

February 28, 1992

Penroc Oil Corporation
P.O. Box 5970
Hobbs, New Mexico 88240

Attn: M.Y. (Merch) Merchant

Re: Application for SWD,
New Mexico "BM" State No. 1

Dear Merch,

In applying for salt water disposal into the above subject well, New Mexico Oil Conservation Division requires notification to all offset operators with wells located within the 1/2 mile radius Area of Review. This policy is inclusive of all operators, regardless of well status.

Please furnish notification including application copies to operators of currently P & A'd wells in the subject Area of Review and forward copies of certified mail receipts to my attention.

Upon receiving this information, I will expedite the processing of your application and subsequently, the departments' approval.

Thank you for your cooperation. If I may be of any help, please don't hesitate to call me at (505) 827-5827.


Sincerely,

Benjamin E. Stone
OC Tech II

\BES

cc: file

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: PENROC OIL CORPORATION
Address: P. O. BOX 5970 HOBBS, NM 88241-5970
Contact party: M. Y. (Merch) Merchant Phone: (505) 397-3596
- 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. None
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.) Submitted by Texaco - previous operator
- * 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. No fresh water well
- 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: M. Y. (Merch) Merchant Title: President
- Signature:  Date: February 13, 1992
- * 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.

PENROC

Penroc Oil Corporation / P. O. Box 5970 / Hobbs, New Mexico 88241 / Telephone (505) 397-3596 / Telecopier (505) 393-7051

February 14, 1992

Mr. Bill LeMay
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Re: Application for Administrative Approval for Salt Water Disposal
New Mexico "BM" State No. 1
Unit O, Section 16, T-17-S, R-36-E
Lea County, New Mexico

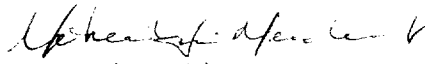
Dear Mr. LeMay:

Penroc Oil Corporation is requesting administrative approval to convert the captioned well to salt water disposal. This well will be utilized to dispose produced water from Penroc operated State VA No.1 (Unit H, Sec. 20, T-17-S, R-36-E) which is capable of producing 15-20 BOPD and 100 BWPD.

Penroc has 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.

An early approval of this application will be greatly appreciated. Without a relative in-expensive disposal, the producing well will have to be plugged and will result in loss of precious reserves. Thank you.

Sincerely,


M. Y. (Merch) Merchant
President

MYM/bm

Attachments

cc: Surface owner
Offset operators

III. A. WELL DATA

- (1) New Mexico "BM" State No. 1
Unit O, Section 16, T17S, R36E
Lea County, New Mexico
- (2) 11 3/4", 42# @ 407' w/ 400 sxs. (circ.)
8 5/8", 32# @ 4200' w/1550 sxs. (circ.)
5 1/2", 17# @ 9461 w/1335 sxs. (calc. cement top: surface)
- (3) Will use 2 7/8" plastic coated tbg.
- (4) The tubing will be set @ approximately 5070' in a
5 1/2" X 2 7/8" nickel coated packer.

III. B.

- (1) The formation to be injected is the San Andres in the West Lovington San Andres Pool.
- (2) The injection will be in cased hole through perforations 5178' - 5187'.
- (3) This well was drilled as an ABO oil well in January, 1987. After depletion in the ABO, it was tested wet in the Paddock (6245' - 6282') and non-commercial in the San Andres (5178' - 5187').
- (4) Currently the well is shut-in, and has been produced off and on for an average of less than 1/2 BOPD.

PENROCK OIL CORPORATION - OPERATOR

NEW MEXICO "BM" STATE #1

UNIT 0, SECTION 16, T17S, R36E

LEA COUNTY, NEW MEXICO

FORM C-108 V

1

Producing/Active wells within $\frac{1}{2}$ -mile radius:

BTA - Turner "JVP" 8408 No. 2

Unit C, Sec. 21, T-17-S, R-36-E

Lea County, New Mexico

Drilled in 1986 - TD 9900' - PBTD 9811'

13 3/8" @ 398' w/ 450 sxs. circ.

8 5/8" @ 4395' w/ 1800 sxs. circ.

5 1/2" @ 9900' w/ 1500 sxs. TOC: 2400'

Perfs: 9294' - 9340'

Producing/Active wells within $\frac{1}{2}$ -mile radius:

BTA - Turner JVP- "B" #1 (8408)

Unit B, Sec. 21, T-17-S, R-36-E

Lea County, New Mexico

Drilled in 1986 - TD 9991' - PBTB 9835'

13 3/8" @ 392' w/ 450 sxs. circ.

8 5/8" @ 4400' w/ 1800 sxs. circ.

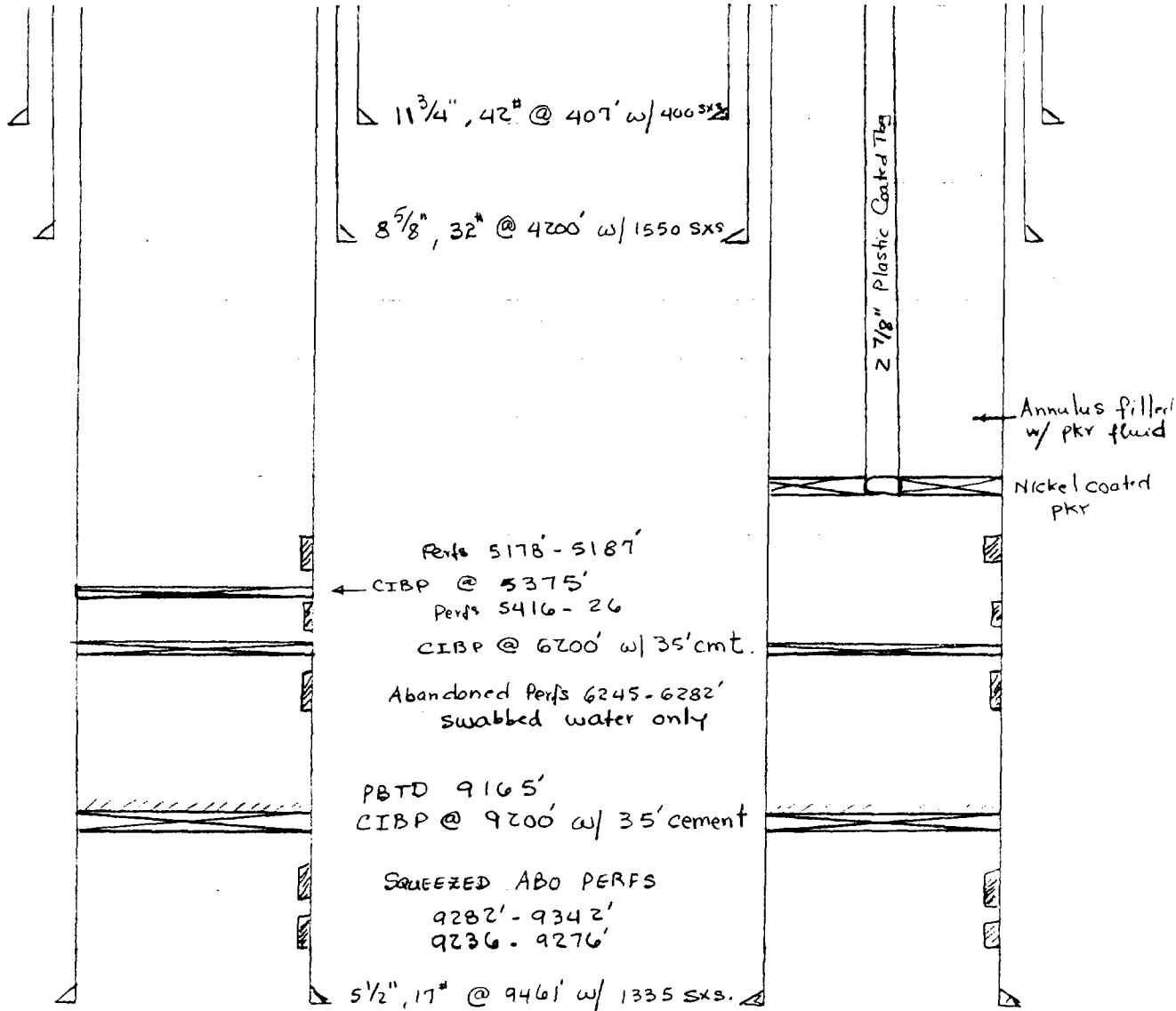
5 1/2" @ 9991' W/ 1700 sxs. circ.

Producing Abo perms: 9263' - 9326'

PENROCK OIL CORPORATION
 NEW MEXICO BM STATE #1
 SEC. 16, T17S, R36E
Lea County, New Mexico

PRESENT

PROPOSED



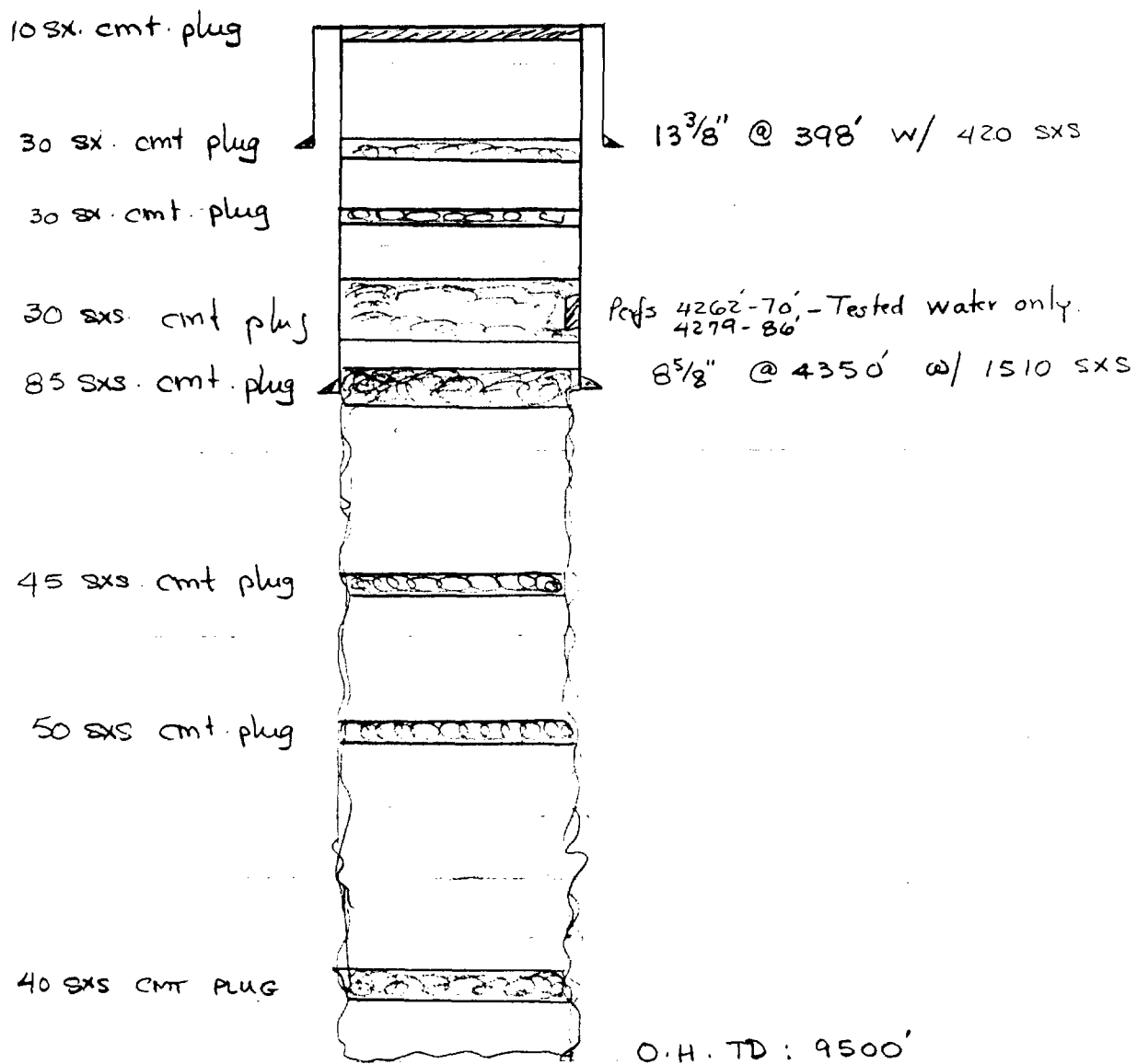
P& A'd well within 1/2-mile radius:

Terra Resources

STATE BS No 1

Unit G, Sec. 16, T. 17 S. - R. 36 E.

Lea County, New Mexico



Well drilled in 1987 - P& A'd after San Andres tested water.

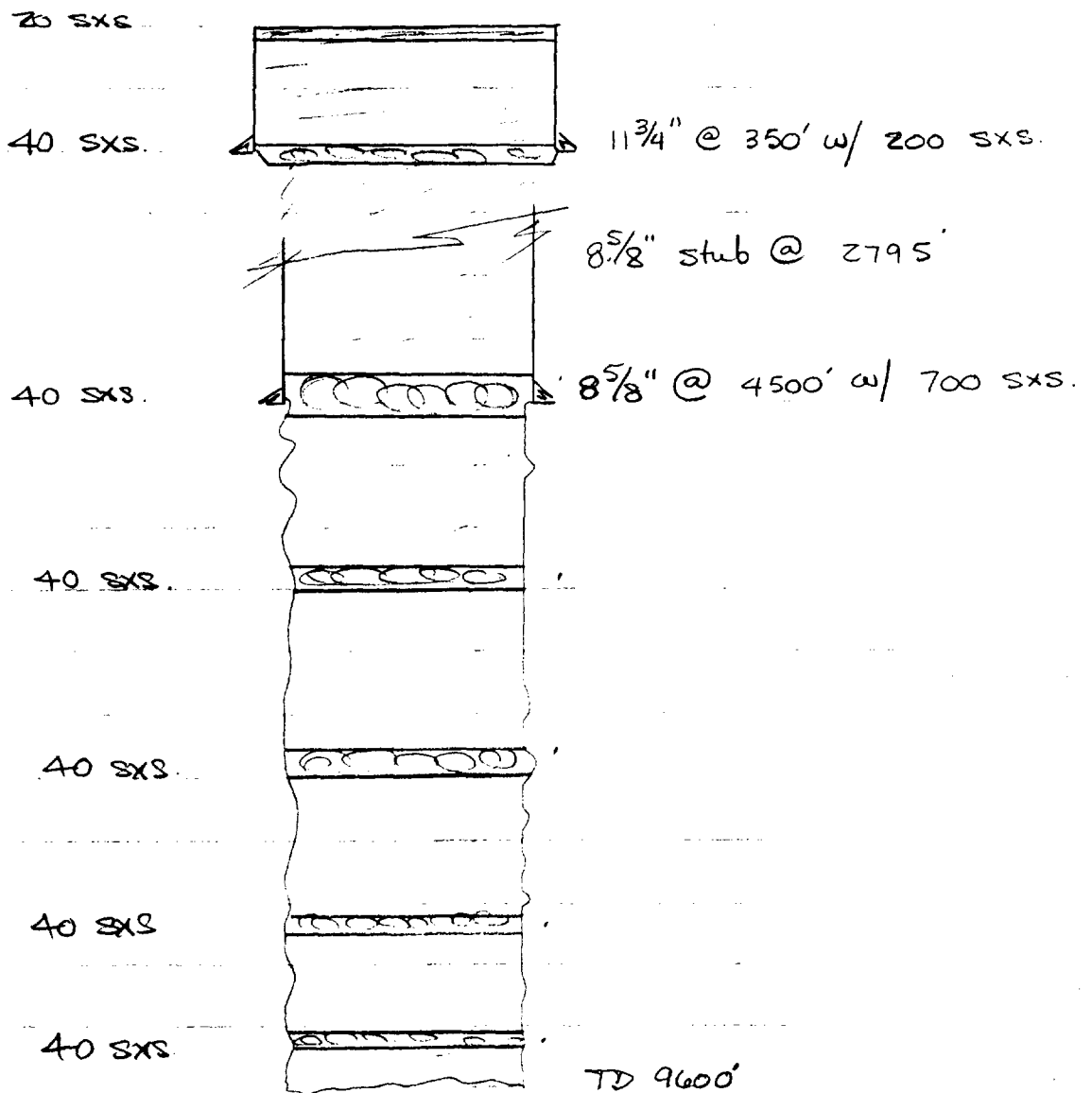
P&A'd well with-in 1/2-mile radius:

Texaco Inc.

NM 'DL' STATE No 1

Unit A, Sec. 21, T17S, R36E

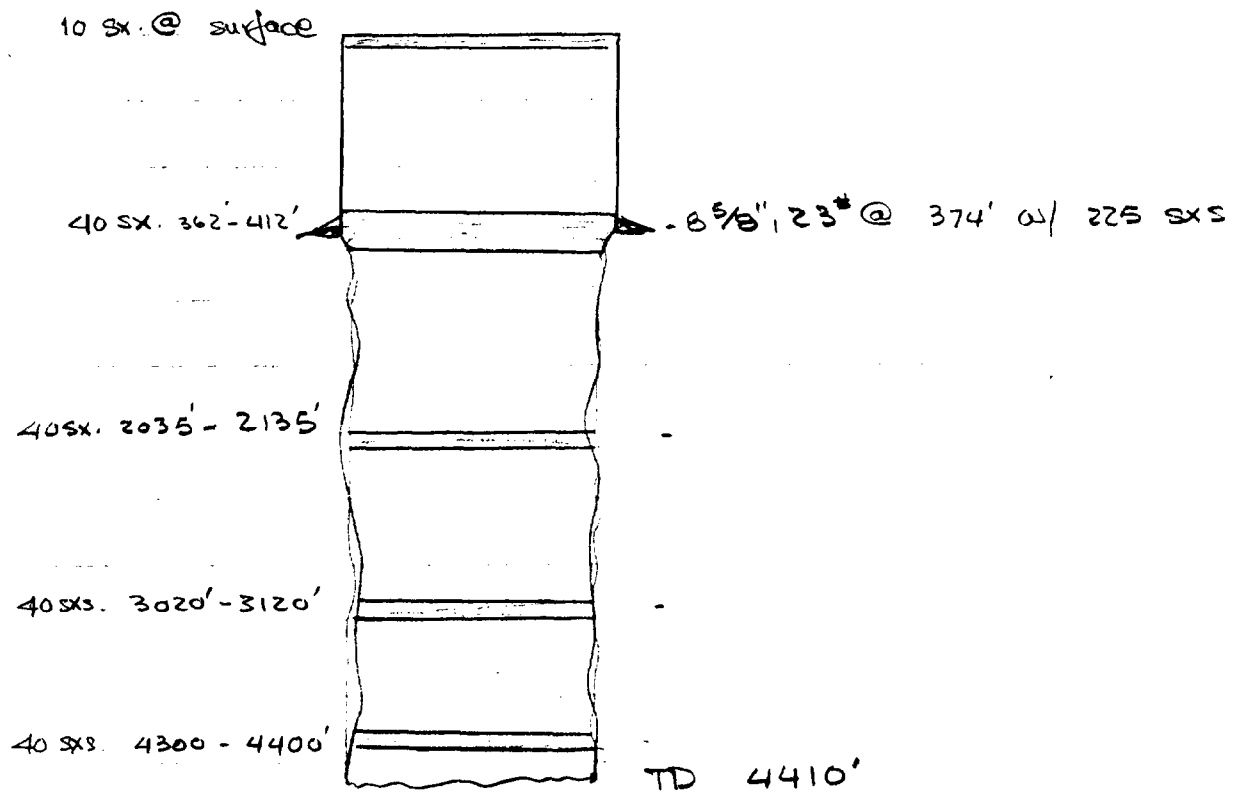
Lea County, New Mexico



Drilled 1967. Tested Also dry - P&A'd.

P&A'd wells with-in 1/2 mile radius:

Western Oil Prod.
Unit A, Sec. 21, T17, R 36E
Lea County, New Mexico



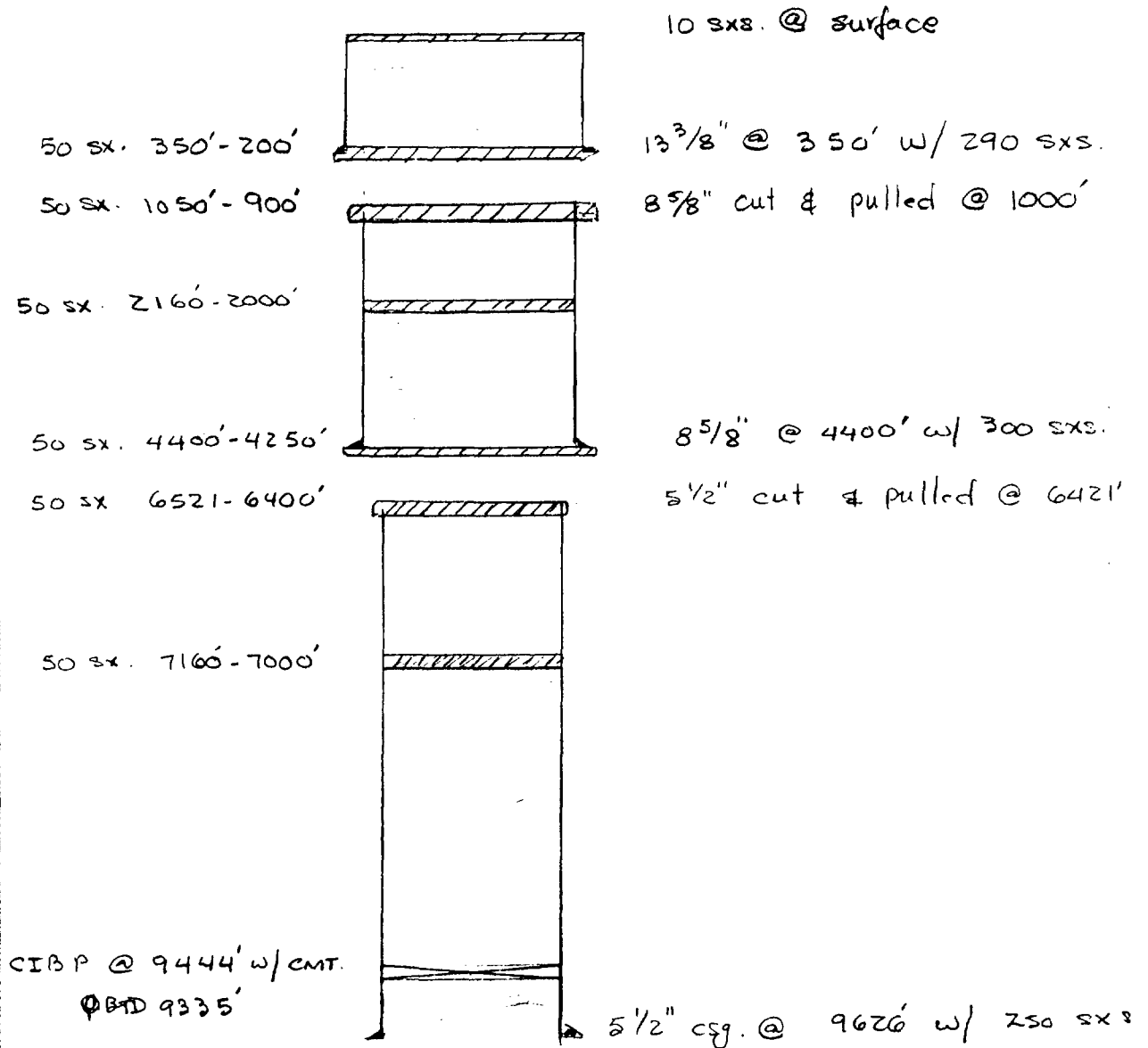
Drilled 1983 - Tested dry.

ELK OIL COMPANY

AZTEC STATE #1

UNIT M, SEC. 15, T17S, R36E

LEA COUNTY, NEW MEXICO



Drilled in 1966 - P & A'd 1981.

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: TEXACO PROD. INC.
LEASE: N.M. BM ST.
SAMPLE POINT: WELL #1
SAMPLE DATE: 3-21-88
SAMPLE TEMP.: NA

FORM C-108 XI

pH: 5.6
H₂S: 280
SPECIFIC GRAVITY: 1.095

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	610.00	10.00
Cl	87330.00	2460.00
SO ₄	3750.00	78.13
Ca	3600.00	180.00
Mg	1944.00	159.34
Na	50801.96	2208.78

IONIC STRENGTH = 2.76
TOTAL HARDNESS = 17000.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 147940.7 mg/ltr.
TOTAL IRON (Fe) = 5.0 ppm

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO ₃) ₂	10.00	810.40
CaSO ₄	78.13	5317.97
CaCl ₂	91.88	5099.06
Mg(HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	159.34	7587.97
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	2208.78	129125.30

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO₃ @ 80 DEG F. = -0.5
CaCO₃ @ 120 DEG F. = 0.0

SATURATION POINT

CaSO₄ @ 70 DEG F. = 4827.9 MG/LTR.
CaSO₄ @ 110 DEG F. = 4788.0 MG/LTR.

(THIS SAMPLE CONTAINED 5318.0 MG/LTR. CaSO₄)

SURFACE OWNER:

Scharbauer Cattle Company
Box 1471
Midland, Texas 79702

OFFSET OPERATORS:

Attn: Regulatory Affairs
BTA Oil Producers
104 S. Pecos
Midland, Texas 79701

Attn: Regulatory Affairs
Meridian Oil, Inc.
21 Desta Drive.
Midland, Texas 79705

P 661 767 292
Certified Mail Receipt
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	
Scharbauer Cattle Company	
Street & No	
P. O. Box 1471	
PO State & ZIP Code	
Midland, Texas 79702	
Postage	\$.98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom Date & Address of Delivery	1.00
Return Receipt Showing to Whom Date & Address of Delivery	
TOTAL Postage & Fees	\$ 2.98
Postmark or Date	

PS Form 3800, June 1990

P 661 767 293
Certified Mail Receipt
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Attn: Regulatory Affairs	
BTA OIL PRODUCERS	
Street & No	
104 S. Pecos	
PO State & ZIP Code	
Midland, Texas 79701	
Postage	\$.98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom Date & Address of Delivery	1.00
Return Receipt Showing to Whom Date & Address of Delivery	
TOTAL Postage & Fees	\$ 2.98
Postmark or Date	

PS Form 3800, June 1990

P 661 767 294
Certified Mail Receipt
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Attn: Regulatory Affairs	
MERIDIAN OIL, INC.	
Street & No	
21 Desta Drive	
PO State & ZIP Code	
Midland, Texas 79705	
Postage	\$.98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom Date & Address of Delivery	1.00
Return Receipt Showing to Whom Date & Address of Delivery	
TOTAL Postage & Fees	\$ 2.98
Postmark or Date	

PS Form 3800, June 1990

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. 16, 1992
and ending with the issue dated

Feb. 16, 1992

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 13 day of

February, 1992

Dana Parrish
Notary Public.

My Commission expires _____

Aug. 5, 1995

(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 16, 1992

PENROC OIL CORPORATION, P.O. Box 5970, Hobbs, New Mexico 88241, is filing an application to convert New Mexico "BM" State No. 1 to water disposal. This well is located 1650' FEL and 330' FSL in Section 16, T17S, R-36-E, Lea County, New Mexico.

The intention of applicant is to inject produced water from the Abo formation at its State VA No. 1, located 990' FEL and 1650' FNL in Section 20, T17S, R-36-E. The pool the produced water is to be injected in the "BM" State is West Lovington San Andres, which has tested non-productive in the area of review.

Maximum injection rates will be 100 BWPD at pressures not to exceed 500 psig.

All interested parties must file any objections or requests for hearing with

the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days of this notice: M.Y. (Merch) Merchant, President, (505) 397-3596.

PENROC

Penroc Oil Corporation / P.O. Box 5970 / Hobbs, New Mexico 88241 / Telephone (505) 397-3596 / Telecopier (505) 393-7051

March 4, 1992

Attn: Russell Pool
Texaco Exploration & Production
205 E. Bender Blvd.
Hobbs, New Mexico 88240

Re: Application for Administrative Approval for Salt Water Disposal
New Mexico "BM" State No. 1
Unit O, Section 16, T-17-S, R-36-E
Lea County, New Mexico

Gentlemen:

PENROC OIL CORPORATION is requesting administrative approval to convert the captioned well to salt water disposal. Enclosed is a copy of same application for your review. If you have any questions, please contact this office.

Sincerely,

PENROC OIL CORPORATION

M. Y. Merchant
M. Y. (Merch) Merchant *MLR*
President & CEO

MYM/br

WAIVER APPROVAL:

Russell S. Pool
Signature

Russell S. Pool
Printed Name

3-6-92
Date

		# of pages 1	
To	David Catanach	From	M. Y. Merchant
Co.	N.M.O.C.D.	Co.	Penroc Oil Corp.
Dept.		Phone #	(505) 397-3596
Fax #	(505) 827-5741	Fax #	(505) 393-5071