

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]  
 [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD
- Check One Only for [B] or [C]  
 [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR
- [D] Other: Specify \_\_\_\_\_

RECEIVED  
 NOV 21 11:19:42  
 OIL CONSERVATION DIVISION

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate and complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

Jerry Fletcher  
 Print or Type Name

*Jerry Fletcher*  
 Signature

Engineer Tech.  
 Title

11/15/01  
 Date

\_\_\_\_\_  
 e-mail Address

**KELLAHIN AND KELLAHIN**

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285  
TELEFAX (505) 982-2047

W. THOMAS KELLAHIN\*

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION  
RECOGNIZED SPECIALIST IN THE AREA OF  
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

November 21, 2001

**HAND DELIVERED**

Mr. Michael E. Stogner  
Oil Conservation Division  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

**RE: NMOCD Reference No. pKRVO-105420033**  
**Indian Hills Unit Well No. 34**  
**1416 feet FNL & 1607 feet FWL NMPM,**  
**N/2 Section 28, T21S, R24E**  
Administrative Application of Marathon Oil Company for Approval  
of an Unorthodox Gas Well Location, Eddy County, New Mexico

Dear Mr. Stogner:

**Request**

On behalf of Marathon Oil Company ("Marathon") and in accordance with your letter dated August 6, 2001, I am resubmitting Marathon's administrative application for approval of an unorthodox gas well location ("NSL") for Marathon Oil Company's Indian Hills Unit Well No. 34.

This well's primary target is the Indian Basin Upper Pennsylvanian Associated Pool ("The Associated Pool") and its secondary target is the Indian Basin-Morrow Gas Pool. Both pools have special rules and regulations requiring, among other things, 320-acre spacing units (GPU) and wells to be located not closer than 330 feet to any interior governmental quarter-quarter section line.

The well is proposed to be dedicated to the N/2 of Section 34 and is to be located in Unit F at a point 287 feet from the west line and 96 feet from the north line of Unit F.

### **Infill Well**

Indian Hills Unit Well No. 34 will also be the second well within the NW/4 of a 320-acre unit consisting of the N/2 of Section 34 ("GPU") dedicated to the Associated Pool. The first well is the Indian Hills Unit Well No. 10 located in Unit E and approved by Administrative Order NSL-4638-D (copy enclosed).

The rules for the Associated Pool allow for multiple wells provided that no more than one well per 80-acre tract shall be drilled or produced on a standard proration unit. See Rule 2.

The pool rules do not require that the 80-acre tract be oriented in the same manner as the 320-acre GPU. Accordingly, Indian Hills Unit Well No. 34 qualifies as an "infill" well for this pool.

### **Previous Filing**

Marathon's original application was dated February 16, 2001. By letter dated March 16, 2001, you informed Marathon that you could not find Division NSL approvals for the Indian Hills Unit Well No. 10 (Unit E-N/2 dedication) and requested supplemental information. In addition, further review disclosed that the Indian Hills Unit Well No 20 (Unit J-S/2 dedication) did not have NSL approval.

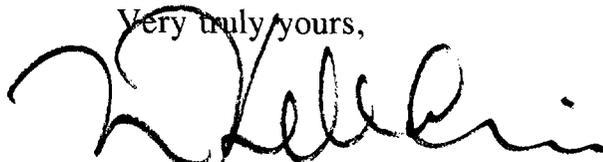
By letter dated August 6, 2001, you returned Marathon's NSL application for the Indian Hills Unit Well No. 34 because more than 30-days had expired without Marathon providing the required supplemental information.

### **Reasons for Request**

(1) Marathon's NSL applications for the Indian Hills Unit Wells No. 10 and 20 have now been issued. See NSL-4638(D) and NSL-4215-A (SD) attached.

(2) The NSL is for topographical reasons and is still geologically suitable. See Marathon Letter dated November 18, 2001. Enclosed.

Very truly yours,



W. Thomas Kellahin

fcx: OCD-Artesia

Attn: Tim Gum

fcx: Marathon Oil Company

Attn: Steven F. Millican



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Jennifer A. Salisbury**

Cabinet Secretary

**Marathon Oil Company**

**P. O. Box 552**

**Midland, Texas 79702-0552**

**Attention: Jerry Fletcher**

March 16, 2001

**Lori Wrotenbery**

Director

**Oil Conservation Division**

**Re:** *Application dated February 16, 2001 for an exception to Rule 2 (b) of the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool", as promulgated by New Mexico Oil Conservation Division ("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, for an infill well to be drilled at an unorthodox location within an existing 320-acre lay-down spacing and proration unit comprising the N/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico*

Dear Mr. Fletcher:

I was in the process of preparing the Division's official administrative order per your request and could not find a reference to a previous order approving Marathon's unorthodox location within this 320-acre unit for the Indian Hills Unit Well No. 10 (API No. 30-015-30571), located 2080 feet from the North line and 660 feet from the West line (Unit E) of Section 28. I realize that this is a trivia matter but such information included in an order serves to complete the regulatory picture surrounding that particular unit of production. It also aids the OCD in double checking that all wells within a spacing unit meet the proper regulatory requirements, this in turn assures that offsetting mineral interests are being protected against unlawful drainage by those operators who choose to ignore such set-back requirements. When such unlawful drainage is brought to our attention, the OCD can then take whatever corrective action is necessary.

Further, the Indian Basin-Upper Pennsylvanian Associated Pool is subject to the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool", as promulgated by New Mexico Oil Conservation Division ("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, not the statewide rules as you referenced. Also, these rules require wells to be located no closer than 660 feet to the outer boundary of the proration and spacing unit, not a lease line. This helps to assure orderly development of a reservoir, also there are so many small tracts of separately owned lands in New Mexico that require communitization agreements thereby making the enforcement of such a "lease line" set-back requirement virtually useless.

Again I apologize for this added delay for what seems like such a small bit of unnecessary information. Please fax a copy of the Division's administrative order or hearing order, whichever is applicable, that authorized the location exception for the Indian Hills Unit Well No. 10 to (505) 476-3471. Thank you.

Sincerely,

Michael E. Stogner

Chief Hearing Officer/Engineer

LW/MES/kv

cc: New Mexico Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad  
U. S. Bureau of Land Management - Roswell  
W. Thomas Kellahn, Legal Counsel for Marathon Oil Company - Santa Fe



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

August 6, 2001

**Marathon Oil Company**  
**P. O. Box 552**  
**Midland, Texas 79702-0552**

**Attention: Jerry Fletcher**

**Re:** *Application dated February 16, 2001 for an exception to Rule 2 (b) of the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool", as promulgated by New Mexico Oil Conservation Division ("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, for an infill well to be drilled at an unorthodox location within an existing 320-acre lay-down spacing and proration unit comprising the N/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico*

Dear Mr. Fletcher:

On March 16, 2001, I sent a letter requesting additional information to support Marathon Oil Company's application dated February 16, 2001 (*Division application reference No. pKRV0-105430033*). To date I have not received a reply. This bureau has recently enacted a policy whereby any incomplete administrative filing older than 30 days is to be withdrawn and returned. This new policy, as I understand, will better serve our customers and help assure a quicker turn around time by this bureau on administrative filings.

In order to fully comply with this policy, I am withdrawing your application and returning it to you at this time. This action will unfortunately require Marathon to cease producing any well that does not have proper authorization; this would include all wells not having an exception to the well location provisions.

Thank you for your understanding and cooperation.

Sincerely

Michael E. Stogner  
Chief Hearing Officer/Engineer

cc: New Mexico Oil Conservation Division – Artesia  
W. Thomas Kellahin, Legal Counsel for Marathon Oil Company - Santa Fe



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

August 13, 2001

Lori Wrotenbery  
Director  
Oil Conservation Division

**Marathon Oil Company**  
c/o W. Thomas Kellahin  
P. O. Box 2265  
Santa Fe, New Mexico 87504-2265

Telefax No. (505) 982-2047

*Administrative Order NSL-4215-A (SD)*

Dear Mr. Kellahin:

Reference is made to the following: (i) your initial application filed with the New Mexico Oil Conservation Division ("Division") on behalf of the operator, Marathon Oil Company ("Marathon") on July 23, 2001 (*Division application reference No. pKRV0-120540431*); (ii) your telephone conversation with Mr. Michael E. Stogner, Engineer/Chief Hearing Officer with the Division in Santa Fe on Monday, August 13, 2001; and (iii) the Division's records in Santa Fe, including the file on Division Administrative Order NSL-4215, dated February 18, 1999: all concerning Marathon's request for an exception to Rule 2 (b) of the "*Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", as promulgated by New Mexico Oil Conservation Division ("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, for an existing infill well that was inadvertently drilled at an unorthodox well location within an existing 320-acre lay-down spacing and proration unit comprising the S/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.

This unit is currently dedicated to Marathon's Indian Hills Unit Well No. 19 (**API No. 30-015-30572**), located at an unorthodox location (approved by Division Administrative Order NSL-4215) 1400 feet from the South line and 1248 feet from the West line (Unit L) of Section 28.

The subject application has been duly filed under the provisions of Division Rule 104.F and Rule 2 (c) of the Division's associated pool rules.

By the authority granted me under the provisions of Division Rule 104.F (2) and the applicable provisions of the special rules governing the Indian Basin-Upper Pennsylvanian Associated Pool the following described well located at an unorthodox infill location within this 320-acre unit is hereby approved:

Administrative Order NSL-4215-A(SD)  
Marathon Oil Company  
August 13, 2001  
Page 2

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**Indian Hills Unit Well No. 20  
2250' FSL & 1730' FEL (Unit J) of Section 28  
(API No. 30-015-30658).**

Marathon is hereby authorized to simultaneously dedicate production attributed to the Indian Basin-Upper Pennsylvanian Associated Pool (33685) from its existing Indian Hills Unit Wells No. 19 and 20. Furthermore, Marathon is permitted to produce the allowable assigned the subject 320-acre spacing and proration unit from both wells in any proportion.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,



Lori Wrotenbery  
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad  
File: NSL-4215



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

September 4, 2001

**Lori Wrotenbery**  
Director  
Oil Conservation Division

**Marathon Oil Company**  
c/o W. Thomas Kellahin  
P. O. Box 2265  
Santa Fe, New Mexico 87504-2265

*Administrative Order NSL-4638 (SD)*

Dear Mr. Kellahin:

Reference is made to the following: (i) your application dated August 15, 2001; and (ii) the records of the New Mexico Oil Conservation Division ("Division") in Santa Fe: all concerning Marathon Oil Company's ("Marathon") belated request for an exception to Rule 2 (b) of the "*Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", as promulgated by New Mexico Oil Conservation Division ("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, for an unorthodox location within an existing 320-acre lay-down spacing and proration unit comprising the N/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.

This unit is currently simultaneously dedicated to Marathon's: (i) Indian Hills Unit Well No. 10 (API No. 30-015-30571), located at an unorthodox location 2080 feet from the North line and 660 feet from the West line (Unit E) of Section 28; and (ii) Indian Hills Unit Well No. 17 (API No. 30-015-30661), located at a standard location 660 feet from the North line and 2220 feet from the East line (Unit B) of Section 28.

The subject application has been duly filed under the provisions of Division Rule 104.F and Rule 2 (c) of the Division's associated pool rules.

By the authority granted me under the provisions of Division Rule 104.F (2) and the applicable provisions of the special rules governing the Indian Basin-Upper Pennsylvanian Associated Pool the above-described unorthodox gas well location for the Indian Hills Unit Well No. 10 is hereby approved.

Marathon is hereby authorized to simultaneously dedicate production attributed to the Indian Basin-Upper Pennsylvanian Associated Pool from both the existing Indian Hills Unit Wells No. 10 and 17. Furthermore, Marathon is permitted to continue producing the allowable assigned the subject 320-acre spacing and proration unit from both wells in any proportion.

Administrative Order NSL-4638(SD)  
Marathon Oil Company  
September 4, 2001  
Page 2

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Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Wrotenbery" followed by a large, stylized flourish or set of initials.

Lori Wrotenbery  
Director

LW/MES/kv

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



P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

November 13, 2001

Mr. Michael Stogner  
Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, New Mexico 87504

***RE: Indian Hills Unit Well No. 34 Unorthodox Location  
1416' FNL & 1607' FWL  
Section 28, Township 21 South, Range 24 East  
Indian Basin Upper Pennsylvanian Associated Pool/ Morrow Pool***

Dear Mr. Stogner,

By means of this application, Marathon Oil Company respectfully requests non-standard location approval for the proposed Indian Hills Unit Well No. 34 well located in Section 28, Township 21 South, Range 24 East, 1416 feet FNL and 1607 feet FWL, and to be dedicated to a standard spacing unit consisting of the north half of Section 28. Marathon is proposing to drill this well to a primary unorthodox location in the Upper Pennsylvanian formation with a secondary unorthodox location in the Morrow formation. This will be a straight hole drill well.

Marathon proposes to complete the Indian Hills Unit Well No. 34 in the "Indian Basin Upper Pennsylvanian Associated Pool" as promulgated by the New Mexico Oil Conservation Division Order Nos. R-9922, R-9922-A, R-9922-B, R-9922-C, and R-9922-D and the general rules for the Associated Gas Pools of Southeast New Mexico as promulgated by Division Order No. R-5533. These rules require wells to be located no closer than 660 feet to the outer boundary of the proration/spacing unit and no closer than 330 feet to the governmental quarter/quarter section line. Indian Hills Unit Well No. 34 location is unorthodox because it is less than 330 feet from the quarter/quarter lines in the west half of the 320-acre "lay-down" gas proration unit located in the north half of Section 28 (please see Attachment #1 - Well Location and Acreage Dedication Plat).

The Indian Hills Unit Well No. 34 will also be an exception to the "Special Rules and Regulations for the Indian Basin Morrow Gas Pool," as promulgated by the New Mexico Oil Conservation Division Orders No. R-8170-O-1/R-2441-B, issued in Case No. 11512 and dated July 31, 1996, and R-8170-O-2/R-2441-C, dated August 15, 1996. These rules require wells to be located no closer than 660 feet to the outer boundary of the proration/spacing unit and no closer than 330 feet to the governmental quarter/quarter section line. Indian Hills Unit Well No. 34 location is unorthodox because it is less than 330 feet from the quarter/quarter lines in the west half of the 320-acre "lay-down" gas proration unit located in the north half of Section 28 (please see Attachment #2 - Well Location and Acreage Dedication Plat).

In support of this application, specific details will be provided for the proposed unorthodox location. These details will include a discussion of how the well fits into Marathon's reservoir management plan and the topographical and archaeological issues driving Indian Hills Unit Well No. 34 to an unorthodox location.

### **Surface Issues:**

The Indian Hills Unit Well No. 34 is targeted to infill drill the northwest quarter of Section 28, Township 21 South, Range 24 East (please see Attachment #3 – Vicinity Map; Attachment #4 – Location Verification Map; Attachment #5 – Section 28, Marathon Surface Equipment Map). Marathon attempted to locate a standard location within the northwest quarter but was unable to do so because of archaeological and topographical issues. Below, each of the standard locations within the northwest quarter of Section 28 are discussed as to why they were unacceptable drilling locations:

- 1.) Unit Letter (U.L.) "C" of Section 28 was condemned because it contains an archaeological site which has been protected by the National Historic Preservation Act of 1969 (please see Attachment 6A - Letter from the Bureau of Land Management (BLM) and Attachment 6B – Map of archaeological sites provided by the BLM).
- 2.) In U.L. "D" of Section 28, Highway 137 runs through the middle of the Standard window of opportunity. Further, this quarter/quarter section was condemned because of its proximity to the 100-year flood plain of the Rocky Arroyo. No development activity is allowed within 200 meters (656 feet) of the outer boundary of the 100-year flood plain.
- 3.) U.L. "E" of Section 28 contains an active corridor of high-pressure gas lines, a power line and the Indian Hills Unit # 10, located @ 2080' FNL & 660'FWL. Therefore, an infill well cannot be drilled in this quarter/quarter section.
- 4.) U.L. "F" of Section 28 contains an active corridor of high-pressure gas pipelines, high angle slopes, and natural drainage within the standard spacing window. Under Section 7 of the "Stipulations for the East Indian Basin Oil Field Development in the Roswell District, BLM" (Serial Number 92026), it is stated, "No well or plant site will be allowed on slopes of 20 percent or greater". This was another contributing factor in site selection.

Ultimately the only location that was agreeable to the BLM and Marathon is the proposed unorthodox location at 1416 feet FNL and 1607 feet FWL, Section 28, Township 21 South, Range 24 East. This location minimizes surface disturbance by avoiding excessive cut and fill, does not encroach on the 200 meter set-back from the Rock Arroyo 100-year flood plain, and is a safe distance from the high pressure gas pipeline corridor.

**Reservoir Management Plan:**

Marathon is entering its final anticipated infill development phase of the Indian Basin Upper Pennsylvanian Associated Gas Pool. The objective of this program is to infill drill the oil column from the current ~160-acre well density to an ~80-acre well density. It is Marathon's belief that the oil zone should be developed on tighter spacing than the current ~160 acre development of the gas zone. The proposed 80-acre infill program will improve oil recovery while minimizing both economic and reservoir waste.

The Indian Hills Unit Well No. 34 is proposed as the oil infill well for the northwest quarter of Section 28. Marathon's initial selection for the location of the well was to be near approximately 700 feet FNL and 1400 feet FWL (approximately 700 feet north of the current location). This would have provided equal distance between offsetting producers. Marathon had hoped to find a standard location near this equidistant spot, however, as stated above, U.L "C" and "D" were condemned because of archeological reasons and topographical reasons. The secondary location as proposed in this application, is expected to recover a near equal quantity of reserves from the Upper Pennsylvanian formation. Marathon is confident this will be the case because reservoir quality and elevation are similar between the initial and secondary locations. Further, insofar as the Morrow formation is concerned, because of the statistical nature of the formation, Marathon believes the proposed unorthodox location has an equally good chance of hitting productive sands, as would have any other location.

**Waivers:**

It is Marathon's understanding that because the proposed location for Indian Hills Unit Well No. 34 is unorthodox only to the internal governmental quarter/quarter setbacks, offset operators and working interest owners do not need to be notified of our application.

Should you have any questions/comments/concerns, please contact me at (915) 687-8306.

Respectfully,



Steven F. Millican  
Operations Engineer  
Indian Basin Asset Team  
Marathon Oil Company

Form 3160-3  
(July 1992)

BLM I E - 1 4000 1007 2114101

SUBMIT IN TRIPLICATE

FORM APPROVED  
OMB NO. 1004-0136

ESS

Expires: February 18, 1995

oel

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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

3. ADDRESS AND TELEPHONE NO.  
P.O. Box 552 Midland, TX 79702 915-687-8357

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
1416' FNL & 1607' FWL  
 At proposed prod. zone  
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
15- miles NW of Carlsbad

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drg. unit line, if any) 1416'

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 320

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. \* 1075'

19. PROPOSED DEPTH 8800'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3704' G.L.

22. APPROX. DATE WORK WILL START\*  
ASAP

5. LEASE DESIGNATION AND SERIAL NO.  
NM 06293

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

7. UNIT AGREEMENT NAME  
Indian Hills Unit

8. FARM OR LEASE NAME, WELL NO.  
# 34

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT  
Indian Basin Upper Perm. Assoc

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 28, T-21-S, R-24-E

12. COUNTY OR PARISH Eddy 13. STATE N.M.

NIP

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17.50"	13-3/8" K-55	54.50#	1200'	1250 sks. to surf.
12.25"	9-5/8" L-80	53.5#, 47.00#	8800'	3110

Marathon Oil Company is proposing to drill a straight hole Upper Perm. Assoc. well on a Non Standard location.

\* The Indian Hills Unit # 34 is located 1075' from the Indian Hills Unit # 10, located @ 2080' FNL & 660' FWL. Sec.28, T-21-S, R-24-E.

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED**

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 [Signature] TITLE Engineer Tech. DATE 2/14/01

(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 [Signature] TITLE Acting FIELD MANAGER DATE 4/27/2001

\*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.

**APPROVAL FOR 1 YEAR**

DISTRICT I  
P.O. Box 1880, Hobbs, NM 88241-1980

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

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  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number <b>30-015-31751</b>	Pool Code 33685	Pool Name Indian Basin Upper Penn. Assoc.
Property Code	Property Name <b>INDIAN HILLS UNIT</b>	Well Number 34
OGRID No. 14021	Operator Name <b>MARATHON OIL COMPANY</b>	Elevation 3704'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	24-E		1416	NORTH	1607	WEST	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.
320 N/2			

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.*

*Jerry Fletcher*  
Signature

Jerry Fletcher  
Printed Name

Engineer Tech.  
Title

8/24/01  
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.*

FEBRUARY 5, 2001

Date Surveyed \_\_\_\_\_ AWB

Signature & Seal of Professional Surveyor  
*Ronald J. Edson*  
NEW MEXICO  
3333  
01-11-0058

Certificate No. RONALD J. EDSON 3239  
GARY EDSON 12641

DISTRICT I  
P.O. Box 1880, Hobbs, NM 88241-1980

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

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  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
	78960	Indian Basin Morrow
Property Code	Property Name	Well Number
	INDIAN HILLS UNIT	34
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3704'

Surface Location

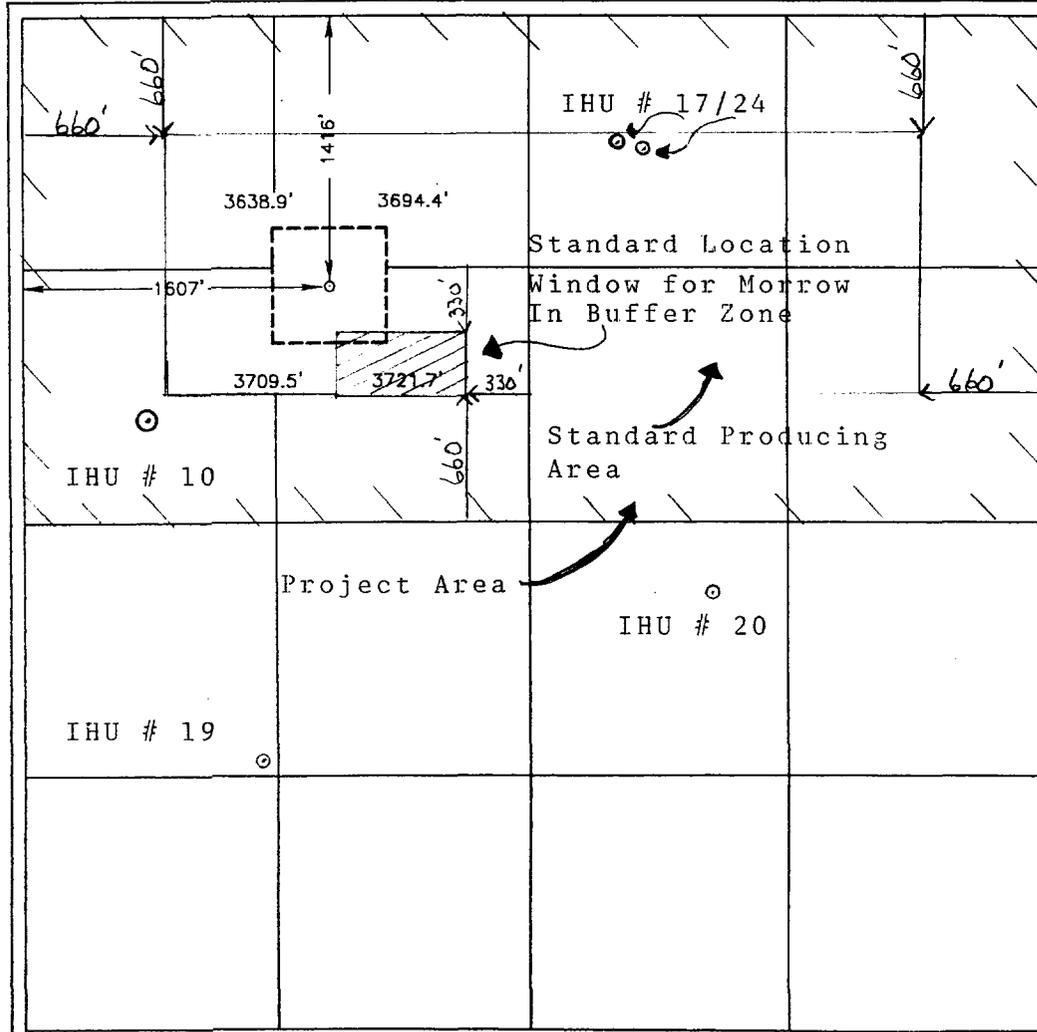
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	24-E		1416	NORTH	1607	WEST	EDDY

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.
320 N/2			

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.

*Jerry Fletcher*  
Signature

Jerry Fletcher  
Printed Name

Engineer Tech.  
Title

8/24/01  
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.

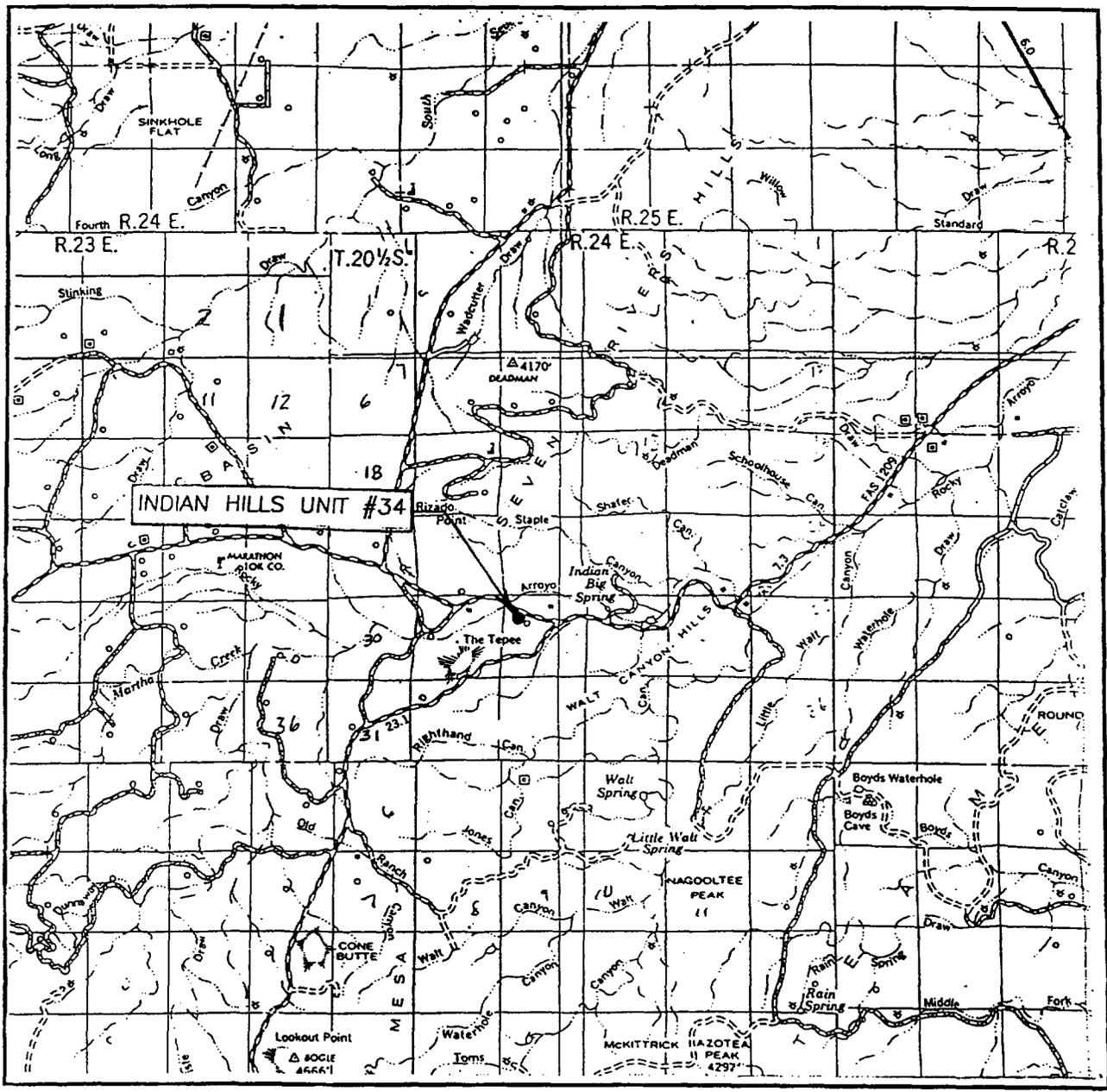
FEBRUARY 5, 2001

Date Surveyed \_\_\_\_\_ AWB

Signature & Seal of Professional Surveyor  
*Ronald J. Kidson*  
01-11-0058

Certificate No. RONALD J. KIDSON 3239  
GARY KIDSON 12641

# VICINITY MAP



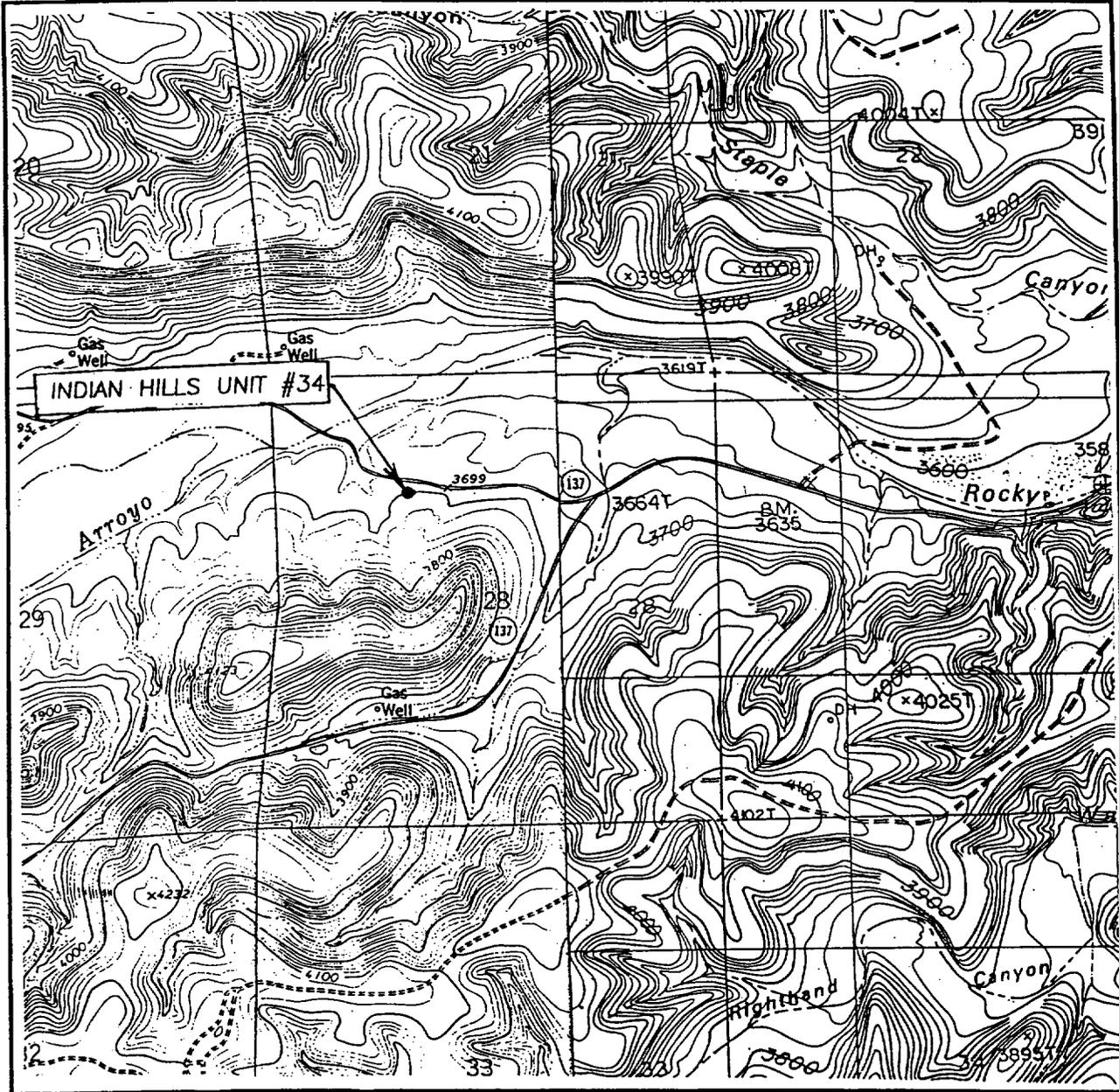
SCALE: 1" = 2 MILES

SEC. 28 TWP. 21-S RGE. 24E  
 SURVEY N.M.P.M.  
 COUNTY EDDY  
 DESCRIPTION 1416.FNL & 1607'FWL  
 ELEVATION 3704'  
 OPERATOR MARATHON OIL COMPANY  
 LEASE INDIAN HILLS UNIT

JOHN WEST SURVEYING  
 HOBBS, NEW MEXICO  
 (505) 393-3117

# LOCATION VERIFICATION MAP

ATTACHMENT # 4



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'

MARTHA CREEK N.M.

SEC. 28 TWP. 21-S RGE. 24E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1416.FNL & 1607'FWL

ELEVATION 3704'

OPERATOR MARATHON OIL COMPANY

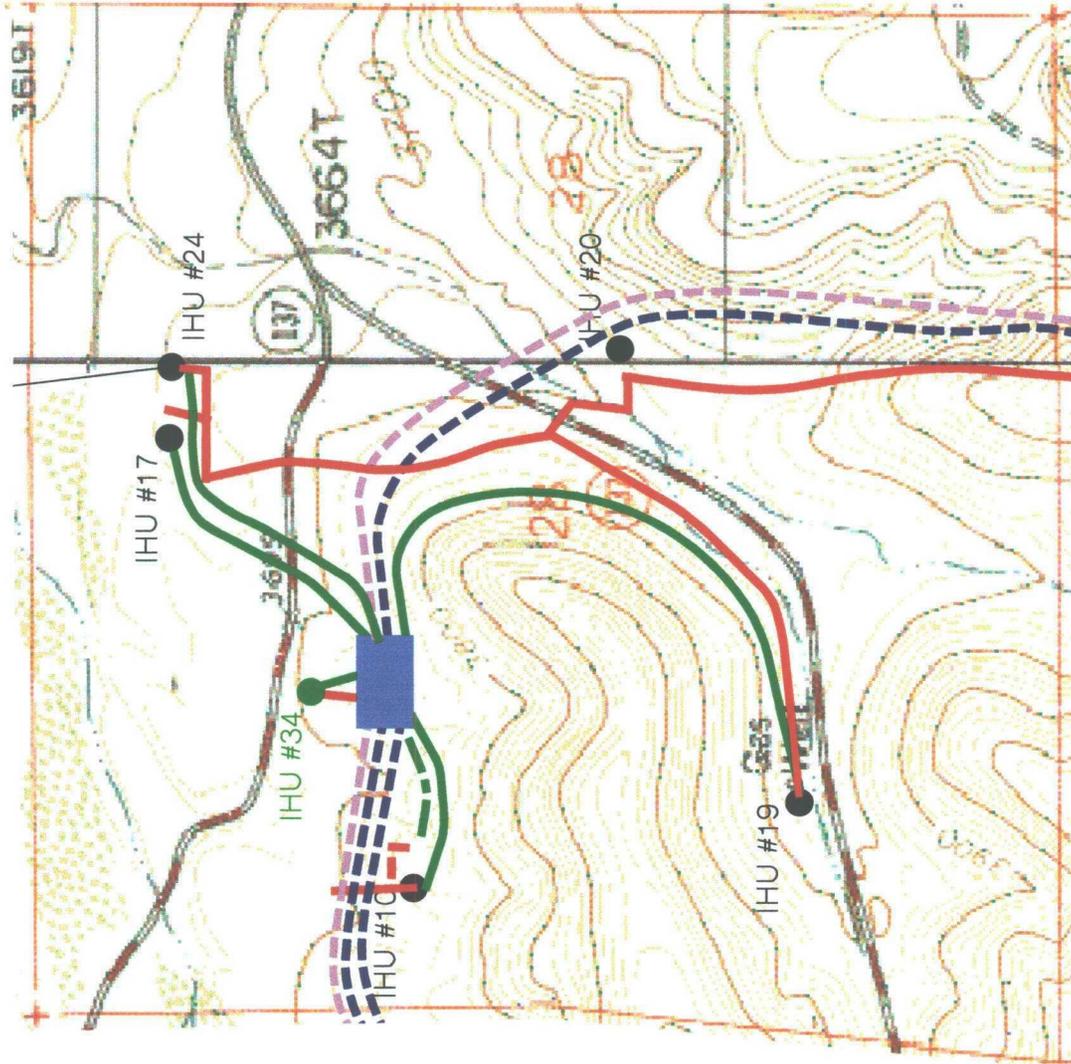
LEASE INDIAN HILLS UNIT

U.S.G.S. TOPOGRAPHIC MAP

MARTHA CREEK N.M.

**JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117**

ATTACHEMENT #5



- PRODUCING WELLS
- PENDING WELLS
- PLANNED WELLS
- CONTINGENT WELLS
- EXISTING DUAL FLOWLINES
- - - PROPOSED DUAL FLOWLINES
- EXISTING ELECTRICAL LINES
- - - PROPOSED ELECTRICAL LINES
- FLUID GATHERING SYSTEM
- OIL GATHERING SYSTEM
- - - LOW PRESSURE GAS GATHERING SYSTEM
- - - HIGH PRESSURE GAS GATHERING SYSTEM
- - - COMPRESSOR FUEL LINE
- COMPRESSOR DISCHARGE LINE
- - - PROPOSED MORROW GAS GATHERING SYSTEM
- SWD INJECTION LINE
- ROADWAY

MARATHON OIL COMPANY  
SOUTHERN BUSINESS UNIT

EAST INDIAN BASIN  
EDDY COUNTY, NEW MEXICO



United States Department of the Interior

**BUREAU OF LAND MANAGEMENT**

Carlsbad Field Office  
620 E. Greene St.  
Carlsbad, New Mexico 88220-6292  
Tel. (505) 234-5972  
Fax (505) 885-9264

AUG 30 2001

In Reply Refer  
8100(080)rmh

Jerry Fletcher  
Marathon Oil Company  
P.O. Box 552  
Midland, Texas 79702

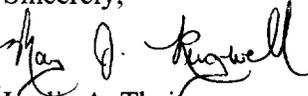
RE: Drill Locations in West ½ of Section 28, T.21S, R.24E

Dear Mr. Fletcher:

I have attached a map showing the archaeological sites now recorded in the West ½ of Section 28, T. 21S, R. 24E. As you can see two of the possibilities contain archaeological sites that are Eligible to the National Register of Historic Places. These sites then fall under the protection of Section 106 of the National Historic Preservation Act of 1969, as amended and therefore can not be adversely affected by federal undertakings.

I hope that this has answered your concerns. If there are any additional questions, please contact my archaeological staff, Rose Marie Havel (505) 234-5917 or Tiffany Sullivan-Owens (505) 234-5980.

Sincerely,

  
Leslie A. Theiss  
Field Manager

enc. One Map

3852

540 000  
FEET

18

17

16

3593

Drill Hole

Gas Well

SEVEN

Rizado Point  
x4238

Staple

Canyon

3592

19

20

21

Gas Well

Drill Hole

3753

Gas Well

Gas Well

Well

27' 30"

3591

CARLSBAD (VIA U.S. 285) 22 MI

(WEST CARLSBAD 1:62 500)  
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# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Marathon Oil Company

P. O. Box 552

Midland, Texas 79702-0552

Attention: Jerry Fletcher

March 16, 2001

Lori Wrotenbery

Director

Oil Conservation Division

**Re:** *Application dated February 16, 2001 for an exception to Rule 2 (b) of the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool", as promulgated by New Mexico Oil Conservation Division ("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, for an infill well to be drilled at an unorthodox location within an existing 320-acre lay-down spacing and proration unit comprising the N/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico*

Dear Mr. Fletcher:

I was in the process of preparing the Division's official administrative order per your request and could not find a reference to a previous order approving Marathon's unorthodox location within this 320-acre unit for the Indian Hills Unit Well No. 10 (API No. 30-015-30571), located 2080 feet from the North line and 660 feet from the West line (Unit E) of Section 28. I realize that this is a trivia matter but such information included in an order serves to complete the regulatory picture surrounding that particular unit of production. It also aids the OCD in double checking that all wells within a spacing unit meet the proper regulatory requirements, this in turn assures that offsetting mineral interests are being protected against unlawful drainage by those operators who choose to ignore such set-back requirements. When such unlawful drainage is brought to our attention, the OCD can then take whatever corrective action is necessary.

Further, the Indian Basin-Upper Pennsylvanian Associated Pool is subject to the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool", as promulgated by New Mexico Oil Conservation Division ("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, not the statewide rules as you referenced. Also, these rules require wells to be located no closer than 660 feet to the outer boundary of the proration and spacing unit, not a lease line. This helps to assure orderly development of a reservoir, also there are so many small tracts of separately owned lands in New Mexico that require communitization agreements thereby making the enforcement of such a "lease line" set-back requirement virtually useless.

Again I apologize for this added delay for what seems like such a small bit of unnecessary information. Please fax a copy of the Division's administrative order or hearing order, whichever is applicable, that authorized the location exception for the Indian Hills Unit Well No. 10 to (505) 476-3471. Thank you.

Sincerely,

Michael E. Stogner

Chief Hearing Officer/Engineer

LW/MES/kv

cc: New Mexico Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad  
U. S. Bureau of Land Management - Roswell  
W. Thomas Kellahin, Legal Counsel for Marathon Oil Company - Santa Fe



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

August 6, 2001

**Marathon Oil Company**  
**P. O. Box 552**  
**Midland, Texas 79702-0552**

**Attention: Jerry Fletcher**

**Re:** *Application dated February 16, 2001 for an exception to Rule 2 (b) of the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool", as promulgated by New Mexico Oil Conservation Division ("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, for an infill well to be drilled at an unorthodox location within an existing 320-acre lay-down spacing and proration unit comprising the N/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico*

Dear Mr. Fletcher:

On March 16, 2001, I sent a letter requesting additional information to support Marathon Oil Company's application dated February 16, 2001 (*Division application reference No. pKRV0-105430033*). To date I have not received a reply. This bureau has recently enacted a policy whereby any incomplete administrative filing older than 30 days is to be withdrawn and returned. This new policy, as I understand, will better serve our customers and help assure a quicker turn around time by this bureau on administrative filings.

In order to fully comply with this policy, I am withdrawing your application and returning it to you at this time. This action will unfortunately require Marathon to cease producing any well that does not have proper authorization; this would include all wells not having an exception to the well location provisions.

Thank you for your understanding and cooperation.

Sincerely

Michael E. Stogner  
Chief Hearing Officer/Engineer

cc: New Mexico Oil Conservation Division – Artesia  
W. Thomas Kellahin, Legal Counsel for Marathon Oil Company - Santa Fe

105430033

NSL

3/12/01

Southern U.S. Business Unit  
Domestic Production



**Marathon  
Oil Company**

P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

February 16, 2001

Mr. Michael Stogner  
Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe N.M. 87504

RE: Application for a Non-Standard well location.  
Indian Hills Unit # 34  
1416' FNL & 1607' FWL  
Section 28, T-21-S, R-24-E  
Eddy County, New Mexico

Dear Mr. Stogner

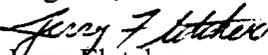
Marathon Oil Company has made an attempt to locate a suitable location for the above mentioned well. Due to topographical conditions we had to place the well in a Non- Standard location. Accordingly, please find enclosed our application for a Non- Standard Location requesting administrative approval under conditions of OCD Rule # 104.

Marathon Oil Company is applying to the New Mexico Conservation Division to drill this well at a NSL of 1416' FNL & 1607' FWL. Unit letter "F", of Section 28, T-21-S, R-24-E, NMPM. Said well is dedicated to a standard 320 acre North half.

- 1) This Indian Basin Upper Penn. Assoc. gas well is subject to the Division's statewide rules and regulations specifying that the well shall be located no closer than 660 feet to the outer boundary of a lease and no closer than 330 feet to any quarter/ quarter section line or subdivision inner boundary. The proposed well is at a legal set back of 660 feet from the outer boundary. This location is Non-Standard to the internal governmental 330' quarter/ quarter section line
- 2) Due to topographical constraints, the well was spotted at this NSL.

Marathon Oil Company seeks approval for this NSL to drill the Indian Basin Upper Penn. Assoc. gas well. Enclosed are copies of the offset's waiver to objection letters. If you have any questions or concerns, please feel free to contact me at 915-687-8357.

Regards,

  
Jerry Fletcher  
Engineering Technician



**Marathon  
Oil Company**

P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

February 16,2001

Yates Petroleum  
105 South 4<sup>th</sup> Street  
Artesia N.M. 88210

RE: Application for a Non-Standard well location.  
Indian Hills Unit # 34  
1416' FNL & 1607' FWL  
Section 28, T-21-S, R-24-E  
Eddy County, New Mexico

Dear Sir,

Marathon Oil Company has made an attempt to locate a suitable location for the above mentioned well. Due to topographical conditions we had to place the well in a Non- Standard location.

As an offset operator you are hereby notified of Marathon Oil Company's intent to drill this well at a Non-Standard location.

Please reference the attached surveyors plat and dedication map.

An application to drill and a request for administrative approval subject to OCD Rule # 104 has been duly filed with the New Mexico Oil Conservation Division in Santa Fe , New Mexico.

This well is subject to the Division's Statewide rules and regulations which provide that a well shall be **no closer than 660' to the outer boundary of a lease and no closer than 330 feet to any governmental quarter/ quarter section line or subdivision inner boundary.**

The proposed well is located in a Non-Standard location of 1416' FNL and 1607'FWL. The above well **conforms to the 660' spacing from the outer boundaries**

This well is Non-Standard in that it is closer than **330' to the governmental quarter /quarter section line.** Should Yates Petroleum have no objection to Marathon's intent to drill the above mentioned well due to the topographical constraints, please signify by signing below and return an executed copy to me in the envelope provided. A copy of the application sent to OCD Santa Fe is enclosed.

Respectfully,

  
Jerry Fletcher,  
Engineer Tech.

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Yates Petroleum

Date \_\_\_\_\_



**Marathon  
Oil Company**

P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

February 16,2001

Devon SFS Operating  
20 N. Broadway, Suite 1500  
Oklahoma City, OK 73102-8260

RE: Application for a Non-Standard well location.  
Indian Hills Unit # 34  
1416' FNL & 1607' FWL  
Section 28, T-21-S, R-24-E  
Eddy County, New Mexico

Dear Ken Gray,

Marathon Oil Company has made an attempt to locate a suitable location for the above mentioned well.

Due to topographical conditions we had to place the well in a Non- Standard location.

As an offset operator you are hereby notified of Marathon Oil Company's intent to drill this well at a Non-Standard location.

Please reference the attached surveyors plat and dedication map.

An application to drill and a request for administrative approval subject to OCD Rule # 104 has been duly filed with the New Mexico Oil Conservation Division in Santa Fe , New Mexico.

This well is subject to the Division's Statewide rules and regulations which provide that a well shall be **no closer than 660' to the outer boundary of a lease and no closer than 330 feet to any governmental quarter/ quarter section line or subdivision inner boundary.**

The proposed well is located in a Non-Standard location of 1416' FNL and 1607'FWL. The above well **conforms to the 660' spacing from the outer boundaries**

This well is Non-Standard in that it is closer than **330' to the governmental quarter /quarter section line.**

Should Devon have no objection to Marathon's intent to drill the above mentioned well due to the topographical constraints, please signify by signing below and return an executed copy to me in the envelope provided. A copy of the application sent to OCD Santa Fe is enclosed.

Respectfully,

A handwritten signature in cursive script that reads "Jerry Fletcher".

Jerry Fletcher,  
Engineer Tech.

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Devon SFS Operating

Date \_\_\_\_\_

TRICT I  
 1. 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

TRICT II  
 2. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

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

TRICT III  
 300 Rio Brazos Rd., Aztec, NM 87410

TRICT IV  
 3. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name	Well Number
OGRD No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3704'
	INDIAN HILLS UNIT	34
	Indian Basin Upper Penn. Assoc.	

Surface Location

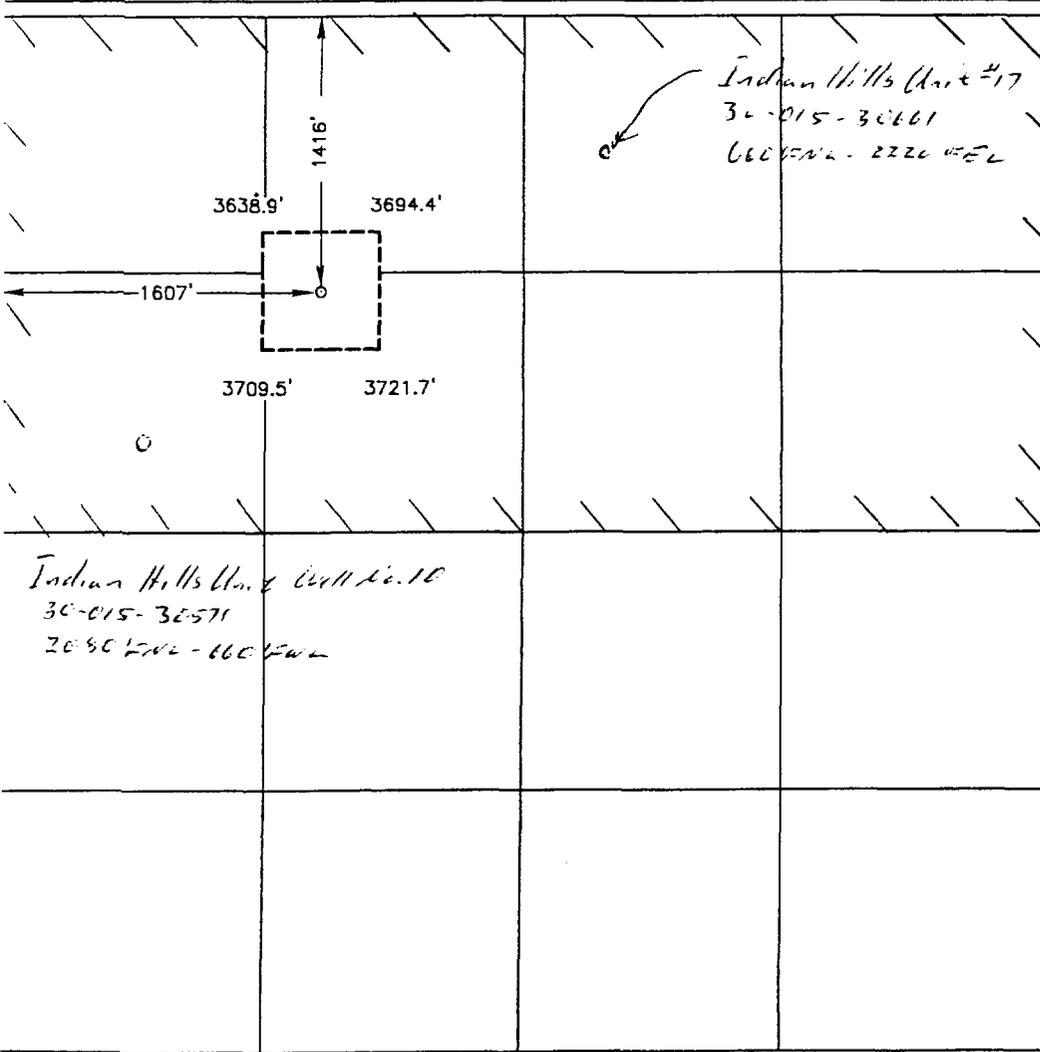
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	24-E		1416	NORTH	1607	WEST	EDDY

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.
320 N/2			

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.

*Jerry Fletcher*  
 Signature

Jerry Fletcher  
 Printed Name

Engineer Tech.  
 Title

2/14/01  
 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.

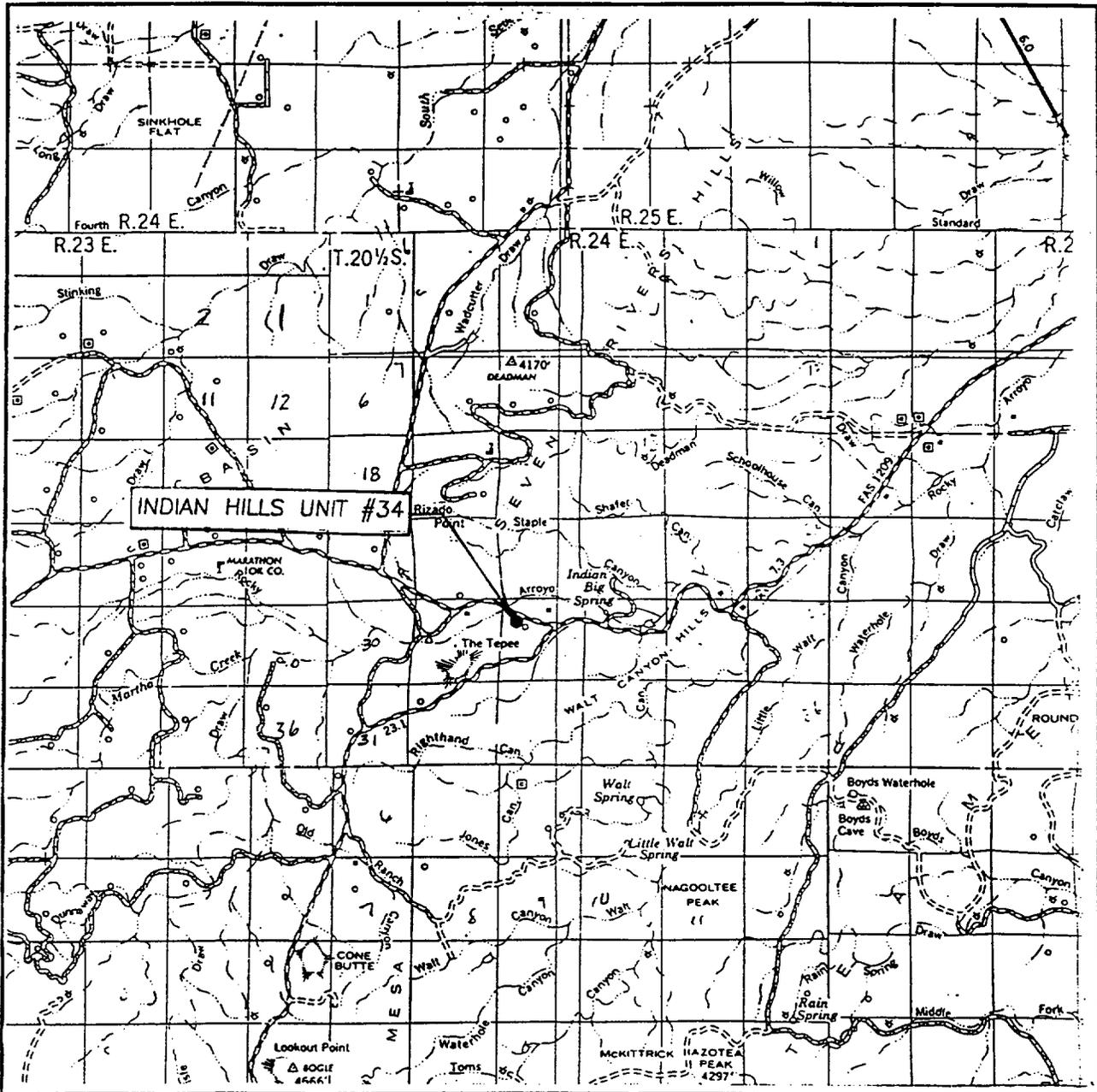
FEBRUARY 5, 2001  
 Date Surveyed

AWB  
 Signature & Seal of Professional Surveyor

*Ronald J. Eidson* 02/08/01  
 01-11-0058

Certificate No. RONALD J. EIDSON 3239  
 CARY EIDSON 12641

# VICINITY MAP

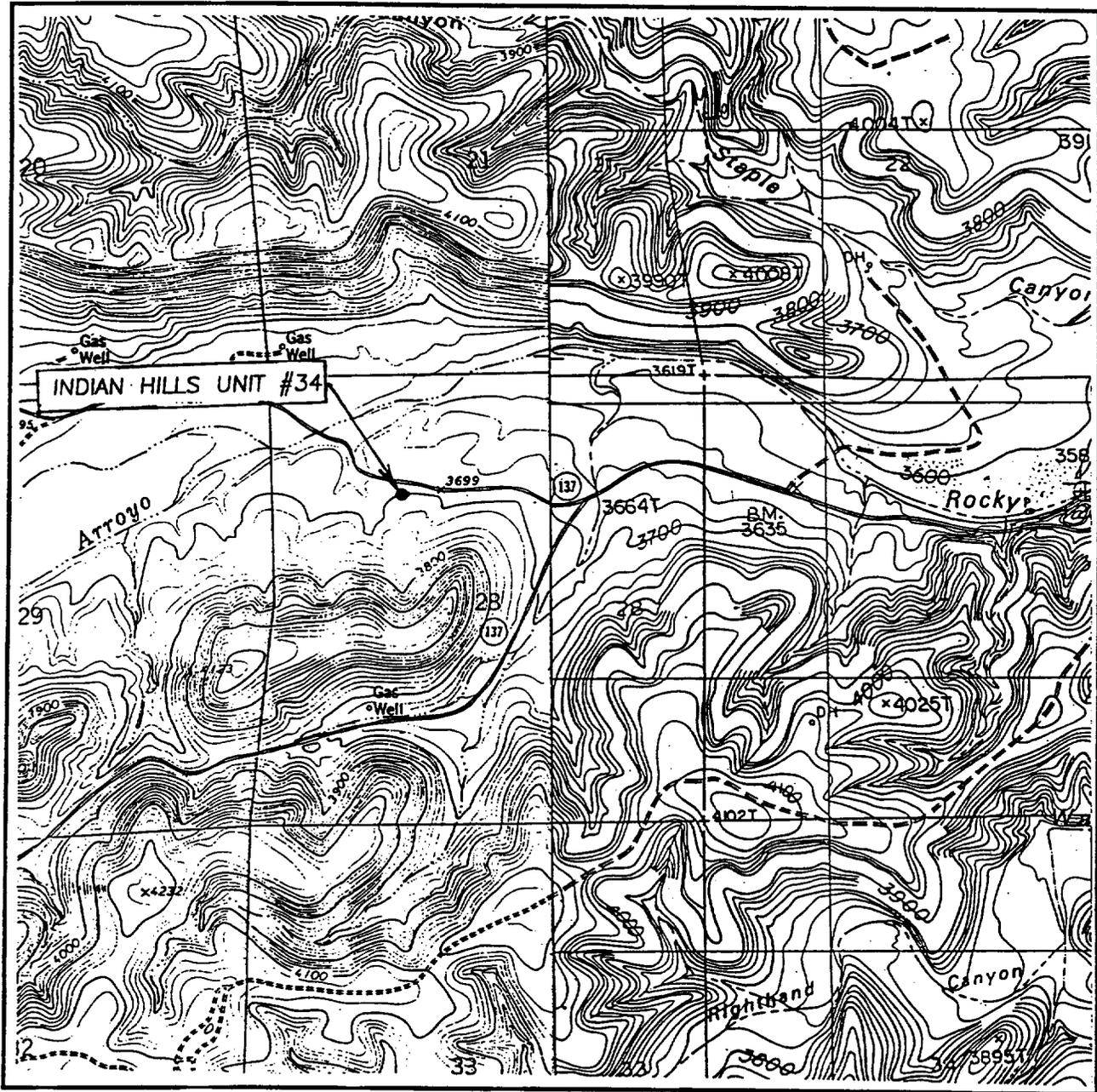


SCALE: 1" = 2 MILES

SEC. 28 TWP. 21-S RGE. 24E  
 SURVEY N.M.P.M.  
 COUNTY EDDY  
 DESCRIPTION 1416.FNL & 1607'FWL  
 ELEVATION 3704'  
 OPERATOR MARATHON OIL COMPANY  
 LEASE INDIAN HILLS UNIT

JOHN WEST SURVEYING  
 HOBBS, NEW MEXICO  
 (505) 393-3117

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'

MARTHA CREEK N.M.

SEC. 28 TWP. 21-S RGE. 24E

SURVEY \_\_\_\_\_ N.M.P.M. \_\_\_\_\_

COUNTY EDDY

DESCRIPTION 1416.FNL & 1607.FWL

ELEVATION 3704'

OPERATOR MARATHON OIL COMPANY

LEASE INDIAN HILLS UNIT

U.S.G.S. TOPOGRAPHIC MAP

MARTHA CREEK N.M.

JOHN WEST SURVEYING  
 HOBBS, NEW MEXICO  
 (505) 393-3117

STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

NOMENCLATURE  
CASE NO. 10748  
Order No. R-9922

APPLICATION OF YATES PETROLEUM  
CORPORATION FOR POOL CREATION,  
CLASSIFICATION OF THE NEW POOL  
AS AN ASSOCIATED POOL AND FOR  
SPECIAL POOL RULES, EDDY COUNTY,  
NEW MEXICO.

*See Also Cont. list.*  
*R-9922-B*  
*R-9922-B*  
*R-9922-C*  
*R-9922-D*

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 17, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of July, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Yates Petroleum Corporation, seeks the creation of a new associated pool for the production of oil and gas from the Upper Pennsylvanian formation comprising the W/2 of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(3) The applicant further seeks the promulgation of temporary special rules and regulations including 320-acre oil and gas spacing, designated well location requirements, a limit of no more than one well per quarter section, a special depth bracket allowable of 1400 barrels of oil per day per standard proration unit and an administrative procedure for approval of unorthodox well locations and non-standard spacing and proration units.

(4) At the time of the hearing the applicant requested that the portion of its request for an administrative procedure for obtaining approval for unorthodox well locations and non-standard spacing and proration units be dismissed.

**NOMENCLATURE**

**CASE No. 10748**

**Order No. R-9922**

**Page -2-**

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(5) Nearburg Producing Company (Nearburg), a leasehold operator in this area, appeared at the hearing in support of Yates' application with the exception of the request to limit the well density to one well per quarter section. In addition, Santa Fe Energy Operating Partners, L.P. and Marathon Oil Company appeared through counsel at the hearing but did not present evidence or testimony nor did they protest the application.

(6) On October 15, 1992 the applicant commenced re-entry operations on its Hickory "ALV" Federal Well No. 1 (previously the Pan American Petroleum Corporation I. T. Hollowell "A" USA No. 1) located 1650 feet from the North and West lines (Unit F) of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico. The subject well has been completed in the Canyon formation through the perforated interval from approximately 8,139 feet to 8,259 feet.

(7) According to applicant's evidence and testimony, the Hickory "ALV" Federal Well No. 1 was tested in the Canyon formation on June 15, 1992 at a rate of 408 BOPD, 1,197 BWPD and 511 MCFGD.

(8) The subject well is located approximately 10 miles south of the South Dagger Draw-Upper Pennsylvanian Associated Pool and directly adjacent to the Indian Basin-Upper Pennsylvanian Gas Pool.

(9) The applicant's geologic evidence and testimony in this case indicates that:

a) the Hickory "ALV" Federal Well No. 1 is producing from the same Dolomite section, albeit structurally lower, being produced in the Indian Basin-Upper Pennsylvanian Gas Pool;

b) the Dolomite section in the Hickory "ALV" Federal Well No. 1 exhibits similar geologic characteristics to the Dolomite section being produced in the North and South Dagger Draw-Upper Pennsylvanian Pools;

c) the subject reservoir will likely ultimately be determined to be a separate "oil leg" of the Indian Basin-Upper Pennsylvanian Gas Pool or an extension of the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(10) The engineering evidence and testimony in this case indicates that the oil being produced in the Hickory "ALV" Federal Well No. 1, having a gravity of approximately 42 degrees, is similar to that being produced in the North and South Dagger Draw-Upper Pennsylvanian Pools. The gravity of oil being produced in the Indian Basin-Upper Pennsylvanian Gas Pool ranges from 58-60 degrees.

(11) The evidence currently available regarding the subject reservoir indicates that a new associated pool for the production of oil and gas from the Upper Pennsylvanian formation should be created and designated the Indian Basin-Upper Pennsylvanian Associated Pool, with horizontal limits comprising the W/2 of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(12) The applicant contends that the similarities between the subject reservoir and the North and South Dagger Draw-Upper Pennsylvanian Pools are sufficient to justify the promulgation of special rules and regulations similar to those currently governing these pools.

(13) The North Dagger Draw-Upper Pennsylvanian Pool is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-4691, as amended, and Order No. R-5565, which require 160-acre spacing with wells to be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary, an oil allowable of 700 barrels per day, and a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(14) The South Dagger Draw-Upper Pennsylvanian Associated Pool is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-5353, as amended, which require 320-acre oil or gas spacing with wells to be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary, an oil allowable of 1400 barrels per day, and a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(15) The Special Rules and Regulations for the North and South Dagger Draw-Upper Pennsylvanian Pools do not prohibit the drilling of more than one well on a standard proration unit.

(16) In support of its request to limit the well density to one well per quarter section, the applicant testified that the Hickory "ALV" Federal Well No. 1, based upon analogies to wells in the South Dagger Draw-Upper Pennsylvanian Associated Pool, should be capable of draining an area of approximately 80-100 acres.

(17) Without a limitation on well density, the South Dagger Draw-Upper Pennsylvanian Associated Pool has been developed on 40-acre well spacing, which, according to the applicant, is too dense for this type of reservoir.

**NOMENCLATURE**

**CASE No. 10748**

**Order No. R-9922**

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(18) Nearburg requested that the proposed pool rules contain a rule similar to Rule No. 22 of the Special Rules and Regulations for the South Dagger Draw-Upper Pennsylvanian Associated Pool which states that all or part of the 1400 BOPD allowable may be produced by a single well or by two or more wells on a standard proration unit.

(19) Nearburg has the opportunity, during the period when temporary special rules and regulations are in place for the subject reservoir, to acquire drainage data and reopen this case in order to present evidence and testimony to support its request.

(20) In the absence of compelling evidence to support denser well spacing, and in order to prevent the drilling of unnecessary wells, the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool should provide for 320-acre well spacing with no more than two wells per standard unit.

(21) The applicant requested an oil allowable of 1400 barrels per day per standard proration unit and a gas-oil ratio limitation of 2,000 cubic feet of gas per barrel of oil. Applicant's requested oil allowable is based upon:

a) a similar oil allowable currently in effect for both the North and South Dagger Draw-Upper Pennsylvanian Pools, and,

b) a gas well in the subject reservoir being able to effectively compete with gas wells in the Indian Basin-Upper Pennsylvanian Gas Pool, whose gas allowable has stabilized, according to the applicant, at approximately 5.5 MMCFGD.

(22) The oil allowable currently in effect for the North and South Dagger Draw-Upper Pennsylvanian Pools was established by the Division, at least in part, in order to provide an incentive to operators to drill additional wells. In addition, there is no evidence at the current time to indicate that the proposed allowable will not cause excessive waste of reservoir energy, thereby resulting in decreased ultimate oil recovery.

(23) The Indian Basin-Upper Pennsylvanian Associated Pool should be assigned an oil allowable equal to the depth bracket allowable of 470 barrels of oil per day per 160-acre tract, or 940 BOPD.

(24) Temporary Special Rules and Regulations should be promulgated for the Indian Basin-Upper Pennsylvanian Associated Pool for a period of eighteen months. These rules should provide for 320-acre oil and gas spacing and proration units, a limitation of one well per quarter section, designated well location requirements, an oil allowable of 940 barrels of oil per day per standard proration unit and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil.

(25) This case should be reopened at an examiner hearing in January, 1995 at which time the operators in the subject pool should be prepared to appear and present evidence and testimony regarding the nature of the subject reservoir, the appropriate well spacing, and an appropriate oil allowable.

**IT IS THEREFORE ORDERED THAT:**

(1) A new associated pool for the production of oil and gas from the Upper Pennsylvanian formation is hereby created and designated the Indian Basin-Upper Pennsylvanian Associated Pool with horizontal limits comprising the W/2 of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(2) The Indian Basin-Upper Pennsylvanian Associated Pool is hereby classified as an associated oil and gas pool and shall be operated in accordance with the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico unless these general rules are in conflict with the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool hereinafter promulgated in which case the provisions of the special rules and regulations shall apply.

(3) Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE  
INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL**

**RULE 2.** (a) A standard oil proration unit shall comprise 320 acres. A standard gas proration unit shall comprise 320 acres.

**RULE 2.** (b) Each well shall be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary. No more than one well per quarter section shall be permitted on a proration unit.

**RULE 22.** The special depth bracket allowable for a 320-acre proration unit shall be 940 barrels of oil per day. All or any part of the allowable may be produced by a single well or by two wells on the unit. However, total oil allowable assigned to a 320-acre unit shall not exceed 940 barrels per day.

**IT IS FURTHER ORDERED THAT:**

(4) The location of all wells presently drilling to or completed in the Indian Basin-Upper Pennsylvanian Associated Pool or in the Upper Pennsylvanian formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well within 30 days from the date of this order.

(5) Pursuant to Paragraph A of Section 70-2-18, N.M.S.A. 1978 Comp., contained in Laws of 1969, Chapter 271, existing oil and gas wells in the Indian Basin-Upper Pennsylvanian Associated Pool shall have dedicated thereto 320 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

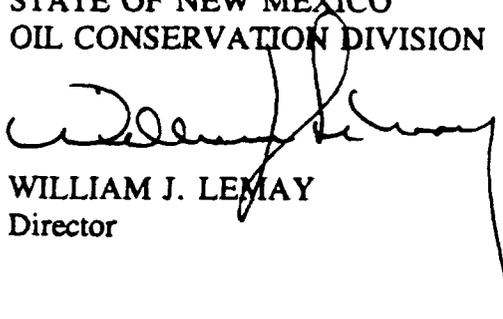
Failure to file new Forms C-102 with the Division dedicating 320 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said 60-day limitation, each well presently drilling to or completed in the Indian Basin-Upper Pennsylvanian Associated Pool or in its corresponding vertical limits, or within one mile thereof, shall receive no more than one-fourth of a standard allowable for said pool.

(6) This case shall be reopened at an examiner hearing in January, 1995, at which time the operators in the subject pool may appear and show cause why the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool promulgated herein should not be rescinded.

(7) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

S E A L

*See Also Order Nos R-9922  
R-9922-B  
R-9922-C  
R-9922-D*

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF CASE NO. 10748 BEING REOPENED UPON APPLICATION OF YATES PETROLEUM CORPORATION TO AMEND THE SPACING REQUIREMENTS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL, ESTABLISHED BY ORDER NO. R-9922, EDDY COUNTY, NEW MEXICO.

CASE NO. 10748  
ORDER NO. R-9922-A

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on December 16, 1993, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 22nd day of December, 1993, the Division Director, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

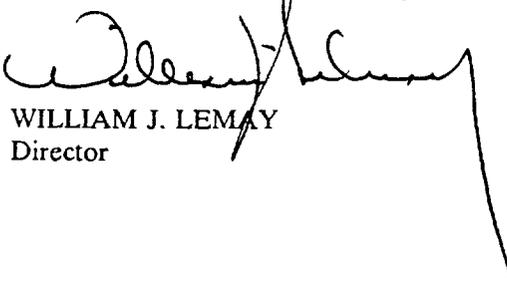
- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Yates Petroleum Corporation made application to reopen Case No. 10748 to amend the spacing requirements for the Indian Basin-Upper Pennsylvanian Associated Pool established by Order No. R-9922, Eddy County, New Mexico.
- (3) By letter dated December 10, 1993, the applicant requested this case be dismissed.
- (4) The applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED THAT:

Case No. 10748 is hereby dismissed.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

S E A L

STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 10748 (Reopened)  
Order No. R-9922-B

IN THE MATTER OF CASE NO. 10748  
BEING REOPENED PURSUANT TO THE  
PROVISIONS OF DIVISION ORDER NO.  
R-9922, WHICH ORDER PROMULGATED  
TEMPORARY SPECIAL RULES AND  
REGULATIONS FOR THE INDIAN BASIN-  
UPPER PENNSYLVANIAN ASSOCIATED  
POOL, EDDY COUNTY, NEW MEXICO.

*See Also Order Nos.*  
*R-9922*  
*R-9922-A*  
*R-9922-C*  
*R-9922-D*

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 2, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of February, 1995, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) By Order No. R-9922 issued in Case No. 10748 on July 6, 1993, the Division, upon application of Yates Petroleum Corporation, created the Indian Basin-Upper Pennsylvanian Associated Pool in Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico, and promulgated Temporary Special Rules and Regulations for said pool including the establishment of standard 320-acre oil or gas spacing and proration units, designated well locations, and a special depth bracket allowable of 940 barrels of oil per day.

(3) Pursuant to the provisions of Order No. R-9922, this case was reopened to allow the operators in the subject pool to appear and present evidence and testimony to show cause why the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

(4) Yates Petroleum Corporation, Marathon Oil Company, Nearburg Producing Company and Santa Fe Energy Operating Partners, L.P. appeared at the hearing through legal counsel.

(5) Yates Petroleum Corporation requested at the hearing that the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool remain in effect for an additional twelve month period.

(6) According to Yates' statement, the conductance of an environmental audit during the past eighteen months has precluded developmental drilling within the subject pool.

(7) All operators represented at the hearing were in agreement with Yates' request.

(8) Approval of Yates' request will allow the operators in the subject pool additional time to gather reservoir data pertinent to this case.

(9) No other operator and/or interest owner appeared at the hearing in opposition to Yates' request.

(10) The Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool should remain in effect for an additional twelve month period.

(11) This case should be reopened at an Examiner hearing in January, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why the Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

**IT IS THEREFORE ORDERED THAT:**

(1) The Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool are hereby continued in full force and effect for an additional twelve month period.

**Case No. 10748 (Reopened)**  
**Order No. R-9922-B**  
**Page -3-**

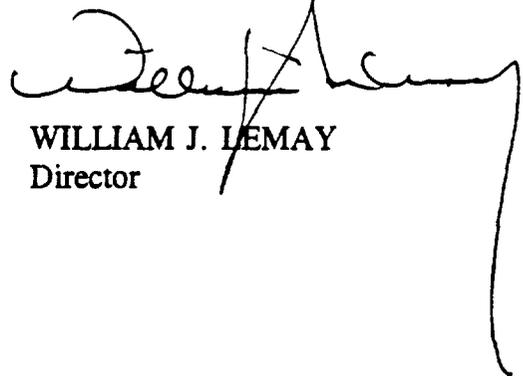
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(2) This case shall be reopened at an Examiner hearing in January, 1996, at which time the operators in the subject pool shall be prepared to appear and show cause why the Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

(3) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

S E A L

STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

*See Also Order Nos.*

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

*R-9922  
R-9922-1  
R-9922-B  
R-9922-D*

CASE NO. 10748 (Reopened)  
CASE NO. 11484  
Order No. R-9922-C

IN THE MATTER OF CASE NO. 10748 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-9922-B, WHICH ORDER CONTINUED IN EFFECT THE TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL AS PROMULGATED BY DIVISION ORDER NO. R-9922, AS AMENDED, EDDY COUNTY, NEW MEXICO.

APPLICATION OF YATES PETROLEUM CORPORATION TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL, EDDY COUNTY, NEW MEXICO.

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on March 21, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 14th day of May, 1996, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS THAT:**

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 10748 (Reopened) and Case No. 11484 were consolidated at the time of the hearing for the purpose of testimony, and inasmuch as both cases concern the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, one order should be entered for both cases.

**CASE NO. 10748 (Reopened)**

**CASE NO. 11484**

**Order No. R-9922-C**

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(3) By Order No. R-9922 issued in Case No. 10748 on July 6, 1993, the Division, upon application of Yates Petroleum Corporation (Yates), created the Indian Basin-Upper Pennsylvanian Associated Pool in Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico, and promulgated Temporary Special Rules and Regulations for said pool including the establishment of standard 320-acre oil or gas spacing and proration units, designated well locations, and a special depth bracket allowable of 940 barrels of oil per day.

(4) Pursuant to the provisions of Order No. R-9922, Case No. 10748 was reopened and heard in February, 1995, to consider permanently adopting the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool. At the request of Yates and for good cause shown, the subject temporary rules were continued in full force and effect for an additional twelve month period.

(5) Pursuant to the provisions of Order No. R-9922-B, this case is being reopened at the present time to allow the operators in the subject pool to appear and present evidence and testimony to show cause why the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

(6) The applicant in Case No. 11484, Yates Petroleum Corporation, seeks to amend the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool whereby:

- a) no more than one well would be allowed to be drilled per 80 acre tract;
- b) the simultaneous dedication of acreage to both oil and gas wells would be allowed;
- c) the gas-oil ratio limitation for the pool would be increased from 2,000 cubic feet of gas per barrel of oil to 10,000 cubic feet of gas per barrel of oil; and,
- d) the oil allowable for the pool would be increased from 940 barrels of oil per day to 1,400 barrels of oil per day.

(7) Yates Petroleum Corporation appeared and presented technical evidence and testimony in support of adopting amended and permanent rules for the Indian Basin-Upper Pennsylvanian Associated Pool.

(8) Marathon Oil Company and Santa Fe Energy Resources Inc., both operators in the Indian Basin-Upper Pennsylvanian Associated Pool, appeared through legal counsel at the hearing in support of adopting permanent rules for the pool and in support of Yates' proposed pool rule amendments.

(9) The Indian Basin-Upper Pennsylvanian Associated Pool currently comprises all or portions of Sections 27, 33 and 34, Township 21 South, Range 24 East, and all or portions of Sections 2, 3, 4, 5, 7, 8, 9, 10, 11, 16 and 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(10) According to the latest Division Monthly Statistical Report, there are twenty-one wells producing from the Indian Basin-Upper Pennsylvanian Associated Pool operated by five different companies. The pool rules currently in effect for the Indian Basin-Upper Pennsylvanian Associated Pool are summarized as follows:

<u>SPACING</u>	<u>ALLOWABLE</u>	<u>SIM. DEDICATION</u> <u>POOL GOR</u>	<u>ALLOWED</u>	<u>DRILLING DENSITY</u>
320 Acres/Oil	940 BOPD	2,000:1	No	1 Well/160 acres
320 Acres/Gas	1.88 MMCFGD			

(11) The geologic evidence presented at the hearing in this matter and in numerous prior cases presented before the Division indicates that the Indian Basin-Upper Pennsylvanian Associated Pool is a small portion of an extensive Cisco-Canyon reservoir which encompasses the North Dagger Draw-Upper Pennsylvanian Pool, the South Dagger Draw-Upper Pennsylvanian Associated Pool, and the Indian Basin-Upper Pennsylvanian Gas Pool. This extensive reservoir comprises portions of Townships 19, 20, 20 1/2, 21 and 22 and Ranges 23, 24 and 25.

(12) The North Dagger Draw-Upper Pennsylvanian Pool, South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Gas Pool are all currently governed by permanent special rules and regulations summarized as follows:

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

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<u>POOL NAME</u>	<u>OIL/GAS/ ASSOCIATED</u>	<u>SPACING</u>	<u>ALLOWABLE</u>	<u>POOL GOR</u>	<u>SIM. DEDICATION ALLOWED</u>
North Dagger Draw-Upper Pennsylvanian	Oil	160 acres	700 BOPD 7.0 MMCFGD	10,000:1	No/NA
South Dagger Draw-Upper Pennsylvanian Associated	Associated	320 acres/ Oil 320 acres/ Gas	1,400 BOPD 9.8 MMCFGD	7,000:1	Yes
Indian Basin- Upper Pennsylvanian	Gas	640 acres	Prorated Gas	NA	NA

(13) In support of its request to increase the oil allowable and gas-oil ratio limitation and to include a provision whereby simultaneous dedication of acreage to both oil and gas wells is allowed, Yates presented geologic evidence which indicates that:

- a) the geologic properties (i.e. permeability, porosity, etc.) of the South Dagger Draw-Upper Pennsylvanian Associated Pool closely resemble those of the Indian Basin-Upper Pennsylvanian Associated Pool;
- b) extension of the pool boundaries for the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Associated Pool through development drilling will likely demonstrate that the pools represent a single common source of supply; and,
- c) both the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Associated Pool are located in an area of the Cisco-Canyon reservoir which is a transition zone between the oil producing portion of the reservoir and the gas cap, represented by the Indian Basin-Upper Pennsylvanian Gas Pool.

(14) The geologic evidence presented indicates that the Indian Basin-Upper Pennsylvanian Associated Pool is properly classified as an "associated" pool.

*CASE NO. 10748 (Reopened)*

*CASE NO. 11484*

*Order No. R-9922-C*

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(15) Previous cases presented before the Division have shown that oil allowables of 1,400 barrels per day per 320-acre proration unit should not have adverse effects on the reservoir or decrease ultimate recovery, therefore, the oil allowable for the Indian Basin-Upper Pennsylvanian Associated Pool should be increased as proposed by the applicant to be consistent with the North Dagger Draw-Upper Pennsylvanian Pool and the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(16) The reservoir conditions and correlative rights issues which prompted the deletion of Rule No. 5 (b) of the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico for the South Dagger Draw-Upper Pennsylvanian Associated Pool, thereby allowing the simultaneous dedication of acreage to both oil and gas wells, also exist within the Indian Basin-Upper Pennsylvanian Associated Pool, therefore, the simultaneous dedication of acreage to both oil and gas wells in the Indian Basin-Upper Pennsylvanian Associated Pool should be allowed.

(17) In support of its request to amend the current pool rules so as to allow the drilling of a well on each 80-acre tract within a standard proration unit, the applicant presented drainage data from existing wells within the pool. The information presented indicates that the smallest drainage area calculated was approximately 60 acres, and that the average drainage area within the pool is approximately 112 acres.

(18) The evidence presented indicates that even though both the North Dagger Draw-Upper Pennsylvanian Pool and the South Dagger Draw-Upper Pennsylvanian Associated Pool do not preclude the drilling of a well on each 40-acre tract within a standard proration unit, and that each of these pools has effectively been developed on 40-acre spacing, a more appropriate drilling density for the Indian Basin-Upper Pennsylvanian Associated Pool is one well per 80-acre tract.

(19) The applicant did not present sufficient evidence to justify the need for establishing a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil, however, the limiting gas-oil ratio for the Indian Basin-Upper Pennsylvanian Associated Pool should be increased to 7,000:1 in order to be consistent with the limiting GOR currently in effect for the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(20) No other operator and/or interest owner appeared and presented evidence in opposition to Yates' proposed pool rule amendments or to adopting permanent rules for the subject pool.

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

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(21) The establishment of permanent Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, including certain amendments proposed by Yates Petroleum Corporation, will allow the "equivalent" development of the Cisco-Canyon reservoir, will provide the oil and gas allowable incentive necessary for further development and delineation of the pool, will prevent the economic loss caused by the drilling of an excessive number of wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, as promulgated by Division Order No. R-9922, as amended, are hereby amended as follows and continued in full force and effect until further order of the Division.

**SPECIAL RULES AND REGULATIONS  
FOR THE  
INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL**

**RULE 2.** (a) A standard oil proration unit shall comprise 320 acres. A standard gas proration unit shall comprise 320 acres.

**RULE 2.** (b) Each well shall be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary. No more than one well per 80-acre tract shall be drilled or produced on a standard proration unit.

**RULE 6.** The limiting gas-oil ratio shall be 7,000 cubic feet of gas per barrel of oil.

**RULE 22.** The special depth bracket allowable for a 320-acre proration unit shall be 1,400 barrels of oil per day. All or any part of the allowable may be produced by a single well or by two or more wells on the unit.

CASE NO. 10748 (Reopened)  
CASE NO. 11484  
Order No. R-9922-C  
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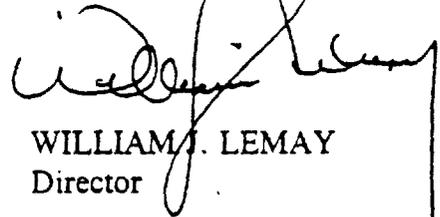
**IT IS FURTHER ORDERED THAT:**

(2) The application of Yates Petroleum Corporation in Case No. 11484 to delete Rule No. 5 (b) of the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico, as promulgated by Division Order No. R-5353, as amended, as it pertains to the Indian Basin-Upper Pennsylvanian Associated Pool, thereby allowing the simultaneous dedication of acreage to both oil and gas wells, is hereby approved.

(3) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

S E A L

*See Also Order Nos.*

*R-9922*

*R-9922-A*

*R-9922-B*

*R-9922-C*

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION  
FOR THE PURPOSE OF CONSIDERING:

*NOMENCLATURE*  
*CASE NO. 12006*  
*ORDER NO. R-9922-D*

**APPLICATION OF MARATHON OIL COMPANY, YATES PETROLEUM CORPORATION, ORYX ENERGY COMPANY, DEVON ENERGY CORPORATION (NEVADA) AND SANTA FE ENERGY RESOURCES, INC. FOR THE EXPANSION OF THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL AND THE CONCOMITANT CONTRACTION OF THE INDIAN BASIN-UPPER PENNSYLVANIAN GAS POOL, APPROVAL OF FOUR NON-STANDARD 320-ACRE GAS PRORATION UNITS, AN UNORTHODOX GAS WELL LOCATION, AND APPORTIONMENT OF GAS ALLOWABLES, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on July 9, 1998, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 7th day of December, 1998, the Division Director, having considered the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) The Indian Basin-Upper Pennsylvanian Gas Pool is a prorated gas pool currently governed by the "General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Gas Pool," as promulgated by Division Order No. R-8170, as amended, which require standard 640-acre spacing and proration units ("GPU") with wells to be located no closer than 1650 feet from the outer boundary of the GPU nor closer than 330 feet from any governmental quarter-quarter section line or subdivision inner boundary. The current gas allowable for the Indian Basin-Upper Pennsylvanian Gas Pool is approximately 6.5 MMCFG per day per GPU.

(3) The Indian Basin-Upper Pennsylvanian (Prorated) Gas Pool currently comprises the following described area in Eddy County, New Mexico:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM

Section 3:	W/2
Section 4:	All
Sections 8 and 9:	All
Section 10:	W/2
Section 15:	W/2
Sections 16 through 30:	All
Sections 32 through 36:	All

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Sections 19 through 21:	All
Sections 28 through 32:	All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM

Sections 1 through 5:	All
Sections 8 through 17:	All
Section 21:	N/2
Section 22:	All.

(4) The Indian Basin-Upper Pennsylvanian Associated Pool is currently governed by the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool," as promulgated by Division Order No. R-9922, as amended, which require standard 320-acre oil and gas spacing units with wells to be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary, and with no more than one well per 80-acre tract to be drilled or produced on a standard proration unit. The special depth bracket allowable for the pool is 1,400 barrels of oil per day. The limiting gas-oil ratio for the pool is 7,000 cubic feet of gas per barrel of oil, which results in a casinghead gas allowable of 9.8 MMCFG per day.

(5) The Indian Basin-Upper Pennsylvanian Associated Pool currently comprises the following described area in Eddy County, New Mexico:

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Section 27:	S/2
Sections 33 and 34:	All.

TOWNSHIP 22 SOUTH, RANGE 24 EAST, NMPM

Sections 2 through 10: All  
Section 11: N/2  
Sections 16 and 17: All.

(6) The applicants, Marathon Oil Company, Yates Petroleum Corporation, Oryx Energy Company, Devon Energy Corporation (Nevada), and Santa Fe Energy Resources, Inc. seek an order expanding the Indian Basin-Upper Pennsylvanian Associated Pool in Eddy County, New Mexico to include:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM

Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Sections 20 and 21: All  
Sections 28 through 32: All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM

Section 1: E/2  
Section 12: E/2  
Section 13: E/2

TOWNSHIP 22 SOUTH, RANGE 24 EAST, NMPM

Section 18: All

AND THE concomitant contraction of the Indian Basin-Upper Pennsylvanian Gas Pool by deleting therefrom:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM

Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Sections 20 and 21: All  
Sections 28 through 32: All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM

Section 1: E/2  
Section 12: E/2  
Section 13: E/2.

(7) In conjunction with the proposed adjustment to the boundaries of the two subject pools, the applicants seek to establish the following four 320-acre, more or less, GPU's within the Indian Basin-Upper Pennsylvanian Gas Pool within Section 36, Township 21 South, Range 23 East, NMPM, and Sections 1, 12, and 13, Township 22 South, Range 23 East, NMPM, Eddy County, New Mexico:

(A) the W/2 of Section 36, comprising 320 acres, which is to be dedicated to the existing Lowe State Gas Com Well No. 1 (API No. 30-015-10342), located 1995 feet from the North line and 1712 feet from the West line (Unit F) of Section 36;

(B) the W/2 equivalent of Section 1, comprising 336.57 acres, on which there is currently no well;

(C) the W/2 of Section 12, comprising 320 acres, which is to be dedicated to the existing Smith Federal Gas Com Well No. 2 (API No. 30-015-26834) located 2049 feet from the North line and 480 feet from the West line (Unit E) of Section 12; and

(D) the W/2 of Section 13, comprising 320 acres, which is to be dedicated to the HOC Federal Gas Com Well No. 2 (API No. 30-015-26939) located 330 feet from the North and West lines (Unit D) of Section 13.

(8) The proposed acreage and pool rededication results in the Lowe State Gas Com Well No. 1 being only 928 feet from the outer boundary of its newly designated 320-acre gas proration unit. The resulting unorthodox gas well location for this well requires proper authorization pursuant to the appropriate rules and regulations governing the Indian Basin-Upper Pennsylvanian Gas Pool.

(9) On behalf of the applicants, Marathon Oil Company presented geologic, petroleum engineering, and oil and gas mineral ownership and land evidence, which demonstrates that this application should be granted and which is summarized as follows:

(A) In the Indian Basin area, the Upper Pennsylvanian interval contains multiple compartmentalized reservoirs, which are productive of oil, gas and water from several dolomitized horizons from the top of the Cisco formation to

the base of the Canyon formation.

(B) The Cisco/Canyon formations within the Indian Basin-Upper Pennsylvanian Gas Pool, including the extension area, and the Indian Basin-Upper Pennsylvanian Associated Pool were originally developed with flowing gas wells on 640-acre gas spacing such that, once the gas wells stopped flowing as a result of water encroachment, the wells were abandoned.

(C) The Indian Basin-Upper Pennsylvanian Gas Pool attained its maximum extension in the 1970s and, since then, water encroachment has advanced from east to west slowly watering out the flowing gas wells. Currently, flowing gas production occurs west of a structural contour line at minus 3300 feet subsea elevation.

(D) In 1992, Yates Petroleum Corporation reentered and recompleted the Hickory "ALV" Federal Well No 1 (API No. 30-015-10566), located 1650 feet from the North and West lines (Unit F) of Section 17, Township 22 South, Range 24 East, NMPM. Using the same high capacity pumps used in the nearby South Dagger Draw-Upper Pennsylvanian Associated Pool, Yates was able to achieve rates of 400 BOPD, 500 MCFGPD and 1200 BWPD in a former Indian Basin-Upper Pennsylvanian Gas Pool well which had previously been depleted. Thereafter the Division entered Order No. R-9922 and created the Indian Basin-Upper Pennsylvanian Associated Pool.

(E) The Cisco/Canyon formations within the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area are in a structural feature separated from the Indian Basin-Upper Pennsylvanian Gas Pool by a structural saddle at the top of the Cisco at a subsea elevation of minus 3500 feet. New wells located within 320-acre spacing units in the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area are now producing or have the potential to produce oil and gas that was not previously recovered when this area was originally developed as part of the Indian Basin-Upper Pennsylvanian Gas Pool.

(F) Current oil and gas production from the Cisco/Canyon formations in the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area required extensive formation "de-watering." Hydrocarbons are mobilized by continuous movement of large volumes of water with artificial lift.

(G) Pressure data demonstrates that:

(i) the Indian Basin-Upper Pennsylvanian Associated Pool, with a pressure on average of 1600 psi, is not in pressure communication with the Indian Basin-Upper Pennsylvanian Gas Pool, which has a current pressure on average of 500 psi; and

(ii) wells in the extension area of Township 21 South, Range 24 East, NMPM, have a pressure related to the Indian Basin-Upper Pennsylvanian Associated Pool.

(H) Production data demonstrates that:

(i) there are no flowing gas wells in the extension area; and

(ii) old flowing gas wells in the extension area were abandoned when they watered out and new wells are attaining oil and gas production by using high capacity pumps.

(I) The division of Section 36, Township 21 South, Range 23 East, NMPM and Sections 1, 12, and 13, Township 22 South, Range 23 East, NMPM (the transition area) into non-standard 320-acre, more or less, gas proration and spacing units will provide an equitable "buffer" between the Indian Basin-Upper Pennsylvanian Gas Pool and the Indian Basin-Upper Pennsylvanian Associated Pool because:

(i) wells have been located or can be located such that drainage by wells in the Indian Basin-Upper Pennsylvanian Associated Pool can be met with counter drainage from wells located or to be located on the eastern side of each of the four 320-acre, more or less, non-standard gas spacing and proration units in the Indian Basin-Upper Pennsylvanian Gas Pool provided that wells located on the eastern side of these units can be no closer than 660 feet from the eastern boundary, which is also the setback requirement for wells in the Indian Basin-Upper Pennsylvanian Associated Pool; and

(ii) wells located in the Indian Basin-Upper Pennsylvanian Gas Pool will not suffer unfair competition from wells located or to be located in these four, non-standard gas proration units because allowables will be apportioned based upon the gas proration system adopted for the Indian Basin-Upper Pennsylvanian Gas Pool.

(J) The granting of this application should not impair the correlative rights:

(i) of any working interest owner within any of the existing 640-acre GPUs because there are voluntary joint operating agreements requiring that all those owners continue to share in production and pay costs from the new 320-acre spacing units on the same proportional basis as in the original 640-acre unit;

(ii) of any overriding royalty interest owner or the federal royalty under a federal oil and gas lease within any of the existing 640-

~~CONFIDENTIAL~~

acre GPUs because there are federal communitization agreements requiring that all those owners continue to share in production from the new 320-acre spacing units on the same proportional basis as in the original 640-acre unit;

(iii) under Section 32, Township 21 South, Range 24 East, NMPM, which consists of two 320-acre State of New Mexico leases and is operated by Marathon Oil Company, because there are no overriding royalty owners and the State Land Office desires that the communitization agreement for the existing 640-acre proration unit terminate and be replaced by two 320-acre proration units co-extensive with the two State leases; and,

(iv) under Section 36, Township 21 South, Range 23 East, NMPM, which consists of two State of New Mexico leases and is operated by ORYX Energy Company, because there are no overriding royalty owners and the State Land Office desires that the existing 640-acre communitization agreement terminate and be replaced by two 320-acre communitization agreements.

(10) The evidence and testimony presented at the hearing further indicate that:

(A) The Cisco/Canyon formations within the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area are a single structural feature such that wells located in this area should be subject to the same special rules and regulations.

(B) Geologic and petroleum engineering evidence demonstrate that substantial volumes of oil and gas, which otherwise would not be produced, can be economically recovered from the extension area if that area is subject to the

current rules applicable to the Indian Basin-Upper Pennsylvanian Associated Pool, thereby preventing waste.

(C) Making the extension area part of the Indian Basin-Upper Pennsylvanian Associated Pool will afford the opportunity to increase the de-watering process in the reservoir and improve recovery efficiencies for both oil and gas.

(D) The adoption of the four 320-acre, more or less, non-standard gas proration and spacing units will establish a temporary "buffer" or transition area between the Indian Basin-Upper Pennsylvanian Gas Pool and the Indian Basin-Upper Pennsylvanian Associated Pool, which at this time will establish equity and protect correlative rights.

(11) The applicants are all of the operators of wells in the extension area and they have met and unanimously agreed upon this application.

(12) In accordance with Division notification rules, notification of this application and request for hearing has been sent to the owners within the proposed expansion area and to the offset operators to each non-standard gas proration and spacing unit and no objections have been received by either the Division or Marathon Oil Company, which sent out these notices.

(13) In order to prevent waste, to prevent the drilling of unnecessary wells, to protect correlative rights and provide for a more orderly development of the Cisco/Canyon formations, it is necessary to do the following:

(A) contract the Indian Basin-Upper Pennsylvanian Gas Pool and expand the Indian Basin-Upper Pennsylvanian Associated Pool as described in Finding Paragraph No. 6;

(B) approve the four non-standard 320-acre, more or less, GPU's within the Indian Basin-Upper Pennsylvanian Gas Pool as described in Finding Paragraph No. 7; and,

(C) approve an unorthodox gas well location for the Lowe State Gas Com Well No. 1 located 1995 feet from the North line and 1712 feet from the West line (Unit K) of said Section

36.

(14) Marathon Oil Company, Santa Fe Energy Resources, Inc. and ORYX Energy Corporation were present at the hearing and Marathon Oil Company, on behalf of the applicants, provided technical land, geologic and engineering testimony concerning the reservoir and, these pools.

(15) No other operator and/or interest owner appeared at the hearing in opposition to the application.

(16) Approval of the applicant's request will allow the interest owners the opportunity to economically recover their share of the oil and gas in the subject pools, will not reduce ultimate recovery from the subject pools, and will not violate correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The Indian Basin-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby contracted by the deletion of the following described area:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM  
Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM  
Sections 20 and 21: All  
Sections 28 through 32: All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM  
Section 1: E/2  
Section 12: E/2  
Section 13: E/2.

(2) Concomitantly, the Indian Basin-Upper Pennsylvanian Associated Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein the following described area:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM  
Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Sections 20 and 21: All  
Sections 28 through 32: All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM

Section 1: E/2  
Section 12: E/2  
Section 13: E/2.

TOWNSHIP 22 SOUTH, RANGE 24 EAST, NMPM

Section 18: All.

(3) The following four 320-acre, more or less, GPU's within the Indian Basin-Upper Pennsylvanian Gas Pool within Section 36, Township 21 South, Range 23 East, and Sections 1, 12, and 13, Township 22 South, Range 23 East, NMPM, Eddy County, New Mexico, are hereby approved:

(A) the W/2 of Section 36, comprising 320 acres, which is to be dedicated to the existing Lowe State Gas Com Well No. 1 (API No. 30-015-10342), located at an unorthodox gas well location for the 320-acre GPU, 1995 feet from the North line and 1712 feet from the West line (Unit F) of Section 36;

(B) the W/2 of Section 1, comprising 336.57 acres, on which there is currently no well;

(C) the W/2 of Section 12, comprising 320 acres, which is to be dedicated to the existing Smith Federal Gas Com Well No. 2 (API No. 30-015-26834) located 2049 feet from the North and 480 feet from the West lines (Unit E) of Section 12; and,

(D) the W/2 of Section 13, comprising 320 acres, which is to be dedicated to the HOC Federal Gas Com Well No. 2 (API No. 30-015-26939) located 330 feet from the North line and 330 feet from the West line (Unit D) of Section 13.

(4) Any future well located in any of these four non-standard gas proration and spacing units no closer than 660 feet to the eastern boundary of the unit shall be considered

to be at a standard location.

(5) The apportionment of gas allowables for the four non-standard GPU's shall be accomplished by applying a 0.5 acreage factor to each of the non-standard GPU's.

(6) An unorthodox gas well location for the following well in the Indian Basin-Upper Pennsylvanian Gas Pool, which became unorthodox as a result of the change in pool boundary, is hereby approved: Lowe State Gas Com Well No. 1 located 1995 feet from the North line and 1712 feet from the West line and of Section 36, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico.

(7) The locations of all wells presently drilling to or completed in the Indian Basin-Upper Pennsylvanian Associated Pool within this expansion area are hereby approved; the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well within thirty days from the date of this order.

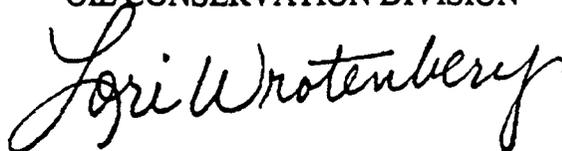
(8) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the Indian Basin-Upper Pennsylvanian Associated Pool within this expansion area shall have dedicated thereto 320 acres; or, pursuant to Paragraph C of Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

(9) Failure to file new Forms C-102 with the Division dedicating 320 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to being shut-in.

(10) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

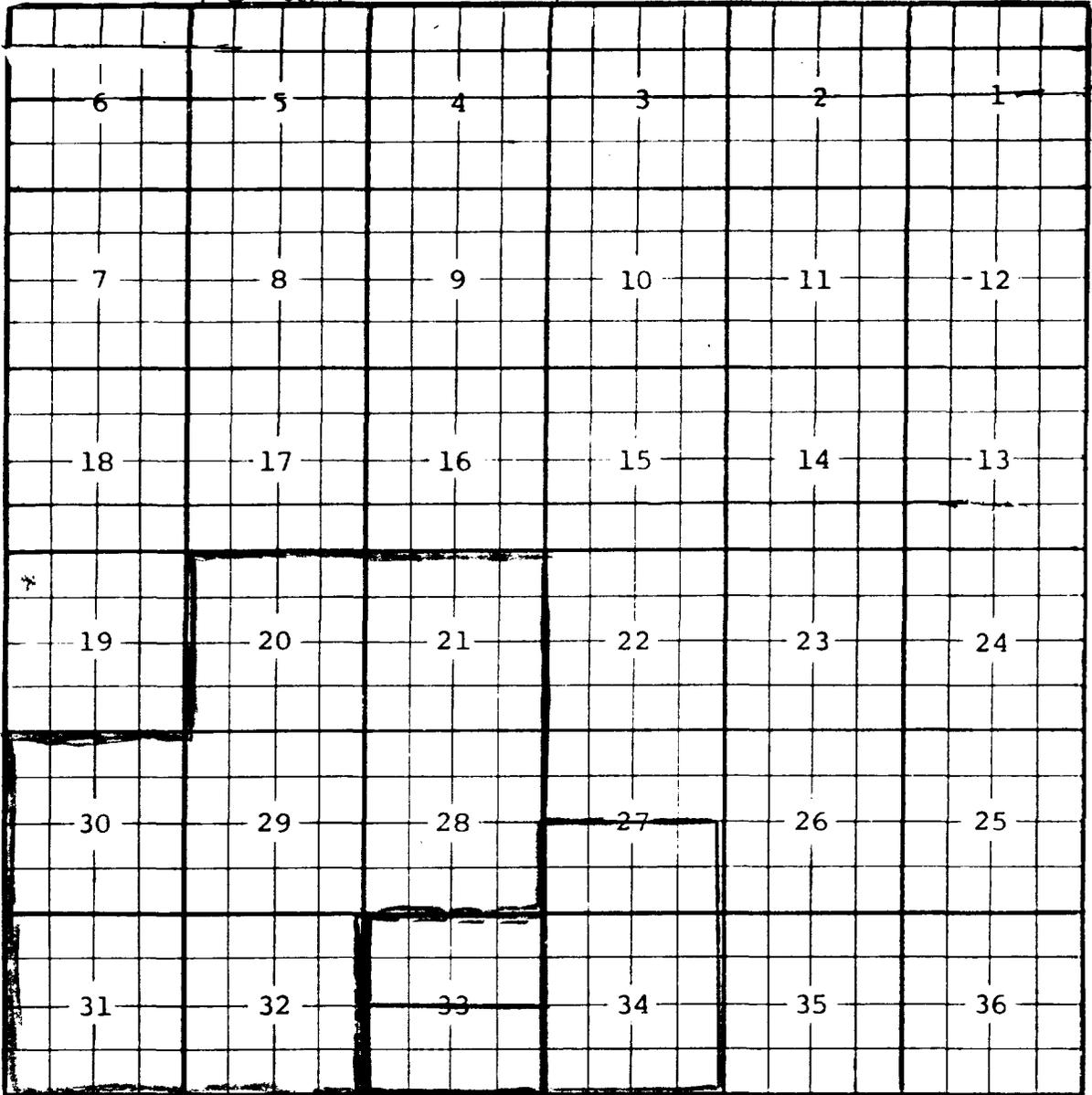


LORI WROTENBERY  
Director

SEAL

County Eddy Pool Indian Basin-Upper Pennsylvanian  
Associated

TOWNSHIP 21 South Range 24 East NMPM



Ext:  $\frac{1}{2}$  Sec. 27, All Sec. 34 (R-9963, 9-20-93)

Ext:  $\frac{1}{2}$  Sec. 33 (R-10518, 10-20-95) Ext:  $\frac{1}{2}$  Sec. 33 (R-10664, 9-16-96)

Ext: All Secs. 20, 21, 28, 29, 30, 31, 32 (R-9922-D, 12-7-94)

**UNITED STATES N.M. Oil Cons. Division**  
**DEPARTMENT OF THE INTERIOR 810 S. 1st Street**  
**BUREAU OF LAND MANAGEMENT Artesia, NM 88210-2834**  
**SUNDRY NOTICES AND REPORTS ON WELLS**

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  **Marathon Oil Company**

3a. Address **P.O. Box 552 Midland, TX 79702**

3b. Phone No. (include area code) **915-882-1625**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**UL "B", 660' FNL & 2220' FEL  
 SECTION 28, T-21-S, R-24-E**

5. Lease Serial No. **NM 06293**

6. If Indian, Allottee or Tribe Name

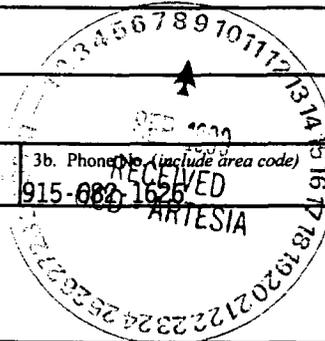
7. If Unit or CA/Agreement, Name and/or No.  
**INDIAN HILLS UNIT**

8. Well Name and No.  
**INDIAN HILLS UNIT #17**

9. API Well No.  
**30-015-30661**

10. Field and Pool, or Exploratory Area  
**INDIAN BASIN UPPER PENN ASSOCIATED GAS POOL**

11. County or Parish, State  
**EDDY NM**

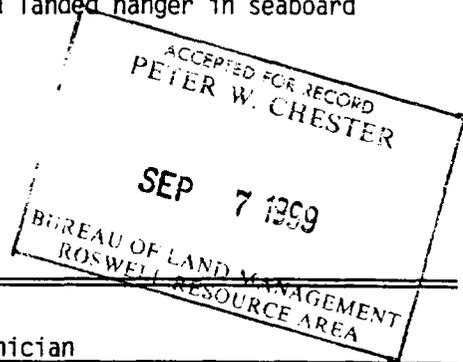


**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <u>INITIAL</u>
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <u>COMPLETION</u>
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Work commenced 7/27/99. MIRU PU. NU BOP & tested. RIH to RBP & latched on. POOH w/RBP. RIH w/bit & DCs on 2-7/8 tbg. Tagged on soft fill, circ wellbore clean & POOH L/D DCs & bit. RU wireline & run GR-cast V Bond Log from 8172'-6200'. RU Baker Atlas & Perf well from 7406'-7471', 7484'-7500', 7528'-7538', 7542'-7558' w/4 jsp. PU & run PPI packer w/tbg & set @ 7292'. Pickled tbg w/600 gals acid. Treated perms 7406'-7558' w/100 gpf 15% CCA Sour acid in 2' increments for a total of 12,000 gals. Set PPI packer @ 7323'. Fished valves & swabbed well. Recovered 72 bbls in 3 hrs. Pulled tbg w/PPI packer & RIH w/RBP on 2-7/8" tbg to 4536'. Couldn't load well, released RBP. RIH & moved RBP to 7838'. PUH & reset RBP @ 7025', loaded & tested OK to 500 psi. Moved RBP to 7811' and reset. POOH, ND BOP, NU wellhead, & NU BOP. RIH w/sub pump & tbg to 7804', made final splice, and landed hanger in seaboard head. ND BOP. NU wellhead & turn well over to production on 8/1/99.



14. I hereby certify that the foregoing is true and correct  
 Name (Printed/Typed) **Ginny Larke** *Ginny Larke* Title **Engineer Technician**  
 Date **8/30/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice 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.	Office	

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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division  
677 S. 1st Street  
Artesia, NM 88210-2834

FORM APPROVED  
OMB NO. 1004-0137  
Expires: February 28, 1995  
LEASE DESIGNATION AND SERIAL NO.  
NM 06293

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other   
b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other

2. NAME OF OPERATOR  
Marathon Oil Company

3. ADDRESS AND TELEPHONE NO.  
P.O. Box 552 Midland, TX 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface  
UL "B", 660' FNL & 2220' FEL  
At top prod. interval reported below  
At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPUDDED 6/25/99  
16. DATE T.D. REACHED 7/20/99  
17. DATE COMPL. (Ready to prod.) 8/1/99  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* KB: 3681'; GL: 3664'

20. TOTAL DEPTH, MD & TVD 9750'  
21. PLUG, BACK T.D., MD & TVD 8172'  
22. IF MULTIPLE COMPL. HOW MANY\*  
23. INTERVALS DRILLED BY  
ROTARY TOOLS ALL  
CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)\*  
7400' - 8002', UPPER PENN

26. TYPE ELECTRIC AND OTHER LOGS RUN  
NGR, MCFL/GR, NGR SPECTROSCOPY, CNT, CN/GR

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9-5/8", K55	36#	1220'	12.25"	489 SX, CIRC 233 SX TO SURF.	
7", K55	23 & 26#	8200'	8.75"	415 SX FOAM, 660 SX CIRC 70SX	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	7804'	RBP-7811'

31. PERFORATION RECORD (Interval, size and number)  
7406' - 7471', 7484' - 7500', 7528' - 7538', 7542' - 7558'  
4 JSPF

32. ACID SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7406-7558'	12,000 GALS. 15% CCA SOUR HC1

33.\* PRODUCTION

DATE FIRST PRODUCTION 8/5/99  
PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) CENTRILIFT K-34, 190 HP SUBMERSIBLE PUMP  
WELL STATUS (Producing or shut-in) PRODUCING

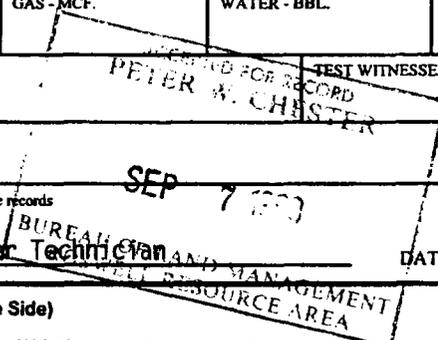
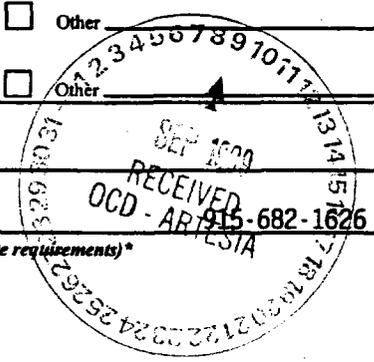
DATE OF TEST 8/18/99  
HOURS TESTED 24  
CHOKE SIZE  
PROD'N. FOR TEST PERIOD  
OIL - BBL. 179  
GAS - MCF. 7567  
WATER - BBL. 4504  
GAS - OIL RATIO 42.274

FLOW, TUBING PRESS. 0  
CASING PRESSURE 300  
CALCULATED 24-HOUR RATE  
OIL - BBL.  
GAS - MCF.  
WATER - BBL.  
OIL GRAVITY - API (CORR.) 41.3

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
SOLD

35. LIST OF ATTACHMENTS  
LOGS & INCLINATION SURVEY

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED Genny Larke TITLE Engineer Technician DATE 8/30/99



\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Upper Penn	7400'	8002'	Dolomite, Limestone, Shale; Oil, Gas & Water	San Andres	750'	
				Glorietta	2390'	
				Yeso	2550'	
				Bone Spring	5095'	
				Bone Spring Sand	6586'	
				Wolfcamp	6710'	
				Upper Penn	7400'	

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**N.M. Oil Cons. Division  
811 S. 1st Street  
Artesia, NM 88210-2834**

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator   
 Marathon Oil Company

3a. Address  
 P.O. Box 552 Midland, TX 79702

3b. Phone No. (Include Area Code)  
 915-682-0126 ARTESIA

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 UL "B", 660' FNL & 2220' FEL  
 SECTION 28, T-21-S, R-24-E

5. Lease Serial No.  
 NM 06293

6. If Indian, Allottee or Tribe Name

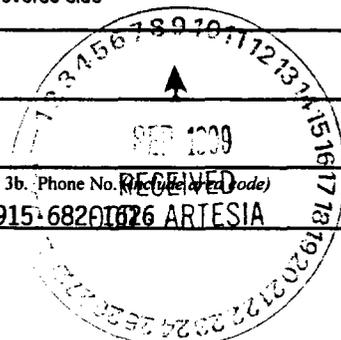
7. If Unit or CA/Agreement, Name and/or No.  
 INDIAN HILLS UNIT

8. Well Name and No.  
 INDIAN HILLS UNIT #17

9. API Well No.  
 30-015-30661

10. Field and Pool, or Exploratory Area  
 INDIAN BASIN UPPER PENN ASSOCIATED POOL

11. County or Parish, State  
 EDDY NM

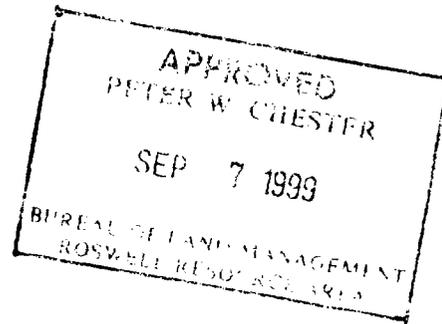


12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

As required by Onshore Order #7, Marathon Oil Company is notifying you of existing and intended methods of water disposal from this well. Produced water from this well will be sent, via pipeline, to one of the wells listed under PRIMARY DISPOSAL on the attached sheets. If additional capacity is required, water may be sent via pipeline (if available) or truck hauled to any of the wells listed under SECONDARY DISPOSAL on the attached sheets.



14. I hereby certify that the foregoing is true and correct  
 Name (Printed/Typed)

Ginny Larke

*Ginny Larke*

Title

Engineer Technician

Date

8/30/99

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice 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.	Office	

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.

August 30, 1999

**ATTACHMENT I**

**Marathon Oil Company Indian Basin**

**Primary Disposal:** MOC Battery Disposal System

Operated By: Marathon Oil Company  
Well Name: MOC SWD # 1  
Location: UL "M" Section 7, T-20-S, R-25-E  
Permit#: SWD 448

Operated By: Marathon Oil Company  
Well Name: Indian Hills State Com # 7  
Location: UL "F" Section 36, T-20-S, R-24-E  
Permit #: SWD 570

**Primary Disposal:** IBGP Disposal System

Operated By: Marathon Oil Company  
Well Name: Indian Basin Gas Com # 1  
Location: UL "E" Section 23, T-21-S, R-23-E  
Permit #: SWD 416

Operated By: Marathon Oil Company  
Well Name: Marathon Federal # 1  
Location: UL "K" Section 24, T-21-S, R-23-E  
Permit #: SWD 55

**Primary Disposal:** Indian Hills Unit Disposal System

Operated By: Marathon Oil Company  
Well Name: Rocky Hills #1 SWD  
Location: UL "O" Section 19, T-21-S, R-24-E  
Permit #: SWD 691

Operated By: Marathon Oil Company  
Well Name: Rocky Hills #2 SWD  
Location: UL "I" Section 20, T-21-S, R-24-E  
Permit #: SWD 738

**Secondary Disposal**

Well Name: Springs SWD  
Operator: Rowland  
Location: Sec 27, T-20-S, R-26-E  
Permit#: SWD 86

Well Name: BKE  
Operator: Rowland  
Location: Sec 13, T-23-S, R-27-E  
Permit#: SWD 495

Well Name: Salty Bill SWD  
Operator: Grace Oil  
Location: Sec 36, T-22-S, R-26-E  
Permit#: SWD R-118 Fed ID # 850303046

Well Name: Big Eddy Federal 100 SWD (Whistle Stop)  
Operator: Dakota Resources  
Location: Unit "L", Sec 8, T-21-S, R-28-E  
Permit#: SWD 461

August 30, 1999

Well Name: Dorstate SWD  
Operator: Mesquite Services  
Location: Sec 27, T25S, R26E  
Permit#: SWD 247

Well Name: Aikman SWD State # 1  
Location: Section 27, T-19-S, R-25-E  
Permit#: SWD 417

Well Name: Holstun # 1 SWD  
Operated By: Nearburg Producing Company  
Location: Section 4, T-20-S, R-25-E  
Permit#: R 9269

Well Name: Charlotte McKay Federal # 1 SWD  
Operated By: Yates Petroleum  
Location: Section 25, T-20-S, R-25-E  
Permit#: SWD 460

Well Name: Walter Solt State No. 1  
Location: Unit "L", Sec 5, T-18-S, R-28-E  
Permit#: SWD 318

Well Name: Dagger Draw Salt Water Disposal  
Location: Sec 22, T-19-S, R-25-E  
Permit#: R7637

Well Name: Corrine Grace Salt Water Disposal Well  
Location: Sec 36, T-22-S, R-26-E  
Permit#: K6290

Well Name: Myrtle-Myra WIW # 1  
Location: Sec 21, T-21-S, R-27-E  
Permit#: NMOCD-FWD-391

Solids that can't be hauled into one of these disposal sites will be sent to:

Well Name: CRI SWD  
Location: Sec 27, T20S, R32E  
Permit #: SWD R91166

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  
2040 South Pacheco, Santa Fe, NM 87505

**OIL CONSERVATION DIVISION**  
**2040 South Pacheco**  
**Santa Fe, NM 87505**

AMENDED REPORT

**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

<sup>1</sup> Operator name and Address Marathon Oil Company ✓ P.O. Box 552 Midland, TX 79702		<sup>2</sup> OGRID Number 014021
		<sup>3</sup> Reason for Filing Code NEW WELL
<sup>4</sup> API Number 30-0 30-015-30661	<sup>5</sup> Pool Name INDIAN BASIN UPPER PENN ASSOCIATED GAS POOL	
<sup>6</sup> Pool Code 33685		
<sup>7</sup> Property Code 6409	<sup>8</sup> Property Name INDIAN HILLS UNIT	<sup>9</sup> Well Number 17

**II. <sup>10</sup> Surface Location**

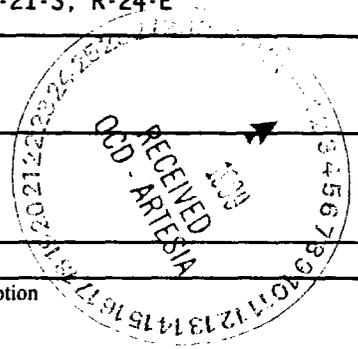
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
B	28	21-S	24-E		660	NORTH	2220	EAST	EDDY

**<sup>11</sup> Bottom Hole Location**

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<sup>12</sup> Lse Code F	<sup>13</sup> Producing Method Code PUMPING		<sup>14</sup> Gas Connection Date 8/5/99		<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date		<sup>17</sup> C-129 Expiration Date	

**III. Oil and Gas Transporters**

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> POD	<sup>21</sup> O/G	<sup>22</sup> POD ULSTR Location and Description
138648	AMOCO PIPELINE TRUCKS 502 N. WEST AVENUE LEVELLAND, TX 79336	2816323	OIL	UL "P", LOT 12, SECTION 19, T-21-S, R-24-E
014035	MARATHON OIL COMPANY P. O. BOX 1324 ARTESIA, NM 88211-1324	2823213	GAS	UL "P", LOT 12, SECTION 19, T-21-S, R-24-E



**IV. Produced Water**

<sup>23</sup> POD 2823214	<sup>24</sup> POD ULSTR Location and Description UL "P", LOT 12, SECTION 19, T-21-S, R-24-E
------------------------------	--

**V. Well Completion Data**

<sup>25</sup> Spud Date 6/25/99	<sup>26</sup> Ready Date 8/1/99	<sup>27</sup> TD 9750'	<sup>28</sup> PBTB 8172'	<sup>29</sup> Perforations 7406' - 7558'	<sup>30</sup> DHC, DC, MC
<sup>31</sup> Hole Size 12.25"	<sup>32</sup> Casing & Tubing Size 9-5/8"	<sup>33</sup> Depth Set 1220'		<sup>34</sup> Sacks Cement 489 SX, CIRC 233 SX TO SURF.	
8.75"	7"	8200'		1075 SX, CIRC 70 SX	
	2-7/8"	7804'			

**VI. Well Test Data**

<sup>35</sup> Date New Oil 8/5/99	<sup>36</sup> Gas Delivery Date 8/5/99	<sup>37</sup> Test Date 8/18/99	<sup>38</sup> Test Length 24 HRS	<sup>39</sup> Tbg. Pressure 0	<sup>40</sup> Csg. Pressure 300
<sup>41</sup> Choke Size	<sup>42</sup> Oil 179	<sup>43</sup> Water 4054	<sup>44</sup> Gas 7567	<sup>45</sup> AOF	<sup>46</sup> Test Method PUMPING

<sup>47</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *GINNY LARKE*  
Printed name: Ginny Larke  
Title: Engineer Technician  
Date: 8/30/99  
Phone: 915-682-1626

**OIL CONSERVATION DIVISION**  
Approved by: *Jim W. Green*  
Title: District Supervisor  
Approval Date: 9-2-99

<sup>48</sup> If this is a change of operator fill in the OGRID number and name of the previous operator			
Previous Operator Signature	Printed Name	Title	Date

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**N.M. Oil Cons. Division**  
811 S. 1st Street  
Artesia, NM 88210-2834

**SDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000

5. Lease Serial No. **NM-06293**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No. **INDIAN HILLS UNIT**

8. Well Name and No. **INDIAN HILLS UNIT 17**

9. API Well No. **30-015-30661**

10. Field and Pool, or Exploratory Area **INDIAN BASIN - MORROW**

11. County or Parish, State **EDDY NM**

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator **Marathon Oil Company**

3a. Address **P.O. Box 552 Midland, TX 79702**

3b. Phone No. (include area code) **915/687-8356**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**U.L. "B", 660' FNL & 2220' FEL  
 SEC. 28, T-21-S, R-24-E**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>DRILL DEEPER</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Coompleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

TD'D WELL IN UPPER PENN AT 8200', PROPOSE TO RUN & CEMENT 7" CASING AT 8200'.

PROPOSE TO DRILL 6 1/8" HOLE TO INDIAN BASIN MORROW POOL AT 9700'. SET 4 1/2", 11.6#, K-55 CASING. TOP OF LINER @ +/- 8,000', CEMENT LINER WITH +/- 150 SACKS CLASS "H"

BOPE - 11" 5M, DUAL RAM, ANNULAR, ROTATING HEAD WITH CHOKE MANIFOLD

WELL WAS ORIGINALLY PROPOSED AS AN INDIAN BASIN UPPER PENN ASSOCIATED TEST.

RECEIVED  
OGD - ARTESIA

RECEIVED  
JUL 13 A 11:07  
BUREAU OF LAND MGMT.  
OGD - ARTESIA AREA

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) **R. J. LONGMIRE** *Walter J. Quare* Title **DRILLING SUPERINTENDENT**

Date **7/9/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by **(ORIG. SGD.) DAVID H. GLASS** Title **PETROLEUM ENGINEER** Date **JUL 19 1999**

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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 1990, Hobbs, NM 88241-1990

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

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-30661	Pool Code 78960	Pool Name Indian Basin - Morrow
Property Code 6409	Property Name INDIAN HILLS UNIT	
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	
		Well Number 17
		Elevation 3664'

Surface Location

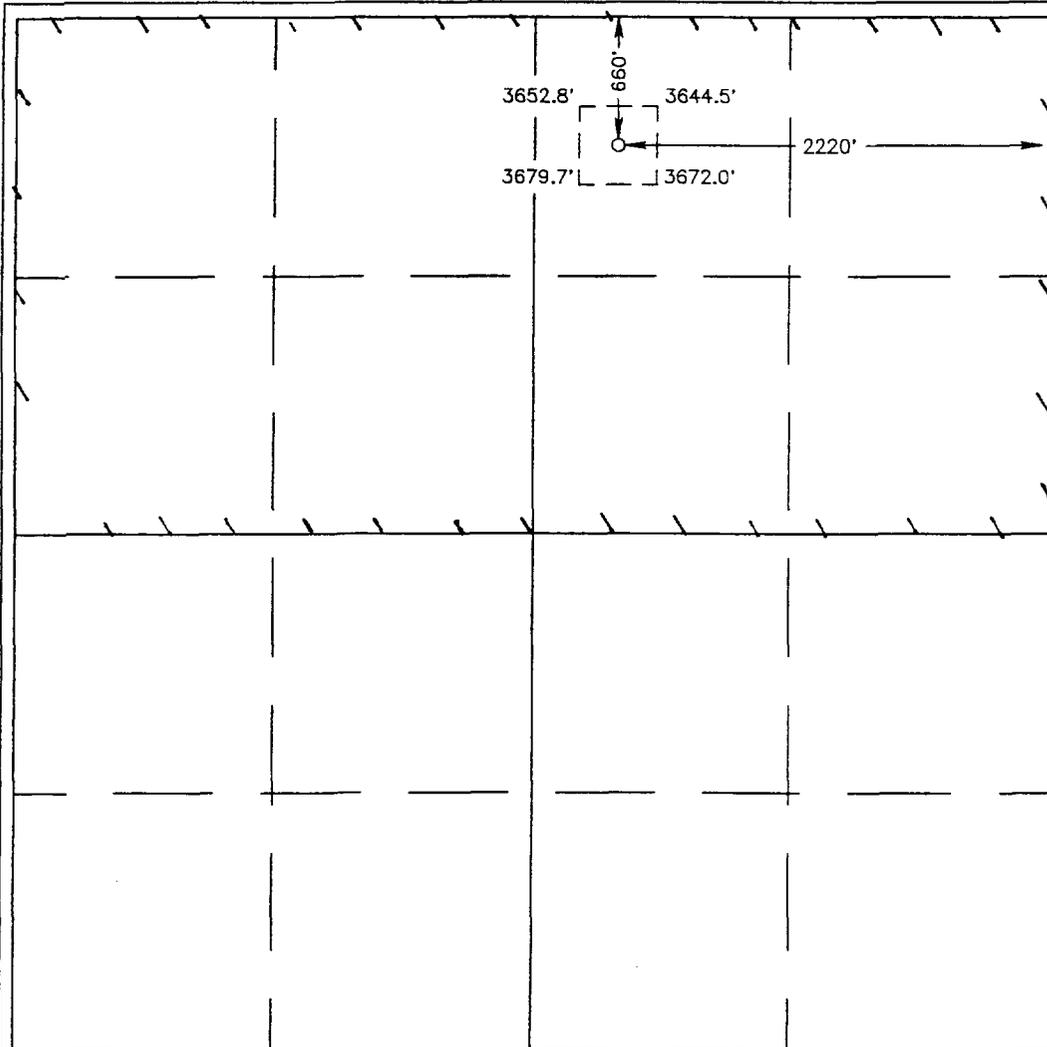
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	28	21 S	24 E		660	NORTH	2220	EAST	EDDY

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 320	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



OPERATOR CERTIFICATION

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

*R. J. Longmire*  
Signature  
R. J. Longmire  
Printed Name  
Drilling Superintendent  
Title  
7/9/99  
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.

JANUARY 28, 1999

Date Surveyed \_\_\_\_\_ CDG  
Signature & Seal of Professional Surveyor

*Ronald J. Edson* 1-29-99  
99-11-0049

Certificate No. RONALD J. EDSON 3239  
GARY EDSON 12641

UNITED STATES  
DEPARTMENT OF THE INTERIOR **N.M. Oil Cons. Division**  
BUREAU OF LAND MANAGEMENT  
811 S. 1st Street  
Artesia, NM 88210-2834

FORM APPROVED *SF*  
Budget Bureau No. 1004-0135  
Expires November 30 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No. **NM-06293**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No. **INDIAN HILLS UNIT**

8. Well Name and No. **INDIAN HILLS UNIT 17**

9. API Well No. **30-015-30661**

10. Field and Pool, or Exploratory Area **INDIAN BASIN - MORROW**

11. County or Parish, State **EDDY NM**

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

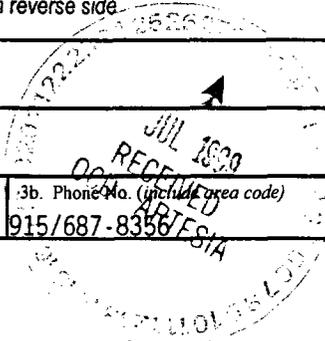
1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator **Marathon Oil Company**

3a. Address **P.O. Box 552 Midland, TX 79702**

3b. Phone No. (include area code) **915/687-8356/ES14**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**U.L. "B", 660' FNL & 2220' FEL  
 SEC. 28, T-21-S, R-24-E**



12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <u>Spud &amp; Drld</u>
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <u>Operations</u>
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Coompleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)  
**See attached for detail.**

ACCEPTED FOR RECORD  
JUL 24 1999  
*ars*

14. I hereby certify that the foregoing is true and correct  
 Name (Printed/Typed) **R. J. LONGMIRE** *R. J. Longmire* Title **DRILLING SUPERINTENDENT**

Date **7/20/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any, are attached. Approval of this notice 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. Office \_\_\_\_\_

## Marathon Oil Company

Indian Hills Unit # 17  
660' FNL & 2220' FEL  
Section 28, T-21-S, R-24-E  
Eddy County, N.M.

**API # 30-015-30661**

6/25/99, MIRU McVay # 4, Spud 12.25" hole @ 0900 hrs, 6/26/99. Drilled to 1220'. Ran 29 jts, 9.625", 36 #, K-55, STC casing to 1220', shoe @ 1220', Float collar @ 1177'. Cemented W/ 200 sx Thixset Wt-14.0, yield- 1.52, followed by 200 sx. Premium plus Wt -- 12.4, yield - 2.02. Tailed in w/ 200 sx premium plus neat, Wt 14.8, yield - 1.34. Circulated 233 sx. Cement. Welded 9.625" SOW X 11" 3M casing head. Tested weld to 1500 psi. N.U. 11" 3M dual ram and annular BOPE, choke manifold and kill line. Tested BOPE to 3000/300 psi. Tested annular to 2000 psi. P.U. 8.75" bit and TIH to TOC @ 1150', tested casing to 1000 psi. Drilled shoe and formation to 8200' TD @ 0200 hrs 7/9/99. RU Schlumberger, ran Platform - Express w/ HALS/NGT 8041' - Surface.

Changed rams to 7", ran 75 jts, 26 #, K-55, 105 jts, 23 #, K-55, 2 jts, 26 #, K-55 LTC casing to 8200'. Shoe @ 8150', float collar @ 8106', ECP @ 5970', D.V. @ 5960'. Cemented 1<sup>st</sup>. stage w/ 175 sx Premium Plus w/ 50,000 Scf N2, Wt - 9.2, yield - 1.18. Tailed in w/ 240 sx Premium Plus. Set ECP & dropped bomb, opened D.V. tool @ 5960', circulated out gas and water, had full returns, did not circulate cement. Cemented 2<sup>nd</sup> stage w/ 560 sx. Interfil "C" w/ .25 p.p.s. flocele, 3 p.p.s. Gilsonite, .2% Halad - 22, Wt - 11.9, yield - 2.47. Tailed in w 100 sx neat. Plug down @ 0145 hrs, 7/10/99. Circulated 70 sx to surface.

ND BOPE and set slips, NU 11" 3M X 7 1/16" 3M tubing spool. Tested seals to 1000 psi.

Picked up 3.5" drill pipe & 4.75" collars. Drilled <sup>6/21/99</sup> 4.75" hole to 9750'. Logged well.

RIH w/ DP to 9394'. Spotted 35 sack balanced plug 9394' - 9269'. TOH w/ DP to 8905', spotted 35 sack balanced cement plug 8905 - 8780'. TOH w/ DP to 8255' Spotted 35 sack balanced plug 8255' - 8120'.

Released rig @ 0900 hrs 7/21/99.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE  
811 S. 1ST ST.  
ALBUQUERQUE, NM 87102-2834

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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 915/687-8356

4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements \*)  
 At surface: U.L. "B", 660' FNL & 2220' FEL  
 At proposed prod. zone: U.L. "B", 660' FNL & 2220' FEL

5 LEASE DESIGNATION AND SERIAL NO  
 NM-06293

6 IF INDIAN, ALLOTTEE OR TRIBE NAME  
 INDIAN HILLS UNIT

7 UNIT AGREEMENT NAME  
 INDIAN HILLS UNIT

8 FARM OR LEASE NAME, WELL NO  
 INDIAN HILLS UNIT 17  
 6409

9 API WELL NO  
 30-015-30661

10 FIELD AND POOL, OR WILDCAT  
 INDIAN BASIN - U. PENN ASSOC.  
 33685

11 SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 SEC. 28, T-21-S, R-24-E

12 COUNTY OR PARISH  
 EDDY

13 STATE  
 NM

14 DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 15 MILES NW OF CARLSBAD, NM

15 DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest dtdg. unit line, if any) 660'

16 NO. OF ACRES IN LEASE  
 4480

17 NO. OF ACRES ASSIGNED TO THIS WELL  
 320, N/2

18 DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT 2789'

19 PROPOSED DEPTH  
 7800'

20 ROTARY OR CABLE TOOLS  
 ROTARY

21 ELEVATIONS (Show whether DF, RT, GR, etc.)  
 3664' G.L., 3680' K.B.

22 APPROX. DATE WORK WILL START\*  
 4/1/99

23 PROPOSED CASING AND CEMENTING PROGRAM **CARLSBAD CONTROLLED WATER BASIN**

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 <b>WITNESS</b>
8 3/4"	L-80, K-55, 7"	23#, 26#	7800'	945 - CIRCULATE

WELL IS A PROPOSED INDIAN BASIN UPPER PENN ASSOCIATED TEST.

SEE ATTACHED FOR DETAIL.

\*DISTANCE TO #10 - 2080' FNL & 660' FWL

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

RECEIVED  
OCD - ARTESIA

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 Walter Duncan TITLE DRILLING SUPERINTENDENT DATE 2/15/99

(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

(ORIG. SGD.) ARMANDO A. LOPEZ Acting Assistant Field Office Manager. MAY 28 1999  
APPROVED BY \_\_\_\_\_ TITLE Lands and Minerals DATE \_\_\_\_\_

\*See Instructions On Reverse Side

File 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 1990, Hobbs, NM 88241-1990

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 79040	Pool Name Indian Basin Upper Penn Assoc.
Property Code 6409	Property Name INDIAN HILLS UNIT	Well Number 17
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3664'

Surface Location

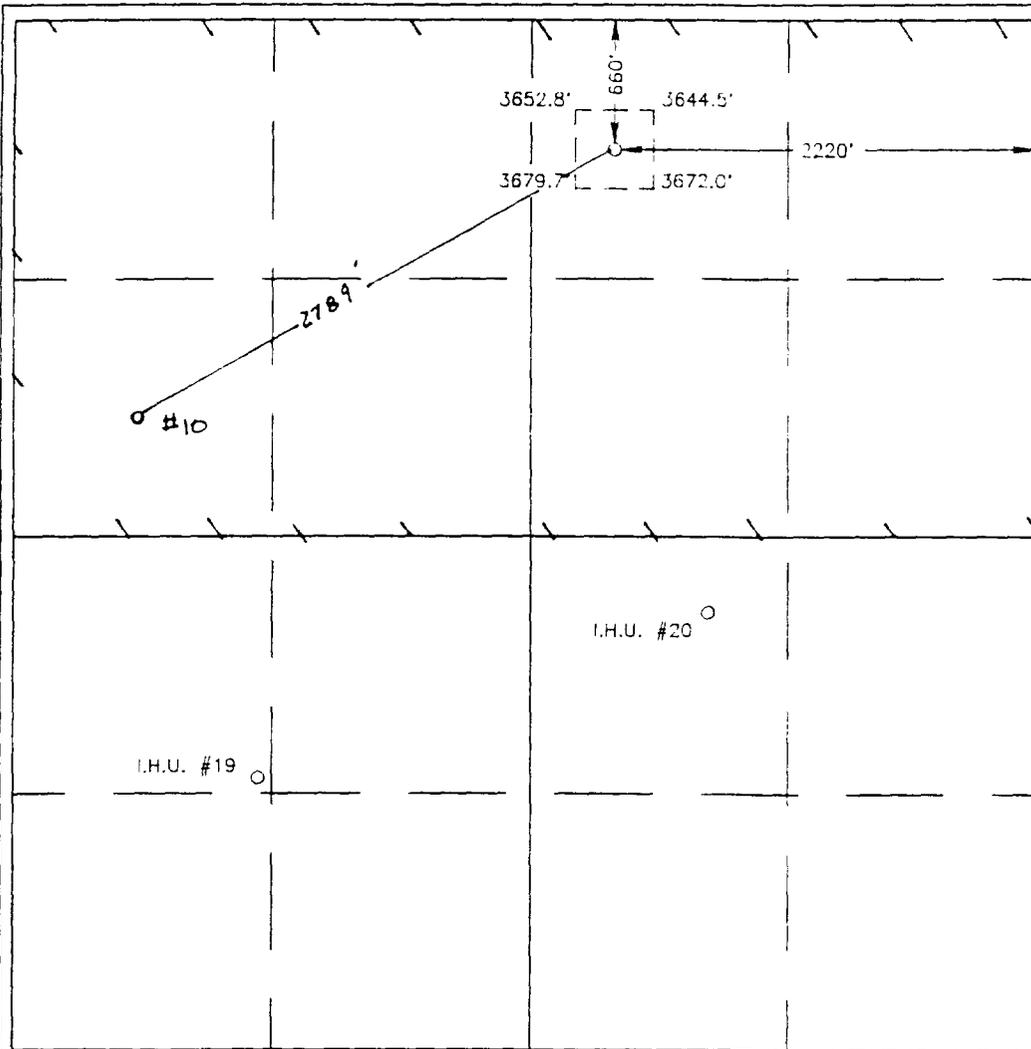
TL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	28	21 S	24 E		660	NORTH	2220	EAST	EECY

Bottom Hole Location If Different From Surface

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

Dedicated Acres 320 - N/2	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



**OPERATOR CERTIFICATION**

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

*Walter Longmire*  
Signature  
R. J. Longmire  
Printed Name  
Drilling Superintendent  
Title  
2/15/99  
Date

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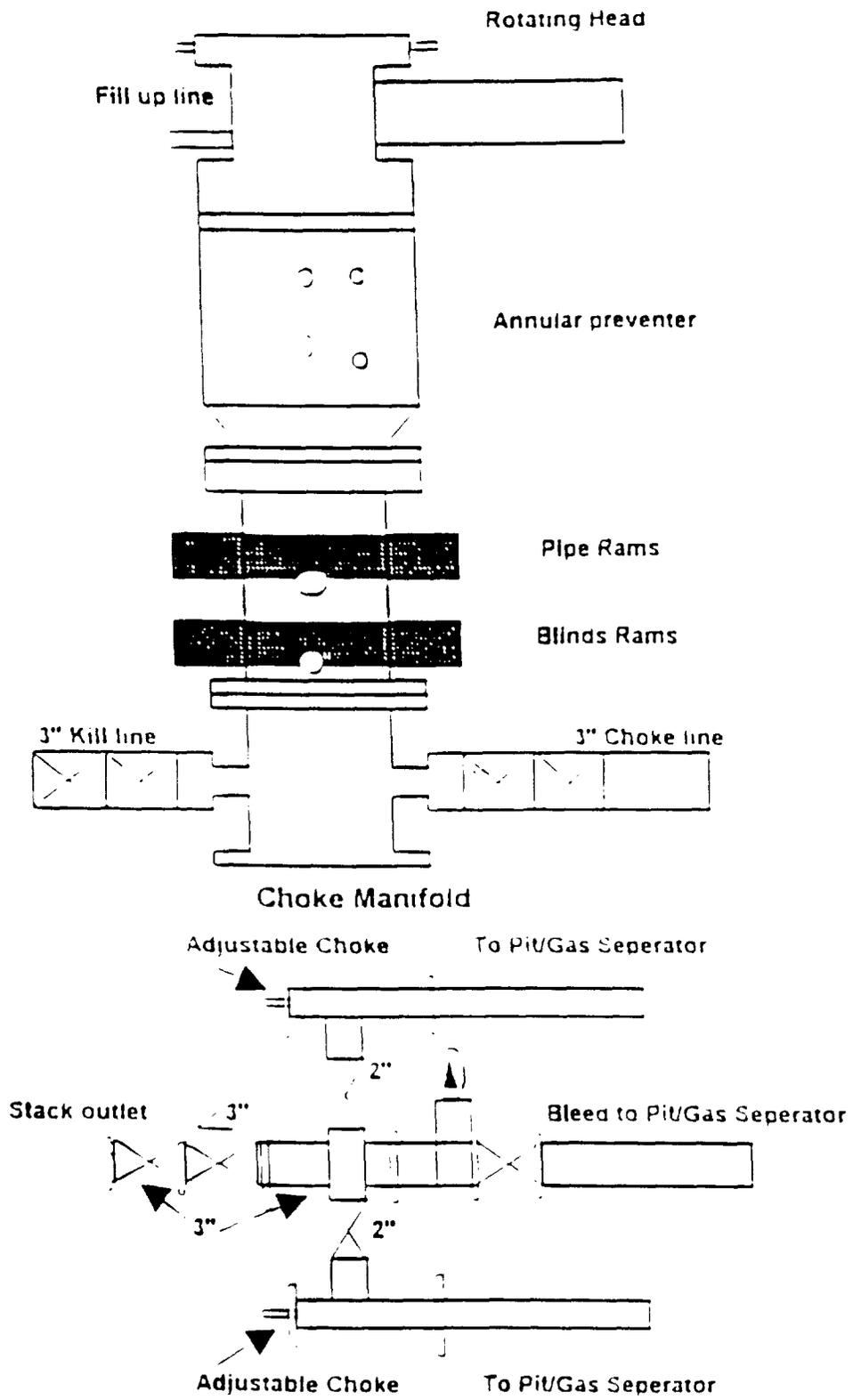
**SURVEYOR CERTIFICATION**

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.

JANUARY 29, 1999  
Date Surveyed  
Signature & Seal of Professional Surveyor  
*Ronald J. Eidson*  
99-11-0049

Certificate No. RONALD J. EIDSON 3239  
GARY EIDSON 12641

# Production Stack



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**N. M. Oil Cons. Division**  
FORM APPROVED  
Bureau No. 1004-0135  
Expires November 30 2000  
811 S. 1ST ST.  
ARTESIA, NM 88210-2834

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. **NM K-06293** *ST*

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
**INDIAN HILLS UNIT**

8. Well Name and No.  
**INDIAN HILLS UNIT 10**

9. API Well No.  
**30-015-30571**

10. Field and Pool, or Exploratory Area  
**INDIAN BASIN, U. PENN**

11. County or Parish, State  
**EDDY NM**

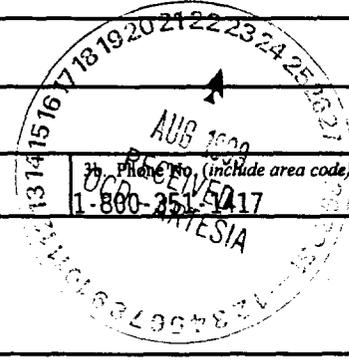
SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator ✓  
**Marathon Oil Company**

3a. Address  
**P.O. Box 552 Midland, TX 79702**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**U.L. "E" 2080' FNL & 660' FWL  
 SEC. 28, T21S, R24E**



12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

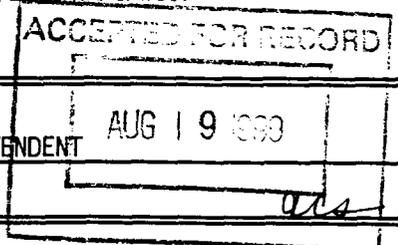
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <u>SPUD &amp; CSG OPERATIONS</u>
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

2/15/99, MIRU McVay # 4, Spud 12.25" hole @ 1000 hrs, 2/16/99. Drilled to 1221'. Ran 29 jts, 9.625", 36 #, K-55, STC casing to 1230', shoe @ 1221', Float collar @ 1180'. Cemented w/ 200 sx Thixset Wt-14.0, yield- 1.52, followed by 150 sx. Premium plus Wt -- 12.4, yield - 2.02. Tailed in w/ 200 sx premium plus neat, Wt 14.8, yield - 1.34. Did not circulate cement. Tagged cement @ 255'. Cemented w/ 1" tubing, 150 sx, Class "C" in 3 stages to 255'. Cemented to surface w/ 5 x cement. Welded 9.625" SOW X 11" 3M casing head. Tested well to 1500 psi. N.U. 11" 3M dual ram and annular BOPE, choke manifold and kill line. Tested BOPE to 3000/300 psi. Tested annular to 2000 psi. P.U. 8.75" bit and TIH to TOC @ 1158', tested casing to 1000 psi. Drilled shoe and formation to 8190' TD @ 1300 hrs 3/1/99. R.U. Schlumberger, ran Platform - Express w/ HALS/NGT 8041' - Surface.

Changed rams to 7", ran 75 jts, 26 #, K-55, 105 jts, 23 #, K-55, 2 jts, 26 #, K-55 LTC casing to 8190'. Shoe @ 8148', float collar @ 8142', ECP @ 6294', D.V. @ 6284'. Cemented 1st. stage w/ 125 sx Premium Plus w/ 3510 Scf N2, Wt - 9.2, yield - 1.18. Tailed in w/ 225 sx Premium Plus foamed w/ 150 SCF N2, Wt - 13.2, yield 1.18. Set ECP & dropped bomb, opened D.V. tool @ 6284', circulated out gas and water, had full returns, did not circulate cement. Cemented 2nd stage w/ 550 sx. Interfil C w/ .25 p.p.s. flocele, 3 p.p.s. Gilsonite, .2% Halad - 22, Wt - 11.9, yield - 2.47. Tailed in w 100 sx neat. Plug down @ 0145 hrs, 3/20/99. Circulated 11 sx to surface.

ND BOPE and set slips, NU 11" 3M X 7 1/16" 3M tubing spool. Tested seals to 1000 psi. Released rig @ 2000 hrs 3/4/99.



14. I hereby certify that the foregoing is true and correct  
 Name (Printed/Typed) **R. J. LONGMIRE** *Walter J. Longmire* Title **DRILLING SUPERINTENDENT**  
 Date **8/17/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Office \_\_\_\_\_

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  
 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  
 2040 South Pacheco, Santa Fe, NM 87505

**OIL CONSERVATION DIVISION**  
 2040 South Pacheco  
 Santa Fe, NM 87505

AMENDED REPORT

**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

Operator name and Address Marathon Oil Company P.O. Box 552 Midland, TX 79702		OGRID Number 014021
Reason for Filing Code NEW WELL		
API Number 30-0 30-015-30571	Pool Name INDIAN BASIN UPPER PENN ASSOCIATED	Pool Code 33685
Property Code 6409	Property Name INDIAN HILLS UNIT	Well Number 10

**II. Surface Location**

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
E	28	21-S	24-E		2080	NORTH	660	WEST	EDDY

**Bottom Hole Location**

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
E	28	21-S	24-E		2080	NORTH	660	WEST	EDDY

Lse Code F	Producing Method Code PUMPING	Gas Connection Date 3/17/99	C-129 Permit Number	C-129 Effective Date	C-129 Expiration Date
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**III. Oil and Gas Transporters**

Transporter OGRID	Transporter Name and Address	POD	O/G	POD ULSTR Location and Description
138468	AMOCO PIPELINE TRUCKS 502 N. WEST AVENUE LEVELLAND, TEXAS 79336	2823212	OIL	UL "P", SECTION 19, T-21-S, R-24-E
14035	MARATHON OIL COMPANY P. O. BOX 1324 ARTESIA, NM 88211-1324	2823213	GAS	UL "P", SECTION 19, T-21-S, R-24-E

**IV. Produced Water**

POD 2823214	POD ULSTR Location and Description UL "P", SECTION 19, T-21-S, R-24-E
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**V. Well Completion Data**

Spud Date 2/16/99	Ready Date 3/14/99	TD 8190	PBTD 8123	Perforations 7416-7500	DHC, DC, MC
Hole Size 12-1/4"	Casing & Tubing Size 14" CONDUCTOR	Depth Set 40'	Sacks Cement CEMENT TO SURFACE		
8-3/4"	9-5/8"	1221'	555 SX; 1" TO SURF W/150 SX		
	7"	8190'	350 SX FOAM, 650 SX 11 CIRC		
	2-7/8"	7920			

**VI. Well Test Data**

Date New Oil 3/17/99	Gas Delivery Date 3/17/99	Test Date 3/24/99	Test Length 24 HRS	Tbg. Pressure 340	Csg. Pressure 270
Choke Size FULL OPEN	Oil 3	Water 3329	Gas 1646	AOF 45	Test Method PUMPING

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Ginny Larke*  
 Printed name: Ginny Larke  
 Title: Engineer Technician  
 Date: 3/31/99 Phone: 915-682-1626

**OIL CONSERVATION DIVISION**  
 Approved by: *Jim W. Green*  
 Title: District Supervisor  
 Approval Date: 4-20-99

48 If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

FORM APPROVED  
OMB NO. 1004-0137

Expires: February 28, 1995

SF

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

5. LEASE DESIGNATION AND SERIAL NO.

LC-06293

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

INDIAN HILLS UNIT

8. FARM OR LEASE NAME, WELL NO.

INDIAN HILLS UNIT #10

1a. TYPE OF WELL:

OIL WELL  GAS WELL  DRY

N.M. Oil Co. Division  
611 S. 1st St.  
Artesia, N.M. 87008-2834

b. TYPE OF COMPLETION:

NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other

2. NAME OF OPERATOR

Marathon Oil Company

3. ADDRESS AND TELEPHONE NO.

P.O. Box 552 Midland, TX 79702 915-682-1626

9. API WELL NO.

30-015-30571

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface  
UL "E", 2080' FNL & 660' FWL, SECTION 28, T-21-S, R-24-E

At top prod. interval reported below  
UL "E", 2080' FNL & 660' FWL, SECTION 28, T-21-S, R-24-E

At total depth  
SAME AS ABOVE

10. FIELD AND POOL, OR WILDCAT

INDIAN BASIN UPPER PENN ASSOCIATED

11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA

SECTION 28, T-21-S, R-24-E

12. COUNTY OR PARISH

EDDY

13. STATE

NM

15. DATE SPUNDED

2/16/99

16. DATE T.D. REACHED

3/1/99

17. DATE COMPL. (Ready to prod.)

3/14/99

18. ELEVATIONS (OF, RKB, RT, GR, ETC.)\*

KB - 3780'; GL - 3763'

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

8190' MD & TVD

21. PLUG, BACK T.D., MD & TVD

8123' MD & TVD

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

ALL

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)\*

UPPER PENN ZONE FROM 7412' - 7998'

25. WAS DIRECTIONAL SURVEY MADE

NO

26. TYPE ELECTRIC AND OTHER LOGS RUN

NATURAL GAMMA RAY SPECTROSCOPY, PLATFORM EXPRESS MICRO-CFL/NGT, CNL/NGT

27. WAS WELL CORED

NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
14" CONDUCTOR		40'		CEMENT TO SURFACE	
9-5/8" K-55	36#	1221'	12-1/4"	555 SX, 1" TO SURF. W/150 SX	
7" K-55	23# & 26#	8190'	8-3/4"	350 SX FOAMED, 2nd STG 650 SX	11 SX CIRC

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	7920'	RBP-7925'

31. PERFORATION RECORD (Interval, size and number)  
7416' - 7438', 7452' - 7470', 7481' - 7500' (236 HOLES @ 4 JSPF W/4" PORT PLUG GUNS)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7416' - 7500'	4650 GALS 15% HCl & CCA SOUR

33. PRODUCTION

DATE FIRST PRODUCTION 3/17/99  
PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) P-7 SUBMERSIBLE PUMP W/2 M-5 MOTORS  
WELL STATUS (Producing or shut-in) PRODUCING

DATE OF TEST 3/24/99  
HOURS TESTED 24  
CHOKE SIZE FULL OPEN  
PROD'N. FOR TEST PERIOD →  
OIL - BBL. 3  
GAS - MCF. 1646  
WATER - BBL. 3329  
GAS - OIL RATIO 548.667

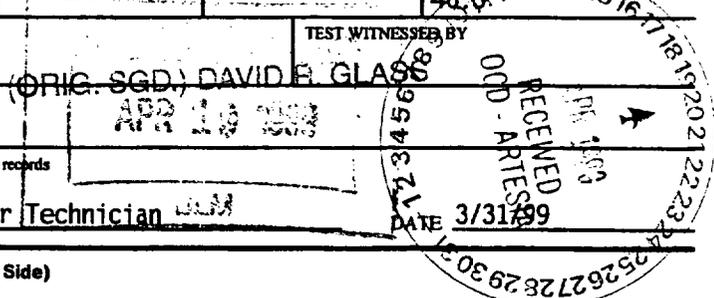
FLOW. TUBING PRESS. 340  
CASING PRESSURE 270  
CALCULATED 24-HOUR RATE →  
OIL - BBL.  
GAS - MCF.  
WATER - BBL.  
OIL GRAVITY - API (CORR.) 46.3 12 13 14 15 16

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
SOLD

35. LIST OF ATTACHMENTS  
LOGS & INCLINATION SURVEY

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ginny Lark TITLE Engineer Technician



(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
UPPER PENN	7412	7998	DOLONITE. LIMESTONE. SHALE; GAS, OIL & WATER	SAN ANDRES	835	
				GLORIETA	2430	
				YESO	2539	
				3RD BONE SPR LIME	5065	
				3RD BOND SPR SAND	6573	
				WOLFCAMP SHALE	6716	
				UPPER PENN	7412	

RECEIVED  
 APR 01 99  
 SLM  
 ROSWELL, NM

**Well Name and Number:** Indian Hills Unit #10

**Location:** Sec. 28, T21S, R24E, Eddy County, New Mexico

**Operator:** Marathon Oil Company

**Drilling Contractor:** McVay Drilling Company

The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>
3/4 621	2 3/4 5147	
1/2 923	2 3/4 5397	
3/4 1175	3 5584	
3/4 1675	2 3/4 5741	
3/4 2141	2 5895	
3/4 2643	1 6206	
3/4 3138	3/4 6711	
3/4 3632	1 7089	
1 3/4 4127	3/4 7310	
2 3/4 4622	1 8155	
2 1/2 4931		



**Drilling Contractor:** McVay Drilling Company

By: Joe Lopez Jr

Subscribed and sworn to before me this 4th day of March, 1999

Tina Flinn  
Notary Public

My Commission Expires: 8-16-01

Lea County, New Mexico

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**N.M. Oil Cons Division**  
811 S. 1st  
Artesia, NM

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000  
5110-2824

SF

LC-06293

6. If Indian, Allottee or Tribe Name  
**INDIAN HILLS UNIT**

7. If Unit or CA/Agreement, Name and/or No.  
**INDIAN HILLS UNIT**

8. Well Name and No.  
**INDIAN HILLS UNIT #10**

9. API Well No.  
**30-015-30571**

10. Field and Pool, or Exploratory Area  
**INDIAN BASIN UPPER PENN ASSOCIATED**

11. County or Parish, State  
**EDDY NM**

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
**Marathon Oil Company**

3a. Address  
**P.O. Box 552 Midland, TX 79702**

3b. Phone No. (include area code)  
**915-682-1626**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**UL "E", 2080' FNL & 660' FWL  
SECTION 28, T-21-S, R-24-E**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input checked="" type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <b>INITIAL</b>
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <b>COMPLETION</b>
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Coompleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Work commenced 3/9/99. MIRU PU. RD wellhead, NU BOP & tested. PU bit, DCs & 2-7/8" tbg. RIH, tagged @ 6260' & drilled cement & DV tool to 6290'. RI & tagged PBDT @ 8123'. Tested casing to 1000 psi. POOH w/tbg & L/D DCs. RU Halliburton. Ran GR-CBL-CAST from 8123'-6200'. Ran log again w/1000 psi. RU wireline & perf 7416'-7438', 7452'-7470', & 7481'-7500' w/4 jspf @ 120 degree phasing for a total of 236 holes. RD wireline. RIH w/PPI tool to 7300' & set packer. Pickled 2-7/8" tbg w/600 gals. 15% HCl acid. Reversed out. RIH & acidized perfs in 2' increments @ 75 gpf for a total of 4650 gals. Fished valves. Set packer @ 7340'. RU swab & swab well. Released PPI packer & POOH. RIH w/RBP & set @ 3649'. Tested to 500 psi. POOH, ND BOP & NU wellhead. NU BOP & test to 1000 psi. PU submersible pump & motors & RIH on 2-7/8" J-55 tbg. Latched onto RBP & RIH. Landed bottom of 7" RBP @ 7925'. Ran 3/8" CT string from 7467' to surface. Made final splice, landed tbg in wellhead, ND BOP & NU wellhead. RD PU. Turned well to production 3/14/99.

(ORIG. SGD.) DAVID F. GLASS  
APR 19 1999

RECEIVED  
OCD - ARTESIA  
APR 22 1999

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) **Ginny Larke** Title **Engineer Technician**

Date **3/31/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any, are attached. Approval of this notice 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.

Office \_\_\_\_\_

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.

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SUNDRY NOTICES AND REPORTS ON WELLS**

**N.M. Oil Co. Division**  
811 S. 1st St. at Artesia, NM  
FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000  
5. Lease Serial No. **0-2834 NM LC-06293**

SF

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
**Marathon Oil Company**

3a. Address  
**P.O. Box 552 Midland, TX 79702**

3b. Phone No. (include area code)  
**915-682-1626**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**UL "E", 2080' FNL & 660' FWL  
SECTION 28, T-21-S, R-24-E**

6. If Indian, Allottee or Tribe Name  
**INDIAN HILLS UNIT**

8. Well Name and No.  
**INDIAN HILLS UNIT #10**

9. API Well No.  
**30-015-30571**

10. Field and Pool, or Exploratory Area  
**INDIAN BASIN UPPER PENN ASSOCIATED GAS POOL**

11. County or Parish, State  
**EDDY NM**

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Coompleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

As required by Onshore Order #7, Marathon Oil Company is notifying you of existing and intended methods of water disposal from this well. Produced water from this well will be sent, via pipeline, to one of the wells listed under PRIMARY DISPOSAL on the attached sheets. If additional capacity is required, water may be sent via pipeline (if available) or truck hauled to any of the wells listed under SECONDARY DISPOSAL on the attached sheets.



**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct  
 Name (Printed/Typed) **Ginny Larke** Title **Engineer Technician**  
*Ginny Larke*  
 Date **3/31/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by **(ORIG. SGD.) ALEXIS C. SWOBODA** Title **PETROLEUM ENGINEER** Date **APR 07 1999**  
 Conditions of approval, if any, are attached. Approval of this notice 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. Office \_\_\_\_\_

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.

March 31, 1999

**ATTACHMENT I**

**Marathon Oil Company Indian Basin**

**Primary Disposal:** MOC Battery Disposal System

Operated By: Marathon Oil Company  
Well Name: MOC SWD # 1  
Location: UL "M" Section 7, T-20-S, R-25-E  
Permit#: SWD 448

Operated By: Marathon Oil Company  
Well Name: Indian Hills State Com # 7  
Location: UL "F" Section 36, T-20-S, R-24-E  
Permit #: SWD 570

**Primary Disposal:** IBGP Disposal System

Operated By: Marathon Oil Company  
Well Name: Indian Basin Gas Com # 1  
Location: UL "E" Section 23, T-21-S, R-23-E  
Permit #: SWD 416

Operated By: Marathon Oil Company  
Well Name: Marathon Federal # 1  
Location: UL "K" Section 24, T-21-S, R-23-E  
Permit #: SWD 55

**Primary Disposal:** Indian Hills Unit Disposal System

Operated By: Marathon Oil Company  
Well Name: Rocky Hills #1 SWD  
Location: UL "O" Section 19, T-21-S, R-24-E  
Permit #: SWD 691

**Secondary Disposal**

Well Name: Springs SWD  
Operator: Rowland  
Location: Sec 27, T-20-S, R-26-E  
Permit#: SWD 86

Well Name: BKE  
Operator: Rowland  
Location: Sec 13, T-23-S, R-27-E  
Permit#: SWD 495

Well Name: Salty Bill SWD  
Operator: Grace Oil  
Location: Sec 36, T-22-S, R-26-E  
Permit#: SWD R-118 Fed ID # 850303046

Well Name: Big Eddy Federal 100 SWD (Whistle Stop)  
Operator: Dakota Resources  
Location: Unit "L", Sec 8, T-21-S, R-28-E  
Permit#: SWD 461

Well Name: Dorstate SWD  
Operator: Mesquite Services  
Location: Sec 27, T25S, R26E  
Permit#: SWD 247

March 31, 1999

Well Name: Aikman SWD State # 1  
Location: Section 27, T-19-S, R-25-E  
Permit#: SWD 417

Well Name: Holstun # 1 SWD  
Operated By: Nearburg Producing Company  
Location: Section 4, T-20-S, R-25-E  
Permit#: R 9269

Well Name: Charlotte McKay Federal # 1 SWD  
Operated By: Yates Petroleum  
Location: Section 25, T-20-S, R-25-E  
Permit#: SWD 460

Well Name: Walter Solt State No. 1  
Location: Unit "L", Sec 5, T-18-S, R-28-E  
Permit#: SWD 318

Well Name: Dagger Draw Salt Water Disposal  
Location: Sec 22, T-19-S, R-25-E  
Permit#: R7637

Well Name: Corrine Grace Salt Water Disposal Well  
Location: Sec 36, T-22-S, R-26-E  
Permit#: K6290

Well Name: Myrtle-Myra WIW # 1  
Location: Sec 21, T-21-S, R-27-E  
Permit#: NMOCD-FWD-391

Solids that can't be hauled into one of these disposal sites will be sent to:

Well Name: CRI SWD  
Location: Sec 27, T20S, R32E  
Permit #: SWD R91166

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

BLM. Oil & Gas Division  
811 S. 1st  
Artesian

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000

SF

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

Marathon Oil Company

3a. Address

P.O. Box 552 Midland, TX 79702

3b. Phone No. (include area code)

915-682-1626

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

UL "E", 2080' FNL & 660' FWL  
SECTION 28, T-21-S, R-24-E

5. Lease Serial No.

NM LE-06293

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
INDIAN HILLS UNIT

8. Well Name and No.

INDIAN HILLS UNIT #10

9. API Well No.

30-015-30571

10. Field and Pool, or Exploratory Area  
INDIAN BASIN UPPER PENN  
ASSOCIATED

11. County or Parish, State

EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

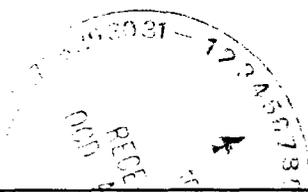
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>COMMINGLE</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>OFF LSE STORAGE &amp;</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>MSMT. &amp; ALT. MSMT.</u>

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

As required by 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4, Marathon Oil Company requests approval of off-lease measurement, storage & sales, alternate measurement method, and commingling of liquid hydrocarbon production for the well shown above. Also, as required by 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 5, we request approval of off-lease measurement and sales, and commingling of gas production from this well. The production from this well will be gathered at a satellite facility in Section 28, (see attached map), and then transported, via pipeline, to the central storage, measurement, & sales facility, which is located at UL "P", Section 19, T-21-S, R-24-E. Turbine meters will be used as the Alternate Measurement Method for liquid hydrocarbons and water production per prior approvals.

The attachments explain this operation in detail, show the equipment to be used, and show the leases involved in this application.

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Ginny Larke

*Ginny Larke*

Title

Engineer Technician

Date

3/29/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

ORIG. SGD.: ALEXIS O. SWOBODA

Title

PETROLEUM ENGINEER

Date

APR 07 1999

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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.

**APPLICATION FOR SURFACE COMMINGLING**  
**OFF-LEASE MEASUREMENT, STORAGE AND ALTERNATE MEASUREMENT**  
**APPROVAL**

**To: Bureau of Land Management**  
**P.O. Box 1778**  
**Carlsbad, New Mexico 88220-1778**

Marathon Oil Company is requesting approval for Surface Commingling, Off-Lease Storage, Measurement and Sales, and Alternate Measurement of hydrocarbon production from the following formation(s) and well(s) on:

Lease Name: **Indian Hills Unit**

<b>Well No.</b>	<b>UL</b>	<b>Sec</b>	<b>TWP</b>	<b>RNG</b>	<b>Formation</b>	<b>Fed. Lease #</b>	<b>COM</b>
10	E	28	21-S	24-E	Upper Penn	LC06293	N/A
19	L	28	21-S	24-E	Upper Penn	LC030482	N/A

Marathon would like to commingle the production from this well with the production of the following wells, which is commingled at the East Indian Basin Central Facility, (PLC-140)

<b>WELL NO.</b>	<b>BOPD</b>	<b>API<sup>0</sup></b>	<b>MCFD</b>
1	16	48.2	5764
6	0	40.7	120
8	160	35.7	2618
9	23	40.7	788
12	0	40.6	0
18	19	44.7	2323
Gas Com 13	7	44.8	1038
Gas Com 3	4	61.6	4713
IB "32" State 1-Y	0	N/A	1211
IB "32" State #2	0	56.0	6269
IB "32" State #3	153	38.6	168

Liquid hydrocarbon production will be measured using turbine meters, per prior approval. These meters will be proved on a regular schedule. A map is enclosed showing the lease numbers and location of all leases and wells that will contribute production to the commingling/common storage facility. All unitized/communitized areas and producing zones/pools are also clearly illustrated. A schematic diagram is also attached which clearly identifies all equipment that will be utilized.

The Storage and Measuring facility will be located at UL "P", Sec. 19, T-21-S, R-24-E, Eddy County, New Mexico. There will be a satellite facility located at UL "C", Section 20, T-21-S, R-24-E, Eddy County, NM. The BLM has been notified of this facility in prior applications. Originally this satellite was to be located in UL "G", so please change your records to reflect the new location.

The gas, liquid hydrocarbons and water from the wells in Sections 28 will be gathered at this satellite facility. The facility will consist of a 3-phase test separator and a 3-phase production separator. A production manifold will allow for individual well testing in the test separator while production from the remaining wells flows to the production separator.

The gas from the separators will be metered at this satellite facility before being delivered to the compressors at the Storage and Measurement facility in Section 19. After compression, the gas will be processed through a dehydrator, metered and delivered to the Indian Basin Gas Plant for further processing. The gas and NGLs will then be metered and sold at the tail-gate of the plant.

The liquid hydrocarbons and water, after being metered through the separators at the satellite facility, will be recombined and then flow to a 3-phase separator at the Storage and Measurement facility in Section 19, via liquid pipeline. After separation, the liquid hydrocarbon production will be processed and stored in tanks at the Storage and Measurement facility. Processing may include the use of heat treating or other liquid hydrocarbon processing equipment. The liquid hydrocarbons will then be metered through a LACT unit, per prior approval, and sold at the truck loading rack. The water production, after being processed through the 3-phase separator at the Storage and Measurement facility, will be sent to the gun barrel for further separation. It will then be stored in tanks at the Storage and Measurement facility prior to being metered and pumped to the SWD system.

Details of the proposed method for allocating production to contributing sources is as follows:

Indian Hills Unit Production= $\frac{\text{Sum of LHC Readings from Indian Hills Unit wells}}{\text{Sum of All LHC Readings}}$  X Gross Consolidated Facility Production

Indian Hills Unit Gas Com Prod.= $\frac{\text{Sum of LHC Readings from Gas Com wells}}{\text{Sum of All LHC Readings}}$  X Gross Consolidated Facility Production

IB "32" State Wells Production= $\frac{\text{Sum of LHC Readings from IB "32" State wells}}{\text{Sum of All LHC Readings}}$  X Gross Consolidated Facility Production

The same formulas will be used to allocate gas and water production, per prior approval (PLC-140).

The working interest owners were notified of the original commingling proposal. The proposed commingling of production is in the interest of conservation and will not result in reduced royalty or improper measurement of production. The proposed commingling is necessary for continued operation of the above referenced Federal Lease.

We understand that the requested approval will not constitute the granting of any right-of-way or construction rights not granted by lease instrument and we will submit, within 30 days, an application for right-of-way to the BLM's Realty Section in your office, if we have not already done so. Additional wells will require additional commingling approvals.

Signature:



Name: Ginny Larke

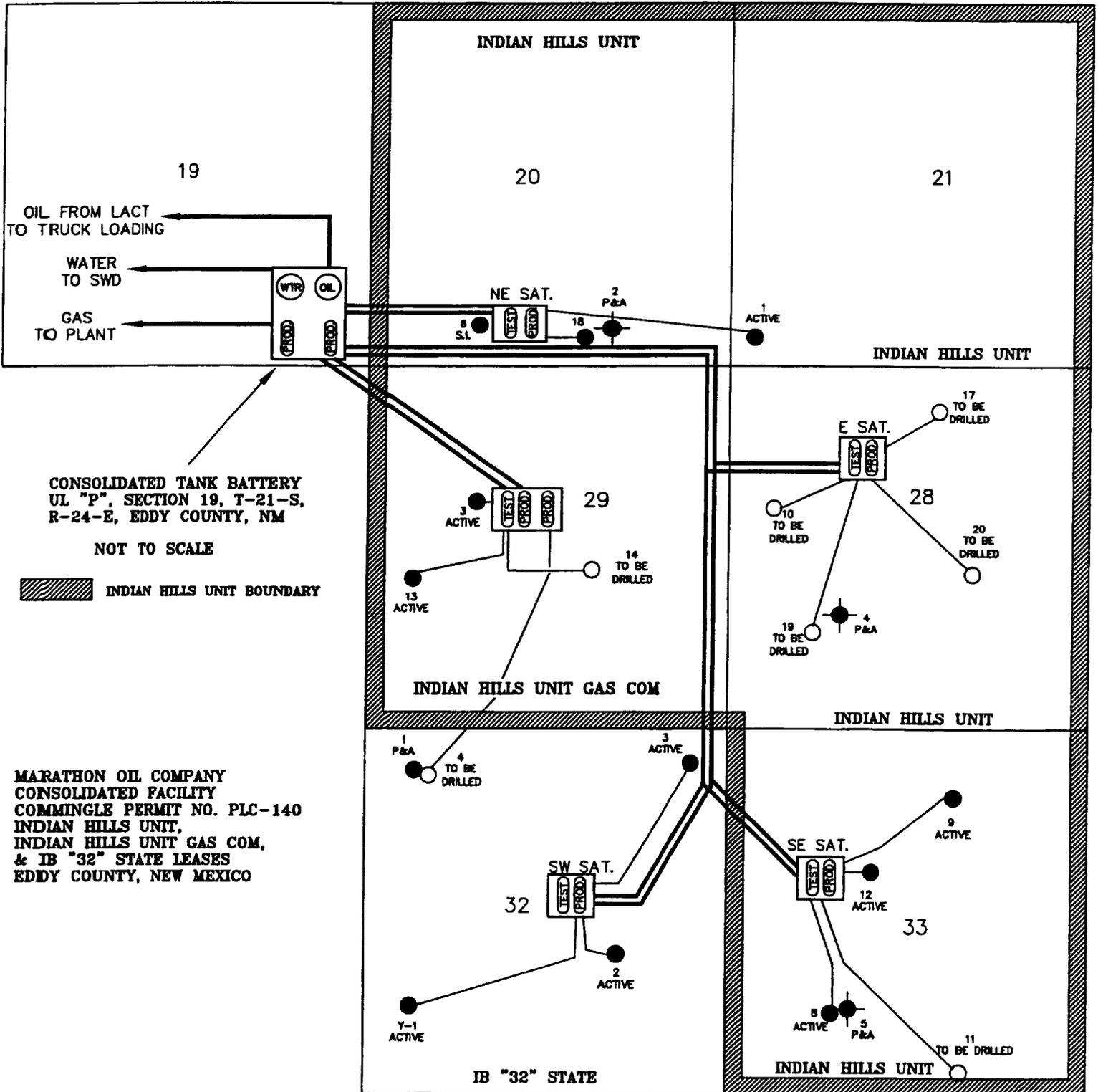
Title: Engineer Technician

March 29, 1999



# MARATHON OIL COMPANY CONSOLIDATED FACILITY COMMINGLE PERMIT NO. PLC-140 GATHERING SYSTEMS

R-24-E



CONSOLIDATED TANK BATTERY  
UL "P", SECTION 19, T-21-S,  
R-24-E, EDDY COUNTY, NM

NOT TO SCALE

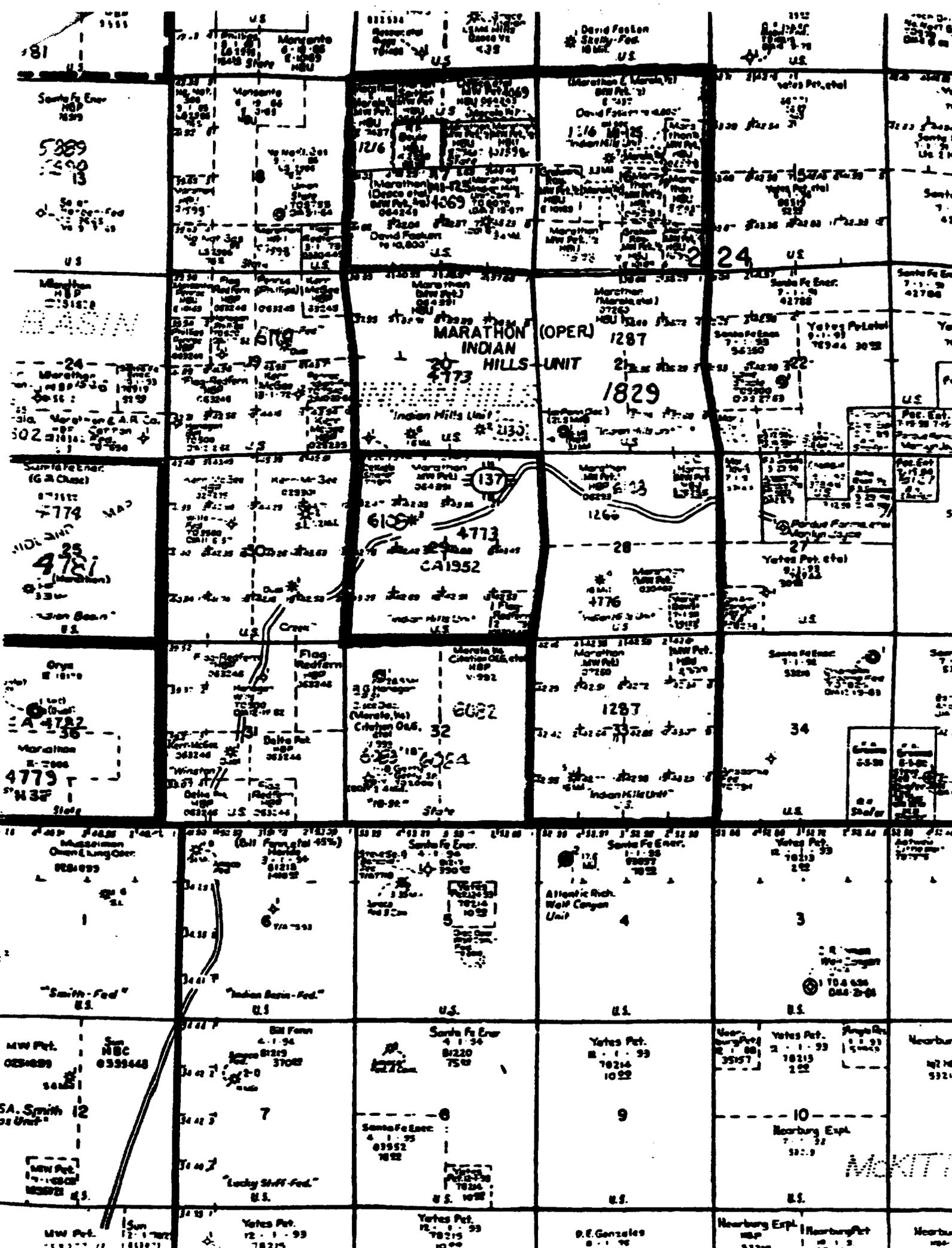
INDIAN HILLS UNIT BOUNDARY

MARATHON OIL COMPANY  
CONSOLIDATED FACILITY  
COMMINGLE PERMIT NO. PLC-140  
INDIAN HILLS UNIT,  
INDIAN HILLS UNIT GAS COM,  
& IB "32" STATE LEASES  
EDDY COUNTY, NEW MEXICO

R-24-E

3/15/99  
KORMAP.DWG  
BY: V. L. LARKE

T-21-S



81  
Santa Fe Ener  
H&P  
7829  
5389  
540  
13  
US

Marathon  
H&P  
31818  
-24  
Marathon  
502  
US

Santa Fe Ener  
(G.A. Chas)  
7774  
4781  
US

Oryx  
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36  
Marathon  
4779  
H&P  
State

Musson  
Chas & Lung  
0281099  
"Smith-Fed"  
U.S.

MW Pet.  
0281099  
ISA. Smith  
304 Unit  
Sun  
MW Pet.  
12  
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US

US  
Flag  
Wood Farm  
H&P  
028245  
US

US  
Delta Pet.  
H&P  
028246  
US

(Bill Farn, et al 45%)  
Marathon  
3111-34  
028218  
14002  
"Lucky Staff Fed."  
U.S.

Bill Farn  
4-1-94  
028219  
37002  
Yates Pet.  
12-1-93  
78215  
US

028234  
US  
Marathon  
H&P  
028235  
US

Marathon  
H&P  
028236  
US

Marathon  
H&P  
028237  
US

Marathon  
H&P  
028238  
US

Santa Fe Ener.  
4-1-94  
028239  
78216  
US

Santa Fe Ener.  
4-1-93  
028240  
78217  
US

David Foster  
S&W Fed.  
H&P  
US  
Marathon (Maro, Va)  
H&P  
028241  
US

Marathon (Maro, Va)  
H&P  
028242  
US

Marathon  
H&P  
028243  
US

Marathon  
H&P  
028244  
US

Atlantic Rich.  
W&P Congn  
Unit  
4  
US

Yates Pet.  
1-1-93  
78214  
1022  
P.E. Gonzales  
0-1-94  
US

US  
Yates Pet. et al  
US

Yates Pet. et al  
US

Yates Pet. et al  
US

Santa Fe Ener.  
1-1-92  
53208  
US

Yates Pet.  
12-1-93  
78213  
222  
US

Yates Pet.  
2-1-93  
78213  
222  
Hearburg Expl.  
7-1-92  
521-9  
US

Santa Fe Ener.  
7-1-90  
42788  
US  
Yates Pet.  
9-1-93  
78214  
302  
US  
S&W Fed.  
H&P  
028245  
US  
S&W Fed.  
H&P  
028246  
US  
S&W Fed.  
H&P  
028247  
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028248  
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S&W Fed.  
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028249  
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028250  
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028252  
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028253  
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028254  
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028255  
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028256  
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028257  
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028258  
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028260  
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028261  
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028262  
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028263  
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028264  
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028265  
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028266  
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028279  
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028280  
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S&W Fed.  
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028281  
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S&W Fed.  
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028282  
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S&W Fed.  
H&P  
028300  
US

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000

**N.M. Oil Co. Division**  
811 S. 1st  
Artesia, NM 87004

5. Lease Serial No.  
**NM LC-06293**  
6. Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
**Marathon Oil Company**

3a. Address  
**P.O. Box 552 Midland, TX 79702**

3b. Phone No. (include area code)  
**915-682-1626**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**UL "E", 2080' FNL & 660' FWL  
SECTION 28, T-21-S, R-24-E**

7. If Unit or CA/Agreement, Name and/or No.  
**INDIAN HILLS UNIT**

8. Well Name and No.  
**INDIAN HILLS UNIT #10**

9. API Well No.  
**30-015-30571**

10. Field and Pool, or Exploratory Area  
**INDIAN BASIN UPPER PENN  
ASSOCIATED GAS POOL**

11. County or Parish, State  
**EDDY NM**

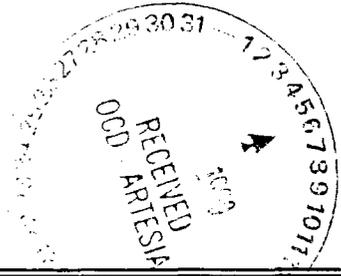
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input type="checkbox"/> Other _____

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

As required by Onshore Order #7, Marathon Oil Company is notifying you of existing and intended methods of water disposal from this well. Produced water from this well will be sent, via pipeline, to one of the wells listed under PRIMARY DISPOSAL on the attached sheets. If additional capacity is required, water may be sent via pipeline (if available) or truck hauled to any of the wells listed under SECONDARY DISPOSAL on the attached sheets.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)  
**Ginny Larke**

*Ginny Larke*

Title  
**Engineer Technician**

Date **3/31/99**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by **(ORIG. SGD.) ALEXIS D. SWOBODA**

Title  
**PETROLEUM ENGINEER**

Date **APR 07 1999**

Conditions of approval, if any, are attached. Approval of this notice 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.

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.

March 31, 1999

**ATTACHMENT I**

**Marathon Oil Company Indian Basin**

**Primary Disposal:** MOC Battery Disposal System

Operated By: Marathon Oil Company  
Well Name: MOC SWD # 1  
Location: UL "M" Section 7, T-20-S, R-25-E  
Permit#: SWD 448

Operated By: Marathon Oil Company  
Well Name: Indian Hills State Com # 7  
Location: UL "F" Section 36, T-20-S, R-24-E  
Permit #: SWD 570

**Primary Disposal:** IBGP Disposal System

Operated By: Marathon Oil Company  
Well Name: Indian Basin Gas Com # 1  
Location: UL "E" Section 23, T-21-S, R-23-E  
Permit #: SWD 416

Operated By: Marathon Oil Company  
Well Name: Marathon Federal # 1  
Location: UL "K" Section 24, T-21-S, R-23-E  
Permit #: SWD 55

**Primary Disposal:** Indian Hills Unit Disposal System

Operated By: Marathon Oil Company  
Well Name: Rocky Hills #1 SWD  
Location: UL "O" Section 19, T-21-S, R-24-E  
Permit #: SWD 691

**Secondary Disposal**

Well Name: Springs SWD  
Operator: Rowland  
Location: Sec 27, T-20-S, R-26-E  
Permit#: SWD 86

Well Name: BKE  
Operator: Rowland  
Location: Sec 13, T-23-S, R-27-E  
Permit#: SWD 495

Well Name: Salty Bill SWD  
Operator: Grace Oil  
Location: Sec 36, T-22-S, R-26-E  
Permit#: SWD R-118 Fed ID # 850303046

Well Name: Big Eddy Federal 100 SWD (Whistle Stop)  
Operator: Dakota Resources  
Location: Unit "L", Sec 8, T-21-S, R-28-E  
Permit#: SWD 461

Well Name: Dorstate SWD  
Operator: Mesquite Services  
Location: Sec 27, T25S, R26E  
Permit#: SWD 247

March 31, 1999

Well Name: Aikman SWD State # 1  
Location: Section 27, T-19-S, R-25-E  
Permit#: SWD 417

Well Name: Holstun # 1 SWD  
Operated By: Nearburg Producing Company  
Location: Section 4, T-20-S, R-25-E  
Permit#: R 9269

Well Name: Charlotte McKay Federal # 1 SWD  
Operated By: Yates Petroleum  
Location: Section 25, T-20-S, R-25-E  
Permit#: SWD 460

Well Name: Walter Solt State No. 1  
Location: Unit "L", Sec 5, T-18-S, R-28-E  
Permit#: SWD 318

Well Name: Dagger Draw Salt Water Disposal  
Location: Sec 22, T-19-S, R-25-E  
Permit#: R7637

Well Name: Corrine Grace Salt Water Disposal Well  
Location: Sec 36, T-22-S, R-26-E  
Permit#: K6290

Well Name: Myrtle-Myra WIW # 1  
Location: Sec 21, T-21-S, R-27-E  
Permit#: NMOCD-FWD-391

Solids that can't be hauled into one of these disposal sites will be sent to:

Well Name: CRI SWD  
Location: Sec 27, T20S, R32E  
Permit #: SWD R91166

811 S. 1ST ST.  
ARTESIA, NM 88010-2824  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**

**SUBMIT IN TRIPLICATE\***  
(Other instructions on reverse side)

**FORM APPROVED**  
**OMB NO. 1004-0136**  
**Expires: February 28, 1995**

5. LEASE DESIGNATION AND SERIAL NO.  
*18-06293*

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
INDIAN HILLS UNIT

7. UNIT AGREEMENT NAME  
INDIAN HILLS UNIT

8. FARM OR LEASE NAME, WELL NO.  
INDIAN HILLS UNIT 10  
*6409*

9. API WELL NO.  
*30-015-30571*

10. FIELD AND POOL, OR WILDCAT  
INDIAN BASIN - U. PENN. ASSOC.  
*33685*

11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA  
SEC. 28, T-21-S, R-24-E

12. COUNTY OR PARISH  
EDDY

13. STATE  
NM

22. APPROX DATE WORK WILL START\*  
1/15/99

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

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  
*915/687-8356*

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface  
2080' FNL & 660' FWL  
At proposed prod. zone  
2080' FNL & 660' FWL *Unit E*

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
15 MILES NW OF CARLSBAD

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drile unit line if any) *660'*

16. NO OF ACRES IN LEASE  
*640*

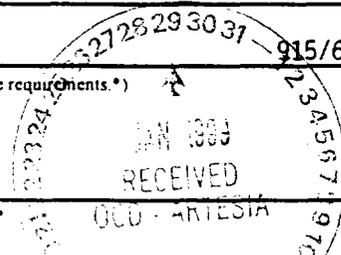
17. NO OF ACRES ASSIGNED TO THIS WELL  
\*

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. *52'*

19. PROPOSED DEPTH  
7800'

20. ROTARY OR CABLE TOOLS  
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3775' KB. 3763' GL



23. 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
8 3/4"	L-80, K-55, 7"	26# & 23#	7800'	945 CIRCULATE

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.

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED**

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 *Walker J. Dineen* TITLE Drilling Superintendent DATE 12/8/98

(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:

**Acting**

Assistant Field Office Manager.  
Lands and Minerals

*Jan 28 1999*

APPROVED BY *ARANDA A. LOPEZ* 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.

DISTRICT I  
P.O. Box 1986, Hobbs, NM 88241-1986

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1984  
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

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

DISTRICT IV  
P.O. BOX 2086, SANTA FE, N.M. 87504-2086

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Indian Basin - Upper Penn Assoc
Property Code	Property Name	Well Number
	INDIAN HILLS UNIT	10
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3763'

Surface Location

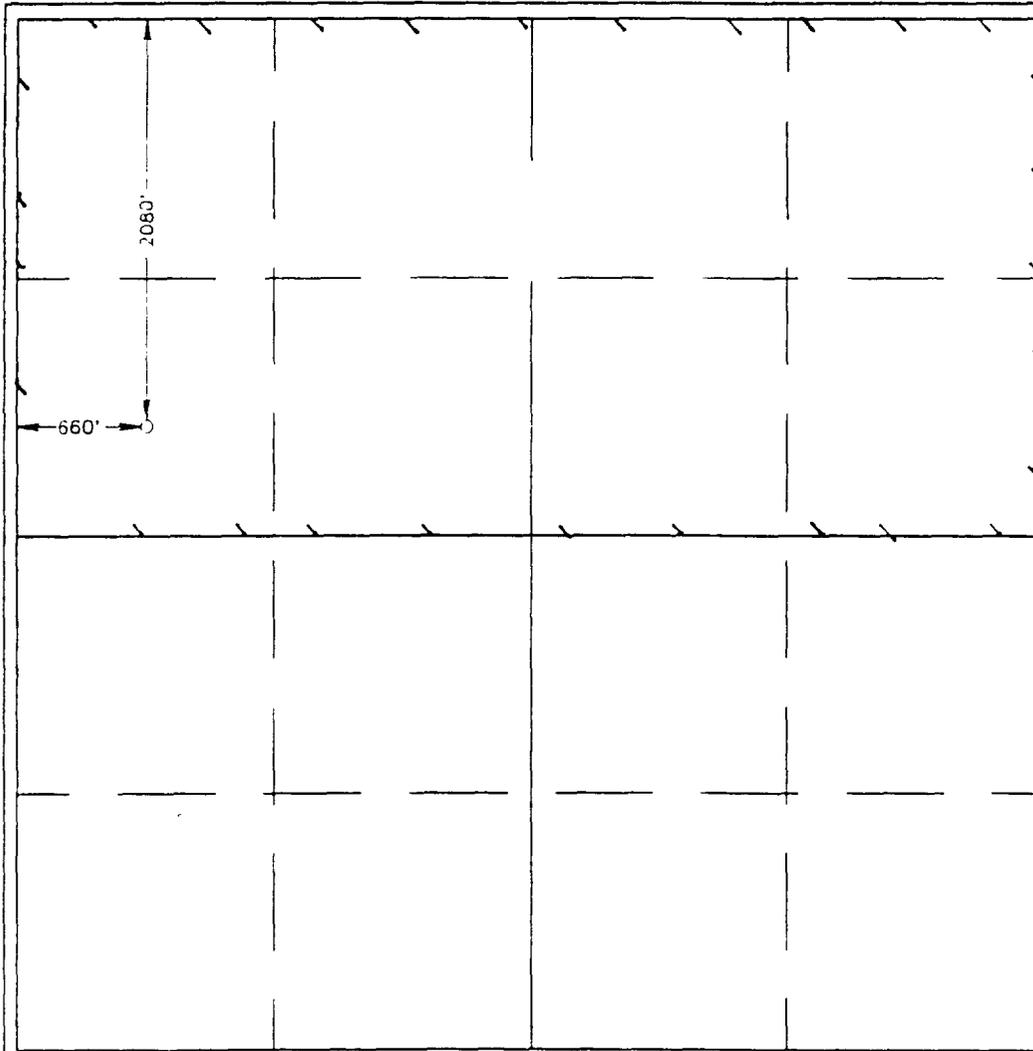
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	28	21 S	24 E		2080	NORTH	660	WEST	EDDY

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.
320			

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

12/8/98  
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 4, 1998  
Date Surveyed

*Ronald J. Eidson*  
Signature

Professional Surveyor  
CDG

*Ronald J. Eidson*  
Professional Surveyor

3239  
Certificate No. RONALD J. EIDSON  
12641

## 2. WELL CONTROL SYSTEMS

### A. Blowout Prevention Equipment

Equipment includes but is not limited to:

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

Auxiliary 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 H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

D. Drill Stem Test intervals are as follows:

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

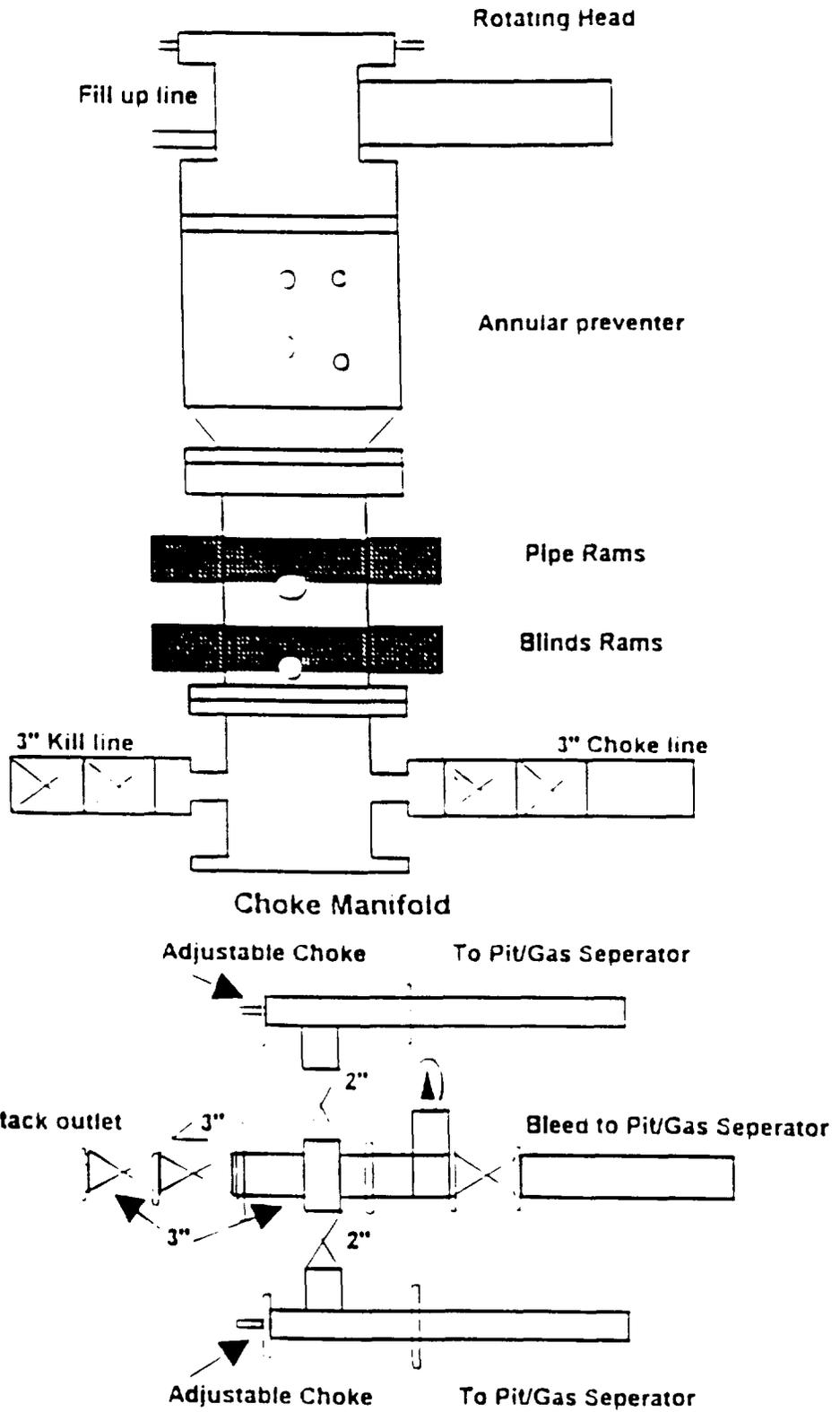
Drill Stem Testing Safety Rules are attached.

## 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



CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

03/16/01 13:48:55  
OGOMES -TQCE  
PAGE NO: 1

Sec : 28 Twp : 21S Rng : 24E Section Type : NORMAL

D 40.00  Federal owned U	C 40.00  Federal owned U C	B 40.00  Federal owned U A A	A 40.00  Federal owned U
E 40.00  Federal owned U A	F 40.00  Federal owned U	G 40.00  Federal owned U	H 40.00  Federal owned U

PF01 HELP    PF02            PF03 EXIT    PF04 GoTo    PF05            PF06  
PF07 BKWD   PF08 FWD      PF09 PRINT   PF10 SDIV     PF11            PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

03/16/01 13:49:01  
OGOMES -TQCE  
PAGE NO: 2

Sec : 28 Twp : 21S Rng : 24E Section Type : NORMAL

L 40.00  Federal owned U A	K 40.00  Federal owned U A	J 40.00  Federal owned U A	I 40.00  Federal owned U
M 40.00  Federal owned U	N 40.00  Federal owned U	O 40.00  Federal owned U	P 40.00  Federal owned U C

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

CMD :  
OG6IWCM

ONGARD  
INQUIRE WELL COMPLETIONS

03/16/01 13:49:13  
OGOMES -TQCE

API Well No : 30 15 30661 Eff Date : 08-01-1999 WC Status : A  
Pool Idn : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
OGRID Idn : 14021 MARATHON OIL CO  
Prop Idn : 6409 INDIAN HILLS UNIT

Well No : 017  
GL Elevation: 3680

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: B	28	21S	24E	FTG 660 F N	FTG 2220 F E	P

Lot Identifier:

Dedicated Acre: 320.00

Lease Type : F

Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

CMD : ONGARD 03/16/01 13:49:46  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TQCE

OGRID Idn : 14021 API Well No: 30 15 31266 APD Status(A/C/P): A  
Opr Name, Addr: MARATHON OIL CO Aprvl/Cncl Date : 06-30-2000  
PO BOX 552  
MIDLAND, TX 79702

Prop Idn: 6409 INDIAN HILLS UNIT Well No: 24

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
Surface Locn	: B	28	21S	24E		FTG 685 F N	FTG 2073 F E
OCD U/L	: B		API County	: 15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): G Cable/Rotary (C/R) : F  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3658

State Lease No: Multiple Comp (S/M/C) : N  
Prpsd Depth : 8800 Prpsd Frmtn : INDIAN BASIN UPPER PENN ASSOC

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD : ONGARD 03/16/01 13:52:40  
OG6IWCM INQUIRE WELL COMPLETIONS OGOMES -TQL1

API Well No : 30 15 30571 Eff Date : 03-17-1999 WC Status : A  
Pool Idn : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
OGRID Idn : 14021 MARATHON OIL CO  
Prop Idn : 6409 INDIAN HILLS UNIT

Well No : 010  
GL Elevation: 3775

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
	---	---	-----	-----	-----	-----	-----
B.H. Locn	: E	28	21S	24E	FTG 2080 F N FTG	660 F W	P

Lot Identifier:

Dedicated Acre: 320.00

Lease Type : F

Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

CMD : ONGARD 03/16/01 14:09:09  
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TQL1  
 Page No: 1

OGRID Identifier : 14021 MARATHON OIL CO  
 Pool Identifier : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
 API Well No : 30 15 30571 Report Period - From : 01 1999 To : 12 2000

API Well No	Property Name	Prod. MM/YY	Days Prod	Production Gas	Production Oil	Production Water	Well Stat
30 15 30571	INDIAN HILLS UNIT	03 99	15	15754	122	38109	P
30 15 30571	INDIAN HILLS UNIT	04 99	30	68759	2555	64325	P
30 15 30571	INDIAN HILLS UNIT	05 99	31	96209	809	98085	P
30 15 30571	INDIAN HILLS UNIT	06 99	27	86471	1124	86419	P
30 15 30571	INDIAN HILLS UNIT	07 99	31	90512	1384	93604	P
30 15 30571	INDIAN HILLS UNIT	08 99	30	78625	2778	79049	P
30 15 30571	INDIAN HILLS UNIT	09 99	30	72465	2192	63816	P

Reporting Period Total (Gas, Oil) :

M0025: Enter PF keys to scroll

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06 CONFIRM  
 PF07 BKWD      PF08 FWD          PF09              PF10 NXTPOOL PF11 NXTOGD      PF12

CMD :  
OG6IPRD

ONGARD  
INQUIRE PRODUCTION BY POOL/WELL

03/16/01 14:09:14  
OGOMES -TQL1  
Page No: 2

OGRID Identifier : 14021 MARATHON OIL CO  
Pool Identifier : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
API Well No : 30 15 30571 Report Period - From : 01 1999 To : 12 2000

API Well No	Property Name	Prod. MM/YY	Days Prod	Production Gas	Oil	Water	Well Stat
30 15 30571	INDIAN HILLS UNIT	10 99	15	53400	2203	114500	P
30 15 30571	INDIAN HILLS UNIT	11 99	14	43418	1259	67914	P
30 15 30571	INDIAN HILLS UNIT	12 99	24	152022	8036	165548	P
30 15 30571	INDIAN HILLS UNIT	01 00	27	201878	6218	115392	P
30 15 30571	INDIAN HILLS UNIT	02 00	28	161962	5891	151660	P
30 15 30571	INDIAN HILLS UNIT	03 00	31	178499	6760	134721	P
30 15 30571	INDIAN HILLS UNIT	04 00	30	182011	7079	123589	P

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07 BKWD	PF08 FWD	PF09	PF10 NXTPOOL	PF11 NXTOGD	PF12

CMD : ONGARD 03/16/01 14:09:16  
OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TQL1  
Page No: 3

OGRID Identifier : 14021 MARATHON OIL CO  
Pool Identifier : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
API Well No : 30 15 30571 Report Period - From : 01 1999 To : 12 2000

API Well No	Property Name	Prod. MM/YY	Days Prod	Production Gas	Oil	Water	Well Stat
30 15 30571	INDIAN HILLS UNIT	05 00	31	167061	6378	131114	P
30 15 30571	INDIAN HILLS UNIT	06 00	28	144578	7211	135008	P
30 15 30571	INDIAN HILLS UNIT	07 00	31	193391	8837	144884	P
30 15 30571	INDIAN HILLS UNIT	08 00	31	199049	14312	116249	P
30 15 30571	INDIAN HILLS UNIT	09 00	30	177265	7881	85702	P
30 15 30571	INDIAN HILLS UNIT	10 00	23	124691	5119	86237	P
30 15 30571	INDIAN HILLS UNIT	11 00	30	155233	8652	144135	P

Reporting Period Total (Gas, Oil) : 2833803 118543 2404965

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM  
PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 03/16/01 14:09:19  
OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TQL1  
Page No: 4

OGRID Identifier : 14021 MARATHON OIL CO  
Pool Identifier : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
API Well No : 30 15 30571 Report Period - From : 01 1999 To : 12 2000

API Well No	Property Name	Prodn. Days		Production Volumes			Well Stat
		MM/YY	Prod	Gas	Oil	Water	
30 15 30571	INDIAN HILLS UNIT	12 00	31	190550	11743	164905	P

-----  
Reporting Period Total (Gas, Oil) : 2833803 118543 2404965  
-----

E0049: User may continue scrolling.

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06 CONFIRM  
PF07 BKWD      PF08 FWD          PF09              PF10 NXTPOOL PF11 NXTOGD      PF12

CMD : ONGARD 03/16/01 15:10:05  
 OG6ACRE C102-DEDICATE ACREAGE OGOMES -TQL1

Page No : 1

API Well No : 30 15 30661 Eff Date : 01-28-1999  
 Pool Idn : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
 Prop Idn : 6409 INDIAN HILLS UNIT Well No : 017  
 Spacing Unit : 51651 OCD Order : Simultaneous Dedication:  
 Sect/Twp/Rng : Acreage : 320.00 Revised C102? (Y/N) :  
 Dedicated Land:

S	Base	U/L	Sec	Twp	Rng	Acreeage	L/W	Ownership	Lot	Idn
	A		28	21S	24E	40.00	N	FD		
	B		28	21S	24E	40.00	N	FD		
	C		28	21S	24E	40.00	N	FD		
	D		28	21S	24E	40.00	N	FD		
	E		28	21S	24E	40.00	N	FD		
	F		28	21S	24E	40.00	N	FD		
	G		28	21S	24E	40.00	N	FD		
	H		28	21S	24E	40.00	N	FD		

E0005: Enter data to modify or PF keys to scroll

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06 CONFIRM  
 PF07 BKWD      PF08 FWD          PF09              PF10 LAND      PF11 NXTSEC      PF12 RECONF

CMD :  
OG6IPRD

ONGARD  
INQUIRE PRODUCTION BY POOL/WELL

03/16/01 15:09:44  
OGOMES -TQL1  
Page No: 1

OGRID Identifier : 14021 MARATHON OIL CO  
Pool Identifier : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
API Well No : 30 15 30661 Report Period - From : 01 1999 To : 12 2000

API Well No	Property Name	Prod. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 15 30661	INDIAN HILLS UNIT	08 99 17	113286 2710 88404	P
30 15 30661	INDIAN HILLS UNIT	09 99 22	71470 637 5836	P
30 15 30661	INDIAN HILLS UNIT	10 99 20	135905 1271 10471	P
30 15 30661	INDIAN HILLS UNIT	11 99 27	79693 1140 14571	P
30 15 30661	INDIAN HILLS UNIT	12 99 22	69365 972 21170	P
30 15 30661	INDIAN HILLS UNIT	01 00 22	98223 7905 73118	P
30 15 30661	INDIAN HILLS UNIT	02 00 29	136559 7570 47493	P

Reporting Period Total (Gas, Oil) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07 BKWD	PF08 FWD	PF09	PF10 NXTPOOL	PF11 NXTOGD	PF12

CMD :  
OG6IPRD

ONGARD  
INQUIRE PRODUCTION BY POOL/WELL

03/16/01 15:09:48  
OGOMES -TQL1  
Page No: 2

OGRID Identifier : 14021 MARATHON OIL CO  
Pool Identifier : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
API Well No : 30 15 30661 Report Period - From : 01 1999 To : 12 2000

API Well No	Property Name	Prod. Days		Production Volumes			Well Stat
		MM/YY	Prod	Gas	Oil	Water	
30 15 30661	INDIAN HILLS UNIT	03 00	31	123970	9127	83719	P
30 15 30661	INDIAN HILLS UNIT	04 00	13	55979	3743	68244	P
30 15 30661	INDIAN HILLS UNIT	05 00	27	114761	10602	89972	P
30 15 30661	INDIAN HILLS UNIT	06 00	30	128463	11416	86980	P
30 15 30661	INDIAN HILLS UNIT	07 00	31	145720	13320	89361	P
30 15 30661	INDIAN HILLS UNIT	08 00	31	157623	14790	93677	P
30 15 30661	INDIAN HILLS UNIT	09 00	30	185564	8144	69061	P

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06 CONFIRM  
PF07 BKWD      PF08 FWD          PF09              PF10 NXTPOOL PF11 NXTOGD      PF12

CMD :  
OG6IPRD

ONGARD  
INQUIRE PRODUCTION BY POOL/WELL

03/16/01 15:09:50  
OGOMES -TQL1  
Page No: 3

OGRID Identifier : 14021 MARATHON OIL CO  
Pool Identifier : 33685 INDIAN BASIN;UPPER PENN (ASSOC)  
API Well No : 30 15 30661 Report Period - From : 01 1999 To : 12 2000

API Well No	Property Name	Prodn. Days		Production Volumes			Well Stat
		MM/YY	Prod	Gas	Oil	Water	
30 15 30661	INDIAN HILLS UNIT	10 00	24	128845	7772	59987	P
30 15 30661	INDIAN HILLS UNIT	11 00	27	100285	3023	47802	P
30 15 30661	INDIAN HILLS UNIT	12 00	31	107624	4559	54690	P

-----  
Reporting Period Total (Gas, Oil) : 1953335 108701 1004556  
-----

E0049: User may continue scrolling.

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06 CONFIRM  
PF07 BKWD      PF08 FWD          PF09              PF10 NXTPOOL PF11 NXTOGD      PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

11/26/01 10:54:  
OGOMES -TP  
PAGE NO:

Sec : 28 Twp : 21S Rng : 24E Section Type : NORMAL

D 40.00  Federal owned U	C 40.00  Federal owned U C	B 40.00  Federal owned U A A	A 40.00  Federal owned U
E 40.00  Federal owned U A	F 40.00  Federal owned U A	G 40.00  Federal owned U	H 40.00  Federal owned U

PF01 HELP    PF02            PF03 EXIT    PF04 GoTo    PF05            PF06  
PF07 BKWD   PF08 FWD      PF09 PRINT   PF10 SDIV     PF11            PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

11/26/01 10:54:  
OGOMES -TP  
PAGE NO:

Sec : 28 Twp : 21S Rng : 24E Section Type : NORMAL

L 40.00  Federal owned U A	K 40.00  Federal owned U A	J 40.00  Federal owned U A	I 40.00  Federal owned U
M 40.00  Federal owned U	N 40.00  Federal owned U	O 40.00  Federal owned U	P 40.00  Federal owned U C

PF01 HELP    PF02            PF03 EXIT    PF04 GoTo    PF05            PF06  
PF07 BKWD   PF08 FWD      PF09 PRINT   PF10 SDIV     PF11            PF12

CMD : ONGARD 11/26/01 10:56:  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TP

OGRID Idn : 14021 API Well No: 30 15 31751 APD Status(A/C/P): A  
Opr Name, Addr: MARATHON OIL CO Aprvl/Cncl Date : 04-27-20  
PO BOX 552  
MIDLAND, TX 79702

Prop Idn: 6409 INDIAN HILLS UNIT Well No: 34

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
Surface Locn : F	28	21S	24E			FTG 1416 F N	FTG 1607 F W
OCD U/L : F		API	County :	15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): G Cable/Rotary (C/R) :  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3704

State Lease No: NM 6293 Multiple Comp (S/M/C) : S  
Prpsd Depth : 8800 Prpsd Frmtn : INDIAN BASIN U/PENN ASSOC

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

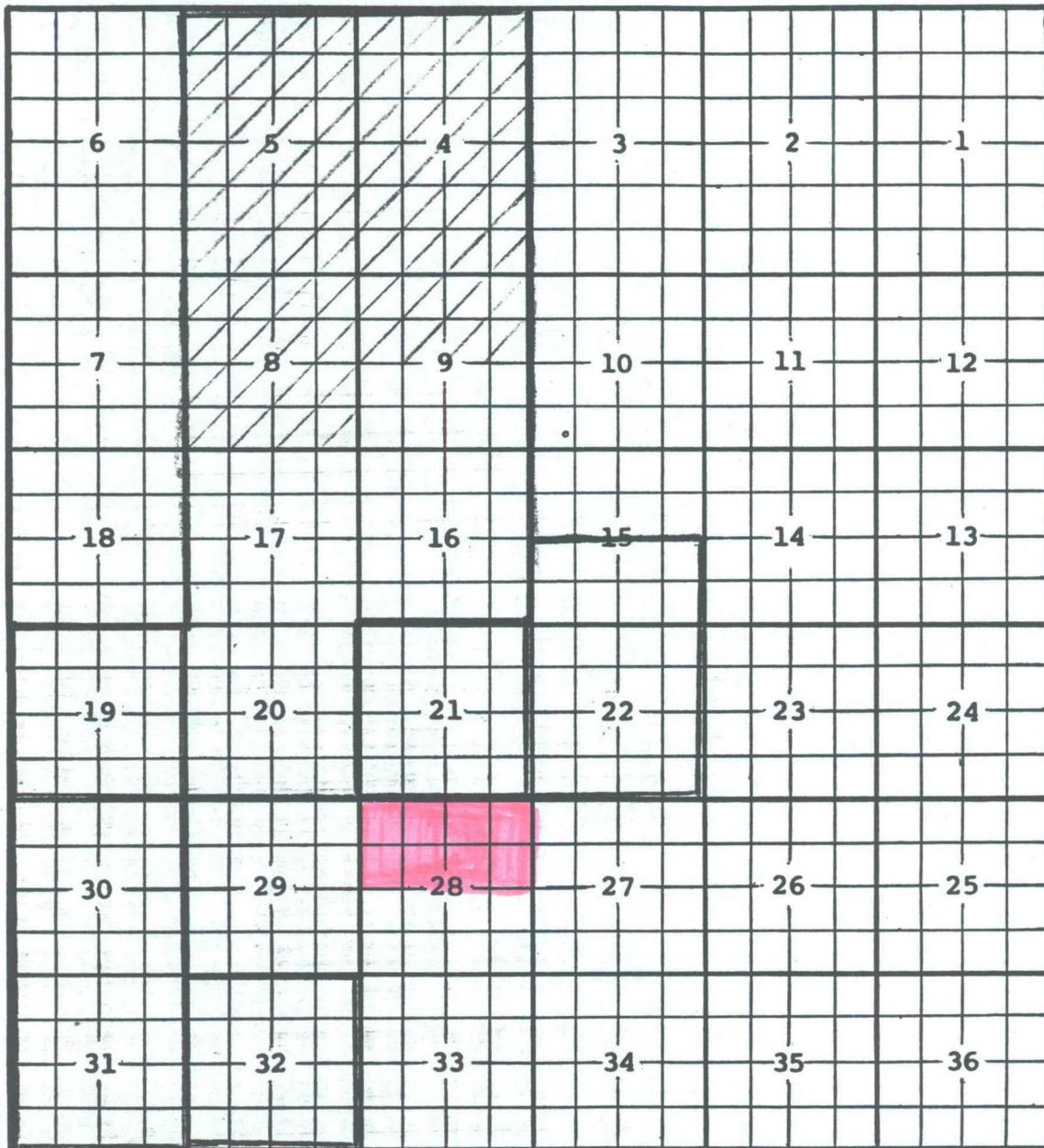
COUNTY *Eddy*

POOL *Indian Basin - Morrow Gas*

TOWNSHIP *21 South*

RANGE *24 East*

NMPM



*Ext: All Sec 19 (R-2726, 7-1-64) - All Sec 30 & 31 (R-2911, 6-1-65)*

*- All Secs 4, 5, 8, 9, 16, 17, & 20 (R-3758, 6-1-69)*

*Deletion: All Secs 4 & 5 (R-5162, 3-1-76)*

*Deletion: 1/2 Sec 9 (R-5891, 1-1-79) Deletion: All Sec 8 (R-5885, 12-31-78)*

*Ext: All Sec. 32 (R-8391, 1-22-87) EXT: All Sec 21 (R-8969, 8-1-89)*

*Ext: 1/2 Sec. 15, All Sec. 22 (R-9963, 9-20-93)*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE  
(Other instructions on reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

51

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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 915-687-8357

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
 1416' FNL & 1607' FWL  
 At proposed prod. zone  
 Same Unit F

5. LEASE DESIGNATION AND SERIAL NO.  
 N/A

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

7. UNIT AGREEMENT NAME  
 Indian Hills Unit *6409*

8. FARM OR LEASE NAME, WELL NO.  
 # 34

9. API WELL NO.  
 30-015-31751

10. FIELD AND POOL, OR WILDCAT  
 Indian Basin Upper Perm. Assoc

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 28, T-21-S, R-24-E

12. COUNTY OR PARISH  
 Eddy

13. STATE  
 N.M.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 15- miles NW of Carlsbad

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1416'

16. NO. OF ACRES IN LEASE  
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 320

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. \* 1075'

19. PROPOSED DEPTH  
 8800'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 3704' G.L.

22. APPROX. DATE WORK WILL START\*  
 ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17.50"	13-3/8" K-55	54.50#	1200'	1250 sks. to surf.
12.25"	9-5/8" L-80	53.5#, 47.00#	8800'	3110

Marathon Oil Company is proposing to drill a straight hole Upper Perm. Assoc. well on a Non Standard location.

\* The Indian Hills Unit # 34 is located 1075' from the Indian Hills Unit # 10, located @ 2080' FNL & 660' FWL. Sec. 28, T-21-S, R-24-E.

NOTIFY OCD SPUD & TIME TO WITNESS  
WATER PROTECTION STRING

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED



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 *Jerry Flicker* TITLE Engineer Tech. DATE 2/14/01

(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 *B/ Joe G. Lara* TITLE FIELD MANAGER DATE APR 27 2001

\*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.

APPROVAL FOR 1 YEAR

DISTRICT I  
P.O. Box 1888, Hobbs, NM 88241-1888

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

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  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
		Indian Basin Upper Penn. Assoc.
Property Code	Property Name	Well Number
	INDIAN HILLS UNIT	34
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3704'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	24-E		1416	NORTH	1607	WEST	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.
320 N/2			

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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Jerry Fletcher</i> Signature</p> <p>Jerry Fletcher Printed Name</p> <p>Engineer Tech. Title</p> <p>2/14/01 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <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 the best of my belief.</p> <p>FEBRUARY 5, 2001 Date Surveyed</p> <p>AWB Signature &amp; Seal of Professional Surveyor</p> <p><i>Ronald J. Edson</i> Professional Surveyor Seal 02/08/01 01-11-0058</p> <p>Certificate No. RONALD J. EDSON 3239 CARY EDSON 12641</p>

## 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                | <input checked="" type="checkbox"/> |
| b. rotating head                    | <input checked="" type="checkbox"/> |
| c. mud- gas separator               | <input checked="" type="checkbox"/> |
| d. flare line and means of ignition | <input checked="" type="checkbox"/> |
| e. remote operated choke            | <input checked="" type="checkbox"/> |

### 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 H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S 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

**KELLAHIN AND KELLAHIN**

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4265  
TELEFAX (505) 982-2047

W. THOMAS KELLAHIN\*

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION  
RECOGNIZED SPECIALIST IN THE AREA OF  
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

November 21, 2001

**Via Facsimile  
505-748-9720**

Mr. Tim Gum, Supervisor  
Oil Conservation Division  
P. O. Drawer DD  
Artesia, New Mexico 88210

RE: **NMOCD Reference No. pKRVO-105420033**  
**Indian Hills Unit Well No. 34**  
**1416 feet FNL & 1607 feet FWL NMPM,**  
**N/2 Section 28, T21S, R24E**  
**Administrative Application of Marathon Oil Company for Approval**  
**of an Unorthodox Gas Well Location, Eddy County, New Mexico**

Dear Mr. Gum:

Today, on behalf of Marathon Oil Company ("Marathon"), I submitted to Mr. Michael E. Stogner (OCD-Santa Fe) Marathon's referenced administrative application for approval of an unorthodox gas well location ("NSL") for Marathon's Indian Hills Unit Well No. 34. **partial copy attached.**

This well will be the second well within the NW/4 of a 320-acre spacing unit consisting of the N/2 of Section 34 to be dedicated to the Indian Basin Upper Pennsylvanian Associated Pool.

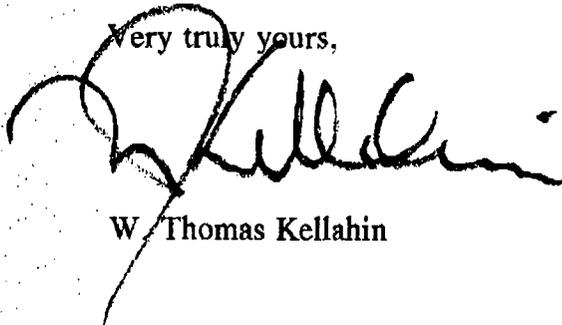
Marathon informed me that you are requiring any such infill well in this pool to be located so that there is no more than one well in a hypothetical 80-acre tract which is oriented in the same direction as the 320-acre spacing unit. I am unaware of any rule that allows you to make this requirement and would appreciate you sending a copy to me if in fact this represents a correct understanding of your position.

Oil Conservation Division  
November 21, 2001  
-Page 2-

My research shows that the rules for the Associated Pool allow for multiple wells provided that no more than one well per 80-acre tract shall be drilled or produced on a standard proration unit. See Rule 2. The pool rules do not require that the 80-acre tract be oriented in the same manner as the 320-acre GPU. Accordingly, the proposed location for the Indian Hills Unit Well No. 34 qualifies it as an "infill" well for this pool.

If you and I are in disagreement about this, please call me so that we can obtain clarification from Mr. Stogner as to the well location requirements for infill wells in this pool.

Very truly yours,

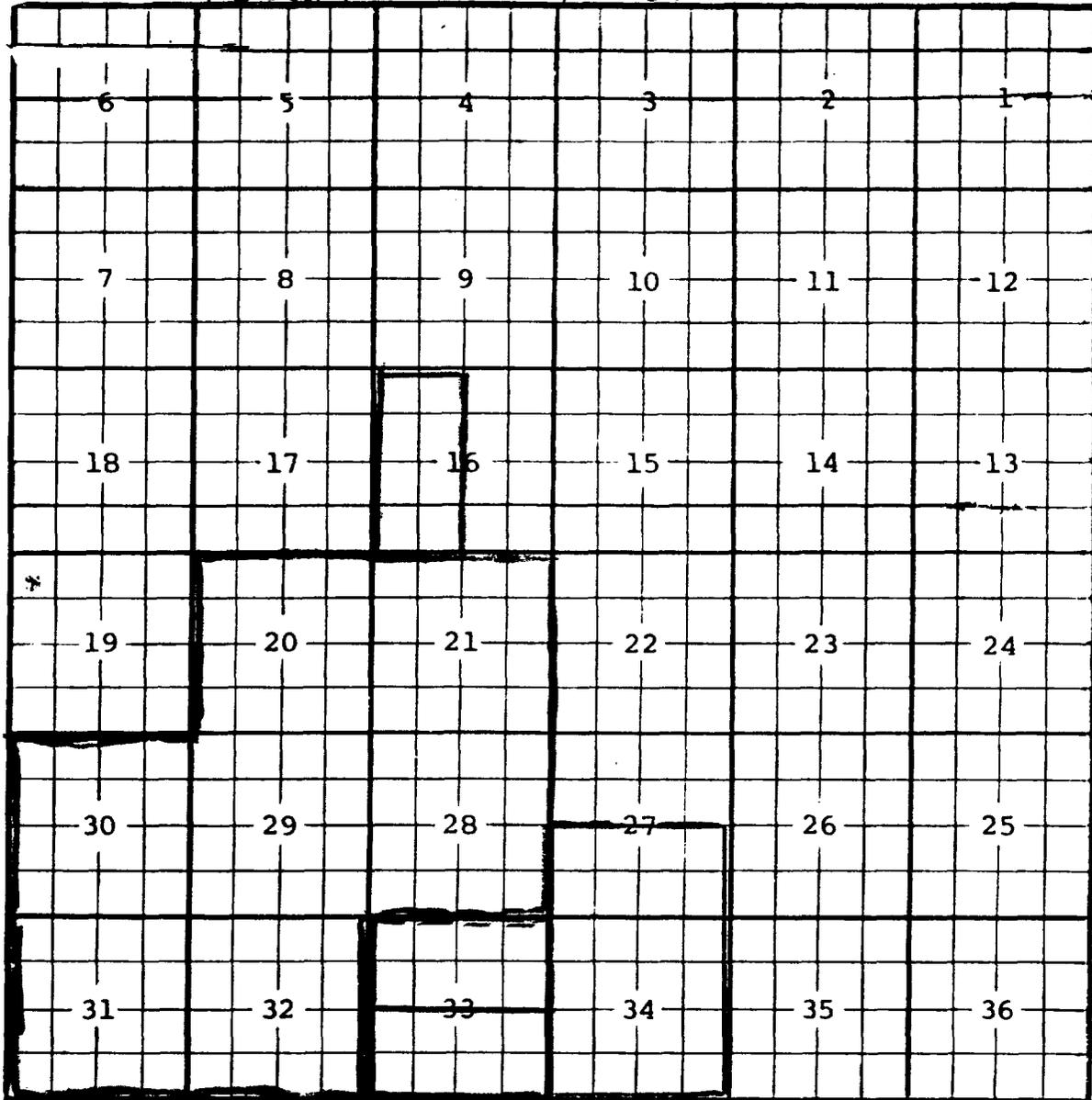


W. Thomas Kellahin

fcx: OCD-Santa Fe  
Attn: Michael E. Stogner  
fcx: Marathon Oil Company  
Attn: Steven F. Millican

County Eddy Pool Indian Basin-Upper Pennsylvanian  
Associated

TOWNSHIP 21 South Range 24 East NMPM



Ext: 1/2 Sec. 27, All Sec. 34 (R-9963, 9-20-93)  
Ext: 1/2 Sec. 33 (R-10518, 10-20-95) Ext: 1/2 Sec. 33 (R-10664, 9-16-96)  
Ext: All Secs. 20, 21, 28, 29, 30, 31, 32 (R-9927-D, 12-7-92)  
Ext: 1/2 Sec. 16 (R-11678, 10-23-01)