

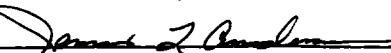
## APPLICATION FOR AUTHORIZATION TO INJECT

West Vacuum Unit

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no
- II. Operator: Texaco Exploration & Production Inc.
- Address: 205 E Bender, Hobbs, New Mexico, 88240
- Contact party: James L. Anderson Phone: 505-397-0420
- 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-3008, 12/3/65, initial  
R-4234, 12/15/71, expansion
- 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: James L. Anderson Title Production Engineer

Signature:  Date: 11/14/96

- \* 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. R-3008, 12/3/65, Commission Hearing, R-4234, 12/15/71, administrative

## 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:
- (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.

November 1, 1996

**NEW MEXICO OIL CONSERVATION DIVISION - Form C-108**

**Application for Water Flood Expansion**

Unit Name: West Vacuum Unit- Lea County, New Mexico

Infill Injection Well Numbers and Location:

56 - Unit Letter O, 100 FSL & 2450 FEL, Section 34, T17S, R34E

- III. All pertinent well data is included on the schematic sheets. The West Vacuum Unit is unitized in the Queen, Grayburg and San Andres Formations from 4100'- 4800'. There is no shallower production in the immediate vicinity of the proposed well.
- IV. Data for sections VI, VIII, X and XI has been previously submitted under NMOCD Order R-3007 dated 12/3/65, Order No. R-3007A dated 5/6/92, Order R-3008 dated 12/3/65, expansion Order R-4234 dated 12/15/71, amendment WFX-507 dated 3/11/83.
- V. A PI map showing all wells within 2 miles, the boundary of the West Vacuum Unit and a 1/2 mile radius area of review (AOR).
- VI. This part of the Vacuum field was also covered by AORs for several projects. NMOCD Order R-6857 and R-6857-A authorizing the North Vacuum Abo West Unit, operated by Texaco, and it's pressure maintenance project. NMOCD Order Nos. R-4442, R-6094, R-7010 authorizing the Vacuum Grayburg San Andres Unit, operated by Texaco, and it's pressure maintenance project. NMOCD Orders R-7103, R-7103A and a current proposal for CO<sub>2</sub> injection for the State Unit 35 operated by Phillips Petroleum Company.

Included are schematics for wells being drilled on the West Vacuum Unit. All casing strings are designed to circulate cement to the surface.

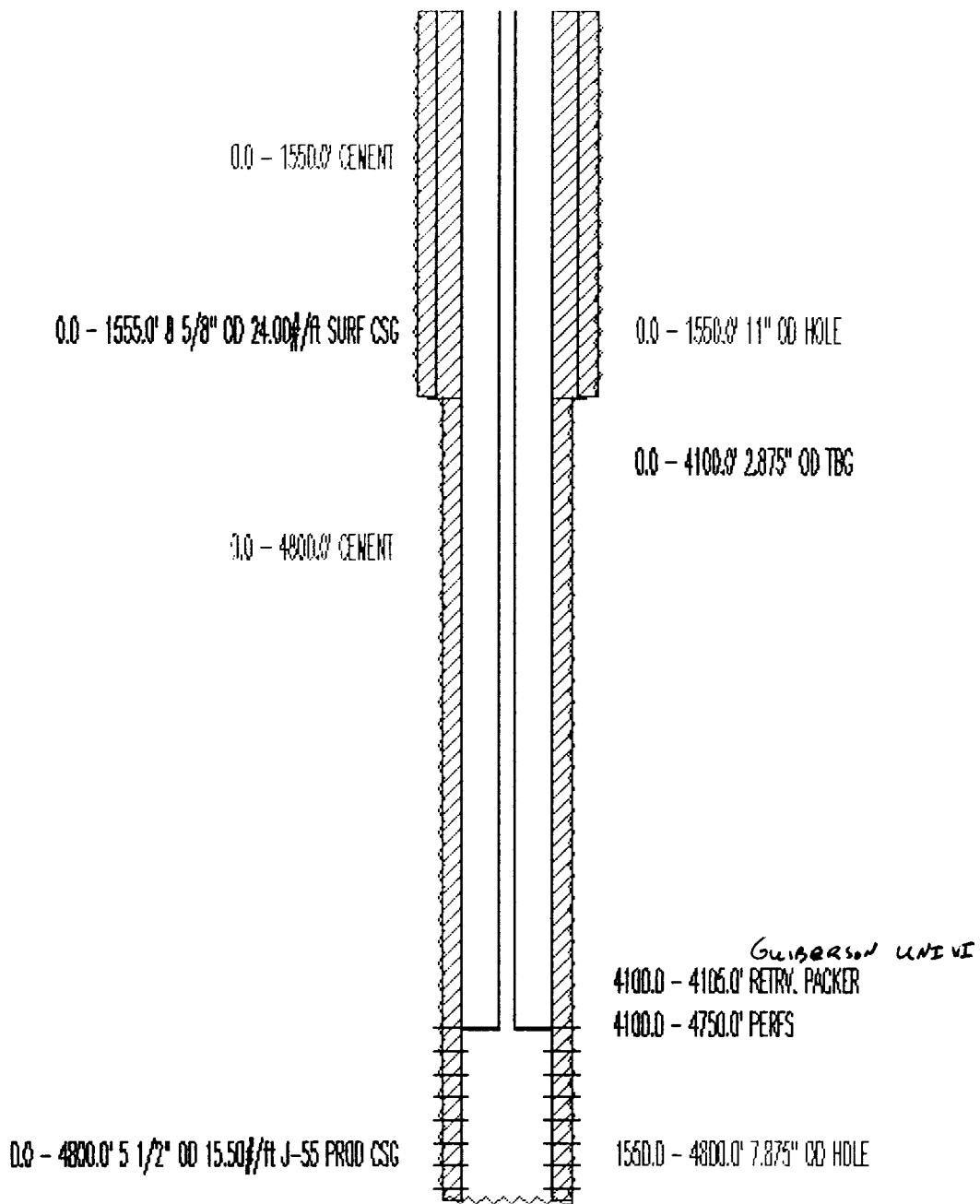
No plugged and abandoned wells exist in the area of review.

**NEW MEXICO OIL CONSERVATION DIVISION - Form C-108**

West Vacuum Unit-      Vacuum Grayburg-San Andres

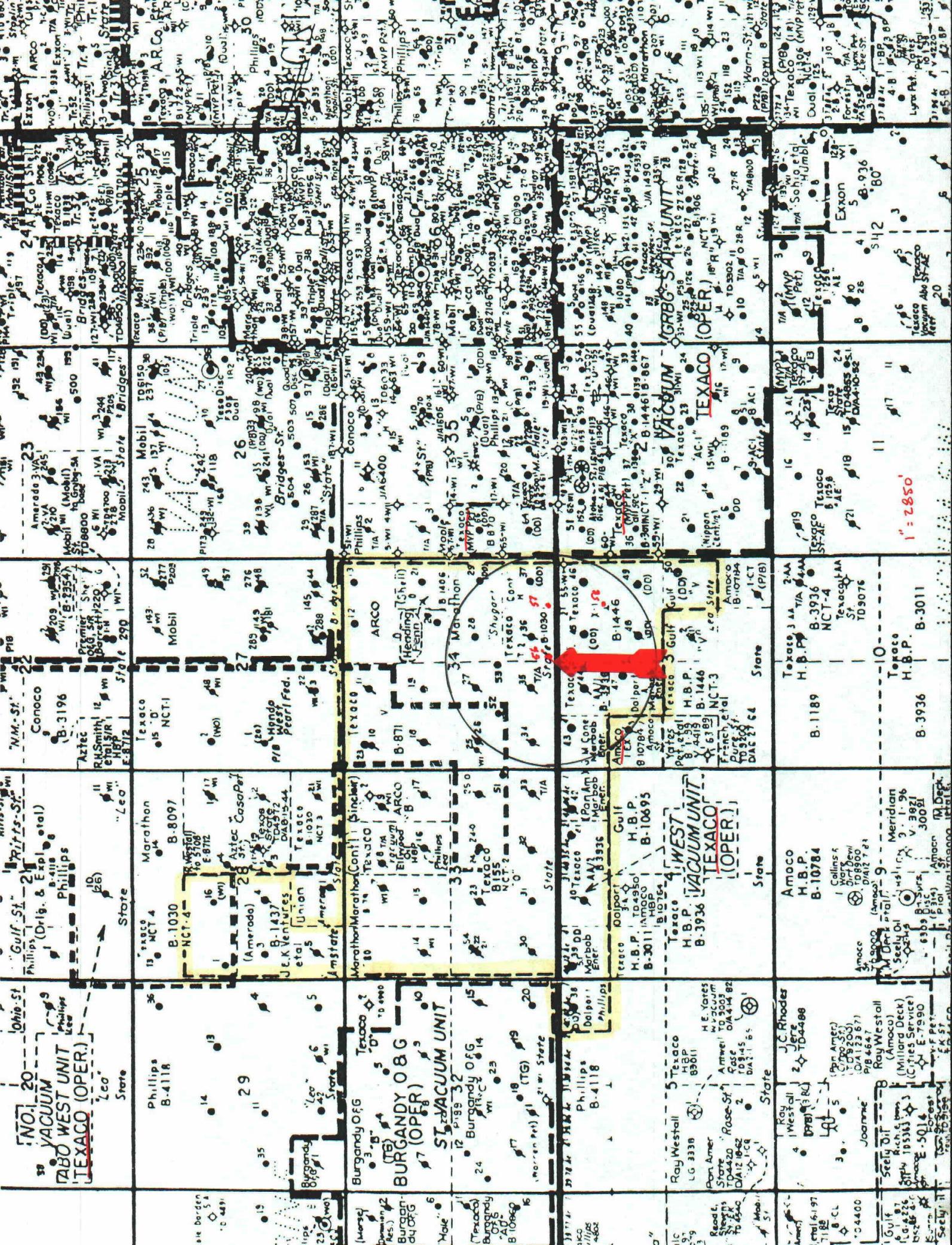
- VII. Proposed average daily injection rate per well is 1000 Bbls per day and anticipated maximum rate is 2000 Bbls per day. Maximum pressure will not exceed 1450 psi system working pressure. The initial injection pressure will be limited to about 820 psi (.2 psi/ft). Step rate tests will be run to establish higher limits with the authorization of the NMOCD. The system will be closed.
- IX. The subject well will be stimulated in stages with 10000 to 20,000 gallons 15% NEFE and surfactants as needed. Rock salt blocks and ball sealers will be used for diversion.
- XII. Based on current geological and engineering data, no evidence of natural or artificially induced open faults occur within the unitized interval or above. No known communication has been observed between the injection zone and any subsurface source of drinking water.
- XIII.A Copy of the Legal Notice is attached.

TEXACO E&P INC  
WEST VACUUM UNIT No. 56 WNW

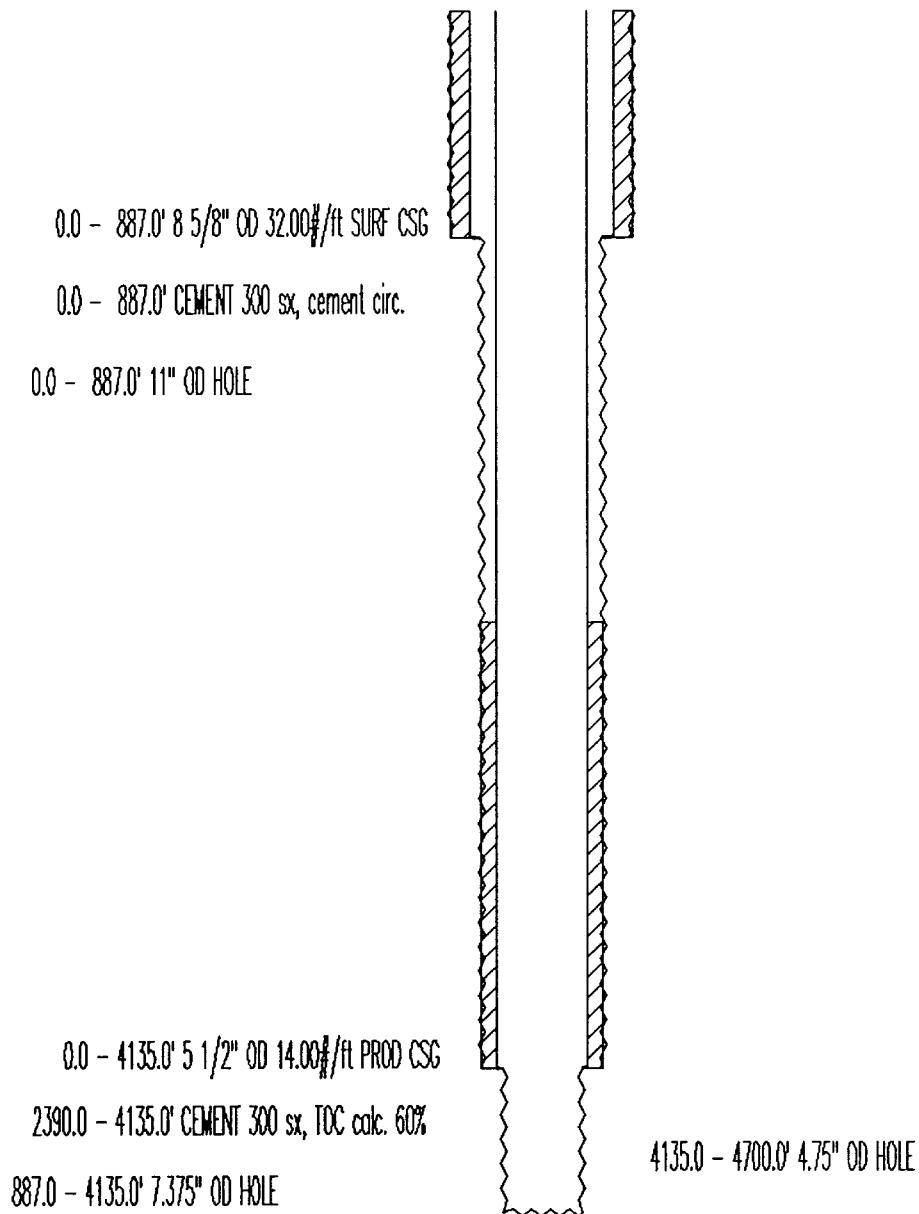


100 FSL & 2450 FEL  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4030' GL  
COMPLETION DATE:  
COMPLETION INTERVAL: 4100 - 4800 (GBSA)



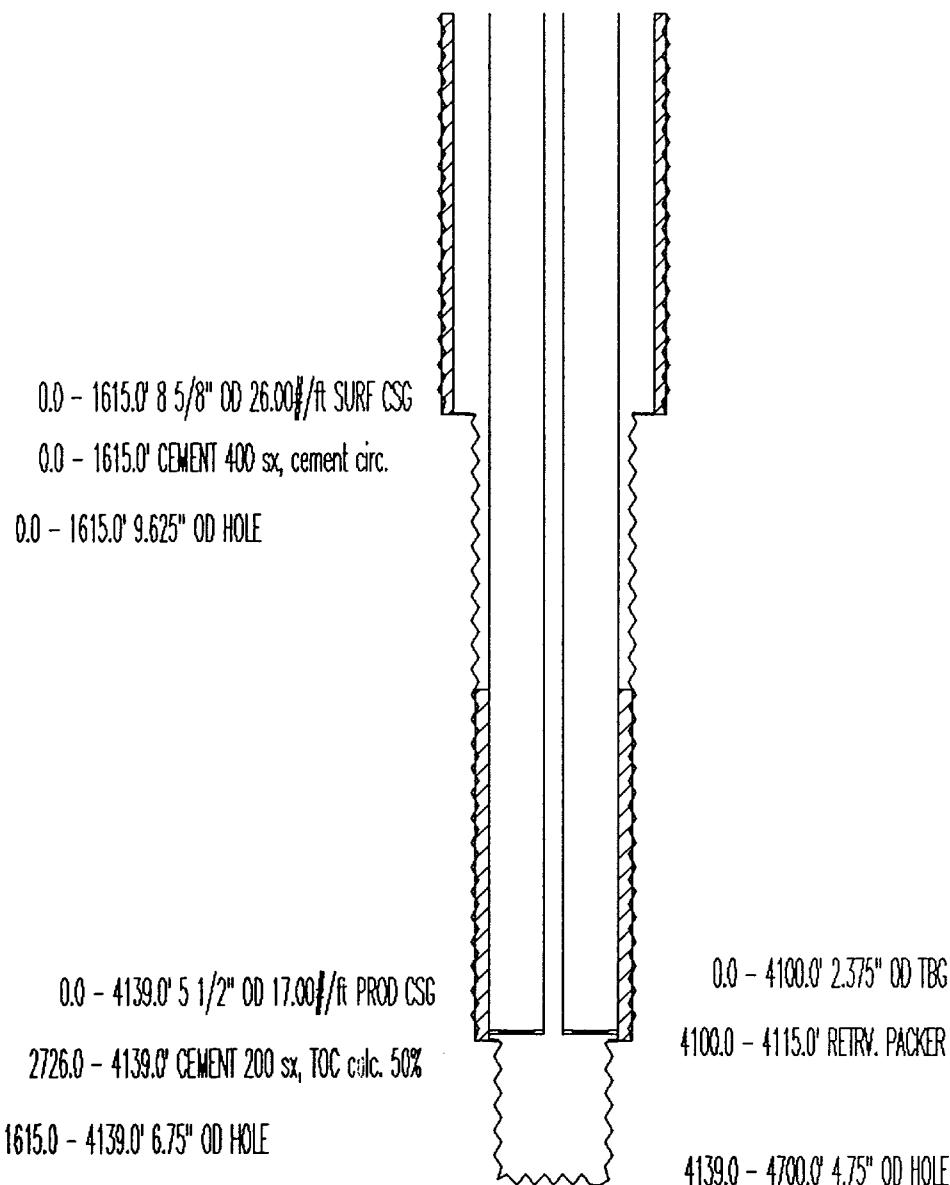


TEXACO E&P INC  
WEST VACUUM UNIT No. 26  
API# 30 025 02209



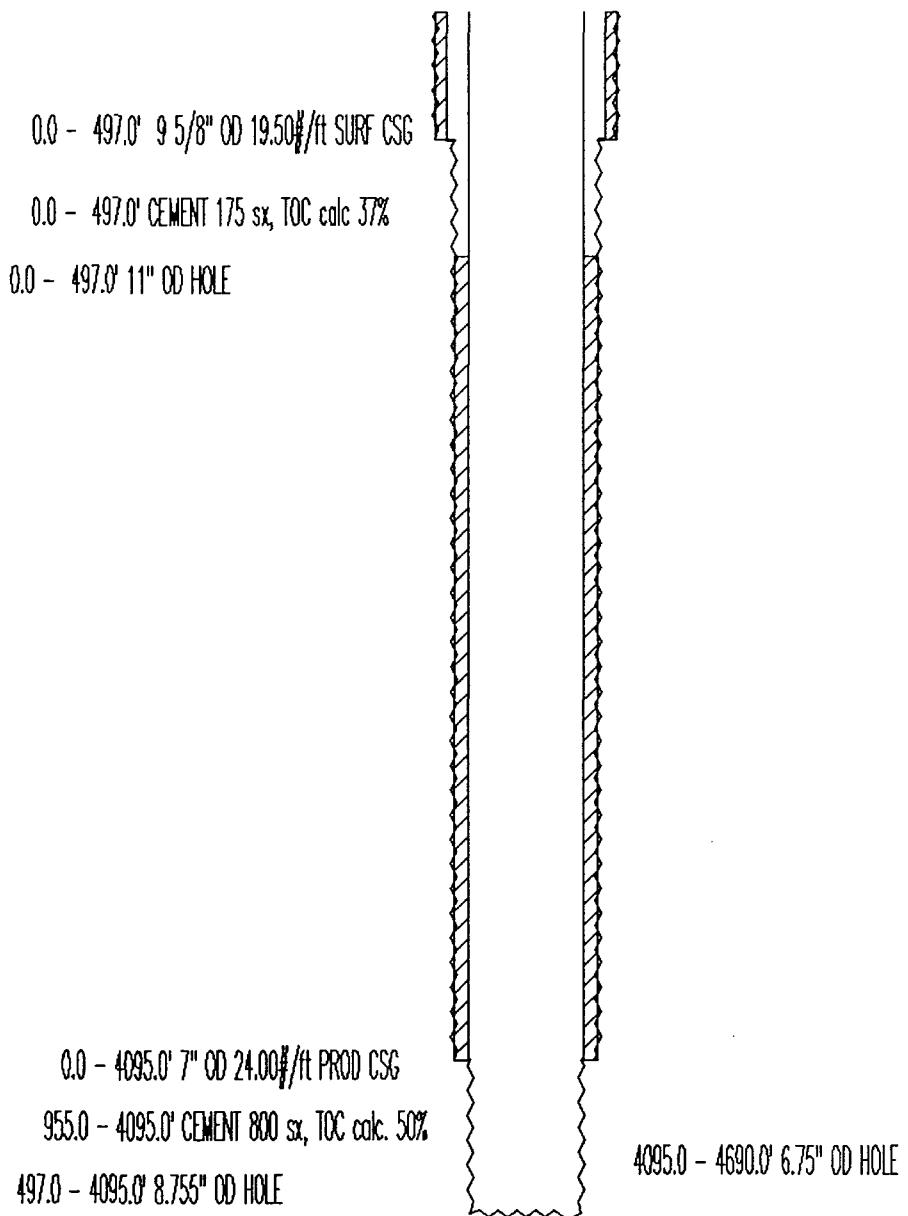
1980 FSL & 660 FWL  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4037' GL  
COMPLETION DATE: 1-09-44  
COMPLETION INTERVAL: 4135 - 4700 (GBSA)  
Former Texaco - NW "V" State No. 5

TEXACO E&P INC  
WEST VACUUM UNIT No. 27 WNW  
API# 30 025 02206



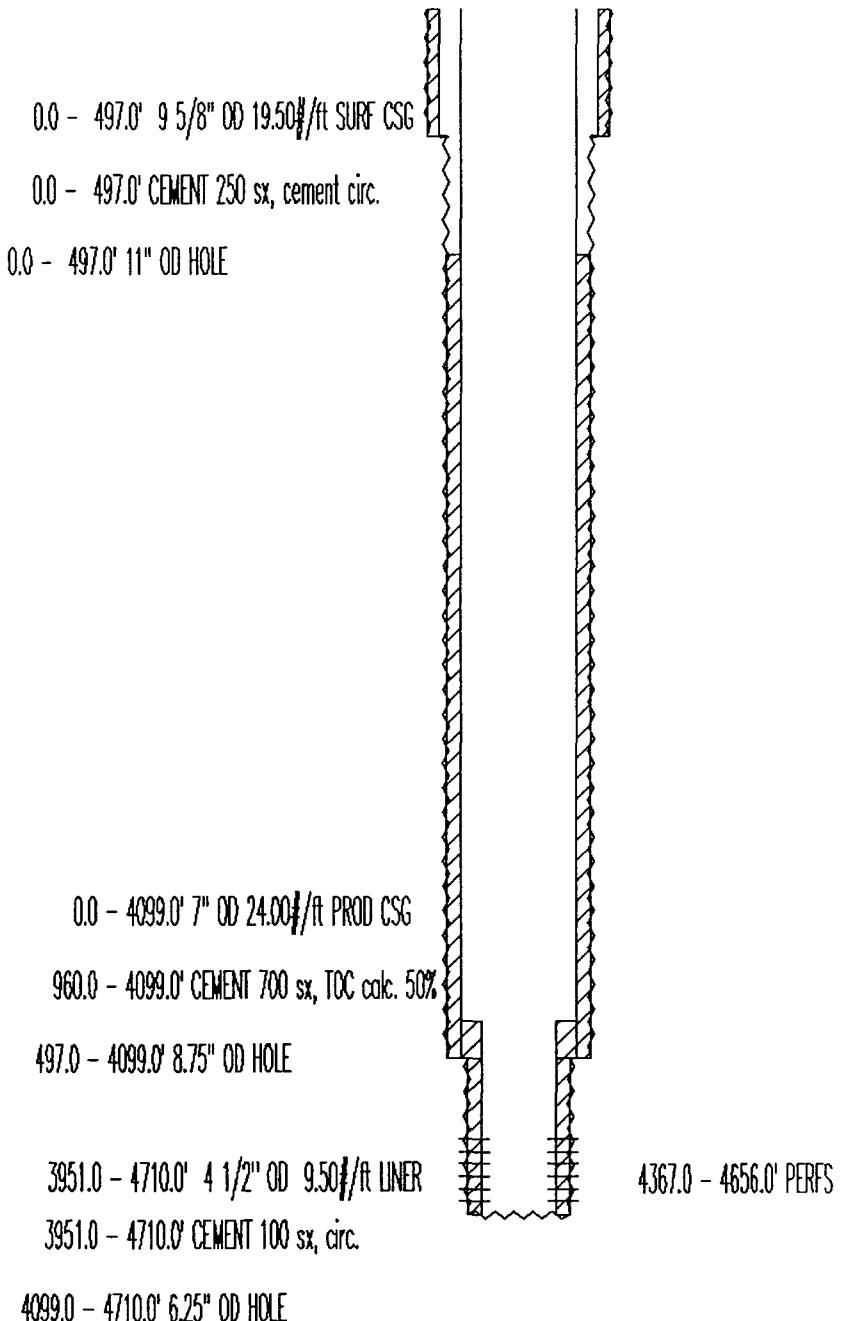
1980 FSL & 1980 FWL  
SEC 34 , TWN 17 S, RANGE 34 E  
ELEVATION: 4035' GL  
COMPLETION DATE: 8-11-39  
COMPLETION INTERVAL: 4139 - 4700 (GBSA)  
Former Texaco - NM "V" State No. 2

TEXACO E&P INC  
WEST VACUUM UNIT No. 28  
API# 30 025 02202



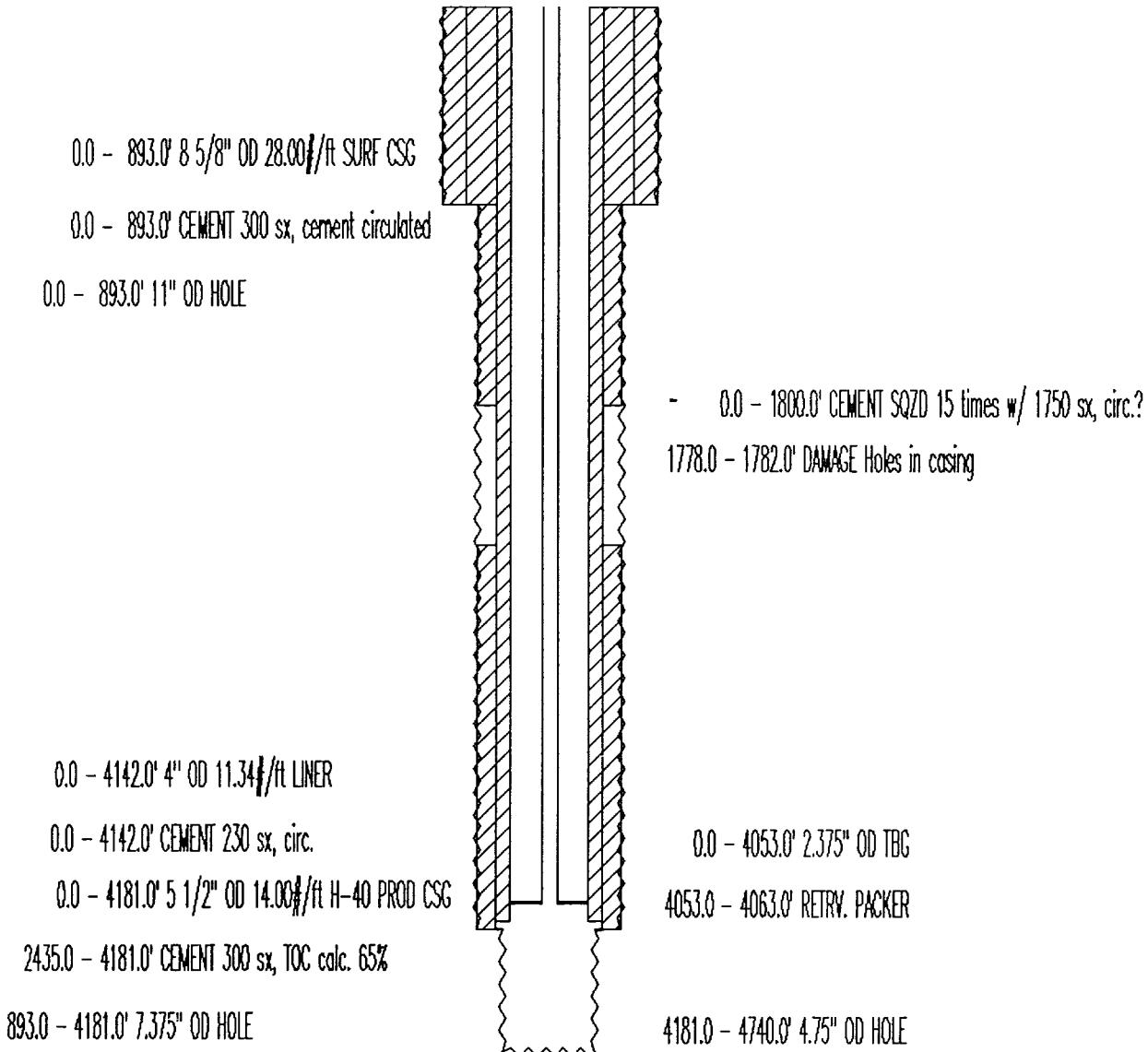
1980 FSL & 1980 FEL  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4031' GL  
COMPLETION DATE: 7-01-39  
COMPLETION INTERVAL: 4095 - 4690 (GSA)  
Former Ohio Oil Co - State "Shugart" No. 2

TEXACO E&P INC  
WEST VACUUM UNIT No. 29  
API# 30 025 02201



1980 FSL & 660 FEL  
SEC 34 , TWN 17 S, RANGE 34 E  
ELEVATION: 4029' CL  
COMPLETION DATE: 12-01-88  
COMPLETION INTERVAL: 4367 - 4656 (GRSA)  
Former Ohio Oil Co - State "Shugart" No. 1

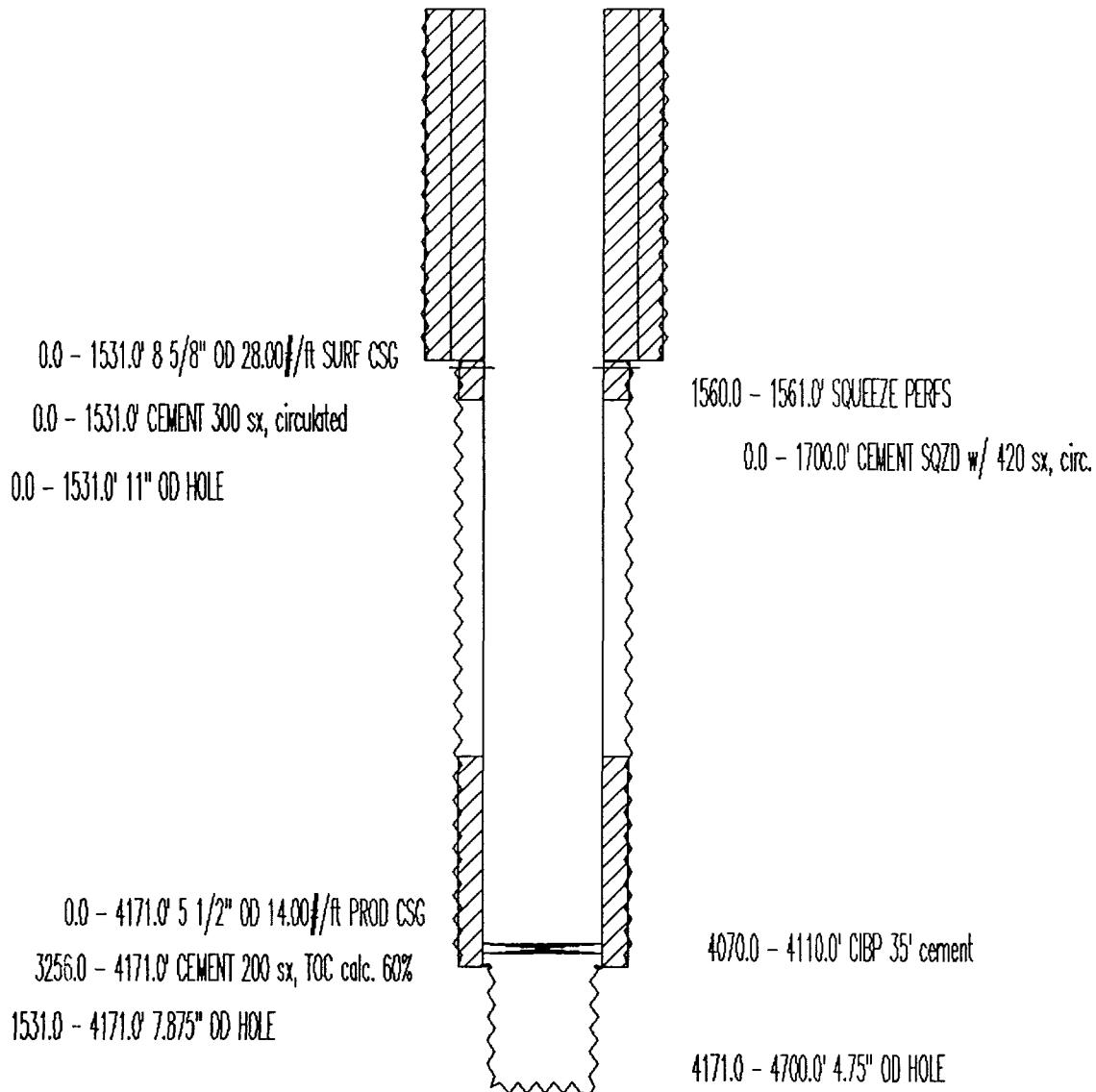
TEXACO E&P INC  
WEST VACUUM UNIT No. 34 WW  
API# 30 025 02210



660 FSL & 660 FWL  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4035' GL  
COMPLETION DATE: 4-18-44  
COMPLETION INTERVAL: 4181 - 4700 (GBSA)  
Former Texaco - NM "V" State No. 6

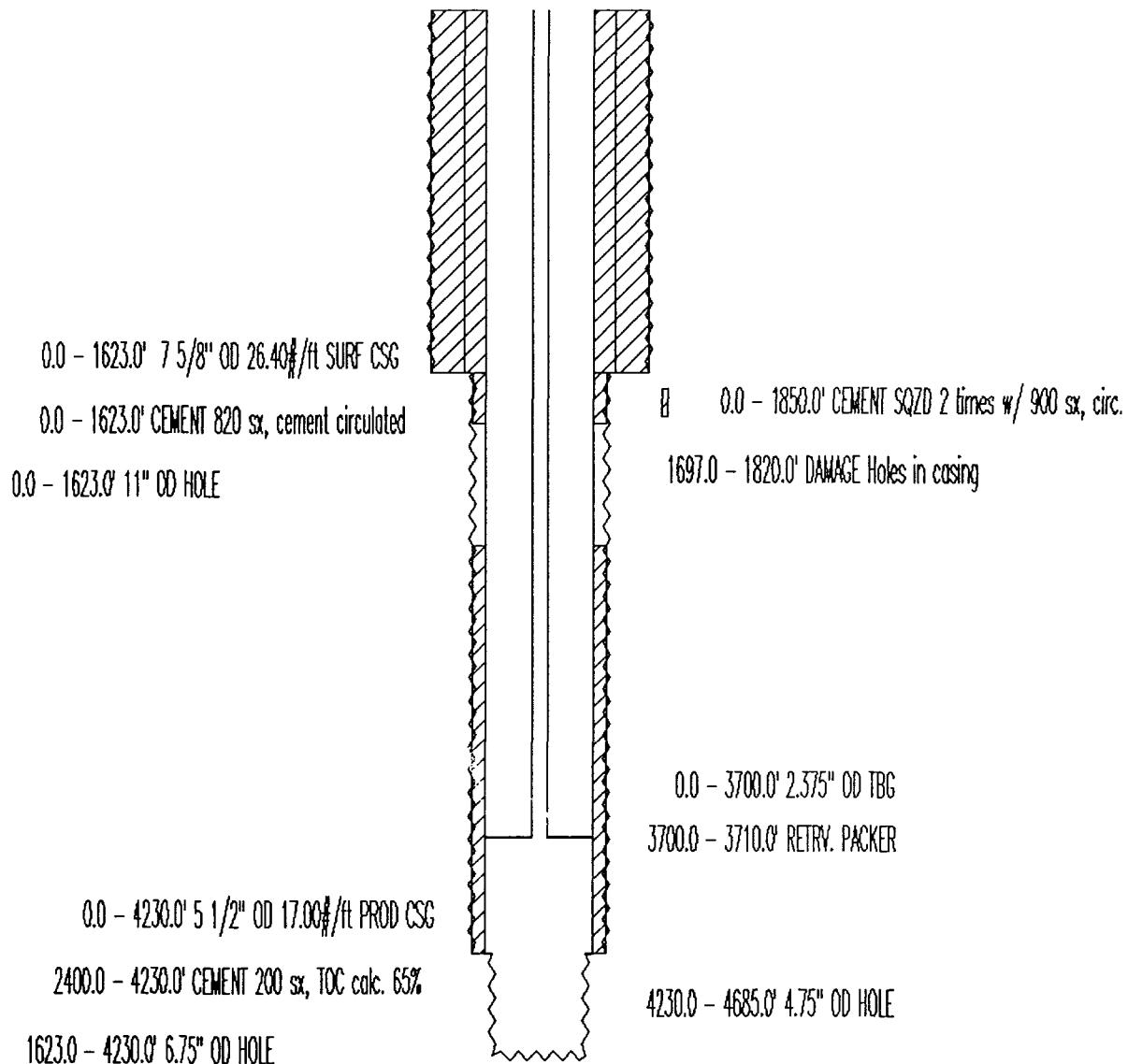
TA: 1-21-94

TEXACO E&P INC  
WEST VACUUM UNIT No. 35  
API# 30 025 02208



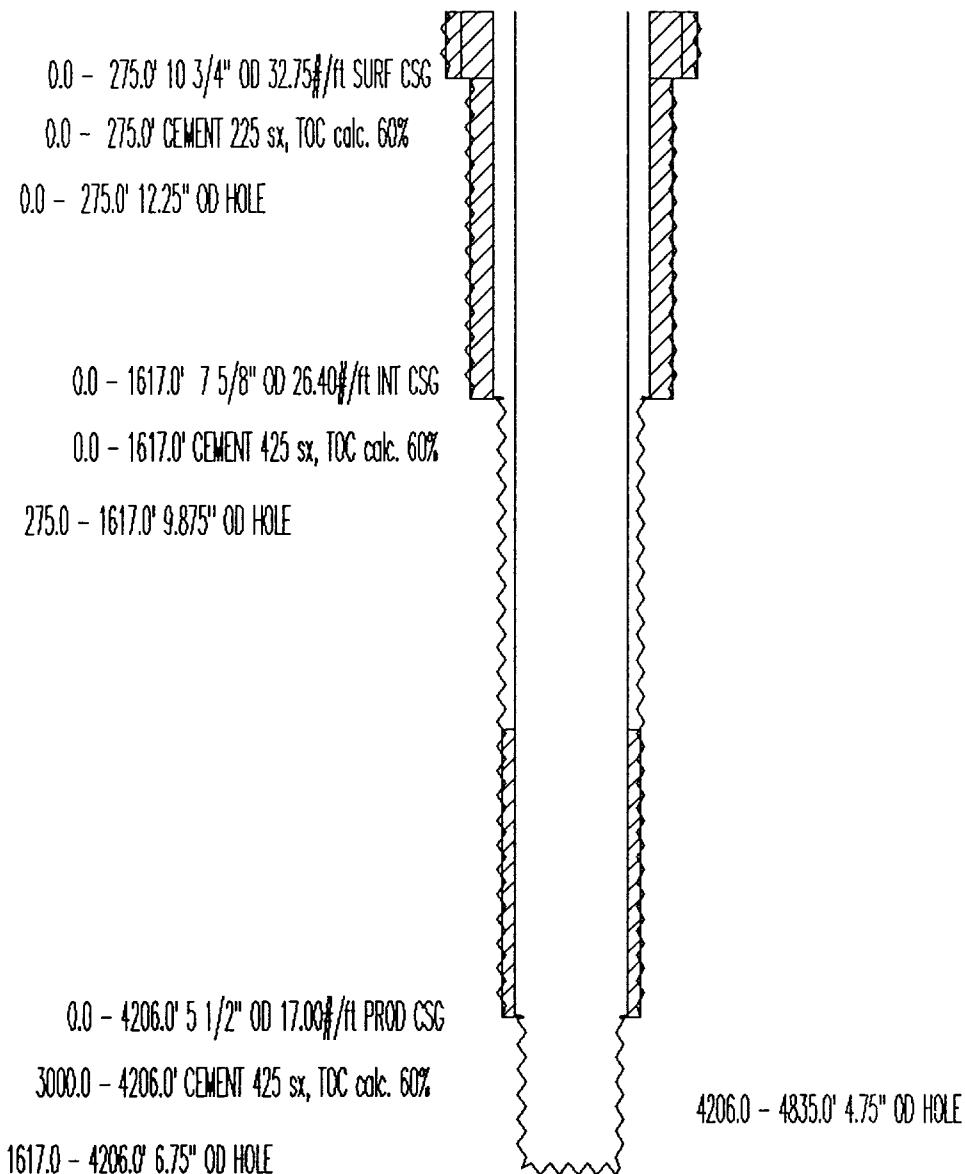
660 FSL & 1980 FML  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4041' GL  
COMPLETION DATE: 4-12-40  
COMPLETION INTERVAL: 4171 - 4700 (GBSA)  
Former Texaco - NM "V" State No. 4

TEXACO E&P INC  
WEST VACUUM UNIT No. 36 WNW  
API# 30 025 02204



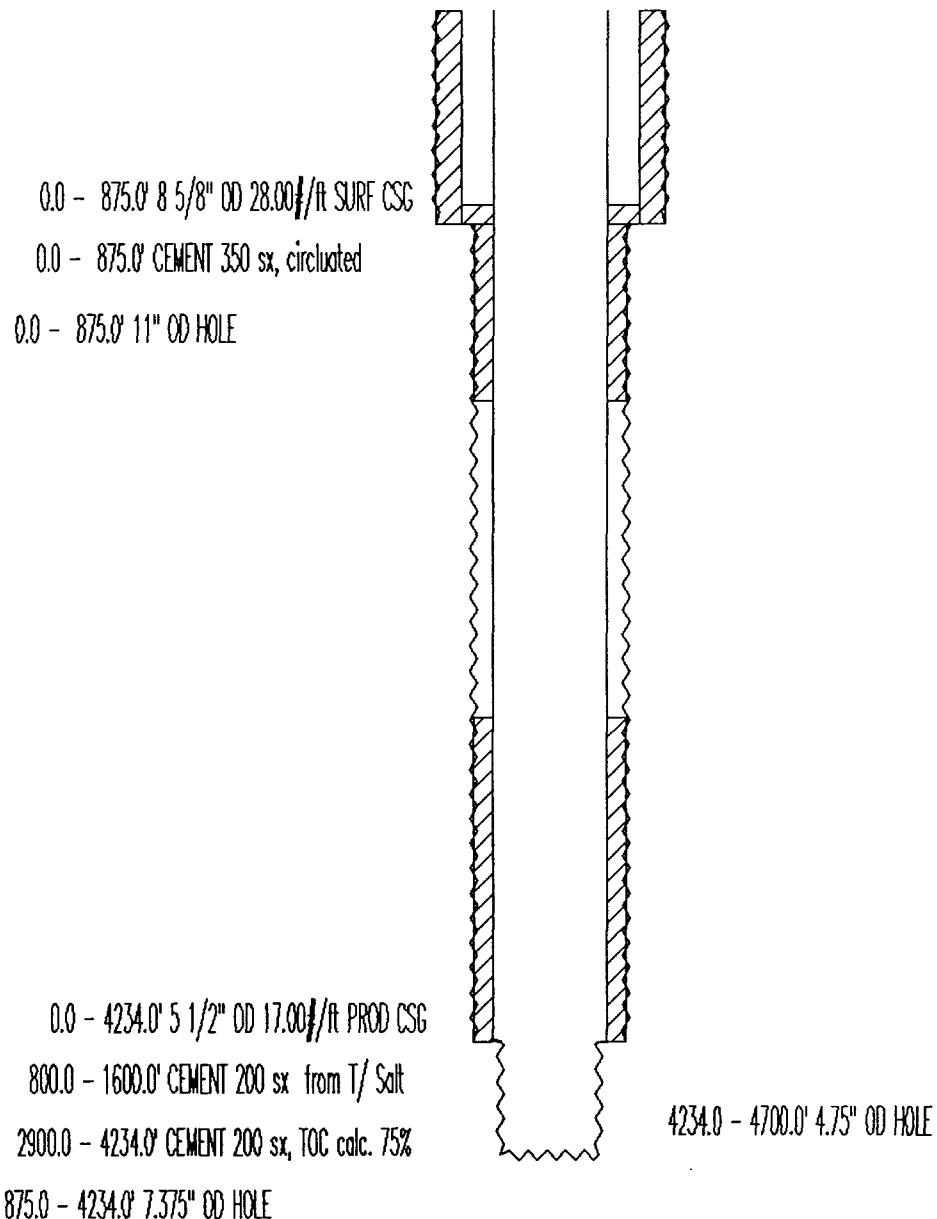
660 FSL & 1980 FEL  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4031' GL  
COMPLETION DATE: 4-24-39  
COMPLETION INTERVAL: 4230 - 4685 (GBSA)  
Former Texaco - NM "T" State NCT-2 No. 2

TEXACO E&P INC  
WEST VACUUM UNIT No. 37  
API# 30 025 02197



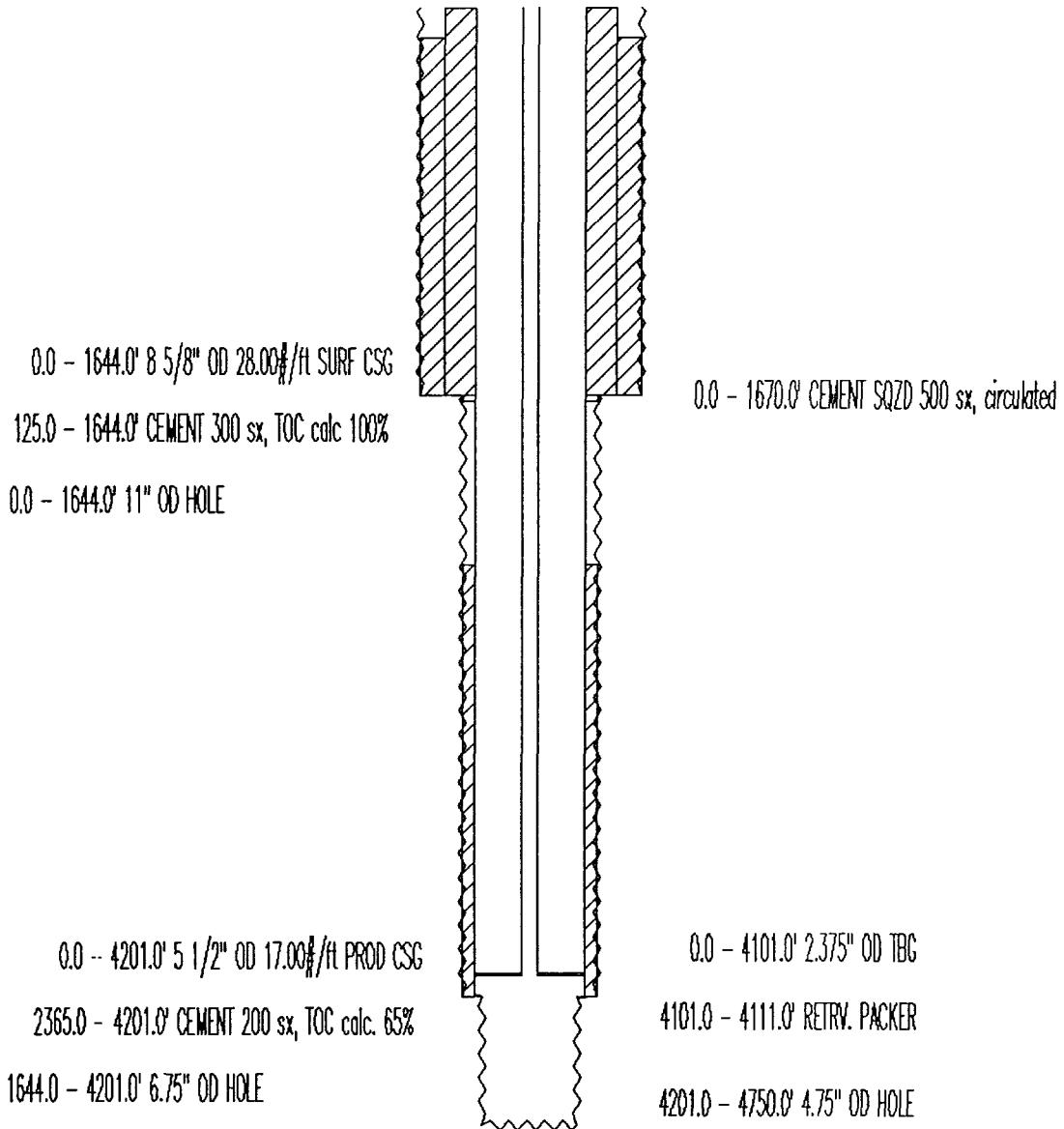
660 FSL & 660 FEL  
SEC 34 , TWN 17 S, RANGE 34 E  
ELEVATION: 4036' GL  
COMPLETION DATE: 2-10-39  
COMPLETION INTERVAL: 4206 - 4835 (GBSA)  
Former Continental Oil - State "H-34" No. 1

TEXACO E&P INC  
WEST VACUUM UNIT No. 43  
API# 30 025 02278



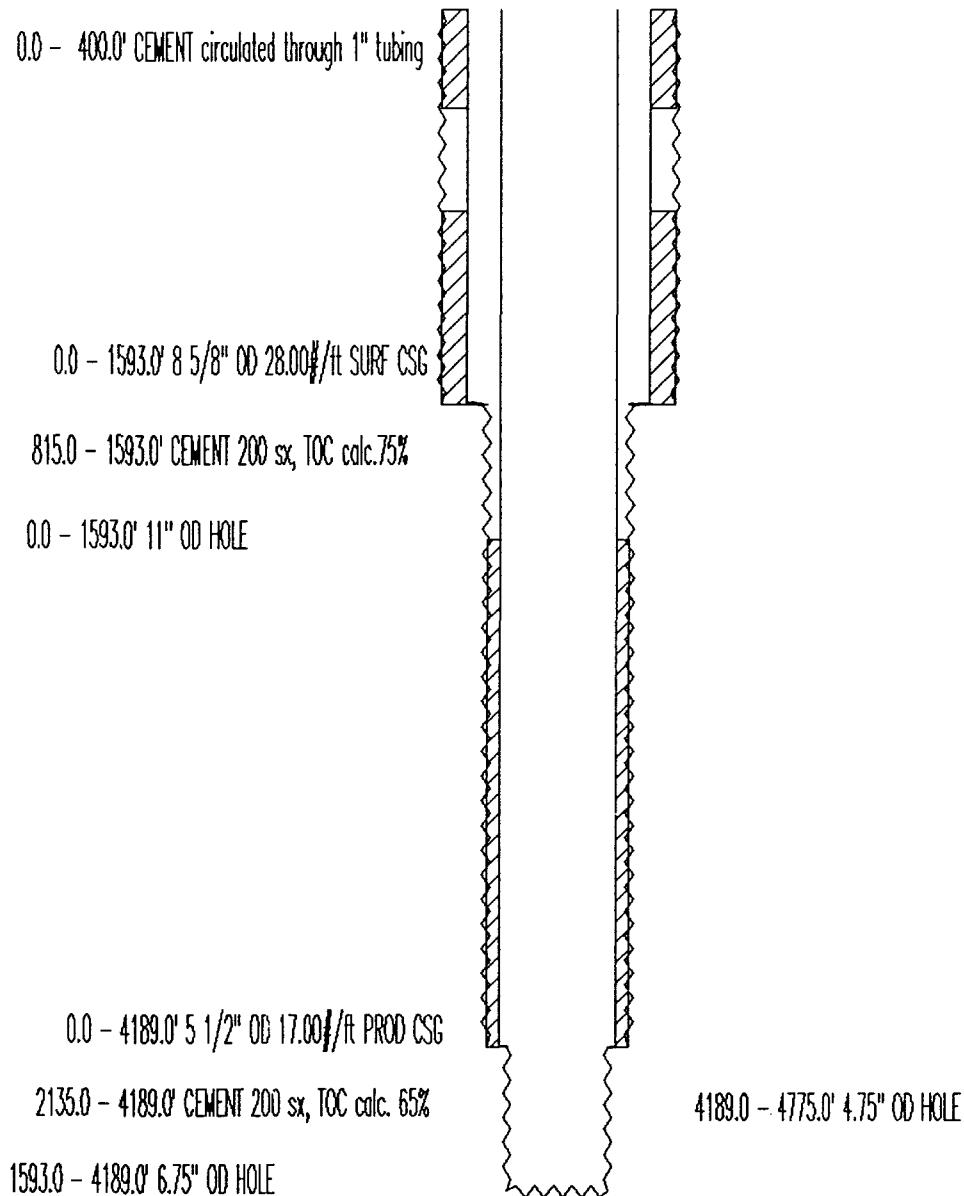
330 FNL & 990 FML  
SEC 3, TWN 18 S, RANGE 34 E  
ELEVATION: 4040 GL  
COMPLETION DATE: 09-28-48  
COMPLETION INTERVAL: 4234 - 4700 (GBSA)  
Former Gordon Cone - Stanolind State No. 1

TEXACO E&P INC  
WEST VACUUM UNIT No. 44 WW  
API# 30 025 02286



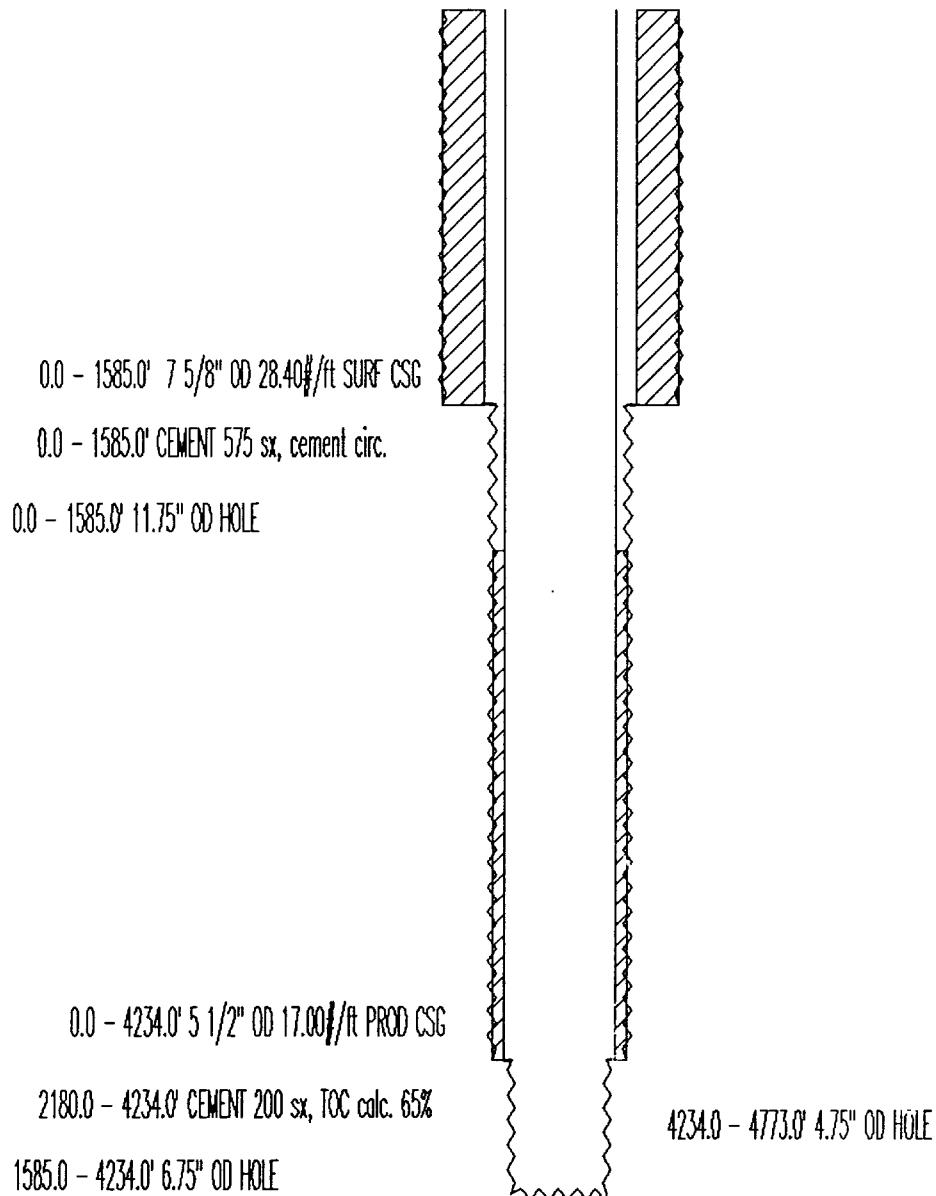
669 FNL & 1980 FWL  
SEC 3, TWN 18 S, RANGE 34 E  
ELEVATION: 4041 GL  
COMPLETION DATE: 02-10-40  
COMPLETION INTERVAL: 4201 - 4750 (GBCA)  
Former Texaco - New Mexico "AA" NCT-1 No. 1

TEXACO E&P INC  
WEST VACUUM UNIT No. 45  
API# 30 025 02283



660 FNL & 1980 FWL  
SEC 3, TWN 18 S, RANGE 34 E  
ELEVATION: 4028 GL  
COMPLETION DATE: 11-11-39  
COMPLETION INTERVAL: 4189 - 4775 (GBSA)  
Former Texaco - NM "X" State NCT-1 No. 2

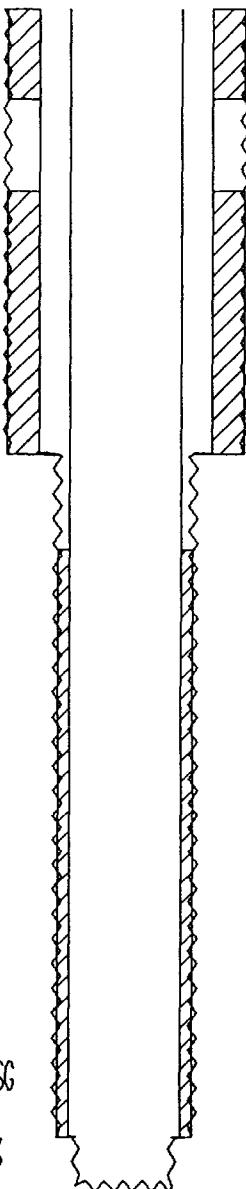
TEXACO E&P INC  
WEST VACUUM UNIT No. 46  
API# 30 025 02282



660 FNL & 660 FEL  
SEC 3, TWN 18 S, RANGE 34 E  
ELEVATION: 4031 GL  
COMPLETION DATE: 4-23-39  
COMPLETION INTERVAL: 4234 - 4773 (CBSA)  
Former Texaco - NM "X" State NCT-1 No. 1

TEXACO E&P INC  
WEST VACUUM UNIT No. 47  
API# 30 025 02379

0.0 - 364.0' CEMENT circ. 100 sx through 1"



0.0 - 1796.0' 8 5/8" OD 28.00#/ft SURF CSC

735.0 - 1796.0' CEMENT 300 sx, TOC calc. 75%

0.0 - 1796.0' 11.75" OD HOLE

0.0 - 4547.0' 5 1/2" OD 15.50#/ft PROD CSC

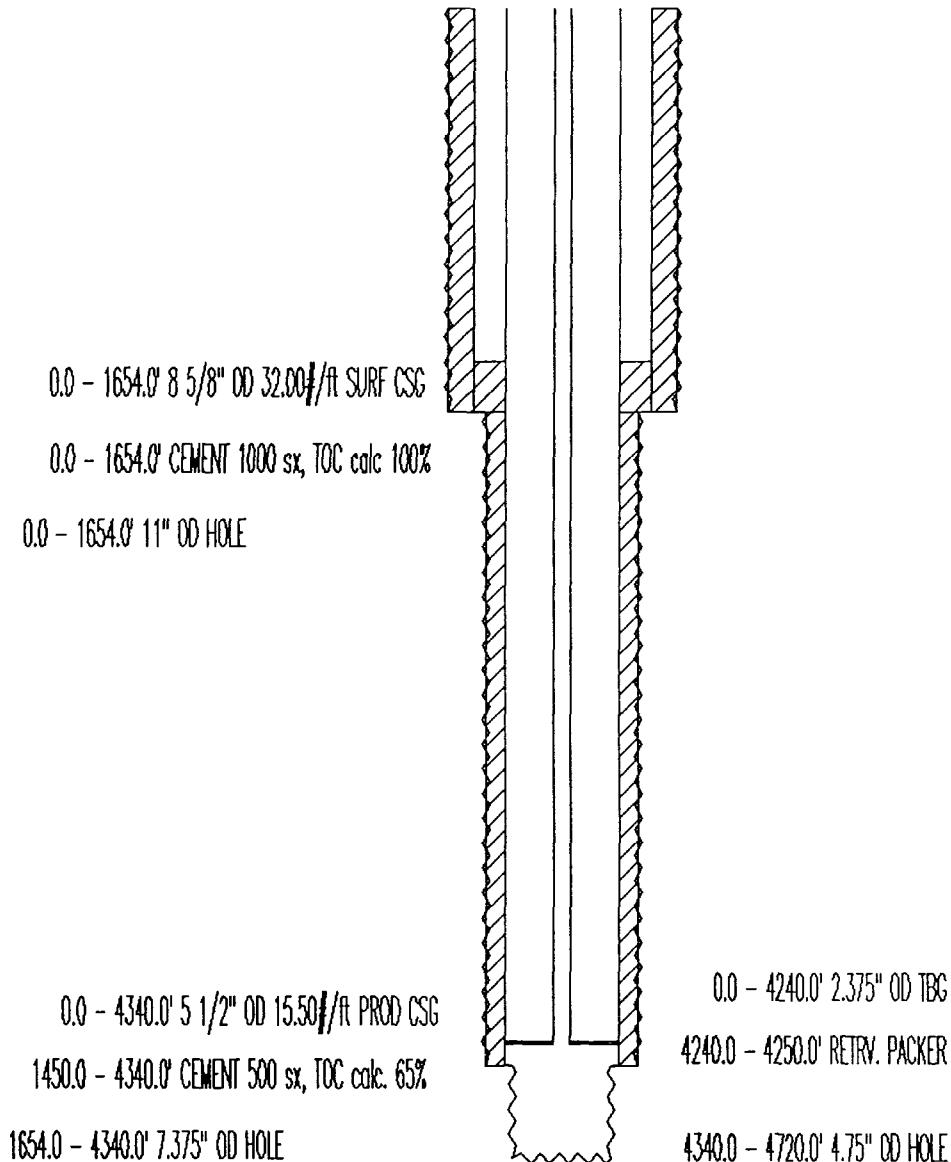
2180.0 - 4547.0' CEMENT 200 sx, TOC calc. 65%

4547.0 - 4747.0' 4.75" OD HOLE

1796.0 - 4547.0' 6.75" OD HOLE

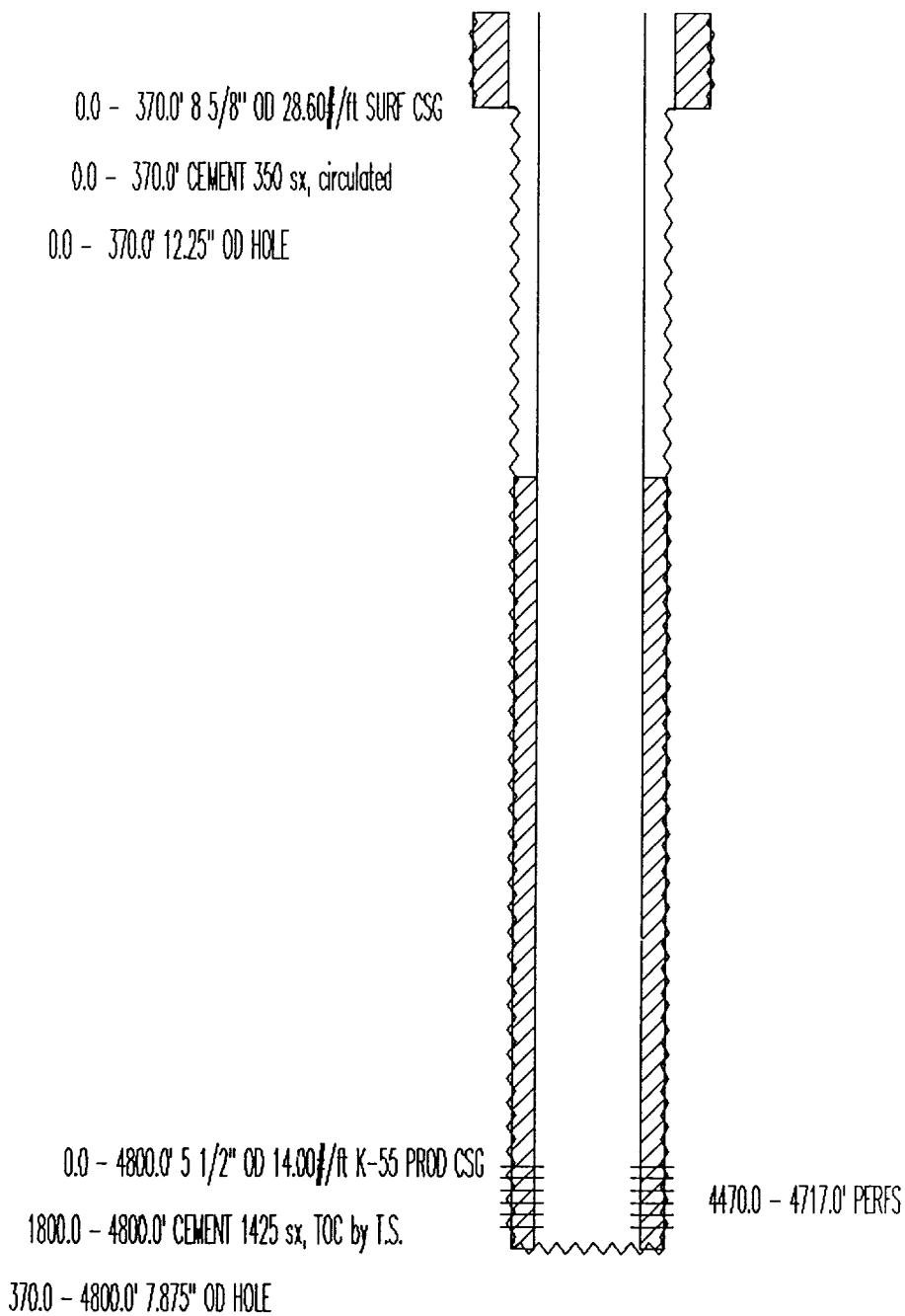
1650 FNL & 2310 FWL
SEC 3, TWN 18 S, RANGE 34 E
ELEVATION: 4027' GL
COMPLETION DATE: 7-13-50
COMPLETION INTERVAL: 4547 - 4747 (CBSA)
Former Dalport Oil - Stanolind State "A" No. 1

TEXACO E&P INC  
WEST VACUUM UNIT No. 48 WW  
API# 30 025 02284



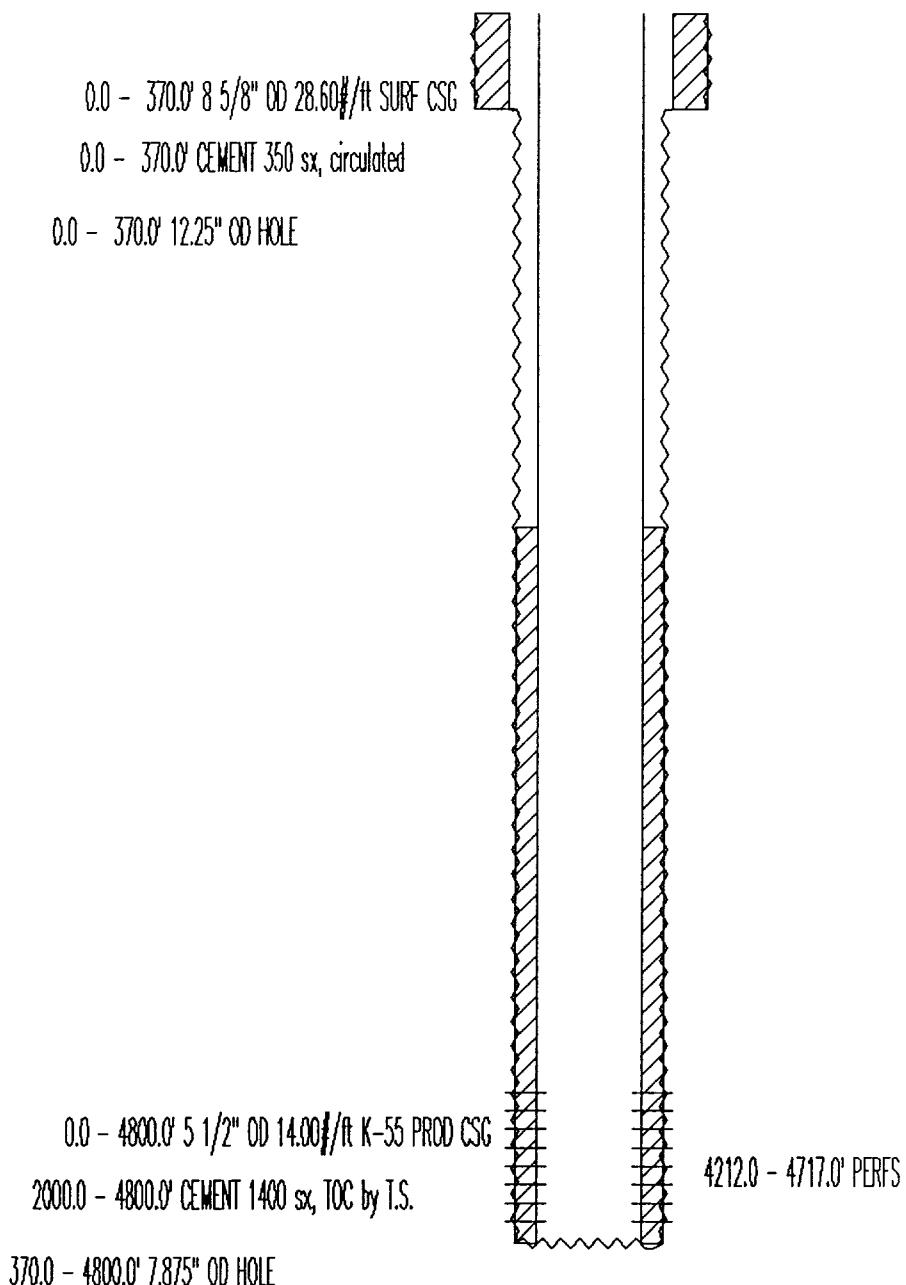
1980 FNL & 1980 FEL  
SEC 3, TWN 18 S, RANGE 34 E  
ELEVATION: 4023 GL  
COMPLETION DATE: 09-04-50  
COMPLETION INTERVAL: 4340 - 4720 (GSA)  
Former Texaco - New Mexico "X" NCT-1 No. 4

TEXACO E&P INC  
WEST VACUUM UNIT No. 52  
API# 30 025 25086



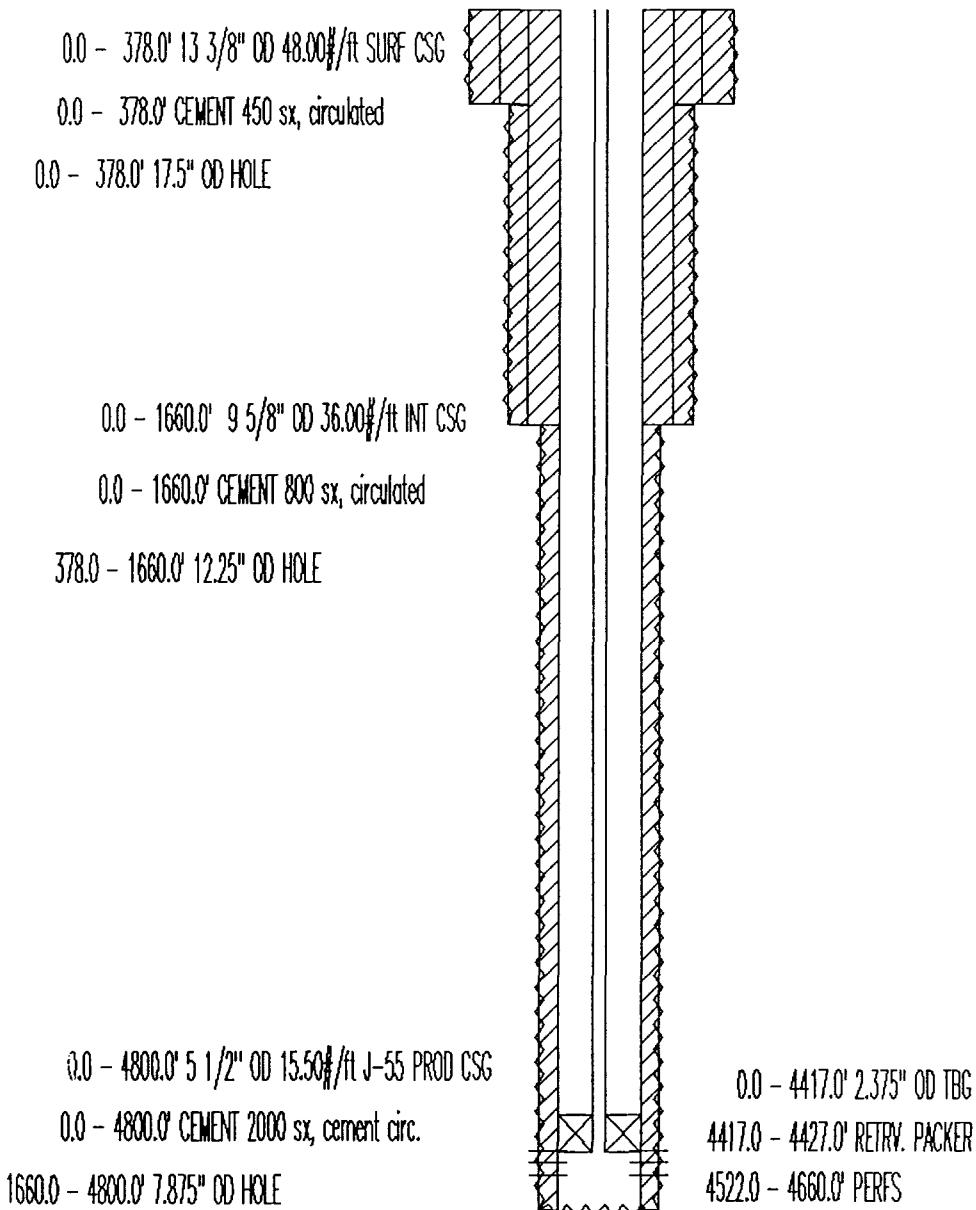
1466 FSL & 1375 FWL  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4032' GL  
COMPLETION DATE: 1-15-76  
COMPLETION INTERVAL: 4470 - 4717 (GBSA)

TEXACO E&P INC  
WEST VACUUM UNIT No. 53  
API# 30 025 25087



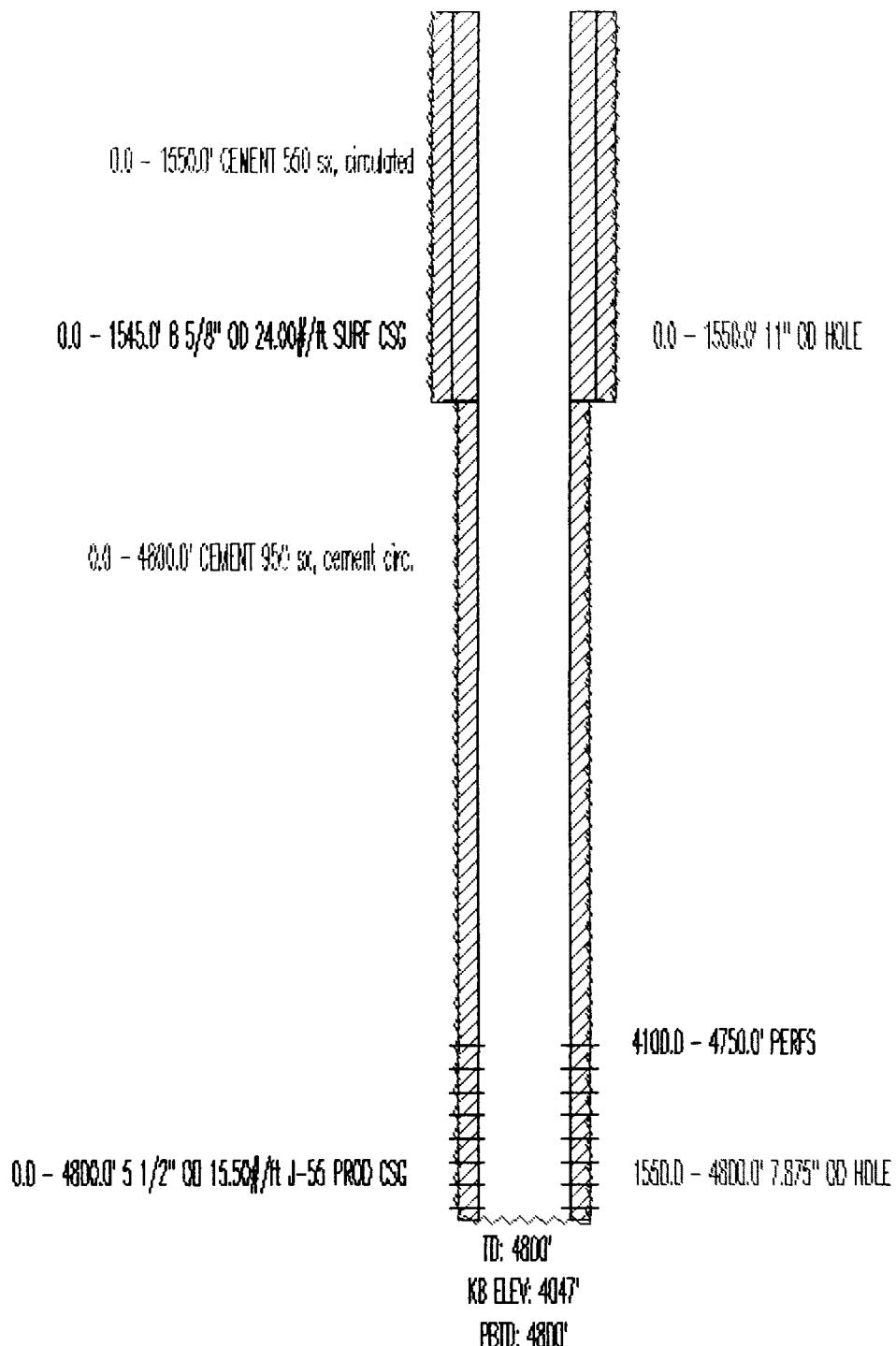
1410 FSL & 2600 FEL  
SEC 34 , TWN 17 S, RANGE 34 E  
ELEVATION: 4032' GL  
COMPLETION DATE: 2-09-76  
COMPLETION INTERVAL: 4212 - 4717 (GBSA)

TEXACO E&P INC  
WEST VACUUM UNIT No. 55 WNW  
API# 30 025 28116



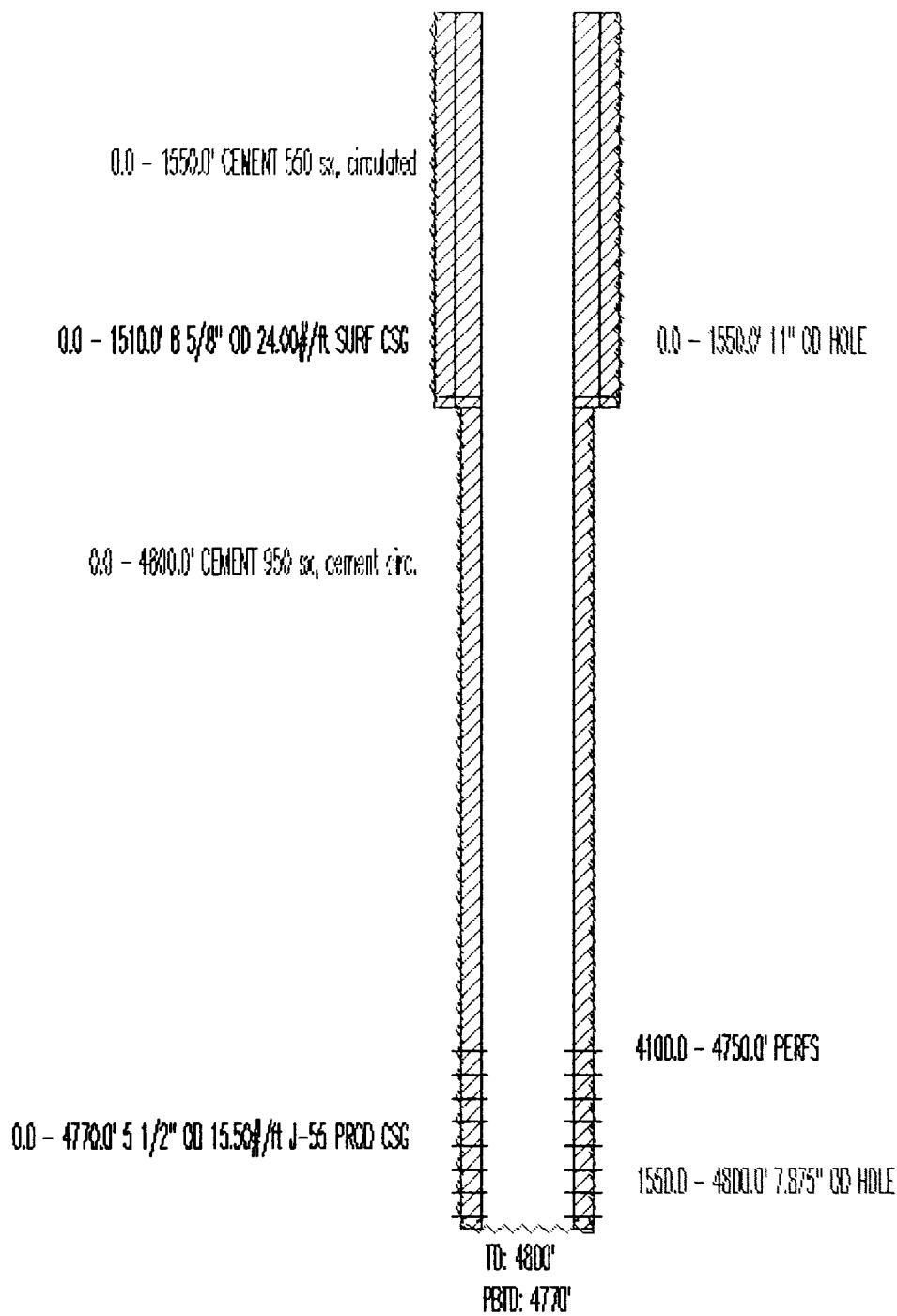
170 FNL & 110 FEL  
SEC 3, TWN 18 S, RANGE 34 E  
ELEVATION: 4022' GL  
COMPLETION DATE: 3-18-83  
COMPLETION INTERVAL: 4522 - 4660 (GBSA)

TEXACO E&P INC  
WEST VACUUM UNIT No. 57



75 FSL & 1305 FEL  
SEC 34, TWN 17 S, RANGE 34 E  
ELEVATION: 4030' GL  
COMPLETION DATE:  
COMPLETION INTERVAL: 4100 - 4800 (GCSA)

TEXACO E&P INC  
WEST VACUUM UNIT No. 58



1330 FSL & 1330 FEL  
SEC 3, TWIN 18 S, RANGE 34 E  
ELEVATION: 4027' GL  
COMPLETION DATE:  
COMPLETION INTERVAL: 4100 - 4800 (GBSA)

Landowners notified by certified mail:

Surface Landowner

State of New Mexico  
P.O. Box 1148  
Santa Fe, NM 87504-1148

Surface leased by:

Roy Pearce, Jr.  
1717 S. Jackson St.  
Pecos, TX 79772

Offset Leaseholders and Operator notified by certified mail.

Floyd Oil Co. 711 Louisiana Suite 1740 Houston, TX 77002	Cheyenne Partners V, Ltd. 711 Louisiana Suite 1740 Houston, TX 77002	Anne Todd Barfield P.O. Box 738 Wimberly, TX 78676
Margaret T. Sherill P.O. Box 2963 Ruidoso, NM 88345	Robert S. Pirtle P.O. Box 1310 Tyler, TX 75710	Tommy T. Todd 7912 Purdue Dallas, TX 75225
Amoco Production Co. P.O. Box 3092 Houston, TX 77253	Cathie Cone Auvenshine, Individually & Trustee, et al P.O. Box 507 Dripping Springs, TX 78620	Santa Fe Energy Resources, Inc. 550 W. Texas Ave Suite 1330 Midland, TX 79701
Conoco Inc. P.O. Box 1959 Midland, TX 79702	Atlantic Richfield Co. P.O. Box 1610 Midland, TX 79702	Marathon Oil Co. P.O. Box 552 Midland, TX 79702
Harry L. Todd 14017 Tanglewood Dr. Dallas, TX 75234	Ray L. Todd 1107 Shawnee Trail Carrollton, TX 75006	Thomas E. Todd, Jr. P.O. Box 338 Ruidoso, NM 88345
The W. L. & Virginia Todd Revocable Trust 3612 Euclid Dallas, TX 75205	Douglas L. Cone, Individually & Trustee, et al P.O. Box 93355 Lubbock, TX 79493	Clifford Cone, Individually & Trustee, et al P.O. Box 1629 Lovington, NM 88260
Kenneth G. Cone, Individually & Trustee, et al P.O. Box 11310 Midland, TX 79702	Tom R. Cone, Individually & Trustee, et al P.O. Box 778 Jay, OK 74346	W. L. Todd, Jr. 3612 Euclid Dallas, TX 75205
Ogden Sharon Hudnall Trust 2 Lometa Hudnall Cox Trust 2 703 First Place Tyler, TX 75702	Mary Anne Todd P.O. Box 2381 Wimberly, TX 78676	Georgia Lorraine Temple P.O. Box 11392 Midland, TX 79702
Ellwood Oil Co. P.O. Box 7500 Bartlesville, OK 74005	Headington Penn Corp. 7557 Rambler Road Suite 1150 Dallas, TX 75231	Oxy USA Inc. P.O. Box 50250 Midland, TX 79710



October 21, 1996

RE: West Vacuum Unit No. 56  
Lea County, New Mexico  
Notification of Expansion of Waterflood (C-108)

This letter is to notify all offset operators and landowners that Texaco E&P Inc. is amending NMOCD Order Nos. R-3007-A, R-4234, and WFX-507 on the West Vacuum Unit in Lea County, New Mexico. The following water injection well will be drilled for the purpose of pressure maintenance:

**56 - Unit Letter 0, 100 FSL & 2450 FEL, Section 34, T17S, R34E**

Proposed average daily injection rate per well is 1000 Bbls per day and anticipated maximum rate is 1500 Bbls per day. The initial injection pressure will be limited to about 820 psi (.2 psi/ft). Attached are maps showing the location of the above well and schematic of the pertinent wellbore data.

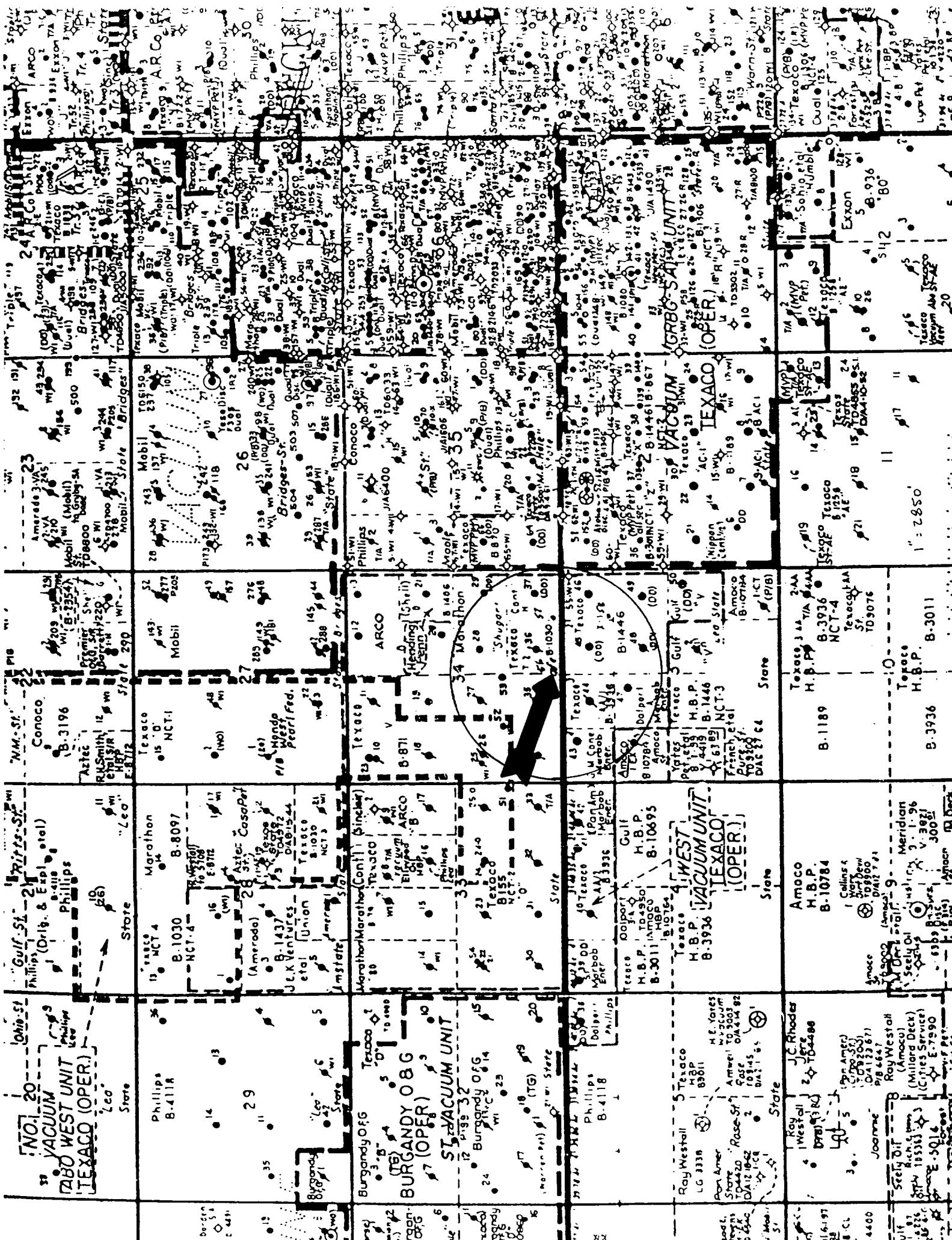
Interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico, 87501, within fifteen (15) days of receipt of this letter.

Sincerely,

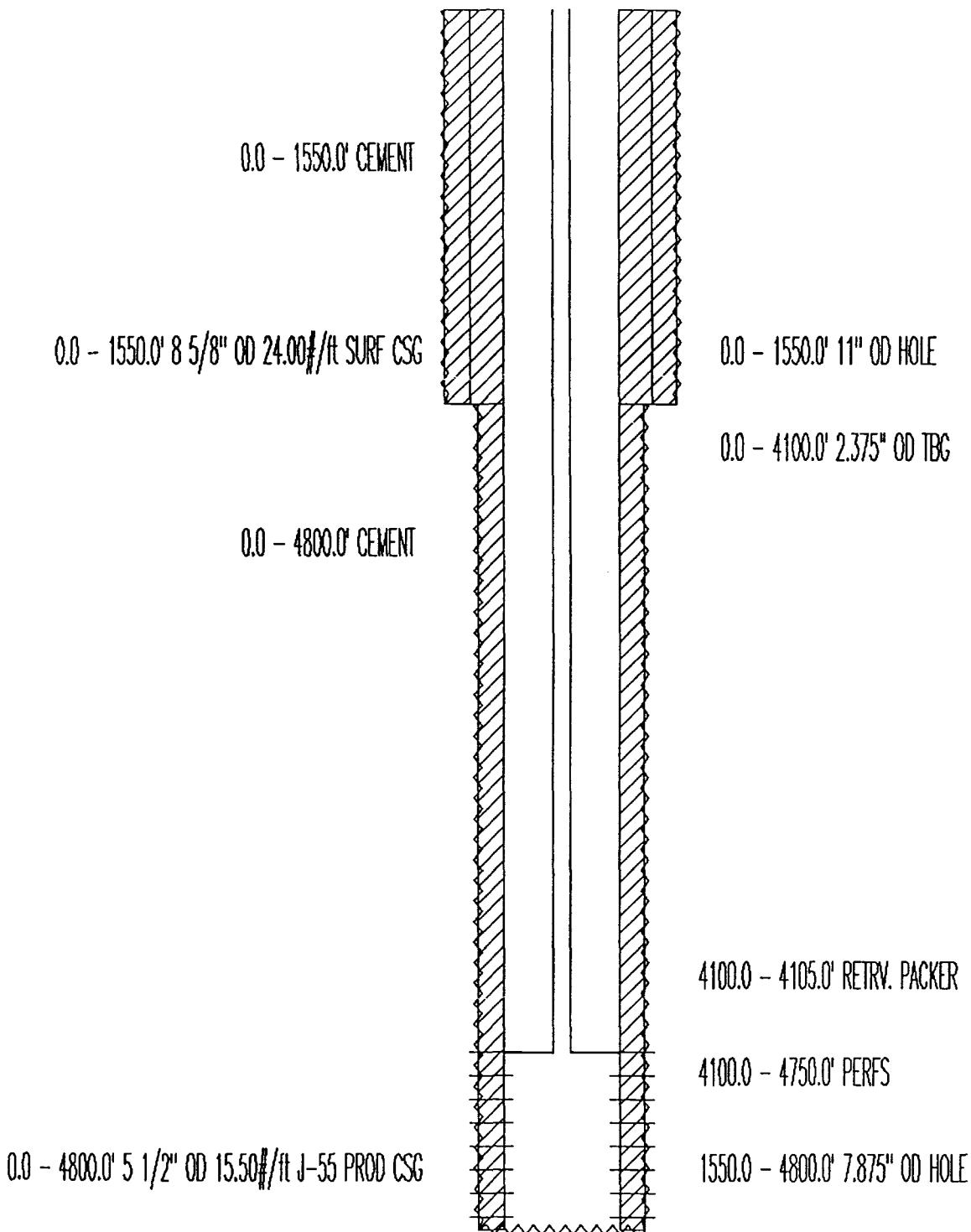
James L. Anderson  
Production Engineer

JLA/s

attachments



TEXACO E&P INC  
WEST VACUUM UNIT No. 56 WW  
PROPOSED WELLBORE SCHEMATIC



100 FSL & 2450 FEL  
SEC 34, TWP 17 S, RANGE 34 E  
ELEVATION:  
COMPLETION DATE:  
COMPLETION INTERVAL: 4100 - 4800 (GBSA)

P 622 712 537  
 US Postal Service  
**Receipt for Certified Mail**  
 J. L. Todd, Jr.  
 612 Euclid  
 Dallas, TX 75205

P 622 712 538  
 US Postal Service  
**Receipt for Certified Mail**  
 Georgia Lorraine Temple  
 P.O. Box 11392  
 Midland, TX 79702

P 622 712 539  
 US Postal Service  
**Receipt for Certified Mail**  
 Oxy USA Inc.  
 P.O. Box 50250  
 Midland, TX 79710

P 622 712 540

US Postal Service <b>Receipt for Certified Mail</b>	
No Insurance Coverage Provided.	
Do not use for International Mail (See Sent to Ray Pearce, Jr., T.C. Street & Number 1717 S. Texas, Post Office, State, & ZIP Code TX 79112 Postage \$ \$ Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt Showing to Whom & Date Delivered Return Receipt Showing to Whom, Date, & Addressee's Address TOTAL Postage & Fees \$ Postmark or Date	
PS Form 3800, April 1995	

Fold at line over top of envelope to the right of the return address

**CERTIFIED**

PS Form 3800, April 1995

P 622 712 539  
 MAIL

Fold at line over top of envelope to the right of the return address

**CERTIFIED**

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P 622 712 538  
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P 622 712 533

**US Postal Service  
Receipt for Certified Mail**

Santa Fe Energy Resources  
150 W. Texas Ave  
Suite 1330  
Midland, TX 79701

**US Postal Service  
Receipt for Certified Mail**

Marathon Oil Co.  
P.O. Box 552  
Midland, TX 79702

P 622 712 534

**US Postal Service  
Receipt for Certified Mail**

Thomas E. Todd, Jr.  
P.O. Box 338  
Ruidoso, NM 88345

P 622 712 535

**US Postal Service  
Receipt for Certified Mail**

Clifford Cone, Individually &  
Trustee, et al  
P.O. Box 1629  
Lovington, NM 88260

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
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Postage	\$
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Restricted Delivery Fee	
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<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
Postmark or Date	

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P 622 712 529

P 622 712 530

**US Postal Service  
Receipt for Certified Mail**

Mary Anne Todd  
P.O. Box 2381  
Wimberly, TX 78676

**US Postal Service  
Receipt for Certified Mail**

Headington Penn Corp.  
7557 Rambler Road  
Suite 1150  
Dallas, TX 75231

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
Postmark or Date	

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**MAIL**

P 622 712 531	P 622 712 531
US Postal Service <b>Receipt for Certified Mail</b>	
Tommy T. Todd 7912 Purdue Dallas, TX 75225	

US Postal Service  
**Receipt for Certified Mail**

Tommy T. Todd  
7912 Purdue  
Dallas, TX 75225

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date & Addressee's Address	
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**MAIL**

P 622 712 532	P 622 712 532
US Postal Service <b>Receipt for Certified Mail</b>	
Anne Todd Barfield P.O. Box 738 Wimberly, TX 78676	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
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P 209 889 500

US Postal Service  
**Receipt for Certified Mail**

Atlantic Richfield Co.  
O. Box 1610  
Midland, TX 79702

P 622 712 526  
US Postal Service  
**Receipt for Certified Mail**

Ray L. Todd  
1107 Shawnee Trail  
Carrollton, TX 75006

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
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P 622 712 527  
US Postal Service  
**Receipt for Certified Mail**

Tom R. Cone, Individually &  
Trustee, et al  
P.O. Box 778  
Jay, OK 74346

US Postal Service  
**Receipt for Certified Mail**

Douglas L. Cone, Individually  
& Trustee, et al  
P.O. Box 93355  
Lubbock, TX 79493

US Postal Service  
**Receipt for Certified Mail**

Postage	\$
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Special Delivery Fee	
Restricted Delivery Fee	
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<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
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**US Postal Service  
Receipt for Certified Mail**

Ellwood Oil Co.  
P.O. Box 7500  
Bartlesville, OK 74005

**US Postal Service  
Receipt for Certified Mail**

Cheyenne Partners V, Ltd.  
711 Louisiana  
Suite 1740  
Houston, TX 77002

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
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P 209 889 496

**MAIL**

P 209 889 497

**US Postal Service  
Receipt for Certified Mail**

Cheyenne Partners V, Ltd.  
711 Louisiana  
Suite 1740  
Houston, TX 77002

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
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**MAIL**

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**US Postal Service  
Receipt for Certified Mail**

Robert S. Pirtle  
P.O. Box 1310  
Tyler, TX 75710

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
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**MAIL**

**US Postal Service  
Receipt for Certified Mail**

Cathie Cone Auvernshine,  
Individually & Trustee, et al  
P.O. Box 507  
Dripping Springs, TX 78620

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
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**MAIL**

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P 209 889 495

**US Postal Service  
Receipt for Certified Mail**

Kerry L. Todd  
4017 Tanglewood Dr.  
Dallas, TX 75234

**US Postal Service  
Receipt for Certified Mail**

The W. L. & Virginia Todd  
Revocable Trust  
3612 Euclid  
Dallas, TX 75205

**US Postal Service  
Receipt for Certified Mail**

Kenneth G. Cone, Individually  
& Trustee, et al  
P.O. Box 11310  
Midland, TX 79702

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
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Return Receipt Showing to Whom, Date, & Addressee's Address	
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**US Postal Service  
Receipt for Certified Mail**

Ogden Sharon Hudnall Trust 2  
Lometa Hudnall Cox Trust 2  
703 First Place  
Tyler, TX 75702

Postage	\$
Certified Fee	
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**US Postal Service  
Receipt for Certified Mail**

No Insurance Coverage Provided.

Floyd Oil Co.  
711 Louisiana  
Suite 1740  
Houston, TX 77002

**US Postal Service  
Receipt for Certified Mail**

Margaret T. Sherill  
P.O. Box 2963  
Ruidoso, NM 88345

**US Postal Service  
Receipt for Certified Mail**

Amoco Production Co.  
P.O. Box 3092  
Houston, TX 77253

**US Postal Service  
Receipt for Certified Mail**

Conoco Inc.  
P.O. Box 1959  
Midland, TX 79702

Postage	\$
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Restricted Delivery Fee	
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MAIL

# AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea

I,

## Publisher

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 2

                           weeks.

Beginning with the issue dated

October 31, 1996  
and ending with the issue dated

November 7, 1996

Karen Bender

Publisher

Sworn and subscribed to before

me this 7th day of

November, 1996

Sandra Callitt

Notary Public.

My Commission expires  
August 29, 1999  
(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

October 31,

November 7, 1996

Notice is hereby given of the application of Texaco Exploration & Production Inc., Attention: Area Manager, 205 E. Bender, Hobbs, New Mexico, 88240, Telephone (505) 393-7191, to the New Mexico Oil Conservation Commission, Energy and Minerals Department, for approval to drill one water injection well for the purpose of pressure maintenance.

Unit Name: West Vacuum Unit, Lea County, New Mexico

Well Numbers and Locations:

56 - Unit Letter 0, 100 FSL & 2450 FEL, Section 34, T17S, R34E

The injection formation is Vacuum Grayburg-San Andreas at a depth of 4100 feet below the surface of the ground. Expected maximum injection rate is 1500 barrels per day, and expected maximum initial injection pressure is 1450 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. #14867.

01101148000      01503701

Anderson James  
205 E. Bender  
a/c 434005  
Hobbs, NM 88240

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 4634  
Order No. R-4234

APPLICATION OF TEXACO INC.  
FOR A WATERFLOOD EXPANSION,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 15, 1971, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 4th day of January, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Texaco Inc., seeks permission to expand the West Vacuum Unit Waterflood Project in the West Vacuum Unit Area, Vacuum Pool, by the injection of water into the Grayburg-San Andres formation through eleven additional injection wells located in Sections 28, 33, and 34 of Township 17 South, Range 34 East, and Sections 3 and 4 of Township 18 South, Range 34 East, NMPM, Lea County, New Mexico, as follows:

CASE NO. 4634  
Order No. R-4234

<u>Well No.</u>	<u>Unit</u>	<u>Section</u>	<u>Township and Range</u>
Well No. 4	K	28	17 South, 34 East
Well No. 7	C	33	17 South, 34 East
Well No. 16	G	33	17 South, 34 East
Well No. 18	E	34	17 South, 34 East
Well No. 20	G	34	17 South, 34 East
Well No. 23	K	33	17 South, 34 East
Well No. 32	O	33	17 South, 34 East
Well No. 34	M	34	17 South, 34 East
Well No. 36	O	34	17 South, 34 East
Well No. 40	C	4	18 South, 34 East
Well No. 48	G	3	18 South, 34 East

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed expansion of the West Vacuum Unit Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That an administrative procedure should be adopted whereby the Secretary-Director of the Commission may authorize additional injection wells within said waterflood project as may be necessary to complete an efficient injection pattern.

(6) That the subject application should be approved and the expanded project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the showing of well response as required by Rule 701 E-5 should not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to expand its West Vacuum Unit Waterflood Project, Vacuum Pool, by the injection of water into the Grayburg-San Andres formations through the following-described wells at locations in Sections 28, 33, and 34 of Township 17 South, Range 34 East, and Sections 3 and 4 of Township 18 South, Range 34 East, NMPM, West Vacuum Unit, Lea County, New Mexico:

<u>Well No.</u>	<u>Unit</u>	<u>Section</u>	<u>Township and Range</u>
Well No. 4	K	28	17 South, 34 East
Well No. 7	C	33	17 South, 34 East
Well No. 16	G	33	17 South, 34 East
Well No. 18	E	34	17 South, 34 East
Well No. 20	G	34	17 South, 34 East
Well No. 23	K	33	17 South, 34 East
Well No. 32	O	33	17 South, 34 East
Well No. 34	M	34	17 South, 34 East
Well No. 36	O	34	17 South, 34 East
Well No. 40	C	4	18 South, 34 East
Well No. 48	G	3	18 South, 34 East

(2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve such additional injection wells within said project area as may be necessary to complete an efficient injection pattern, and that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(3) That monthly progress reports of the expanded waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

S E A L

dr/

A. L. PORTER, Jr., Member & Secretary

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C

APPLICATION OF TEXACO, U.S.A.  
TO EXPAND ITS WATERFLOOD PROJECT  
IN THE VACUUM GRAYBURG-SAN ANDRES  
POOL IN LEA COUNTY, NEW MEXICO

ORDER No. WFX-507

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Order No. R-4234 Texaco has made application to the Division on March 7, 1983, for permission to expand its West Vacuum Unit Waterflood Project in the Vacuum Grayburg-San Andres Pool in Lea County, New Mexico.

NOW, on this 11th day of March, 1983, the Division Director finds:

1. That application has been filed in due form.
2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
3. That no objection has been received within the waiting period as prescribed by Rule 701B.
4. That the proposed injection well is eligible for conversion to water injection under the terms of Rule 701.
5. That the proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.
6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco, U.S.A., be and the same is hereby authorized to inject water into the Vacuum Grayburg-San Andres formations through plastic-lined tubing set in a packer at approximately 4480 feet in the following described well for purposes of secondary recovery to wit:

West Vacuum Unit Well No. 55  
Section 3, Township 18 South,  
Range 34 East, NMPM, Lea County,  
New Mexico

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus (in each well) shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure to a maximum of 924 pounds per square inch; provided however that the Division Director may administratively authorize a pressure limitation in excess of the above upon the operator's establishing that such higher pressure will not result in fracturing of the confining strata. This can be accomplished by providing the Oil Conservation Division office with step-rate data satisfactory to this office.

That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said well.

That the operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such failure or leakage.

That the subject well shall be governed by all provisions of Division Order No. R-4234 and Rules 702, 703, 704, 705, and 706 not inconsistent herewith.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

JOE D. RAMEY,  
Division Director

S E A L