

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.
NMSF-078872A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A
6371

8. FARM OR LEASE NAME, WELL NO.
Bolack 15 2 E

9. API WELL NO.
30-045-30423

10. FIELD AND POST OFFICE
Bash Dakota

11. SEC. T. R., M., OR BLK. AND SURVEY OR AREA
15-27n-11w NMPM

12. COUNTY OR PARISH
San Juan

13. STATE
NM

17. NO. OF ACRES ASSIGNED TO THIS WELL
320.00

19. PROPOSED DEPTH
6,860'

20. ROTARY OR CABLE TOOLS
Rotary

22. APPROX. DATE WORK WILL START*
Mar. 15, 2001

1a. TYPE OF WORK
DRILL DEEPEN

b. TYPE OF WELL
OIL WELL GAS WELL OTHER
SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
Marathon Oil Company *14021*

3. ADDRESS AND TELEPHONE NO.
P. O. Box 552, Midland, Tx. 79702-0552 **(915) 687-8357**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface **1100' FNL & 1650' FWL**
At proposed prod. zone **Same**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
12 air miles S of Bloomfield

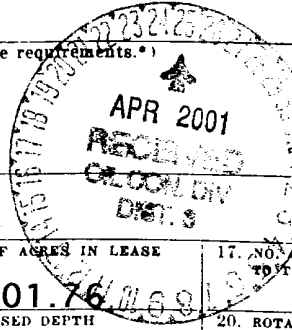
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)
990'

16. NO. OF ACRES IN LEASE
2,401.76

17. NO. OF ACRES ASSIGNED TO THIS WELL
319.50

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
110'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6,293' ungraded



23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	J-55 8-5/8"	24	325'	≈270 cu. ft. & to surface
7-7/8"	K-55 4-1/2"	11.6	6,860' —	≈2,394 cu. ft. & to surface

This APD is also serving as a BLM road right-of-way application to cross E2SE4 and S2NE4 15-27n-11w. Length = 5280' Width = 25' Acres = 3.03.

Only other well in quarter-quarter is also a Marathon well.

On sited with Danny Randall on 9-26-00.

Archaeology consultant report #: CASA 00-101

This section is subject to technical and procedural review pursuant to 43 CFR 3135.3 and 43 CFR 3105.4.

cc: BLM, Byrd, Donaghey, Fletcher, OCD (via BLM)

APR 16 2001

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 *R. E. Wood* TITLE Consultant (505) 466-8120 DATE 11-7-00

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval 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 conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY *Is/ Lee Ottent* TITLE _____ DATE _____

*See Instructions On Reverse Side

APR 16 2001

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-102
 Revised February 21, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-30423		² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 6371	⁵ Property Name BOLACK 15		⁶ Well Number 2E
⁷ OGRID No. 14021	⁸ Operator Name MARATHON OIL COMPANY		⁹ Elevation 6293

¹⁰ Surface Location

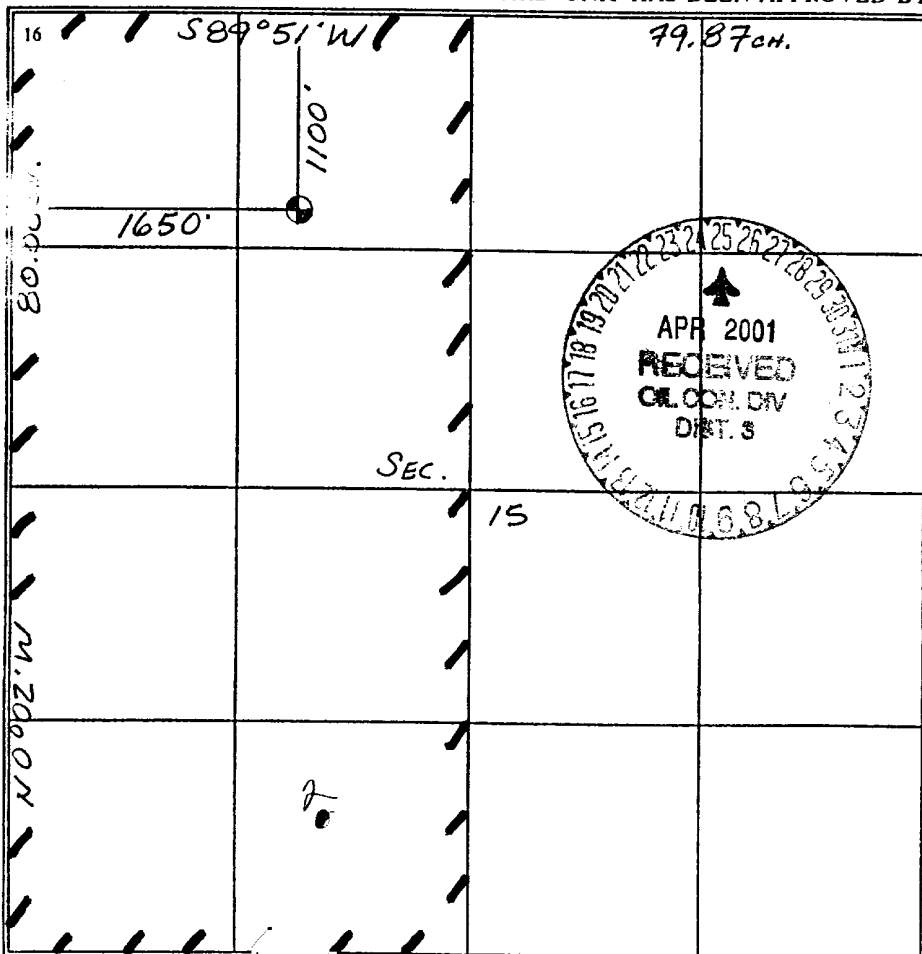
UL. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	15	27 N	11 W		1100	North	1650	West	San Juan

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

¹² Dedicated Acres 320 W	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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



¹⁷ OPERATOR CERTIFICATION

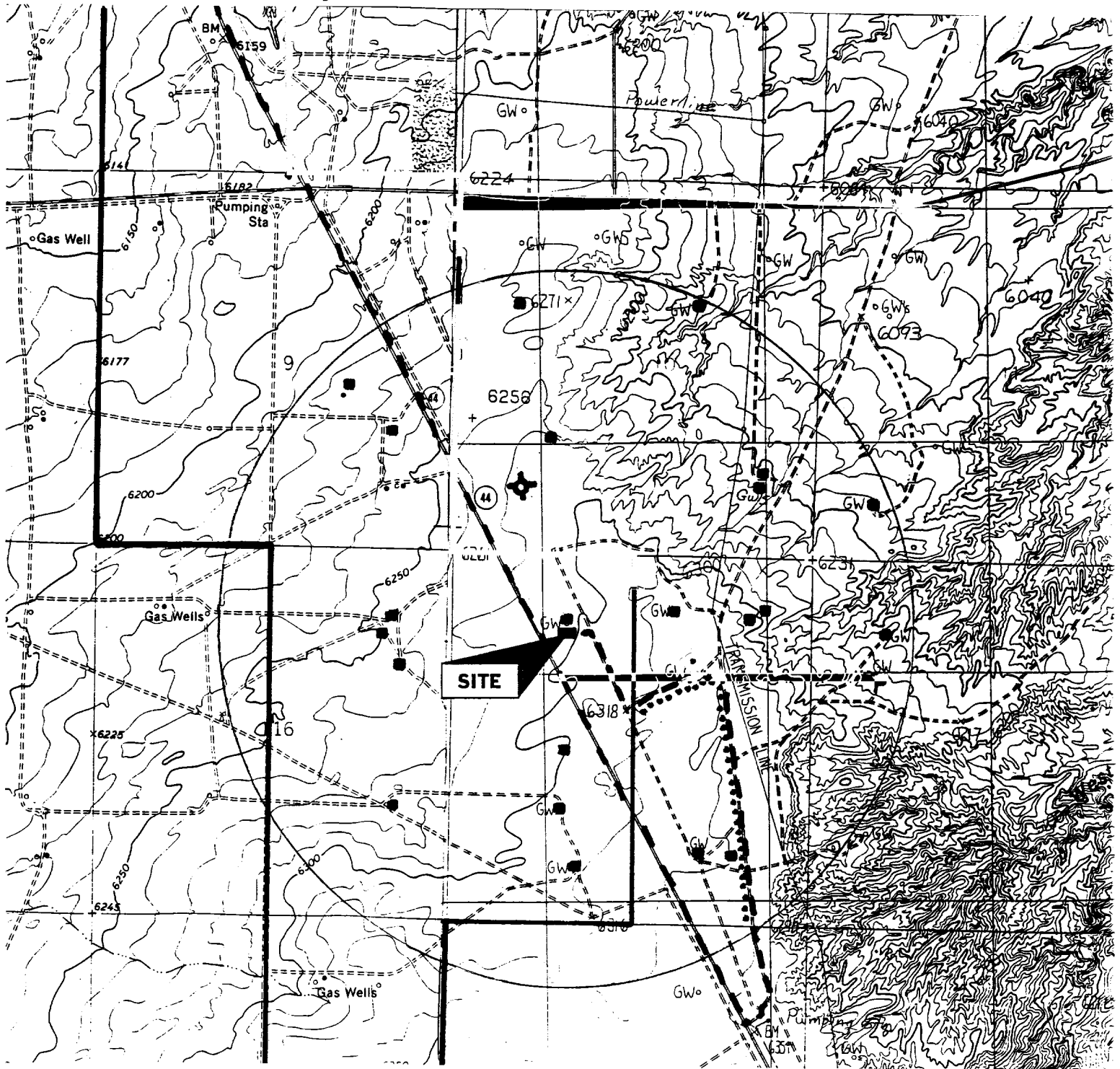
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Brian Wood
 Signature
 BRIAN WOOD
 Printed Name
 CONSULTANT
 Title
 NOV. 7, 2000
 Date

¹⁸ 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.

15 SEP 2000
 Date of Survey
William H. Hinkle II
 Signature
 WILLIAM H. HINKLE II
 PROFESSIONAL SURVEYOR
 #8466
 Certificate Number
 8466



PROPOSED WELL: ■
 EXISTING WELL: ●
 P&A WELL: ⊕
 LEASE: ┌
 EXISTING ROAD: - - -
 BLM ROAD R/W APPLN:

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) An 8-5/8" x 11" 2,000 pound double ram BOP system with a choke manifold and mud cross will be tested to 200 psi and then to 2000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 30 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure is \approx 2,800 psi. BOP and mud system will control pressure.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	<u>GL Setting Depth</u>
12-1/4"	8-5/8"	24	J-55	Used	8rd, ST&C	325'
7-7/8"	4-1/2"	11.6	K-55	Used	8rd, LT&C	6,860'

Surface casing will be cemented to surface with \approx 270 cu. ft. (\approx 230 sx) Class B Neat + 1/4 lb/sk cello-flake + 2% CaCl₂. Yield = 1.27 cu. ft./sk. Weight = 15.2 lb/gal.

Marathon Oil Company
Bolack 15 2 E
1100' FNL & 1650' FWL
Sec. 15, T. 27 N., R. 11 W.
San Juan County, New Mexico

PAGE 4

Conventional centralizers will be set on the bottom two joints and every fourth joint to surface.

Production casing hole will be cemented to surface as follows. DV @ 4,000'.

First stage Lead will be cemented to 4,000' with 828 cu. ft. (600 sx) 50:50 Poz + 5 lb/sk gilsonite + 2% gel + 1/4 lb/sk cello-flake, dispersant, and FLA. Yield = 1.38 cu. ft./sk. Weight = 13.5 lb/gal. Excess = 25%.

Second stage Lead will be cemented to surface with 1440 cu. ft. (500 sx) Class B or H + 10 lb/sk gilsonite + 4% gel + 1/2 lb/sk cello-flake + 3% Econolite. Yield = 2.88 cu. ft./sk. Weight = 11.4 lb/gal. Excess = 50%

Second stage Tail will be cemented to 3,600' with 126 cu. ft. (100 sx) Class B or H Neat + 1/4 lb/sk cello-flake + 2% CaCl. Yield = 1.26 cu. ft./sk. Weight = 15.2 lb/gal. Excess = 10%.

Production casing may be cemented with an alternative foam cement.

First stage Lead will be cemented to 200' with 1320 cu. ft. (1,740 cu. ft. when foamed) or 1,000 sx 50:50 Poz + 2% gel + 2% Diacel LWL 0.094 gal/sk foaming agent. Yield = 1.32 cu. ft./sk (1.74 when foamed). Weight = 13.8 lb/gal (10.5 when foamed). Excess = 15%.

First stage Tail will be cemented to 6,000' with 146 cu. ft. (116 sx) Class B or H Neat + 1/4 lb/sk cello-flake + 2% CaCl. Yield = 1.26 cu. ft./sk. Weight = 15.2 lb/gal.

Cap will be cemented to surface with 75 cu. ft. (60 sx) Class B or H with 2% CaCl₂.

Conventional centralizers will be set on the bottom two joints, every second joint to 6,100' and every fourth joint from 2,000' to surface.