RELEASE 7.26.93

OIL CONSERVATION DIVISION
RECEIVED
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June 29, 1993

State of New Mexico
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
P.O. Box 2088
Sante Fe, NM 87504-2088

Gentlemen:

SUBJECT: EXPANSION OF PRESSURE MAINTENANCE PROJECT
VACUUM GRAYBURG SAN ANDRES UNIT (VGSAU)
VACUUM GRAYBURG SAN ANDRES POOL
LEA COUNTY, NM

We request administrative approval to drill two VGSAU wells for water injection. Order No. R-4442, dated November 1, 1972, authorized Texaco to operate the VGSAU pressure maintenance project within the subject pool.

The wells to be drilled are the VGSAU Well No.'s 146 & 147. Form C-108 and attachments are enclosed.

As required, copies of this application with attachments has been sent to the surface owners and offset operators.

Please contact Todd Lackey at (505) 397-0420 with questions.

Sincerely,

T. L. Frazier
Hobbs Area Manager

/wtl

Attachments

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: Texaco Exploration & Production Inc.

Address: P.O. Box 730, Hobbs New Mexico 88240

Contact party: Todd Lackey, Prod Engr 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-4442.

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: Terry L. Frazier Title Area Manager

Signature: Terry Frazier Date: 6/29/93

* 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. See attached list of orders

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

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.

NEW MEXICO OIL CONSERVATION DIVISION - Form C-108, cont'd

Drilling of the following wells for water injection
Vacuum Grayburg San Andres Unit

No. 146 - 1980' FEL & 1320' FNL, Sec 2, T-18-S, R-34-E
No. 147 - 660' FEL & 1320' FNL, Sec 2, T-18-S, R-34-E

III. See attached injection well data sheets.

IV. Expansion of existing project Order No. R-4442.

V. See attached map.

VI. See attached well information and schematics.

VII. 1) Average injection rate - 500 BWPD
Maximum injection rate - 2000 BWPD

2) Closed injection system

3) Average injection pressure - 1300 psi (Avg in offset wells)
Initial maximum injection pressure - 860 psi (0.2 psi/ft)
Maximum injection pressure - 1700 psi (Possible after step-rate testing)

4) Grayburg San Andres produced water and Ogallala fresh water for make-up. See attached analysis and compatibility test.

5) N/A

VIII. Previously submitted. See attached orders.

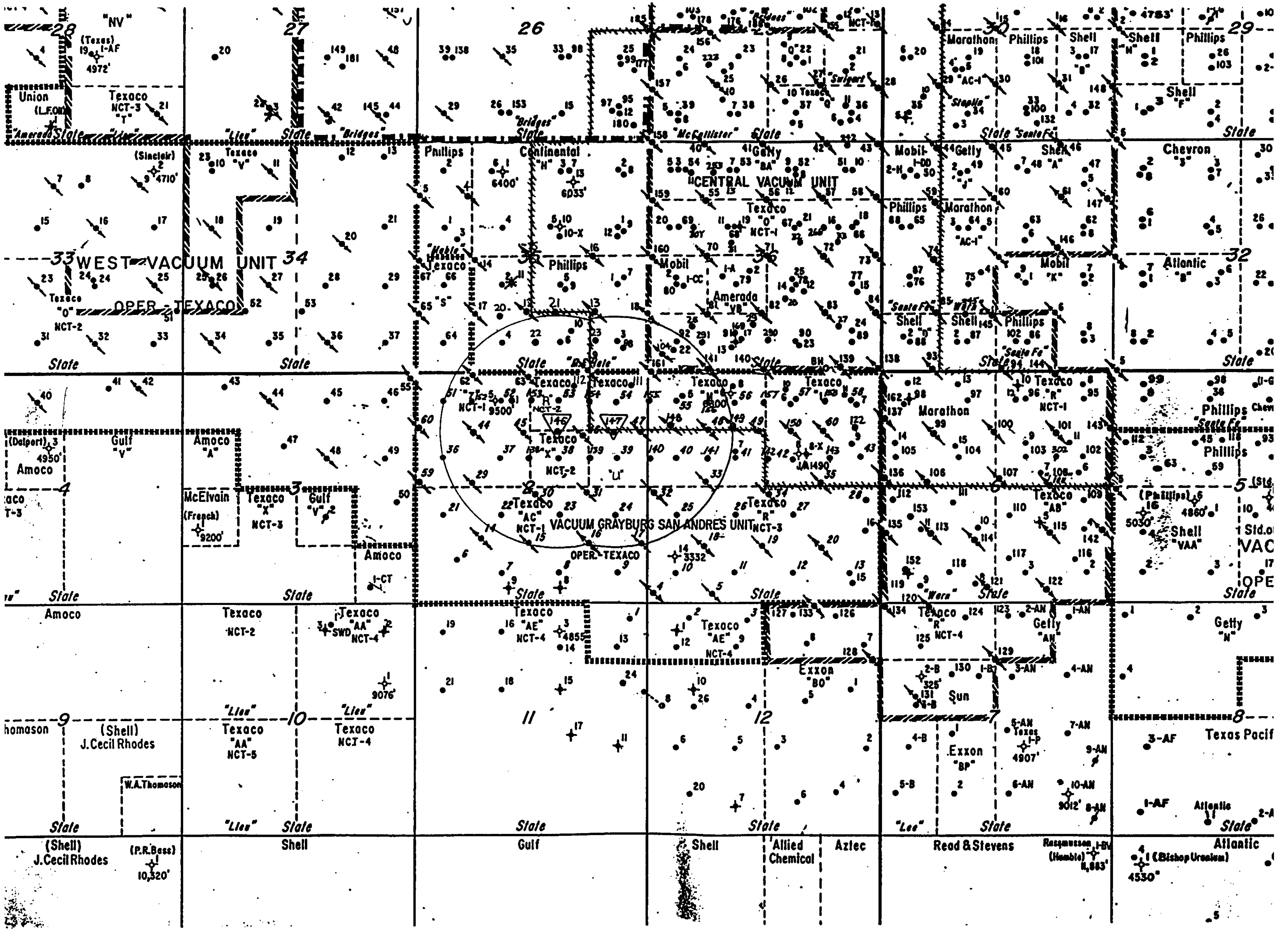
IX. Wells will be stimulated with 15% NEFE HCL.

X. Logging and test data will be submitted on the proposed injectors after drilling and completion.

XI. Previously submitted. See attached orders. The water analysis for VGSAU Water Well No. 4 has been attached. This is a fresh water well that is used for make-up water. It is located approximatly 3/4 mile to the SW of the proposed conversions.

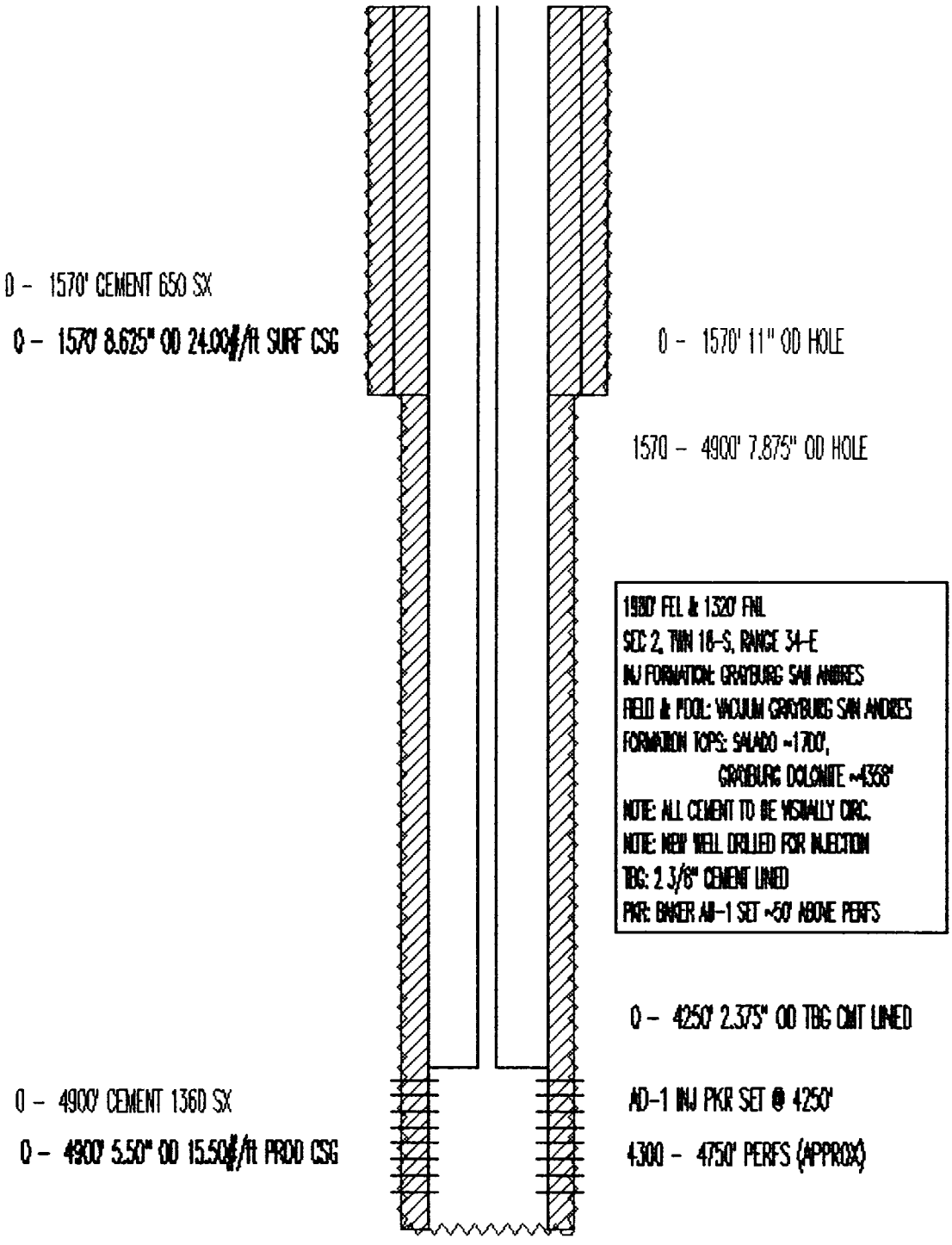
XII. N/A

XIII. Copies of this application and attachments have been sent by certified mail to surface owners and offset operators (see attached). The legal notice and affidavit of publication in the Hobbs Daily News-Sun is also attached.



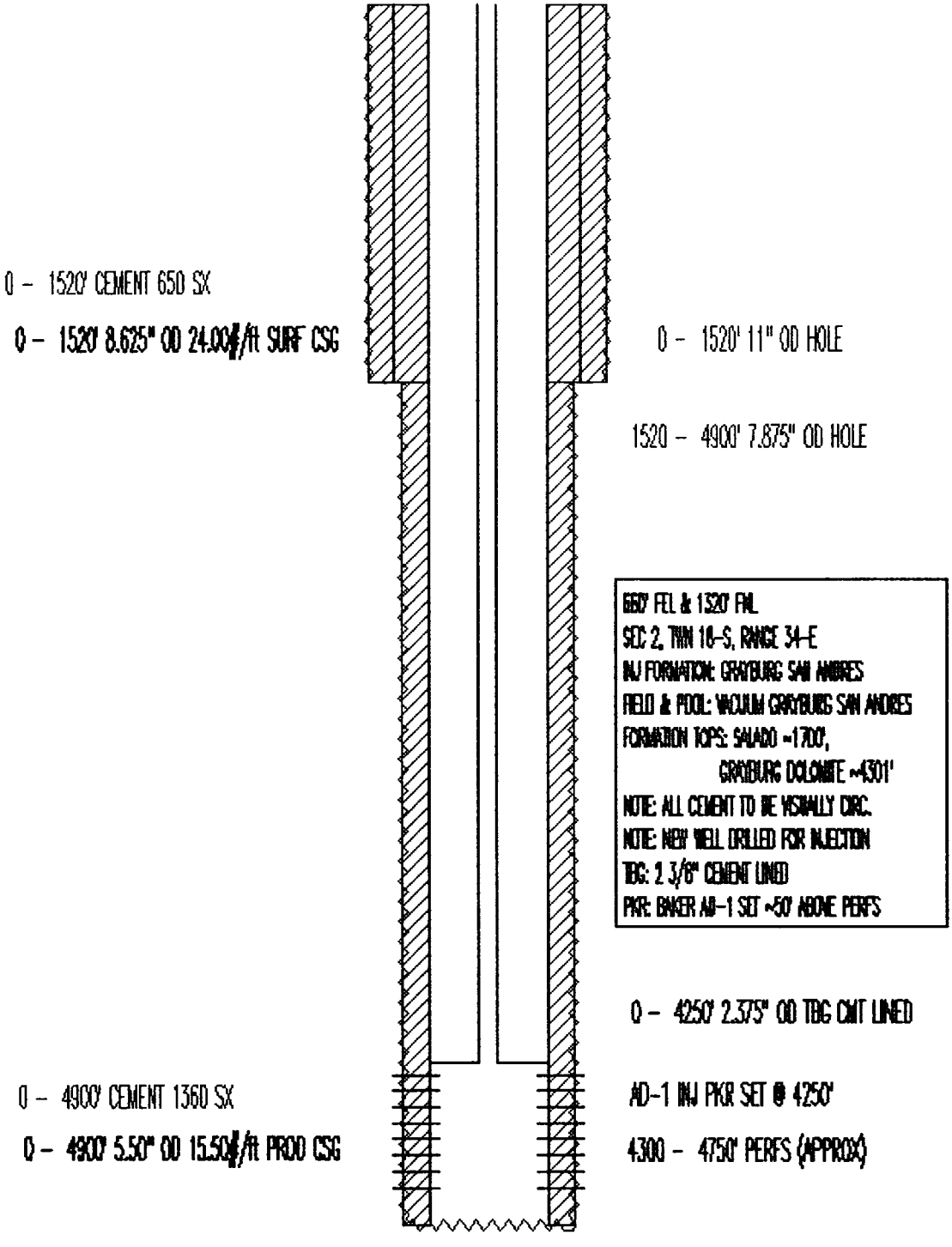
WEST VACUUM UNIT
OPER - TEXACO
CENTRAL VACUUM UNIT
VACUUM GRAYBURG SAN ANDRES UNIT
OPER - TEXACO
Union
Texaco
Phillips
Continental
Mobil
Getty
Marathon
Shell
Chevron
Atlantic
Amerada
Amoco
Gulf
McElvain
Exxon
Sun
J. Cecil Rhodes
W.A. Thomason
Allied Chemical
Aztec
Read & Stevens
Texas Pacif
State

TEXACO EXPL. & PROD. INC.
VACUUM GRAYBURG SA UNIT #146
PROPOSED NEW INJECION WELL



KB ELEV: 4028'
TD: 4900'

TEXACO EXPL. & PROD. INC.
VACUUM GRAYBURG SA UNIT #147
PROPOSED NEW INJECION WELL



KB ELEV: 4016'

TD: 4900'

LEASE NAME	WELL NO.	WELL TYPE	COMPANY
VACUUM GRAYBURG SAN ANDRES UNIT	15	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	16	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	17	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	22	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	23	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	24	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	25	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	29	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	30	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	31	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	32	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	33	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	36	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	37	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	38	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	39	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	40	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	44	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	45	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	46	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	47	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	48	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	51	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	52	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	53	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	54	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	55	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	62	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	63	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	138	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	139	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	140	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	141	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	148	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	149	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	152	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	153	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	154	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	155	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	156	OIL	TEXACO

LEASE NAME	WELL NO.	WELL TYPE	COMPANY
CENTRAL VACUUM UNIT	92	OIL	TEXACO
CENTRAL VACUUM UNIT	141	INJ	TEXACO
CENTRAL VACUUM UNIT	161	INJ	TEXACO
M.E. HALE	3	OIL	PHILLIPS
M.E. HALE	4	OIL	PHILLIPS
M.E. HALE	6	OIL	PHILLIPS
M.E. HALE	10	OIL	PHILLIPS
M.E. HALE	19	OIL	PHILLIPS
M.E. HALE	22	OIL	PHILLIPS
M.E. HALE	23	OIL	PHILLIPS
VACUUM GLORIETA WEST UNIT	98	OIL	TEXACO
VACUUM GLORIETA WEST UNIT	104	INJ	TEXACO
VACUUM GLORIETA WEST UNIT	111	OIL	TEXACO
VACUUM GLORIETA WEST UNIT	112	OIL	TEXACO
N.M. "O" STATE (NCT-1)	22	OIL	TEXACO
N.M. "R" STATE (NCT-2)	5	OIL	TEXACO
N.M. "Z" TN COM	1	OIL	TEXACO
WELLS WHICH HAVE BEEN PLUGGED:			
N.M. "Z" STATE (NCT-1)	5	P&A'd	TEXACO
PROPOSED INJECTION WELLS			
VACUUM GRAYBURG SAN ANDRES UNIT	146	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	147	INJ	TEXACO

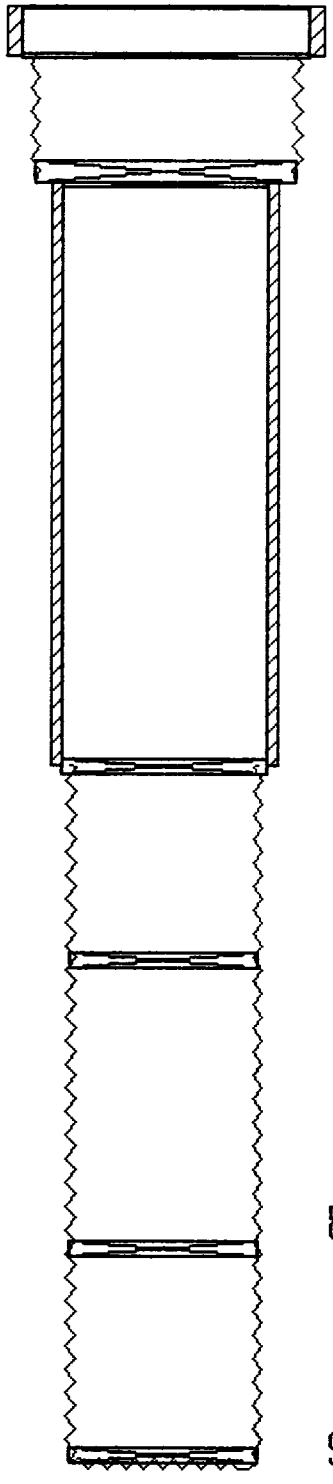
VACUUM GRAYBURG SAN ANDRES UNIT
NEW AND OLD WELL NAMES & NUMBERS

VGSAU WELL NO.	OLD LEASE WELL NAME	OLD LEASE WELL NO.	STATUS	DATE CONVERTED
1	N.M. "AE" STATE (NCT-4)	23	P	
2	N.M. "AE" STATE (NCT-4)	22	P	
3	N.M. "AE" STATE (NCT-4)	2	P	
4	N.M. "R" STATE (NCT-3)	22	CI	6-16-82
5	N.M. "R" STATE (NCT-3)	23	CI	2-21-73
6	N.M. "AC" STATE (NCT-1)	10	P	
7	N.M. "AC" STATE (NCT-1)	7	P	
8	N.M. "AC" STATE (NCT-1)	5	P	
9	N.M. "AC" STATE (NCT-1)	4	P	
10	N.M. "R" STATE (NCT-3)	11	P	
11	N.M. "R" STATE (NCT-3)	10	P	
12	N.M. "R" STATE (NCT-3)	12	P	
13	N.M. "R" STATE (NCT-3)	13	P	
14	N.M. "AC" STATE (NCT-1)	13	CI	8-01-82
15	N.M. "AC" STATE (NCT-1)	14	CI	1-14-73
16	N.M. "AC" STATE (NCT-1)	15	CI	8-14-82
17	N.M. "AC" STATE (NCT-1)	16	CI	1-14-73
18	N.M. "R" STATE (NCT-3)	19	CI	5-19-83
19	N.M. "R" STATE (NCT-3)	20	CI	2-25-73
20	N.M. "R" STATE (NCT-3)	21	CI	4-16-83
21	N.M. "AC" STATE (NCT-1)	6	P	
22	N.M. "AC" STATE (NCT-1)	3	P	
23	N.M. "AC" STATE (NCT-1)	2	P	
24	N.M. "AC" STATE (NCT-1)	1	P	
25	N.M. "R" STATE (NCT-3)	9	P	
26	N.M. "R" STATE (NCT-3)	8	P	
27	N.M. "R" STATE (NCT-3)	7	P	
28	N.M. "R" STATE (NCT-3)	6	P	
29	N.M. "Z" STATE (NCT-1)	8	CI	1-14-73
30	N.M. "AC" STATE (NCT-1)	12	CI	9-04-82
31	N.M. "AC" STATE (NCT-1)	11	CI	1-14-73
32	N.M. "R" STATE (NCT-3)	18	CI	9-27-82
33	N.M. "M" STATE	11	CI	2-05-73
34	N.M. "R" STATE (NCT-3)	17	CI	5-22-83
35	N.M. "L" STATE	12	CI	1-01-81
36	N.M. "Z" STATE (NCT-1)	4	P	
37	N.M. "Z" STATE (NCT-1)	3	P	
38	N.M. "X" STATE (NCT-2)	3	P	
39	N.M. "U" STATE	2	P	
40	N.M. "M" STATE	4	P	
41	N.M. "M" STATE	1	P	
42	N.M. "L" STATE	1	P	
43	N.M. "L" STATE	3	P	
44	N.M. "Z" STATE (NCT-1)	7	CI	8-23-82

VGSAU WELL NO.	OLD LEASE WELL NAME	OLD LEASE WELL NO.	STATUS	DATE CONVERTED
45	N.M. "Z" STATE (NCT-1)	6	CI	4-05-73
46	N.M. "X" STATE (NCT-2)	4	CI	9-01-82
47	N.M. "U" STATE	4	CI	4-04-73
48	N.M. "M" STATE	10	CI	1-26-83
49	N.M. "M" STATE	12	CI	2-16-73
50	N.M. "L" STATE	11	CI	4-11-83
51	N.M. "Z" STATE (NCT-1)	1	P	
52	N.M. "Z" STATE (NCT-1)	2	P	
53	N.M. "R" STATE (NCT-2)	4	P	
54	N.M. "U" STATE	1	P	
55	N.M. "M" STATE	2	P	
56	N.M. "M" STATE	3	P	
57	N.M. "L" STATE	4	P	
58	N.M. "L" STATE	2	P	
59	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
60	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
62	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
63	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
64	N.M. "S" STATE	2	P	
65	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
66	N.M. "S" STATE	1	P	
67	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
68	N.M. "R" STATE (NCT-3)	16	P&A	
122	VACUUM GRAYBURG SAN ANDRES UNIT		P	
138	VACUUM GRAYBURG SAN ANDRES UNIT		P	
139	VACUUM GRAYBURG SAN ANDRES UNIT		P	
140	VACUUM GRAYBURG SAN ANDRES UNIT		P	
141	VACUUM GRAYBURG SAN ANDRES UNIT		P	
142	VACUUM GRAYBURG SAN ANDRES UNIT		P	
143	VACUUM GRAYBURG SAN ANDRES UNIT		P	
148	VACUUM GRAYBURG SAN ANDRES UNIT		CI	3-28-92
149	VACUUM GRAYBURG SAN ANDRES UNIT		CI	4-05-92
150	VACUUM GRAYBURG SAN ANDRES UNIT		CI	4-06-92
152	VACUUM GRAYBURG SAN ANDRES UNIT		P	
153	VACUUM GRAYBURG SAN ANDRES UNIT		P	
154	VACUUM GRAYBURG SAN ANDRES UNIT		P	
155	VACUUM GRAYBURG SAN ANDRES UNIT		P	
156	VACUUM GRAYBURG SAN ANDRES UNIT		P	
157	VACUUM GRAYBURG SAN ANDRES UNIT		P	
158	VACUUM GRAYBURG SAN ANDRES UNIT		P	

