Form 3160-3
(November 1983)
(formerly 9-331C)

N.M. OIL CONS COMMISSION
P.O. BOX 1980
HOBBS, NEW MEXICO 88240

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-81633

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Mills Federal

2. NAME OF OPERATOR: C. W. TRAINER

9. WELL NO.: 7

3. ADDRESS OF OPERATOR: P.O. Box 888 Hobbs, N.M. 88241-0888

10. FIELD AND POOL, OR WILDCAT: Red Tank Bone Spring

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 330' FSL & 330' FWL
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 24-T22S-R32E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 14 miles Southeast of Halfway

12. COUNTY OR PARISH: Lea County | 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 330'

16. NO. OF ACRES IN LEASE: 600

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1320'

19. PROPOSED DEPTH: 10,150'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3769' GR

Carlsbad Controlled Water Basin

22. APPROX. DATE WORK WILL START*: ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	650'	650 sx. Circulated
11"	8 5/8"	24# & 32#	4550'	1800 sx. Circulated
7 7/8"	5 1/2"	17# & 20#	10,150'	1000 sx. Tie into 8 5/8"

MUD PROGRAM:

0----------650'	Fresh water and native mud.
650'-------4550'	Brine Water
4550'------10,150	Cut brine and starch.

OPER. OGRID NO. 3474
PROPERTY NO. 13342
POOL CODE 51683
EFF. DATE 7-22-94
API NO. 30-025-32596

BOP PROGRAM:

BOP's will be used and installed at the onset of drilling. They will consist of a hydraulic actuated double ram BOP and annular BOP. A rotating assembly will also be used. BOP's will be tested daily. See attached diagram.

Approval Subject to General Requirements and Special Stipulations Attached

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED W. E. Dan Lee TITLE Agent DATE 4-10-94

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY Isl Sonny Davers. TITLE for AREA MANAGER DATE 7-19-94

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

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

DISTRICT III
1000 Rio Brazos Rd., Aztec NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102
Revised February 10, 1994
Instruction 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	Pool Code	Pool Name
30-025-32596	51683	Red Tank Bone Spring

Property Code	Property Name	Well Number
13342	MILLS FEDERAL	7

OGRID No.	Operator Name	Elevation
3474	CW TRAINER	3769

Surface Location

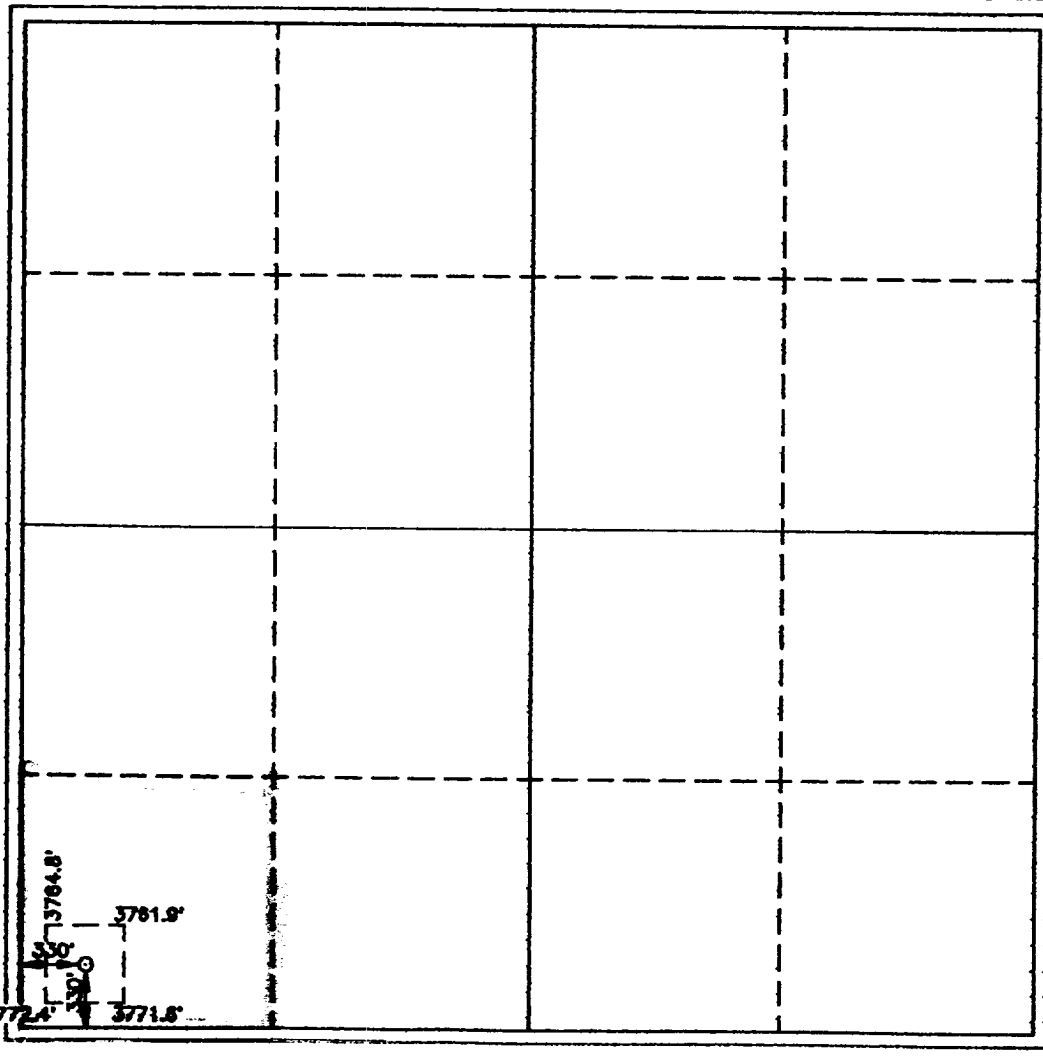
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	24	22 S	32 E		330	SOUTH	330	WEST	LEA

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	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

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

H. E. Gene Lee
Signature

H. E. Gene LEE
Printed Name

Agent
Title

4-10-94
Date

SURVEYOR CERTIFICATION

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 the best of my belief.

March 15, 1994
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. Num. 94111-0516

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239
GARY L. JONES, 7977

DRILLING PROGRAM

C. W. TRAINER
Mills Fed. #7
330' FWL & 330' FSL
Section 23-T22S-R32E
Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, C. W. TRAINER submits the following items of pertinent information in accordance with BLM requirements.

1. **The geologic surface formation is sandy alluvium. The ground elevation is 3769'.**

2. **The estimated tops of geologic markers are as follows:**

Rustler	950'
Lamar	4800'
Delaware Sand	4850'
Cherry Canyon	6050'
Brushy Canyon	7400'
Bone Springs	8750'

3. **Estimated depths at which water, oil or gas bearing formations are expected to be encountered are:**

Fresh Water	350-500'
Bell Canyon	4950'-5050'
Brushy Canyon	8450'-8550'
Bone Spring	9900'-10,000'

No other formations are expected to give up oil, gas or fresh water in measurable quantities. The fresh water will be protected by setting the 13 3/8" casing at 650' and circulating cement to the surface. The 8 5/8" casing will be set at 4550' and cement circulated. Any zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a cementing stage tool in the 5.5" production casing which will be run to TD.

4. **Proposed casing program:**

Hole Size	Interval	Csg. Size	Wt, Grade, Condition & Type
17 1/2"	0-650'	13 3/8"	New, 54.5#, J-55 ST&C R-3 0-650'
11"	0' 650'-4550'	8 5/8"	New, 24# & 32# K-55 LT&C, R-3 0-400'--32# K-55 LT&C R-3 400-2000'--24# K-55 ST&C R-3 2000-4600'--32# S-95 LT&C R3
7 7/8"	0' 4550-10150'	5 1/2"	New 17 & 20# N-80 LT&C, R-3 0-400'---20# N-80 LT&C, R-3 400-8000'---17# N-80 LT&C, R-3 8000'--10150'--20# N-80 LT&C R3

5. Pressure control equipment:

See Form 3160-3, and attached BOP diagram.

The BOP equipment shown in the diagram will consist of a double ram hydraulic preventer, and a bag-type annular preventer. Both units will be rated for 3000 psi working pressure. The pipe rams will be equivalent to whatever size drill pipe and casing is being used. Both BOP's will be nipple up on the 13 3/8" surface casing and used continuously to TD. All BOP equipment will be tested before drilling out of the surface casing. Before drilling out of the intermediate casing, the BOP's and associated closing equipment will be tested by an independent testing company to 3000#. Pipe rams will be operationaly checked each 24 hour period. Blind rams will be tested on each trip out of the hole. These tests will be noted on the daily tour sheets. A kill line and choke line will be included in the drilling spool located below the BOP. Other accessories include a rotating head, kelly cock valve, floor safety valve,and choke lines and manifold with 3000# WP rating.

6. Mud Program:

See Form 3160-3 & attached drilling program..

The well will be drilled to TD with a combination of fresh water, brine and cutbrine/starch mud system. The applicable depths and properties of this system are as follows:

From 0-650'	Fresh Water	WT:- 8.5 ppg. Vis--40 WL--NC
650-4550'	Brine water	Wt: 10 ppg Vis--29 WL--NC
4550-10150'	Cut Brine/starch	Wt:-9.0 ppg Vis--30 WL--<20cc

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Equipment:

A kelly cock valve will be kept in the drill string at all times.

A full opening drillpipe stabbing valve will be on the rig floor at all times.

A Pit volume totalizer system will be used below 8000' to monitor pit levels.

A mudlogging unit complete with H2S detector will be continuously used to monitor drilling penetration rate and hydrocarbon shows below 4600'.

8. Testing, Logging and Coring Program:

Samples:	From base of surface to TD.
DST's:	As warranted from shows.
Coring:	None expected.
Logging:	CNL-FDC from TD to Csg, GR-CNL to surface, Sonic from TD to Base of Salt.

9. Abnormal Conditions, Pressures, Temperatures, or Hazards.

No abnormal pressures, temperatures, or hazards are expected. The estimated bottom hole temperature at TD is 145 deg. F and estimated maximum bottom hole pressure is 3800 PSI. No hydrogen sulfid or other hazardous gases are expected to be encountered. No major loss of circulation zones have been reported in offset wells.

10. Anticipated starting date:

As soon as possible after approval. Drilling operations will take approx. 16 days and an additional 15 days to complete and test.

Attachment to Exhibit #1
NOTES REGARDING THE BLOWOUT PREVENTERS

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.

2. Wear ring to be properly installed in head.

3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.

4. All fittings to be flanged.

5. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.

6. All choke and fill lines to be securely anchored, especially ends of choke lines.

7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.

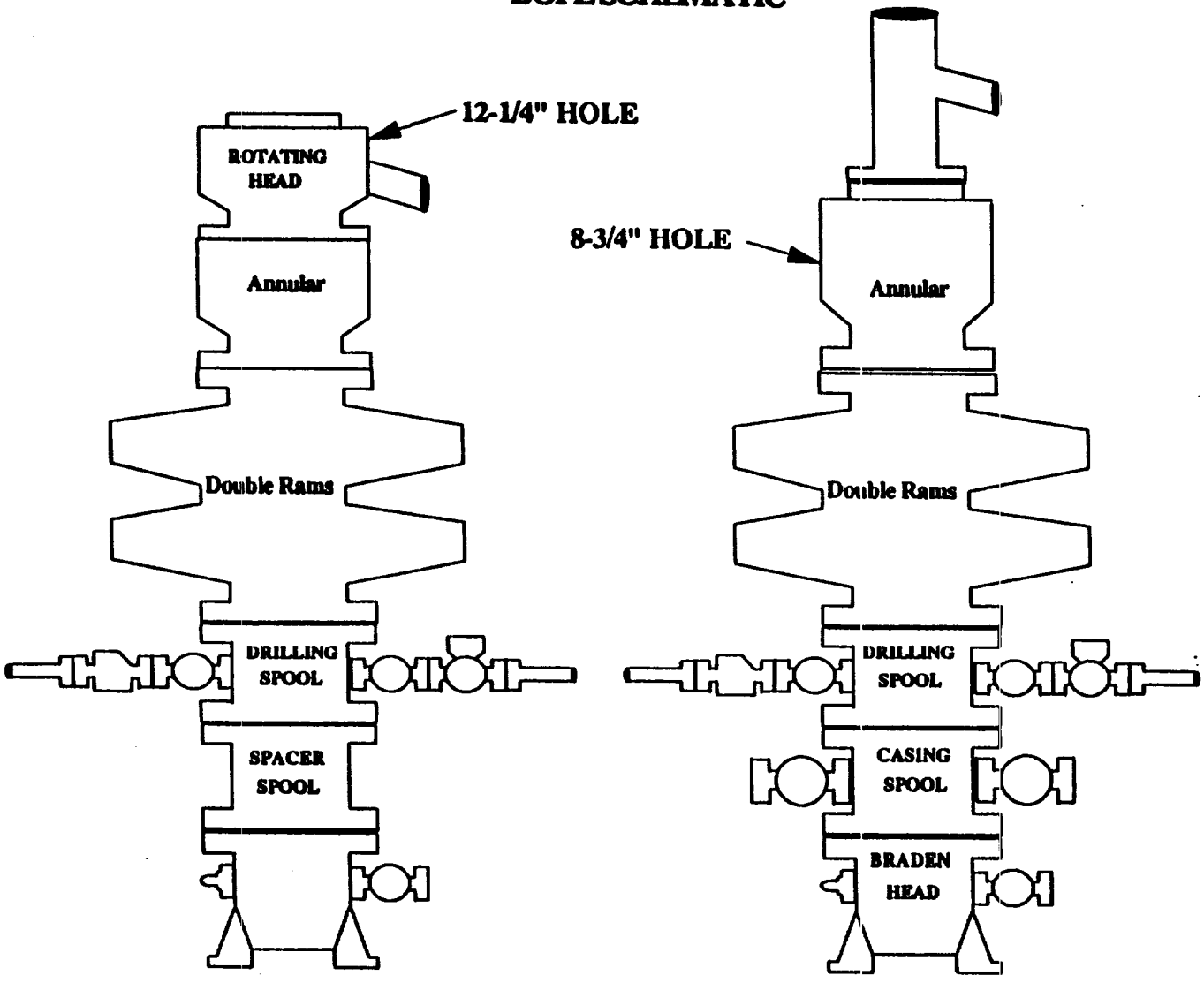
8. Kelly cock on kelly.

9. Extension wrenches and hand wheels to be properly installed.

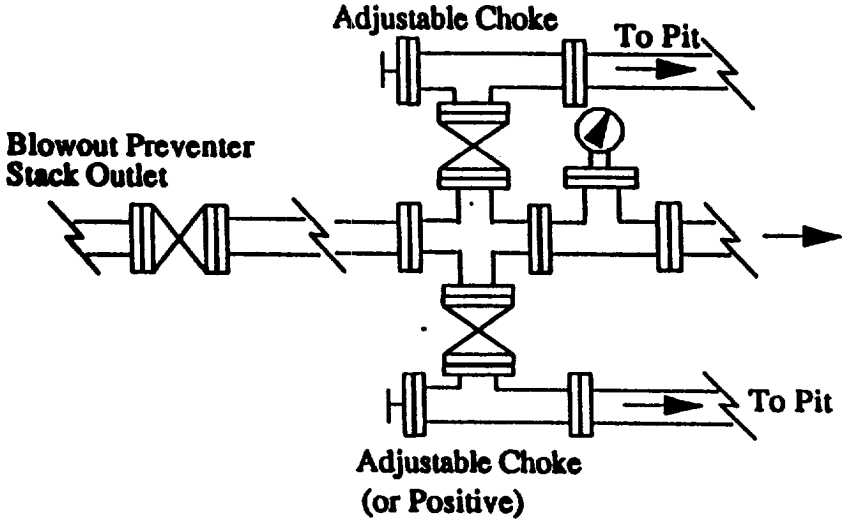
10. Blow out preventer control to be located as close to driller's position as feasible.

11. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

BOPE SCHEMATIC



Choke Manifold Requirement (3000 psi WP)



Minimum 4" Nominal choke and kill lines