RELEASED 3/24/93

OIL CONSERVATION DIVISION
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February 11, 1993

MOVED UP 15 DAYS FROM FEB 7
NO OFFSET OPERATORS
BS
RELEASE 2.22.93

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Attention: Ben Stone

Re: Application for Salt Water Disposal;
Texaco Exploration and Production Inc.
New Mexico "CR" State #3, Lusk Delaware Formation
T-19-S, R-32-E, Lea County, New Mexico

Gentlemen:

Texaco Exploration and Production Inc. respectfully requests administrative approval for the conversion of New Mexico "CR" State # 3 to salt water disposal. This work will help reduce current operating costs. An attempt was made to notify the offset operator. C & K Petroleum is no longer in business and their well is plugged and abandoned. Administration approval is requested so that the necessary operations can be advanced in a prudent manner.

Yours very truly,

T. L. Frazier/RSP

Terry L. Frazier
Hobbs Area Manager

DLM/s

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 AND PRODUCTION INC.

Address: P. O. Box 730, Hobbs, NM 88240

Contact party: Terry Frazier, Area Manager Phone: (505) 397-0421

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 _____.

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 Frazier Title Area Manager

Signature: T J Frazier /RSP Date: 2-10-93

* 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. _____

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

02-03-93

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

III. INJECTION WELL DATA

Part A

1.) New Mexico "CR" State No. 3
1980' FSL and 660' FWL
Sec. 32 - T19S - R32E
Unit Letter L
Lea County, NM

2.) See attached wellbore schematic.

3.) Propose to run approximately 4500' of 2 7/8" plastic coated tubing.

4.) Propose to use a Baker AD-1 Plastic Coated Tension Packer as a seal and load the casing annulus with packer fluid.

Part B

1.) The injection formation is the Cherry Canyon (Delaware). The well is located in the Lusk Delaware Field.

2.) The injection is cased hole at 4578' - 4624'.

3.) The original purpose of this well was a producer.

4.) Original Morrow perforations at 11,400' - 11,456' were squeezed with 35 sxs Class H cement. Delaware perforations from 4767' - 4930' were squeezed with 100 sxs Class C cement. See attached wellbore schematic.

5.) The Yates is the next higher zone at 2530' and the Brushy Canyon is the next lower zone at 6375'.

V. SUBJECT AREA MAPS

A map of the subject area, New Mexico "CR" State, is attached.

VI. AREA OF REVIEW

A tabulation of all the wells in the area of review is located in Appendix A. There are five wellbores within a half a mile radius, two of which are plugged and abandoned.

VII. PROPOSED OPERATION

1.) Proposed average daily injection will be 500 bbls/day. Maximum will be 1000 bbls/day.

2.) The system will be closed.

3.) The wellhead injection pressure will not exceed 900 psi until a step rate test establishes a higher limit.

4.) The source of water will be from Texaco Exploration and Producing from the Federal USA "I", Federal USA "J", SA Bowman, and the NM "CR" State leases. The formations are the Lusk Delaware and the Lusk Bone Springs.

5.) The Cherry Canyon is productive in this area.

VIII. GEOLOGICAL DESCRIPTION

The injection interval is the Cherry Canyon of the Delaware Formation and is composed of primarily sandstone with occasional thin bedded carbonates. This entire area is overlain by the Quaternary Alluvium and Triassic Redbeds. There is no proven fresh water within one mile of the proposed location. There are no fresh water zones below the Cherry Canyon.

IX. PROPOSED STIMULATION

The disposal interval will be treated with and acid job.

XI. FRESH WATER WELLS

There are no active fresh water wells within one mile of New Mexico "CR" State # 3.

XII. GEOLOGICAL EVALUATION

Based on current geological and engineering data and a petrophysical rock-properties evaluation, there is no evidence of any natural or artificially created open faults within the disposal interval or above. There is no communication between the subject injection zone and any subsurface source of drinking water.

APPENDIX

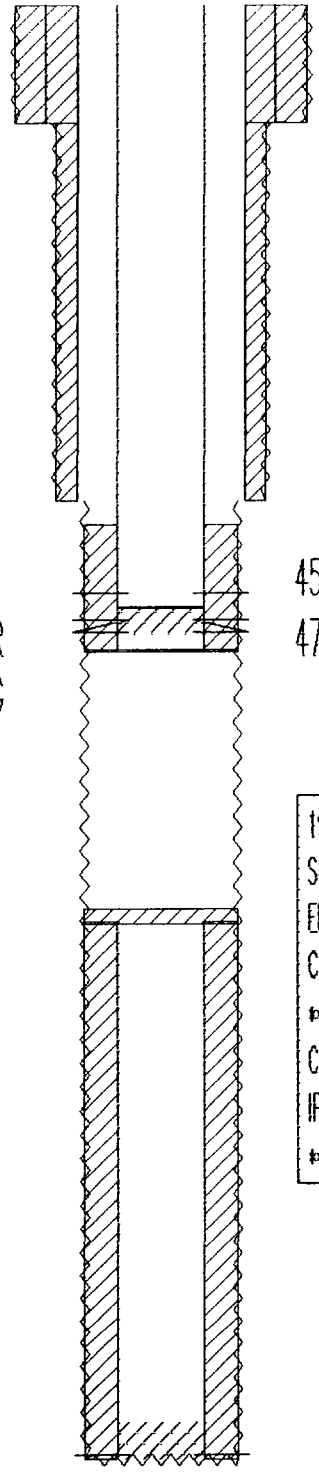
A. SCHEMATIC OF SUBJECT WELL

B. MAPS OF SUBJECT AREA

C. TABULATION OF WELLS IN AREA OF REVIEW
   - SCHEMATICS OF ALL WELLS IN AREA OF REVIEW

A. SCHEMATIC OF SUBJECT WELL

TEXACO EXPLOR & PROD
STATE OF NM CR NO. 3
API# 3002520959



0 - 917' 11.75" OD SURF CSG
0 - 917' CEMENT 600 sx

0 - 917' 15" OD HOLE

0 - 3900' CEMENT 500 sx
0 - 3900' 8.625" OD INT CSG

917 - 3900' 10.75 " OD HOLE

4083 - 5085' CEMENT 250 sx calc
0 - 5075' 4.5" OD PROD CSG
4735 - 4740' RETAINER
4740 - 4940' CEMENT PLUG

4578 - 4624' PERFS
4767 - 4930' SQUEEZE PERFS

1980 FSL & 660 FWL
SEC 32 , TWN 19 S, RANGE 32 E
ELEVATION: 3543 GR
COMPLETION DATE: 09-23-64
****
COMPLETION INTERVAL: 11400 - 11456 (STRN)
IP: 410 BOPD, 0 MCFD, 0 BWPD (FLOWING)
****

7130 - 7250' CEMENT

7230 - 11499' CEMENT 300 sx

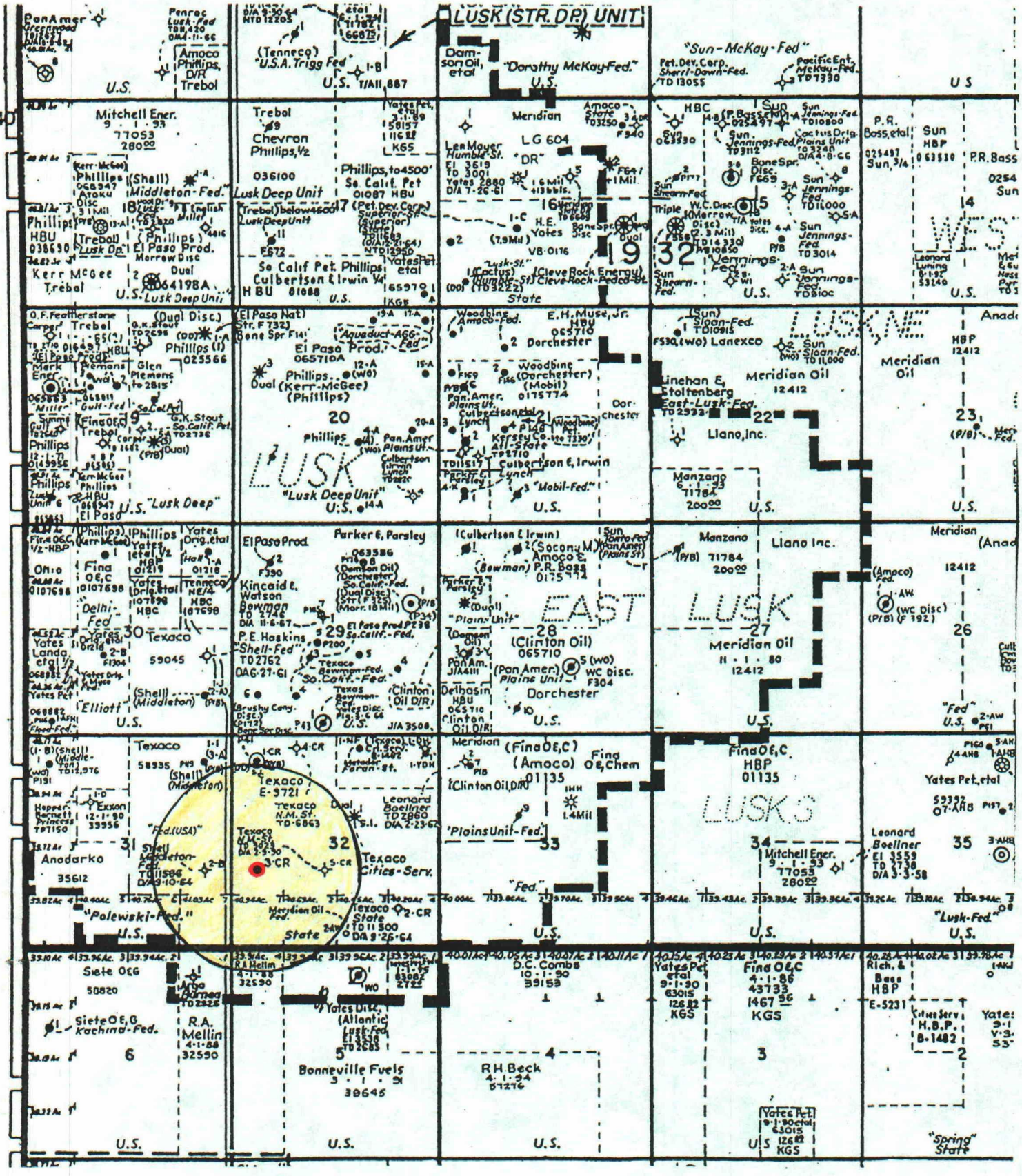
7220 - 11499' 4.5" OD PROD CSG
11210 - 11500' CEMENT PLUG

11400 - 11456' SQUEEZE PERFS
3900 - 11500' 7.875 " OD HOLE

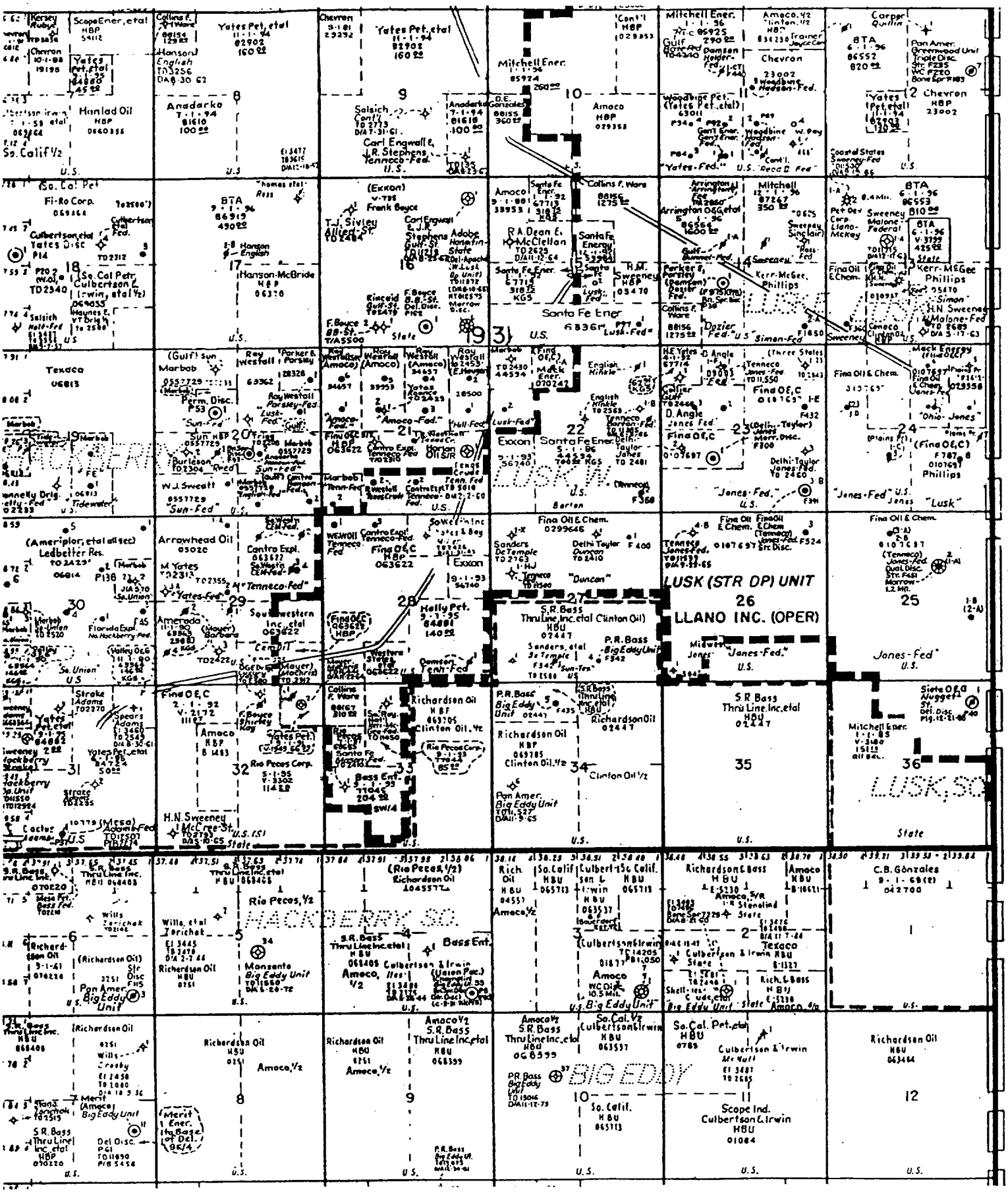
PBTD: 4735'
TD: 11500'

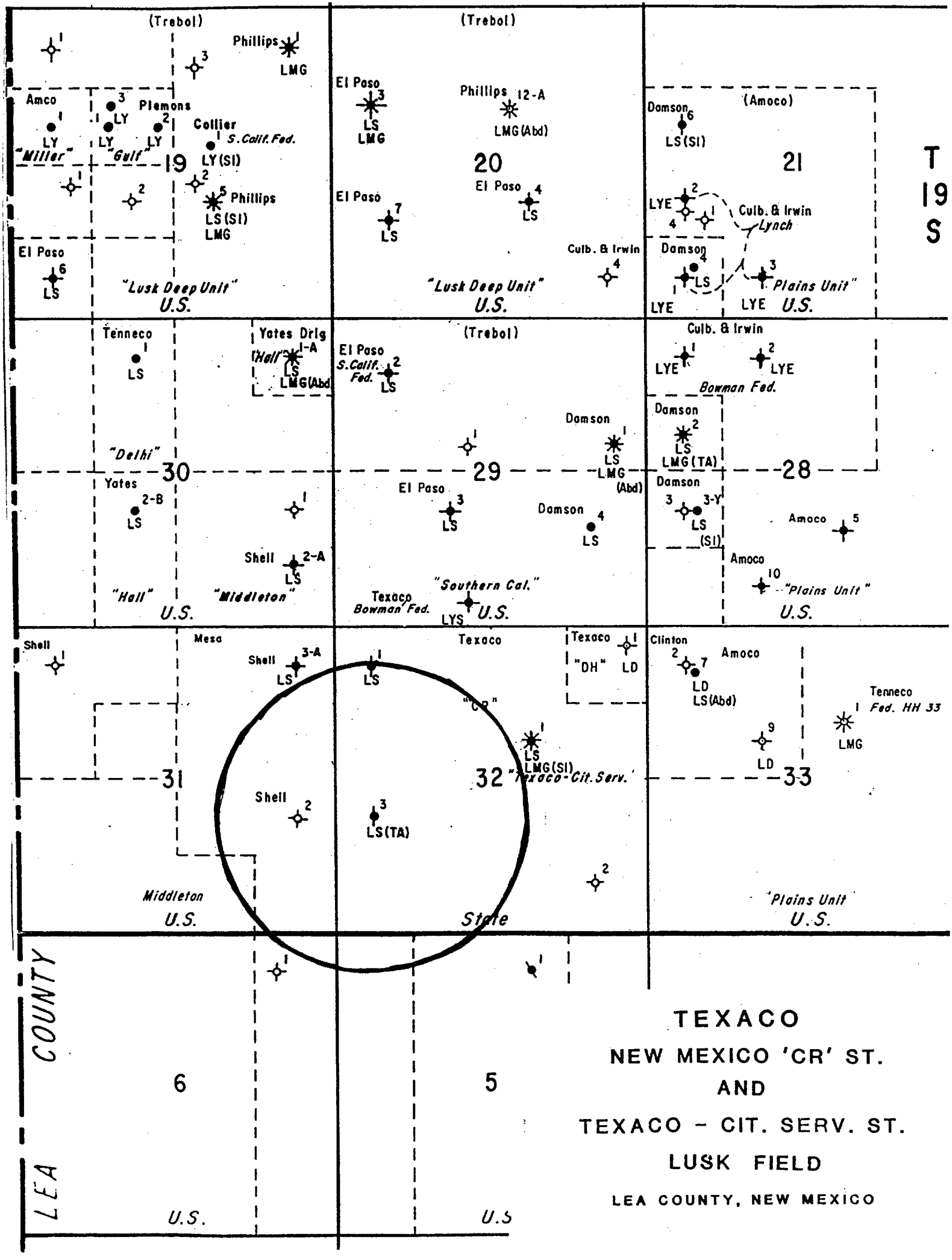
B. MAPS OF SUBJECT AREA

Lusk Field
Lea County NM



Lusk Field
Eddy County, NM





TEXACO

NEW MEXICO 'CR' ST.

AND

TEXACO - CIT. SERV. ST.

LUSK FIELD

LEA COUNTY, NEW MEXICO

C. TABULATION OF WELLS IN AREA OF REVIEW - SCHEMATICS OF SUBJECT WELLS

TABULATION OF DATA FOR WELLBORE DIAGRAMS

T-19-S, R-32-E

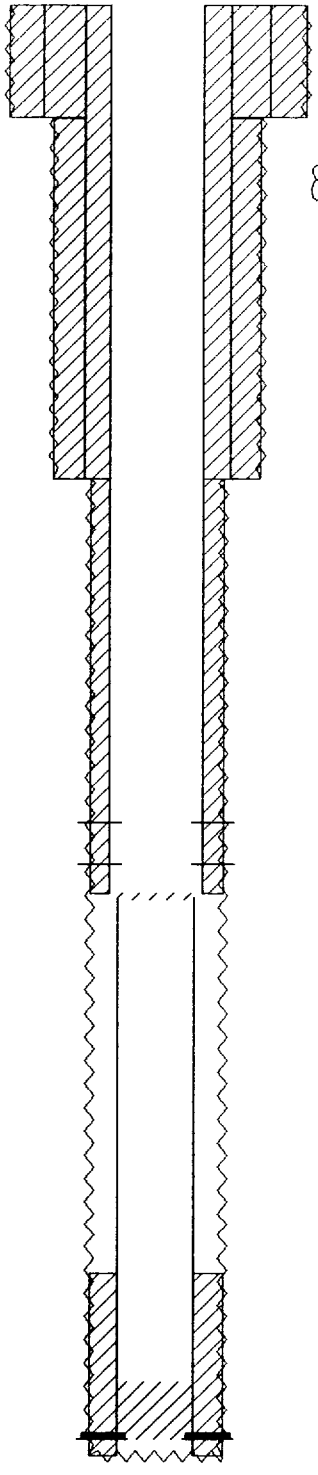
SECTION 31

UNIT LETTER	COMPANY	WELL NAME & NO.	API #	STATUS
A	Texaco E & P Inc	Federal USA "I" #1	30-025-20813	Producer
I	C&K Petroleum Inc	Middleton "31" Fed #1	30-025-20814	P & A

SECTION 32

UNIT LETTER	COMPANY	WELL NAME & NO.	API #	STATUS
D	Texaco E & P Inc	New Mexico CR St #1	30-025-20563	Producer
G	Texaco E & P Inc	Texaco Cities Service	30-025-20961	Producer
K	Texaco E & P Inc	New Mexico CR St #5	30-25-30762	P & A
L	Texaco E & P Inc	New Mexico CR St #3	30-025-20959	Proposed SWD

TEXACO EXPLOR & PROD
FEDERAL USA "I" NO. 1
API# 3002520813



0 - 896' CEMENT 350 sxs, circ

0 - 896' 13.375" OD SURF CSG

0 - 896' 17.5 " OD HOLE

0 - 3706' CEMENT 400 sxs, circ

896 - 3706' 12.25 " OD HOLE

0 - 6951' CEMENT 700 sxs,circ

0 - 3706' 8.625" OD INT CSG

660 FNL & 660 FEL
SEC 31 , TWN 19 S, RANGE 32 E
ELEVATION: 3539 GR
COMPLETION DATE: 06-07-64
****
COMPLETION INTERVAL: 11199 - 11250 (STRN)
TRT: 500 GALS ACID (11199 - 11250)
IP: 421 BOPD, 0 MCFD, 0 BWPD (FLOWING)
****

0 - 6951' 5.5" OD PROD CSG

6396 - 6401' PERFS Delaware

6682 - 6727' PERFS Delaware

6951' - 7000' CEMENT PLUG

9945 - 11385' CEMENT 450 sx

10800 - 11250' CEMENT PLUG

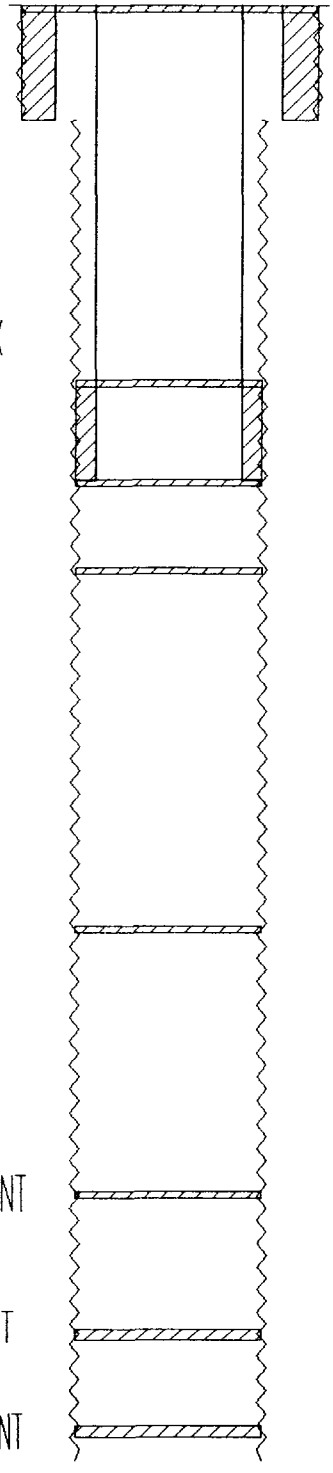
11199 - 11250' ABANDONED PERFS

6981 - 11385' 4.5" OD PROD CSG

3706 - 11385' 7.875 " OD HOLE

TD: 11385'

C & K PETROLEUM INC.
MIDDLETON "31" FEDERAL NO. 1
API# 3002520814



0 - 50' CEMENT

0 - 903' 13.375" OD SURF CSG

0 - 903' CEMENT 400 sx

0 - 903' 17.5 " OD HOLE

3000 - 3756' CEMENT 300 SX

0 - 3756' 8.625" OD PROD CSG

2950 - 3000' CEMENT

3750 - 3800' CEMENT

4450 - 4500' CEMENT

7300 - 7350' CEMENT

9400 - 9450' CEMENT

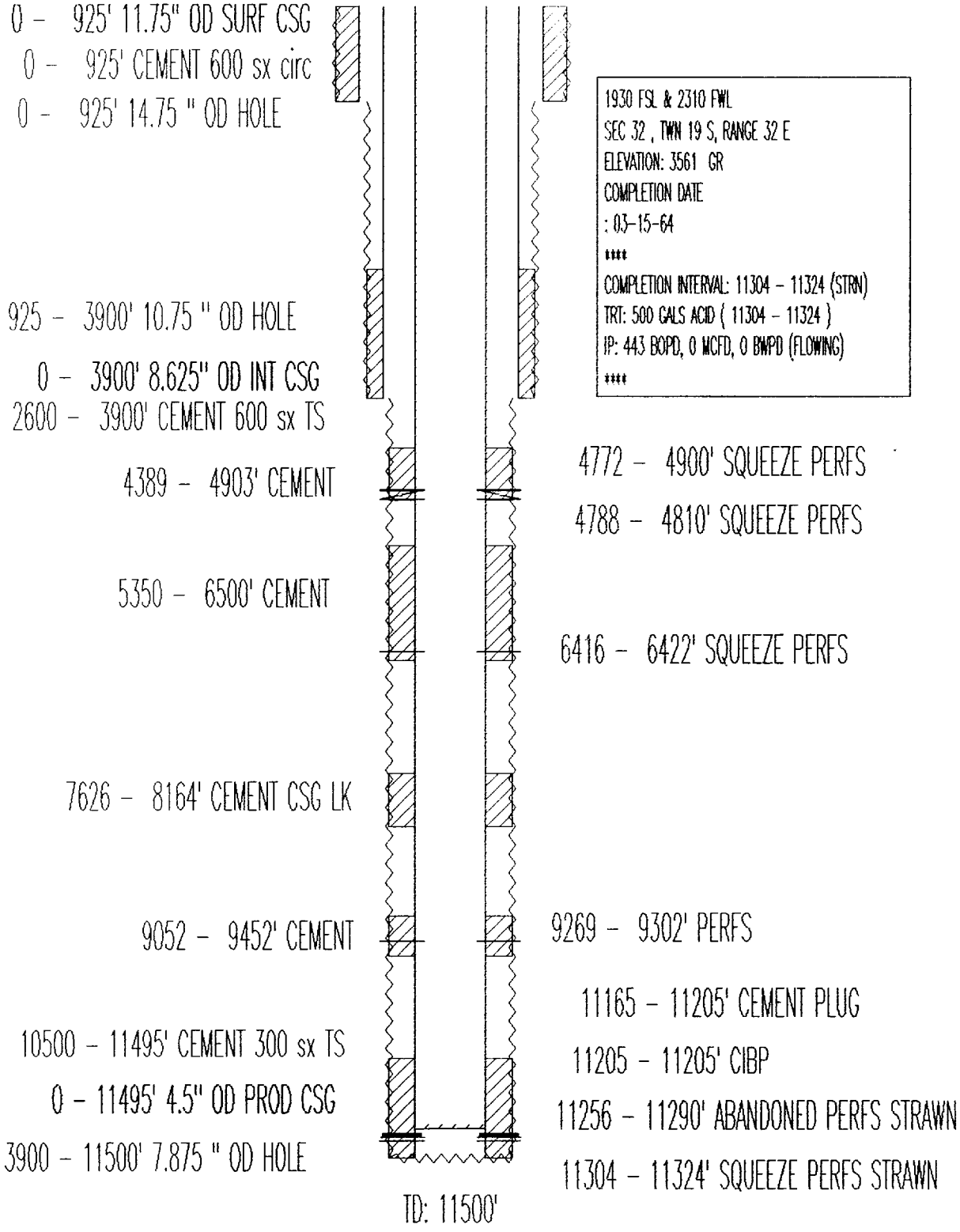
10506 - 10608' CEMENT

11298 - 11400' CEMENT

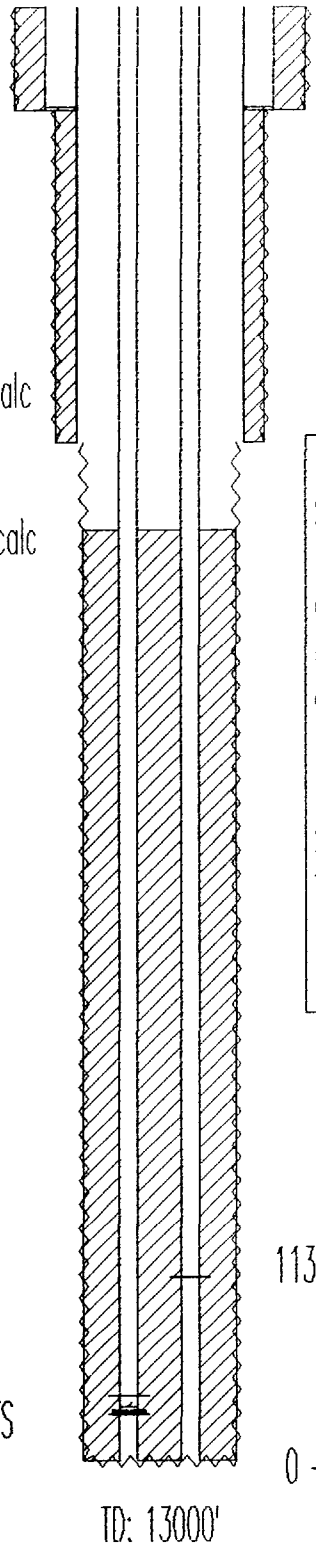
TD: 12597'

2310 FSL & 660 FEL
SEC 31 , TWN 19 S, RANGE 32 E
ELEVATION: 3537 ES
COMPLETION DATE: 10-06-64
****
NOT COMPLETED AS A PRODUCER
****

TEXACO INC
STATE OF NEW MEXICO CR NO. 1
API# 3002520563



TEXACO INC
TEXACO-CITIES SERV- NO. 1
API# 3002520961



0 - 906' 11.75" OD SURF CSG
0 - 906' CEMENT 700 sx circ

0 - 906' 15" OD HOLE

0 - 3880' 8.625" OD INT CSG
880 - 3880' CEMENT 750 sx calc

906 - 3880' 10.75 " OD HOLE

4650 - 13000' CEMENT 2500 sx calc

1980 FNL & 1980 FEL
SEC 32 , TWN 19 S, RANGE 32 E
ELEVATION: 3553 ES
COMPLETION DATE: 07-22-64
****
COMPLETION INTERVAL: 12332 - 12388 (MRRW)
IP: 25 BOPD, 2200 MCFD, 0 BWPD (FLOWING)
****
SECOND CMPL INTRVL: 11302 - 11343 (STRN)
TRT: 1000 GALS ACID (11302 - 11343)
IP: 363 BOPD, 0 MCFD, 4 BWPD (FLOWING)
****

12485 - 12520' CEMENT PLUG
12520 - 12520' CIBP

11302 - 11343' PERFS Strawn

12318 - 12422' PERFS Morrow

12551 - 12590' ABANDONED PERFS

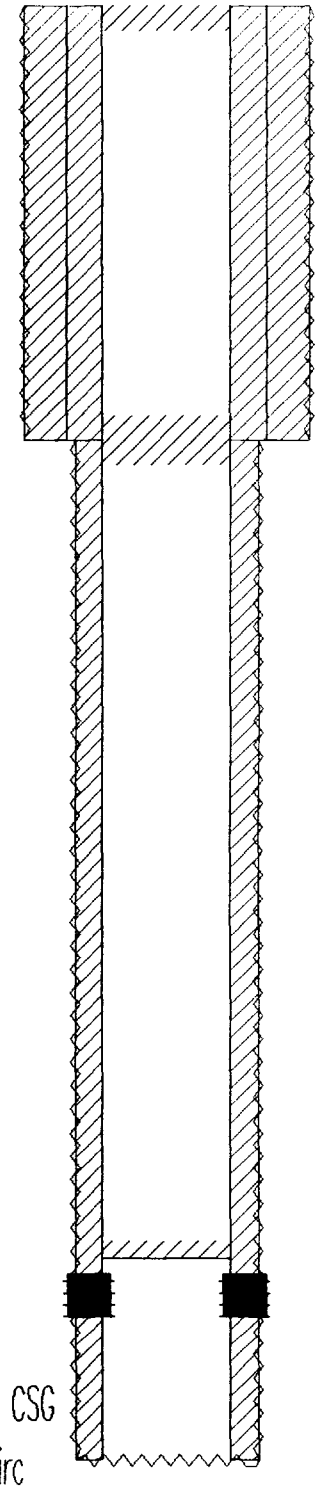
3880 - 13000' 7.875 " OD HOLE

0 - 12987' 2.875" OD TBG

0 - 12995' 2.875" OD TBG

TD: 13000'

TEXACO INC
NEW MEXICO "CR" STA NO. 5
API# 3002530762



0 - 50' CEMENT PLUG

0 - 900' 8.625" OD K-55 SURF CSG

0 - 900' CEMENT 650 sx circ

0 - 900' 12.25" OD HOLE

850 - 950' CEMENT PLUG

1930 FSL & 2310 FWL
SEC 32 , TWN 19 S, RANGE 32 E
ELEVATION: 3543 DF
COMPLETION DATE: 02-02-90
****
NOT COMPLETED AS A PRODUCER
****

2565 - 2600' CEMENT PLUG

2600 - 2600' CIBP

2630 - 2720' ABANDONED PERFS

0 - 3023' 5.5" OD K-55 PROD CSG

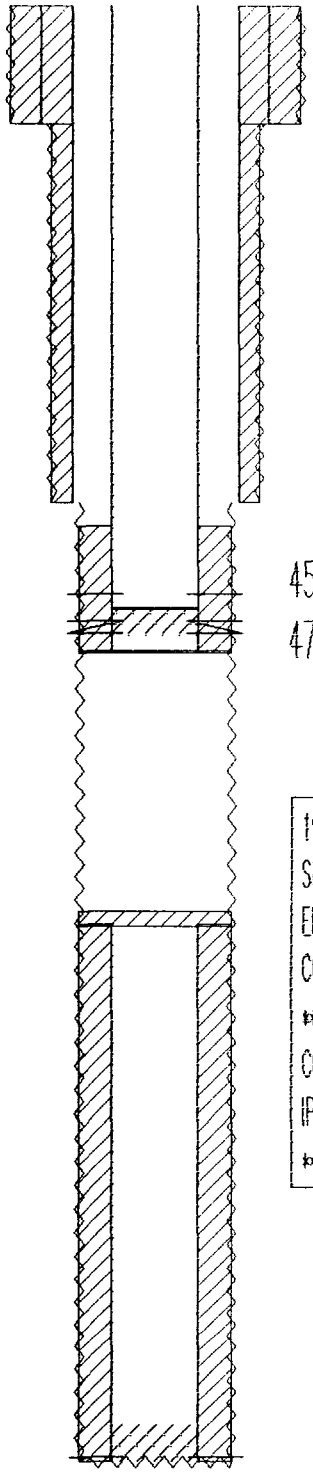
0 - 3023' CEMENT 850 sx circ

900 - 3023' 7.875 " OD HOLE

PBTD: 2830'

TD: 3023'

TEXACO EXPLOR & PROD
STATE OF NM CR NO. 3
API# 3002520959



0 - 917' 11.75" OD SURF CSG
0 - 917' CEMENT 600 sx
0 - 917' 15" OD HOLE
0 - 3900' CEMENT 500 sx
0 - 3900' 8.625" OD INT CSG
917 - 3900' 10.75 " OD HOLE
4083 - 5085' CEMENT 250 sx calc
0 - 5075' 4.5" OD PROD CSG
4578 - 4624' PERFS
4735 - 4740' RETAINER
4767 - 4930' SQUEEZE PERFS
4740 - 4940' CEMENT PLUG
7130 - 7250' CEMENT
7230 - 11499' CEMENT 300 sx
7220 - 11499' 4.5" OD PROD CSG
11400 - 11456' SQUEEZE PERFS
11210 - 11500' CEMENT PLUG
3900 - 11500' 7.875 " OD HOLE

1980 FSL & 660 FWL
SEC 32 , TWN 19 S, RANGE 32 E
ELEVATION: 3543 GR
COMPLETION DATE: 09-23-64
****
COMPLETION INTERVAL: 11400 - 11456 (STRN)
IP: 410 BOPD, 0 MCFD, 0 BWPD (FLOWING)
****

PBTD: 4735'
TD: 11500'

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

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

Feb. 7, 19 93
and ending with the issue dated

Feb. 7, 19 93

Kathi Bearden
General Manager

Sworn and subscribed to before me this 10th day of February, 1993

Peggy J. Hentz
Notary Public.

My Commission expires

July 6, 19 94
(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
February 7, 1993

Notice is hereby given of the application of Texaco Exploration & 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 of the following well to be converted to salt water disposal.

Lease/Unit Name: New Mexico "CR" State

Well Number(s) and Location(s):

3-Unit Letter L, 1980' FSL & 660' FWL, Section 32, T19S, R32E

The injection formation is Cherry Canyon at a depth of 4578 feet below the surface of the ground. Expected maximum injection rate is 1000 barrels per day, and expected maximum 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.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
RECEIVED

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

'93 FEB 19 AM 9 38 2-16-93

BRUCE KING
GOVERNOR

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 X
WFX_____
PMX_____

Gentlemen:

I have examined the application for the:

Jerome Expl & Prod Inc. New Mexico CR State #3-L 32-19-32
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed