



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 22, 1996

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

Administrative Order DD-131-A

Dear Mr. Dueease:

Under the provisions of Rules 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, Marathon Oil Company made application to the New Mexico Oil Conservation Division on January 30, 1996 for authorization to directional drill its proposed North Indian Basin Unit Well No. 27, Eddy County, New Mexico.

The Division Director Finds That:

- (1) The operator proposes to locate said well at an unorthodox surface location 2340 feet from the South line and 255 feet from the West line (Unit L) of Section 11, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico, drill vertically to a depth of approximately 5,000 feet, kickoff in a southeasterly direction and directionally drill to an estimated true vertical depth of 8,100 feet within the South Dagger Draw-Upper Pennsylvanian Associated Pool at a standard subsurface oil well location within the NW/4 SW/4 (Unit L) of said Section 11;
- (2) An existing 320-acre standard spacing and proration unit comprising the W/2 of said Section 11 is to be dedicated to said well;
- (3) By Order No. R-5353, as amended by supplemental Orders "A", "L", and "L-1", the Division promulgated "*Special Rules and Regulations For The South Dagger Draw-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;

- (4) It is necessary for the operator to directionally drill the Indian Basin Unit Well No 24 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;
- (5) The applicable drilling window or "producing area" for said wellbore should include that area within the NW/4 SW/4 (Unit L) of said Section 11 that is no closer than 660 feet to the West line of said Section 11 nor closer than 330 feet to any internal quarter-quarter section line; and,
- (6) 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 North Indian Basin Unit Well No. 27 at an unorthodox surface location 2340 feet from the South line and 255 feet from the West line (Unit L) of Section 11, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico and directional drill in a southeasterly direction in such a manner as to bottom said well within the South Dagger Draw-Upper Pennsylvanian Associated Pool at a standard subsurface well location within the NW/4 SW/4 (Unit L) of said Section 11 that is no closer than 660 feet to the West line of said Section 11 nor closer than 330 feet to any internal 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) The existing 320-acre standard spacing and proration unit comprising the W/2 of said Section 11 shall be dedicated to said well.

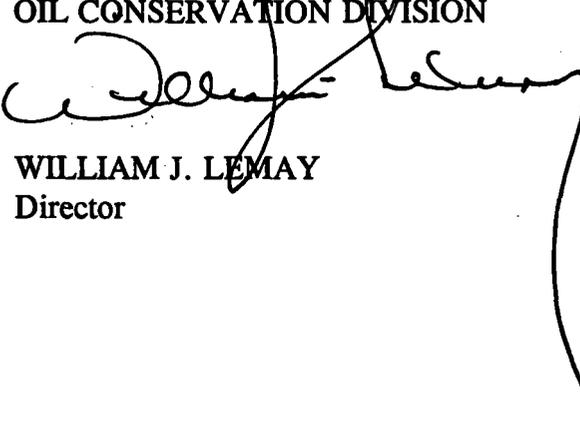
(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(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

SEAL

WJL/MES/kv

cc: Oil Conservation Division - Artesia
U. S. Bureau of Land Management - Carlsbad
File: DD-131 ✓



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

February 13, 1996

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

Attention: Walter J. Ducease

Administrative Order DD-131

Dear Mr. Ducease:

Under the provisions of Rules 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, Marathon Oil Company made application to the New Mexico Oil Conservation Division on January 30, 1996 for authorization to directional drill its proposed North Indian Basin Unit Well No. 24, Eddy County, New Mexico.

The Division Director Finds That:

- (1) The operator proposes to locate said well at an unorthodox surface location 122 feet from the North line and 310 feet from the West line (Unit D) of Section 11, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico, drill vertically to a depth of approximately 5,000 feet, kickoff in a southeasterly direction and directionally drill to an estimated true vertical depth of 8,100 feet within the South Dagger Draw-Upper Pennsylvanian Associated Pool at a standard subsurface oil well location within the NW/4 NW/4 (Unit D) of said Section 11;
- (2) An existing 320-acre standard spacing and proration unit comprising the W/2 of said Section 11 is to be dedicated to said well;
- (3) By Order No. R-5353, as amended by supplemental Orders "A", "L", and "L-1", the Division promulgated "*Special Rules and Regulations For The South Dagger Draw-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;

- (4) It is necessary for the operator to directionally drill the Indian Basin Unit Well No 24 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;
- (5) The applicable drilling window or "producing area" for said wellbore should include that area within the NW/4 NW/4 (Unit D) of said Section 11 that is no closer than 660 feet to either the North or West lines of said Section 11 nor closer than 330 feet to either internal quarter-quarter section line; and,
- (6) 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 Basin Unit Well No. 24 at an unorthodox surface location 122 feet from the North line and 310 feet from the West line (Unit D) of Section 11, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico and directional drill in a southeasterly direction in such a manner as to bottom said well within the South Dagger Draw-Upper Pennsylvanian Associated Pool at a standard subsurface well location within the NW/4 NW/4 (Unit D) of said Section 11 that is no closer than 660 feet to either the North or West lines of said Section 11 nor closer than 330 feet to either internal 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) The existing 320-acre standard spacing and proration unit comprising the W/2 of said Section 11 shall be dedicated to said well.

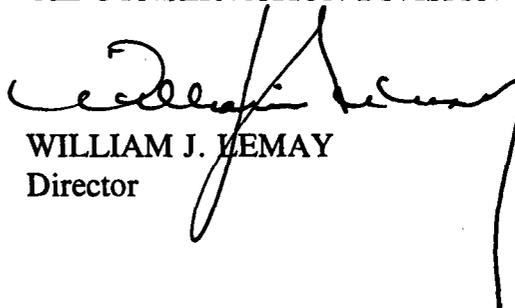
(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(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

DD-Mara

Rec. 1/30/96
Susp. 2/19/96
Released 2/13/96

February 13, 1996

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

Attention: Walter J. Dueease

Administrative Order DD-131

Dear Mr. Dueease:

Under the provisions of Rules 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, Marathon Oil Company made application to the New Mexico Oil Conservation Division on January 30, 1996 for authorization to directional drill its proposed North Indian Basin Unit Well No. 24, Eddy County, New Mexico.

The Division Director Finds That:

- (1) The operator proposes to locate said well at an unorthodox surface location 122 feet from the North line and 310 feet from the West line (Unit D) of Section 11, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico, drill vertically to a depth of approximately 5,000 feet, kickoff in a southeasterly direction and directionally drill to an estimated true vertical depth of 8,100 feet within the South Dagger Draw-Upper Pennsylvanian Associated Pool at a standard subsurface oil well location within the NW/4 NW/4 (Unit D) of said Section 11;
- (2) An existing 320-acre standard spacing and proration unit comprising the W/2 of said Section 11 is to be dedicated to said well;
- (3) By Order No. R-5353, as amended by supplemental Orders "A", "L", and "L-1", the Division promulgated "*Special Rules and Regulations For The South Dagger Draw-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;

- (4) It is necessary for the operator to directionally drill the Indian Basin Unit Well No 24 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;
- (5) The applicable drilling window or "producing area" for said wellbore should include that area within the NW/4 NW/4 (Unit D) of said Section 11 that is no closer than 660 feet to either the North or West lines of said Section 11 nor closer than 330 feet to either internal quarter-quarter section line; and,
- (6) 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 Basin Unit Well No. 24 at an unorthodox surface location 122 feet from the North line and 310 feet from the West line (Unit D) of Section 11, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico and directional drill in a southeasterly direction in such a manner as to bottom said well within the South Dagger Draw-Upper Pennsylvanian Associated Pool at a standard subsurface well location within the NW/4 NW/4 (Unit D) of said Section 11 that is no closer than 660 feet to either the North or West lines of said Section 11 nor closer than 330 feet to either internal 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.

*Administrative Order DD-*****
Marathon Oil Company
February 13, 1996
Page No. 3

(3) The existing 320-acre standard spacing and proration unit comprising the W/2 of said Section 11 shall be dedicated to said well.

(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

OIL CONSERVATION DIVISION
RECEIVED



**Marathon
Oil Company**

96 JAN 30 AM 8 52

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

January 18, 1996

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

RE: North Indian Basin Unit No. 24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
Eddy County, New Mexico

Dear Mr. Stogner:

Marathon Oil Company respectfully requests authority to directionally drill and complete the above referenced well in the South Dagger Draw Upper Pennsylvanian Oil Pool.

Marathon has made numerous attempts to locate an orthodox drillsite in the NW/4 of Section 11, but due to topographical and archaeological 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 an area requiring excessive cut and fill requirements. An extensive cultural survey performed by Archaeological Survey Consultants, Inc. of Roswell, New Mexico revealed that a significant site encompasses virtually all of the possible orthodox locations in the NW/4 of Section 11.

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

PAGE -2-

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 certified letter to 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 February 10, 1996.

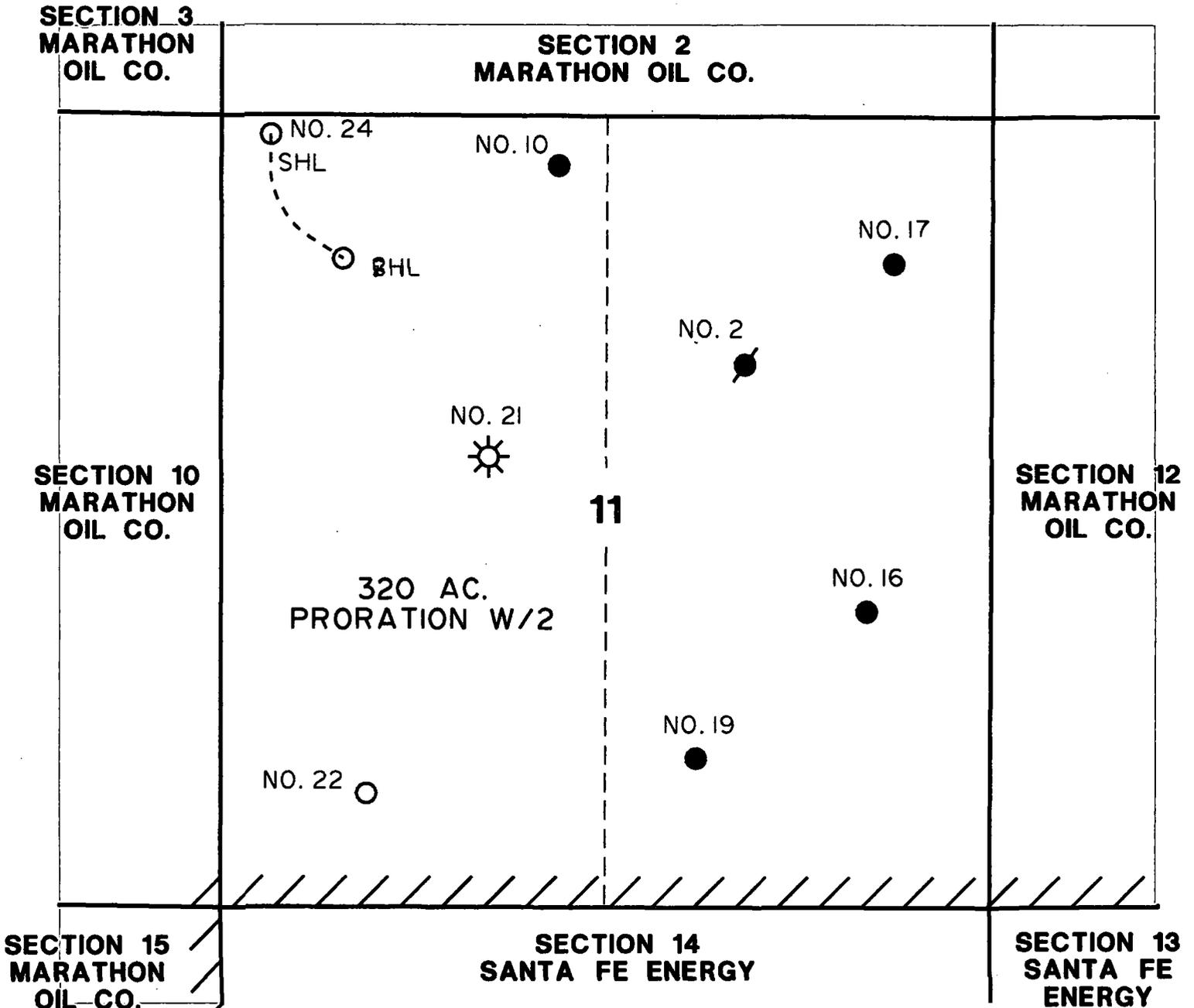
Please feel free to contact me at (800) 351-1417 if you have any questions.

Respectfully,



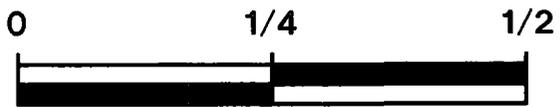
Walter J. Dueease
MARATHON OIL COMPANY

T-21-S, R-23-E EDDY CO., NEW MEXICO SOUTH DAGGER DRAW UPPER PENN. ASSOCIATED POOL



INDIAN BASIN
UNIT BOUNDARY

MARATHON OIL COMPANY
MID-CONTINENT REGION



MILE

MARATHON

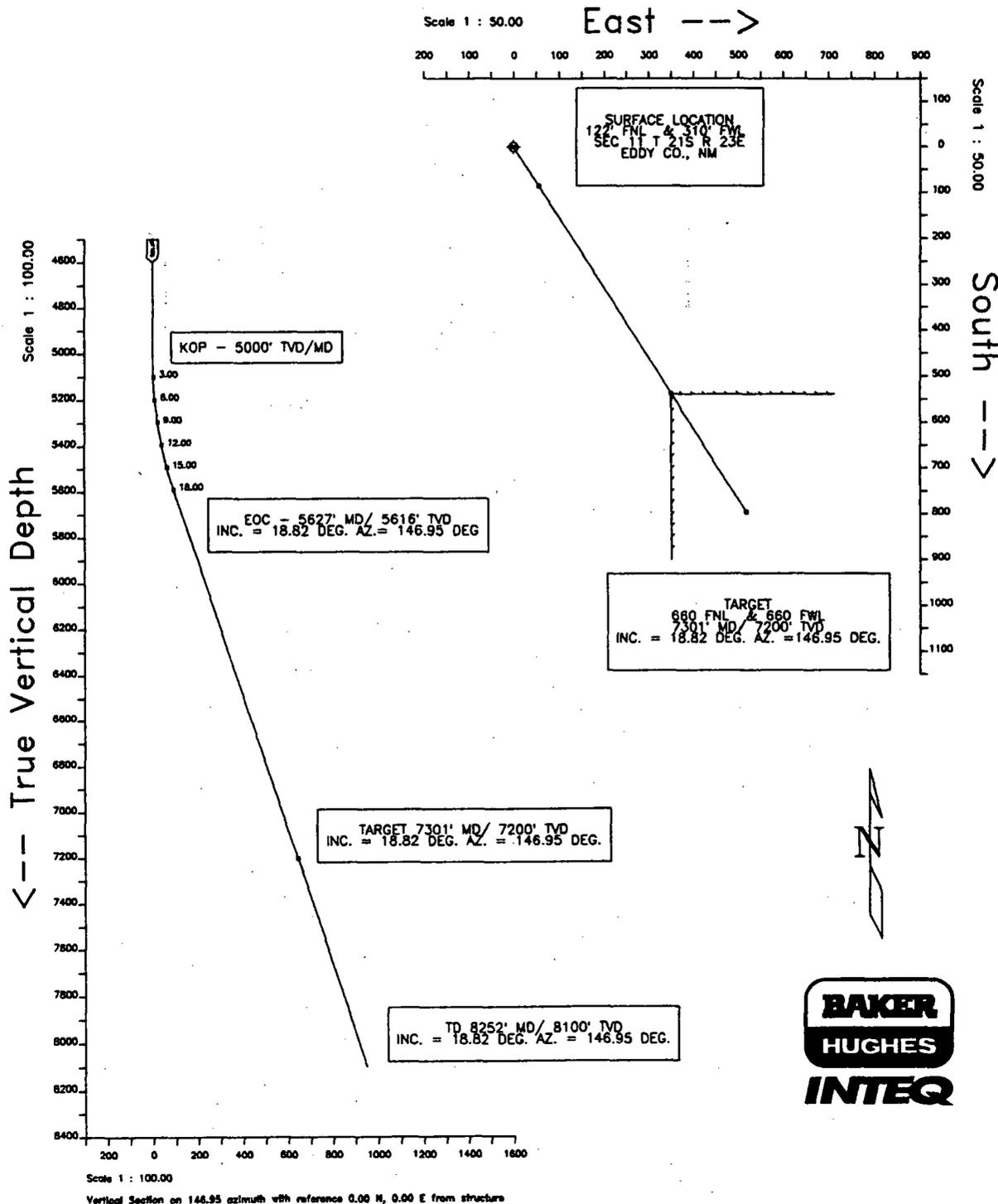
Structure : INDIAN BASIN UNIT NO. 24

Field : INDIAN BASIN

Location : EDDY COUNTY, NEW MEXICO

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	Dep/100
Tie in	0	0.00	146.95	0	0	0	0.00
KOP	5000	0.00	146.95	5000	0	0	0.00
End of Build	5627	18.82	146.95	5616	-96	56	3.00
Target	7301	18.82	146.95	7200	-536	350	0.00
End of Well	8252	18.82	146.95	8100	-795	517	0.00



MARATHON
 INDIAN BASIN UNIT NO. 24, slot #1
 INDIAN BASIN, EDDY COUNTY, NEW MEXICO

PROPOSAL LISTING Page 1
 Your ref :
 Last revised : 16-Jan-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	146.95	0.00	0.00 N	0.00 E	0.00	0.00
500.00	0.00	146.95	500.00	0.00 N	0.00 E	0.00	0.00
1000.00	0.00	146.95	1000.00	0.00 N	0.00 E	0.00	0.00
1500.00	0.00	146.95	1500.00	0.00 N	0.00 E	0.00	0.00
