30-015-27964

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

NM OIL CONS. COMMISSION
DRAWER DD
ARTESIA, NM 88210

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 15003

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: Government AB 8608

RECEIVED

2. NAME OF OPERATOR: OXY USA Inc. ✓ 16696

9. WELL NO.: 9

3. ADDRESS OF OPERATOR: P. O. Box 50250, Midland, TX 79710

MAY 13 '94

10. FIELD AND POOL, OR WILDCAT: Old Millman Ranch Bone Springs, Assoc.

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 330' FNL & 230' FEL
At proposed prod. zone: 660' FNL & 660' FEL

MT. A O. C. D. ARTESIA, OFFICE

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 48035 Sec. 10, T20S, R28E

12. COUNTY OR PARISH: Eddy

13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 11 miles NE of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	660' (BH) 230' (Surf.)	16. NO. OF ACRES IN LEASE: 1720	17. NO. OF ACRES ASSIGNED TO THIS WELL: 80
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	1320' (BH) 1750' (Surf.)	19. PROPOSED DEPTH: 6700'TVD, 6764'MD	20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3268' GR

22. APPROX. DATE WORK WILL START*: May 15, 1994

23. PROPOSED CASING AND CEMENTING PROGRAM * or top of Rustler Anhydrite

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" H40	48#	400'*	415 sx Class C (Circ. to Surface)
11"	8-5/8" K55	24# & 32#	3000'	840 sx Class C & Liteweight (Circ
7-7/8"	5-1/2" K55	15.5#	6764' MD	700 sx Class C & Liteweight (TOC at 2500')

It is proposed to directionally drill this well to a TD of 6764' MD, or 6700' TVD (100' below the base of the 1st Bone Springs Sand). The wellbore will strike the top of the 1st Bone Springs Sand at 660' FNL & 660' FEL of Sec. 10, T20S, R28E. The BH location will remain within 150' radius of the center of the quarter-quarter section.

Post ID-1
5-20-94
New Loc & APE

The Blowout Prevention Program is as follows:

1. One set of drill pipe rams (3M).
2. One set of blind rams (3M).
3. One hydril (3M).

DD-92
4-11-94

* PENDING DD APPROVAL

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 Robert P. Ellett TITLE Operations Engineer DATE April 8, 1994

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SGD.) RICHARD L. MANUS TITLE AREA MANAGER DATE MAY 9 1994

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO

*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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-27964	48035	Old Millman Ranch Bone Springs, Assoc.

Property Code	Property Name	Well Number
8608	GOVERNMENT "AB"	9

OGRID No.	Operator Name	Elevation
16696	OXY U.S.A. INC.	3268

Surface Location

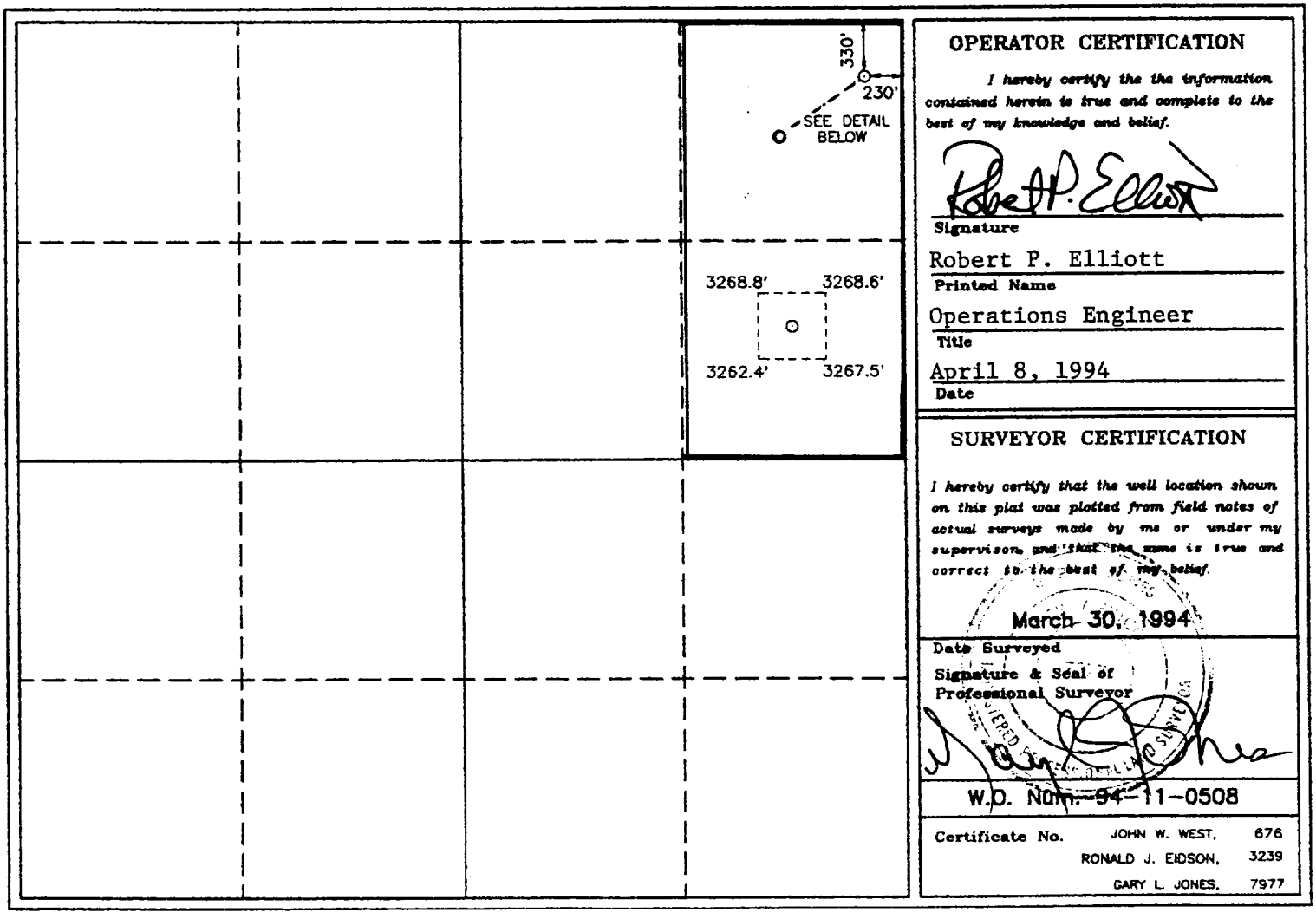
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	10	20S	28E		330	NORTH	230	EAST	EDDY

[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
A	10	20S	28E		708	North	723	East	Eddy

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			

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 the the information contained herein is true and complete to the best of my knowledge and belief.

Robert P. Elliott
Signature

Robert P. Elliott
Printed Name

Operations Engineer
Title

April 8, 1994
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 supervison, and that the same is true and correct to the best of my belief.

March 30, 1994
Date Surveyed

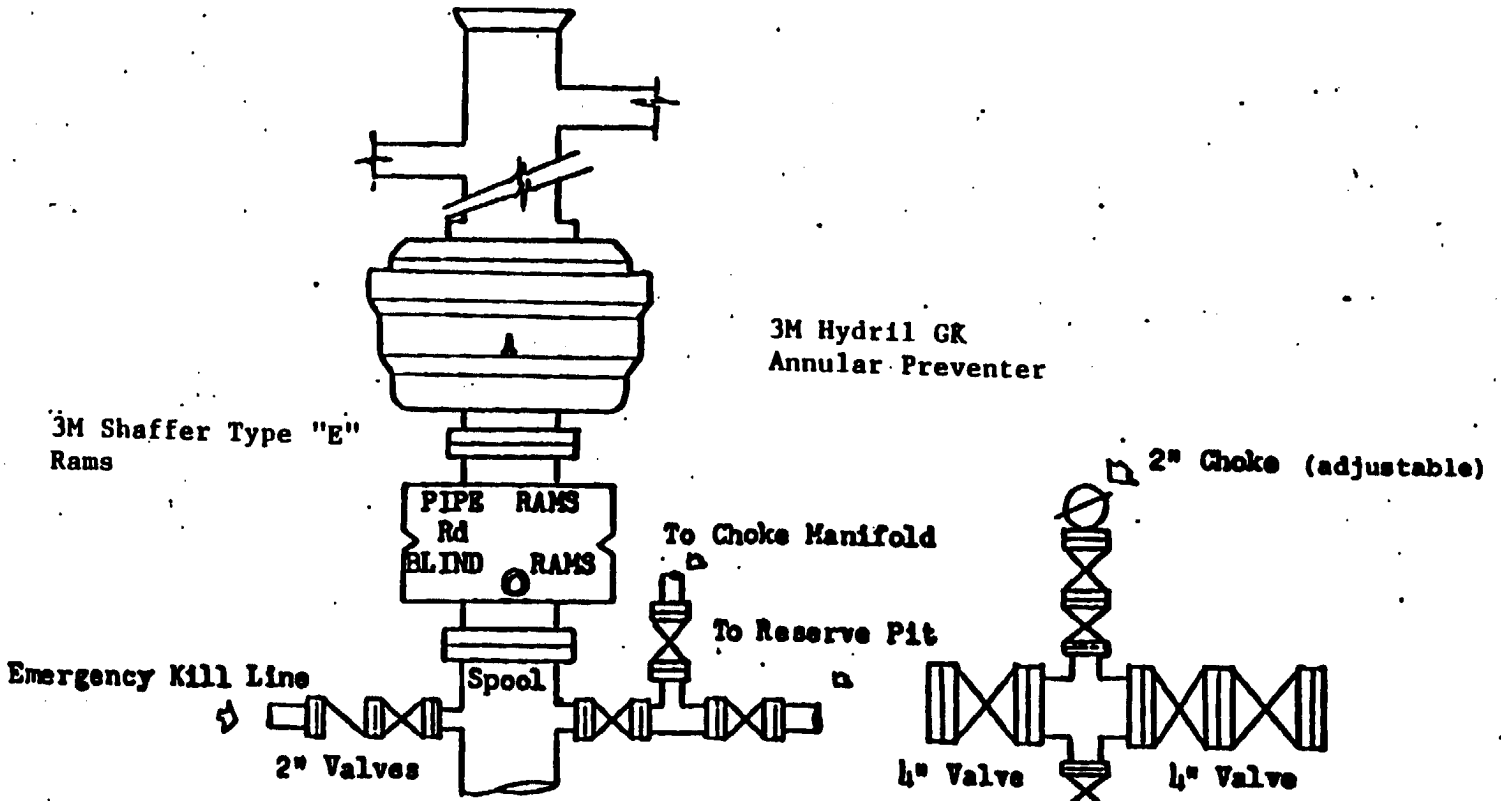
Signature & Seal of Professional Surveyor

W.O. Num. 94-11-0508

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

MCGEE DRILLING CORPORATION
BLOWOUT PREVENTOR SCHEME
RIG 1

12" 3000# Annular & BOP & Manifold



OXY USA INC.
Box 50250, Midland, TX 79710

April 5, 1994

United States Department of the Interior
Bureau of Land Management
Carlsbad Resource Area
P.O. Drawer 1778
Carlsbad, New Mexico 88220

Re: Application for Permit to Drill
OXY USA Inc.
Government AB #9
Eddy County, New Mexico
Lease No. NM 15003

Gentlemen:

OXY USA Inc. respectfully requests permission to directionally drill our Government AB #9 with the surface location 330' from the north line and 230' from the east line of Section 10, T20S, R28E, Eddy County, New Mexico, Federal Lease No. NM 15003. The well will intersect the top of the 1st Bone Springs sand at 660' FNL and 660' FEL of Sec. 10, T20S, R28E and the bottom hole displacement will be within 150' of the center of the quarter-quarter section. Due to cave/karst features in the area, this surface location was the only acceptable location on the 80 acre proration unit. The location, access road and work area have been staked. It is approximately 11 miles northeast of Carlsbad, New Mexico.

In accordance with requirements stipulated in Federal Onshore Oil and Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

I. Application for Permit to Drill:

1. Form 3160.3, Application for Permit to Drill.

2. Form C-102 Location and Acreage Dedication Plat certified by Gary Jones, Registered Land Surveyor No. 7977 in the State of New Mexico, dated March 30, 1994. Exhibit "A" attached.

3. The elevation of the unprepared ground is 3268 feet above sea level.

4. The geologic name of the surface formation is Permian Rustler.

5. Rotary drilling equipment will be utilized to drill the well to TD 6,700'(TVD), or 100' below the base of the 1st Bone Springs Sand, and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.

6. Proposed total depth is 6,700' TVD, 6764' MD.

7. Estimated tops of important geologic markers.

Seven Rivers	1,247' TVD
Upper Cherry Canyon	3,180' TVD
Bone Spring Lime	4,700' TVD
1st Bone Springs Sand	6,578' TVD
Total Depth	6,700' TVD

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Primary Objective: 1st Bone Springs Sand 6578' TVD

Secondary Objective: Delaware Sands 3180' TVD

9. The proposed casing program is as follows:

Surface: 13-3/8" OD 48# H40 ST&C new casing

Intermediate: 8-5/8" OD 24 & 32# K55 N80 ST&C new casing

Production: 5-1/2" OD 15.5# K-55 LT&C new casing

10. Casing setting depth and cementing program:

A. 13-3/8" OD surface casing set at 400', or the top of the Rustler Anhydrite, in 17-1/2" hole. Circulate cement with 415 sacks class "C" with 2% $CaCl_2$ and 0.25 lb/sk Cello-Seal. If cement does not circulate, determine the top of cement by temperature survey then finish cementing to the surface through 1" in the annulus using Class "C" with 2% $CaCl_2$.

B. 8-5/8" OD intermediate casing set at 3000' in 11" hole. Circulate cement with a mutistage job as follows: (DV tool @ 1500')

Stage 1 - 250 sx Liteweight cement with 6% Bentonite, 5% salt and 0.25 #/sk Cello-Seal followed by 200 sx class C with 2% $CaCl_2$.

Stage 2 - 340 sx Liteweight cement with 6% Bentonite and 5% salt followed by 50 sx class C with 2% $CaCl_2$.

If hole conditions will allow, this string may be cemented to surface convetionally without using a DV tool.

If cement does not circulate, a temperature log will be run to find the TOC, and the well will be topped-out using a 1" tubing string and class C cement with 2% $CaCl_2$.

C. 5-1/2" OD production casing set @ 6700' TVD, 6764' MD. Cement with 525 sx of Liteweight cement with 6% Bentonite + 0.25#/sx Cello-Seal + 3#/sx Hi-Seal 2 followed by 175 sx of class C with 5 #/sx Fumed Silica for compressive strength enhancement and low fluid loss additives.

Estimated top of cement is 2,500'.

Note: Cement volumes may need to be adjusted to hole caliper.

11. Pressure Control Equipment

0' - 400'	None
400' - 3000'	12" 3000# ram type preventers with one set blind rams and one set pipe rams.
3000' - 6700'	10" 3000# ram type preventers with one set blind rams and one set pipe rams and a 3000# annular type preventer. See attached exhibit. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system.

A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

After setting the 8-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 3000 psi. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log. The BOPs will be maintained ready for use until drilling operations are completed.

BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.

12. Mud Program:

0′ - 400′	Fresh water spud mud. Using lime to control pH (9 to 10). Paper for seepage. Vis 33-36 sec.
400′ - 1500′	Fresh water/native mud. Wt. 8.9-9.2 ppg, vis 32-34 sec, pH 10-10.5 with lime. Paper for seepage control.
1500′ - 3000′	Fresh water/native mud. Wt. 9.6-9.8 ppg, vis 32-34. Add 10 lb brine as make-up to avoid excessive washouts in salt stringers. Lime for pH control (10-10.5). Paper for seepage.
3000′ - 6000′	Fresh water. Wt. 8.4 ppg, vis 26-28. Use lime to control pH and paper for seepage.

6000′ - 6700′ Mud up with a LSND FW gel system with the following characterstics:
Wt. 8.6-8.8 ppg
Vis. 32-34 sec.
WL 10 cc or less

13. Testing, Logging and Coring Program:

A. Testing program: None planned.

B. Mud logging program: Two man unit from 3000′ to TD.

C. Electric logging program: CNL-LDT-Cal-GR, DLL-Cal-GR.

D. Coring program: Possible sidewall cores.

14. No abnormal temperatures, pressures or H2S gas are anticipated.

15. Anticipated starting date is May 15, 1994. It should take approximately 20 days to drill the well and another 7-10 days to complete.

16. A directional well plan is attached. KOP - 3582′ TVD, build 3 deg/100′, max angle 12 degrees, hold 12 degrees to TD.

17. The Multi-Point Surface Use & Operation Plan is attached.

18. If the Bureau of Land Management needs additional information to evaluate this application, please advise.

Very truly yours,

Robert P. Elliott
Operations Engineer
Western Region

RPE
Attachments