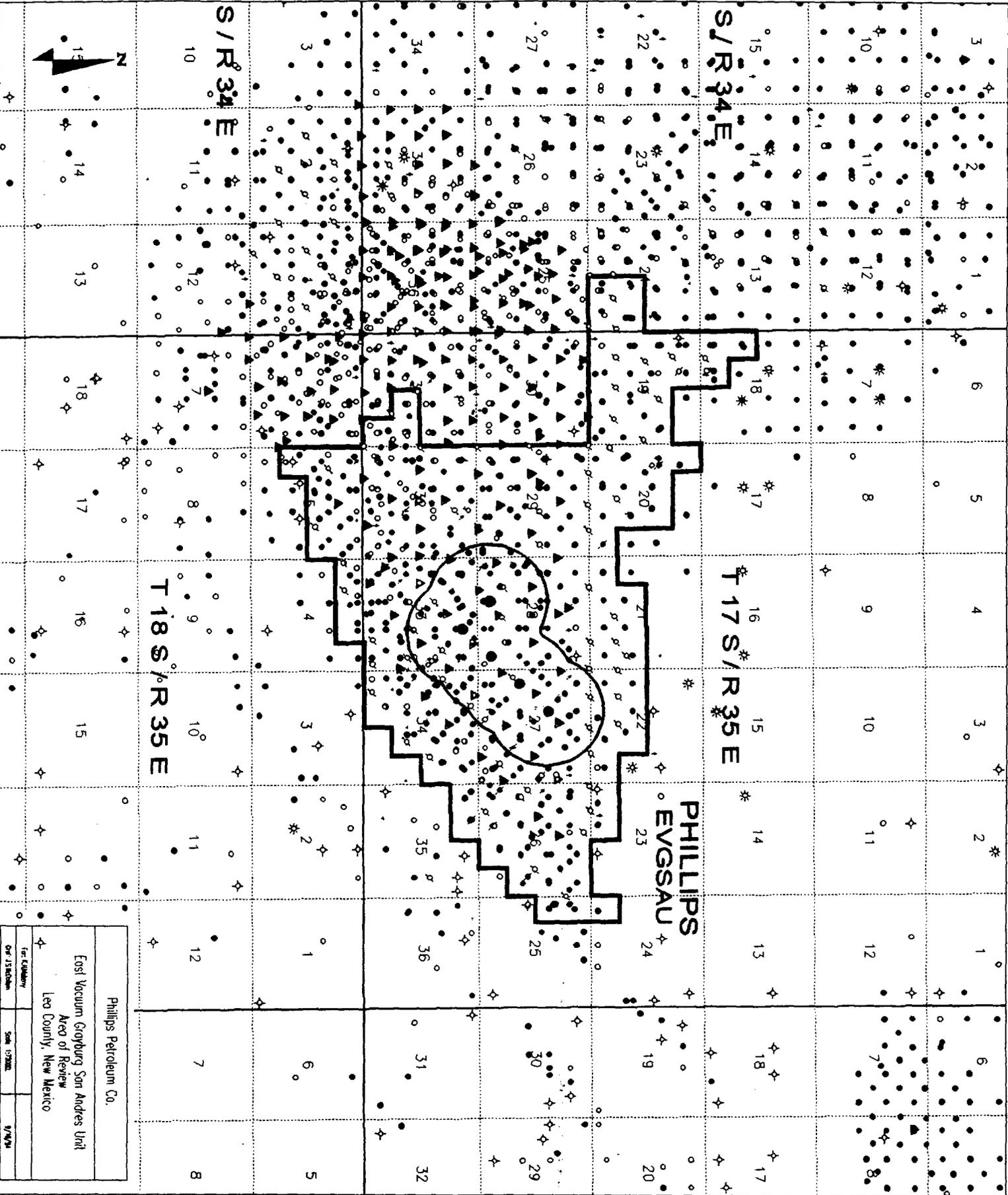
0 - 4116' 7 " OD PROD CSG
2360 - 4116' CEMENT 400 sx

0 - 4075' 2.875" OD TBG
4075 - 4078' PACKER BAKER A-3 LOK-SET

1562 - 4588' 8.75 " OD HOLE

OPEN HOLE 4116' - 4588'

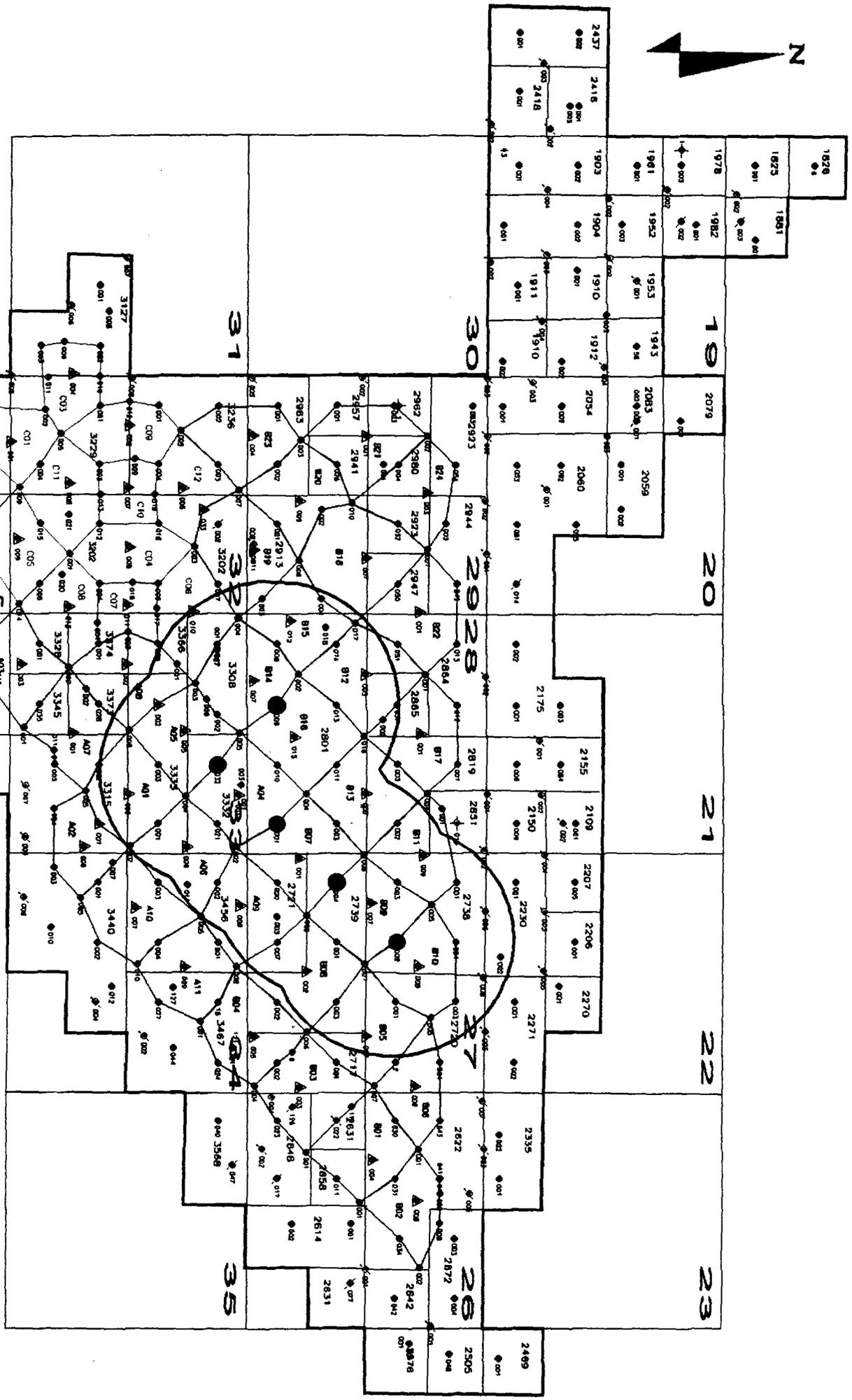
TD: 4588'



Phillips Petroleum Co.			
East Vacuum Grayburg San Andres Unit			
Acre of Review			
Lea County, New Mexico			
For Estimate	Scale 1/2"=100'		
Case 13780-AM			



LEGEND
 Active Wells:
 ● Producers
 ▲ CO2 Injectors
 ⚡ H2O Injectors



Phillips Petroleum
 Area of Review
 East Vacuum Grayburg San Andres Unit
 Lea County, New Mexico

For: Killebrew
 Conf: JSMcCorm
 V11/19/94
 Scale: 1:50000

EAST VACUUM GRAYBURG SAN ANDRES UNIT

ATTACHMENT III TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

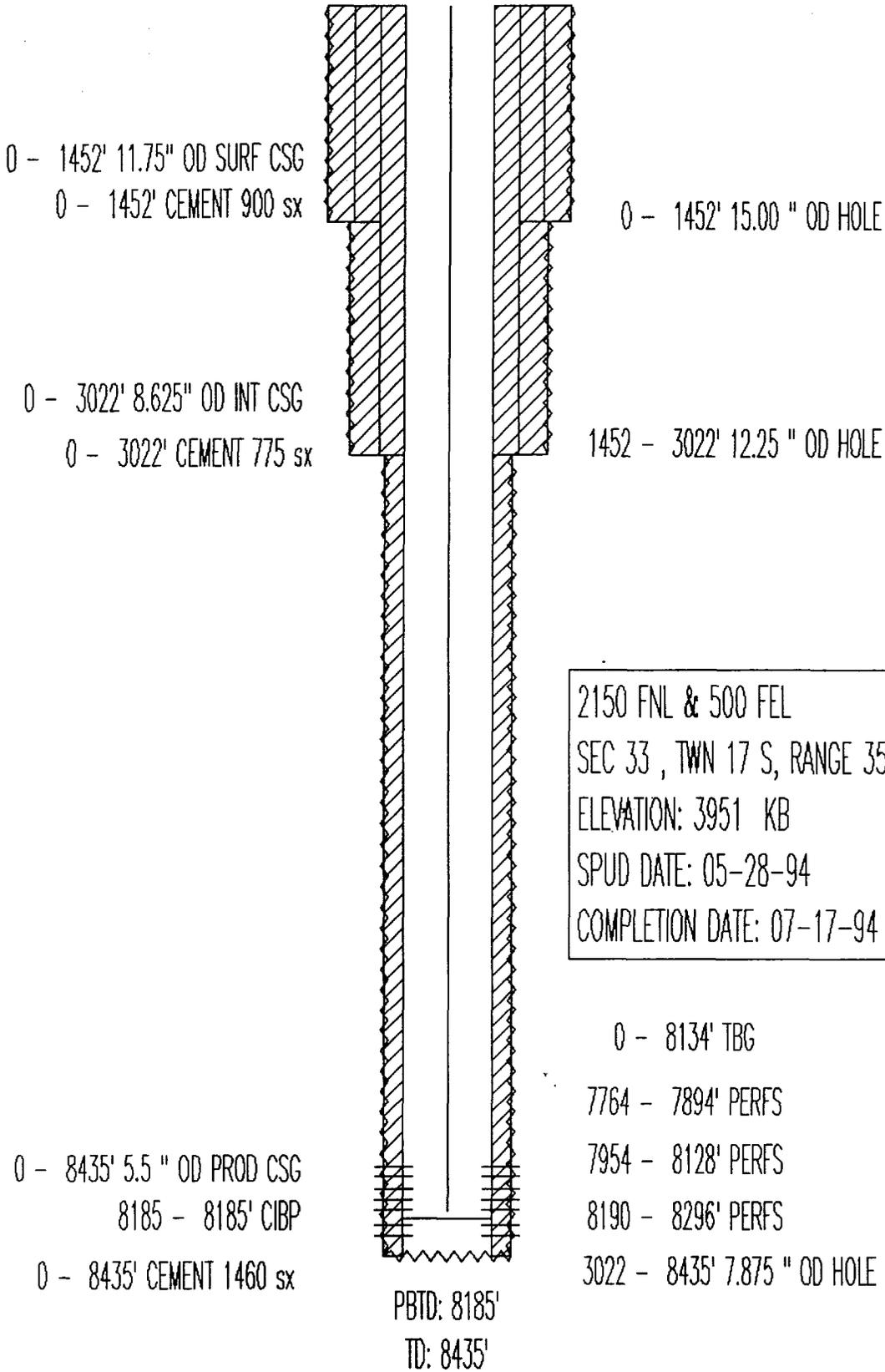
WELL DATA TABLE

Operator	Lease Name	Well No.	API Number	Type	Top of Cement*	Construction	Date Drilled	Record of Completion	Depth	Location
Marathon	Wam St. AC 3	3	3002532512	PROD	surface	see diagram	05-28-94	see diagram	8435'	33 17S 35E 2150 FN, 500 FE
Mobil	State "M"	16	3002532598	P&A	surface	"	08-14-94	"	8030'	34 17S 35E 2075 FN, 330 FE
Phillips	EVGSAU	2721-003	3002532058	PROD	1580' M	"	08-28-93	"	4800'	27 17S 35E 660 FS, 1415 FW
Phillips	EVGSAU	2801-018	3002532337	PROD	surface	"	12-21-93	"	4800'	28 17S 35E 1750 FS, 300 FW
Phillips	EVGSAU	3308-006	3002532062	PROD	surface	"	11-13-93	"	4820'	33 17S 35E 900 FN, 1860 FW
Phillips	EVGSAU	3308-007	3002532219	PROD	surface	"	09-25-93	"	4800'	33 17S 35E 660 FN, 760 FW
Phillips	EVGSAU	3366-001	3002532063	PROD	surface	"	10-07-93	"	4825'	33 17S 35E 1560 FN, 1080 FW
Phillips	EVGSAU	3456-011	3002532060	PROD	surface	"	09-08-93	"	4800'	34 17S 35E 1340 FN, 712 FW
Phillips	VGEU	01-13	3002532364	PROD	surface	"	01-07-94	"	6350'	28 17S 35E 1455 FS, 1330 FE
Phillips	VGEU	24-06	3002532366	PROD	surface	"	02-06-94	"	6303'	33 17S 35E 1685 FN, 2611 FW
Phillips	VGEU	26-06	3002532367	PROD	2665' M	"	01-30-94	"	6300'	27 17S 35E 1550 FN, 1410 FW

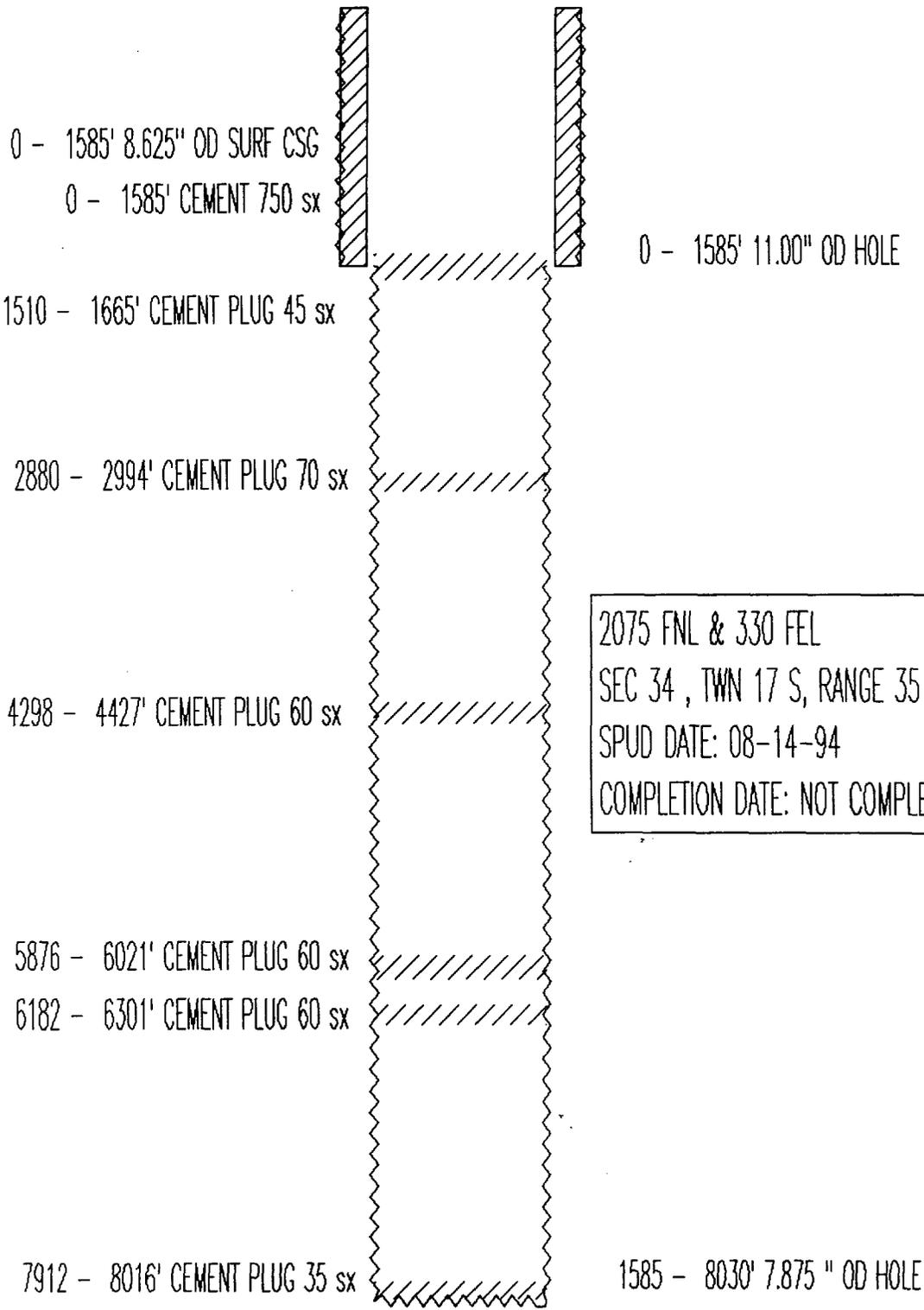
*Top of Cement

M - Measured by Temp. Survey or Cement Bond Log

MARATHON
WARN ST A/C #3
API# 3002532512

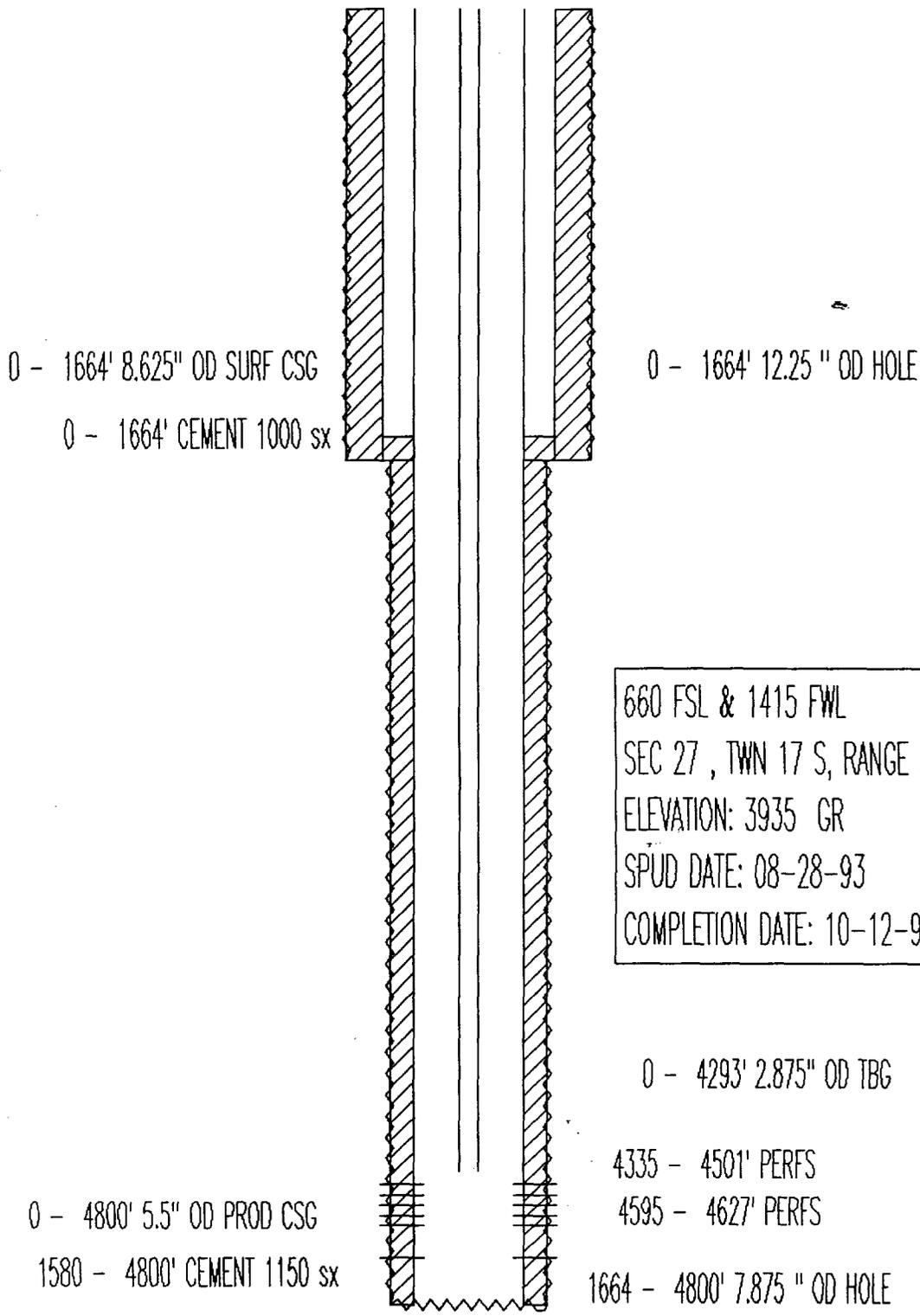


MOBIL
STATE 'M' #16
API# 3002532598



PBTD: 1510'
TD: 8030'

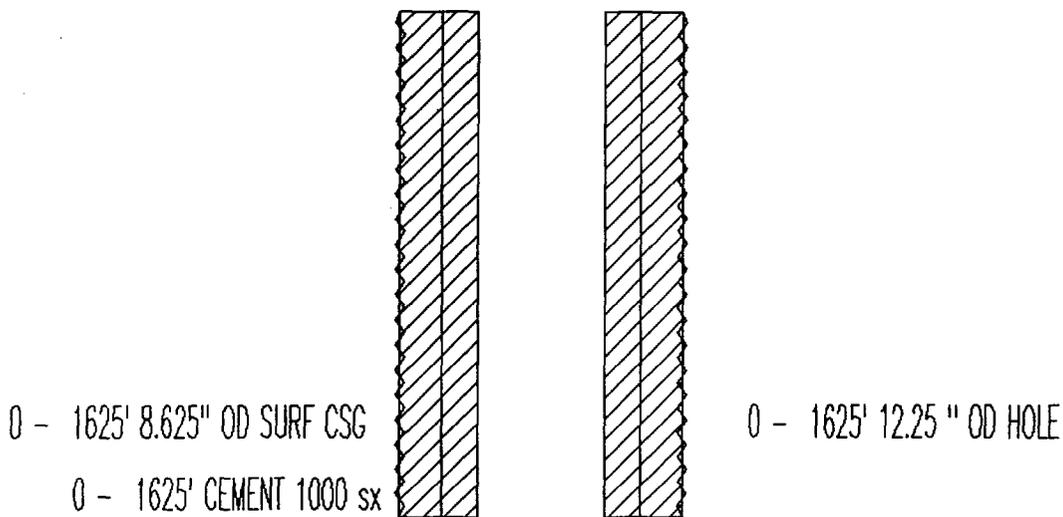
PHILLIPS PET
EVCSAU 2721-003
API# 3002532058



660 FSL & 1415 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3935 GR
SPUD DATE: 08-28-93
COMPLETION DATE: 10-12-93

0 - 1664' 12.25 " OD HOLE
0 - 4293' 2.875" OD TBG
4335 - 4501' PERFS
4595 - 4627' PERFS
1664 - 4800' 7.875 " OD HOLE

PHILLIPS PET
EVGSAU 2801-018
API# 3002532337



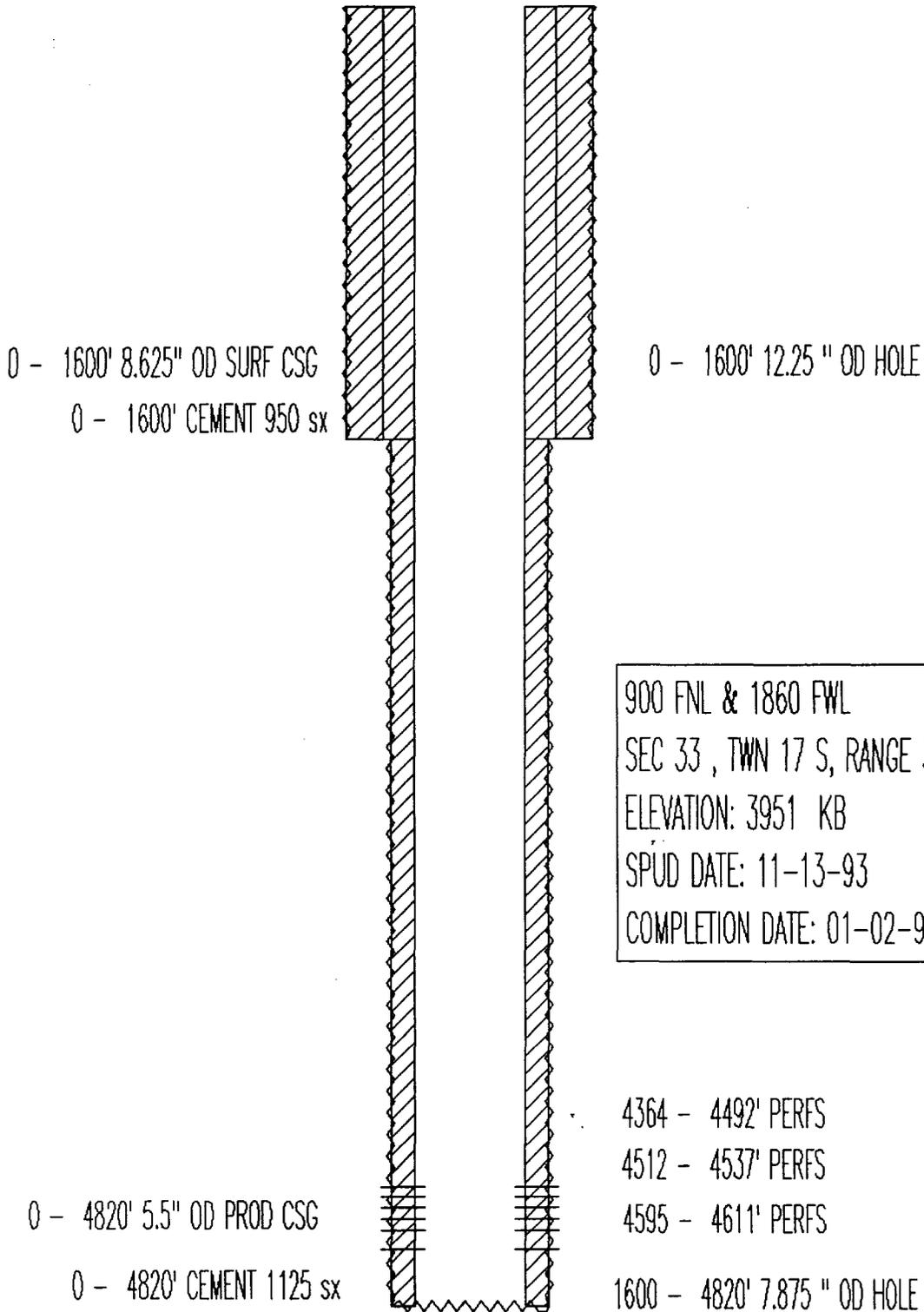
1750 FSL & 300 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3969 KB
SPUD DATE: 12-21-93
COMPLETION DATE: 03-17-94

0 - 4800' 5.5" OD PROD CSG
0 - 4800' CEMENT 1007 sx

4486 - 4506' PERFS
4556 - 4570' PERFS
1625 - 4800' 7.875" OD HOLE

PBTD: 4752'
TD: 4800'

PHILLIPS PET
EVGSAU 3308-006
API# 3002532062

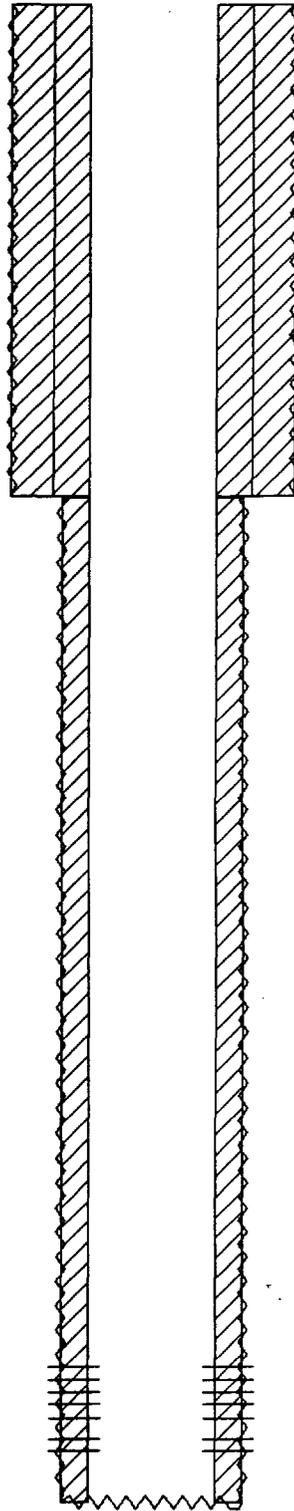


PBTD: 44773'
TD: 4820'

