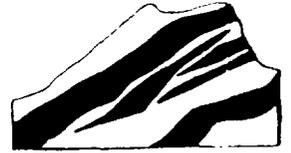


OIL CONSERVATION DIVISION
RECEIVED

PEAK

CONSULTING SERVICES
ENVIRONMENTAL,
GEOLOGICAL & REGULATORY
SPECIALISTS

P.O. BOX 636
HOBBS, NEW MEXICO 88240
OFFICE (505) 392-1915



PCS

August 13, 1991

Mr. David Catanach
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Texaco Producing Inc.
Getty 24 Federal No. 5
Disposal Application
Sec. 24 - T22S - R31E
Eddy County, New Mexico

Dear David:

Please find enclosed Texaco Producing Inc.'s disposal application for the above captioned well. This well is in the Livingston Ridge Field, and is southwest of the well we permitted earlier this year. A decision was made to move the location of the disposal facility to a more favorable location, and to move to a proration unit not already drilled so that this well may at sometime be deepened and completed in the Brushy Canyon.

A copy of this application is being mailed to all interested parties, and proof of publication will be sent as soon as possible.

If you have any questions or if I can be of any assistance please let me know. Thank you for your time and cooperation.

Sincerely,

Michael L. Pierce
Peak Consulting Services

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

OIL CONSERVATION DIVISION
RECEIVED
AUG 8 51

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: TEXACO PRODUCING INC.

Address: 205 East Bender Blvd. Hobbs, New Mexico 88240

Contact party: Michael Pierce (Consultant) Phone: 505-392-1915

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.

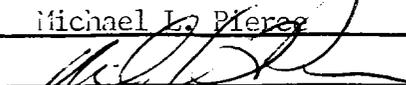
XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

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: Michael L. Pierce Title Consultant

Signature:  Date: 8-14-91

* 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.

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.

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- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
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- (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

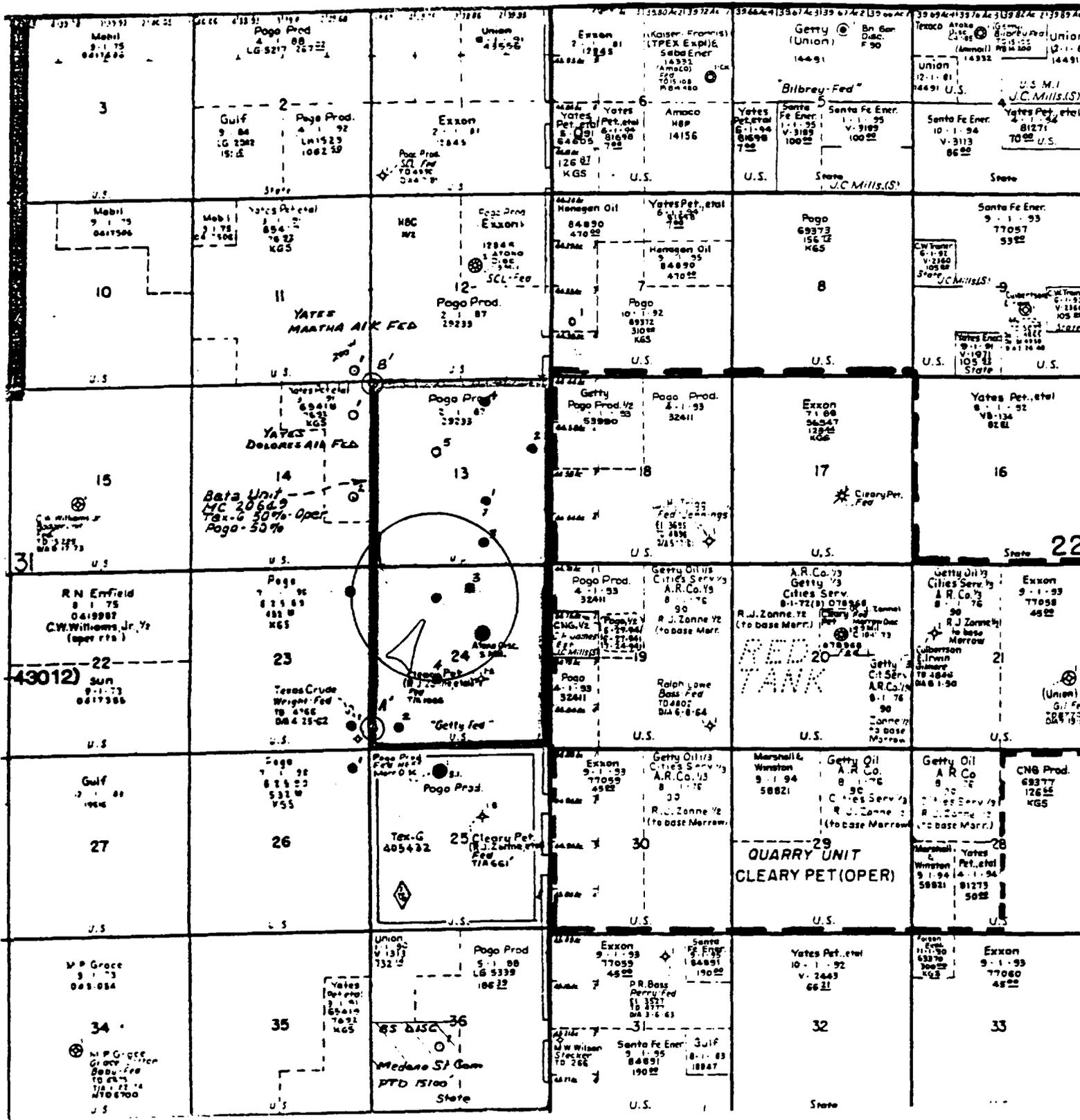
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Getty '24' Federal No. 5
 990' FNL and 1650' FWL
 Sec. 24 - T22S - R31E
 Unit C
 Eddy County, New Mexico

FORM C - 108 cont.

Part III. A

- 1.) Getty '24' Federal No. 5
990' FNL and 1650' FWL
Sec. 24 - T22S - R31E
Unit C
Eddy County, New Mexico
- 2.) See attached wellbore schematic.
- 3.) Propose to run approximately 4500' of 2 7/8" plastic lined tubing.
- 4.) Propose to use a Haliburton Tension Packer as a seal, and load the casing annulus with packer fluid.

Part III. B

- 1.) The injection formation is the Bell Canyon (Delaware), and the well is located in the Livingston Ridge Delaware Field.
- 2.) The injection interval will be cased at approximately 4500' to 5000'.
- 3.) This well will be drilled as a disposal well.
- 4.) See wellbore schematic
- 5.) The Brushy Canyon is the next deeper oil horizon at approximately 7000'. There is no shallower production in the area.

Part VII.

- 1.) Proposed average daily injection will be 750 bbls/ day. Maximum will be 2000 bbls./ day.
- 2.) The system will be closed.
- 3.) The average injection pressure will be 0(Vacuum). The maximum will not exceed the limits set forth by the OCD.
- 4.) The source of the water will be from Texaco Producing and Pogo Producing Company wells from the Livingston Ridge Delaware Field.

5.) The Bell Canyon is not productive within one mile of the Getty 24 Federal No. 5 well.

Part VIII

The injection interval is the Bell Canyon Member of the Delaware Formation, and is composed of primarily Sandstone with occasional thin bedded carbonates. The top of the Bell Canyon is at approximately 4500'. 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 Bell Canyon.

Part IX

The disposal interval will be treated with a breakdown acid job.

Part X

The logs will be submitted when the well is completed.

Part XI

There are no active fresh water wells within one mile of the Getty 24 Federal No. 5 location.

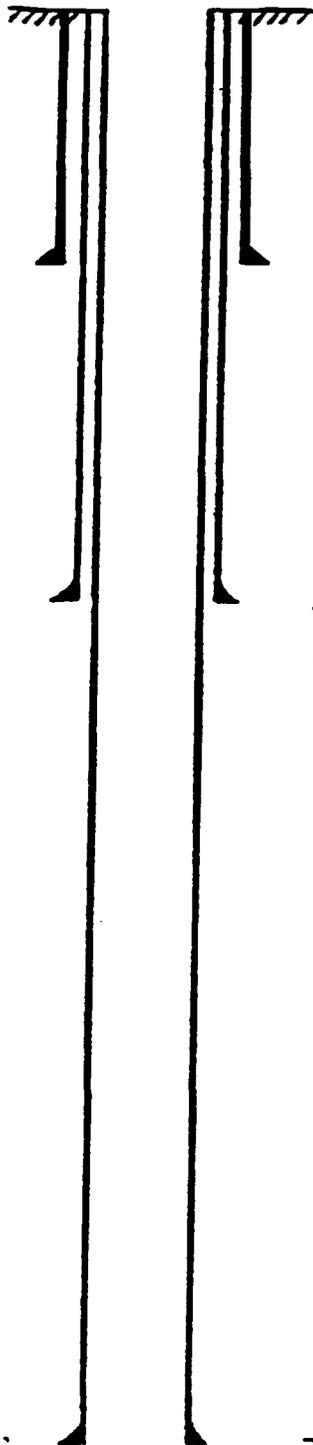
Part XII

We have examined all available geologic and engineering data, and find no evidence of open faults or any other hydrologic connection between the disposal interval and any underground source of drinking water.

OPERATOR Texaco Producing Inc.	DATE PROPOSED	
LEASE Getty 24 Federal	WELL No. 5	LOCATION 990 FNL and 1650' FNL Unit C

Salt water Disposal well Sec 24-T225-R31E
Eddy County New Mexico

Proposed Wellbore Schematic



13³/₈" csg set @ 40' with enough cmt to circulate 17¹/₂" hole

9⁵/₈" casing set at 840' with _____ sx of _____ cement
Hole size 12¹/₄" enough cmt to circulate

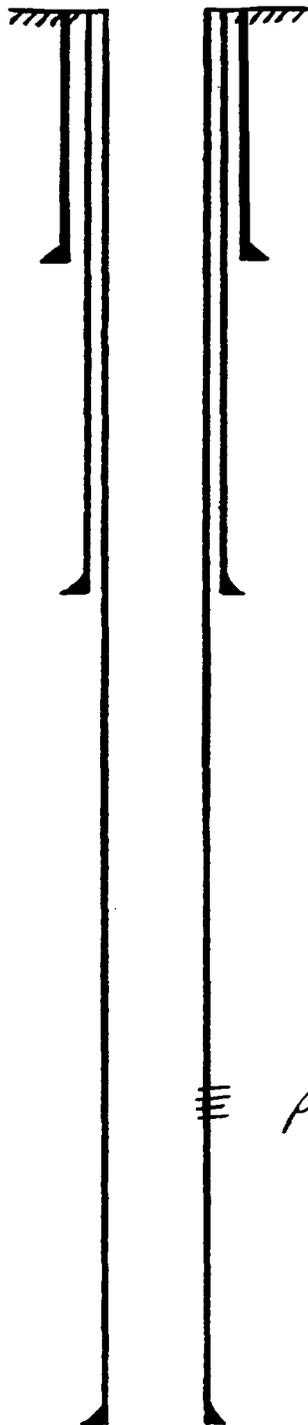
Perf selectively Bell CANYONS (DELAWARE)
4500 - 5000'

7" casing set at 5000' with _____ sx of _____ cement
Total Depth 5000' Hole size 8³/₄" enough cmt to circulate

OPERATOR <i>TERACO PRODUCING Inc</i>		DATE <i>8-13-91</i>	
LEASE <i>Getty 24 Federal</i>	WELL No. <i>4</i>	LOCATION <i>1980' ESL and 1980' ENL Unit K</i>	

*SEC 27-7225-1231G
Eddy County New Mexico*

Status: Active producer



*11 3/4" CSG set @ 840' w/ 800 SXS CMT Circ.
14 3/4" hole size*

*8 5/8" casing set at 4350' with 1550 sx of _____ cement
Hole size 11" Circulated*

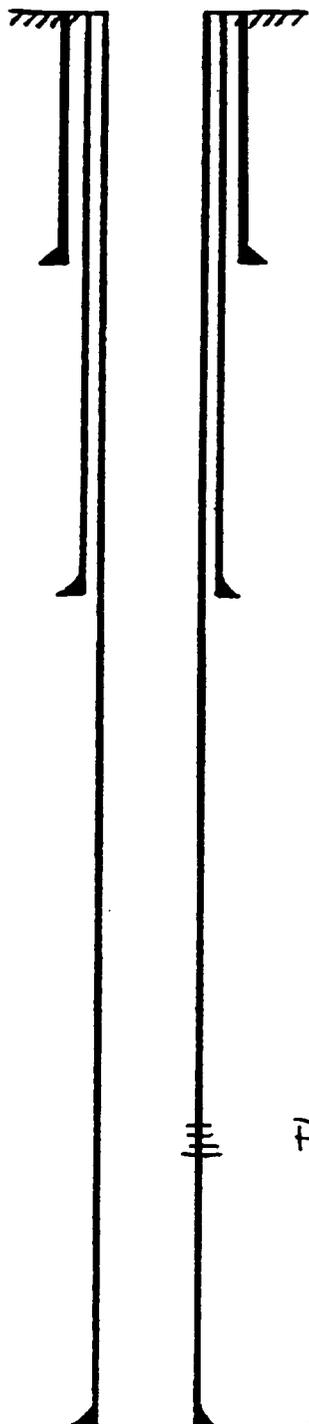
perf BRUSHY @ MYM 7068 - 7118

*5/2" casing set at 8400' with ^{DV @ 5992} 1st stage cmt w/ 700 SXS circ.
2nd stage " " 1050 SXS circ.
sx of _____ cement
Total Depth 8400' Hole size 7 7/8"*

OPERATOR POGO PRODUCING Co		DATE 8-13-91
LEASE Federal 23	WELL No. S	LOCATION 660' FNL + 510' FEL UNIT A

Sec 23 - T22S-R31E
Eddy County NM

Status: Active Producer



13³/₈" CSG set @ 850' w/ 1025 SXS cmt
Hole size 17¹/₂" Circulated

8⁵/₈" casing set at 4365' with 2785' sx of _____ cement
Hole size 11" Circulated

Perf BRUSHY Canyon 7002-7017

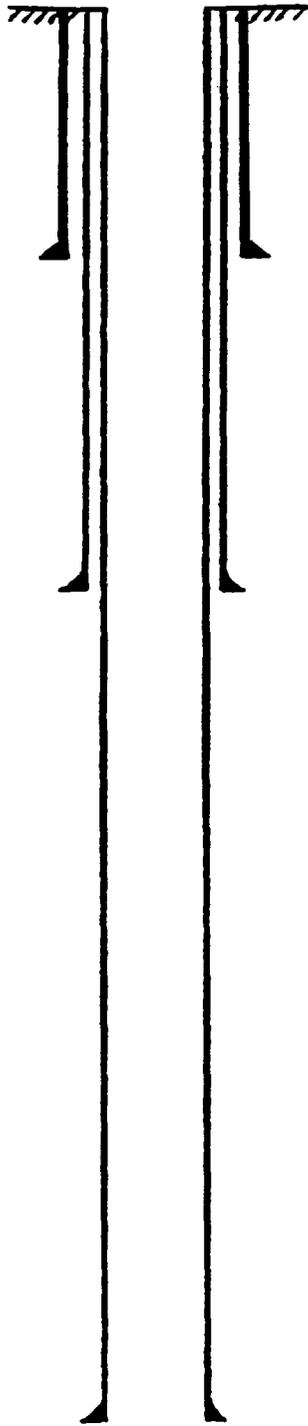
DV @ 6208
1st stage cmt w/ 630 SXS circ.
* 2nd stage cmt w/ 560 SXS

5¹/₂" casing set at 8439' with _____ sx of _____ cement

Total Depth 8439' Hole size 7³/₈" * TOC Calc @
4237' using
50% efficiency
75% efficiency
3229'

OPERATOR	Texaco Producing Inc		DATE	4-30-91
LEASE	Neff 13 Federal Eddy Co.	WELL NO.	3	LOCATION SEC 13-7-225-231E unit 0 600' FSL AND 1980' FEL

STATUS: Active Producer
BRUSHY CANYON



11 3/4" CSG set @ 834' w/ 700 SXS cmt
14 3/4" hole Circulated

8 5/8" casing set at 4520' with 1100 sx of _____ cement
Hole size 10 5/8" Circulated

Perforate 7068 - 7110 BRUSHY CANYON

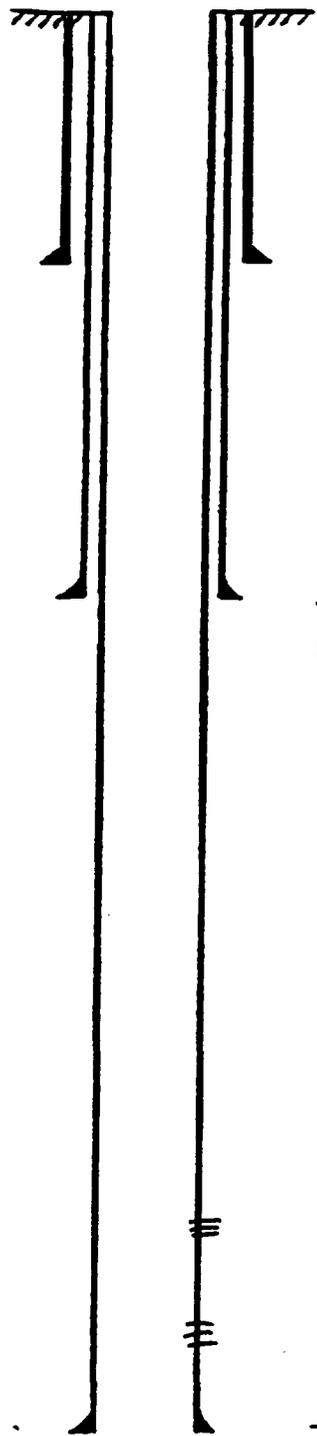
DV tool @ 6101 1st stage 950 SXS circ
2nd stage 1050 SXS circ

5 1/2" casing set at 8450' with 2000 sx of _____ cement
Total Depth 8450' Hole size 7 7/8" Circulated

OPERATOR TEXACO PRODUCING INC		DATE 4-30-91
LEASE Getty 24 Federal Eddy Co.	WELL NO. 3	LOCATION Sec 24-T225-R31E unit B

660' FNL AND 2310 FEL'

STATUS: **Active Producer
BRUSHY CANYON**



**1 13/4" CSG set @ 796' w/ 700 sx cement
1 4 3/4" hole Circulated**

**8 5/8" casing set at 4520' with 1641 sx of _____ cement
Hole size 11" Circulated**

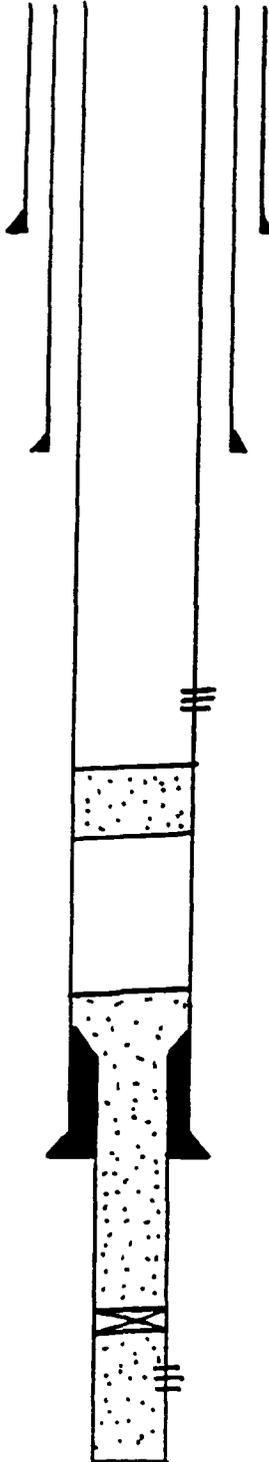
**Perforate 7874 - 7915 } BRUSHY CANYON
8284 - 8320 }**

**5 1/2" casing set at 8410' with 1965 sx of _____ cement
Total Depth 8410' Hole size 7 7/8" Circulated**

OPERATOR	Texaco Producing, Inc.		DATE	4-30-91
LEASE	Getty 24 Federal	WELL No.	LOCATION	
		1	SEC 24-T22S-R31E Unit 6	

1980' FNL and 1980' FBL
Eddy Co. New Mexico

STATUS: Active Producer
BRUSHY CANYON



13 3/8 " casing set at 891 ' with 1200 sx of _____ cemen
Hole size 17 1/2 " Circulated

9 5/8 " casing set at 4513 ' with 1800 sx of _____ cemen
Hole size 12 1/4 " Circulated

Perf BRUSHY Canyon 7091 - 7112

SPOT 60 SXS 7943 - 8268

CIBP @ 13147 + 150 SXS cmt.

SQZ 13528 - 13566 w/ 150 SXS

Perf Atoka 13528 - 13566

7 " casing set at 12242 ' with 2200 sx of _____ cemen
Total Depth 12242 ' Hole size 8 1/2 " est. TOC @ 1650'
50% efficiency

5 " casing set at ¹⁴⁹³⁴11964 ' with 400 sx of _____ cemen
Total Depth 14934 ' Hole size 6 1/8 " Circulated

P 661 762 609

Certified Mail Receipt

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



Sent to BLM	
Street & No. PO Box 1778	
P.O. State & ZIP Code CALSBAND NM 88221	
Postage \$ 1.75	
Certified Fee 1.00	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees \$ 1.75	
Postmark AUG 1991	

PS Form 3800, June 1990

P 661 762 640

Certified Mail Receipt

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



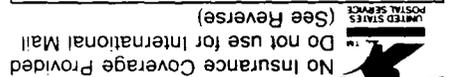
Sent to Pogo Producing Co	
Street & No. PO Box 10340	
P.O. State & ZIP Code MIDLAND TX 79702	
Postage \$ 1.75	
Certified Fee 1.00	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees \$ 1.75	
Postmark AUG 1991	

PS Form 3800, June 1990

P 661 762 638

Certified Mail Receipt

No Insurance Coverage Provided
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(See Reverse)



Sent to J.C. Mills	
Street & No. P.O. Box 190	
P.O. State & ZIP Code ARKANSAS TX 79311	
Postage \$ 1.75	
Certified Fee 1.00	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees \$ 1.75	
Postmark AUG 1991	

PS Form 3800, June 1990