

# PEAK

CONSULTING SERVICES  
ENVIRONMENTAL,  
GEOLOGICAL & REGULATORY  
SPECIALISTS

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

AN DIVISION



PCS

May 16, 1991

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

Re: Texaco Producing Inc.  
Dagger Draw No. 1  
Disposal Application  
Sec. 32 - T19S - R25E  
Eddy County, New Mexico

Dear David:

Please find enclosed two copies of Texaco Producing Inc. application for disposal. We propose to deepen this well from it's present depth of 9566' to approximately 10,300'. We ask for administrative approval to open hole complete this well as a disposal well.

The Mississippian section will be open, but it is not likely to take any fluid. Our main disposal interval will be in the Devonian. This well will be used to dispose of produced water from Texaco leases.

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,

A handwritten signature in black ink, appearing to read 'Michael L. Pierce'.

Michael L. Pierce  
Peak Consulting Services

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

**PEAK**  
**CONSULTING SERVICES**  
ENVIRONMENTAL,  
GEOLOGICAL & REGULATORY  
SPECIALISTS

RECEIVED  
MAY 20 1991  
O. C. D.  
ARTESIA, OFFICE



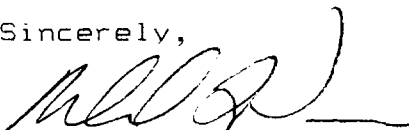
**PCS**

May 16, 1991

Dear Sir:

Please find enclosed Texaco Producing Inc.s' application for disposal of produced water at the referenced location. Should you have any questions about this application, please direct them to Michael Pierce. Thank you for your time and consideration.

Sincerely,



Michael L. Pierce

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: 5-17-91

- \* 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.

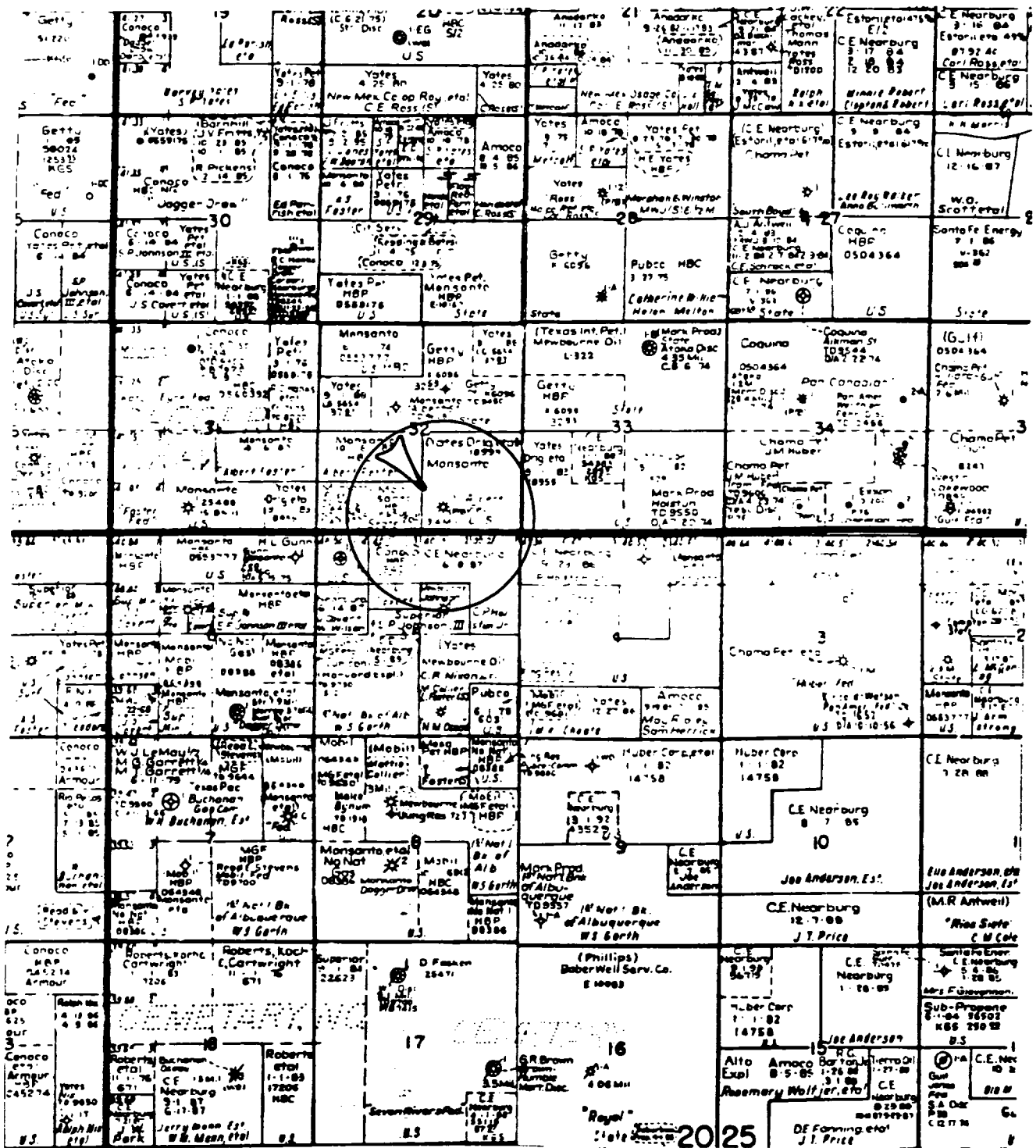
Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (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.



Dagger Draw No. 1  
 660' FSL and 1980' FEL  
 Sec. 32 - T19S - R25E  
 Unit 0  
 Eddy County, New Mexico

FORM C - 108 cont.

Part III. A

- 1.) Dagger Draw No. 1  
660' FSL and 1980' FEL  
Sec. 32 - T19S - R25E  
Unit 0  
Eddy County, New Mexico
- 2.) See attached wellbore schematic.
- 3.) Propose to run approximately 9600' of 2 7/8" plastic lined tubing.
- 4.) Propose to use a Halliburton Tension Packer as a seal. and load the casing annulus with packer fluid.

Part III. B

- 1.) The injection formation is the Devonian, and the well is located in the Dagger Draw.
- 2.) The injection interval will be open hole at approximately 9566' to 10300'.
- 3.) This well was originally drilled as a gas well.
- 4.) See wellbore schematic
- 5.) There is no deeper oil or gas producing horizon in the area. The Morrow was productive in the area, however all Morrow wells have been abandoned due to depletion of the reservoir.

Part VII.

- 1.) Proposed average daily injection will be 3500 bbls/ day. Maximum will be 10000 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 Operated wells.
- 5.) The Devonian is not productive within one mile of the Dagger Draw No. 1 well.

#### Part VIII

The injection interval is the Devonian. The Mississippian section will be open, but is not expected to take fluid. The Devonian is composed of Limestone and porous Dolomite, with some secondary porosity development. The top of the Devonian is at approximately 10200'. The fresh water in this area is from approximately 100 to 350 deep. The surface is overlain by the Quaternary Alluvium. Fresh water analysis from active wells in the area are included in this application. There are no fresh water zones below the Devonian.

#### Part IX

The disposal interval will be treated with a breakdown acid job consisting of 5000 - 7500 gallons of 15% acid.

#### Part X

The logs will be submitted when the well is completed.

#### Part XI

Fresh water analysis of near by wells are attached.

#### Part XII

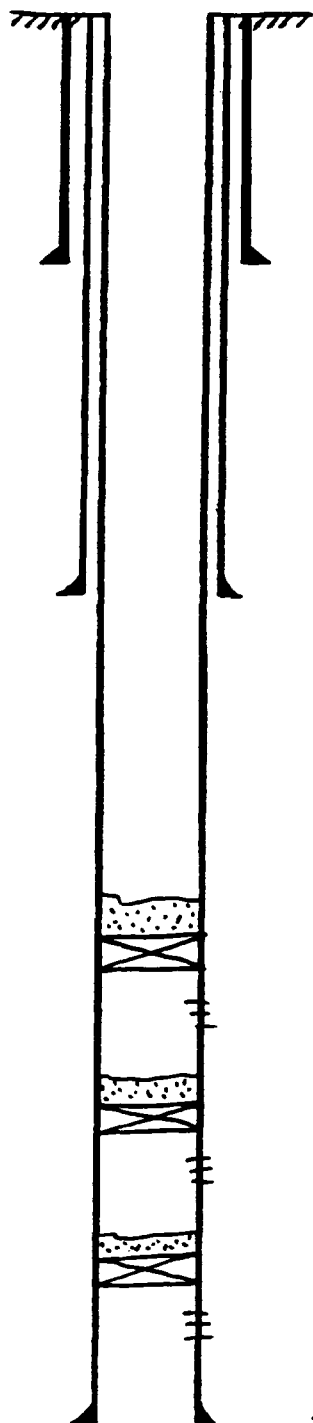
We have examined all available geologic and engineering data, and find no evidence of open faults or any other hydrologic connection between the disposal interval and any underground source of drinking water.

OPERATOR Texaco Producing Inc		DATE 5-2-91	
LEASE Albert Federal Cim No 1	WELL No 1	LOCATION Unit 0 sec 32 T19S R25E	

Eddy Co New Mexico

Status: TA'D

Current Wellbore Configuration.



13 3/8" csg set @ 395' w/ 500 sxs cmt circ  
OH 17 1/4"

9 5/8" casing set at 1374' with 800 sx of \_\_\_\_\_ cement  
Hole size 12 1/4" Circulated

set CIBP @ 8200' + 35' cmt

perf STEARN 8268 - 8666'

CIBP @ 8950' + 35' cmt

perf Atoka 9015 - 9019

perf Morrow 9282 - 9315'  
set CIBP @ 9100' + 35' cmt

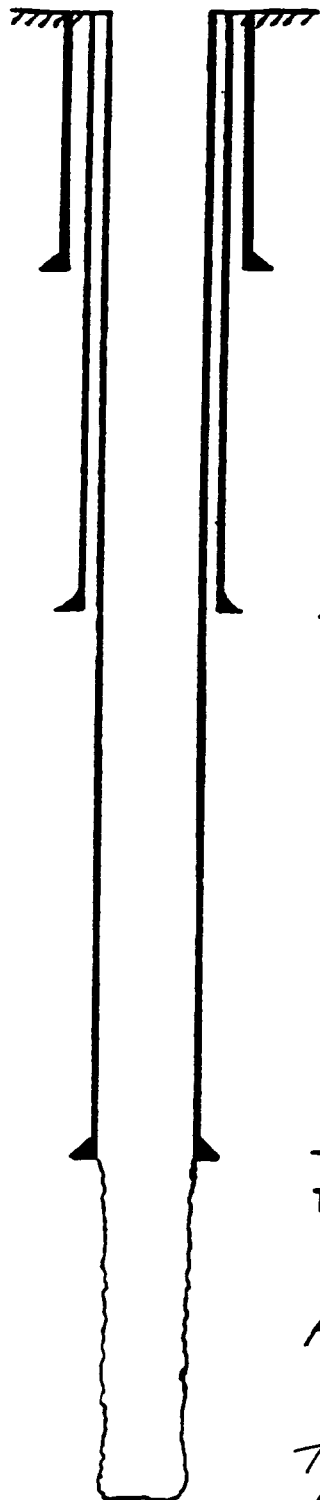
5 1/2" casing set at 9566' with 800 sx of \_\_\_\_\_ cemen  
Total Depth 9566' Hole size 8 3/4" TOC BY TS 7040'



OPERATOR Texaco Producing, Inc.		DATE 5-2-91	
LEASE Albert Federal Comm. No.	WELL No. 1	LOCATION Unit 0 Sec 32-T19S-R25E	

660' FSL and 1980' FEL  
Eddy Co. New Mexico

### Proposed wellbore Configuration.



13<sup>3</sup>/<sub>8</sub>" casing set at 395 ' with 500 sx of \_\_\_\_\_ cem:  
Total Depth 395 ' Hole size 17<sup>1</sup>/<sub>4</sub> " Circulated

9<sup>5</sup>/<sub>8</sub> " casing set at 1374 ' with 800 sx of \_\_\_\_\_ cemer  
Hole size 12<sup>1</sup>/<sub>4</sub> " Circulated

Squeeze perfs @ 8268-8666, 9015-9019,  
9282-9315.

Drill out CIAP's @ 8200', 8950', 9100'

5<sup>1</sup>/<sub>2</sub> " casing set at 9566 ' with 800 sx of \_\_\_\_\_ ceme:  
Total Depth 9566 ' Hole size 8<sup>3</sup>/<sub>4</sub> " TOC By TS  
7040'

Proposed Injection Interval  
9566 - 10300'

Total Depth Open Hole section 10,300'  
Devonian.

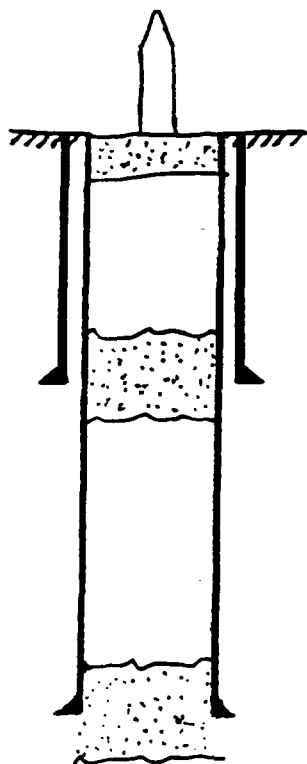
OPERATOR MewBORNE Oil Company		DATE 4-30-91
LEASE S.P. Johnson	WELL NO. 1	LOCATION Unit 6 Sec 5-T20S-R25E

1980' FNL md 1980' Fe /  
Eddy Co. New Mexico

STATUS: P + A

10 sx @ surface

4-23-82



12 1/4" CSG set @ 305' with 300 sx  
1 7/2" hole Circulated

35 sx @ 235-350'

8 5/8" casing set at 1250' with 450 sx of \_\_\_\_\_ cement  
Hole size 12 1/4" Circulated



35 sx @ 2300 - Tagged @ 1170'



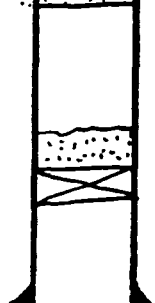
35 sx @ 3680 3720



35 sx @ 6160 - 6200



4 1/2" CSG SHOT md pulled @ 6683'  
35 sx plug @ 6733-6528'



CIBP @ 9250' + 35' cmt

4 1/2" casing set at 9500' with 650 sx of \_\_\_\_\_ cement  
Total Depth 9500' Hole size 7 7/8" Tsc by TS  
7174'

HALLIBURTON SERVICES  
MIDLAND DIVISION  
HOBBS, NEW MEXICO 88240

To Texaco Prod. Inc.

Sample Number 193  
\*Milligrams per liter

Chlorides Only

Submitted by \_\_\_\_\_ Date Received 5-17-91

Well No. See Below Depth \_\_\_\_\_ Formation \_\_\_\_\_

County \_\_\_\_\_ Field \_\_\_\_\_ Source \_\_\_\_\_

Foster Ranch #1 Windmill South of Logger Draw #1

Resistivity.... \_\_\_\_\_

Specific Gr.... \_\_\_\_\_

pH..... \_\_\_\_\_

Calcium\*..... \_\_\_\_\_

Ca

Magnesium\*..... \_\_\_\_\_

Mg

Chlorides\*..... 75 mg/l 110 mg/l

Cl

Sulfates\* ..... \_\_\_\_\_

SO<sub>4</sub>

Bicarbonates\*... \_\_\_\_\_

HCO<sub>3</sub>

Soluble Iron\*... \_\_\_\_\_

Fe

P 661 765 544

**Certified Mail Receipt**

No Insurance Coverage Provided

Do not use for International Mail  
(See Reverse)

Sent to <i>Linco Fin</i>	
Street & No. <i>PO Box 1957</i>	
P.O. State & ZIP Code <i>Midland TX 79702</i>	
Postage	\$
Certified Fee	
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 or Date: <i>1991</i>	

PS Form 3800, June 1990

P 661 765 545

**Certified Mail Receipt**

No Insurance Coverage Provided

Do not use for International Mail  
(See Reverse)

Sent to <i>E. McCarty II</i>	
Street & No. <i>PO Box 366</i>	
P.O. State & ZIP Code <i>Cincinnati OH 45221</i>	
Postage	\$
Certified Fee	
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 or Date: <i>1991</i> USPO	

PS Form 3800, June 1990

P 661 765 543

**Certified Mail Receipt**

No Insurance Coverage Provided

Do not use for International Mail  
(See Reverse)

Sent to <i>Marking Prod. Co</i>	
Street & No. <i>PO Box 31405</i>	
P.O. State & ZIP Code <i>Dallas TX 75231</i>	
Postage	\$
Certified Fee	
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 or Date: <i>1991</i>	

PS Form 3800, June 1990

P 661 765 542

**Certified Mail Receipt**

No Insurance Coverage Provided

Do not use for International Mail  
(See Reverse)

Sent to <i>Yates Petr. Corp</i>	
Street & No. <i>207 S TEAL ST</i>	
P.O. State & ZIP Code <i>Midland NM 88210</i>	
Postage	\$
Certified Fee	
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 or Date: <i>1991</i>	

PS Form 3800, June 1990

P 661 765 541



# Certified Mail Receipt

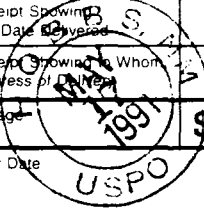
No Insurance Coverage Provided

Do not use for International Mail

(See Reverse)

Sent to	
31121	
Street & No	
PO Box 177E	
City, State & ZIP Code	
Cochito NM 89221-177E	
Postage	\$
Certified Fee	
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 or Date	

PS Form 3800, June 1990



RECEIVED  
JUN 11 1991  
P.O. BOX 636  
HOBBS, NEW MEXICO 88240  
OFFICE (505) 392-1915

5 0715:01

AM 8 47

**PEAK**  
**CONSULTING SERVICES**  
ENVIRONMENTAL,  
GEOLOGICAL & REGULATORY  
SPECIALISTS



**PCS**

June 3, 1991

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

Re: Proof of Publication  
Texaco SWD applications

Dear David:

Please find enclosed the proof of publication for the Federal Neff "13" No. 6 located in section 13 - T22S - R31E, and the Dagger Draw No. 1 located in section 32 - T19S - R25E both in Eddy County New Mexico. I have not received any notice of objection for either of these applications as of this date.

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

# Affidavit of Publication

State of New Mexico,  
County of Eddy, ss.

E. C. Cantwell, being first duly sworn,  
on oath says:

That he is publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

May 21 \_\_\_\_\_, 19 91  
\_\_\_\_\_, 19 \_\_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_\_

that the cost of publication is \$ 9.70 ,  
and that payment thereof has been made  
and will be assessed as court costs.

*E C Cantwell*

Subscribed and sworn to before me this

21 day of May, 19 91

*Donella Taylor*

My commission expires 6/01/92

Notary Public

May 21, 1991.

## ADVERTISEMENT

TEXACO PRODUCING, INC., whose address is 205 E. Bender Blvd. HOBBS, NEW MEXICO 88240, proposes to convert the following well for the purpose of disposing produced water from oil and gas production.

The well is the Dagger Draw No. 1 located at 880' FSL and 1980' FEL of Sec. 32 - T19S -R25E, unit 0, Eddy County New Mexico. The injection interval is 9566' - 10,300'. The maximum injection rate will be 10000 bbls/day, with 0 pressure.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, within 15 days.

Inquiries regarding this application should be directed to M. Pierce, P.O. Box 636, Hobbs, New Mexico 88240, (505) 392 - 1915.