PHILLIPS PET
EVGSAU 3308-007
API# 3002532219

0 - 1575' 8.625" OD SURF CSG
0 - 1575' CEMENT 800 sx

0 - 1575' 12.25 " OD HOLE



660 FNL & 760 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3956 KB
SPUD DATE: 09-25-93
COMPLETION DATE: 11-14-93

0 - 4800' 5.5" OD PROD CSG
0 - 4800' CEMENT 1130 sx

4365 - 4484' PERFS

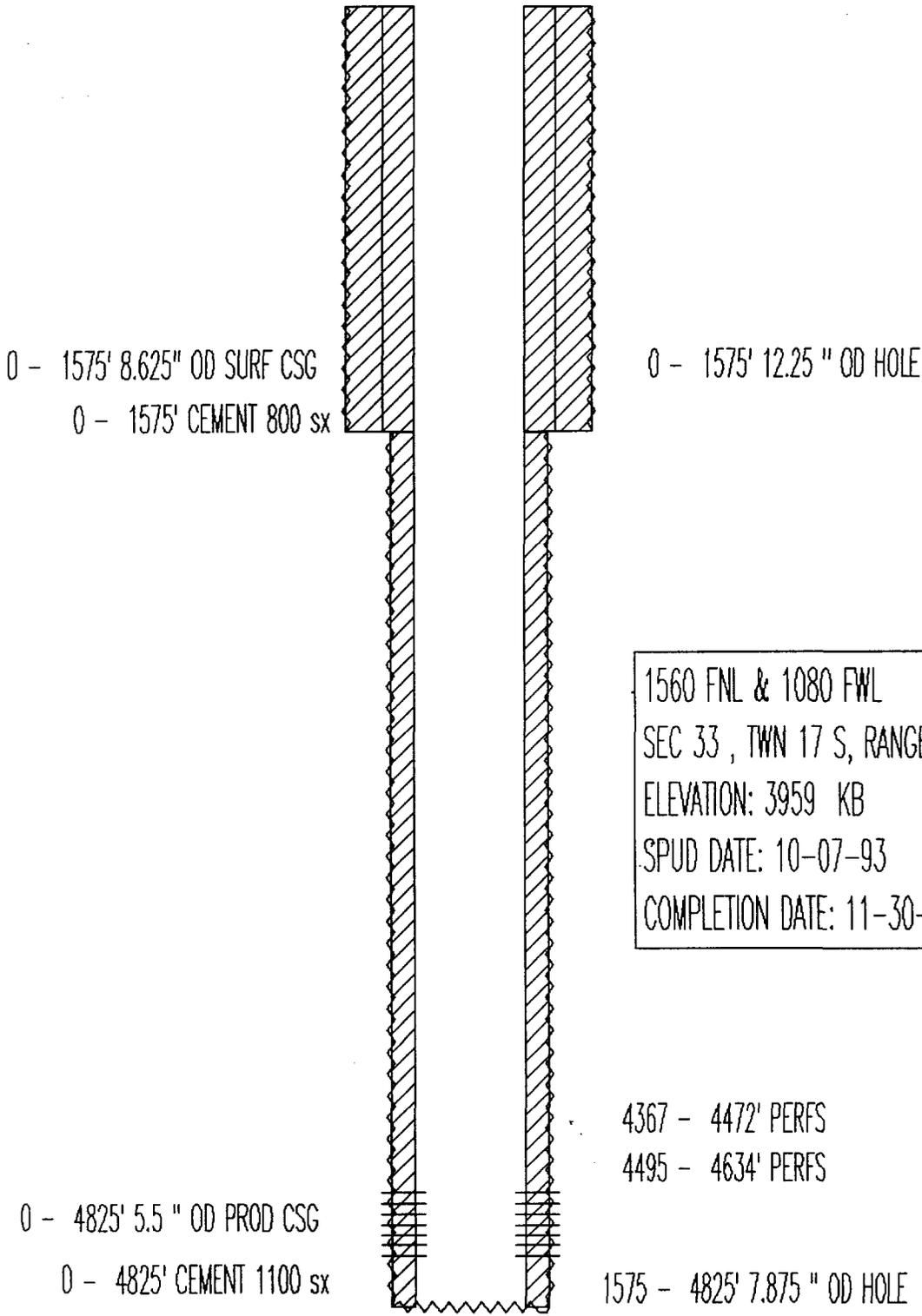
4508 - 4534' PERFS

4590 - 4637' PERFS

1575 - 4800' 7.875 " OD HOLE

TD: 4800'

PHILLIPS PET
EVGSAU 3366-001
API# 3002532063



1560 FNL & 1080 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3959 KB
SPUD DATE: 10-07-93
COMPLETION DATE: 11-30-93

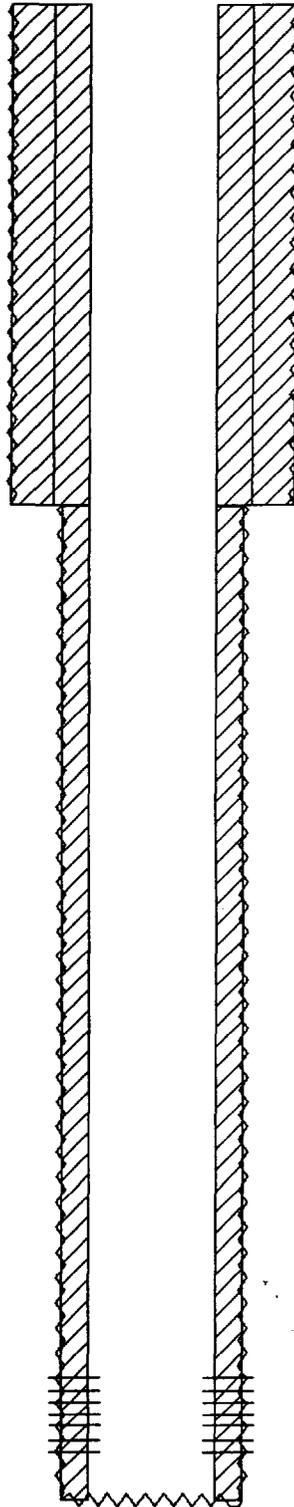
4367 - 4472' PERFS
4495 - 4634' PERFS

PBTD: 4780'
TD: 4825'

PHILLIPS PET
EVGSAU 3456-011
API# 3002532060

0 - 1612' 8.625" OD SURF CSG
0 - 1612' CEMENT 1000 sx

0 - 1612' 12.25 " OD HOLE



1340 FNL & 712 FWL
SEC 34 , TWN 17 S, RANGE 35 E
ELEVATION: 3948 KB
SPUD DATE: 09-08-93
COMPLETION DATE: 11-27-93

0 - 4800' 5.5" OD PROD CSG
0 - 4800' CEMENT 1100 sx

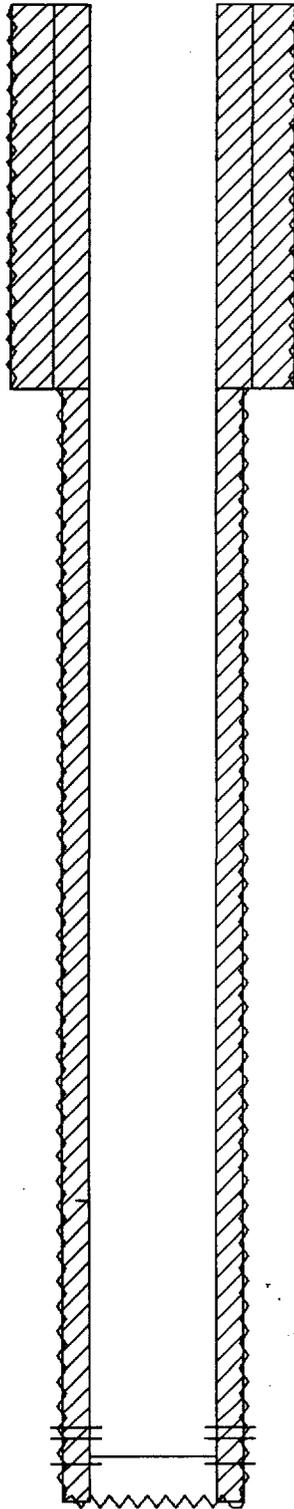
4400 - 4559' PERFS
4573 - 4646' PERFS
1612 - 4800' 7.875 " OD HOLE

TD: 4800'

PHILLIPS PET
VGEU 01-13
API# 3002532364

0 - 1625' 8.625" OD SURF CSG
0 - 1625' CEMENT 800 sx

0 - 1625' 12.25 " OD HOLE



1455 FSL & 1333 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3955 KB
SPUD DATE: 01-07-94
COMPLETION DATE: 03-07-94

5067 - 5067' DVTOOL

6155 - 6155' PLUG

0 - 6350' 5.5" OD PROD CSG

0 - 6350' CEMENT 1965 sx

6024 - 6080' PERFS

6172 - 6186' PERFS

1625 - 6350' 7.875" OD HOLE

PBD: 6291'

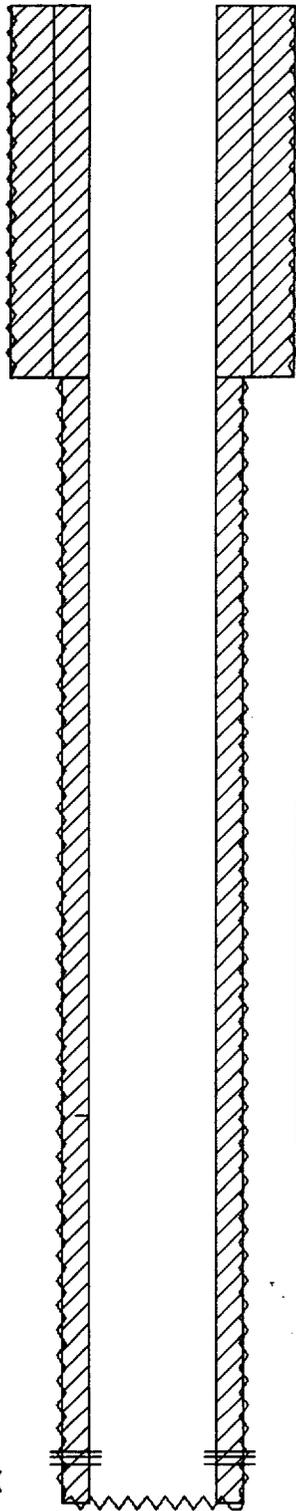
TD: 6350'

PHILLIPS PET
VGEU 24-06
API# 3002532366

0 - 1575' 8.625" OD SURF CSG

0 - 1575' CEMENT 850 sx

0 - 1575' 12.25" OD HOLE



4672 - 4672' DVTOOL

0 - 6303' 5.5" OD PROD CSG

0 - 6303' CEMENT 1900 sx

1685 FNL & 2611 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3951 KB
SPUD DATE: 02-06-94
COMPLETION DATE: 05-10-94

6068 - 6086' PERFS

6092 - 6110' PERFS

6120 - 6140' PERFS

1575 - 6303' 7.875" OD HOLE

PBTD: 6269'

TD: 6303'

PHILLIPS PET
VGEU 26-06
API# 3002532367

0 - 1650' 8.625" OD SURF CSG
0 - 1650' CEMENT 850 sx

0 - 1650' 12.25 " OD HOLE

1550 FNL & 1410 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3950 KB
SPUD DATE: 01-30-94
COMPLETION DATE: 06-29-94

5198 - 5198' DVTOOL

0 - 6300' 5.5" OD PROD CSG
2665 - 6300' CEMENT 1550 sx

6126 - 6165' PERFS

1650 - 6300' 7.875 " OD HOLE

PBTD: 6252'
TD: 6300'

**EAST VACUUM GRAYBURG SAN ANDRES UNIT
ATTACHMENT VII TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER
AND CARBON DIOXIDE**

**DATA ON THE PROPOSED OPERATION
OF THE INJECTION WELLS UNDER APPLICATION**

The proposed average and maximum daily water injection rates per well is:

Average daily rate 1,200 BHPD, Maximum daily rate 2,200 BHPD

The proposed average and maximum daily carbon dioxide rate per well is:

Average daily rate 3,000 MMSCFD, Maximum daily rate 5,000 MMSCFD

Both the water and carbon dioxide systems are closed.

The proposed average and maximum surface injection pressures for water are:

Average injection pressure 1,000 PSIG, Maximum* injection pressure 1,350 PSIG

The proposed average and maximum surface injection pressures for carbon dioxide are:

Average injection pressure 1,500 PSIG, Maximum* injection pressure 1,850 PSIG

* Maximum injection pressures are based on pre-existing Unit injection pressure allowable which are based on actual San Andres fracture gradients.

There are two sources of injection water makeup, San Andres produced water from Phillips operated East Vacuum Grayburg San Andres Unit and Ogallala fresh water from the EVGSAU water supply wells. Both waters have been injected into the San Andres formation since 1979, and are compatible with each other and the San Andres formation. The two sources of carbon dioxide are from reinjected produced gas and purchased pipeline sales gas. The gas composition is approximately:

CARBON DIOXIDE	91 %
HYDROGEN SULPHIDE	2 %
NITROGEN	2 %
HYDROCARBON	5 %

Carbon dioxide has been injected into the San Andres Formation since 1985 under the authority on NMOCED Order No. R6856 dated 12/16/81.

**EAST VACUUM GRAYBURG SAN ANDRES UNIT
ATTACHMENT IX TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER
AND CARBON DIOXIDE**

**PROPOSED STIMULATION PROGRAM
FOR SAN ANDRES INJECTION WELLS**

All five injection wells are open hole completions in the Grayburg and San Andres formations of the unitized interval. All five wells currently produce oil. The wells will be cleaned out and stimulated with a small to medium sized matrix Hydrochloric acid treatment prior to converting them to water injection. Acid concentrations will range from 15% to 20 % depending on anticipated completion damage.

**EAST VACUUM GRAYBURG SAN ANDRES UNIT
ATTACHMENT XII TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER
AND CARBON DIOXIDE**

STATEMENT OF HYDRAULIC INTEGRITY

Phillips Petroleum Company has examined available geological and engineering data and finds no evidence of open faults nor any other hydraulic connection between the injection zone and any underground source of drinking water.

ATTACHMENT NO. XIV
Notification

I hereby certify that a complete copy of this application was sent by certified mail to the below listed person on October 10, 1994.

Signed: *L. M. Sanders*
Name: L. M. Sanders
Title: Supervisor, Regulatory Affairs
Date: *October 10, 1994*

Surface Owner:
State of New Mexico
Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico 87501-1148

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

General Manager

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 _____

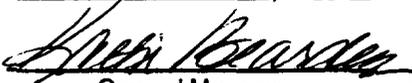
one weeks.

Beginning with the issue dated

September 29, 19 94

and ending with the issue dated

September 29, 19 94

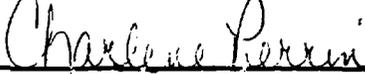


General Manager

Sworn and subscribed to before

me this 4 day of

October, 19 94



Notary Public.

My Commission expires

March 15, 1997

(Seal)

LEGAL NOTICE

September 29, 1994

Notice is hereby given of the application of Phillips Petroleum Company, 4001 Penbrook Street, Odessa, Texas 79762. Attn: L. M. Sanders, (915) 368-1488, to the Oil Conservation Division, New Mexico Energy and Mineral Department, for approval of the following water injection well authorization for the purpose of water injection:

Well Name: East Vacuum Gb/SA Unit #2738-002.

Location: 1980 feet from the North line and 1980 feet from the West line, Section 27, T-17-S, R-35-E, Lea County, NM.

The water injection formation is Grayburg/San Andres at a depth of 4215'-4608' below the surface of the ground.

Expected maximum injection rate is 2200 bbls water per day and expected maximum surface injection pressure is 1350 pounds per square inch.

Interested parties must file objections or request for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days.

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.

Received

OCT 07 1994

P.B.R. Regulatory Section

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Well Name: East Vacuum Gb/SA Unit #2739-004.

Location: 1980 feet from the South line and 660 feet from the West line, Section 28, T-17-S, R-35-E, Lea County, NM.

The water injection formation is Grayburg/San Andres at a depth of 4220'-4597' below the surface of the ground.

Expected maximum injection rate is 2200 bbls water per day and expected maximum surface injection pressure is 1350 pounds per square inch.

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P.O. Box 2088 Santa Fe, NM 87501

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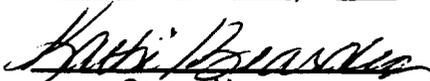
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Well Name: East Vacuum Gb/SA Unit #2801-001.

Location: 660 feet from the South line and 660 feet from the East line, Section 28, T-17-S, R-35-E, Lea County, NM.

The water injection formation is Grayburg/San Andres at a depth of 4097-4640' below the surface of the ground.

Expected maximum injection rate is 2200 bbls water per day and expected maximum surface injection pressure is 1350 pounds per square inch.

Interested parties must file objections or request for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days.

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General Manager

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Notary Public.

My Commission expires
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Well Name: East Vacuum Gb/SA Unit #2801-009.

Location: 660 feet from the South line and 1992 feet from the West line, Section 28, T-17-S, R-35-E, Lea County, NM.

The water injection formation is Grayburg/San Andres at a depth of 4147'-4660' below the surface of the ground.

Expected maximum injection rate is 2200 bbls water per day and expected maximum surface injection pressure is 1350 pounds per square inch.

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General Manager

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Well Name: East Vacuum Gb/SA Unit #3332-032

Location: 660 feet from the North line and 1980 feet from the East line, Section 33, T-17-S, R-35-E, Lea County, NM.

The water injection formation is Grayburg/San Andres at a depth of 4116'-4588' below the surface of the ground.

Expected maximum injection rate is 2200 bbls water per day and expected maximum surface injection pressure is 1350 pounds per square inch.

Interested parties must file objections or request for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days.

OCT 07 1994

P.B.R. Regulatory Section



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

10-14-94

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

9 09 27 10 52

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

PMX-177

RE: Proposed:

- MC _____
- DHC _____
- NSL _____
- NSP _____
- SWD _____
- WFX _____
- PMX *✓*

Gentlemen:

I have examined the application for the:

Phillips Petroleum Co East Vacuum GB-SA Unit
Operator

Tract & Well No.	API Number	Unit	Sec - Tn - Rg	Footage
2739-002	3002502904	F	27 17S 35E	1980 FN, 1980 FW
2739-004	3002502898	L	27 17S 35E	1980 FS, 660 FW
2801-001	3002508548	P	28 17S 35E	660 FS, 660 FE
2801-009	3002502910	N	28 17S 35E	660 FS, 1982 FW
3332-032	3002502988	B	33 17S 35E	660 FN, 1980 FE

Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed