

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. LC-064391-B		
2. NAME OF OPERATOR Marathon Oil Company 14021			6. IF INDIAN, ALLOTTEE OR TRIBE NAME INDIAN HILLS UNIT		
3. ADDRESS AND TELEPHONE NO. P.O. Box 552 Midland, TX 79702			7. UNIT AGREEMENT NAME INDIAN HILLS UNIT 18		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 409' FSL & 2324' FEL At proposed prod. zone 409' FSL & 2324' FEL Unit 0			8. FARM OR LEASE NAME, WELL NO. INDIAN HILLS UNIT 18		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 15 MILES NW OF CARLSBAD			9. API WELL NO. 30-015-30564		
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilling unit line, if any) 409'			10. FIELD AND POOL OR WELD CAT INDIAN BASIN - UPPER PENN 79040		
16. NO. OF ACRES IN LEASE 640			11. SEC., T., R., M. OR B/LK. AND SURVEY OR AREA SEC. 20 T-21-S, R-24-E		
17. NO. OF ACRES ASSIGNED TO THIS WELL *			12. COUNTY OR PARISH EDDY		
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 52'			13. STATE NM		
19. PROPOSED DEPTH 7800'			20. ROTARY OR CABLE TOOLS ROTARY		
21. ELEVATIONS (Show whether DEPT, GR, etc.) 3751' KB, 3739' GL			22. APPROX DATE WORK WILL START 1/15/99		

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	K-55, 9 5/8"	36"	1200'	800 CIRCULATE Post ID-1
8 3/4"	L-80, K-55, 7"	26# & 23#	7800'	945 CIRCULATE 1-22-99 API & Loc

WELL IS A PROPOSED INDIAN BASIN UPPER PENN GAS TEST. CURRENT POOL RULES REQUIRE 640 ACRE SPACING BUT MARATHON HAS REQUESTED A POOL RULE CHANGE TO 320 ACRE SPACING.

THIS WELL SHALL REQUIRE ADMINISTRATIVE APPROVAL FOR A NON-STANDARD LOCATION.

PROPOSED WELL SHALL UTILIZE THE EXISTING DRILLSITE OF THE INDIAN HILLS UNIT #2 (409' FSL & 2376' FEL), WHICH SHALL BE PLUGGED PRIOR TO SPUDDING THE I.H.U. #18.

NSL-
Approved 1/5/99

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.

21. SIGNED Walter Duma TITLE DRILLING SUPV. DATE 1/1/99

(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:

(DRILL. SGD.) ARMANDO A. LOPEZ

Acting

Assistant Field Office Manager,
Lands and Minerals

JAN 11 1999

APPROVED BY _____ TITLE _____ DATE _____

*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.

RECEIVED

DEC 02 '98

BLM
ROSWELL, NM

2000-1998

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

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

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

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
		INDIAN BASIN - UPPER PENN GAS
Property Code	Property Name	Well Number
	INDIAN HILLS UNIT	18
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3739'

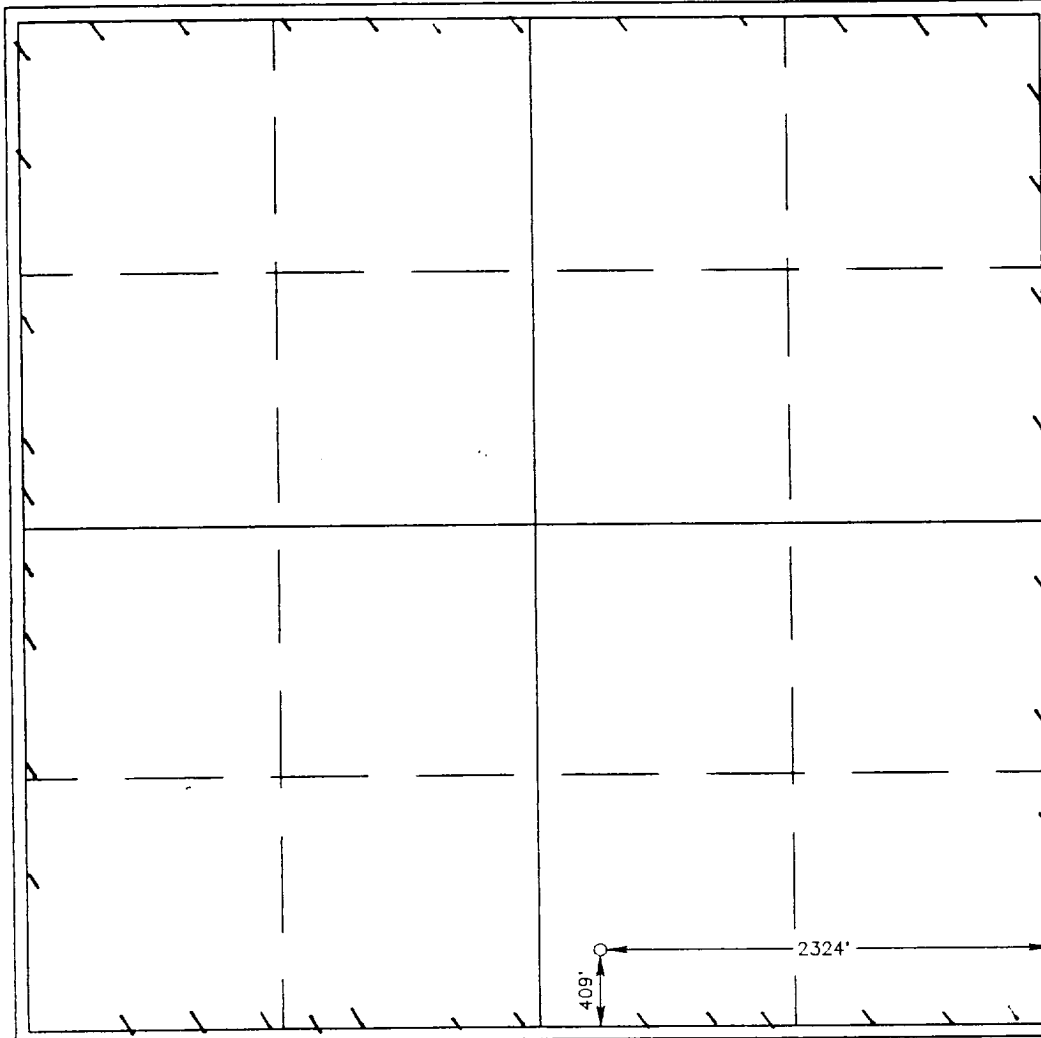
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	20	21 S	24 E		409	SOUTH	2324	EAST	EDDY

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.						
640									

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.

Walter J. Longmire
Signature

R. J. LONGMIRE

Printed Name

DRILLING SUPERINTENDENT

Title

DEC. 1, 1998

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.

NOVEMBER 2, 1998

Date Surveyed CDG

Signature of Professional Surveyor

Ronald A. Edson
NEW MEXICO
Professional Surveyor
4-06-98
98-11-1372

Certificate No. RONALD A. EDSON 3239
GARY EDSON 12641

2. WELL CONTROL SYSTEMS

A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accomodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit

Auxillary equipment added as appropriate includes:

- a. annular preventor _____
- b. rotating head _____
- c. mud- gas separator _____
- d. flare line and means of ignition _____
- e. remote operated choke _____

B. Communication

The rig contractor will be required to have two-way communication capability. Marathon Oil Company will have either land-line or mobile telephone capabilities.

C. Mud Program

The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers when appropriate will minimize hazards when penetrating H₂S bearing zones.

D. Drill Stem Test intervals are as follows:

DST No. 1	_____ ft. to _____ ft.
DST No. 2	_____ ft. to _____ ft.
DST No. 3	_____ ft. to _____ ft.

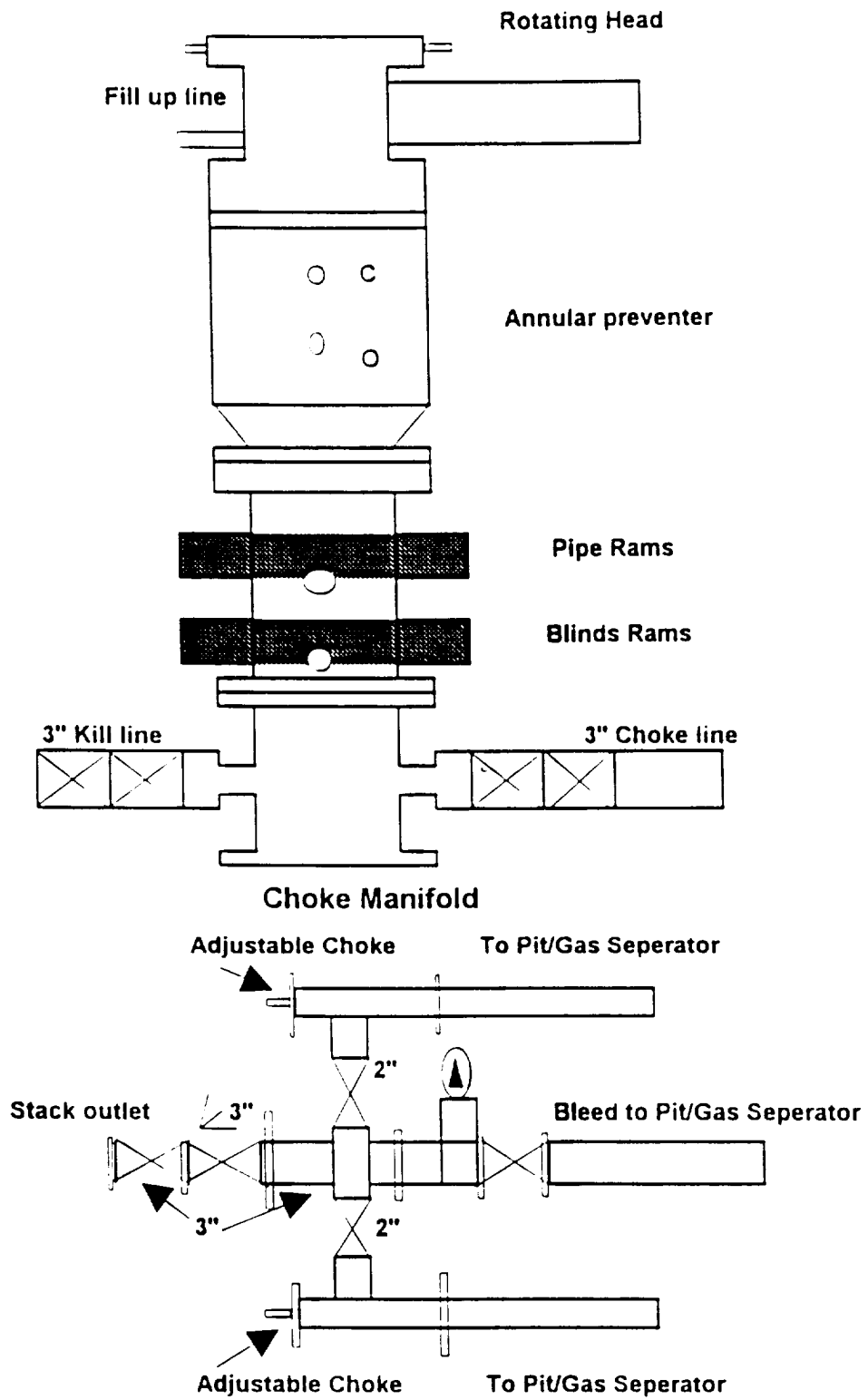
Drill Stem Testing Safety Rules are attached.

III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached.

- 1. Rig orientation
- 2. Terrain
- 3. Briefing areas
- 4. Ingress and egress
- 5. Pits and flare lines
- 6. Caution and danger signs
- 7. Wind indicators and prevailing wind direction

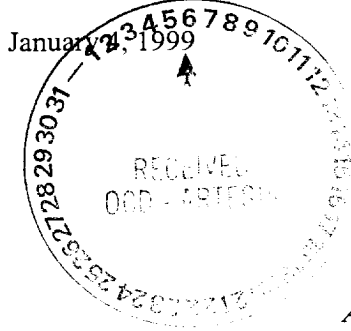
Production Stack





NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131



Marathon Oil Company
P. O. Box 552
Midland, Texas 79702-0552
Attention: Walter J. Dueease

Administrative Order NSL-4191

Dear Mr. Dueease:

Reference is made to the following: (i) your application dated December 14, 1998, which was received on December 30, 1998; (ii) the records of the Division in Santa Fe; and (iii) Division Order No. R-9922-D, issued in Case No. 12006 dated December 7, 1998, which adjusted the Upper-Pennsylvanian pool boundaries in the area subject to your application: all concerning Marathon Oil Company's request for a non-standard oil/gas well location within a 314.54-acre standard spacing and proration unit for the Indian Basin-Upper Pennsylvanian Associated Pool comprising Lots 1, 2, 7, and 8 and the SE/4 (E/2 equivalent) of Section 20, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.

The subject application has been duly filed under the provisions of Rule 104.F of the Rules and Regulations of the New Mexico Oil Conservation Division ("Division").

By the authority granted me under the provisions of: (i) Rule 2(c) of the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool," as promulgated by Division Order Nos. R-9922, R-9922-A, R-9922-B, R-9922-C, and R-9922-D and the "General Rules and Regulations for the Associated Oil and Gas Pools of Northwest New Mexico and Southeast New Mexico," as promulgated by Division Order No. R-5353, as amended; and, (ii) Division General Rule 104.F(2), the following described well, to be drilled at an unorthodox oil/gas well location within the Indian Basin-Upper Pennsylvanian Associated Pool is hereby approved:

**Indian Hills Unit Well No. 18
409' FSL - 2324' FEL (Unit O) of Section 20.**

It is our understanding that this well is to be a replacement for Marathon Oil Company's Indian Hills Unit Well No. 2 (**API No. 30-015-10618**), located in Unit "O" of Section 20, which was drilled by Ralph Lowe in 1965 and produced from the Upper-Pennsylvanian interval until 1980 when this well was temporarily abandoned.

Further, Marathon Oil Company will assure that any and all wells in Section 20 producing from the Indian Basin-Upper Pennsylvanian Associated Pool are being operated pursuant to the requirements of Division Order No. R-9922-D.

Sincerely,

Lori Wrotenbery
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Artesia
U. S. Bureau of Land Management - Carlsbad