CI - Converted to injection
DI - Drilled as injector
P - Producer

TEXACO INC
NEW MEXICO "Z" ST NCT-1 #5
P&A'd



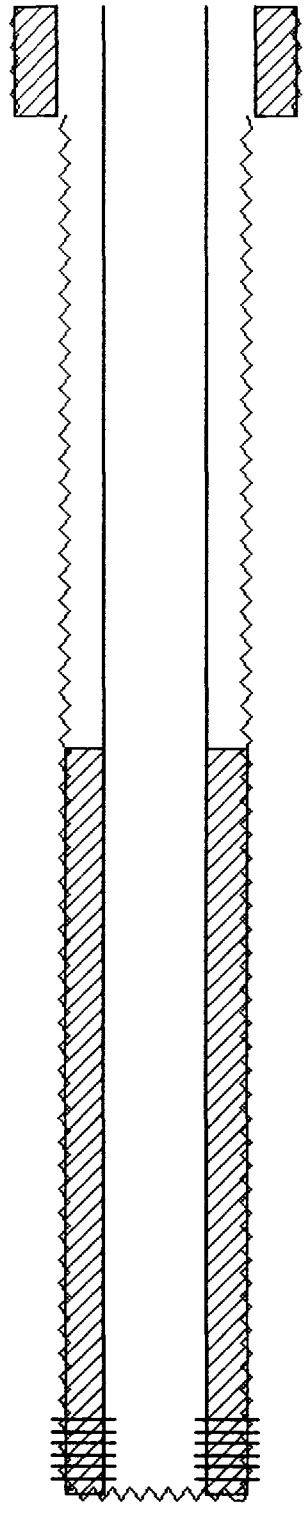
0 - 322' CEMENT
0 - 322' 13.387" OD SURF CSG
322 - 1146' 12.25" OD HOLE
CUT 9.875" CSG @ 1146'
1146 - 4957' 9.625" OD INT CSG
1146 - 4957' CEMENT 700 sx
4957 - 9500' 8.75" OD HOLE

0 - 15' PLUG
305 - 335' PLUG
1009 - 1172' PLUG
4907 - 5007' PLUG
6166 - 6266' PLUG
8039 - 8139' PLUG
9400 - 9500' PLUG

660 FNL & 1880 FWL
SEC 2, TWN 18 S, RANGE 34 E
ELEVATION: 4027 GL
NO COMPLETION ATTEMPTED
P&A'd on 9-4-61

KB ELEV: 4042'
TD: 9500'

TEXACO INC
VACUUM GRBG-SADR UN NO. W115
API# 3002524328000O



0 - 356' 8.625" OD SURF CSG
0 - 356' CEMENT 350 sx

0 - 356' 12.25" OD HOLE

1400 FSL & 2450 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4019 GR
COMPLETION DATE: 01-14-73
####
COMPLETED AS INJECTOR 4531-4751
TRT: 6000 GALS 20% NEA (4531-4751)
500 BWPD @ VAC
####

356 - 4800' 7.875 " OD HOLE

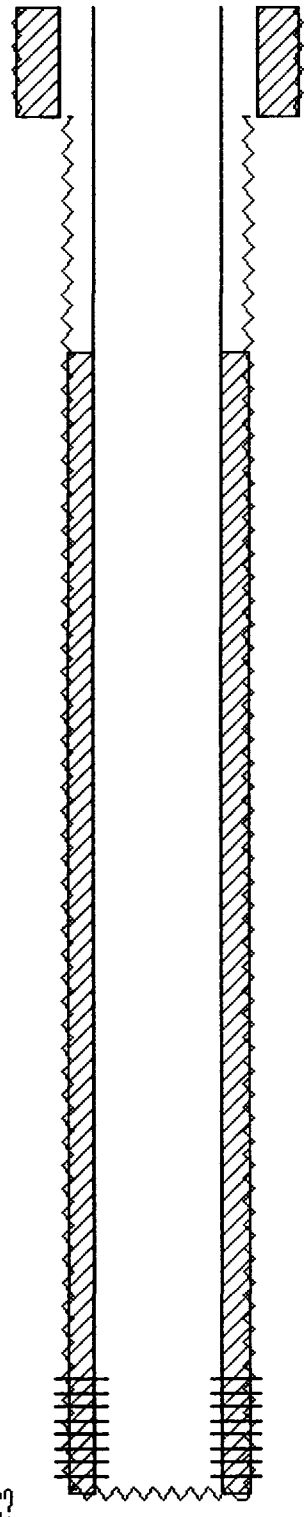
0 - 4800' 4.5" OD PROD CSG
2390 - 4800' CEMENT 650 sx

4531 - 4751' PERFS

PBTD: 4761'

KB ELEV: 4019'
TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 16
API# 30025243080000



0 - 353' 8.625" OD SURF CSG

0 - 353' CEMENT 300 sx

0 - 353' 12.25" OD HOLE

1400 FSL & 1300 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4005 GL
COMPLETION DATE: 01-22-73
++++
COMPLETION INTERVAL: 4428 - 4742 (GBSA)
TRT: 6000 GALS ACID (4428 - 4742)
IP: 81 BOPD, 0 MCFD, 19 BWPD (PUMPING)
++++
9/12/82 CONV TO INJECTION 920 BWPD @ 850 PSI
####

353 - 4800' 7.875" OD HOLE

4428 - 4742' PERFS

0 - 4800' 5.5" OD PROD CSG

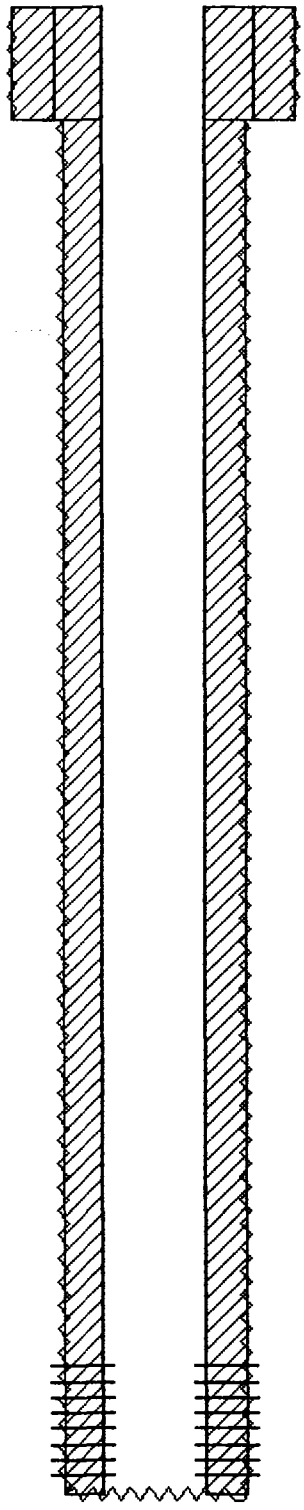
1111 - 4800' CEMENT 500 sx, TOC?

PBTD: 4757'

KB ELEV: 4015'

TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 17
API# 30025243160000



0 - 364' 8.625" OD SURF CSG

0 - 364' CEMENT 0 sx

0 - 364' 12.25" OD HOLE

616 - 990' DAMAGE CSNG LEAK, SQZ 300 SX

905 - 1140 DAMAGE CSNG LEAK, SQZ 50 SX

1400 FSL & 10 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 3999 GL
COMPLETION DATE: 01-14-73
++++
COMPLETED AS INJECTOR 4386-4740
TRT: 6000 GAL 20% NEA
500 BWPD @ VAC
++++

364 - 4800' 7.875 " OD HOLE

4386 - 4740' PERFS

0 - 4800' 4.5" OD PROD CSG

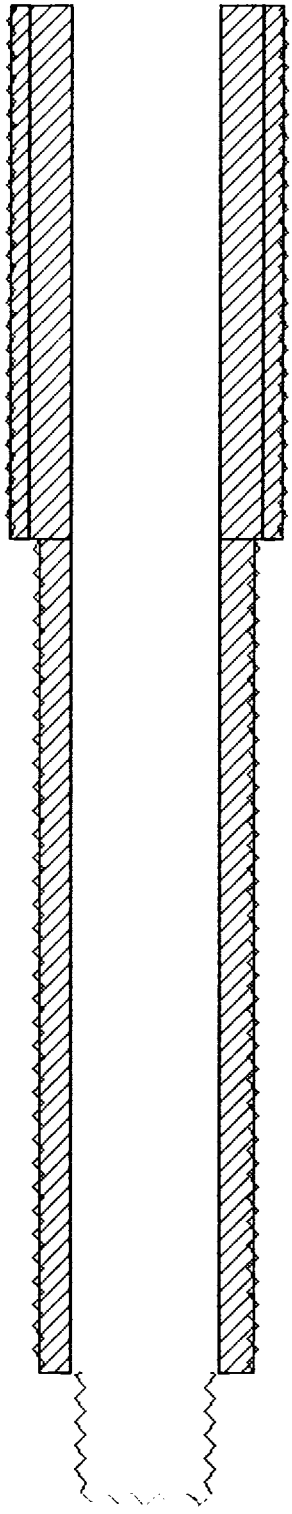
0 - 4800' CEMENT 650 sx

PBTD: 4777'

KB ELEV: 4010'

TD: 4800'

TEXACO INC
VACUUM GRBG-SADR UN NO. 22
API# 3002502273000



0 - 1688' 8.625" OD SURF CSG
0 - 1688' CEMENT 300 sx

0 - 1688' 10" OD HOLE

1980 FSL & 1980 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4013 GL
COMPLETION DATE: 12-27-40
++++
COMPLETION INTERVAL: 4333 - 4710
IP: 173 BOPD, 0 MCFD, 0 BWPD (FLOWING)
++++

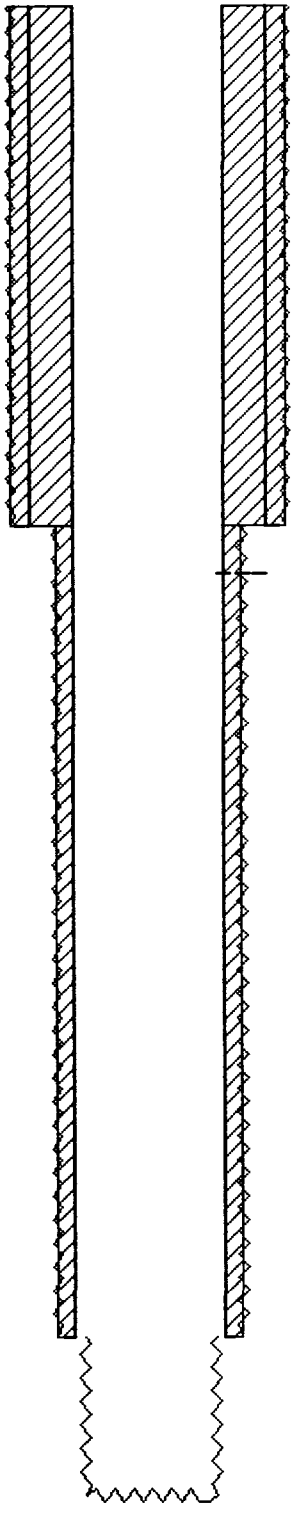
1688 - 4333' 7.875 " OD HOLE

0 - 4333' 5.5" OD PROD CSG
0 - 4333' CEMENT 200 sx

4333 - 4755' 4.75" OD Openhole

TD: 4755'
KB ELEV: 4023'

TEXACO INC
VACUUM GRBG-SADR UN NO. 23
API# 3002502272000O



0 - 1644' 8.625" OD SURF CSG

0 - 1644' CEMENT 300 sx

0 - 1644' 10" OD HOLE

1670' SQZ 400 sx

1980 FSL & 1980 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4007 GL
COMPLETION INTERVAL: 4220 - 4710
IP: 544 BOPD, 0 MCFD, 0 BWPD (FLOWING)
###
COMPLETION INTERVAL: 4220 - 4710 ( )
IP: 644 BOPD, 0 MCFD, 0 BWPD (FLOWING)
###

0 - 4206' 5.5" OD PROD CSG

0 - 4206' CEMENT 200 sx

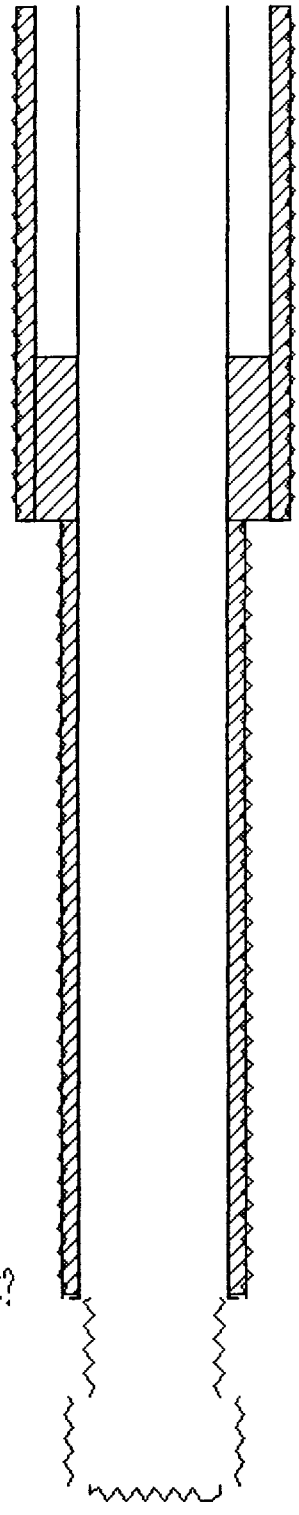
1644 - 4206' 6.755" OD HOLE

4206 - 4710' 4.75" OD Openhole

KB ELEV: 4018'

TD: 4710'

TEXACO INC
VACUUM GRBG-SADR UN NO. 24
API# 30025022710000



0 - 1630' 8.625" OD SURF CSG
0 - 1630' CEMENT 300 sx

0 - 1630' 10" OD HOLE

1980 FSL & 660 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4002 GL
COMPLETION DATE: 10-07-40
####
COMPLETION INTERVAL: 4076 - 4710
IP: 1142 BOPD, 0 MCFD, 0 BWPD (FLOWING)
####

0 - 4089' 5.5" OD PROD CSG
1111 - 4076' CEMENT 200 sx, TOC?

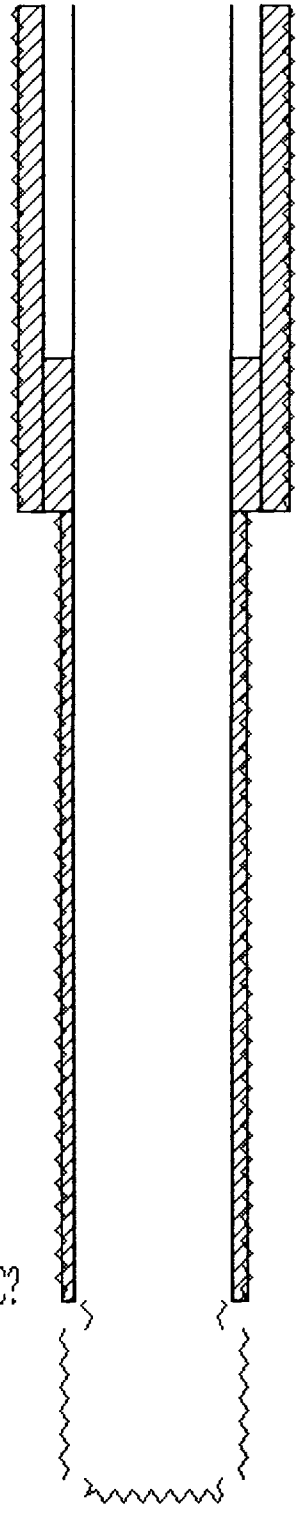
1630 - 4089' 6.75" OD HOLE

4089 - 4405' 4.75" OD HOLE
4405 - 4683' 6.25" OD HOLE Underreamed 1/81
4683 - 4710' 4.75" OD HOLE

KB ELEV: 4012'

TD: 4710'

TEXACO INC
VACUUM GRBG-SADR UN NO. 25
API# 3002502256000



0 - 1593' 7.625" OD SURF CSG
0 - 1593' CEMENT 200 sx

0 - 1593' 9.5 " OD HOLE

1980 FSL & 660 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3998 GL
COMPLETION DATE: 09-11-40
++++
COMPLETION INTERVAL: 4092 - 4710
IP: 980 BOPD, 0 MCFD, 0 BWPD (FLOWING)
++++

0 - 4092' 5.5" OD PROD CSG
1111 - 4092' CEMENT 200 sx, TOC?

1593 - 4092' 6.5 " OD HOLE

4092 - 4180' 4.75 " OD HOLE

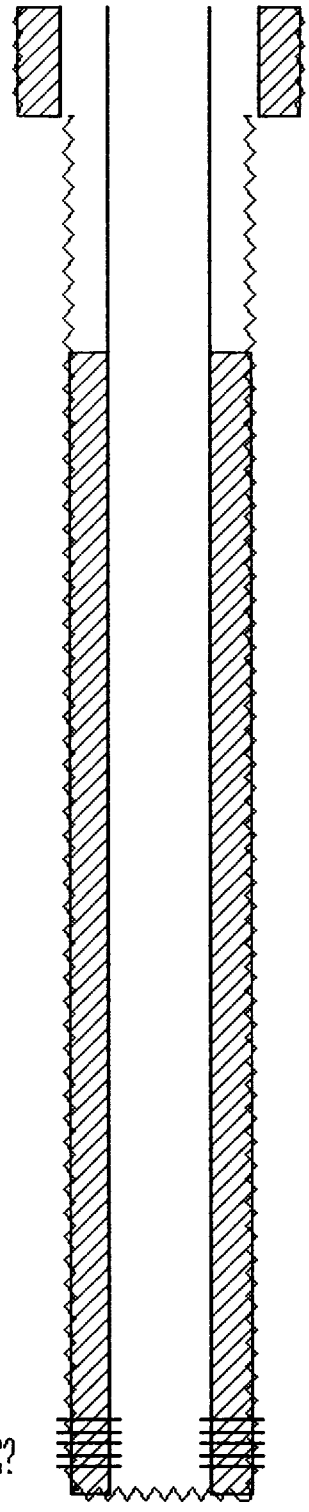
4180 - 4659' 6.25" OD HOLE Underreamed 8/80

4659 - 4710' 4.75" OD HOLE

KB ELEV: 4010'

TD: 4710'

TEXACO INC
VACUUM GRAYBURG SA NO. WI 29
API# 30025243130000



0 - 350' 8.625" OD SURF CSG
0 - 350' CEMENT 235 sx

0 - 350' 12.25" OD HOLE

2630 FNL & 1310 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4017 GL
COMPLETION DATE: 01-14-73
####
COMPLETED AS INJECTOR 4528-4713
TRT: 6000 GALS 20% NEA
IP: 500 BWPD @ VAC
####

350 - 4800' 7.875 " OD HOLE

0 - 4800' 4.5" OD PROD CSG
1111 - 4800' CEMENT 650 sx, TOC?

4528 - 4713' PERFS

PBTD: 4788'
KB ELEV: 4026'
TD: 4800'

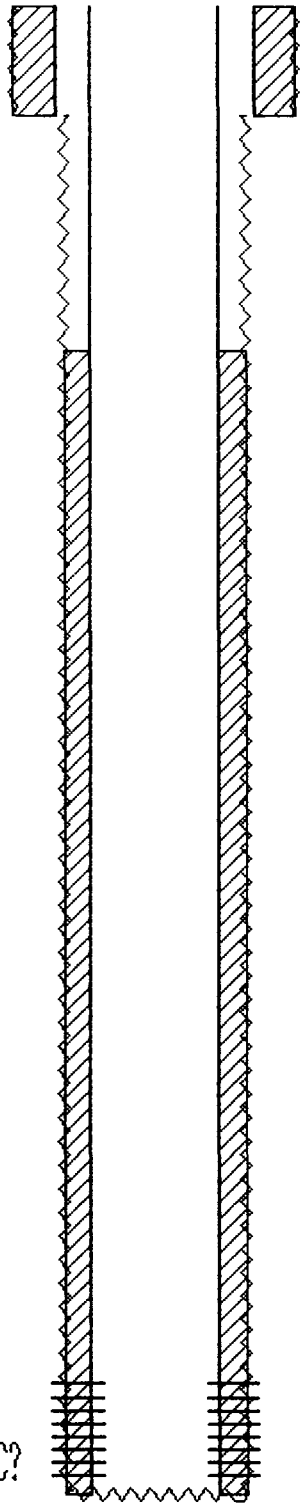
TEXACO INC

VACUUM GRAYBURG-SA NO. WI 30

API# 3002524307000O

0 - 354' 8.625" OD SURF CSG

0 - 354' CEMENT 300 sx



0 - 354' 12.25" OD HOLE

2630 FSL & 2630 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4012 GL
COMPLETION DATE: 01-31-73
####
COMPLETION INTERVAL: 4443 - 4740 (GBSA)
TRT: 8000 GALS ACID (4443 - 4740)
IP: 144 BOPD, 0 MCFD, 7 BWPD (PUMPING)
####
CONVERT TO INJ 9/4/82, 100 BWPD @ VAC
####

354 - 4800' 7.875 " OD HOLE

0 - 4800' 5.5" OD PROD CSG

1111 - 4800' CEMENT 500 sx, TOC?

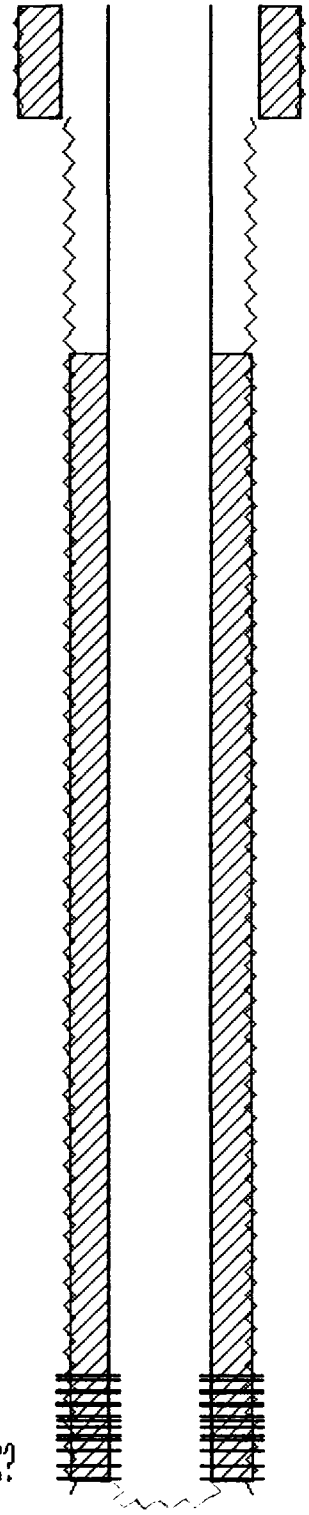
4443 - 4740' PERFS

PBTD: 4788'

KB ELEV: 4025'

TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 31
API# 30025243140000



0 - 360' 8.625" OD SURF CSG
0 - 360' CEMENT 210 sx

0 - 360' 12.25" OD HOLE

2630 FSL & 1330 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4005 GL
COMPLETION DATE: 01-14-73
####
COMPLETED AS INJECTOR 4376-4705
TRT: 6000 GAL 20% NEA
INITIAL INJ 500 BWPD @ VAC
####

360 - 4750' 7.875" OD HOLE

0 - 4710' 4.5" OD PROD CSG
1111 - 4710' CEMENT 650 sx, TOC?

4376 - 4705' PERFS Initial
4385 - 4615' PERFS Added 1/91

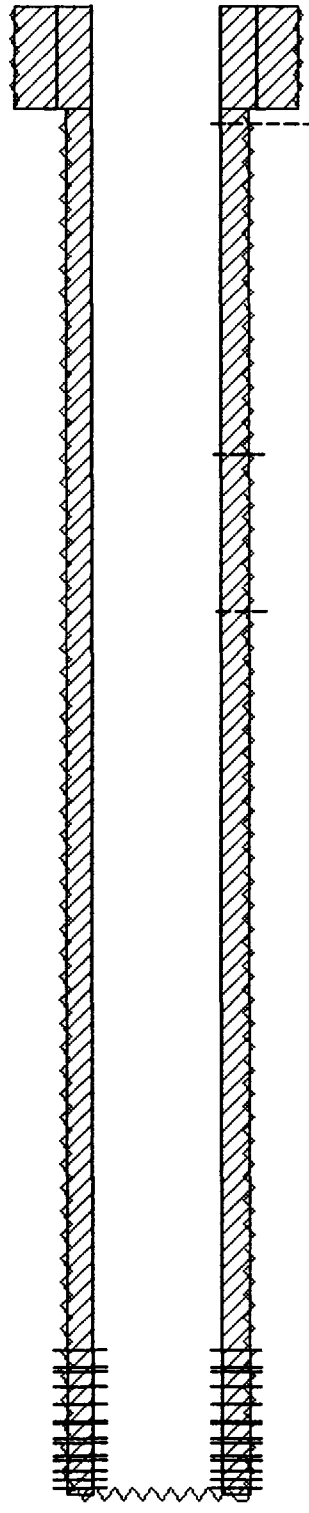
KB ELEV: 4018'

4570 - 4800' 3.875" OD HOLE

TD: 4800'

Drilled out 1/91

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 32
API# 30025243300000



0 - 333' 8.625" OD SURF CSG
0 - 333' CEMENT 300 sx

0 - 333' 12.25" OD HOLE

330' SQZ 525 sx

1185' SQZ 350 sx

1675' SQZ 750 sx

2630 FSL & 30 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3999 GL
COMPLETION DATE: 01-28-73
####
COMPLETION INTERVAL: 4333 - 4750 (SAND)
TRT: 8000 GALS ACID (4333 - 4750)
IP: 207 BOPD, 493 MCFPD, 19 BWPD (PUMPING)
####
CONVERT TO INJ 9/27/82, 400 BWPD @ 0 PSI
####

333 - 4800' 7.875 " OD HOLE

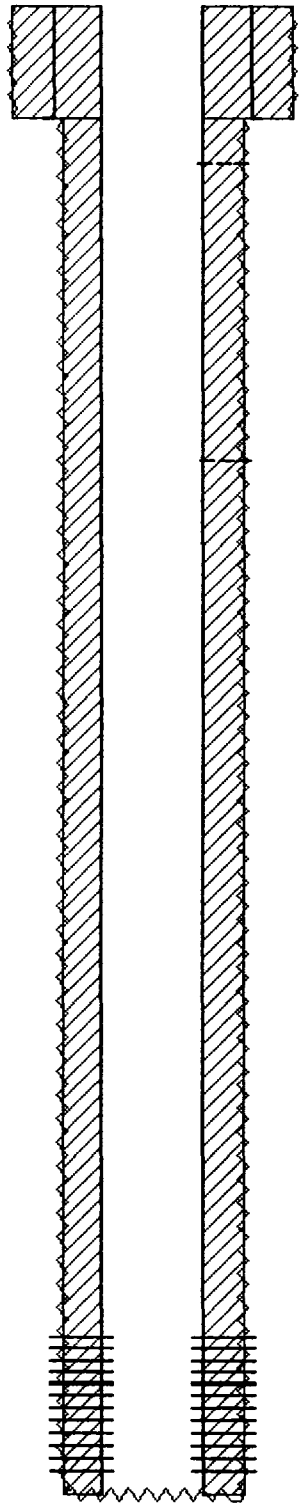
0 - 4800' 5.5" OD PROD CSG
0 - 4800' CEMENT 500 sx

4333 - 4750' PERFS Initial

4403 - 4781' PERFS 9/90, 2 JSPF 46 Holes

PBTD: 4789'
KB ELEV: 4012'
TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 33
API# 3002524323000



0 - 361' 8.625" OD SURF CSG
0 - 361' CEMENT 300 sx

0 - 361' 12.25" OD HOLE
285 - 380' Damage CSG Leak, SQZ 775 SX
385' SZQ 200 sx

1480' SQZ 550 sx

2630 FNL & 1310 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3991 GL
COMPLETION DATE: 02-05-73
####
COMPLETED AS INJECTOR 4435-4722
TRT: 6000 GAL 20%
####

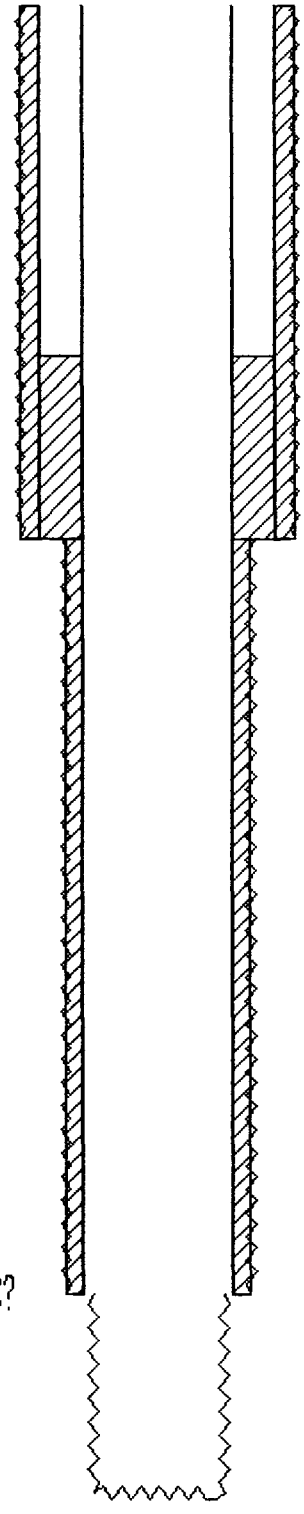
361 - 4800' 7.875 " OD HOLE

4435 - 4722' PERFS Initial
4274 - 4475' PERFS 9/90, 2 JSPF 40 Holes

0 - 4800' 4.5" OD PROD CSG
0 - 4800' CEMENT 650 sx

PBTD: 4790'

TEXACO INC
VACUUM GRBG-SADR UN NO. 36
API# 30025022690000



0 - 1690' 8.625" OD SURF CSG

0 - 1690' CEMENT 300 sx

0 - 1690' 10" OD HOLE

1980 FNL & 660 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4020 GL
COMPLETION DATE: 10-25-40
####
COMPLETION INTERVAL: 4079 - 4710
IP: 780 BOPD, 0 MCFD, 0 BWPD (FLOWING)
####

0 - 4079' 5.5" OD PROD CSG

1111 - 4079' CEMENT 200 sx, TOC?

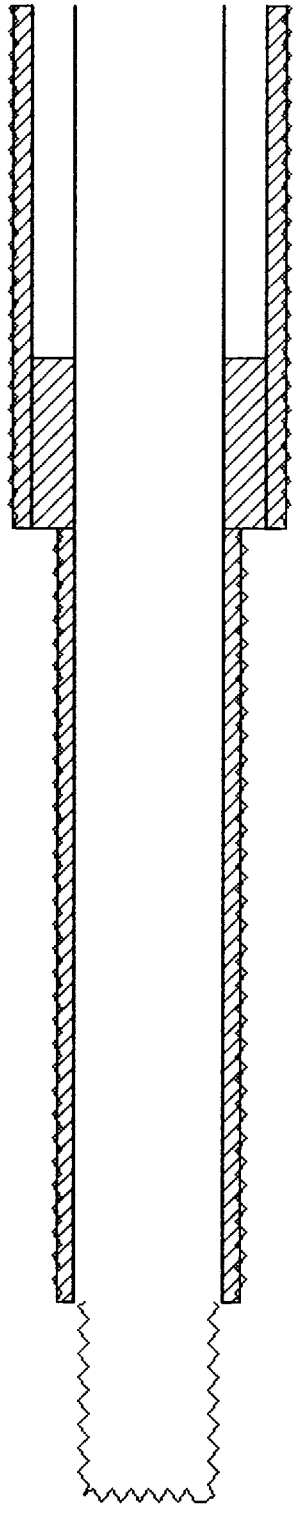
1690 - 4079' 6.755" OD HOLE

4079 - 4710' 4.75" OD HOLE

KB ELEV: 4030'

TD: 4710'

TEXACO INC
VACUUM GRBG-SADR UN NO. 37
API# 30025022680000



0 - 1648' CEMENT 200 sx

0 - 1648' 8.625" OD SURF CSG

0 - 1648' 10" OD HOLE

1111 - 4100' CEMENT 200 sx, TOC?

1980 FNL & 1980 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4019 GL
COMPLETION DATE: 09-29-40
####
COMPLETION INTERVAL: 4088 - 4710
IP: 680 BOPD, 0 MCFD, 0 BWPD (FLOWING)
####

0 - 4100' 5.5" OD PROD CSG

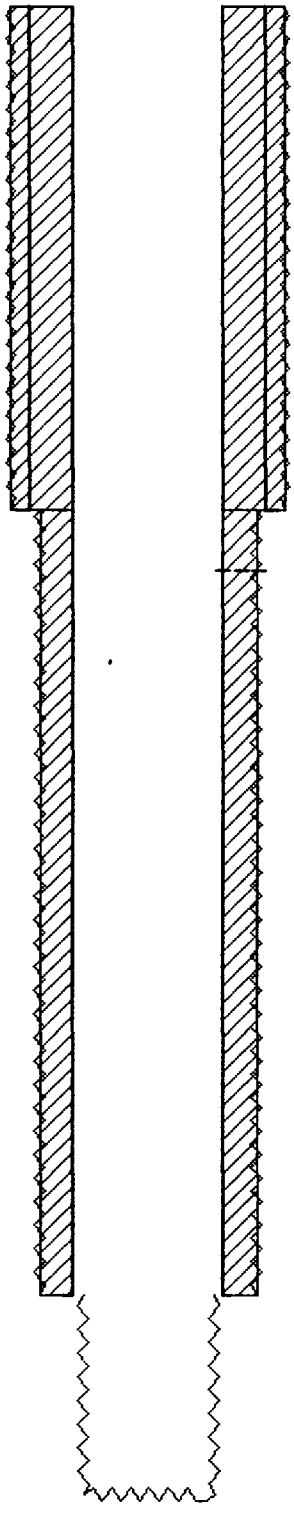
1648 - 4100' 6.75" OD HOLE

4100 - 4710' 4.75 " OD HOLE

KB ELEV: 4031'

TD: 4710'

TEXACO INC
VACUUM GRBG-SADR UN NO. 38
API# 3002502265000O



0 - 1593' 8.625" OD SURF CSG
0 - 1593' CEMENT 300 sx

0 - 1593' 10" OD HOLE

1625' SZQ 750 sx

1980 FNL & 1980 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4012 GL
COMPLETION DATE: 08-31-40
####
COMPLETION INTERVAL: 4079 - 4710
IP: 819 BOPD, 0 MCFD, 0 BWPD (FLOWING)
####

0 - 4079' 5.5" OD PROD CSG
0 - 4079' CEMENT 200 sx

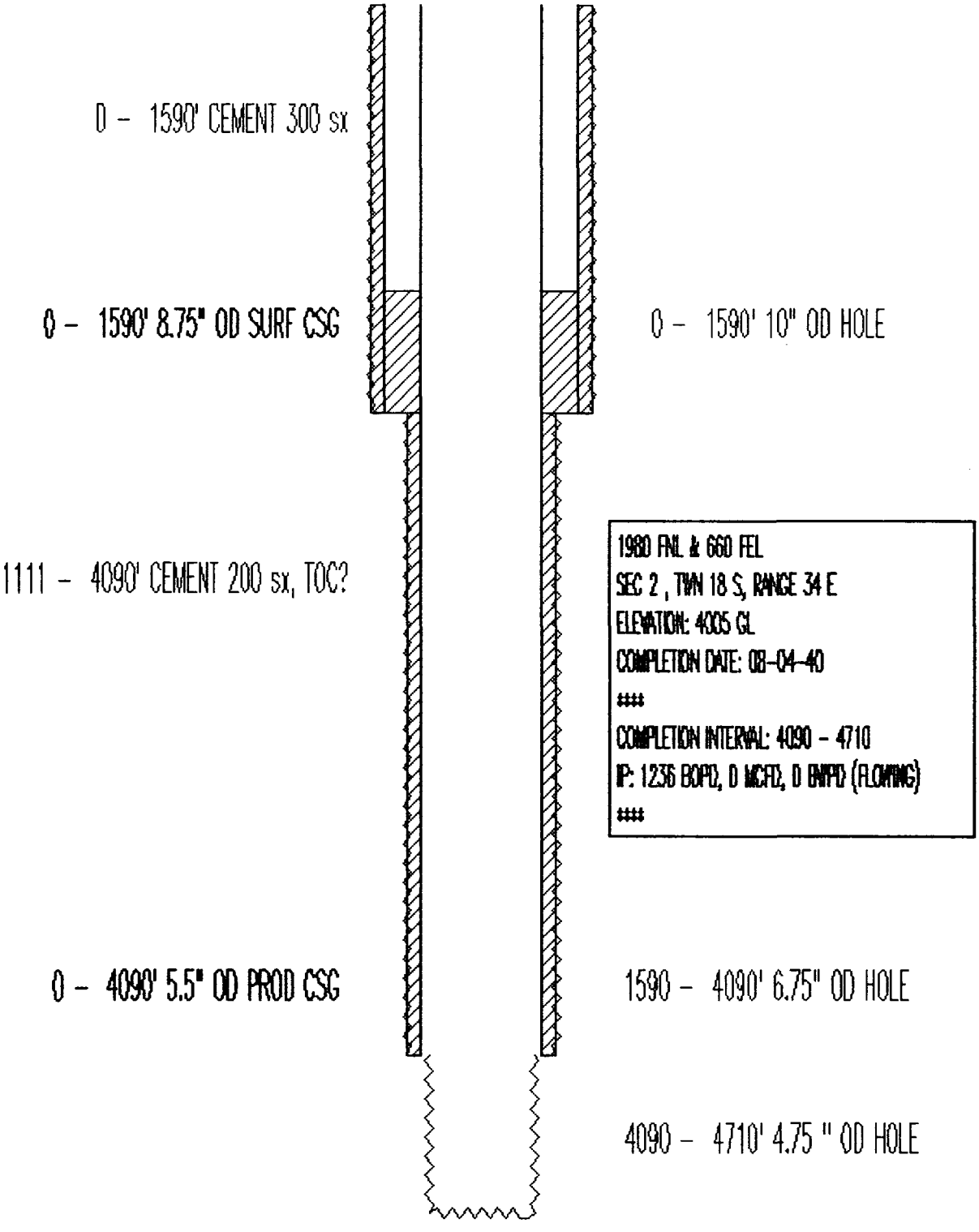
1593 - 4079' 7.875 " OD HOLE

4079 - 4710' 4.75 " OD HOLE

KB ELEV: 4014'

TD: 4710'

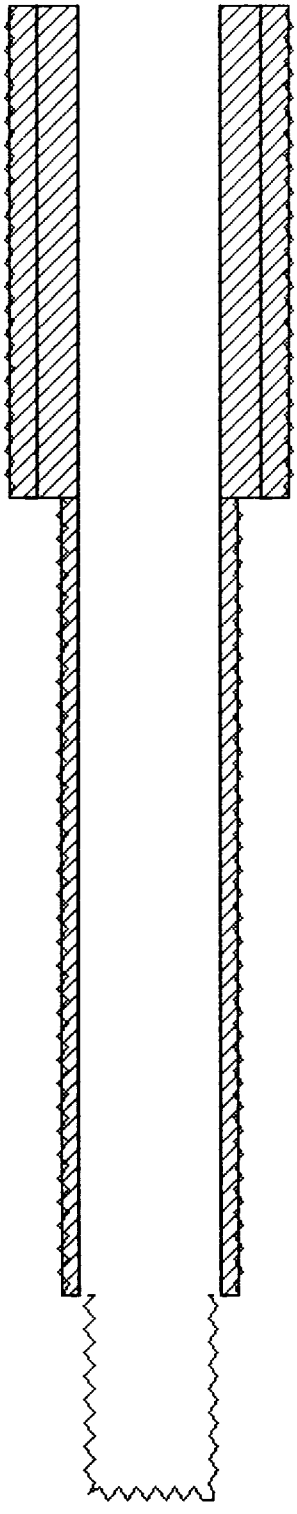
TEXACO INC
VACUUM GRBG-SADR UN NO. 39
API# 30025022640000



KB ELEV: 4010'

TD: 4710'

TEXACO INC
VACUUM GRBG-SADR UN NO. 40
API# 3002502252000O



0 - 1559' 8.625" OD SURF CSG
0 - 1559' CEMENT 300 sx

0 - 1559' 10.75" OD HOLE

1980 FNL & 660 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3997 GL
COMPLETION DATE: 07-03-40
####
COMPLETION INTERVAL: 4076 - 4710
IP: 278 BOPD, 0 MCFD, 0 BWPD (FLOWING)
####

0 - 4076' 5.5" OD PROD CSG
0 - 4076' CEMENT 200 sx

1559 - 4076' 6.75" OD HOLE

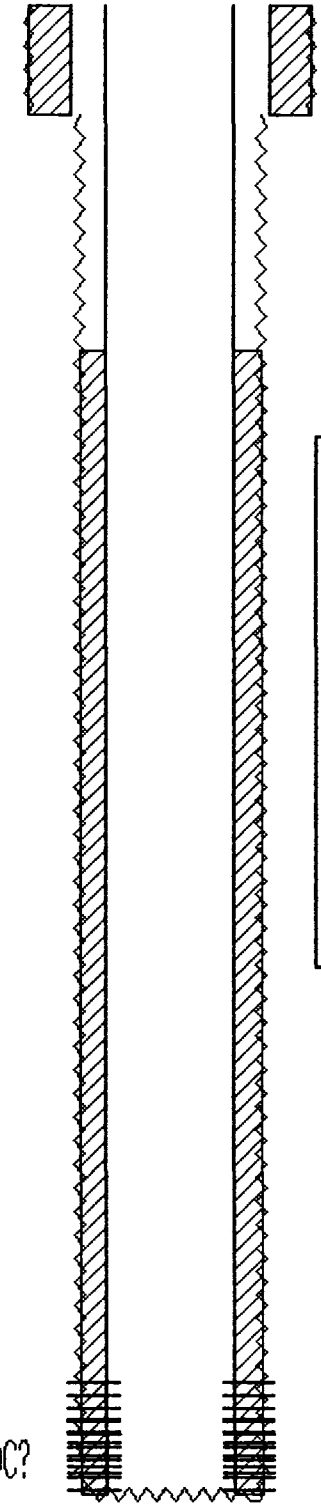
4076 - 4710' 4.75 " OD HOLE

KB ELEV: 4010'
TD: 4710'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 44
API# 3002524362000

0 - 356' 8.625" OD SURF CSG
0 - 356' CEMENT 300 sx

0 - 356' 12.25" OD HOLE



1330 FNL & 1330 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4019 GL
COMPLETION DATE: 03-19-73
****
COMPLETION INTERVAL: 4443 - 4732 (GBSA)
TRT: 8000 GALS ACID (4443 - 4732)
IP: 59 BOPD, 0 MCFD, 4 BWPD (PUMPING)
****
CONVERT TO INJ 8/82, 720 BWPD @ VAC
###

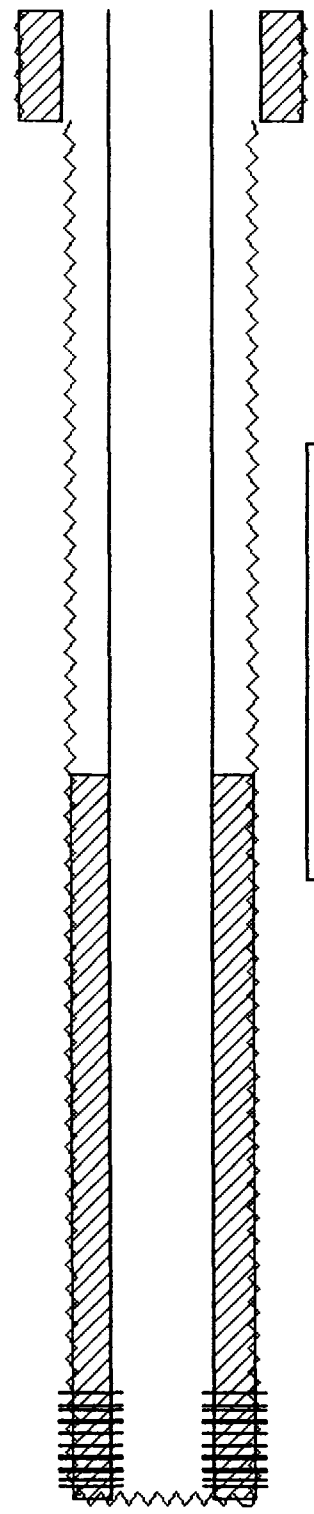
356 - 4800' 7.875 " OD HOLE

0 - 4800' 5.5" OD PROD CSG
1111 - 4800' CEMENT 500 sx, TOC?

4443 - 4732' PERFS Initial
4548 - 4786' PERFS 9/92, 2JSPF 96 Holes

PBTD: 4788'
KB ELEV: 4029'
TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 45
API# 30025243630000



0 - 356' 8.625" OD SURF CSG
0 - 356' CEMENT 300 sx

0 - 356' 12.25" OD HOLE

1310 FNL & 2530 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4016 GL
COMPLETION DATE: 04-05-73
xxxx
COMPLETED AS INJECTOR 4433-4756
TRT: 6000 GAL 20% NEA
INITIAL INJ 500 BWPD @ VAC
xxxx

356 - 4800' 7.875 " OD HOLE

4433 - 4455' PERFS SQZ PERFS 200 sx
4484 - 4740' PERFS 6/90, 2JSPF 44 Holes
4455 - 4756' PERFS

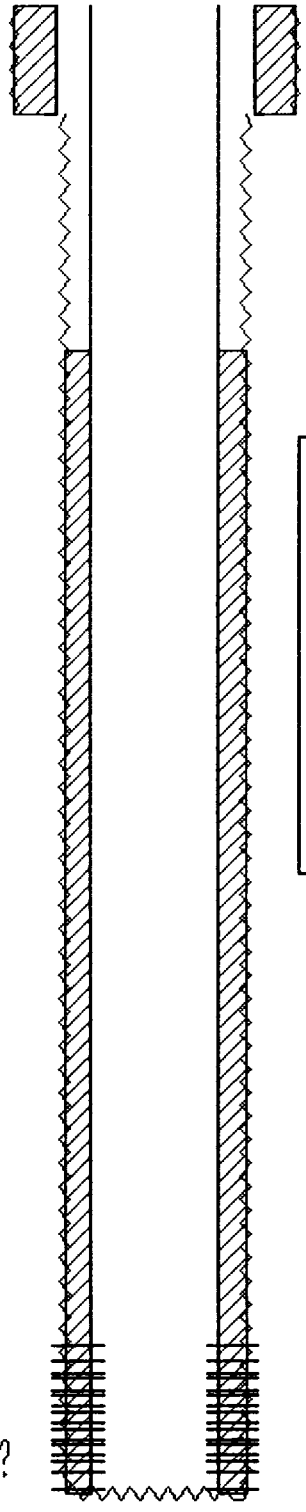
0 - 4800' 4.5" OD PROD CSG
2464 - 4800' CEMENT 600 sx

PBTD: 4776'
KB ELEV: 4026'
TD: 4800

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 46
API# 3002524364000O

0 - 356' 8.625" OD SURF CSG
0 - 356' CEMENT 300 sx

0 - 356' 12.25" OD HOLE



1405 FNL & 1230 FEL
SEC 2 , TWN 16 S, RANGE 34 E
ELEVATION: 4009 GL
COMPLETION DATE: 03-07-73
xxxx
COMPLETION INTERVAL: 4319 - 4697 (GBSA)
TRT: 8000 GALS ACID (4319 - 4697)
IP: 99 BOPD, 226 MCFD, 7 BWPD (PUMPING)
xxxx

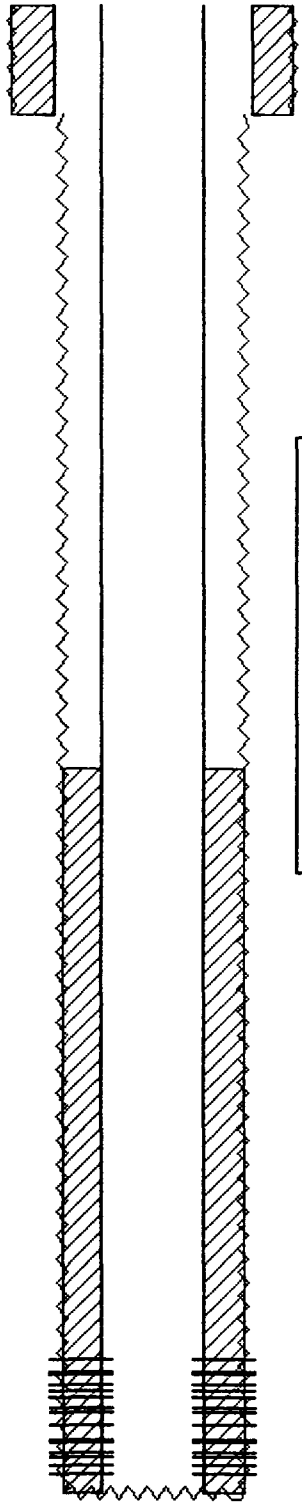
356 - 4800' 7.875 " OD HOLE

0 - 4800' 5.5" OD PROD CSG
1111 - 4800' CEMENT 500 sx, TOC?

4319 - 4697' PERFS
4412 - 4785' PERFS 6/90, 2JSPF 48 Holes

PBTD: 4788'
KB ELEV: 4019'
TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 47
API# 3002524365000O



0 - 355' 8.625" OD SURF CSG
0 - 355' CEMENT 300 sx

0 - 355' 12.25" OD HOLE

1330 FNL & 10 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4001 GL
COMPLETION DATE: 04-04-73
***
COMPLETED AS INJECTOR 4361-4739
TRT: 6000 GAL 20% NEA
INITIAL INJ 600 BWPD @ 0 PSI
***

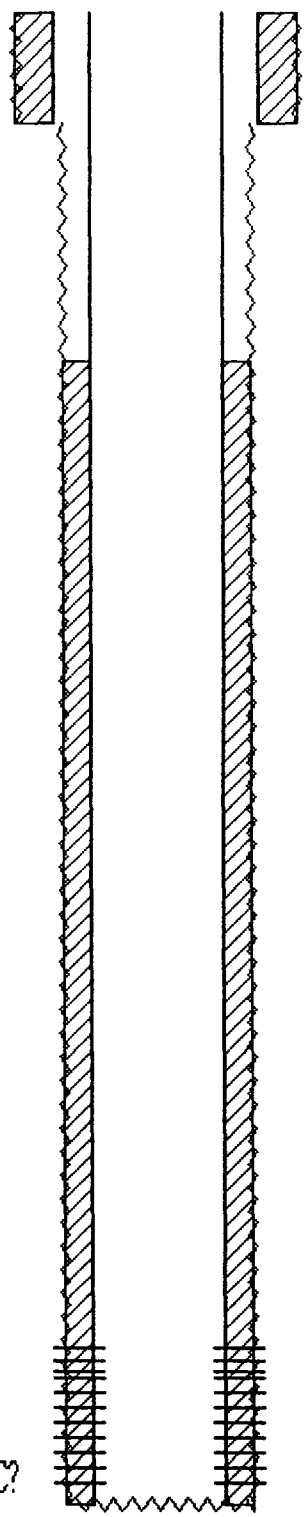
355 - 4800' 7.875 " OD HOLE

4361 - 4739' PERFS
4403 - 4712' PERFS 6/90, 2JSPF 32 Holes

0 - 4800' 4.5" OD PROD CSG
2460 - 4800' CEMENT 600 sx

PBTD: 4789'
KB ELEV: 4011'
TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 48
API# 3002524322000



0 - 355' 8.625" OD SURF CSG

0 - 355' CEMENT 300 sx

0 - 355' 11.75" OD HOLE

1330 FNL & 1330 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3994 GL
COMPLETION DATE: 02-13-73
****
COMPLETION INTERVAL: 4389 - 4730 (SADR)
TRT: 8000 GALS ACID (4389 - 4730)
IP: 216 BOPD, 495 MCFD, 11 BWPD (PUMPING)
****
CONVERT TO INJ 1/26/83, 800 BWPD @ VAC
####

355 - 4800' 7.875 " OD HOLE

0 - 4800' 5.5" OD PROD CSG

1111 - 4800' CEMENT 500 sx, TOC?

4389 - 4730' PERFS

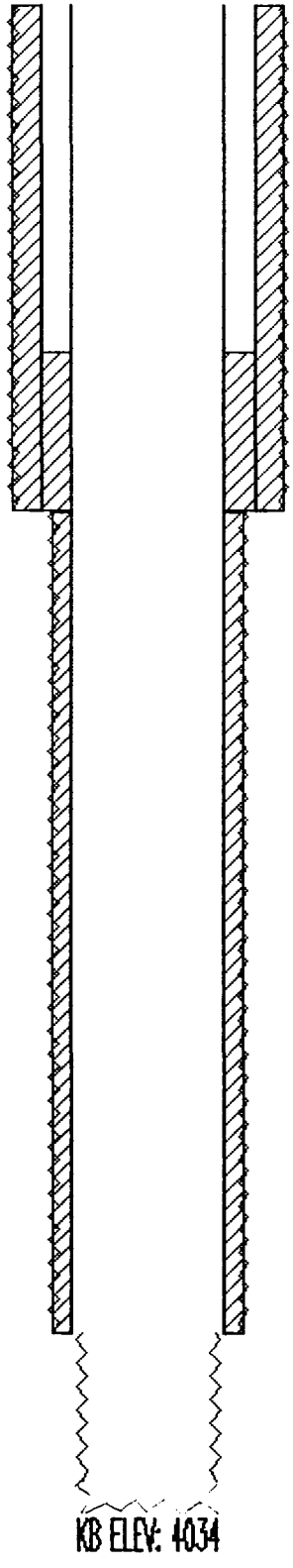
4280 - 4372' PERFS 8/87, 2JSPF 26 Holes

PBTD: 4788'

KB ELEV: 4004'

TD: 4800'

TEXACO INC
VACUUM GRBG-SADR UN NO. 51
API# 3002502266000



0 - 1615' 7.625" OD SURF CSG
0 - 1615' CEMENT 325 sx

0 - 1615' 9.625" OD HOLE

660 FNL & 660 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4021 GL
COMPLETION DATE: 05-29-39
***
COMPLETION INTERVAL: 4234 - 4700
IP: 315 BOPD, 190 MCFD, 0 BWPD (FLOWING)
***

0 - 4234' 5.5" OD PROD CSG
1111 - 4234' CEMENT 200 sx, TOC?

1615 - 4234' 6.75" OD HOLE

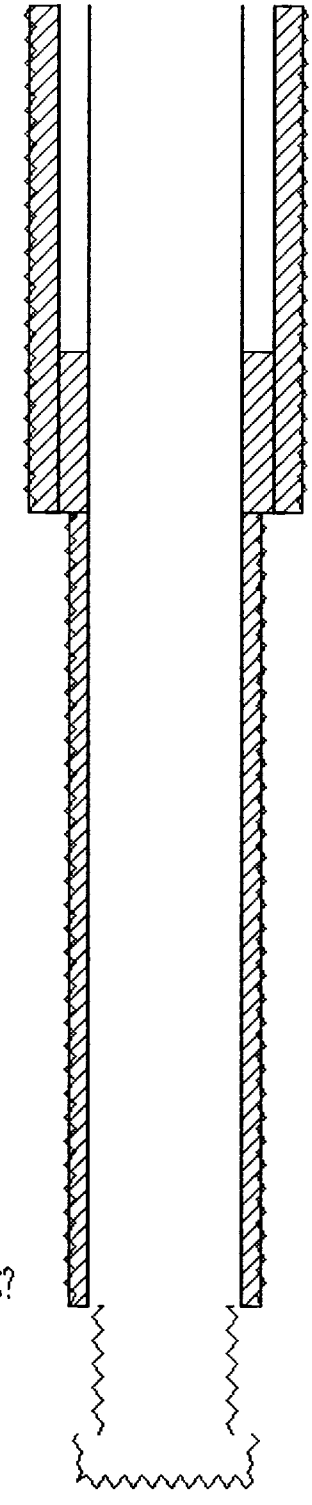
4234 - 4700' 4.75 " OD HOLE

4700 - 4756' OD Hole Deepened 3/87

KB ELEV: 4034

TD: 4756'

TEXACO INC
VACUUM GRBG-SADR UN NO. 52
API# 3002502267000O



0 - 1629' 7.625" OD SURF CSG
0 - 1629' CEMENT 350 sx

0 - 1629' 9.625" OD HOLE

660 FNL & 1980 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4019 GL
COMPLETION DATE: 09-11-39
***
COMPLETION INTERVAL: 4189 - 4700
IP: 768 BOPD, 0 MCFD, 0 BWPD (FLOWING)
***

0 - 4189' 5.5" OD PROD CSG
1111 - 4189' CEMENT 200 sx, TOC?

1629 - 4189' 6.75" OD HOLE

4189 - 4608' 4.75 " OD HOLE
4608 - 4700' 6.25" OD HOLE UR 10/85
4700 - 4760' 6.25" OD HOLE DO & UR 10/85

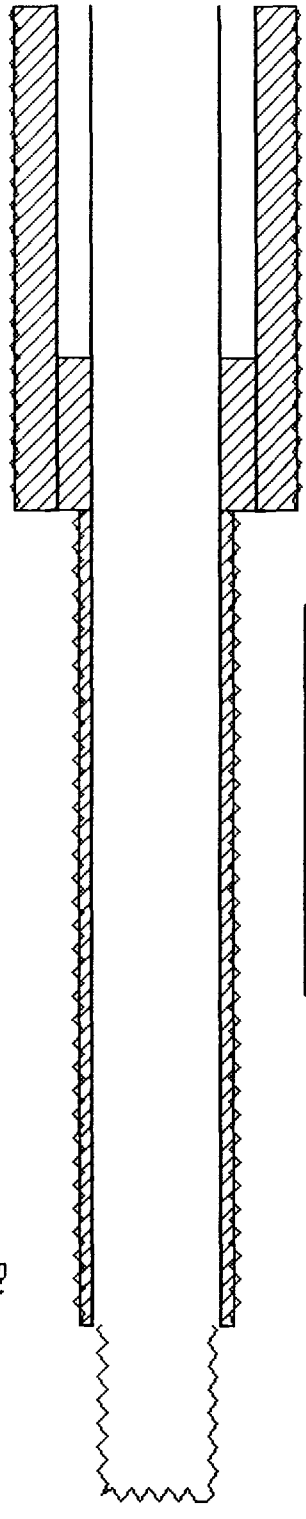
KB ELEV: 4031'

TD: 4760'

TEXACO INC

VACUUM GRBG-SADR UN NO. 53

API# 3002502262000O



0 - 1596' 8.625" OD SURF CSG

0 - 1596' CEMENT 300 sx

0 - 1596' 12.25" OD HOLE

660 FNL & 1980 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4013 GL
COMPLETION DATE: 11-06-39
***
COMPLETION INTERVAL: 4171 - 4710
IP: 656 BOPD, 0 MCFD, 0 BWPD (FLOWING)
***

0 - 4171' 5.5" OD PROD CSG

1111 - 4171' CEMENT 250 sx, TOC?

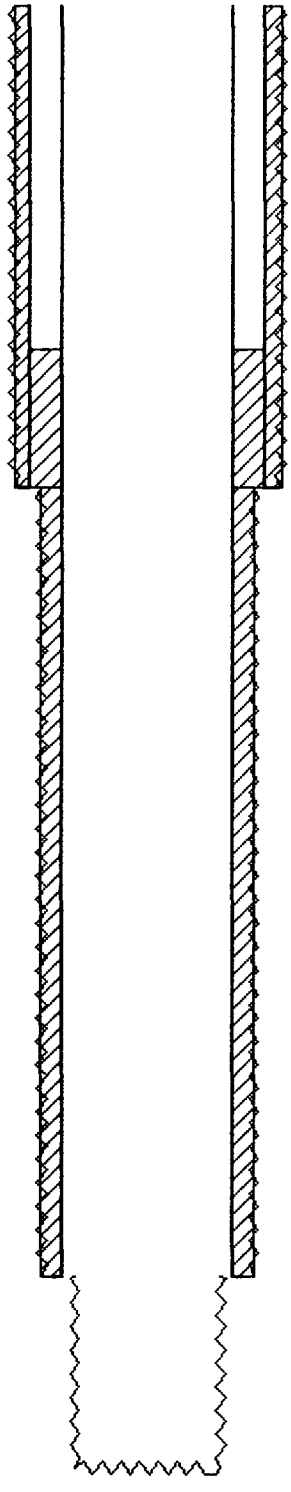
1596 - 4171' 6.75" OD HOLE

4171 - 4710' 4.75 " OD HOLE

KB ELEV: 4026'

TD: 4710

TEXACO INC
VACUUM GRAYBURG-SA NO. 54
API# 30025211110000



0 – 1554' 7.625" OD SURF CSG
0 – 1554' CEMENT 300 sx

0 – 1554' 8.625" OD HOLE

660 FNL & 660 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4007 GL
COMPLETION DATE: 11-16-38
***
COMPLETION INTERVAL: 4091 – 4710
IP: 1236 BOPD, 0 MCFD, 0 BWPD (FLOWING)
***

0 – 4091' 5.5" OD PROD CSG
1111 – 4091' CEMENT 200 sx, TOC?

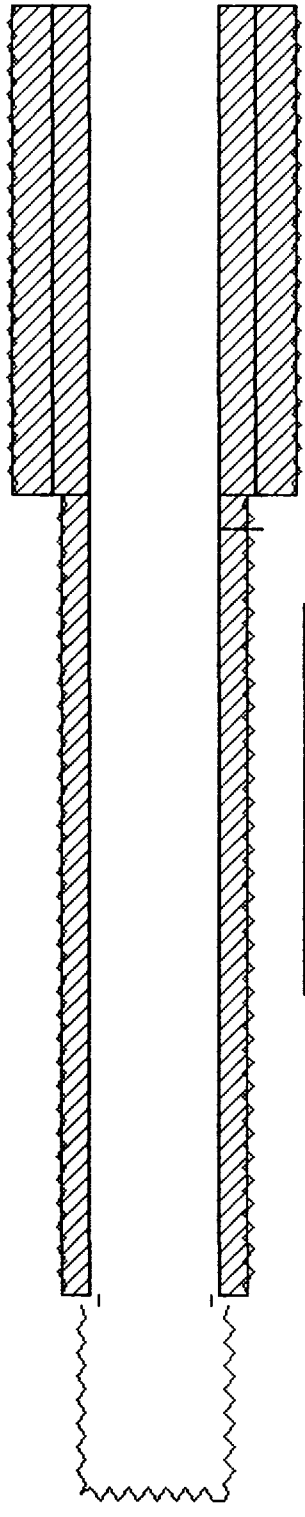
1554 – 4091' 6.875" OD HOLE

4091 – 4710' 4.75" OD HOLE

KB ELEV: 4020'

TD: 4710

TEXACO INC
VACUUM GRBG-SADR UN NO. 55
API# 30025022500000



0 - 1547' 8.625" OD SURF CSG

0 - 1547' CEMENT 200 sx

0 - 1547' 12" OD HOLE

1572' SQZ 500 sx

660 FNL & 660 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3998 GL
COMPLETION DATE: 11-07-39
***
COMPLETION INTERVAL: 4062 - 4710
IP: 412 BOPD, 0 MCFD, 0 BWPD (FLOWING)
***

0 - 4082' 5.5" OD PROD CSG

0 - 4082' CEMENT 250 sx

1547 - 4082' 7.875 " OD HOLE

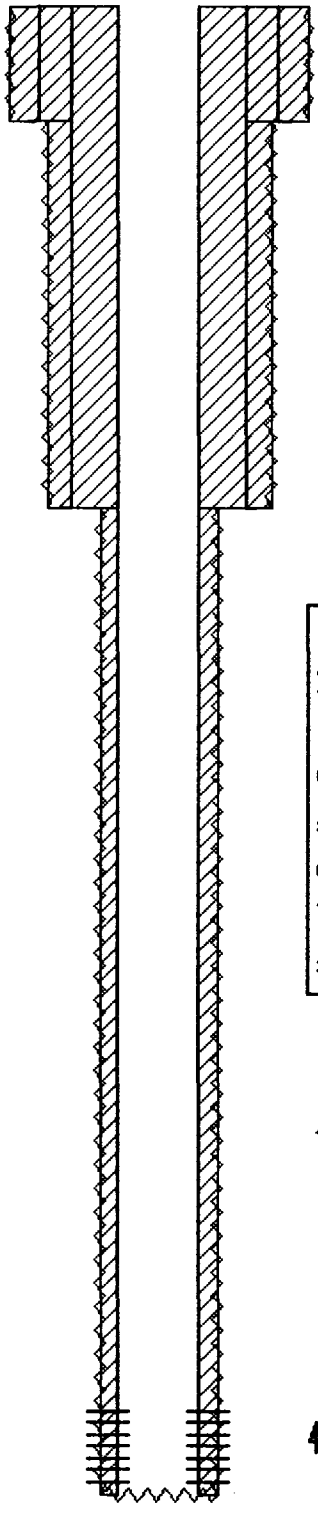
4082 - 4115' 4.75 " OD HOLE

4115 - 4710' 6.25" OD HOLE Underream 1/87

KB ELEV: 4011'

TD: 4710

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 62
API# 30025279730000



0 - 375' 16 " OD SURF CSG
0 - 375' CEMENT 500 sx

0 - 375' 20 " OD HOLE

0 - 1615' 11.75" OD INT CSG
0 - 1615' CEMENT 750 sx

375 - 1615' 15" OD HOLE

65 FNL & 1330 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4019 GL
COMPLETION DATE: 12-12-82
***
COMPLETED AS INJECTOR 4516-4555
TRT: 5500 GAL 15% NEA
***

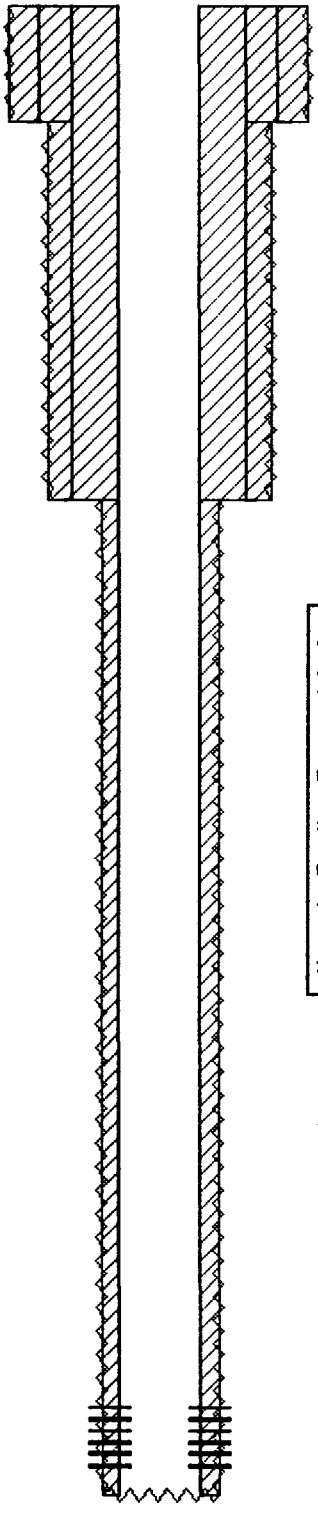
1615 - 4800' 7.875" OD HOLE

0 - 4800' 5.5" OD PROD CSG
0 - 4800' CEMENT 2000 sx

4516 - 4755' PERFS

PBTD: 4782'
KB ELEV: 4029'
TD: 4800'

TEXACO INC
VACUUM GRAYBURG-SA NO. WI 63
API# 30025279740000



0 - 375' 16 " OD SURF CSG
0 - 375' CEMENT 550 sx

0 - 375' 20 " OD HOLE

0 - 1590' 11.75" OD INT CSG
0 - 1590' CEMENT 950 sx

375 - 1590' 15" OD HOLE

50 FNL & 2630 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4017 GL
COMPLETION DATE: 12-13-82
****
COMPLETED AS INJECTOR 4484-4709
TRT: 5500 GAL 15% NEA
****

1590 - 4800' 7.875" OD HOLE

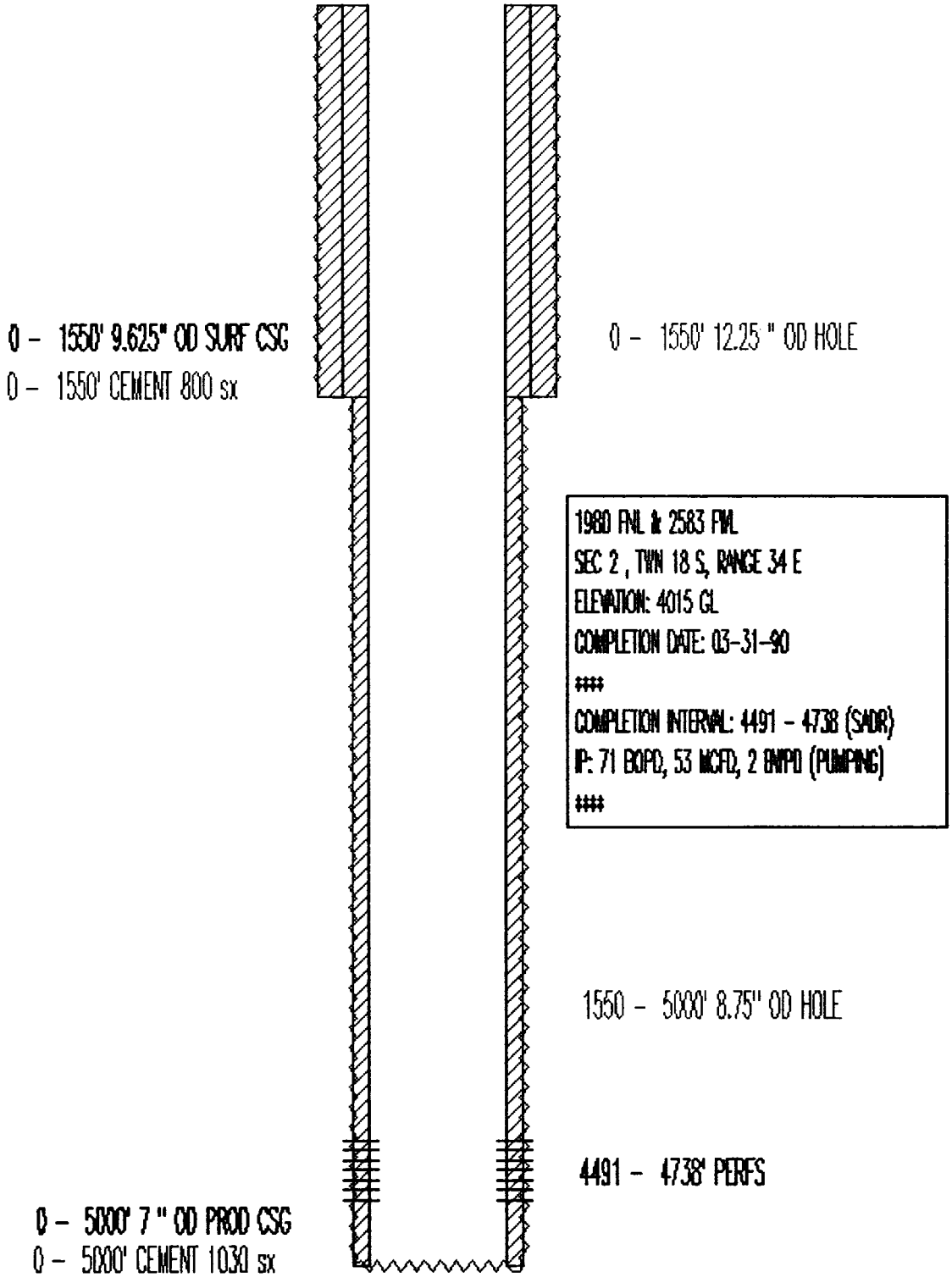
0 - 4800' 5.5" OD PROD CSG
0 - 4800' CEMENT 2000 sx

4484 - 4709' PERFS
4502 - 4703' PERFS 3/91, 2JSPF 24 Holes

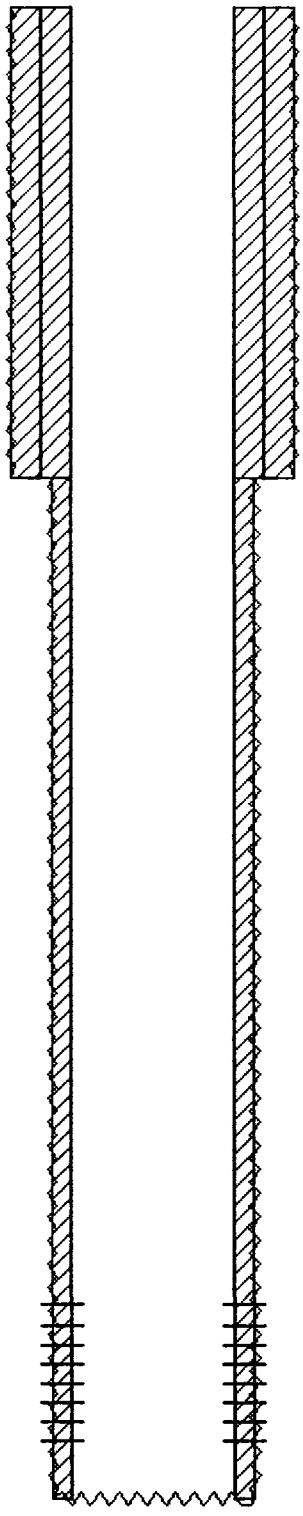
PBTD: 4744'

KB ELEV: 4029'
TD: 4800

TEXACO PROD
VACUUM (GRAYBURG-SA NO. 138
API# 3002530754000O



TEXACO PROD
VACUUM (GRAYBURG-SA NO. 139
API# 3002530755000O



0 - 1570' 9.625" OD SURF CSG

0 - 1570' CEMENT 856 sx

0 - 1570' 12.25 " OD HOLE

1980 FNL & 1282 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4007 GL
COMPLETION DATE: 07-30-90
###
COMPLETION INTERVAL: 4347 - 4806 (SADR)
TRT: 10600 GAL 15% NEFE
IP: 330 BOPD, 46 MCFD, 111 BWPD (PUMPING)
###

1570 - 5000' 8.75" OD HOLE

4347 - 4806' PERFS

0 - 5000' 7 " OD PROD CSG

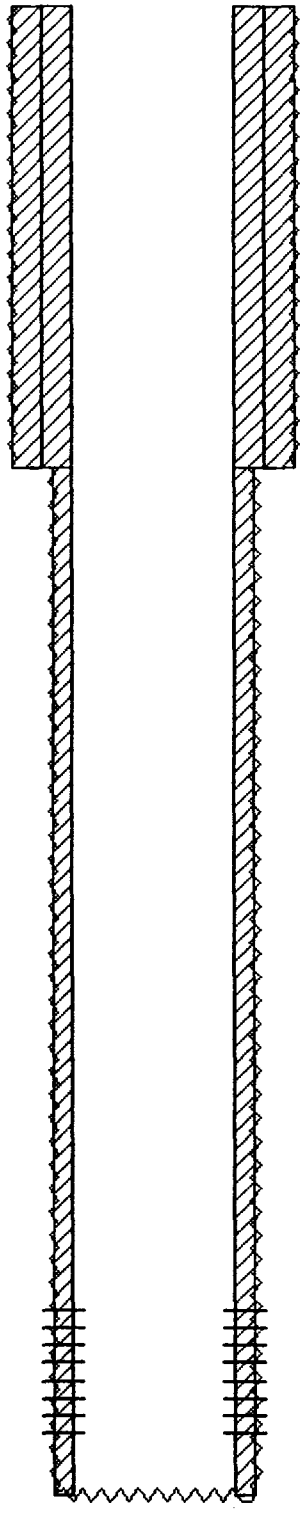
0 - 5000' CEMENT 1200 sx

PBTD: 4900'

KB ELEV: 4020'

TD : 5000'

TEXACO PROD
VACUUM (GRAYBURG-SA NO. 140
API# 3002530756000O



0 - 1550' 9.625" OD SURF CSG
0 - 1550' CEMENT 800 sx

0 - 1550' 12.25 " OD HOLE

1980 FNL & 10 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4000 GL
COMPLETION DATE: 04-22-90
####
COMPLETION INTERVAL: 4378 - 4792 (GRBG)
TRT: 14,100 GAL 28% NEFE
IP: 96 BOPD, 88 MCFD, 256 BWPD (PUMPING)
####

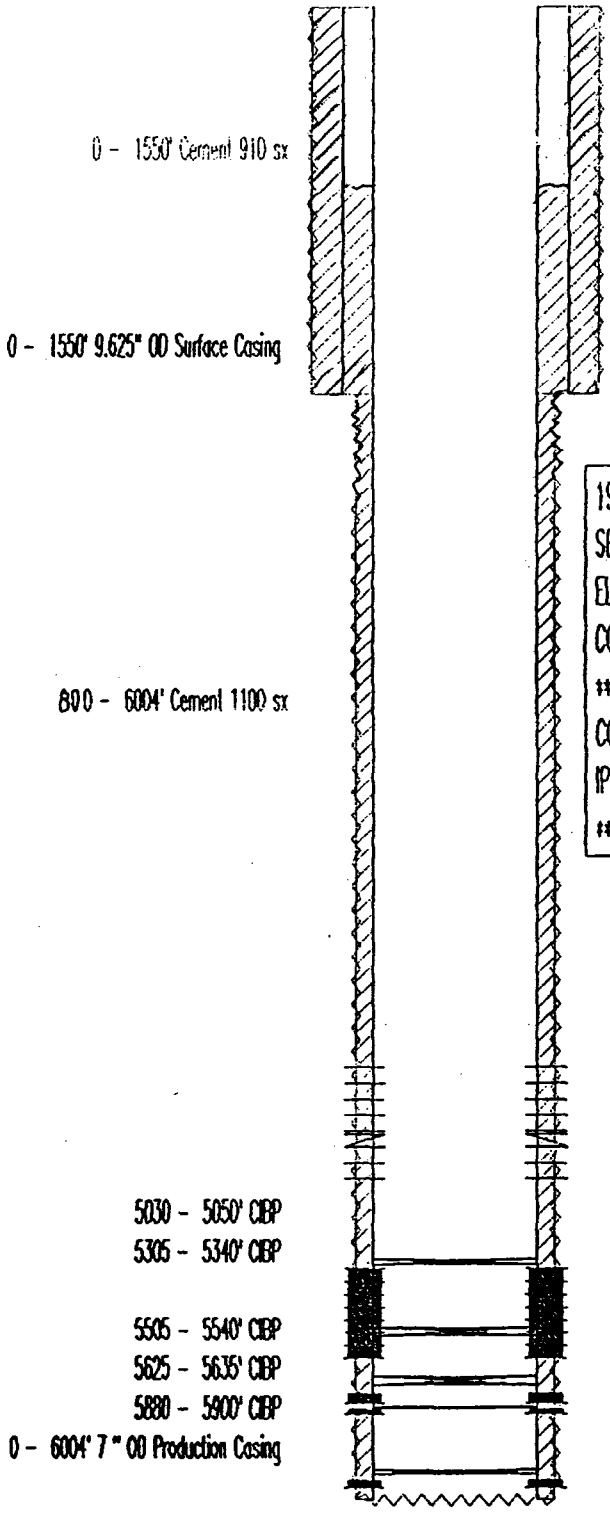
1550 - 5000' 8.75" OD HOLE

4378 - 4792' PERFS

0 - 5000' 7 " OD PROD CSG
0 - 5000' CEMENT 1125 sx

PBTD: 4900'
KB ELEV: 4013'
TD: 5000'

TEXACO INC
VACUUM (GRAYBURG-SA) NO. 141
API# 3002530797000



0 - 1550' 12.25 " OD Openhole

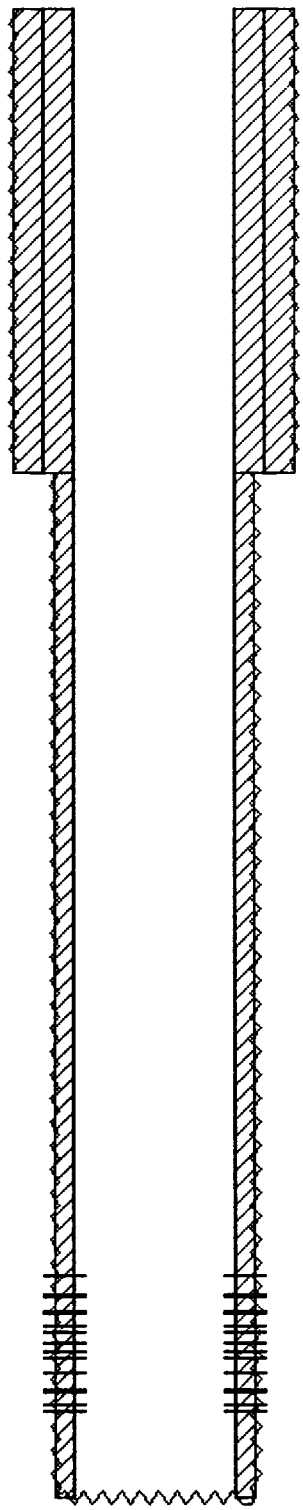
1980 FNL & 1309 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3995 GL
COMPLETION DATE: 06-24-90
****
COMPLETION INTERVAL: 4258 - 4705 (GRBG)
IP: 101 BOPD, 38 MCFD, 398 BWPD (PUMPING)
****

4258 - 4705' Perfs
4494 - 4576' Squeeze Perfs 150 SX, TEST WET

5066 - 5432' Abandoned Perfs SWAB 278 BW, 10 HR

5572 - 5612' Abandoned Perfs SWAB 16 BO 63 BW, 11 HRS
5640 - 5654' Abandoned Perfs SWAB 84 BW, 8 HR
5926 - 5955' Abandoned Perfs SWAB 2 BO 19 BW, 13 HRS
1550 - 6004' 8.75" OD Openhole

TEXACO PROD
VACUUM GRAYBURG SA NO. WI 148
API# 3002530799000O



0 - 1553' 9.625" OD SURF CSG
0 - 1553' CEMENT 1000 sx

0 - 1553' 12.25 " OD HOLE

1330 FNL & 660 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3998' GL
COMPLETION DATE: 06-30-90
####
COMPLETION INTERVAL: 4320 - 4690 (SADR)
TRT: 9900 GAL 15% NEFE
IP: 19 BOPD, 58 MCFD, 468 BWPD (PUMPING)
####
CONV TO INJECTION 04-13-92
738 BWPD @ 850 PSI
####

1553 - 5000' 8.75" OD HOLE

4320 - 4690' PERFS
4251 - 4710' PERFS 3/92, 2JSPF 116 HOLES

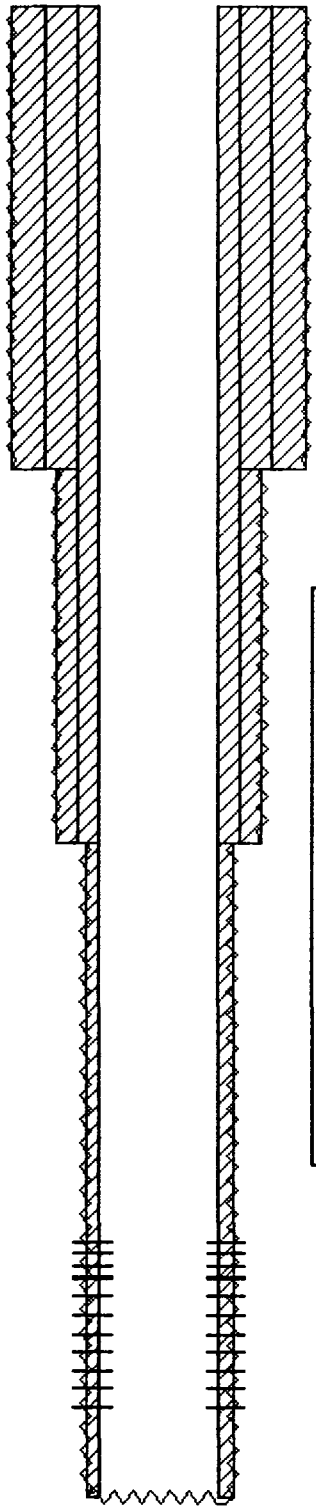
0 - 5000' 7 " OD PROD CSG
0 - 5000' CEMENT 1050 sx

PBTD: 4728'

KB ELEV: 4011'

TD: 5000'

TEXACO PROD
VACUUM GRAYBURG-SA NO. WI 149
API# 30025308470000



0 - 1550' 17.5 " OD HOLE

0 - 1550' 13.375" OD SURF CSG

0 - 1550' CEMENT 1700 sx

1550 - 2800' 12.25 " OD HOLE

1330 FNL & 1980 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3992 GL
COMPLETION DATE: 10-24-90
####
COMPLETION INTERVAL: 4132 - 4590 (GRBG)
TRT: 12,900 GAL 15% NEFE
IP: 27 BOPD, 15 MCFD, 862 BWPD (PUMPING)
####
CONV TO INJECTION 04-13-92
1346 BWPD @ 825 PSI
####

0 - 2800' 9.625" OD INT CSG

0 - 2800' CEMENT 1570 sx

2800 - 5000' 8.75" OD HOLE

4132 - 4258' PERFS

4262 - 4698' PERFS 4/92, 2JSPF 192 HOLES

0 - 5000' 7 " OD PROD CSG

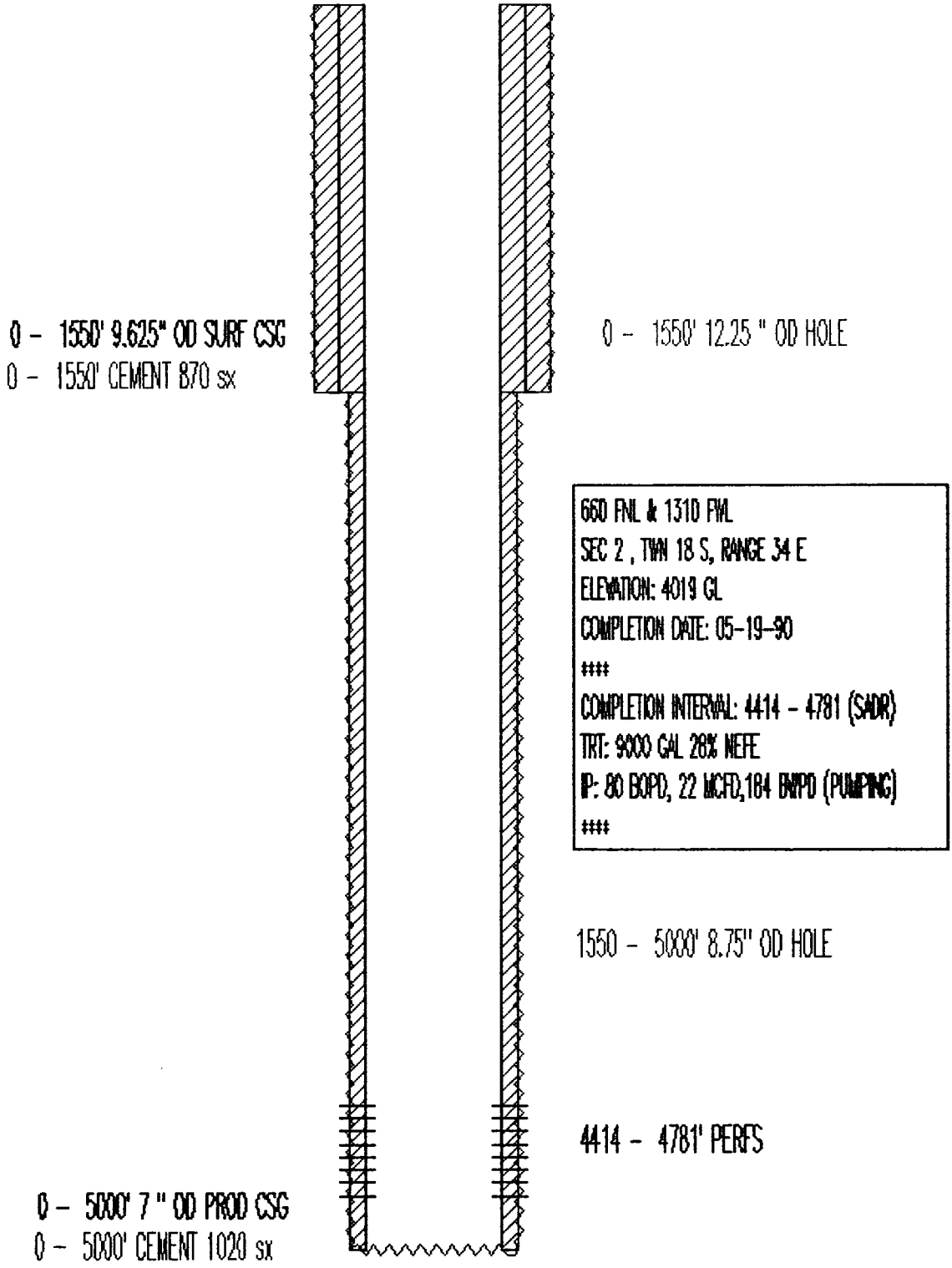
0 - 5000' CEMENT 950 sx

PBTD: 4810'

KB ELEV: 4005'

TD: 5000'

TEXACO PROD
VACUUM (GRAYBURG-SA NO. 152
API# 3002530803000O

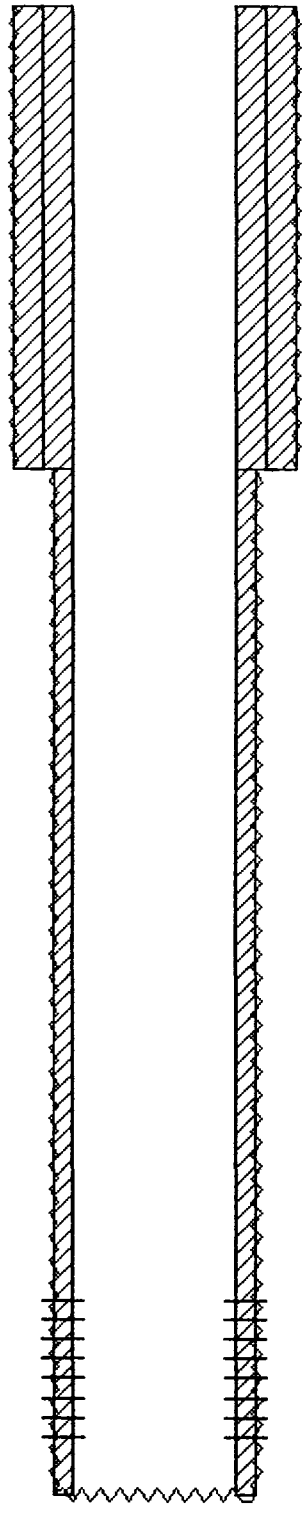


PBTD: 4850'

KB ELEV: 4032'

TD: 5000'

TEXACO PROD
VACUUM (GRAYBURG-SA NO. 153
API# 3002530802000



0 - 1558' 9.625" OD SURF CSG
0 - 1558' CEMENT 1000 sx

0 - 1558' 12.25 " OD HOLE

660 FNL & 2630 FWL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4016 GL
COMPLETION DATE: 05-30-90
###
COMPLETION INTERVAL: 4342 - 4804 (SADR)
TRT: 16,400 GAL 28% NEFE
IP: 72 BOPD, 37 MCFD, 352 BWPD (PUMPING)
###

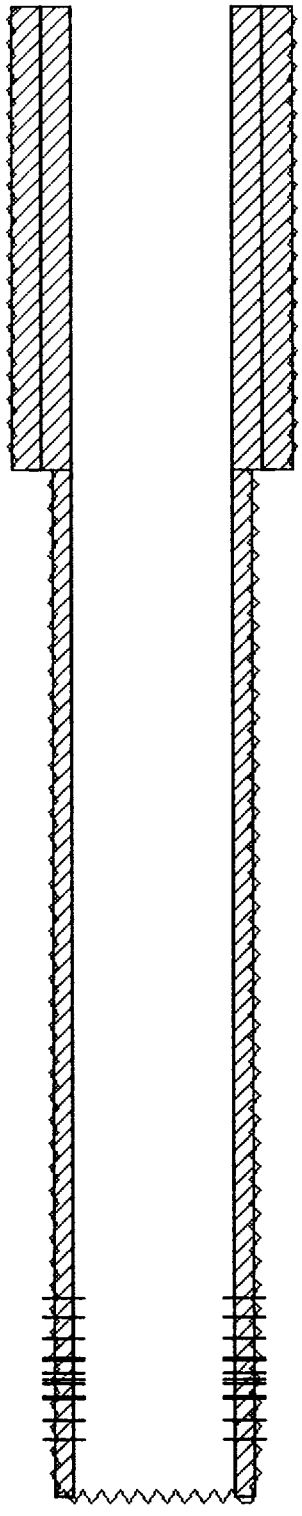
1558 - 5000' 8.75" OD HOLE

4342 - 4804' PERFS

0 - 5000' 7 " OD PROD CSG
0 - 5000' CEMENT 1000 sx

PBTD: 4900'
KB ELEV: 4029'
TD: 5000'

TEXACO PROD
VACUUM (GRAYBURG-SA NO. 154
API# 3002530801000O



0 - 1550' 9.625" OD SURF CSG
0 - 1550' CEMENT 1050 sx

0 - 1550' 12.25 " OD HOLE

660 FNL & 1331 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4011 GL
COMPLETION DATE: 06-06-90
###
COMPLETION INTERVAL: 4326 - 4807 (SADR)
TRT: 14,400 GAL 28% NEFE
IP: 187 BOPD, 79 MCFD, 476 BWPD (PUMPING)
###

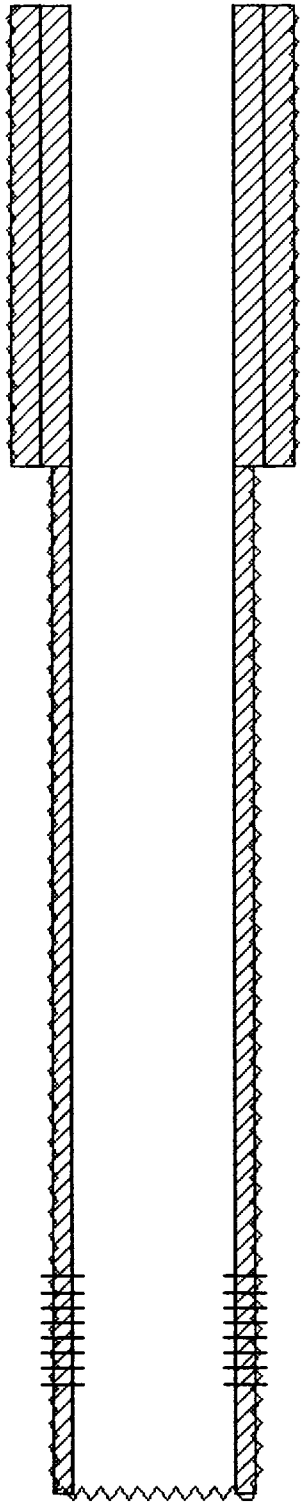
1550 - 5000' 8.75" OD HOLE

4326 - 4807' PERFS
4509 - 4660' PERFS 6/93, 2JSPF 50 Holes

0 - 5000' 7 " OD PROD CSG
0 - 5000' CEMENT 1050 sx

PBTD: 4900'
KB ELEV: 4024'
TD: 5000'

TEXACO PROD
VACUUM (GRAYBURG-SA NO. 155
API# 3002530800000



0 - 1550' 9.625" OD SURF CSG

0 - 1550' CEMENT 1000 sx

0 - 1550' 12.25 " OD HOLE

660 FNL & 10 FEL
SEC 2 , TWN 18 S, RANGE 34 E
ELEVATION: 4001 GL
COMPLETION DATE: 06-28-90
####
COMPLETION INTERVAL: 4268 - 4630 (SADR)
TRT: 10,200 GAL 15% NEFE
IP: 137 BOPD, 67 MCFD, 241 BWPD (PUMPING)
####

1550 - 5000' 8.75" OD HOLE

4268 - 4630' PERFS

0 - 5000' 7 " OD PROD CSG

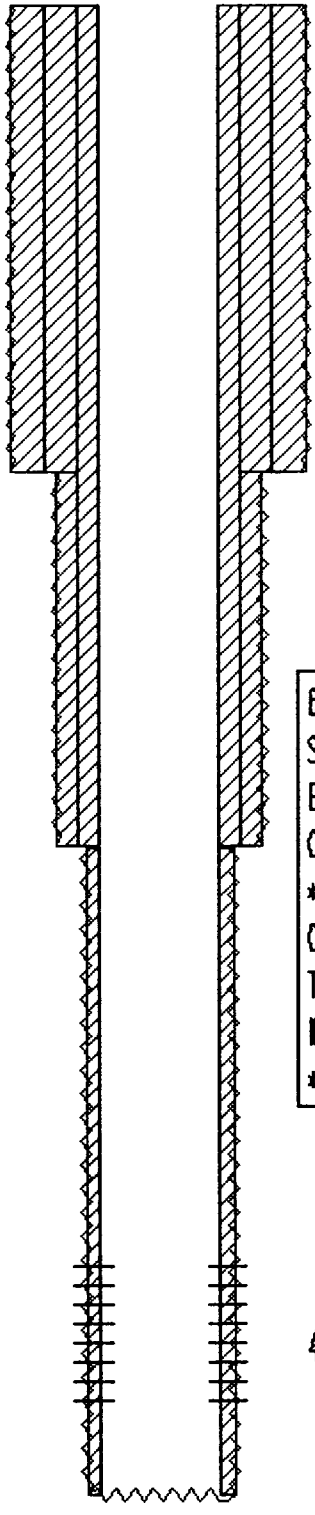
0 - 5000' CEMENT 1125 sx

PBTD: 4650'

KB ELEV: 4014'

TD: 5000'

TEXACO PROD
VACUUM (GRAYBURG-SA NO. 156
API# 3002530851000O



0 - 1560' 17.5 " OD HOLE

0 - 1560' 13.375" OD SURF CSG
0 - 1560' CEMENT 1700 sx

1560 - 2820' 12.25 " OD HOLE

660 FNL & 1330 FWL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 3997 GL
COMPLETION DATE: 11-09-90
****
COMPLETION INTERVAL: 4226 - 4680 (SADR)
TRT: 15,000 GAL 15% NEFE
IP: 107 BOPD, 101 MCFD, 695 BWPD (PUMPING)
****

0 - 2820' 9.625" OD INT CSG
0 - 2820' CEMENT 1570 sx

2820 - 5000' 8.75" OD HOLE

4226 - 4680' PERFS

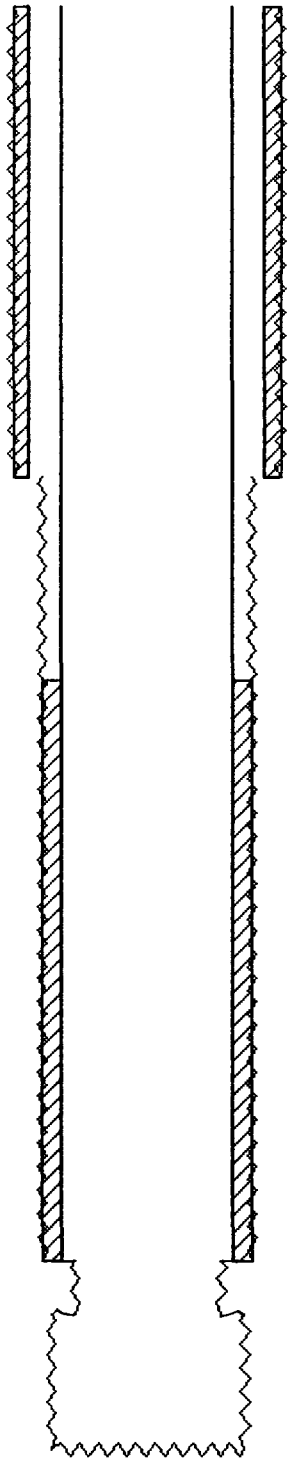
0 - 5000' 7 " OD PROD CSG
0 - 5000' CEMENT 900 sx

PBTD: 4815'
KB ELEV: 4010'
TD: 5000'

TEXACO INC

CENTRAL VACUUM UNIT #92

API# 30025203190000



0 – 1540' 7.625" OD SURF CSG

0 – 1540' CEMENT 300 SX

0 – 1540' 8.625" OD HOLE

660 FSL & 660 FWL
SEC 36, TWN 17 S, RANGE 34 E
ELEVATION: 4001' GL
COMPLETION DATE: 10-04-38
####
COMPLETION INTERVAL: 4096 – 4710 (GBSA)
IP: 192 BOPD, 137 MCFPD, 0 BWPD (4F)
####

1540 – 4096' 6.75" OD HOLE

0 – 4096' 5.5" OD PROD CSG

2200 – 4096' CEMENT 200 SX

4096 – 4267' 4.75" OD HOLE

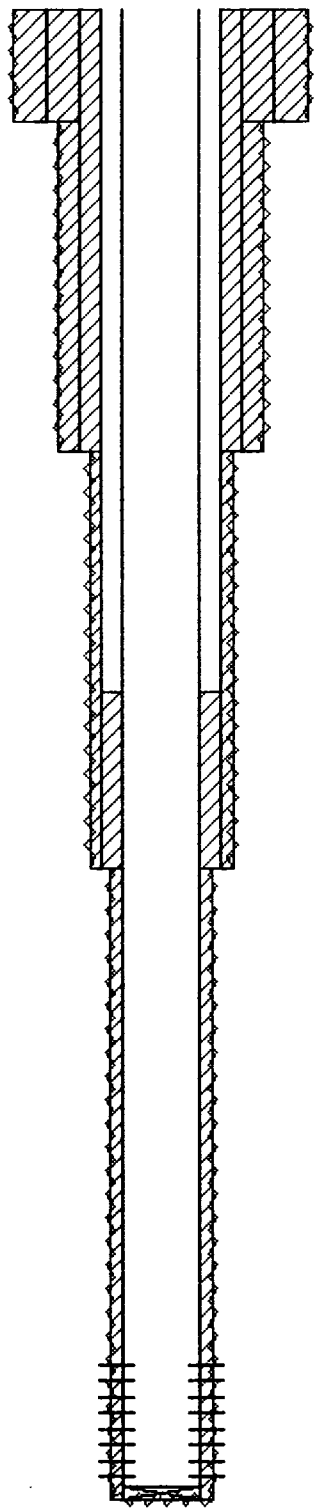
4267 – 4710' 6.25" OD HOLE

KB ELEV: 4012'

PBTD: 4710'

TD: 4710'

TEXACO INC
CENTRAL VACUUM V NO. WI-141
API# 30025260010000



0 - 361' 13.375" OD SURF CSG
0 - 361' CEMENT 400 sx

0 - 361' 17.5 " OD HOLE

0 - 1416' 9.625" OD INT CSG
0 - 1416' CEMENT 800 sx

361 - 1416' 12.25 " OD HOLE

0 - 2765' 7 " OD INT CSG
0 - 2765' CEMENT 650 sx

1416 - 2765' 8.5 " OD HOLE

10 FSL & 1310 FWL
SEC 36 , TWN 17 S, RANGE 34 E
ELEVATION: 3992 GR
COMPLETION DATE: 01-18-79
##
NOT COMPLETED AS A PRODUCER
##

4360 - 4724' PERFS

0 - 4800' 4.5" OD PROD CSG
2200 - 4800' CEMENT 750 sx

2765 - 4800' 6.125 " OD HOLE

PBTD: 4760'

KB ELEV: 4004'

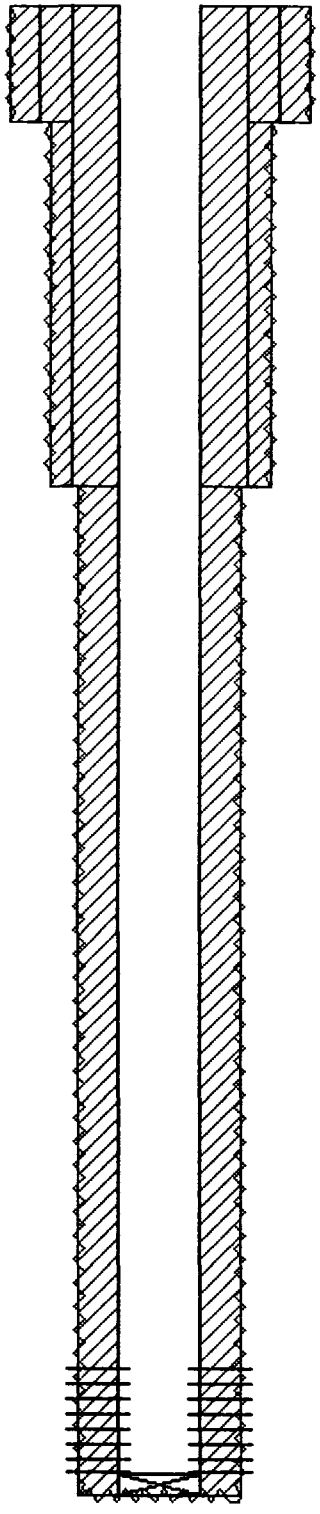
TEXACO INC
CENTRAL VACUUM UNIT NO. WI-161
API# 3002527971000O

0 - 374' 16 " OD SURF CSG
0 - 374' CEMENT 550 sx

0 - 374' 20 " OD HOLE

0 - 1550' 11.75" OD INT CSG
0 - 1550' CEMENT 750 sx

374 - 1550' 14.75 " OD HOLE



180 FSL & 10 FWL
SEC 36 , TWN 17 S, RANGE 34 E
ELEVATION: 4004 GR
COMPLETION DATE: 01-11-83
##
NOT COMPLETED AS A PRODUCER
##

4391 - 4727' PERFS

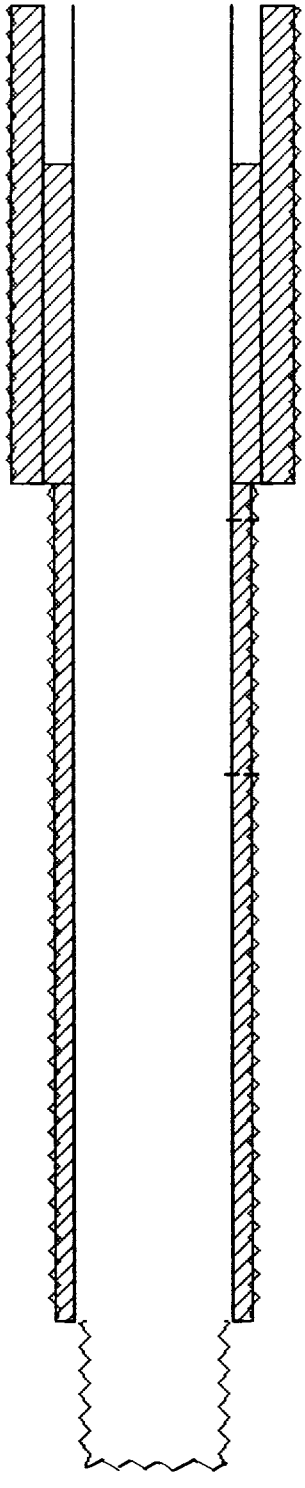
0 - 4800' 5.5" OD PROD CSG
0 - 4800' CEMENT 2000 sx

1550 - 4800' 10.75 " OD HOLE

PBTD: 4730'

KB ELEV: 4014'
TD: 4800'

PHILLIPS PET
HALE-STATE NO. 3
API# 30025022210000



0 - 1491' 9.625" OD SURF CSG

0 - 1491' CEMENT 875 sx

0 - 1491' 12.5" OD HOLE

SQZ @ 1495' W/ 250 SX

SQZ @ 2645' W/ 1020 SX

660 FSL & 660 FEL
SEC 35 , TWN 17 S, RANGE 34 E
ELEVATION: 4018 EB
COMPLETION DATE: 01-02-39
####
COMPLETION INTERVAL: 4099 - 4552 ( )
TRT: 1500 GALS ACID (4099 - 4552)
IP: 516 BOPD, 400 MCFD, 0 BWPD (FLOWING)
####

0 - 4099' 7 " OD PROD CSG

? - 4099' CEMENT 400 SX

1491 - 4099' 8.75" OD HOLE

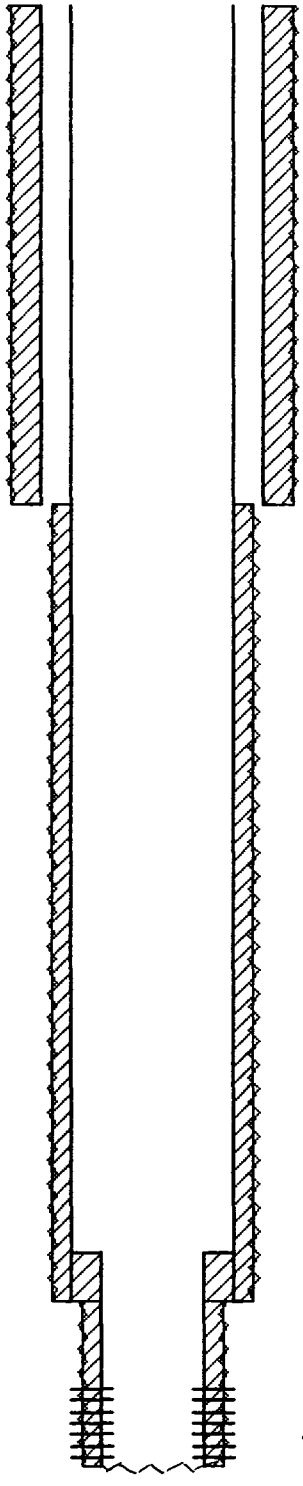
4099 - 4721 6.125" OD HOLE

TD: 4721'

PHILLIPS PET

NE HALE-STATE NO. 1

API# 30025084550000



0 - 1593' 9.625" OD SURF CSG

0 - 1593' CEMENT 900 sx

0 - 1593' 12.25 " OD HOLE

660 FSL & 1980 FWL
SEC 35 , TWN 17 S, RANGE 34 E
ELEVATION: 4029 ES
COMPLETION DATE: 07-15-39
****
COMPLETION INTERVAL: 4145 - 4678 ( )
IP: 584 BOPD, 300 MCFD, 0 BWPD (FLOWING)
****

1593 - 4145' 8.75" OD HOLE

? - 4145' CEMENT 400 sx

0 - 4145' 7 " OD PROD CSG

4145 - 4678' 6.125 " OD HOLE

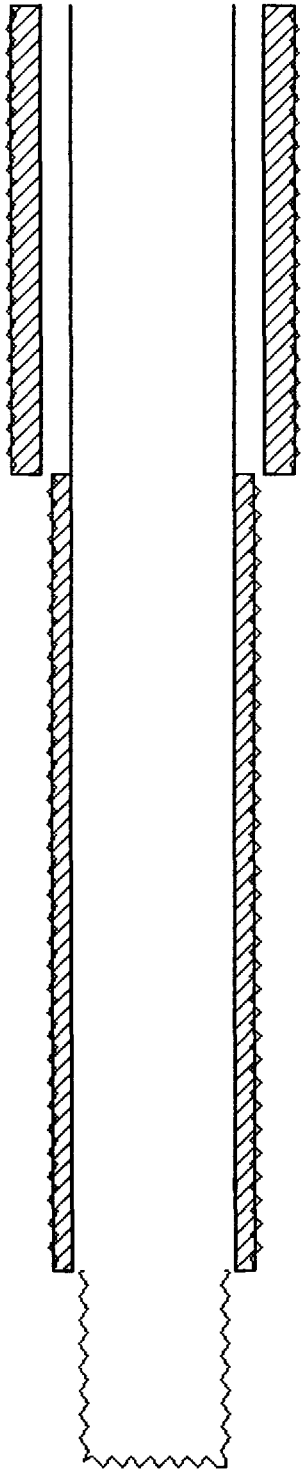
3990 - 4744' 4.5" OD LINER

3990 - 4744' CEMENT 160 sx

4415 - 4651' PERFS

TD: 4678'

PHILLIPS PET
HALE-STATE NO. 6
API# 30025022230000



0 - 1523' 9.625" OD SURF CSG
0 - 1523' CEMENT 623 sx

0 - 1523' 12.25 " OD HOLE

660 FSL & 1980 FEL
SEC 35 , TWN 17 S, RANGE 34 E
ELEVATION: 4025 ES
COMPLETION DATE: 05-23-40
****
COMPLETION INTERVAL: 4091 - 4714 ( )
IP: 255 BOPD, 0 MCFD, 0 BWPD (PUMPING)
****

0 - 4091' 7 " OD PROD CSG

? - 4091' CEMENT 400 sx

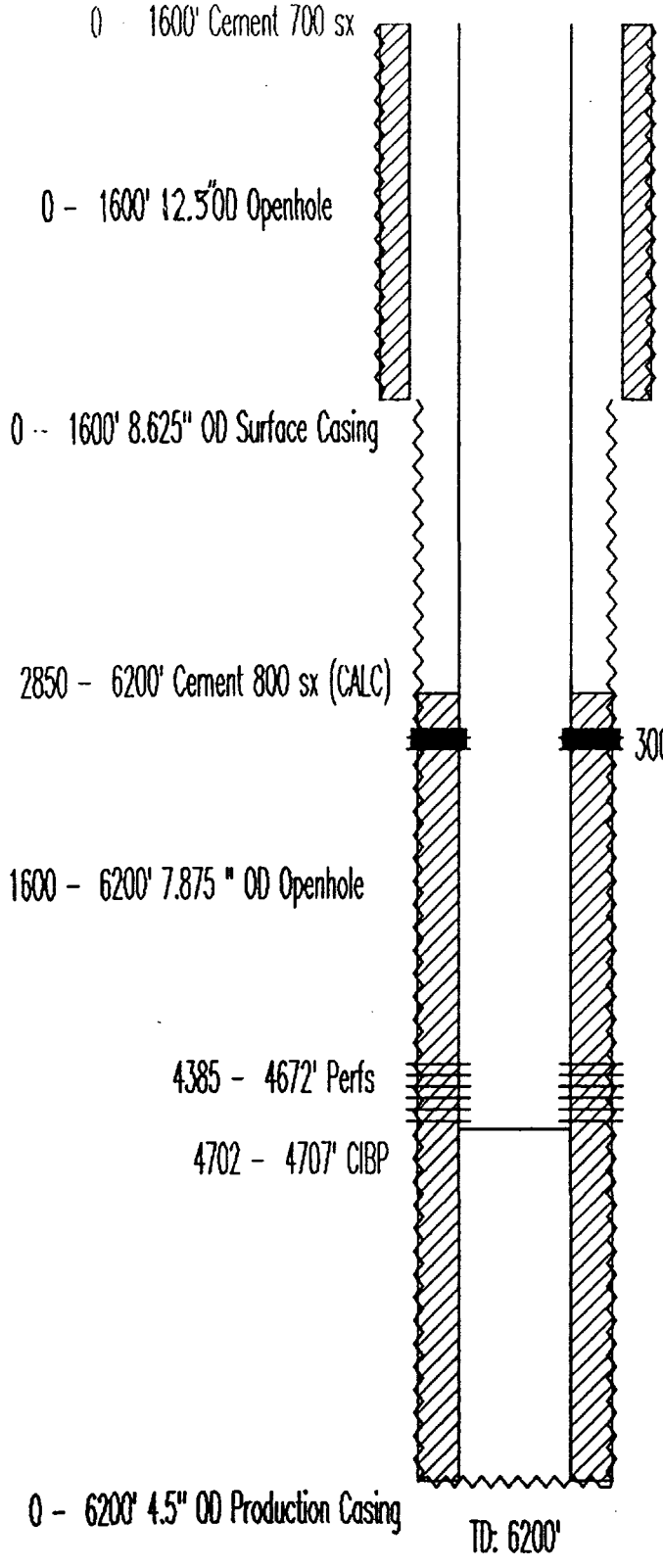
1523 - 4091' 8.75" OD HOLE

4091 - 4714' 6.125 " OD HOLE

TD: 4721'

PHILLIPS
M.E. HALE STATE NO. 10
API# 30025207820000

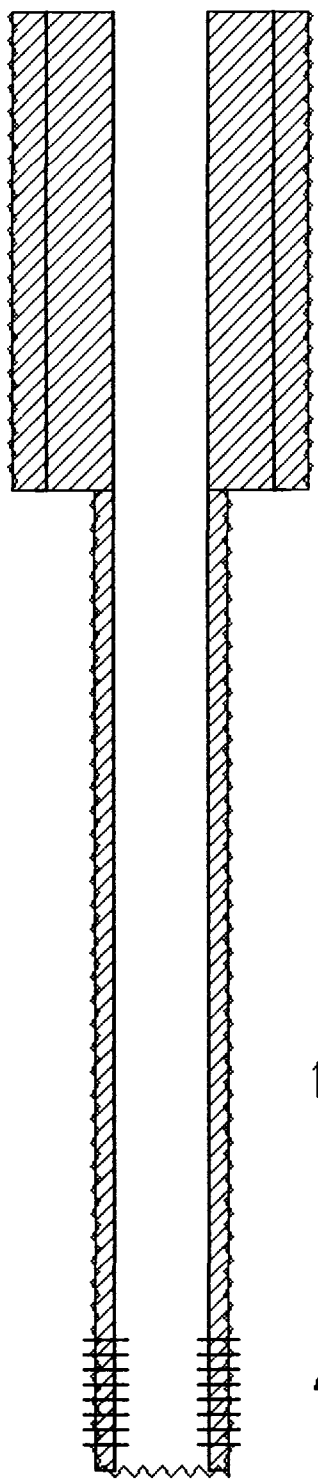
960 FSL & 1680 FEL
SEC 35 , TWN 17 S, RANGE 34 E
ELEVATION: 4013 GR
COMPLETION DATE: 08-13-64
****
COMPLETION INTERVAL: 3004 - 3090 (YTES)
TRT: FRAC 20000 GALS 25000 LBS (3004 - 3090)
IP: 0 BOPD, 0 MCFD, 0 BWPD (FLOWING)
****
RECOMPLETION DATE: 12-16-69
++++
RECOMPLETION INTERVAL: 4385-4588 (GBSA)
TRT: 20,000 GALS ACID (4385-4588)
IP: 136 BOPD, 0 MCFD, 0 BWPD
++++
CURRENT STATUS: GBSA PRODUCER



PHILLIPS PET

HALE W E NO. HW-19

API# 3002528062000O



0 - 1570' 13.375" OD SURF CSG

0 - 1570' CEMENT 1650 sx

0 - 1570' 17.5 " OD HOLE

10 FSL & 1210 FEL
SEC 35 , THN 17 S, RANGE 34 E
ELEVATION: 4010 GR
COMPLETION DATE: 07-23-83
****
NOT COMPLETED AS A PRODUCER
****

1570 - 4800' 7.875" OD HOLE

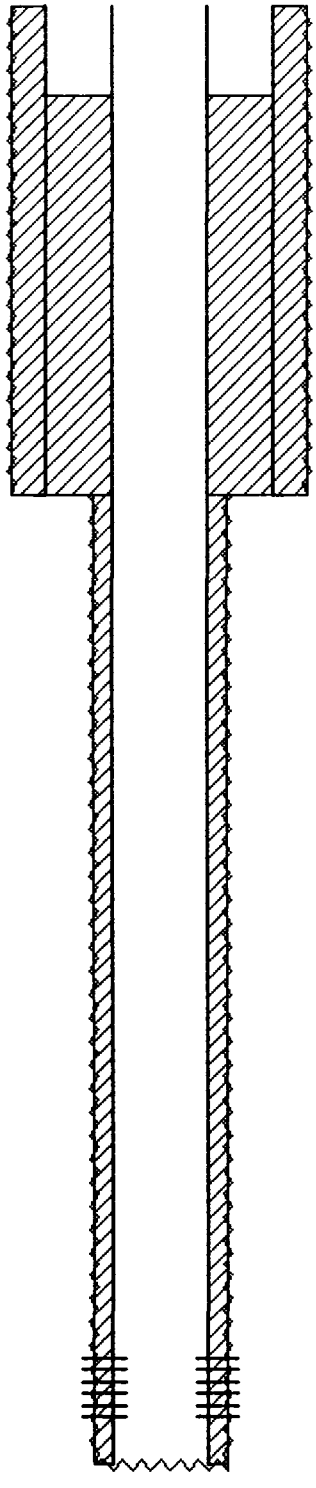
4367 - 4710' PERFS

0 - 4800' 5.5" OD PROD CSG

0 - 4800' CEMENT 1700 sx

TD: 4800'

PHILLIPS PET
HALE M E NO. 22
API# 3002530616000



0 - 1608' 13.375" OD SURF CSG

0 - 1608' CEMENT 1500 sx

0 - 1608' 17.5 " OD HOLE

1650 FSL & 2630 FWL
SEC 35 , THSN 17 S, RANGE 34 E
ELEVATION: 4026 KB
COMPLETION DATE: 07-21-89
***
COMPLETION INTERVAL: 4411 - 4545 (SHOR)
IP: 226 BOPD, 106 MCFD, 203 BWPD (PUMPING)
***

1608 - 4800' 7.875" OD HOLE

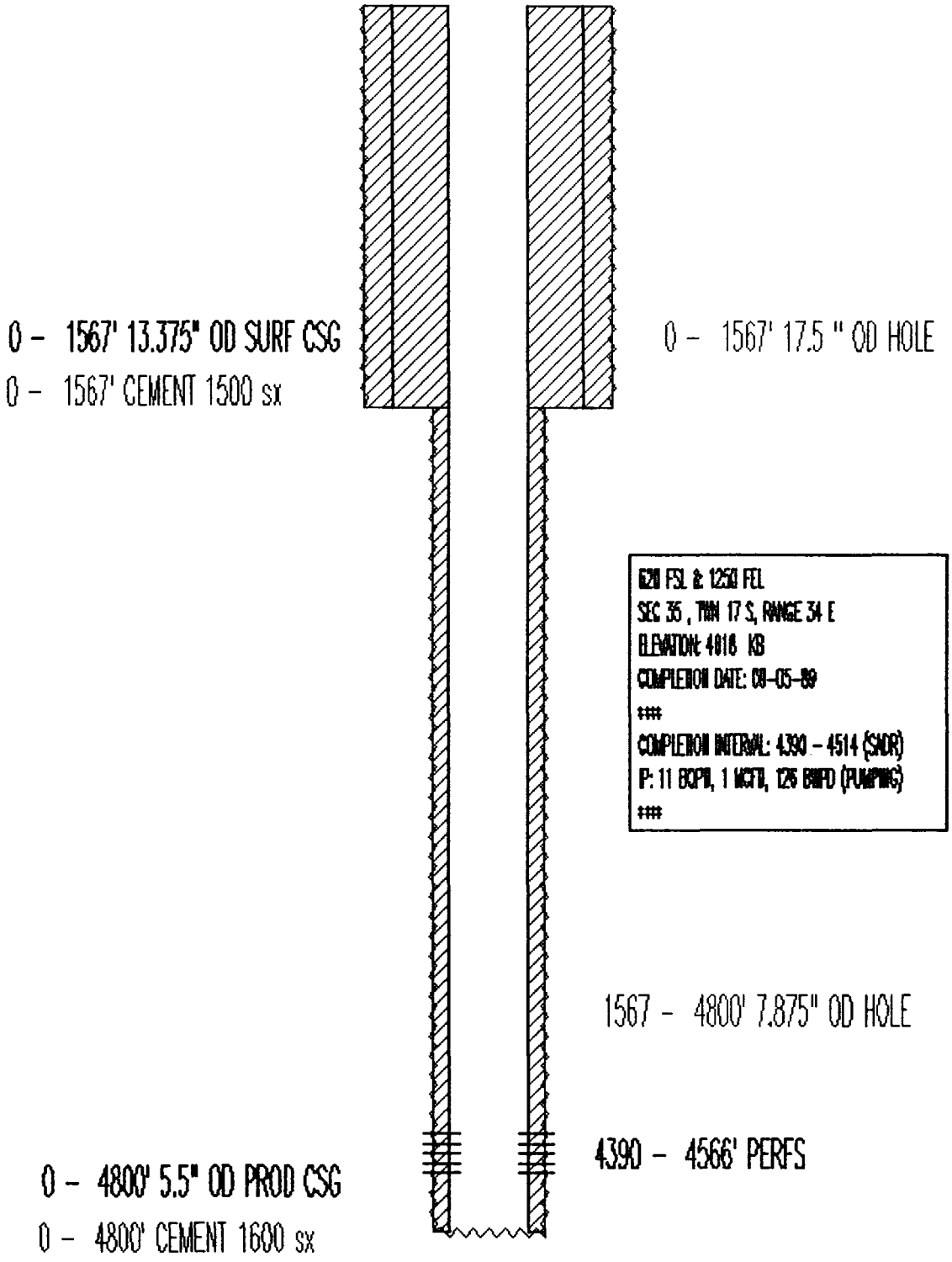
0 - 4800' 5.5" OD PROD CSG

300 - 4800' CEMENT 2000 sx

4411 - 4643' PERFS

TD: 4800'

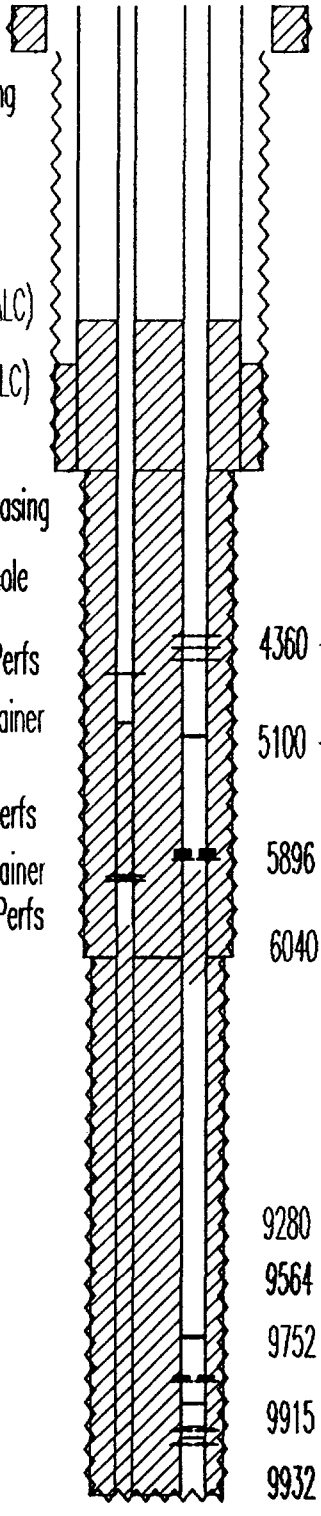
PHILLIPS PET
HALE M E NO. 23
API# 3002530617000O



PHILLIPS
M E HALE NO. 8 (NOW: VACUUM GLORIETA WEST UNIT NO. 98)
API# 3002520780000

660 FSL & 560 FEL
SEC 35 , TWN 17 S, RANGE 34 E
ELEVATION: 4018 ES
COMPLETION DATE: 04-18-64
****
COMPLETION INTERVAL: 6068 - 6078 (GLRT)
IP: 60 BOPD, 0 MCFD, 72 BWPD (PUMPING)
****
SECOND CMPL INTRVL: 9546 - 9604 (WFMP)
IP: 86 BOPD, 0 MCFD, 9 BWPD (FLOWING)
****
CURRENT STATUS: GBSA PRODUCER

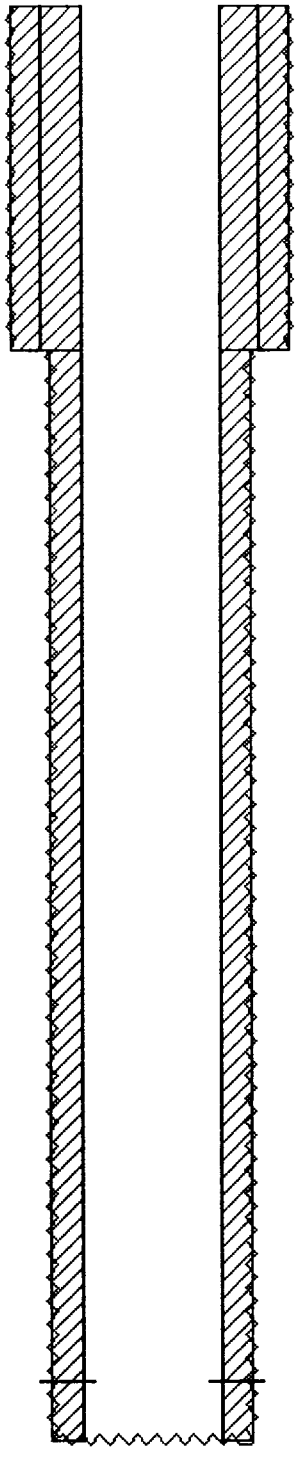
0 - 320' Cement 350 sx
0 - 320' 17.5 " OD Openhole
0 - 320' 13.375" OD Surface Casing
3250 - 6645' 8.75" OD Openhole
2200 - 10400' Cement 485 sx (CALC)
2500 - 3250' Cement 400 sx (CALC)
0 - 3250' 9.625" OD Intermediate Casing
320 - 3250' 12.25 " OD Openhole
4639 - 4670' Perfs
5010 - 5015' Retainer
6069 - 6079' Abandoned Perfs
6085 - 6090' Retainer
6100 - 6110' Abandoned Perfs
6645 - 10400' 7.875" OD Openhole
0 - 6428' 2.875" OD Tubing
0 - 10359' 4.5" OD Tubing



TD: 10400'

4360 - 4574' Perfs
5100 - 5110' CIBP
5896 - 5964' Abandoned Perfs
6040 - 6831' Cement Plug
9280 - 9300' Retainer (CMT CAP)
9564 - 9604' Abandoned Perfs
9752 - 9757' CIBP
9915 - 9920' Retainer
9932 - 9945' Abandoned Perfs
9995 - 10000' CIBP
10034 - 10044' Abandoned Perfs

TEXACO INC
VACUUM GLORIETA WEST UNIT 104 WI
API# 3002531858000O



0 - 1500' 8.625" OD SURF CSG

0 - 1500' CEMENT 650 SX

0 - 1500' 11" OD HOLE

361 FSL & 300 FWL
SEC 36, TWN 17 S, RANGE 34 E
ELEVATION: 4003' GL
COMPLETION DATE: 04-07-93
####
COMPLETION INTERVAL: 5944 - 5983 (GLOR)
STATUS: SI, WAITING FOR INJ LINE
####

1500 - 6245' 7.875" OD HOLE

0 - 6245' 5.50" OD PROD CSG

0 - 6245' CEMENT 1390 SX

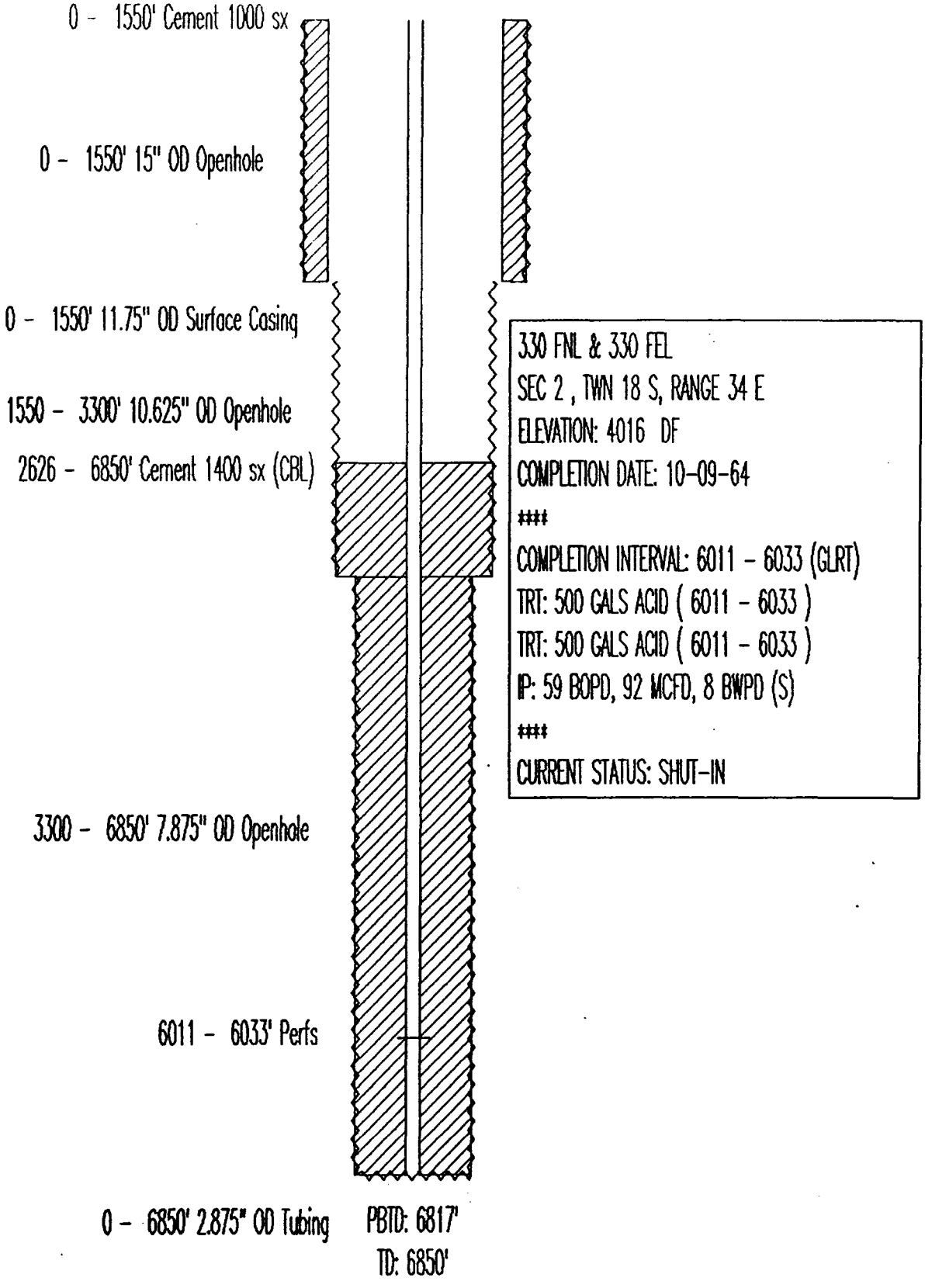
5944 - 5983' PERFS

KB ELEV: 4017'
PBTD: 6208'
TD: 6245'

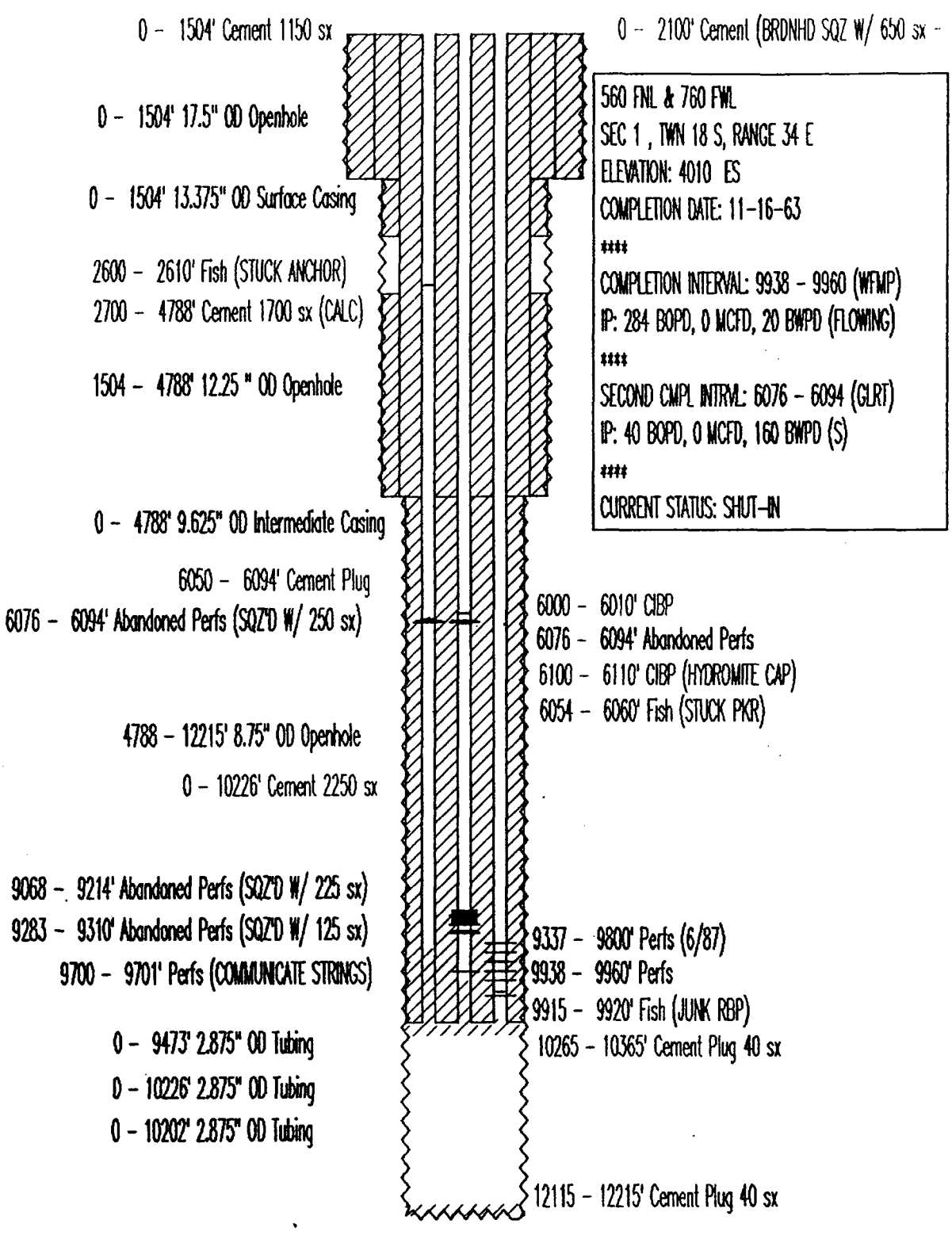
TEXACO

NEW MEXICO U STATE NO. 3 (NOW: VACUUM GLORIETA WEST UNIT NO. 111)

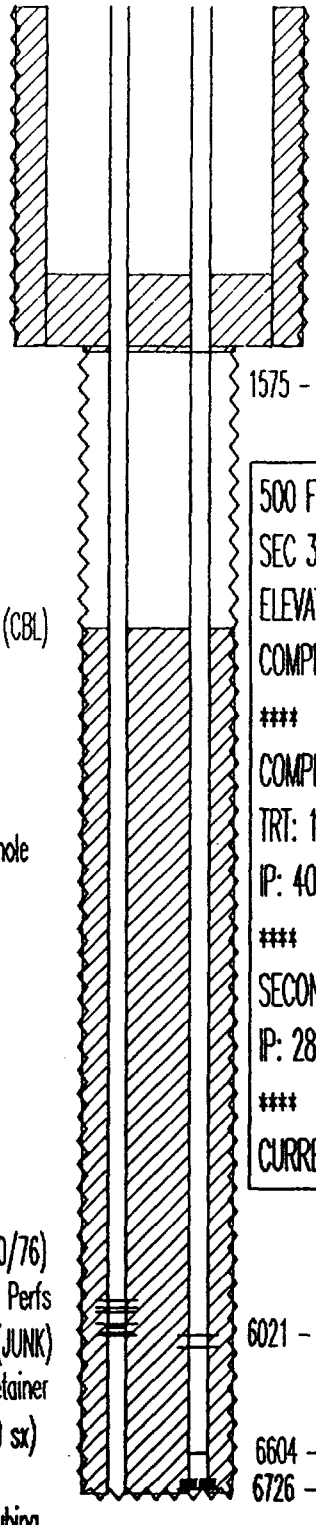
API# 30025211110000



TEXACO
NEW MEXICO M STATE NO. 5 (NOW: VACUUM GLORIETA WEST UNIT NO. 112)
API# 3002520515000



TEXACO
NM O STATE NCT-1 NO. 22
API# 3002520319000



0 - 1549' Cement 1100 sx

0 - 1549' 15" OD Openhole

1223 - 1575' Cement (TEMP)

0 - 1549' 11.75" OD Surface Casing

1575 - 1575' Squeeze Perfs (SQZ W/ 1000 sx)

500 FSL & 560 FWL
SEC 36 , TWN 17 S, RANGE 34 E
ELEVATION: 4000 GR
COMPLETION DATE: 12-10-63
****
COMPLETION INTERVAL: 5929 - 5941 (GLRT)
TRT: 1000 GALS ACID (5929 - 5941)
IP: 404 BOPD, 0 MCFD, 0 BWPD (FLOWING)
****
SECOND CMPL INTRVL: 6726 - 6774 (BLBR)
IP: 28 BOPD, 0 MCFD, 44 BWPD (S)
****
CURRENT STATUS: SHUT-IN

2845 - 6794' Cement 1400 sx (CBL)

1549 - 6794' 7.875" OD Openhole

5861 - 6012' Perfs (3/71 & 10/76)

5929 - 5941' Perfs

6018 - 6030' Fish (JUNK)

6030 - 6035' Retainer

6053 - 6067' Abandoned Perfs (SQZ'D W/ 100 sx)

6021 - 6120' Perfs (3/85)

6604 - 6610' CIBP

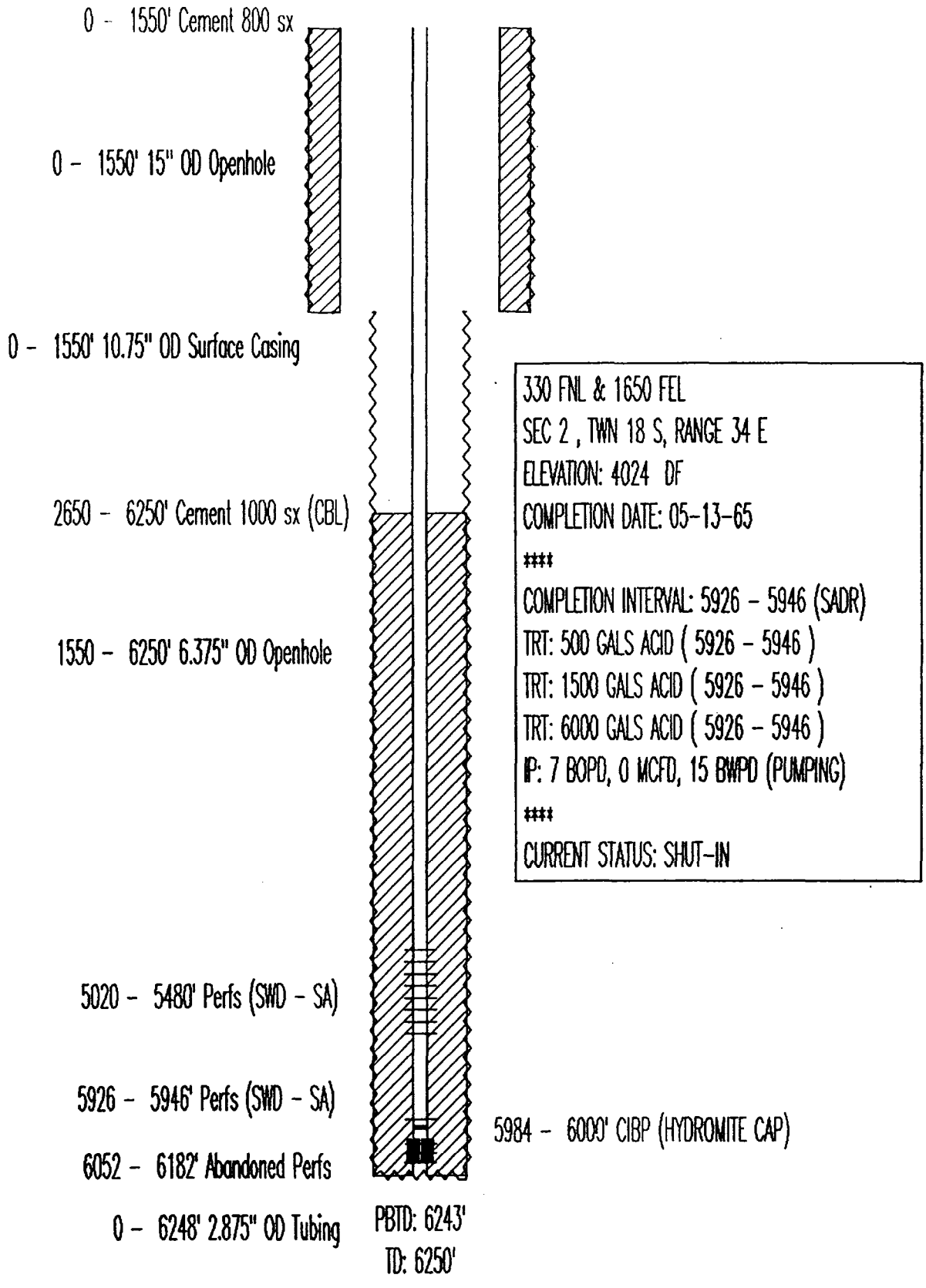
6726 - 6774' Abandoned Perfs

0 - 6794' 2.875" OD Tubing

0 - 6789' 2.875" OD Tubing

TD: 6800'

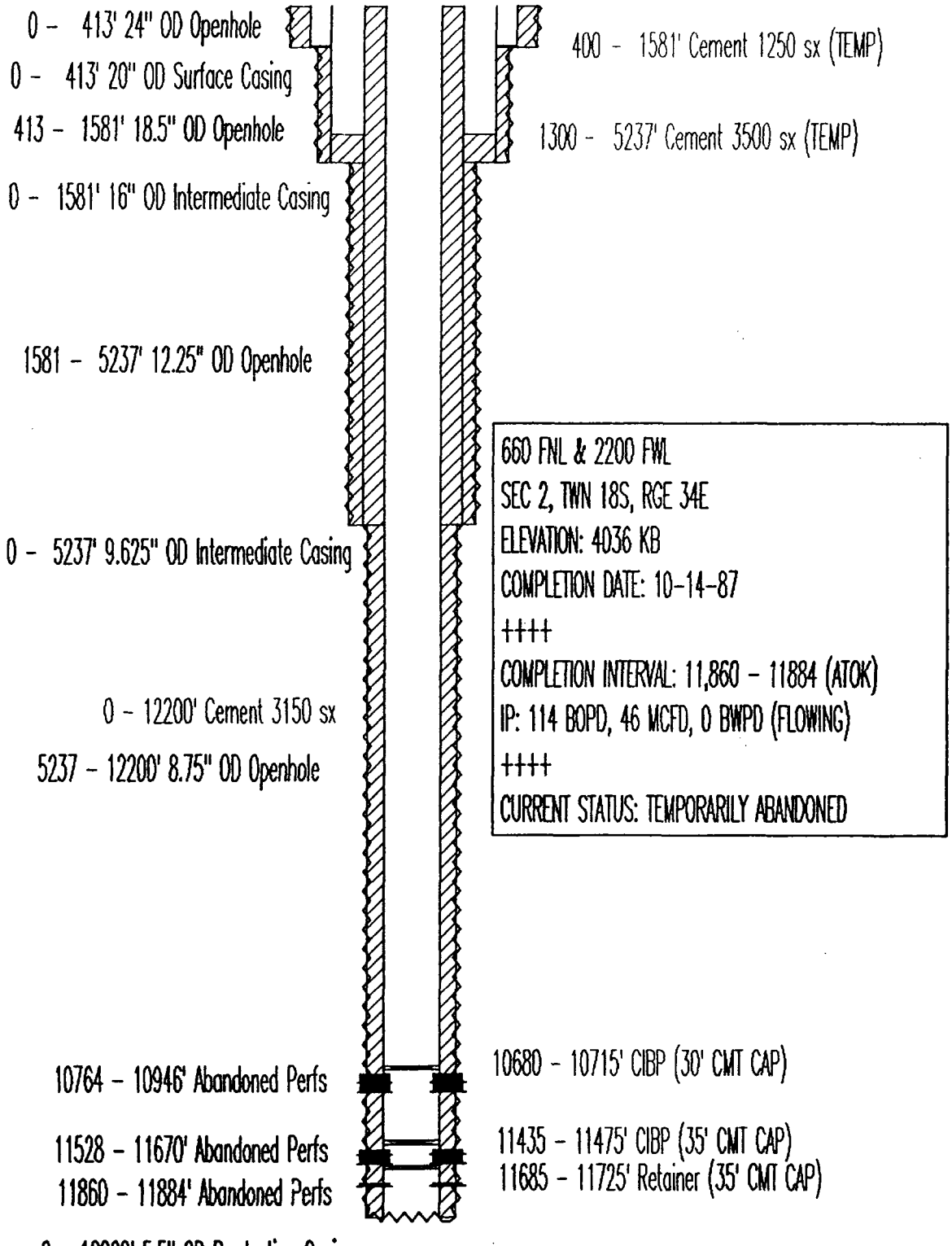
TEXACO
NM R STATE NCT-2 NO. 5
API# 3002521424000



TEXACO

NM Z STATE TN COM NO. 1

30025299880000



Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.
Date : 01-07-1992
Location: VGSAU - FRESH WATER (on 01-07-1992)
WELL NO. 4

	Sample 1
Specific Gravity:	1.002
Total Dissolved Solids:	3311
pH:	6.70
IONIC STRENGTH:	0.057

		me/liter	mg/liter
CATIONS:			
Calcium	(Ca^{+2})	6.80	136
Magnesium	(Mg^{+2})	2.80	34.0
Sodium	(Na^{+1})	41.7	959
Iron (total)	(Fe^{+2})	0.011	0.300
Barium	(Ba^{+2})	0.092	6.30
ANIONS:			
Bicarbonate	(HCO_3^{-1})	13.8	842
Carbonate	(CO_3^{-2})	0	0
Hydroxide	(OH^{-1})	0	0
Sulfate	(SO_4^{-2})	0.833	40.0
Chloride	(Cl^{-1})	36.7	1300

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.07	-16
120°F	49°C	0.96	-16
130°F	54°C	1.1	-16
140°F	60°C	1.3	-16
160°F	71°C	1.7	-16
180°F	82°C	2.1	-16

Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.
Date : 01-07-1992
Location: VGSAU - PRODUCED WATER (on 01-07-1992)

	Sample 1
Specific Gravity:	1.071
Total Dissolved Solids:	99419
pH:	7.10
IONIC STRENGTH:	1.832

CATIONS:		me/liter	mg/liter
Calcium	(Ca^{+2})	124	2480
Magnesium	(Mg^{+2})	68.0	826
Sodium	(Na^{+1})	1510	34800
Iron (total)	(Fe^{+2})	0.014	0.400
Barium	(Ba^{+2})	0.096	6.60
Manganese	(Mn^{+2})	0.002	0.060
ANIONS:			
Bicarbonate	(HCO_3^{-1})	8.80	537
Carbonate	(CO_3^{-2})	0	0
Hydroxide	(OH^{-1})	0	0
Sulfate	(SO_4^{-2})	58.8	2830
Chloride	(Cl^{-1})	1640	58000

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.53	-17
120°F	49°C	1.4	-17
130°F	54°C	1.6	-17
140°F	60°C	1.8	-17
160°F	71°C	2.2	-13
180°F	82°C	2.6	-13

Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.
Date : 01-07-1992
Location: VGSAU - PRODUCED & FRESH WATER COMPATIBILITY (on 01-07-1992)

	Sample 1
Specific Gravity:	1.064
Total Dissolved Solids:	89808
pH:	7.06
IONIC STRENGTH:	1.654

CATIONS:		me/liter	mg/liter
Calcium	(Ca^{+2})	112	2250
Magnesium	(Mg^{+2})	61.5	747
Sodium	(Na^{+1})	1360	31400
Iron (total)	(Fe^{+2})	0.014	0.390
Barium	(Ba^{+2})	0.096	6.57
Manganese	(Mn^{+2})	0.002	0.054
ANIONS:			
Bicarbonate	(HCO_3^{-1})	9.30	567
Carbonate	(CO_3^{-2})	0	0
Hydroxide	(OH^{-1})	0	0
Sulfate	(SO_4^{-2})	53.0	2550
Chloride	(Cl^{-1})	1480	52300
DISSOLVED GASES			
Carbon Dioxide	(CO_2)		0
Hydrogen Sulfide	(H_2S)		0
Oxygen	(O_2)		0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.45	-22
120°F	49°C	1.3	-22
130°F	54°C	1.5	-22
140°F	60°C	1.7	-22
160°F	71°C	2.1	-18
180°F	82°C	2.5	-18

Comments:
COMPATIBILITY=
FRESH WATER= 10%
PRODUCED WATER = 90%

Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.
Date : 01-07-1992
Location: VGSAU - PRODUCED & FRESH WATER COMPATIBILITY (on 01-07-1992)

	Sample 1
Specific Gravity:	1.054
Total Dissolved Solids:	75392
pH:	7.00
IONIC STRENGTH:	1.388

CATIONS:		me/liter	mg/liter
Calcium	(Ca^{+2})	94.7	1890
Magnesium	(Mg^{+2})	51.7	628
Sodium	(Na^{+1})	1140	26300
Iron (total)	(Fe^{+2})	0.013	0.375
Barium	(Ba^{+2})	0.095	6.52
Manganese	(Mn^{+2})	0.002	0.045
ANIONS:			
Bicarbonate	(HCO_3^{-1})	10.1	613
Carbonate	(CO_3^{-2})	0	0
Hydroxide	(OH^{-1})	0	0
Sulfate	(SO_4^{-2})	44.3	2130
Chloride	(Cl^{-1})	1240	43800
DISSOLVED GASES			
Carbon Dioxide	(CO_2)		0
Hydrogen Sulfide	(H_2S)		0
Oxygen	(O_2)		0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.37	-29
120°F	49°C	1.3	-29
130°F	54°C	1.4	-29
140°F	60°C	1.6	-29
160°F	71°C	2.0	-25
180°F	82°C	2.4	-25

Comments:
COMPATIBILITY =
FRESH WATER = 25%
PRODUCED WATER = 75

Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.
Date : 01-07-1992
Location: VGSAU - PRODUCED & FRESH WATER COMPATIBILITY (on 01-07-1992)

	Sample 1
Specific Gravity:	1.037
Total Dissolved Solids:	51365
pH:	6.90
IONIC STRENGTH:	0.944

CATIONS:		me/liter	mg/liter
Calcium	(Ca^{+2})	65.4	1310
Magnesium	(Mg^{+2})	35.4	430
Sodium	(Na^{+1})	777	17900
Iron (total)	(Fe^{+2})	0.013	0.350
Barium	(Ba^{+2})	0.094	6.45
Manganese	(Mn^{+2})	0.001	0.030
ANIONS:			
Bicarbonate	(HCO_3^{-1})	11.3	689
Carbonate	(CO_3^{-2})	0	0
Hydroxide	(OH^{-1})	0	0
Sulfate	(SO_4^{-2})	29.8	1430
Chloride	(Cl^{-1})	836	29700
DISSOLVED GASES			
Carbon Dioxide	(CO_2)		0
Hydrogen Sulfide	(H_2S)		0
Oxygen	(O_2)		0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.11	-38
120°F	49°C	1.0	-38
130°F	54°C	1.2	-38
140°F	60°C	1.4	-38
160°F	71°C	1.8	-34
180°F	82°C	2.2	-34

Comments:
COMPATIBILITY =
FRESH WATER = 50%
PRODUCED WATER = 50%

OFFSET OPERATORS WITHIN AREA OF REVIEW

OPERATORS	LEASE
Texaco Expl. & Prod. Inc. P. O. Box 730 Hobbs, New Mexico 88240	-Vacuum Grayburg San Andres Unit -Central Vacuum Unit -Vacuum Glorieta West Unit -N.M. "O" St NCT-1 -N.M. "Z" St NCT-1 -N.M. "Z" TN COM
Phillips Petroleum Co. 4001 Penbrook Odessa, Texas 79762	-M. E. Hale

SURFACE OWNERSHIP

T-18-S, R-34-S, Sec. 2, NE/4

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

Texaco E & P

P.O. Box 730
Hobbs NM 88241-0730
505 393-7191

June 29, 1993

CERTIFIED MAIL

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

Gentlemen:

SUBJECT: FORM C-108 AND ATTACHMENTS
APPLICATION FOR AUTHORIZATION TO INJECT
VACUUM GRAYBURG SAN ANDRES UNIT, WELL NO'S 146 & 147
SEC 2, T18S, R34E
LEA COUNTY, NM

It is our intent to drill the subject wells for water injection and expansion of our pressure maintenance project. The New Mexico Oil Conservation Division requires that the surface owners of the tracts on which proposed injectors are located and offset operators within 1/2 mile of the wells be furnished a copy of the application to inject.

Accordingly, attached is a copy of our application. Included are Form C-108, Application for Authorization to Inject, and attachments that were submitted to the State of New Mexico in support of the application.

Please contact Todd Lackey at (505) 397-0420 with questions.

Sincerely,

T. L. Frazier
Hobbs Area Manager

/wtl

Attachments

Texaco E & P

PO Box 730
Hobbs NM 88241 0730
505 393 7191

June 29, 1993

CERTIFIED MAIL

Phillips Petroleum Co.
4001 Penbrook
Odessa, Texas 79762

Gentlemen:

SUBJECT: FORM C-108 AND ATTACHMENTS
APPLICATION FOR AUTHORIZATION TO INJECT
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SEC 2, T18S, R34E
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Sincerely,

T. L. Frazier
Hobbs Area Manager

/wtl

Attachments

P 369 424 278

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to STATE OF NEW MEXICO	
Street and No. P.O. BOX 1148	
P.O., State and ZIP Code SANTE FE, NEW MEXICO 87504-1148	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, June 1991

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

CERTIFIED

P 369 424 278

MAIL

P 369 424 279

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to PHILLIPS PETROLEUM CO.	
Street and No. 4001 PENBROOK	
P.O., State and ZIP Code ODESSA, TEXAS 79762	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, June 1991

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

CERTIFIED

P 369 424 279

MAIL

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

June 27 , 19 93

and ending with the issue dated

June 27 , 19 93

Kathi Bearden
General Manager
Sworn and subscribed to before

me this 28 day of

June , 19 93

Charlene Herrin
Notary Public.

My Commission expires
March 15, 1997
(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 27, 1993

Notice is hereby given of the application of Texaco Exploration and Production Inc., Attention: Terry L. Frazier, Area Manager, P.O. Box 730, Hobbs, New Mexico, 88240, Telephone (505)393-7191, to the New Mexico Oil Conservation Commission, Energy and Minerals Department, for approval to drill the following wells as water injectors for the purpose of pressure maintenance.

Lease/Unit Name: Vacuum Grayburg San Andres Unit, Lea Co., NM Well Numbers and Locations:

146 - 1980' FEL & 1320' FNL, Sec. 2, T18S, R34E
147 - 660' FEL & 1320' FNL, Sec. 2, T18S, R34E

The injection formation is the Vacuum Grayburg San Andres at an approximate depth of 4300 feet below the surface of the ground. Expected maximum initial injection rate is 1500 barrels per day and expected maximum initial injection pressure is 900 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within fifteen (15) days of this publication.

SUMMARY OF ORDER NUMBERS FOR TEXACO'S VACUUM GRAYBURG-SAN ANDRES PRESSURE MAINTENANCE PROJECT

R-4442	Nov. 1, 1972	Initiate secondary recovery
PMX-43	Jan. 31, 1973	Expansion
PMX-44	Jan. 31, 1973	Expansion
PMX-74	Jan. 8, 1979	Expansion
R-6094	Aug. 8, 1979	Remove the top unit allowable restriction
R-7010	May 26, 1982	Initiate tertiary recovery
R-7010-A	Jul. 30, 1982	Correction to R-7010
PMX-120	Nov. 2, 1982	Expansion
PMX-157	Feb. 10, 1992	Expansion

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. 4852
Order No. R-4442

Rule 3 Amended by R-6094

APPLICATION OF TEXACO INC FOR A
PRESSURE MAINTENANCE PROJECT AND
SPECIAL RULES THEREFOR, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 1, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 27th day of November, 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 authority to institute a pressure maintenance project in its Vacuum Grayburg San Andres Unit Area, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, by the injection of approximately 1,500 barrels of water per day into the Grayburg and San Andres formations through each of eight injection wells proposed to be drilled at unorthodox locations in Sections 1 and 2, Township 18 South, Range 34 East, NMPM.

(3) That the applicant also seeks authority to drill seven additional producing wells at unorthodox locations in said Sections 1 and 2.

(4) That the applicant further seeks the designation of a project area and the promulgation of rules for the project area, including provision for the assignment of top unit allowable to all wells in the project area, top unit allowable to each of the 15 additional injection and producing wells to be drilled in the project area, and an additional 75 percent of top unit allowable to be assigned to each well in the project area as a bonus allowable for the injection of water.

(5) That a pressure maintenance project area comprising all of the Vacuum Grayburg San Andres Unit Area, being all of Sections 1 and 2, the NE/4 NE/4 of Section 11, and the N/2 NW/4 of Section 12, all in Township 18 South, Range 34 East, is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(6) That top unit allowable for the Vacuum Grayburg-San Andres Pool should be assigned to all wells in the project area upon initiation of substantial water injection, and each of the proposed 15 additional wells should also receive top unit allowable upon completion. That the project allowable should be the sum of the allowables assigned to the wells in the project area and should be permitted to be produced from any well in the project area, provided however, that any producing well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply should not be permitted to produce in excess of top unit allowable for the pool without a showing at public hearing that substantial response to water injection has occurred in said well.

(7) That approval of the proposed eight injection wells and seven producing wells, all at unorthodox locations, and the proposed pressure maintenance project, subject to the provisions of Finding No. (6) above, will not cause but will prevent waste and will protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc, is hereby authorized to operate a pressure maintenance project in its Vacuum Grayburg San Andres Unit Area, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, to be designated the Texaco Vacuum Grayburg-San Andres Pressure Maintenance Project, by the injection of water into the Grayburg and San Andres formations through eight injection wells to be drilled at the following unorthodox locations in Township 18 South, Range 34 East, NMPM:

LEASE NAME	WELL NO	LOCATION	SECTION
New Mexico "M" State	11	2630' FNL & 1310' FWL	1
New Mexico "M" State	12	1330' FNL & 2630' FWL	1
New Mexico "AC" NCT-1 State	11	2630' FSL & 1330' FEL	2
New Mexico "AC" NCT-1 State	14	1400' FSL & 2550' FEL	2
New Mexico "AC" NCT-1 State	16	1400' FSL & 10' FEL	2
New Mexico "R" NCT-3 State	20	1310' FSL & 2630' FEL	1
New Mexico "R" NCT-3 State	23	100' FSL & 1420' FWL	1
New Mexico "Z" NCT-1 State	8	2630' FNL & 1310' FWL	2

(2) That the applicant is hereby authorized to drill seven additional producing wells in its Vacuum Grayburg San Andres

Pressure Maintenance Project at the following unorthodox locations in Township 18 South, Range 34 East, NMPM:

LEASE NAME	WELL NO	LOCATION	SECTION
New Mexico "M" State	10	1330' FNL & 1330' FWL	1
New Mexico "AC" NCT-1 State	12	2630' FSL & 2630' FWL	2
New Mexico "AC" NCT-1 State	15	1400' FSL & 1300' FEL	2
New Mexico "R" NCT-3 State	17	2630' FSL & 2630' FEL	1
New Mexico "R" NCT-3 State	18	2630' FSL & 10' FWL	1
New Mexico "R" NCT-3 State	19	1330' FSL & 1330' FWL	1
New Mexico "R" NCT-3 State	22	100' FSL & 100' FWL	1

(3) That Special Rules and Regulations governing the operation of the Texaco Vacuum Grayburg-San Andres Pressure Maintenance Project are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
TEXACO INC. VACUUM GRAYBURG-SAN ANDRES
PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of the Texaco Inc. Vacuum Grayburg-San Andres Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM
Sections 1 and 2: All
Section 11: NE/4 NE/4
Section 12: N/2 NW/4

RULE 2. The allowable for the project area shall be known as the project allowable and shall be equal to top unit allowable for the Vacuum Grayburg-San Andres Pool times the number of wells in the project area completed in the Grayburg and/or San Andres formations for production from, or injection into, said formations.

RULE 3. The project allowable may be produced from any well or wells completed in the Vacuum Grayburg-San Andres Pool in the project area, provided however, that any well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply shall not be permitted to produce in excess of top unit

allowable for the Vacuum Grayburg-San Andres Pool until it has been established after notice and hearing that such well has experienced a substantial response to water injection.

RULE 4. Each producing well in the project area shall be subject to the limiting gas-oil ratio (2500 to one) for the Vacuum Grayburg-San Andres Pool.

RULE 5. Each month the project operator shall, by the 15th day of the month, submit to the Hobbs district office of the Commission a report for the previous month showing average daily water injection into each injection well, total water injected into each well, and total cumulative water injected into each well. The report shall also list each producing well, and average daily and total monthly production from same, together with a nomination of proposed daily allowable for each of said wells for the following month. The aforesaid report shall be filed in lieu of Form C-120 for the project.

RULE 6. The Commission shall, upon review of the report and after any adjustments deemed necessary in accordance with Rules 3 and 4 of these rules, assign an allowable to each of the various producing wells in the project area for the next succeeding month.

RULE 7. The conversion of producing wells to injection, or the drilling of additional wells for injection purposes shall be accomplished only after approval of the same by the Secretary-Director of the Commission. To obtain such approval, the Project operator shall file application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional injection wells shall include the following:

(1) A plat showing the location of proposed injection well, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed injection well which fully describes the casing, tubing, perforated interval, and depth showing that the injection of water will be confined to the Grayburg and San Andres formations.

(3) A letter stating that all offset operators within one-half mile of the proposed injection well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed injection well, if within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

RULE 8. Additional producing wells may also be drilled at unorthodox locations anywhere within the project area not closer than 1320 feet of the outer boundaries of the project area. The Secretary-Director of the Commission shall have authority to grant permission to drill any well within the provisions of this rule without notice and hearing.

(4) That the effective date of the allowable provisions of this order shall be the date that actual water injection operations commence in a minimum of four of the eight authorized injection wells.

(5) 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

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

S E A L

dr/

APPLICATION OF TEXACO INC. TO
EXPAND ITS VACUUM GRAYBURG-SAN ANDRES
PRESSURE MAINTENANCE PROJECT IN THE
VACUUM GRAYBURG - SAN ANDRES POOL IN
LEA COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER PMX-43

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order No. R-4442, Texaco, Inc. has made application to the Commission on January 31, 1973, for permission to expand its Vacuum Grayburg-San Andres Pressure Maintenance Project in the Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

NOW, on this 6th day of February, 1973, the Secretary-Director finds:

1. That application has been filed in due form.

2. That the proposed producing wells at unorthodox locations are eligible for approval under the terms of Order No. R-4442.

3. That the proposed expansion of the above-referenced pressure maintenance project will not cause waste nor impair correlative rights.

4. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco Inc., be and the same is hereby authorized to drill to the Grayburg-San Andres formation, the following described producing wells, to wit:

Well No. 14, 1500 feet FSL and 1500 feet FWL of Section 2,
Well No. 20, 1330 feet FSL and 1330 feet FEL of Section 1,
Well No. 44, 1330 feet FNL and 1330 feet FWL of Section 2,
Well No. 46, 1405 feet FNL and 1230 feet FEL of Section 2, and
Well No. 50, 1330 feet FNL and 1330 feet FEL of Section 1, all
in Township 18 South, Range 34 East, NMPM.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

A. L. PORTER, Jr.
Secretary-Director

S E A L

APPLICATION OF TEXACO INC.
TO EXPAND ITS VACUUM GRAYBURG-
SAN ANDRES PRESSURE MAINTENANCE
PROJECT IN THE VACUUM GRAYBURG-
SAN ANDRES POOL IN LEA COUNTY,
NEW MEXICO.

ORDER NO. PMX-44

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order No. R-4442, Texaco Inc. has made application to the Commission on January 31, 1973, for permission to expand its Vacuum Grayburg-San Andres Pressure Maintenance Project in the Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

NOW, on this 20th day of February, 1973, the Secretary-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 Order No. R-4442.

4. That the proposed injection wells are eligible for water injection under the terms of Order No. R-4442.

5. That the proposed expansion of the above-referenced pressure maintenance project will not cause waste nor impair correlative rights.

6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco Inc., be and the same is hereby authorized to inject water into the Grayburg-San Andres formation through the following described wells for purposes of pressure maintenance, to wit:

Well No. 35 located 2630' FNL and 1330' FEL of Section 1,
Well No. 45 located 1310' FNL and 2530' FWL of Section 2, and
Well No. 47 located 1330' FNL and 10' FEL of Section 2, all
in Township 18 South, Range 34 East, NMPM.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

A. L. PORTER, Jr.
Secretary-Director

S E A L

APPLICATION OF TEXACO, INC. TO EXPAND ITS PRESSURE MAINTENANCE PROJECT IN THE VACUUM GRAYBURG SAN ANDRES POOL IN LEA COUNTY, NEW MEXICO

ORDER PMX NO. 74

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Order No. R-4442, Texaco, Inc. has made application to the Division on January 8, 1979, for permission to expand its Vacuum Grayburg-San Andres Pressur Maintenance Project in the Vacuum Grayburg-San Andres Pool in Lea County, New Mexico.

NOW, on this 29th day of January, 1979, 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 Order No. R-4442.

4. That the proposed injection well is eligible for conversion to water injection under the terms of Order No. R-4442.

5. That the proposed expansion of the above referenced water flood project will not cause waste nor impair correlative rights.

6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco, Inc., be and the same is herel authorized to inject water into the Grayburg and San Andres formations through plastic-lined tubing set in packers at approximately 50 feet above the uppermost perforations in the following described wells for purposes of secondary recovery, tc wit:

Vacuum Grayburg San Andres Unit Well No. 59, located in Unit E, and Vacuum Grayburg San Andres Unit Well No. 60, located in Unit D; both in Section 2, 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 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 leakag in the casing, tubing, or packer.

That the injection wells or system shall be equipped wit a pop-off valve or device which will limit the wellhead pressure to a maximum of 900 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 confining strata.

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

That the operator shall immediately notify the Superviso 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 wells and shall take such steps as may be timely or necessary to correct such failure or leakage.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY
Division Director

S E A L

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION
RECEIVED
'93 JUL 16 AM 9 49

BRUCE KING
GOVERNOR

July 15, 1993

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

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

RE: Proposed:
MC_____
DHC_____
NSL_____
NSP_____
SWD_____
WFX_____
PMX X

Gentlemen:

I have examined the application for the:

Operator	Lease & Well No.	Unit	S-T-R
Texaco Expl & Prod Inc.	Vacuum Grayburg SA Unit	#147-H	2-18-34
	Vacuum Grayburg SA Unit	#146-B	2-18-34

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed