

**BW -           /**

**PERMITS,  
RENEWALS,  
& MODS**

*C L O S E D*



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

Joanna Prukop  
Cabinet Secretary

March 06, 2003

**Lori Wrotenbery**

Director

Oil Conservation Division

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 3929 9819**

Suzanne P. Holland, P.E.  
Conoco-Phillips  
4001 Penbrook  
Odessa, Texas 79762

RE: Conoco-Phillips Warren McKee Brine wells site closure and termination of  
Discharge Plan BW-001

Dear Mrs. Holland:

The New Mexico Oil Conservation Division (OCD) hereby approves of Conoco-Phillips closure activities at the Warren McKee Brine wells located in the UL N and M, Section 2, Township 20 South, Range 38 East, NMPM, Lea County, New Mexico and hereby terminates Discharge Permit BW-001.

Please be advised that NMOCD approval of this closure plan and permit termination does not relieve Conoco-Phillips of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment in the foreseeable future. In addition, NMOCD approval does not relieve Conoco-Phillips of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

Sincerely,

Roger C. Anderson  
Environmental Bureau Chief

RCA/lwp

xc: OCD Hobbs Office



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

December 19, 1994

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z-765-962-843**

Mr. Jerry W. Hoover  
Conoco Inc.  
10 Desta Drive, Suite 100w  
Midland, Texas 79705-4500

**RE: Fee for Discharge Plan BW-001 Modification**  
**Conoco Warren McKee Brine Station**

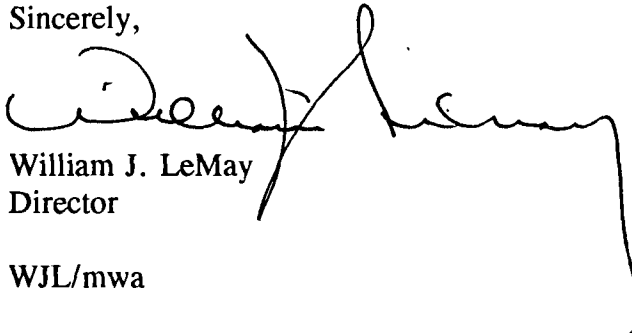
Dear Mr. Hoover:

The modification application for Conoco Inc. is subject to the WQCC Regulation 3-114.B.1.(b).3 discharge plan modification fee. But, due to the timing of the discharge plan renewal and modification the New Mexico Oil Conservation Division (OCD) has chosen to waive the flat rate of six hundred and ninety dollars (\$690.00) for brine station discharge plan modifications. Conoco Inc. is still responsible for the filing fee of fifty (50) dollars. The fifty (50) dollar filing fee has not been received by the OCD, and shall be submitted on receipt of this letter.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

If you have any questions, please contact Mark Ashley of my staff at (505) 827-7155.

Sincerely,



William J. LeMay  
Director

WJL/mwa

xc: OCD Hobbs Office



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

December 6, 1994

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z-765-962-840**

Mr. Jerry W. Hoover  
Conoco Inc.  
10 Desta Drive, Suite 100w  
Midland, Texas 79705-4500

**RE: Approval of Discharge Plan BW-001 Modification  
Conoco Warren McKee Brine Station**

Dear Mr. Hoover:

The discharge plan modification (BW-001) for the Conoco Warren McKee Brine Station located in the SW/4 NW/4 of Section 2, Township 20 South, Range 38 East, NMPM, Lea County, New Mexico, is hereby approved under the conditions contained in the enclosed attachment. The modification application consists of the request for modification of the previously approved discharge plan dated June 6, 1994. The original discharge plan was approved December 18, 1982, renewed on April 10, 1989, renewed again on June 6, 1994, and will expire on April 10, 1999.

The modification application was submitted pursuant to Section 3-107.C of the New Mexico Water Quality Control Commission (WQCC) Regulations. Based on the information provided in the modification application and in the approved discharge plan, it is approved pursuant to Sections 5-101.A and 3-109. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface water, ground water, or the environment which may be actionable under other laws and/or regulations.

The monitoring and reporting shall be as specified in the referenced materials. Please note that Section 3-104 of the regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C you are required to notify the Director of any facility expansions, production increase, or process modification that would result in any change in the discharge or water quality or volume.

Mr. Jerry W. Hoover  
December 6, 1994  
Page 2

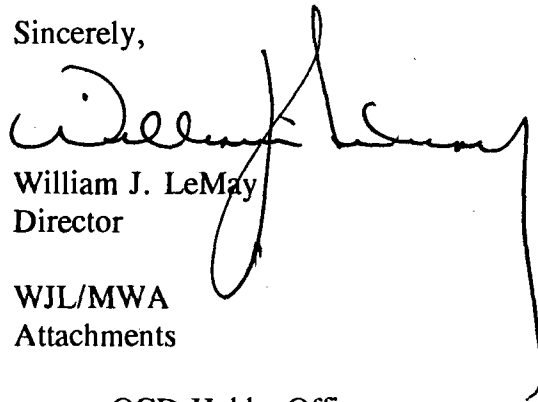
Before performing remedial work, altering or pulling casing, plugging or abandonment, or any other workover, approval of the OCD must be obtained. Approval should be requested on the OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103-A). Submit the original form to the Environmental Bureau in the Santa Fe Office and a copy to the appropriate district office.

The modification application for the Conoco Inc. is subject to the WQCC Regulation 3-114.B.1.(b).3 discharge plan modification fee. Every billable facility submitting a discharge plan modification will be assessed a fee equal to the filing fee of fifty (50) dollars plus a flat rate of six hundred and ninety dollars (\$690.00) for brine station discharge plans. The fifty (50) dollar filing fee and the six hundred and ninety dollar (\$690.00) flat fee have not been received by the Oil Conservation Division, and shall be submitted on receipt of this approval. The required flat fee may be paid in a single payment or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

If you have any questions, please contact Mark Ashley of my staff at (505) 827-7155.

Sincerely,



William J. LeMay  
Director

WJL/MWA  
Attachments

xc: OCD Hobbs Office

ATTACHMENT TO THE DISCHARGE PLAN BW-001 APPROVAL  
CONOCO INC.

WARREN MCKEE BRINE STATION  
DISCHARGE PLAN REQUIREMENTS  
(December 6, 1994)

1. The fifty (50) dollar filing fee plus the flat rate of six hundred and ninety dollars (\$690.00) flat fee shall be submitted on receipt of this approval. The required flat fee may be paid in a single payment or in equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year.
2. Brine Transfer Lines: All Below-grade brine transfer lines will be tested for integrity once every five years.
3. Sump Construction: All new or rebuilt sumps and below-grade tanks will be approved by the OCD prior to installation and will incorporate secondary synthetic containment and leak detection in their designs. All leak detection systems will be inspected weekly and the OCD Santa Fe Office will be notified immediately upon discovery of fluids in any leak detection system.
4. Drum Storage: All chemical and lubrication drums shall be stored on pad and curb type containment.
5. Tank Berming: All tanks that contain materials other than fresh water will be bermed to contain one and one-third times the capacity of the tank.
6. Spill Containment: All brine storage and transfer will be managed in such a manner to keep brine off of the ground surface. Any brine spilled onto the ground surface will be cleaned up upon discovery.
7. Spill Reporting: All spills and/or leaks shall be reported to the appropriate OCD District office pursuant to WQCC Rule 1-203 and OCD Rule 116.
8. Production Method: Fresh water shall be injected down the annulus and brine shall be recovered up the tubing. Reverse flow will be allowed once a month for up to 24 hours for clean out.
9. Maximum Injection Pressure: The maximum operating injection pressure at the well head will be such that the fracture pressure of the injection formation (Salado) will not be exceeded. Prior to initiating injection Conoco Inc. shall supply and obtain approval for the maximum and average injection pressures and injection volumes.

10. Mechanical Integrity Testing: A mechanical integrity test will be conducted on the well annually. A pressure equal to one and one-half of the normal operating pressure will be maintained for four hours. The OCD will be notified at least 72 hours prior to the test so that the OCD may witness the test.
11. Cavity Configuration: A test will be conducted to determine the size and configuration of the mined cavity prior to discharge plan renewal (April 10, 1999). The method and time of testing will be approved by the OCD prior to performing the test.
12. Production/Injection Volumes: The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office quarterly.
13. Well Workover Operations: OCD approval will be obtained from the director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103-A). Submit the original form to the Environmental Bureau in the Santa Fe Office and a copy to the appropriate district office.
14. Closure: The OCD will be notified when operations of the facility is discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.



Midland Division  
Exploration Production

Conoco Inc.  
10 Desta Drive, Suite 100W  
Midland, TX 79705-4500  
(915) 686-5400

October 14, 1994

Mr. Roger Anderson  
Environmental Bureau Chief  
Oil Conservation Division  
P.O. 2088  
Santa Fe, NM 87501-2088

**RE: Modification of Discharge Plan BW-001 to Plug and Abandon the Warren McKee Brine Wells No. 1 & 2 and to Drill Two Replacement Brine Extraction Wells, The Warren McKee Brine Wells No. 3 and 4.**

Dear Mr. Anderson:

Conoco recently filed a renewal application for the subject Discharge Plan BW-001 which was approved by the Oil Conservation Division June 6, 1994. In this plan renewal, both the Warren McKee Brine Wells No. 1 and 2 were approved for brine extraction. Both wells have subsequently become mechanically unusable and uneconomical to maintain.

Conoco proposes to plug and abandon Wells No. 1 and 2 and to drill two replacement wells Nos. 3 and 4. The locations of these proposed new extraction wells are shown on EXHIBIT A with well No. 3 proposed for Unit M and well No. 4 proposed for Unit E in Section 2, Township 20 South, Range 38 East.

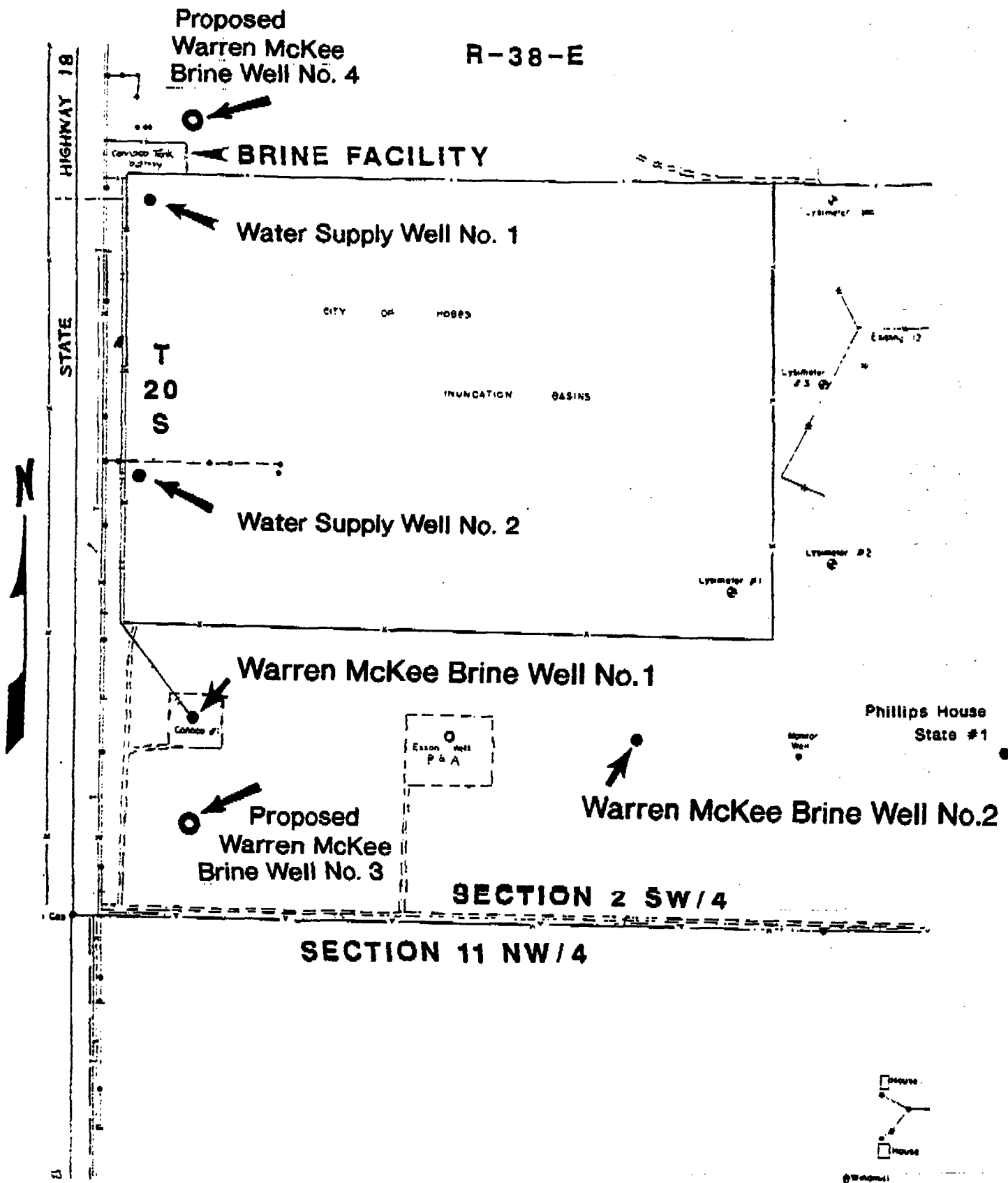
Since both of Conoco's Warren McKee and Warren Unit Blinbry-Tubb Waterflood Projects are shut-in, pending the drilling and extraction approval of these two new wells, it is requested that this proposed discharge plan modification be given notice of publication as soon as possible to expedite the re-activation of these projects. As soon as the plug and abandonment procedures, the proposed drilling plans, and the survey plats are available for these modifications, a full modification application will be filed.

It is anticipated that a detailed application can be prepared within a couple of weeks. Thank you for your help in expediting this notice of publication requirement. A suggested statement of notice is attached as EXHIBIT B. If there are any further questions or requirements at this time, please call me at (915) 686-6548.

Very truly yours,

Jerry W. Hoover  
Sr. Conservation Coordinator





General Area of Brine Extraction Operations

EXHIBIT A



Midland Division  
Exploration Production

OIL CONSERVATION DIVISION  
DEPT. 781

Conoco Inc.  
10 Desta Drive, Suite 100W  
Midland, TX 79705-4500  
(915) 686-5400

NOV 30 1994

November 30, 1994

Mr. Roger Anderson  
Environmental Bureau Chief  
Oil Conservation Division  
P.O. 2088  
Santa Fe, NM 87501-2088

**RE: Modification of Discharge Plan BW-001 to Plug and Abandon the  
Warren McKee Brine Wells No. 1 & 2 and to Drill Two Replacement Brine  
Extraction Wells, The Warren McKee Brine Wells No. 3 and 4.**

Dear Mr. Anderson:

In a letter of October 14, 1994, Conoco requested a modification of its recently renewed Discharge Plan BW-001 which was approved by the Oil Conservation Division June 6, 1994. As that first letter explained, both of the Warren McKee Brine wells have become mechanically unusable and uneconomical to maintain and Conoco proposes to plug and abandon Wells No. 1 and 2 and to drill two replacement wells Nos. 3 and 4.

Since your receipt of the first letter, the plug and abandonment procedures have been completed and filed and the Drilling applications have been filed and approved by the NMOCD. Copies of these documents are attached to complete our application for modification of Discharge Plan BW-001.

If there are any further questions or requirements at this time, please call me at (915) 686-6548.

Very truly yours,

Jerry W. Hoover  
Sr. Conservation Coordinator

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

WELL API NO.  
30-025-30707

5. Indicate Type of Lease  
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.  
B-9652

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"  
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:  
OIL WELL ☐ GAS WELL ☐ OTHER Brine Extraction

2. Name of Operator  
Conoco, Inc.

3. Address of Operator  
10 Desta Dr. Ste 100W, Midland, TX 79705

4. Well Location  
Unit Letter N : 660 Feet From The South Line and 1980 Feet From The West Line  
Section 2 Township 20S Range 38E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
3590'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐  
OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

It is proposed to plug and abandon this well according to the attached procedure.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Jerry W. Hoover*

TITLE

Sr. Conservation Coordinator DATE 11/30/94

TYPE OR PRINT NAME

Jerry W. Hoover

(915) 686-6548

TELEPHONE NO.

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Warren McKee Brine Well No. 2  
P&A Procedure Outline

Well information is shown on the attached wellbore diagram.

1. Pull all production equipment from the well.
2. Set a CIBP @ 1550' MD ( bottom of cased hole section - casing shoe @ 1580' MD ) to isolate the open hole cavity from the wellbore.
3. RIH with open ended tubing and spot a minimum of a 35' cement plug on top of CIBP.
4. Fill casing with salt gel mud consisting of 10 pound brine with 25 pounds of gel per barrel.
5. Lay a minimum of a 100' cement plug at the 9-5/8" casing shoe @ 420' MD.
6. Fill casing with salt gel mud consisting of 10 pound brine with 25 pounds of gel per barrel.
7. Spot a surface plug with a minimum of 10 sacks.
8. Cut off the wellhead and erect a P&A marker.
9. Restore location as necessary.

NOTE: Should only need to tag the cement plug at the casing shoe.

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

WELL API NO.  
30-025-30707

5. Indicate Type of Lease  
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.  
B-7652

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE 'APPLICATION FOR PERMIT'  
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:  
OIL WELL ☐ GAS WELL ☐ OTHER Brine Extraction

2. Name of Operator  
Conoco, Inc.

8. Well No.  
2

3. Address of Operator  
10 Desta Dr. Ste 100W, Midland, TX 79705

9. Pool name or Wildcat  
BSW: Salado

4. Well Location  
Unit Letter N : 660 Feet From The South Line and 1980 Feet From The West Line  
Section 2 Township 20S Range 38E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
3590'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☒

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

It is proposed to plug and abandon this well according to the attached procedure.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Jerry W. Hoover*  
Jerry W. Hoover

TITLE

Sr. Conservation Coordinator

DATE

11/30/94

TYPE OR PRINT NAME

(915) 686-6548

TELEPHONE NO.

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Warren McKee Brine Well No. 2  
P&A Procedure Outline

Well information is shown on the attached wellbore diagram.

1. Pull all production equipment from the well.
2. Set a CIBP @ 1550' MD ( bottom of cased hole section - casing shoe @ 1580' MD ) to isolate the open hole cavity from the wellbore.
3. RIH with open ended tubing and spot a minimum of a 35' cement plug on top of CIBP.
4. Fill casing with salt gel mud consisting of 10 pound brine with 25 pounds of gel per barrel.
5. Lay a minimum of a 100' cement plug at the 9-5/8" casing shoe @ 420' MD.
6. Fill casing with salt gel mud consisting of 10 pound brine with 25 pounds of gel per barrel.
7. Spot a surface plug with a minimum of 10 sacks.
8. Cut off the wellhead and erect a P&A marker.
9. Restore location as necessary.

NOTE: Should only need to tag the cement plug at the casing shoe.

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-101  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address. CONOCO INC. 10 DESTA DRIVE STE 100W MIDLAND, TEXAS 79705		OGRID Number 005073
		API Number 30 - 025-32745
Property Code 15765	Property Name Warren McKee Brine	Well No. 3

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	2	20S	38E		330	South	420	West	Lea

Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

BSW: Salado Salt	Proposed Pool 1	Proposed Pool 2
---------------------	-----------------	-----------------

Work Type Code N	Well Type Code I	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3575'
Multiple No	Proposed Depth 2800'	Formation Salado Salt	Contractor	Spud Date 11/23/94

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36#	400'	200	surface
8-3/4"	7"	23#	1600'	350	surface

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

It is proposed to drill this well vertically into the Salado Salt formation and to circulate Hobbs City sewage effluent water (fresh) through the salt section. The resulting brine will then be mixed with sewage effluent water to formulate a controlled salinity brine water for injection into the Warren McKee and Warren Unit Blinbry-Tubb Waterfloods. This well will be drilled according to the following attachments:

This well will be located on State Lease B-9652

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Jerry W. Hoover</i> Printed name: Jerry W. Hoover Title: Sr. Conservation Coordinator Date: 11/22/94 Phone: (915) 686-6548		OIL CONSERVATION DIVISION Approved by: _____ Title: _____ Approval Date: NOV 28 1994 Expiration Date: _____ Conditions of Approval: Attached <input type="checkbox"/>	
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

District I  
PO Box 1960, Hobbs, NM 88241-1960  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Artec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-  
Revised February 21, 1988  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

'API Number 30-025-32745	'Pool Code 96173-NA	'Pool Name BSW Salado Salt
'Property Code 15765-NA	'Property Name WARREN MCKEE BRINE	'Well Number 3
'OGRID No. 005073	'Operator Name CONOCO, INC.	'Elevation 3575

**10 Surface Location**

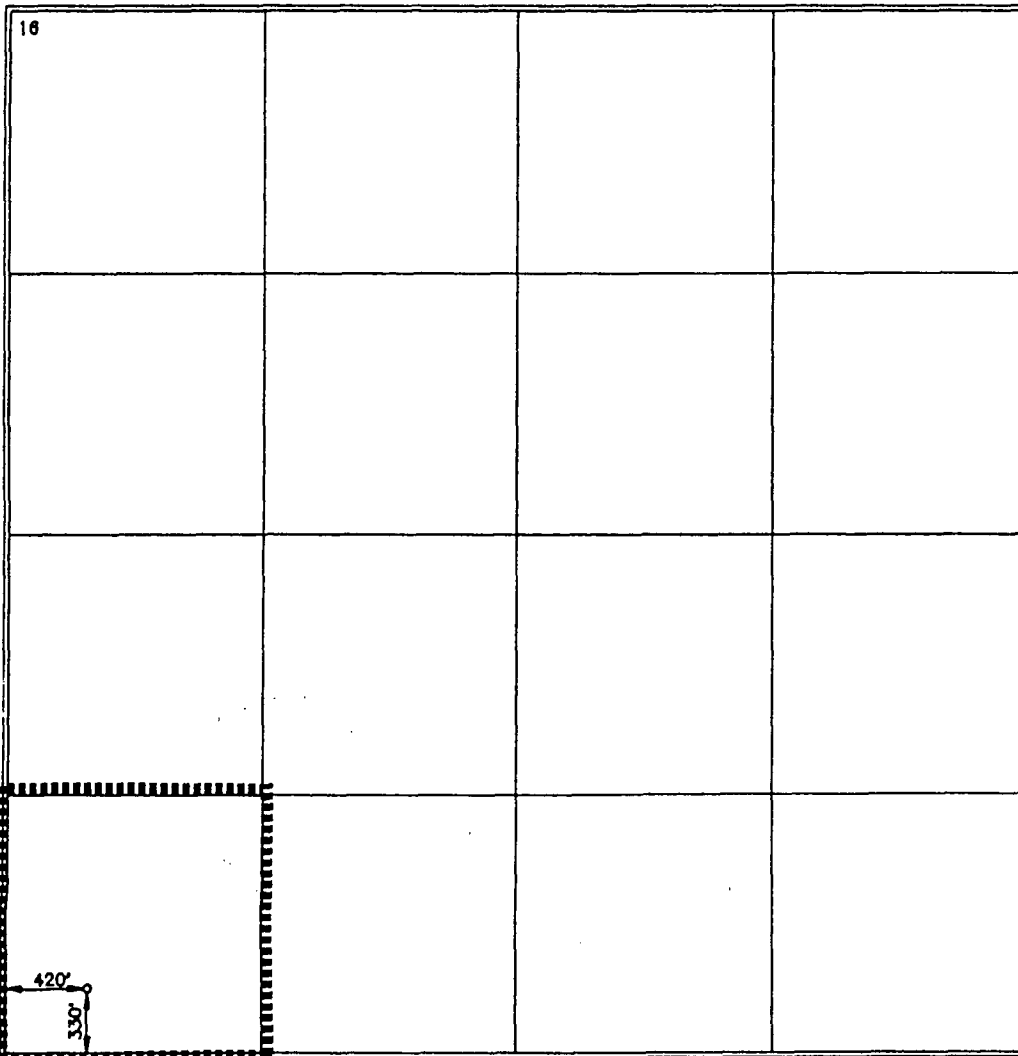
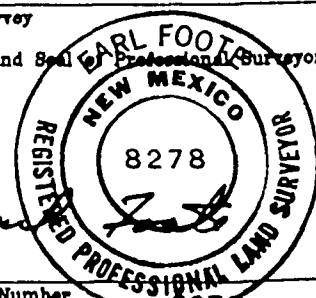
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	2	20-S	38-E		330	SOUTH	420	WEST	LEA

**11 Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

'Dedicated Acres 40	'Joint or Infill	'Consolidation Code	'Order No.
------------------------	------------------	---------------------	------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div>16</div> 	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Jerry W. Hoover</i> Signature Jerry W. Hoover Printed Name Sr. Conservation Coordinator Title 11/23/94 Date</p>
	<div>18 SURVEYOR CERTIFICATION</div> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to best of my belief.</p> <p>OCTOBER 17, 1994 Date of Survey</p> <p>Signature and Seal  Certificate Number 8278</p>



# PROPOSED WELL PLAN OUTLINE

WELL NAME **Warren McKee Brine Well #3**

LOCATION **330' FSL 420' FWL SECT. 2 T-20S R-38E LEA CO.**

TVD IN 1000'	MD	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE DEPTH	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WT TYPE	DAYS
0					12-1/4"	9-5/8" 400'			8.4 FRESH	
			POSSIBLE HOLE ENLARGEMENT AND SLOUGHING		8-3/4"	36# K-55 (200' to surface)			10 # BRINE	
1		RUSTLER 1430'				7" 1600'				
		ANHYDRITE 1573'				23# K-55 (350' to surface)				6
2		TOP OF SALT 1663'								
3		B/SALT 2785'								
		TD = 2800'								
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										

DATE \_\_\_\_\_

APPROVED \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WELL NAME: Warren McKee Brine #3

**CEMENTING PROGRAM**

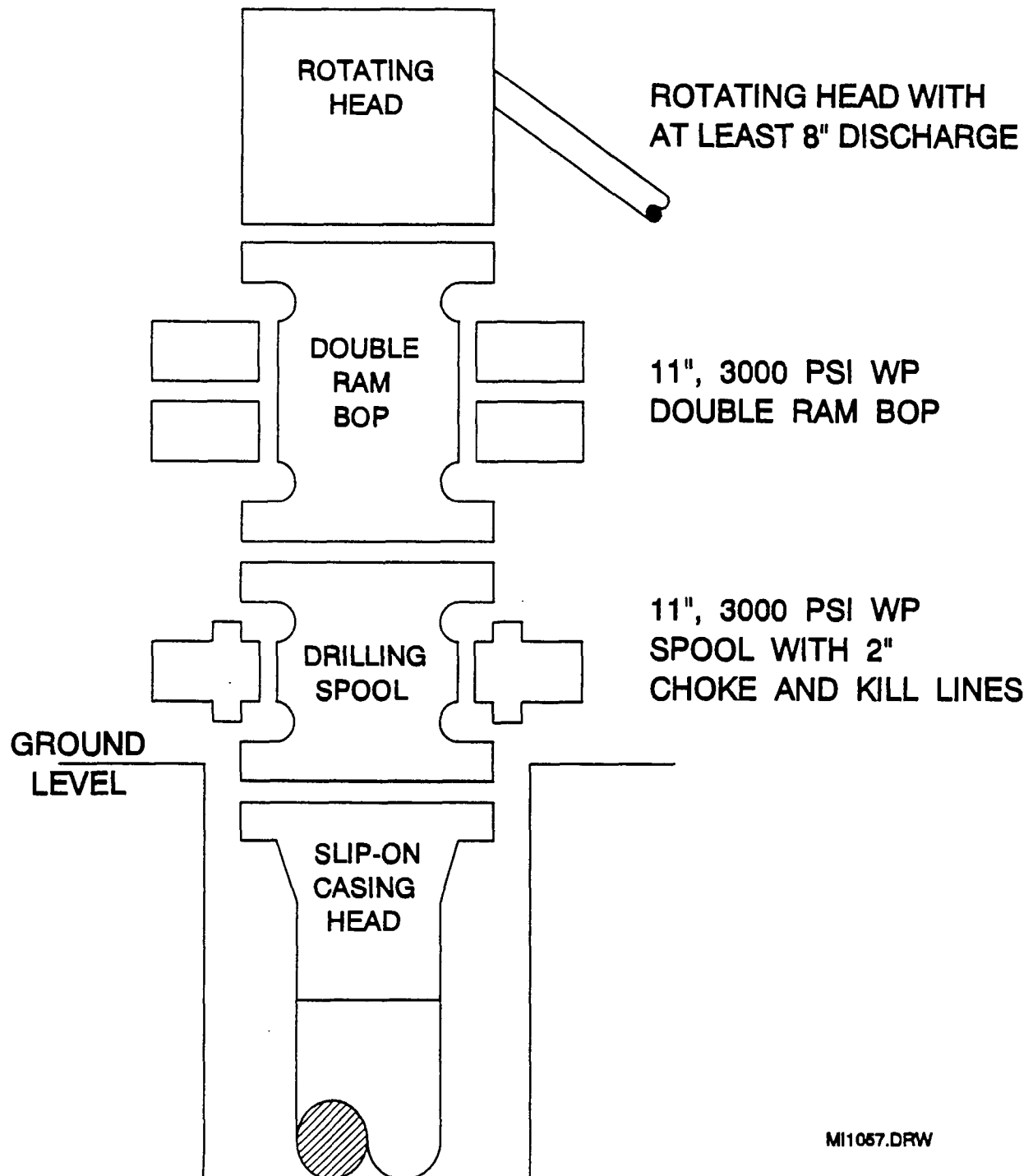
**SURFACE CASING STRING**

LEAD 100 sxs Class C Mixed at 13.7 ppg  
Additives 4 % Gel + 2 % CaCl<sub>2</sub>  
TAIL 100 sxs Class C Mixed at 14.8 ppg  
Additives 2 % CaCl

**PRODUCTION CASING STRING**

LEAD 200 sxs Class C Mixed at 13.7 ppg  
Additives 4 % Gel + 2 % CaCl<sub>2</sub> + .2 % SMS  
TAIL 150 sxs Class C Mixed at 14.8 ppg  
Additives 2 % CaCl<sub>2</sub>

# BOP SPECIFICATIONS



MI1057.DRW

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-101  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address.  ✓ CONOCO INC. 10 DESTA DRIVE STE 100W MIDLAND, TEXAS 79705		OGRID Number 005073
		API Number 30-025-32746
Property Code 15765	Property Name Warren McKee Brine	Well No. 4

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	20S	38E		330	South	1980	West	Lea

8 Proposed Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
BSW Salado Salt									

Work Type Code N	Well Type Code I	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3568'
Multiple No	Proposed Depth 2800'	Formation Salado Salt	Contractor	Spud Date 11/23/94

21 Proposed Casing and Cement Program

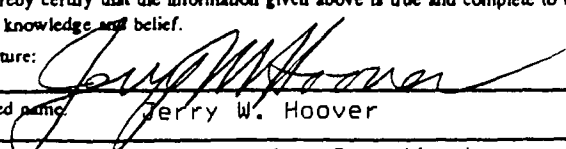
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36#	400'	200	surface
8-3/4"	7"	23#	1600'	350	surface

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

It is proposed to drill this well vertically into the Salado Salt formation and to circulate Hobbs City sewage effluent water (fresh) through the salt section. The resulting brine will then be mixed with sewage effluent water to formulate a controlled salinity brine water for injection into the Warren McKee and Warren Unit Blinbry-Tubb Waterfloods. This well will be drilled according to the following attachments:

This well will be located on State Lease B-9652

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:   
Printed name: Jerry W. Hoover  
Title: Sr. Conservation Coordinator  
Date: 11/22/94  
Phone: (915) 686-6548

OIL CONSERVATION DIVISION

Approved by:

Title: ORIGINAL SIGNED BY JERRY HOOPER  
DISTRICT I SUPERVISOR



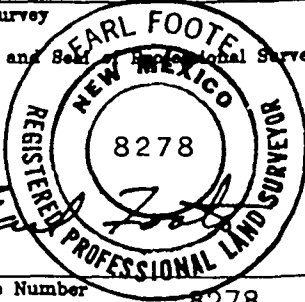
Approval Date: NOV 28 1994

Expiration Date:

Conditions of Approval:

Attached ☐

☐ AMENDED REPORT

<div>16</div> <div></div>	<div></div>	<div></div>	<div></div>	<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</div> <div><div></div><div>Signature</div><div>Jerry W. Hoover</div><div>Printed Name</div><div>Sr. Conservation Coordinator</div><div>Title</div><div>11/23/94</div><div>Date</div></div>			
				<div>18 SURVEYOR CERTIFICATION</div> <div>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to best of my belief.</div> <div>OCTOBER 17, 1994</div> <div>Date of Survey</div> <div><div></div><div>Signature and Seal of Professional Surveyor:</div></div> <div><div></div><div>Certificate Number</div><div>8278</div></div>			
					<div>1980'</div>	<div>330'</div>	<div></div>

# PROPOSED WELL PLAN OUTLINE

WELL NAME **Warren McKee Brine Well #4**

LOCATION **330' FSL 1980' FWL SECT. 2 T-20S R-38E LEA CO.**

TVD IN 1000'	MD	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE DEPTH	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WT TYPE	DAYS
0					12-1/4"	9-5/8" 400'			8.4 FRESH	
			POSSIBLE HOLE ENLARGEMENT AND SLOUGHING		8-3/4"	23# K-55 (200' to surface)			10 # BRINE	
1						7" 1600'				
		RUSTLER 1430'				23# K-55 (350' to surface)				6
2		ANHYDRITE 1573'								
		TOP OF SALT 1663'								
3										
		R/SALT 2785'								
		TD = 2800'								
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										

DATE \_\_\_\_\_

APPROVED \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WELL NAME: Warren McKee Brine #4

**C E M E N T I N G   P R O G R A M**

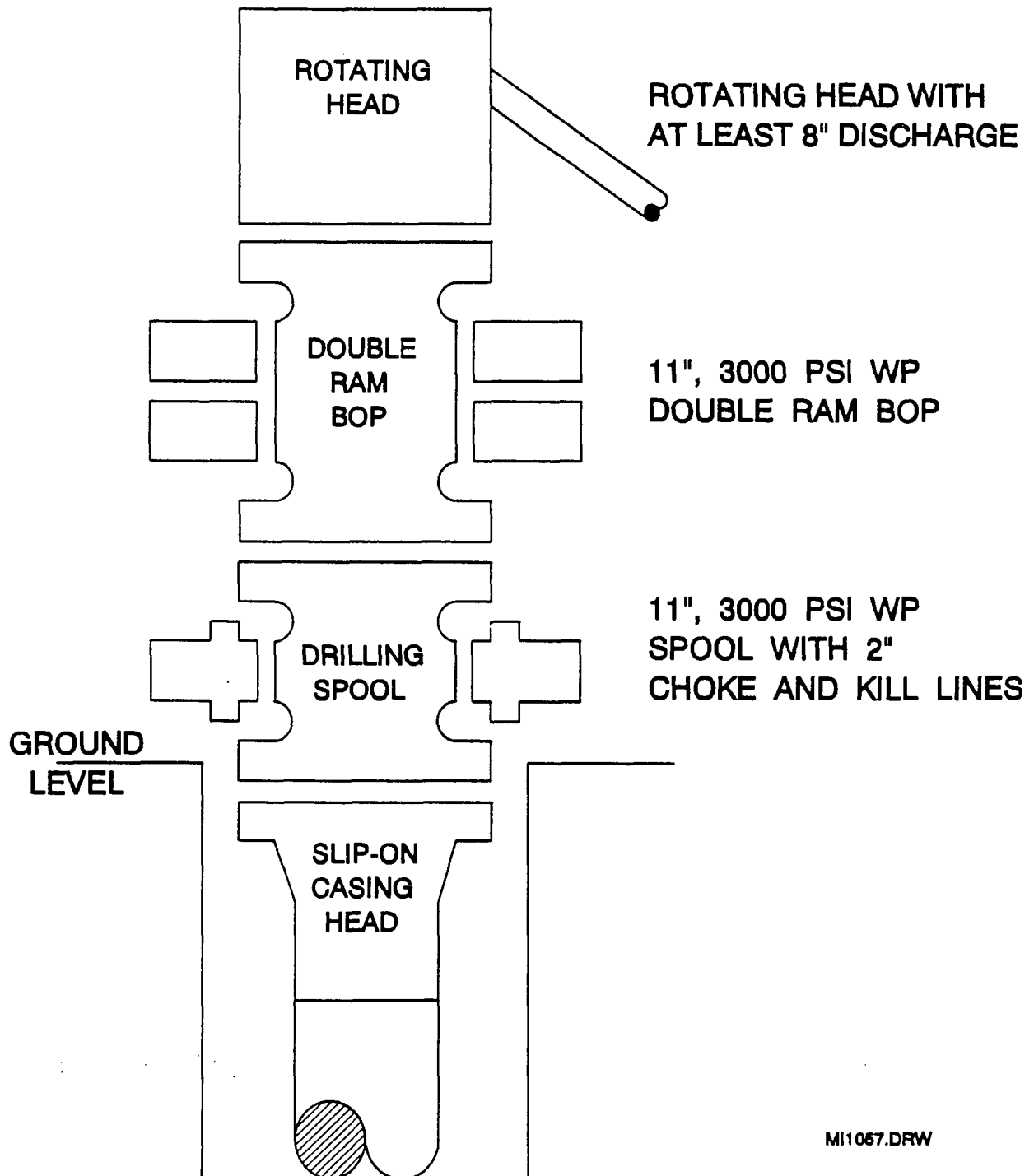
**SURFACE CASING STRING**

**LEAD** 100 sxs Class C Mixed at 13.7 ppg  
Additives 4 % Gel + 2 % CaCl<sub>2</sub>  
**TAIL** 100 sxs Class C Mixed at 14.8 ppg  
Additives 2 % CaCl

**PRODUCTION CASING STRING**

**LEAD** 200 sxs Class C Mixed at 13.7 ppg  
Additives 4 % Gel + 2 % CaCl<sub>2</sub> + .2 % SMS  
**TAIL** 150 sxs Class C Mixed at 14.8 ppg  
Additives 2 % CaCl<sub>2</sub>

# BOP SPECIFICATIONS



MI1057.DRW



ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 12-28-94,

or cash received on \_\_\_\_\_ in the amount of \$ 50.00

from Conoco Inc

for Warren McKee (BW-01)

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Submitted to ASD by: Chois Eustice Date: 2-15-95

Received in ASD by: Conce F. Gabeldon Date: 2/15/95

Filing Fee ☒ New Facility \_\_\_\_\_ Renewal \_\_\_\_\_

Modification \_\_\_\_\_ Other \_\_\_\_\_

(specify)

Organization Code 521.07 Applicable FY 95

To be deposited in the Water Quality Management Fund.

Full Payment \_\_\_\_\_ or Annual Increment \_\_\_\_\_

CONOCO, INC.

SHERRI L. WILLIAMS  
WORKING FUND

10 DESTA DR., SUITE 100W  
MIDLAND, TEXAS 79705

PAY  
TO THE  
ORDER OF

WQMD - Water Quality Management \$ 50.00

Fifty & 00/100 DOLLARS

filing fee				

THIS CHECK IS DELIVERED FOR PAYMENT ON THE ACCOUNTS LISTED

Barbara Williams

0991

TEXAS NATIONAL BANK

POST OFFICE BOX 3090, MIDLAND, TEXAS 79702