



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

April 30, 1996

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

Administrative Order DD-139

Dear Mr. Dueease:

Reference is made to your application dated April 4, 1996 for authorization to directionally drill its proposed Indian Hills Unit Well No. 11, Eddy County, New Mexico.

The Division Director Finds That:

- (1) The subject application submitted by Marathon Oil Company as operator has been duly filed under the provisions of Rule 111(D) and (E) of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The operator proposes to drill the Indian Hills Unit Well No. 11 at an unorthodox surface location 335 feet from the South line and 1880 feet from the East line (Lot 15/Unit O) of Section 33, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, drill vertically to a depth of approximately 5,000 feet, kickoff in a northerly direction and directionally drill to an estimated true vertical depth of 8,350 feet within the Indian Basin-Upper Pennsylvanian Associated Pool at a standard subsurface well location within the SW/4 SE/4 (Lot 15/Unit O) of said Section 33;
- (3) The 342.48 acres comprising Lots 9 through 16 (the S/2 equivalent) of said Section 33 is to be dedicated to said well thereby forming a non-standard oil or gas spacing and proration unit for said pool;
- (4) By Order Nos. R-9922 and R-5353, as amended, the Division promulgated "*General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico/Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", which includes provisions for 320-acre spacing and proration units for both oil and gas and well location requirements

which provides that wells be no closer than 660 feet to the outer boundary of a 320-acre spacing unit and not closer than 330 feet to any quarter-quarter section line or subdivision inner boundary thereon;

- (5) It is necessary for the operator to directionally drill the Indian Hills Unit Well No. 11 in the above-described manner in order to satisfy the United States Bureau of Land Management surface use restrictions and to obtain an acceptable subsurface location for this well;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the Lot 15 (the SW/4 SE/4 equivalent) of said Section 33 that is no closer than 660 feet to the South line of said Section 33 nor closer than 330 feet to any internal Lot (quarter-quarter section) line; and,
- (7) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Marathon Oil Company, is hereby authorized to drill its Indian Hills Unit Well No. 11 at an unorthodox surface location 335 feet from the South line and 1880 feet from the East line (Lot 15/Unit O) of Section 33, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico and directional drill in a northerly direction in such a manner as to bottom said well within the Indian Basin-Upper Pennsylvanian Associated Pool at a standard subsurface well location within Lot 15 (the SW/4 SE/4 equivalent) of said Section 33 that is no closer than 660 feet to the South line of said Section 33 nor closer than 330 feet to any internal Lot (quarter-quarter section) line.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Artesia offices

of the Division upon completion.

(3) Lots 9 through 16 (the S/2 equivalent) of said Section 33 shall be dedicated to said well thereby forming a non-standard 342.48-acre oil or gas spacing and proration unit for said pool.

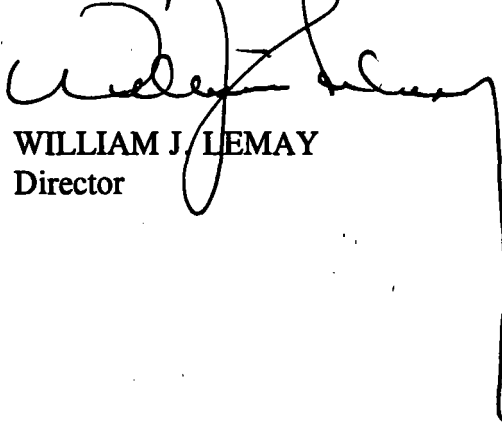
(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(5) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(6) Jurisdiction of this cause 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



WILLIAM J. LEMAY
Director

S E A L

WJL/MES/kv

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



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

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

May 12, 1999

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

Administrative Order NSL-3558-A (SD)

Dear Mr. Ducease:

Reference is made to your application dated April 21, 1999 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 342.48-acre lay-down spacing and proration unit comprising Lots 9 through 16 (S/2 equivalent) of Section 33, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.

This unit is currently dedicated to Marathon Oil Company's ("Marathon") Indian Hills Unit Well No. 8 (API No. 30-015-28590), located at an unorthodox location [approved by Division Administrative Order NSL-3558 (NSP)] 1182 feet from the South line and 1545 feet from the West line (Lot 14/Unit N) of Section 33.

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: (i) Rule 2(c) of the *"Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool/General Rules and Regulations for the Associated Oil and Gas Pools of Northwest New Mexico and Southeast New Mexico"*; and (ii) Division Rule 104.F(2), the following described well to be drilled at an unorthodox infill location in Section 33 is hereby approved:

**Indian Hills Unit Well No. 11
335' FSL & 1880' FEL (Lot 15/Unit O)
(API No. 30-015-28748).**

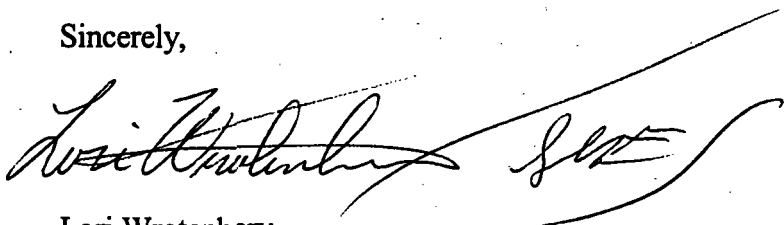
Also, Marathon is hereby authorized to simultaneously dedicate production attributed to the Indian Basin-Upper Pennsylvanian Associated Pool from the existing Indian Hills Unit Well No. 8 with the proposed Indian Hills Unit Well No. 11. Furthermore, Marathon is permitted to produce the allowable assigned the subject 342.48-acre spacing and proration unit from both wells in any proportion.

Administrative Order NSL-3558-A(SD)
Marathon Oil Company
May 12, 1999
Page 2

The provisions of Division Administrative Order NSL-3558 (NSP) for Marathon's Indian Hills Unit Well No. 8 shall remain in full force and effect until further notice and such provisions contained therein shall be expanded to include the Indian Basin-Upper Pennsylvanian Associated Pool.

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, sweeping flourish.

Lori Wrotenbery
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Artesia
U. S. Bureau of Land Management - Carlsbad
W. Thomas Kellahin, Counsel for Marathon Oil Company - Santa Fe
File: NSL-3558 (NSP)
DD-139

Remarks: The previously issued Division Administrative Order DD-139, dated April 30, 1996, which order authorized Marathon to directionally drill the Indian Hills Unit Well No. 11 from the proposed (surface) location to a subsurface location within the Indian Basin-Upper Pennsylvanian Associated Pool that is standard within Lot 15 (SW/4 SE/4 equivalent) of Section 33, is hereby placed in abeyance until further notice.

DD - MARA.1

Rec 4/8/96
Sup 4/29/96
Released 4/29/96

April 28, 1996

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

Attention: Walter J. Ducease

Administrative Order DD-139

Dear Mr. Ducease:

Reference is made to your application dated April 4, 1996 for authorization to directionally drill its proposed Indian Hills Unit Well No. 11, Eddy County, New Mexico.

The Division Director Finds That:

- (1) The subject application submitted by Marathon Oil Company as operator has been duly filed under the provisions of Rule 111(D) and (E) of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The operator proposes to drill the Indian Hills Unit Well No. 11 at an unorthodox surface location 335 feet from the South line and 1880 feet from the East line (Lot 15/Unit O) of Section 33, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, drill vertically to a depth of approximately 5,000 feet, kickoff in a northerly direction and directionally drill to an estimated true vertical depth of 8,350 feet within the Indian Basin-Upper Pennsylvanian Associated Pool at a standard subsurface well location within the SW/4 SE/4 (Lot 15/Unit O) of said Section 33;
- (3) The 342.48 acres comprising Lots 9 through 16 (the S/2 equivalent) of said Section 33 is to be dedicated to said well thereby forming a non-standard oil or gas spacing and proration unit for said pool;
- (4) By Order Nos. R-9922 and R-5353, as amended, the Division promulgated "*General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico/Special Rules and Regulations for the*

Indian Basin-Upper Pennsylvanian Associated Pool", which includes provisions for 320-acre spacing and proration units for both oil and gas and well location requirements which provides that wells be no closer than 660 feet to the outer boundary of a 320-acre spacing unit and not closer than 330 feet to any quarter-quarter section line or subdivision inner boundary thereon;

- (5) It is necessary for the operator to directionally drill the Indian Hills Unit Well No. 11 in the above-described manner in order to satisfy the United States Bureau of Land Management surface use restrictions and to obtain an acceptable subsurface location for this well;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the Lot 15 (the SW/4 SE/4 equivalent) of said Section 33 that is no closer than 660 feet to the South line of said Section 33 nor closer than 330 feet to any internal Lot (quarter-quarter section) line; and,
- (7) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Marathon Oil Company, is hereby authorized to drill its Indian Hills Unit Well No. 11 at an unorthodox surface location 335 feet from the South line and 1880 feet from the East line (Lot 15/Unit O) of Section 33, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico and directional drill in a northerly direction in such a manner as to bottom said well within the Indian Basin-Upper Pennsylvanian Associated Pool at a standard subsurface well location within Lot 15 (the SW/4 SE/4 equivalent) of said Section 33 that is no closer than 660 feet to the South line of said Section 33 nor closer than 330 feet to any internal Lot (quarter-quarter section) line.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

*Administrative Order DD-*****
Marathon Oil Company
April 28, 1996
Page No. 3

(2) The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Artesia offices of the Division upon completion.

(3) Lots 9 through 16 (the S/2 equivalent) of said Section 33 shall be dedicated to said well thereby forming a non-standard 342.48-acre oil or gas spacing and proration unit for said pool.

(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(5) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(6) Jurisdiction of this cause 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

WILLIAM J. LEMAY
Director

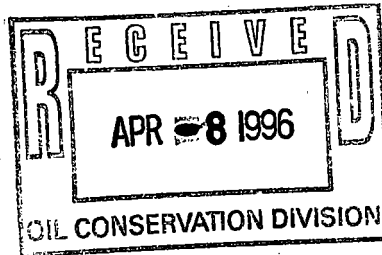
S E A L

WJL/MES/kv

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



**Marathon
Oil Company**



Mid-Continent Region
Production United States

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

April 4, 1996

State of New Mexico
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505
Attn: Mr. M. E. Stogner

RE: Indian Hills Unit No. 11
SHL: 335' FSL & 1880' FEL
BHL: 842' FSL & 1880' FEL
Sec. ~~11~~, T-21-S, R-24-E
Eddy County, New Mexico

Dear Mr. Stogner:

Marathon Oil Company respectfully requests administrative approval to directionally drill and complete the above referenced well in the Indian Basin, Upper Penn Associated.

Marathon has made numerous attempts to locate an orthodox drillsite in the SW/4, SE/4 of Section 33, but due to topographical considerations, a directional well from an unorthodox surface hole location is the only possibility to test the Upper Penn.

Onsite inspection of the area with Mr. Barry Hunt, Surface Use Specialist, Carlsbad Resource Area of Bureau of Land Management, resulted in their encouragement of locating the drilling pad away from areas requiring excessive cut and fill requirements and damage to the drainage of Right Hand Canyon.

PAGE -2-

Through onsite investigation, the BLM has recommended a site that will result in a minimum of surface damage to the area, yet is an unorthodox surface hole location.

The following items are being submitted in support of this request:

1. Form 3160-3 Application for Permit to Drill
2. Location Plat
3. Vertical Plan View
4. Horizontal Plan View
5. Type Log
6. Copy of signed waiver letters from offset operators

A copy of this letter and attachments is being furnished to the offset operators by certified mail as notice of this application

Marathon Oil Company requests that this request to directionally drill from an unorthodox surface hole location to an orthodox bottom hole location be administratively approved. Due to rig scheduling difficulties, we anticipate spudding this well by May 24, 1996.

Please feel free to contact me at (800) 351-1417 if you have any questions.

Respectfully,



Walter J. Dueease
MARATHON OIL COMPANY

Mid-Continent Region
Production United States



**Marathon
Oil Company**

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

**INDIAN HILLS UNIT NO. 11
SHL: 335' FSL & 1880' FEL
SEC. 33, T-21-S, R-24-E
EDDY COUNTY, NEW MEXICO**

OFFSET OPERATOR LIST

Santa Fe Energy Resources, Inc.
550 West Texas Ave, Suite 1330
Midland, Texas 79701

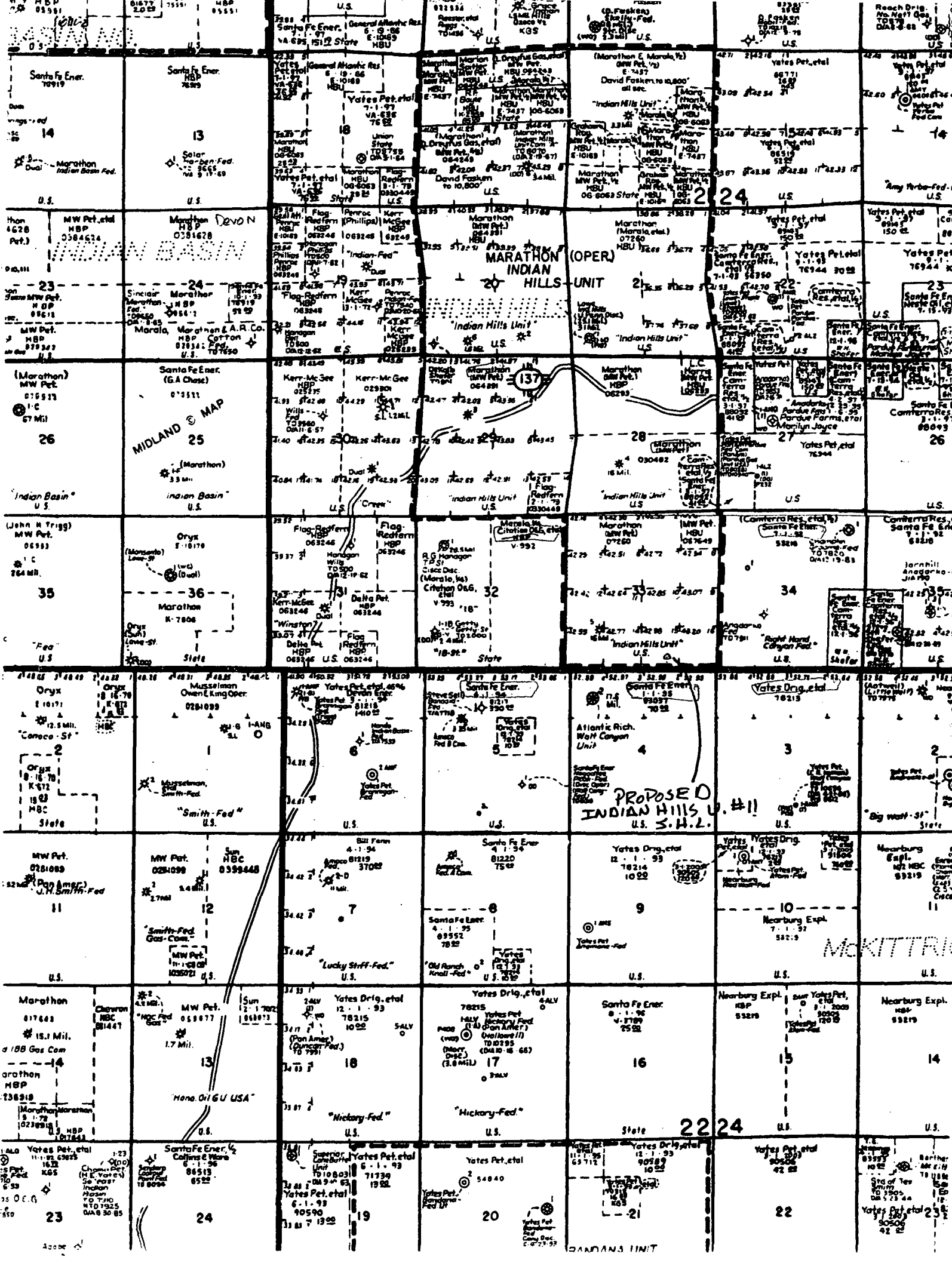
Sec. 34, T-21-S, R-24-E
Secs. 4 & 5, T-22-S, R-24-E

Yates Petroleum Corp.
105 South 4th St.
Artesia, New Mexico 88210

Sec. 27, T-21-S, R-24-E
Sec. 3, T-22-S, R-24-E

Citation Oil & Gas Corp.
8223 Willow Place South, Suite 250
Houston, Texas 77070

E/2, Sec. 32, T-22-S, R-24-E





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

April 4, 1996

Certified Mail Return Receipt Requested
Citation Oil & Gas Corp.
8223 Willow Place South, Suite 250
Houston, Texas 77070

RE: Directional Well Application
Indian Hills Unit No. 11
SHL: 335' FSL & 1880' FEL
BHL: 842' FSL & 1880' FEL
Sec. 33, T-21-S, R-24-E
Indian Basin, Upper Penn Assoc.
Eddy County, New Mexico

To whom it may concern:

Marathon Oil Company is requesting administrative approval to directionally drill the Indian Hills Unit No. 11 from an unorthodox surface hole location to an orthodox bottom hole location, under the provision of Rule 111 (D). Attached to this letter is a copy of the application to drill and corresponding plats, showing the exact location of the subject well.

Marathon has made numerous attempts to locate an orthodox drillsite in the SW/4, SE/4 of Sec. 33 but due to topographical considerations, a directional well from an unorthodox surface hole location is the only possible way to test the Upper Penn.

Onsite inspection of the area with Mr. Barry Hunt, Surface Use Specialist, Carlsbad Resource Area of the Bureau of Land Management, resulted in their encouragement of locating the drillsite away from Right Hand Canyon which would exceed cut and fill construction requirements for the East Indian Basin/Azotea Mesa Environmental Assessment.

If you have no objection to this application, please sign the attached waiver and mail to Marathon. An addressed, stamped envelope is enclosed for your convenience.

Feel free to call me at (800) 351-1417 if anything additional is needed.

Respectfully,

A handwritten signature in cursive script, appearing to read 'Walter J. Dueease', followed by a horizontal line.

Walter J Dueease
MARATHON OIL COMPANY



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

April 4, 1996

Certified Mail Return Receipt Requested
Santa Fe Energy Resources, Inc.
550 West Texas Ave, Suite 1330
Midland, Texas 79701
Attn: Gene H. Davis

RE: Directional Well Application
Indian Hills Unit No. 11
SHL: 335' FSL & 1880' FEL
BHL: 842' FSL & 1880' FEL
Sec. 33, T-21-S, R-24-E
Indian Basin, Upper Penn Assoc.
Eddy County, New Mexico

Dear Mr. Davis:

Marathon Oil Company is requesting administrative approval to directionally drill the Indian Hills Unit No. 11 from an unorthodox surface hole location to an orthodox bottom hole location, under the provision of Rule 111 (D). Attached to this letter is a copy of the application to drill and corresponding plats, showing the exact location of the subject well.

Marathon has made numerous attempts to locate an orthodox drillsite in the SW/4, SE/4 of Sec. 33 but due to topographical considerations, a directional well from an unorthodox surface hole location is the only possible way to test the Upper Penn.

Onsite inspection of the area with Mr. Barry Hunt, Surface Use Specialist, Carlsbad Resource Area of the Bureau of Land Management, resulted in their encouragement of locating the drillsite away from Right Hand Canyon which would exceed cut and fill construction requirements for the East Indian Basin/Azotea Mesa Environmental Assessment.

If you have no objection to this application, please sign the attached waiver and mail to Marathon. An addressed, stamped envelope is enclosed for your convenience.

Feel free to call me at (800) 351-1417 if anything additional is needed.

Respectfully,

A handwritten signature in cursive script, appearing to read 'Walter J. Dueease'.

Walter J Dueease
MARATHON OIL COMPANY



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

April 4, 1996

Certified Mail Return Receipt Requested
Yates Petroleum Corp
105 South 4th
Artesia, New Mexico 88210

RE: Directional Well Application
Indian Hills Unit No. 11
SHL: 335' FSL & 1880' FEL
BHL: 842' FSL & 1880' FEL
Sec. 33, T-21-S, R-24-E
Indian Basin, Upper Penn Assoc.
Eddy County, New Mexico

To whom it may concern:

Marathon Oil Company is requesting administrative approval to directionally drill the Indian Hills Unit No. 11 from an unorthodox surface hole location to an orthodox bottom hole location, under the provision of Rule 111 (D). Attached to this letter is a copy of the application to drill and corresponding plats, showing the exact location of the subject well.

Marathon has made numerous attempts to locate an orthodox drillsite in the SW/4, SE/4 of Sec. 33 but due to topographical considerations, a directional well from an unorthodox surface hole location is the only possible way to test the Upper Penn.

Onsite inspection of the area with Mr. Barry Hunt, Surface Use Specialist, Carlsbad Resource Area of the Bureau of Land Management, resulted in their encouragement of locating the drillsite away from Right Hand Canyon which would exceed cut and fill construction requirements for the East Indian Basin/Azotea Mesa Environmental Assessment.

If you have no objection to this application, please sign the attached waiver and mail to Marathon. An addressed, stamped envelope is enclosed for your convenience.

Feel free to call me at (800) 351-1417 if anything additional is needed.

Respectfully,

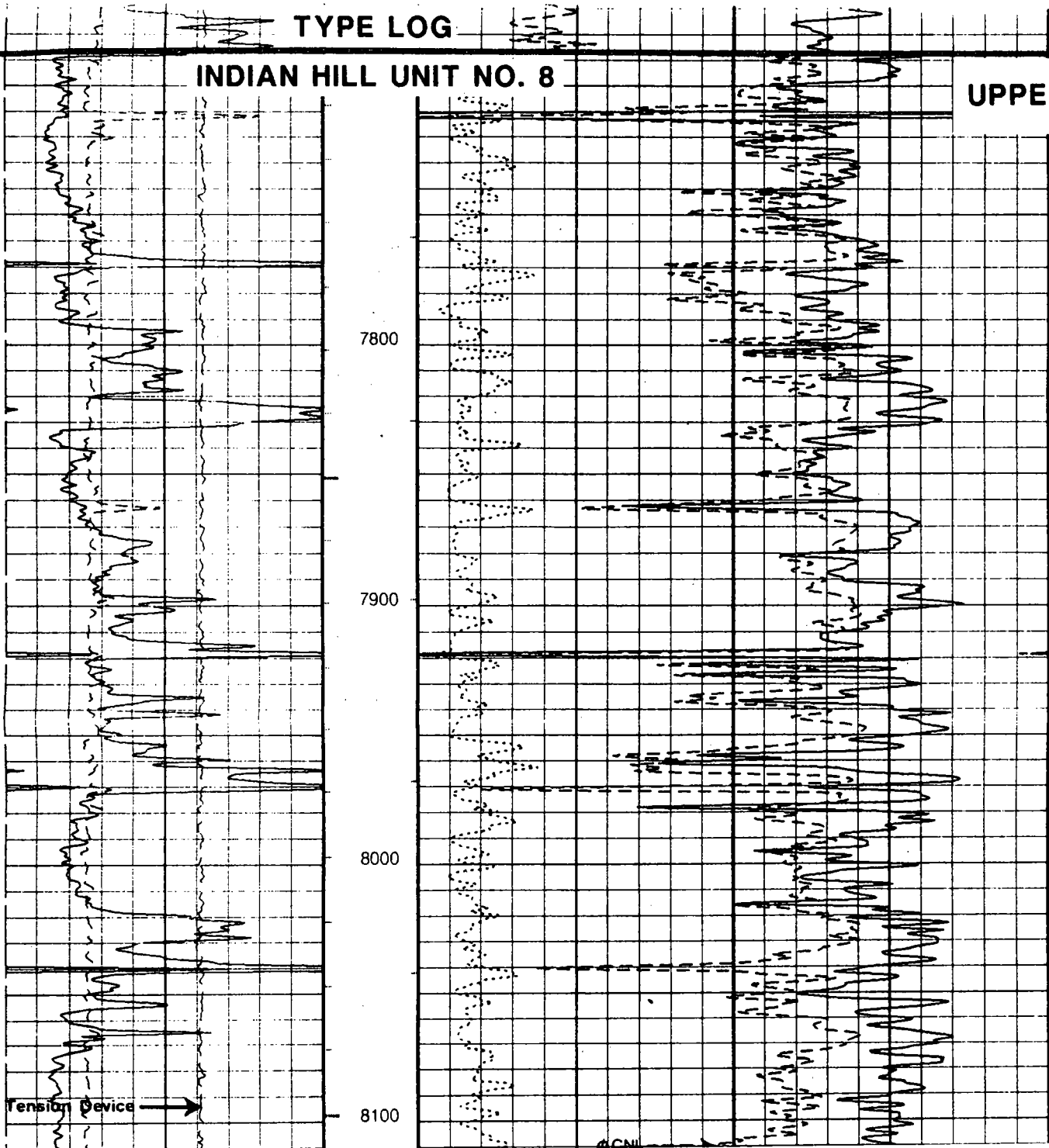
A handwritten signature in cursive script, reading 'Walter J. Dueease'.

Walter J Dueease
MARATHON OIL COMPANY

TYPE LOG

INDIAN HILL UNIT NO. 8

UPPER PENN



INDIAN BASIN, UPPER PENN ASSOC. POOL



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

WAIVER

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

RE: Directional Well Application
Indian Hills Unit #11
SHL: 335' FSL & 1880' FEL
BHL: 842' FSL & 1880' FEL
Sec. 11, T-21-S, R-24-E
Indian Basin, Upper Penn Assoc.
Eddy County, New Mexico

We the undersigned, have been furnished a copy of Marathon Oil Company's application to directionally drill and complete the subject well to an orthodox bottom hole location under the provisions of Rule 111 (D). Please be informed that we, as offset operator, have no objection to the drilling and completion of this well as set forth in Marathon's application.

Respectfully,

COMPANY Santa Fe Energy Resources, Inc

REPRESENTATIVE _____

SIGNATURE _____

TITLE _____

DATE _____



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

WAIVER

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

RE: Directional Well Application
Indian Hills Unit #11
SHL: 335' FSL & 1880' FEL
BHL: 842' FSL & 1880' FEL
Sec. 11, T-21-S, R-24-E
Indian Basin, Upper Penn Assoc.
Eddy County, New Mexico

We the undersigned, have been furnished a copy of Marathon Oil Company's application to directionally drill and complete the subject well to an orthodox bottom hole location under the provisions of Rule 111 (D). Please be informed that we, as offset operator, have no objection to the drilling and completion of this well as set forth in Marathon's application.

Respectfully,

COMPANY Citation Oil & Gas Corp.

REPRESENTATIVE _____

SIGNATURE _____

TITLE _____

DATE _____



**Marathon
Oil Company**

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

WAIVER

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

RE: Directional Well Application
Indian Hills Unit #11
SHL: 335' FSL & 1880' FEL
BHL: 842' FSL & 1880' FEL
Sec. 11, T-21-S, R-24-E
Indian Basin, Upper Penn Assoc.
Eddy County, New Mexico

We the undersigned, have been furnished a copy of Marathon Oil Company's application to directionally drill and complete the subject well to an orthodox bottom hole location under the provisions of Rule 111 (D). Please be informed that we, as offset operator, have no objection to the drilling and completion of this well as set forth in Marathon's application.

Respectfully,

COMPANY Yates Petroleum Corp.

REPRESENTATIVE _____

SIGNATURE _____

TITLE _____

DATE _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM07260

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK

DRILL ☒DEEPEN ☐

2. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

3. NAME OF OPERATOR

Marathon Oil Company

4. ADDRESS AND TELEPHONE NO.

P.O. Box 552, Midland, TX 79702

915/682-1626

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

At surface

335' FSL & 1880' FEL

At proposed prod. zone

760' FSL & 1880' FEL

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

10 MILES WEST OF LAKEWOOD NEW MEXICO

7. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

335' SHL, 760' BHL

8. NO. OF ACRES IN LEASE

640

9. NO. OF ACRES ASSIGNED
TO THIS WELL

320 - S/2

10. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2039' SHL, 1805' BHL

11. PROPOSED DEPTH

8000' MD, 7970' TVD

12. ROTARY OR CABLE TOOLS

ROTARY

13. ELEVATIONS (Show whether DP, RT, GR, etc.)

4087' G.L.

14. APPROX. DATE WORK WILL START*

ASAP

15.

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|-----------------------|-----------------|---------------|-------------------------------|
| 17 1/2" | 16" | 50# | 40' | CONDUCTOR-REDI MIS TO SURFACE |
| 14 3/4" | 9 5/8" | 36# | 1600' | 800 - CIRCULATE |
| 8 3/4" | 7" | 23#, 26# | 8000' | 1075-TOC @ +/- 1000' |

SEE ATTACHED MULTIPONT AND DRILLING PROGRAM FOR SPECIFIC DETAILS.

DUE TO TOPOGRAPHIC CONSTRAINTS THIS WELL MUST BE DIRECTIONALLY DRILLED TO REMAIN IN
COMPLIANCE OF BLM'S REQUIREMENT OF SPECIAL LOCATION CONSTRUCTION STIPULATIONS IN THE EAST
INDIAN BASIN ENVIRONMENTAL ASSESSMENT.AN APPLICATION FOR AN INTENTIONALLY DEVIATED WELL IS BEING MADE WITH THE STATE OF NEW
MEXICO.

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.

16.

SIGNED

W. J. Duvane, P.E. DPN

TITLE

DRILLING SUPERINTENDENT

DATE

10-19-95

(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:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

APPROVED BY

Joe G. Lara Acting Area Manager

TITLE

DATE

12/6/95

*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 1900, Hobbs, NM 88241-1900

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 BD, Artesia, NM 88211-0719

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

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---------------|----------------------|-----------------------------------|
| API Number | Pool Code | Pool Name |
| | | INDIAN BASIN (U. PENN ASSOC. OIL) |
| Property Code | Property Name | Well Number |
| | INDIAN HILLS UNIT | 11 |
| OGRID No. | Operator Name | Elevation |
| | MARATHON OIL COMPANY | 4087 |

Surface Location

| | | | | | | | | | |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| 15 | 33 | 21 S | 24 E | | 335 | SOUTH | 1880 | 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 |
| 15 | 33 | 21-S | 24-E | | 760' | SOUTH | 1980 | EAST | EDDY |
| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. | | | | | | |
| 320, S/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

| | | | |
|---------------------|---------------------|---------------------|---------------------|
| LOT 4 | LOT 3 | LOT 2 | LOT 1 |
| 42.16 AC. LOT 5 | 42.38 AC. LOT 6 | 42.59 AC. LOT 7 | 42.81 AC. LOT 8 |
| 42.29 AC. LOT 12 | 42.51 AC. LOT 11 | 42.72 AC. LOT 10 | 42.94 AC. LOT 9 |
| 42.42 AC. LOT 13 | 42.64 AC. LOT 14 | 42.85 AC. LOT 15 | 43.07 AC. LOT 16 |
| 42.55 AC. | 42.77 AC. | | 43.25 AC. |

OPERATOR CERTIFICATION

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

W. J. Ruman FOR OPR
Signature

D. P. NORDT
Printed Name

DRILLING SUPERINTENDENT
Title

10-19-95
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.

SEPTEMBER 27 1995
Date Surveyed

Ronald J. Edson
Signature & Seal of Professional Surveyor

W.O. Num. 95-11-1472

Certificate No. JCH-4-1231 676
RONALD J. EDSON 3239
CAP. 5357N 1254

Thirteen Point Surface Use Plan
MARATHON OIL COMPANY

Indian Hills Unit #11
Sec 33, T-21-S, R-24-E
Eddy County, New Mexico

1. Existing Roads: Refer to Vicinity Lease Map.

- a. The proposed wellsite is staked and the surveyor's plat is attached.
- b. To reach the location from Carlsbad, New Mexico: Follow Hwy.. 285 North of Carlsbad 14 miles. Turn West on Queen's highway (NM 137) for 8.8 miles. Turn South on NM 137 for 4.1 miles, turn East on caliche lease road for 1.2 miles. Turn left for .3 miles. Turn right at "Y" and follow 1.1 miles, then left at "Y" and go thru Jones Canyon 4 Fed #1 well, then 1 mile North to a point 250' East of the location.
- c. Existing roads within a one-mile radius (refer to Vicinity Lease Map).
- d. The existing road will be maintained as necessary to provide access during the drilling operation.

2. Planned Access Road: Refer to Vicinity Lease Map.

Access will be by existing lease roads. Construction plans will require blading and rolling the road and pad. An access road of approximately 250' will be required. The access road will enter the drilling pad on the Southeast corner. The drilling location will have a V-door facing North.

3. Location of Existing Wells: See Vicinity Lease Map.

4. Location of Existing and Proposed Production Facilities within a one-mile radius:

- a. Existing: There are six gas wells operated by Marathon, Santa Fe and Yates Petr. within a one-mile radius of the proposed location. These locations have production facilities including separators, condensate storage tanks and location drips. Marathon and Santa Fe and Yates operates a variety of dehydrators, meter runs, and several gathering lines in the one-mile radius.
- b. New Facilities: The proposed location will have a separator and gas sales line. The actual equipment and its configuration will be determined after the well is completed.
- c. Rehabilitation of disturbed areas no longer needed for operations will be accomplished by grading, leveling and seeding as recommended.

A. P. D. (cont.)
Thirteen Point Surface Use Plan
Indian Hills Unit #11

5. Location and Type of Water Supply:

- a. Source: Indian Basin Gas Plant, SW/4, NE/4, Sec. 23, T-21-S, R-23-E.
- b. The water will be trucked by a contractor over existing roads to the well location. No new construction will be required on/along the water route.
- c. No water well will be drilled on this location.

6. Source of Construction Materials:

- a. Construction materials will be obtained from the construction site.
- b. If production is obtained, native materials will be used on the location and for installation of production facilities.
- c. On-site inspection may dictate any changes in location construction.

7. Methods of Handling Waste Material Disposal:

- a. Cuttings - will be deposited in the reserve pit.
 - b. Drilling fluids - contained in reserve pit and allowed to evaporate. Free water will be removed and transported to an approved disposal site to accelerate pit drying.
 - c. Produced fluids - none anticipated.
 - d. A portable chemical toilet will be provided.
 - e. Garbage and other waste material - garbage and trash will be stored in a receptacle on location and periodically hauled to an approved sanitary landfill.
 - f. After the rig moves out, all materials not necessary for operations will be removed. Pits will be backfilled and leveled. The location will be cleaned of all trash and debris.
8. Ancillary Facilities: Camp facilities will not be required. Portable trailers will be on location to house a company drilling foreman and contract toolpusher.

9. Wellsite Layout:

- a. The wellpad layout shows the drillsite layout as staked. Cross-sections have been drafted to visualize the planned cuts and fills across the location. Topsoil will be stockpiled per specifications.
- b. The reserve pit will be fenced on three sides before drilling begins. The fourth side will be fenced when the drilling rig leaves location.
- c. The reserve pit will be lined (8 mil material).

A. P. D. (cont.)
Thirteen Point Surface Use Plan
Indian Hills Unit #11

10. Plans for Restoration of the Surface:

- a. Backfilling, leveling, and contouring are planned as soon as all pits have dried. Waste disposal and spoiled materials will be buried or hauled away immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.
- b. The soil banked material will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula by BLM. Revegetation is recommended for road area, as well as around the drill pad.
- c. The reserve pit will be fenced during drilling operations. Fencing will be maintained until leveling and cleanup are accomplished.
- d. If any oil is in the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with mesh.
- e. The rehabilitation operations will begin after the drilling rig is removed. Removal of oil or other adverse substances will begin immediately or area will be flagged and fenced. Other cleanup will be done as needed. Planting and revegetation will be done between July 15 and September 15.

11. Other Information:

- a. There are no significant archaeological or cultural sites visible in the area of disturbance. A cultural resource survey was performed by Archaeological Consultants Inc. of Roswell.
- b. General topography: Shown on Vicinity Lease Map. The terrain at the wellsite is gently rolling hills. Vegetation is primarily sage brush and natural grasses.
- c. Animal life: Prairie dogs, domestic livestock, rabbits and native rodents and predators.
- d. Dwellings (nearest): Approximately 4-1/2 miles.
- e. General location: Approximately 8.5 miles west of Lakewood, New Mexico.
- f. Drainage: Internal
- g. Surface Owner: The surface is owned by the Federal Government.

A. P. D. (cont.)
Thirteen Point Surface Use Plan
Indian Hills Unit #11

12. Operator Representatives:

David Nordt
Drilling, Completion, & Workover Superintendent
P. O. Box 552
Midland, TX 79702
800/351-1417
915/682-1626

13. Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge and belief, true and correct; and that the work associated with the operations proposed herein will be performed by MARATHON OIL COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

10/23-95
Date

W. J. Duman FOR
D. P. Nordt

**DRILLING PROGRAM
MARATHON OIL COMPANY**

Indian Hills Unit #11

1. Estimated KB Elevation: 4097'

| FORMATION | —TOP— | | —BASE— | | FLUID |
|-----------------|----------|-----------------|----------|----------------|-----------------|
| | MEASURED | SUBSEA MEASURED | MEASURED | SUBSEA CONTENT | |
| Queen | Surface | +4097' | 650' | +3447' | water |
| San Andres | 650' | 3447' | 2250' | 1847' | water |
| Glorietta | 2250' | 1847' | 2355' | 797' | |
| Delaware | 3300' | 797' | 4300' | -203' | |
| Bone Spring | 4300' | -203' | 5950' | -1853' | oil gas |
| Wolfcamp | 5950' | -1853' | 7520' | -3423' | oil gas |
| B/Permian Shale | 7520' | -3423' | 7530' | -3433' | |
| U. Penn | 7530' | -3433' | 7550' | -3453' | gas, oil, water |
| Penn Dolomite | 7550' | -3453' | 8000' | -4253' | gas, oil, water |

| FORMATION | —EST | | EST SBHT | | H2S | —SIGNIFICANCE— (obj. marker, etc.) |
|-----------------|------|------------------|----------|-----|------|---------------------------------------|
| | PSIG | SBHP— PPG EMW | DEG f | PPM | | |
| Bone Springs | 1210 | 8.5 | | | 500 | marker |
| Wolfcamp | 1680 | 9.0 | | | | marker |
| B/Permian Shale | 1810 | 9.0 | | | | marker |
| U. Penn | 2050 | 9.0 | | | 5000 | objective pay |
| Penn Dolomite | 2164 | 9.0 | | | 5000 | objective |

2. See (1) above.

If any unexpected water or mineral bearing zones are encountered, they will be reported, evaluated, and protected as circumstances and regulations require.

3. Pressure Control Equipment:

9 5/8" Surface: 11" 3M annular tested to 200#/2000#, 11" 3M dual rams, choke manifold and mud cross, tested to 300#/3000#.

Auxiliary Equipment:

Surface Hole: Annular or rotating head w/air rig.

Intermediate Hole: N/A

Production Hole: Flow indicator, PVT, H₂S Sensors, air packs, stroke counter, rotating head.

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs.

Upper and lower kelly cocks with valve handle and safety valve and subs to fit all drillstring connections in use will be available on rig floor.

Test Frequency

A. P. D. (cont.)
Thirteen Point Surface Use Plan
Indian Hills Unit #11

1. When installed.
2. Anytime a pressure seal is broken (test confined only to affected equipment).
3. At least every 20 days.
4. Blind and pipe rams shall be activated each trip but not more than once/day.

4. Casing and Cement Program:

| —DEPTH— FROM TO | | SECTION LENGTH | HOLE SIZE | CSG SIZE | WT. PPE | GRADE | THREADS COUPLINGS | NEW USED |
|--------------------------|-------|-------------------|--------------|----------------|----------------|------------|----------------------|---|
| 0 | 1600' | 1600' | 12.25" | 9.625" | 36 | K-55 | 8rd, STC | New |
| 0 | 2800' | 2800' | 8.75" | 7" | 23 | K-55 | 8rd, LTC | New |
| 2800' | 8000' | 5200' | 8.75" | 7" | 26 | K-55 | 8rd, LTC | New |
| CASING DV STRING DPTH | STG | LEAD TAIL | AMT SXS | TYPE CEMENT | YIELD CF/SX | WT. PPG | TOC | ADDITIVES |
| 9.625" None | 1 | L | 600 | "C" Lite | 1.99 | 12.4 | Surf | 10#/SK. Gilsonite, 3% CaCl ₂ , 1/4# cello |
| 9.625" | | T | 200 | "C" Neat | 1.32 | 14.8 | Surf | 2% CaCl ₂ , 1/4# cello |
| 7" ±5600' | 1 | L | 500 | "C" Lite | 1.8 | 13.6 | 5600' | 8 pps Silica, .6% Halad 9, 3% salt, 5 pps Gilsonite |
| 7" | 2 | L | 675 | "C" Lite | 1.91 | 12.8 | 5500' | 5 pps, salt, 5 pps Gilsonite, 1/4 pps Cello |
| 7" | 2 | T | 100 | "C" Neat | 1.32 | 14.8 | ±1000' | |

Each stage will be preceded by an appropriate mud flush. Actual production hole volumes will be based on the calliper volume plus 15% excess.

Centralizer Program:

9 5/8" Conventional centralizers. Bottom 3 joints and every fourth joint to surface.

7" Conventional centralizers middle of 1st joint, then every joint to 7500', and 1 centralizer every 4th joint thereafter to 1100'.

A. P. D. (cont.)
Thirteen Point Surface Use Plan
Indian Hills Unit #11

5. Mud Program:

| -DEPTH- FROM TO | | MUD TYPE | WEIGHT (PPG) VIS | | WL CC | ADDITIVES | VISUAL MONTR |
|--------------------|-------|-----------|---------------------|-------|----------|--|-----------------|
| | | | | | | | |
| 0 | 1800' | air/mist | N/A | N/A | N/A | Soap for mist | Reserve |
| 1800' | 5000' | fresh | 8.5 | 28-32 | N/C | Gel, caustic, H ₂ S Scavenger | Reserve |
| 5000' | 7200' | cut brine | 9.0 | 32-36 | N/C | Saturated brine | Reserve |
| 7200' | 8000' | cut brine | 9.0 | 32-36 | <20 | Salt gel, starch, caustic | Steel Pits |

Sufficient quantities of additives will be on location to maintain above mud properties for any anticipated well conditions.

6. Logging, Testing & Coring Programs:

| LOG/TEST/CORE/MUDLOG/OTHER | -INTERVAL- FROM TO | | REMARKS |
|----------------------------|-----------------------|-------------|---|
| | | | |
| DLL/MSFL/GR | TD | 5000' | |
| LDT/CNL/GR/CAL | TD | surf casing | |
| MUD LOGGER | | | ROP, Lithology, Gas Analysis, Chromatograph |
| NO CORES OR DST'S | | | |

7. Abnormal Pressures, Temperatures or Potential Hazards:

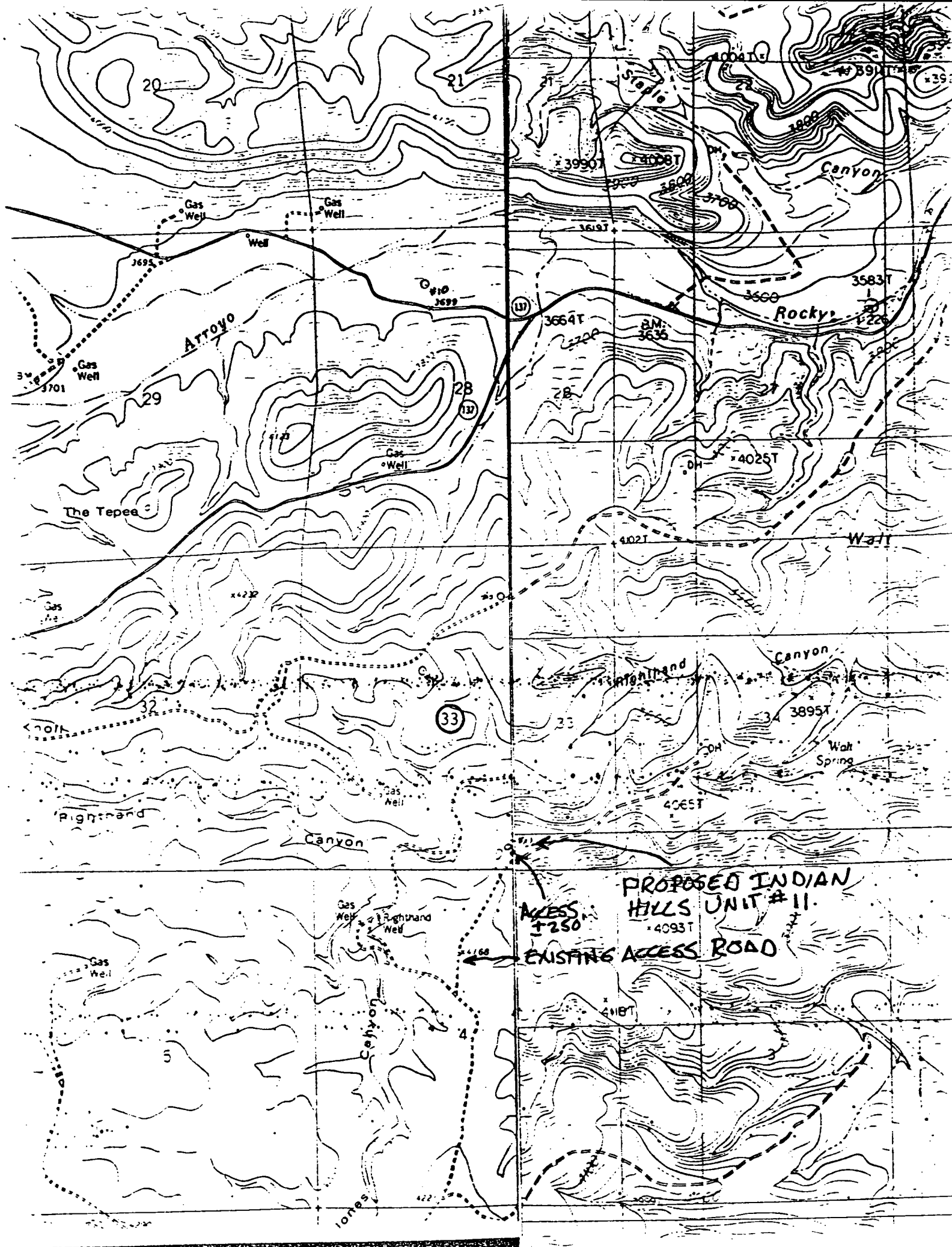
None anticipated. Possible H₂S In-Cisco & Upper Penn. See H₂S Drilling Operations Plan.

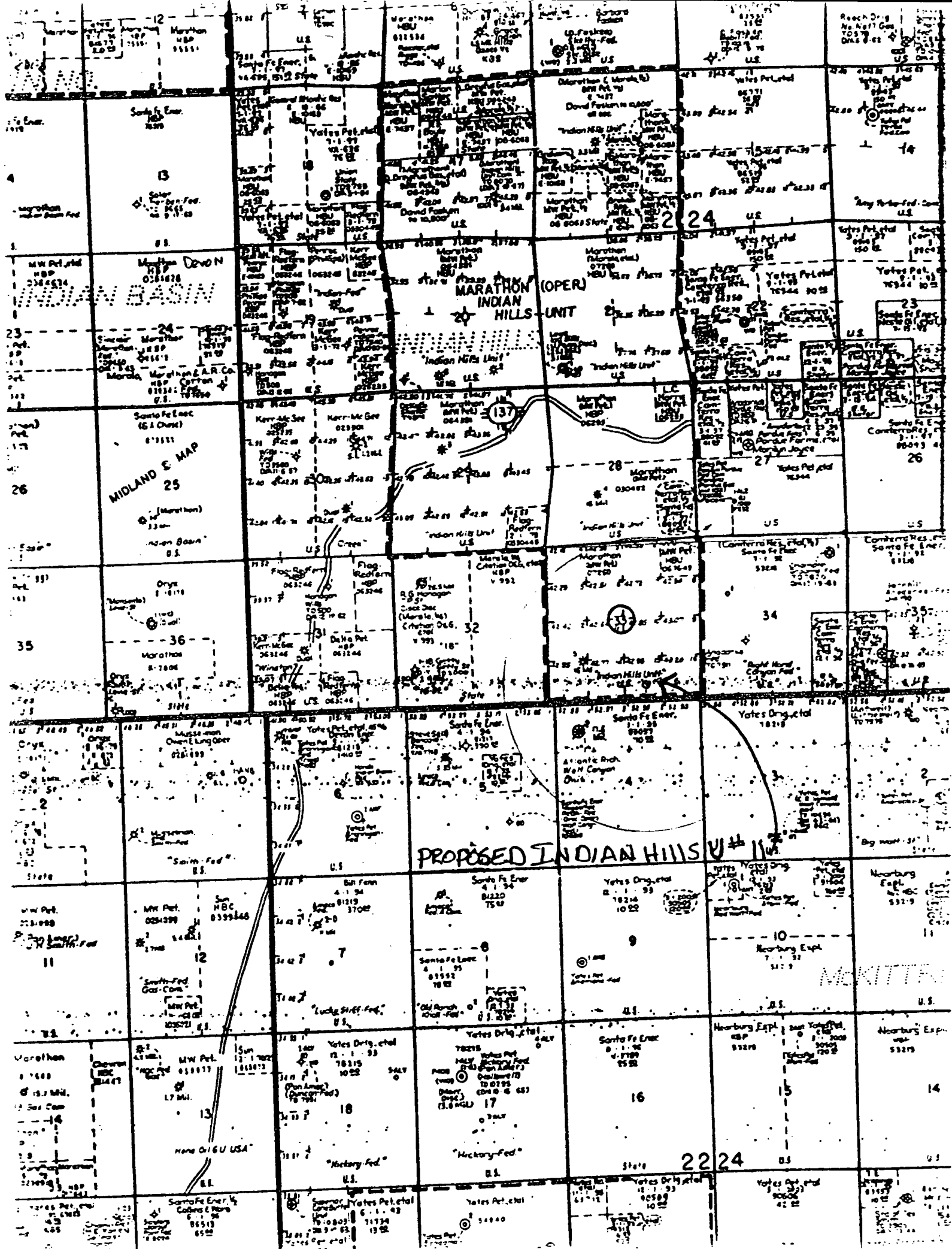
8. Other Information:

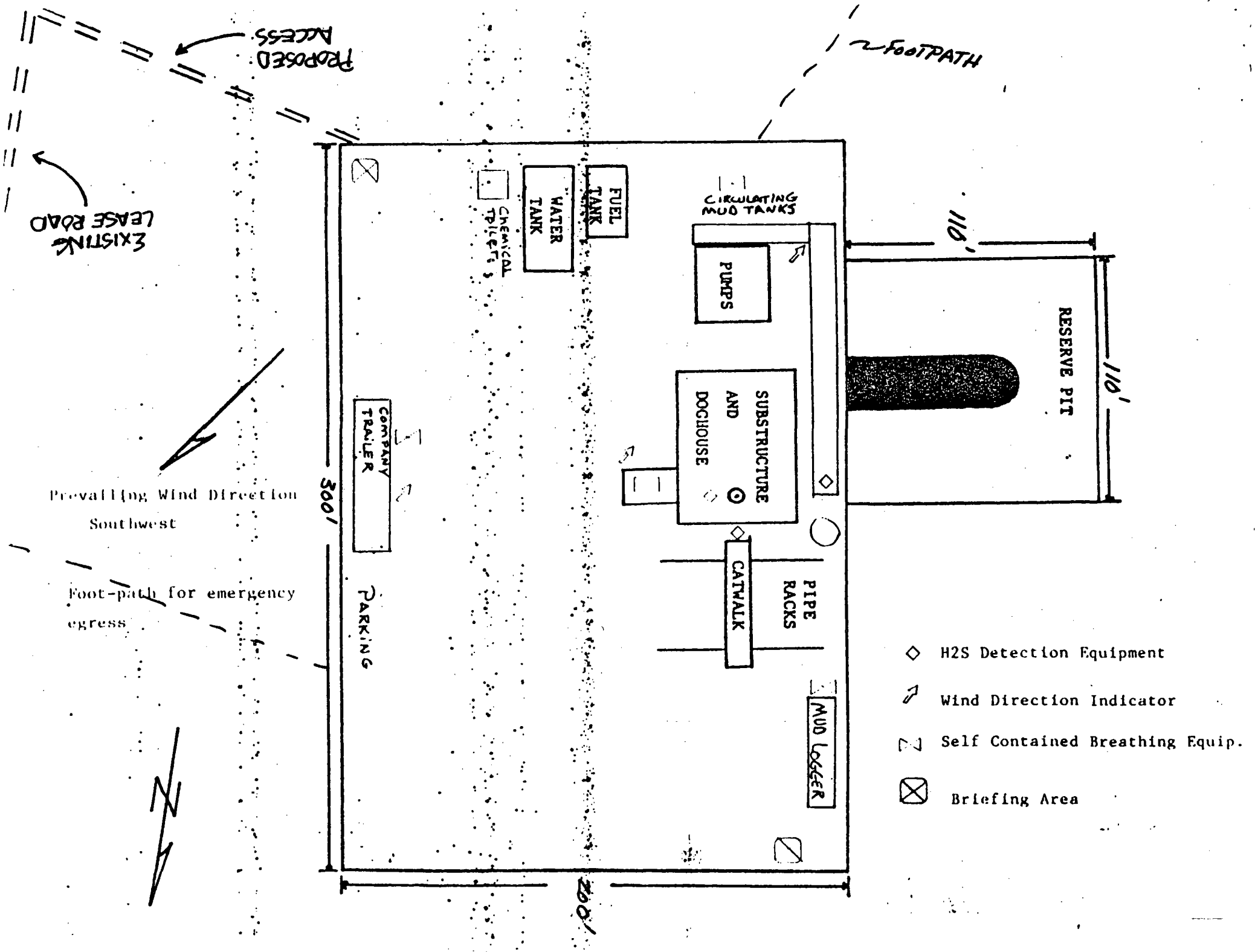
Anticipated Starting Date: As soon as possible.

Duration of Well: drilling - 18 days, completion - 10 days.

See attached directional plan for proposed kick off point and build and hold program.







PROPOSED
ACCESS

2 FOOTPATH

EXISTING
LEASE ROAD

RESERVE PIT

110'

110'

CIRCULATING
MUD TANKS

PUMPS

SUBSTRUCTURE
AND
DOCHOUSE

CATWALK

PIPE
RACKS

MUD LOGGER

FUEL
TANK

WATER
TANK

CHEMICAL
TANKS

COMPANY
TRAILER

PARKING

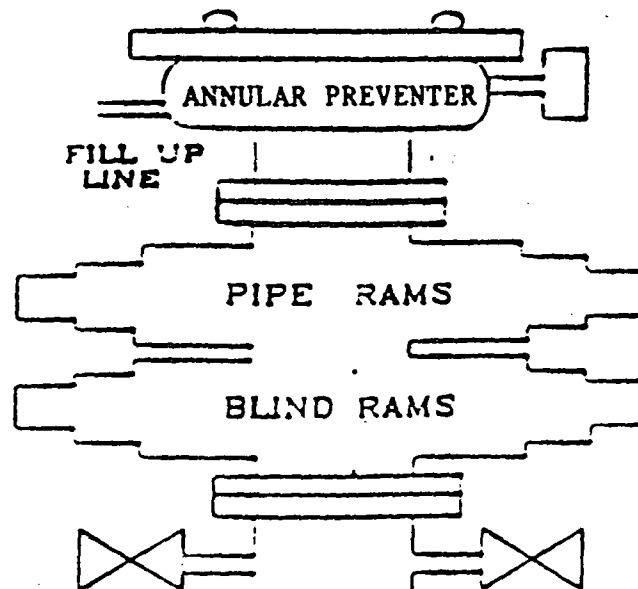
300'

200'

Prevailing Wind Direction
Southwest

Foot-path for emergency
egress

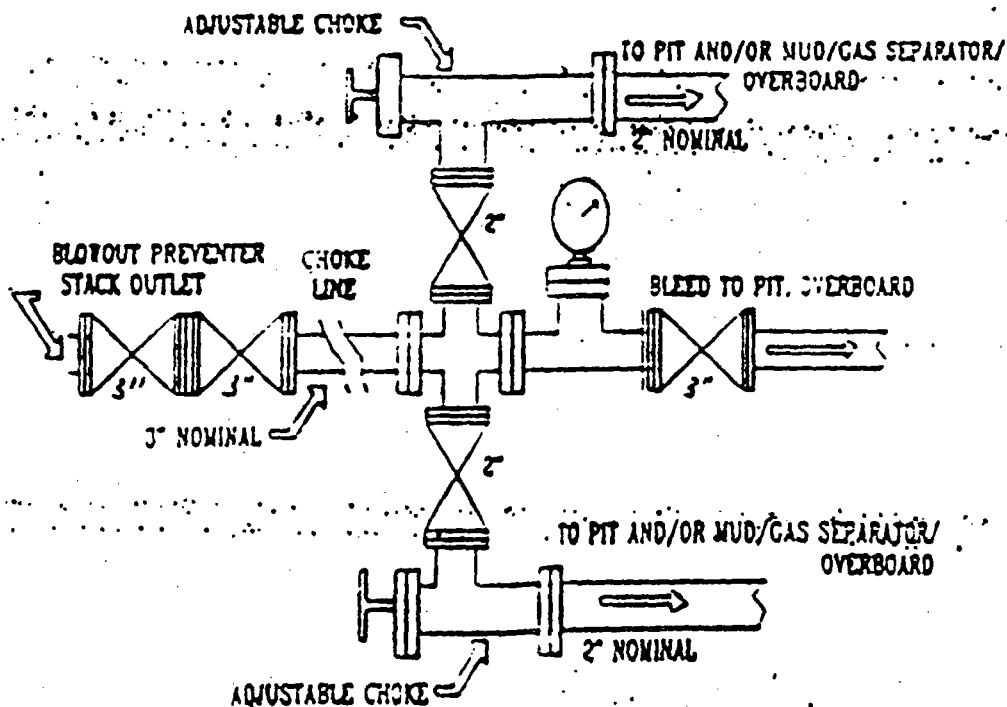
- ◇ H2S Detection Equipment
- ↗ Wind Direction Indicator
- Z Self Contained Breathing Equip.
- ⊠ Briefing Area



PRODUCTION
STACK

11" 3000 #

3" KILL LINE CHOKE LINE 3"



[illegible]

The diagram illustrates a two-stage sampling process. At the top, a large circle is labeled 'N'. Inside this circle is a smaller circle labeled 'n'. Inside the 'n' circle is an even smaller circle labeled 'm'. Arrows indicate the flow of selection: from the 'N' circle to the 'n' circle, and from the 'n' circle to the 'm' circle. Below the 'N' circle, the text 'Stage 1' is written. Below the 'n' circle, the text 'Stage 2' is written. Below the 'm' circle, the text 'Sample' is written.

MARATHON OIL COMPANY

H2S DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All contractors and subcontractors employed by Marathon Oil Company will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. Safety precautions
3. Operations of safety equipment and life support systems

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H2S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

II. H2S EQUIPMENT AND SYSTEMS

1. Safety Equipment

The following safety equipment will be on location:

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H2S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at briefing areas as seen in the attached diagram.

2. WELL CONTROL SYSTEMS

A. Blowout Prevention Equipment

Equipment includes but is not limited to:

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

Auxillary equipment added as appropriate includes:

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

B. Communication

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

C. Mud Program

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

D. Drill Stem Test intervals are as follows:

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

Drill Stem Testing Safety Rules are attached.

III. WELL SITE DIAGRAM

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

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

MARATHON

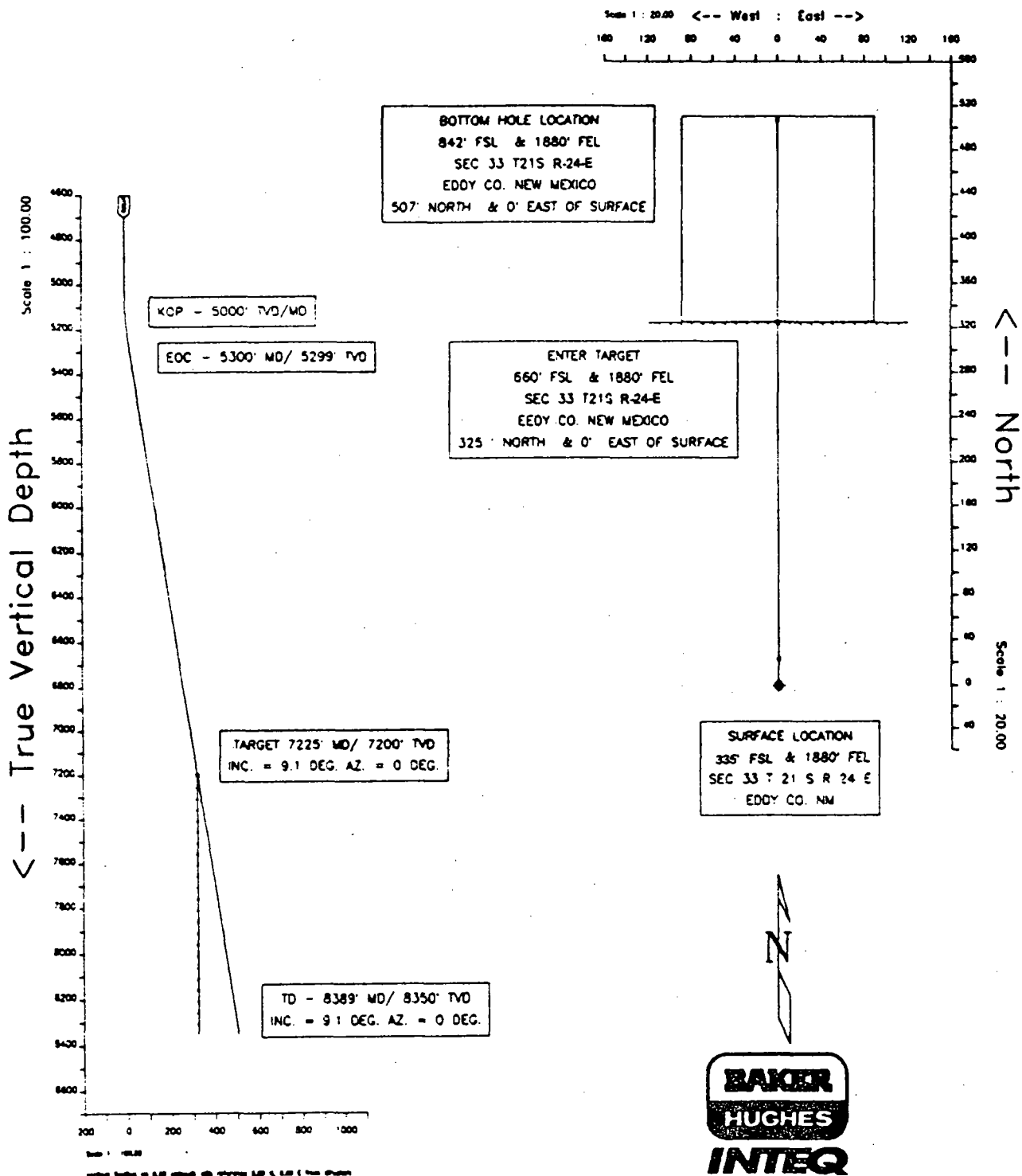
Structure : INDIAN HILLS UNIT NO. 11

Field : INDIAN BASIN

Location : EDDY COUNTY, NEW MEXICO

WELL PROFILE DATA

| Point | MD | Inc | Gr | TVD | Depth | East | Deep/TVD |
|-------------|------|------|------|------|-------|------|----------|
| Surface | 0 | 0.00 | 0.00 | 0 | 0 | 0 | 0.00 |
| KOP | 5000 | 0.00 | 0.00 | 5000 | 0 | 0 | 0.00 |
| End of Hole | 5300 | 9.01 | 0.00 | 5299 | 24 | 0 | 3.80 |
| Target | 7225 | 9.01 | 0.00 | 7200 | 325 | 0 | 0.00 |
| End of Well | 8389 | 9.01 | 0.00 | 8350 | 307 | 0 | 0.00 |



MARATHON
INDIAN HILLS UNIT NO. 11

slot #1
INDIAN BASIN
EDDY COUNTY, NEW MEXICO

P R O P O S A L L I S T I N G

by
Baker Hughes INTEQ

Your ref :
Our ref : prop1292
License :

Date printed : 3-Apr-96
Date created : 3-Apr-96
Last revised : 3-Apr-96

Field is centred on 0.000,0.000,0.00000,N
Structure is centred on 0.000,0.000,0.00000,N

Slot location is n0 0 0.000,w4 29 18.843
Slot Grid coordinates are N 0.000, E 0.000
Slot local coordinates are 0.00 N 0.00 E
Reference North is Grid North

MARATHON
INDIAN HILLS UNIT NO. 11, slot #1
INDIAN BASIN, EDDY COUNTY, NEW MEXICO

PROPOSAL LISTING Page 1
Your ref :
Last revised : 3-Apr-96

| Measured Depth | Inclin. Degrees | Azimuth Degrees | True Vert. Depth | R E C T A N G U L A R C O O R D I N A T E S | | Dogleg Deg/100Ft | Vert Sect |
|-------------------|--------------------|--------------------|---------------------|--|---|---------------------|--------------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N | 0.00 | 0.00 |
| 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | N | 0.00 | 0.00 |
| 1000.00 | 0.00 | 0.00 | 1000.00 | 0.01 | N | 0.00 | 0.01 |
| 1500.00 | 0.00 | 0.00 | 1500.00 | 0.01 | N | 0.00 | 0.01 |
| 2000.00 | 0.00 | 0.00 | 2000.00 | 0.02 | N | 0.00 | 0.02 |
| 2500.00 | 0.00 | 0.00 | 2500.00 | 0.02 | N | 0.00 | 0.02 |
| 3000.00 | 0.00 | 0.00 | 3000.00 | 0.03 | N | 0.00 | 0.03 |
| 3500.00 | 0.00 | 0.00 | 3500.00 | 0.03 | N | 0.00 | 0.03 |
| 4000.00 | 0.00 | 0.00 | 4000.00 | 0.04 | N | 0.00 | 0.04 |
| 4500.00 | 0.00 | 0.00 | 4500.00 | 0.04 | N | 0.00 | 0.04 |
| 5000.00 | 0.00 | 0.00 | 5000.00 | 0.05 | N | 0.00 | 0.05 |
| 5099.98 | 3.00 | 0.00 | 5099.94 | 2.67 | N | 0.00 | 2.67 |
| 5199.98 | 6.00 | 0.00 | 5199.62 | 10.51 | N | 0.00 | 10.51 |
| 5299.98 | 9.00 | 0.00 | 5298.75 | 23.56 | N | 0.00 | 23.56 |
| 5300.28 | 9.01 | 0.00 | 5299.05 | 23.61 | N | 0.00 | 23.61 |
| 5500.00 | 9.01 | 0.00 | 5496.30 | 54.88 | N | 0.00 | 54.88 |
| 6000.00 | 9.01 | 0.00 | 5990.13 | 133.18 | N | 0.00 | 133.18 |
| 6500.00 | 9.01 | 0.00 | 6483.96 | 211.48 | N | 0.00 | 211.48 |
| 7000.00 | 9.01 | 0.00 | 6977.80 | 289.77 | N | 0.00 | 289.77 |
| 7224.98 | 9.01 | 0.00 | 7200.00 | 325.00 | N | 0.00 | 325.00 |
| 7500.00 | 9.01 | 0.00 | 7471.63 | 368.06 | N | 0.00 | 368.06 |
| 8000.00 | 9.01 | 0.00 | 7965.46 | 446.36 | N | 0.00 | 446.36 |
| 8389.34 | 9.01 | 0.00 | 8350.00 | 507.33 | N | 0.00 | 507.33 |

All data is in feet unless otherwise stated
Coordinates from structure and TVD from wellhead.
Vertical section is from wellhead on azimuth 0.00 degrees.
Declination is 0.00 degrees, Convergence is 0.00 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ

MARATHON
INDIAN HILLS UNIT NO. 11, slot #1
INDIAN BASIN, EDDY COUNTY, NEW MEXICO

PROPOSAL LISTING Page 2
Your ref :
Last revised : 3-Apr-96

Targets associated with this wellpath
=====

| Target name | Position | T.V.D. Local rectangular coords. | | | Date revised |
|-------------|---------------|----------------------------------|---------|-------|--------------|
| ----- | | | | | |
| | not specified | 7200.00 | 325.00N | 0.00E | 3-Apr-96 |

All data is in feet unless otherwise stated
Coordinates from structure and TVD from wellhead.
Bottom hole distance is 507.33 on azimuth 0.00 degrees from wellhead.
Vertical section is from wellhead on azimuth 0.00 degrees.
Declination is 0.00 degrees, Convergence is 0.00 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

04/27/96 14:12:04
OGOMES -EME7
PAGE NO: 2

Sec : 33 Twp : 21S Rng : 24E Section Type : NORMAL

| | | | |
|---------------------------------------|--|--|---------------------------------------|
| 12 42.42 Federal owned U | 11 42.64 Federal owned U | 10 42.85 Federal owned U | 9 43.07 Federal owned U |
| 13 42.55 Federal owned U | 14 42.77 Federal owned U A A | 15 42.98 Federal owned U A | 16 43.20 Federal owned U |

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

84.97

85.41

85.83

86.27
85.83
172.10
85.41
257.51
84.97
342.48

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

04/27/96 14:11:57
OGOMES -EME7
PAGE NO: 1

Sec : 33 Twp : 21S Rng : 24E Section Type : NORMAL

| | | | |
|--------------------------------------|---|---|--------------------------------------|
| 4 42.16 Federal owned U | 3 42.38 Federal owned U | 2 42.59 Federal owned U A | 1 42.81 Federal owned U |
| 5 42.29 Federal owned U | 6 42.51 Federal owned U A | 7 42.72 Federal owned U | 8 42.94 Federal owned U |

| | | | | | |
|-----------|----------|------------|-----------|------|------|
| PF01 HELP | PF02 | PF03 EXIT | PF04 GoTo | PF05 | PF06 |
| PF07 BKWD | PF08 FWD | PF09 PRINT | PF10 SDIV | PF11 | PF12 |

County Eddy Pool Indian Basin-Upper Pennsylvanian
Associated

TOWNSHIP 21 South Range 24 East NMPM

| | | | | | | | |
|----|----|----|----|----|----|--|--|
| | | | | | | | |
| 6 | 5 | 4 | 3 | 2 | 1 | | |
| | | | | | | | |
| 7 | 8 | 9 | 10 | 11 | 12 | | |
| | | | | | | | |
| 18 | 17 | 16 | 15 | 14 | 13 | | |
| | | | | | | | |
| 19 | 20 | 21 | 22 | 23 | 24 | | |
| | | | | | | | |
| 30 | 29 | 28 | 27 | 26 | 25 | | |
| | | | | | | | |
| 31 | 32 | 33 | 34 | 35 | 36 | | |
| | | | | | | | |

Ext: $\frac{5}{2}$ Sec. 27, All Sec. 34 (R-9963, 9-20-93)

Ext: $\frac{5}{2}$ Sec. 33 (R-10518, 10-20-95)