2000.00	0.00	146.95	2000.00	0.00 N	0.00 E	0.00	0.00
2500.00	0.00	146.95	2500.00	0.00 N	0.00 E	0.00	0.00
3000.00	0.00	146.95	3000.00	0.00 N	0.00 E	0.00	0.00
3500.00	0.00	146.95	3500.00	0.00 N	0.00 E	0.00	0.00
4000.00	0.00	146.95	4000.00	0.00 N	0.00 E	0.00	0.00
4500.00	0.00	146.95	4500.00	0.00 N	0.00 E	0.00	0.00
5000.00	0.00	146.95	5000.00	0.00 N	0.00 E	0.00	0.00
5100.00	3.00	146.95	5099.95	2.19 S	1.43 E	3.00	2.62
5200.00	6.00	146.95	5199.63	8.77 S	5.70 E	3.00	10.46
5300.00	9.00	146.95	5298.77	19.71 S	12.82 E	3.00	23.51
5400.00	12.00	146.95	5397.08	34.98 S	22.76 E	3.00	41.74
5500.00	15.00	146.95	5494.31	54.55 S	35.49 E	3.00	65.08
5600.00	18.00	146.95	5590.18	78.35 S	50.97 E	3.00	93.48
5627.23	18.82	146.95	5616.02	85.56 S	55.66 E	3.00	102.07
6000.00	18.82	146.95	5968.86	186.35 S	121.23 E	0.00	222.31
6500.00	18.82	146.95	6442.14	321.53 S	209.17 E	0.00	383.58
7000.00	18.82	146.95	6915.42	456.71 S	297.12 E	0.00	544.85
7300.65	18.82	146.95	7200.00	538.00 S	350.00 E	0.00	641.83
8251.48	18.82	146.95	8100.00	795.09 S	517.25 E	0.00	948.54

All data is in feet unless otherwise stated
 Coordinates from structure and TVD from wellhead.
 Vertical section is from wellhead on azimuth 146.95 degrees.
 Declination is 0.00 degrees, Convergence is 0.00 degrees.
 Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ

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

5. LEASE DESIGNATION AND SERIAL NO.
NM05608

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1a. TYPE OF WORK

DRILL

DEEPEEN

7. UNIT AGREEMENT NAME
N. INDIAN BASIN UNIT

b. TYPE OF WELL

OIL WELL

GAS WELL

OTHER

SINGLE ZONE

MULTIPLE ZONE

8. FARM OR LEASE NAME, WELL NO.
N. INDIAN BASIN UNIT 24

2. NAME OF OPERATOR

Marathon Oil Company

9. API WELL NO.

3. ADDRESS AND TELEPHONE NO.

P.O. Box 552, Midland, TX 79702

915/682-1626

10. FIELD AND POOL, OR WILDCAT
S. DAGGER DRAW, U.PENN

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

At surface

122' FNL & 310' FWL

At proposed prod. zone

917' FNL & 827' FWL

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

SEC.11, T-21-S, R-23-E

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

10 MILES W OF LAKEWOOD NEW MEXICO

12. COUNTY OR PARISH
EDDY,

13. STATE
N.M.

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

(Also to nearest drlg. unit line, if any) **827' @ BHL**

16. NO. OF ACRES IN LEASE

4160

17. NO. OF ACRES ASSIGNED TO THIS WELL

320 - W/2

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

*** 1594'**

19. PROPOSED DEPTH

8000'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3735' GL

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 1/2"	13 3/8"	48#	40'	CONDUCTOR-REDI MIX TO SURFACE
12 1/4"	9 5/8"	36#	1200'	800 - CIRCULATE
8 3/4"	7"	23#, 26#	8000'	1075' - CIRCULATE

SEE ATTACHED MULTIPOINT AND DRILLING PROGRAM FOR SPECIFIC DETAILS.

PLEASE NOTE DIRECTIONAL DRILLING PROPOSALS WITH HORIZONTAL AND VERTICAL PLAN VIEMS.

WELLS IS AN UNORTHODOX SURFACE HOLE LOCATION DUE TO TOPOGRAPHICAL AND ARCHAEOLOGICAL CONSTRAINTS. AN APPLICATION FOR A DIRECTIONAL WELL IS BEING MADE TO THE NMOC.

* DISTANCE TO NIBU #10 @ 330' FNL & 2310' FWL,

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 W.J. Duan FOR DDN TITLE DRILLING SUPERINTENDENT DATE 10-10-95

(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:

APPROVED BY _____ TITLE _____ DATE _____

***See Instructions On Reverse Side**

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I
P.O. Box 1960, Hobbs, NM 88241-1960

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		Pool Code 15475	Pool Name SOUTH DAGGER DRAW (U. PENN ASSOC)
Property Code 6411	Property Name NORTH INDIAN BASIN UNIT		Well Number 24
OCRD No. 014021	Operator Name MARATHON OIL COMPANY		Elevation 3735

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	11	21 S	23 E		122	NORTH	310	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
D	11	21 S	23 E		917	NORTH	827	WEST	EDDY

Dedicated Acres 320 W/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

<p>SHL 310' 122' 3735.7' — 3730.5' BHL 3737.2' — 3731.3' DETAIL</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein to true and complete to the best of my knowledge and belief.</p> <p><i>W. J. Duncan TOROPN</i> Signature</p> <p>D. P. NORDT Printed Name</p> <p>DRILLING SUPERINTENDENT Title</p> <p>1/22/96 Date</p>	
	<p>SURVEYOR CERTIFICATION</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>JANUARY 16, 1996</p>	
	<p>Date Surveyed _____ SJA</p> <p>Signature & Seal Professional Surveyor</p> <p><i>[Signature]</i> P.O. Num. 96-1150042</p>	
	<p>Certificate No. JOHN W. WEST 676 RONALD O. EDSON 3239 CARY EDSON 12641</p>	

Thirteen Point Surface Use Plan
MARATHON OIL COMPANY

North Indian Basin Unit #24
Sec 11, T-21-S, R-23-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 right on NM 401, turn right on NM 403 and follow Northwest for 2.2 miles. Turn left into 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 300' will be required. The access road will enter the drilling pad on the North east corner. The drilling location will have a V-door facing east.

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 and Santa Fe 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 operate 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, levelling and seeding as recommended.

**A. P. D. (cont.)
Thirteen Point Surface Use Plan
North Indian Basin Unit #24**

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 pumped thru 3" plastic line 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 a pit in Sec. 21, T-20-S, R-24-E.**
- 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 levelled. 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
North Indian Basin Unit #24**

10. Plans for Restoration of the Surface:

- a. Backfilling, levelling, 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 levelling 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
North Indian Basin Unit #24**

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.

11/20-95
Date

W. J. Duvane FORDPN
D. Nordt

**DRILLING PROGRAM
MARATHON OIL COMPANY**

North Indian Basin Unit #24

1. **Estimated KB Elevation: 3748'**

<u>FORMATION</u>	<u>TOP</u>		<u>BASE</u>		<u>FLUID</u>
	<u>MEASURED</u>	<u>SUBSEA MEASURED</u>	<u>SURSEA</u>	<u>CONTENT</u>	
Queen	Surface	+3748'	650'	+3098'	water
San Andres	650'	3098'	2250'	1498'	water
Glorietta	2250'	1498'	2355'	448'	
Delaware	3300'	448'	4300'	-552'	
Bone Spring	4300'	-552'	5950'	-2202'	oil gas
Wolfcamp	5950'	-2202'	7520'	-3772'	oil gas
B/Permian Shell	7520'	-3772'	7530'	-3782'	
U. Penn	7530'	-3782'	7550'	-3802'	gas, oil, water
Penn Dolomite	7550'	-3802'	8000'	-4252'	gas, oil, water

<u>FORMATION</u>	<u>EST PSIG</u>	<u>SBHP-- PPG EMW</u>	<u>EST SBHT DEG f</u>	<u>PPM</u>	<u>H2S (obj, marker, etc.)</u>	<u>SIGNIFICANCE--</u>
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
Morrow	3460	9.2				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 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
North Indian Basin Unit #24**

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:

<u>—DEPTH—</u> <u>FROM TO</u>	<u>SECTION</u> <u>LENGTH</u>	<u>HOLE</u> <u>SIZE</u>	<u>CSG</u> <u>SIZE</u>	<u>WT.</u> <u>PPE</u>	<u>GRADE</u>	<u>THREADS</u> <u>COUPLINGS</u>	<u>NEW</u> <u>USED</u>
0 1200'	1200'	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

<u>CASING DV</u> <u>STRING DPTH</u>	<u>STG</u>	<u>LEAD</u> <u>TAIL</u>	<u>AMT</u> <u>SXS</u>	<u>TYPE</u> <u>CEMENT</u>	<u>YIELD</u> <u>CF/SX</u>	<u>WT.</u> <u>PPG.</u>	<u>TOC</u>	<u>ADDITIVES</u>
9.625"	None	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'	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
North Indian Basin Unit #24**

5. Mud Program:

<u>—DEPTH—</u>		<u>MUD TYPE</u>	<u>WEIGHT</u>		<u>WL</u>	<u>ADDITIVES</u>	<u>VISUAL</u>
<u>FROM</u>	<u>TO</u>		<u>(PPG)</u>	<u>VIS</u>			
0	1200'	air/mist	N/A	N/A		Soap for mist	Reserve
1200'	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:

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

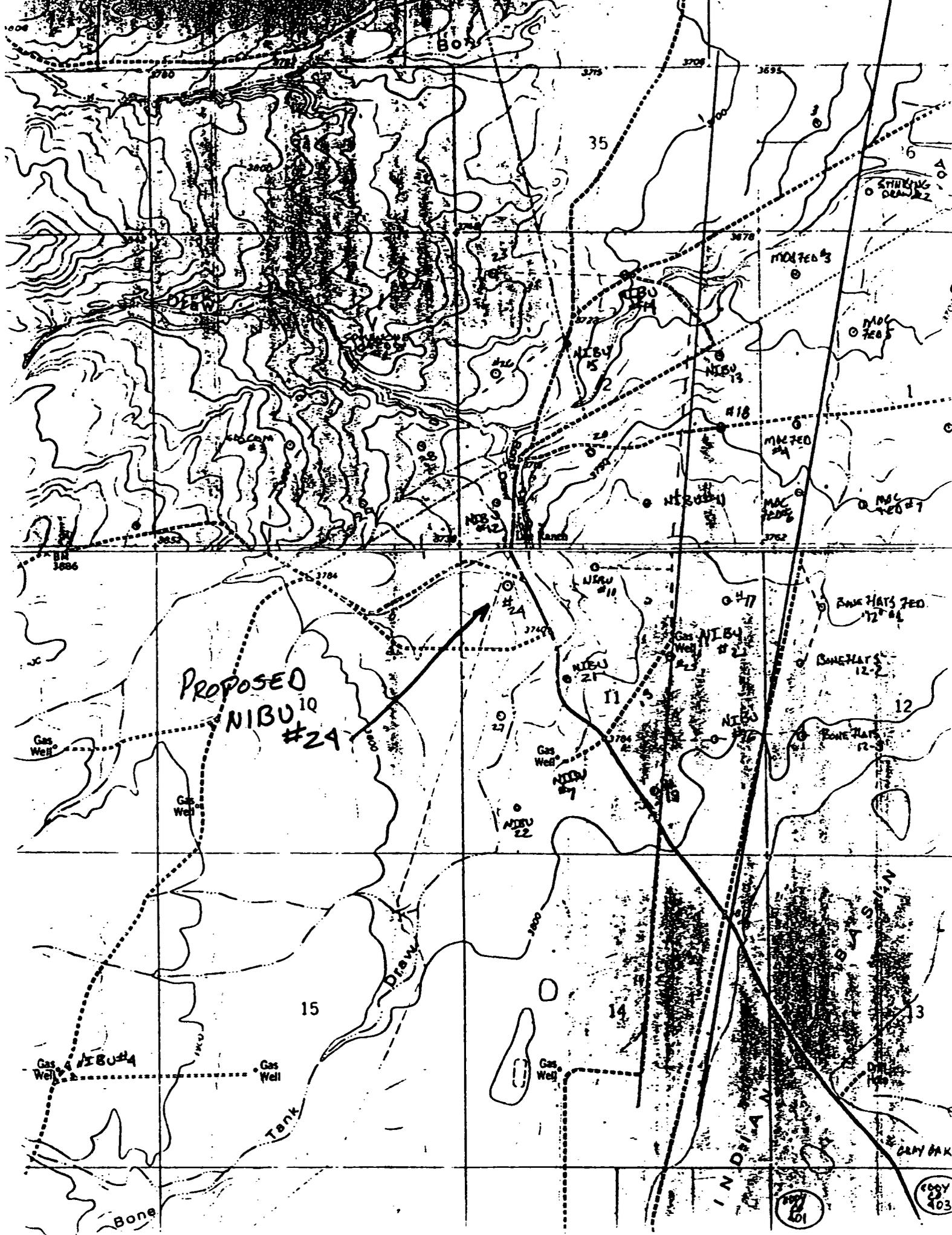
7. Abnormal Pressures, Temperatures or Potential Hazards:

None anticipated. Possible H₂S in Cisco & Upper penn. See H₂S Drilling Operations Plan.

8. Other Information:

Anticipated Starting Date: As soon as possible.

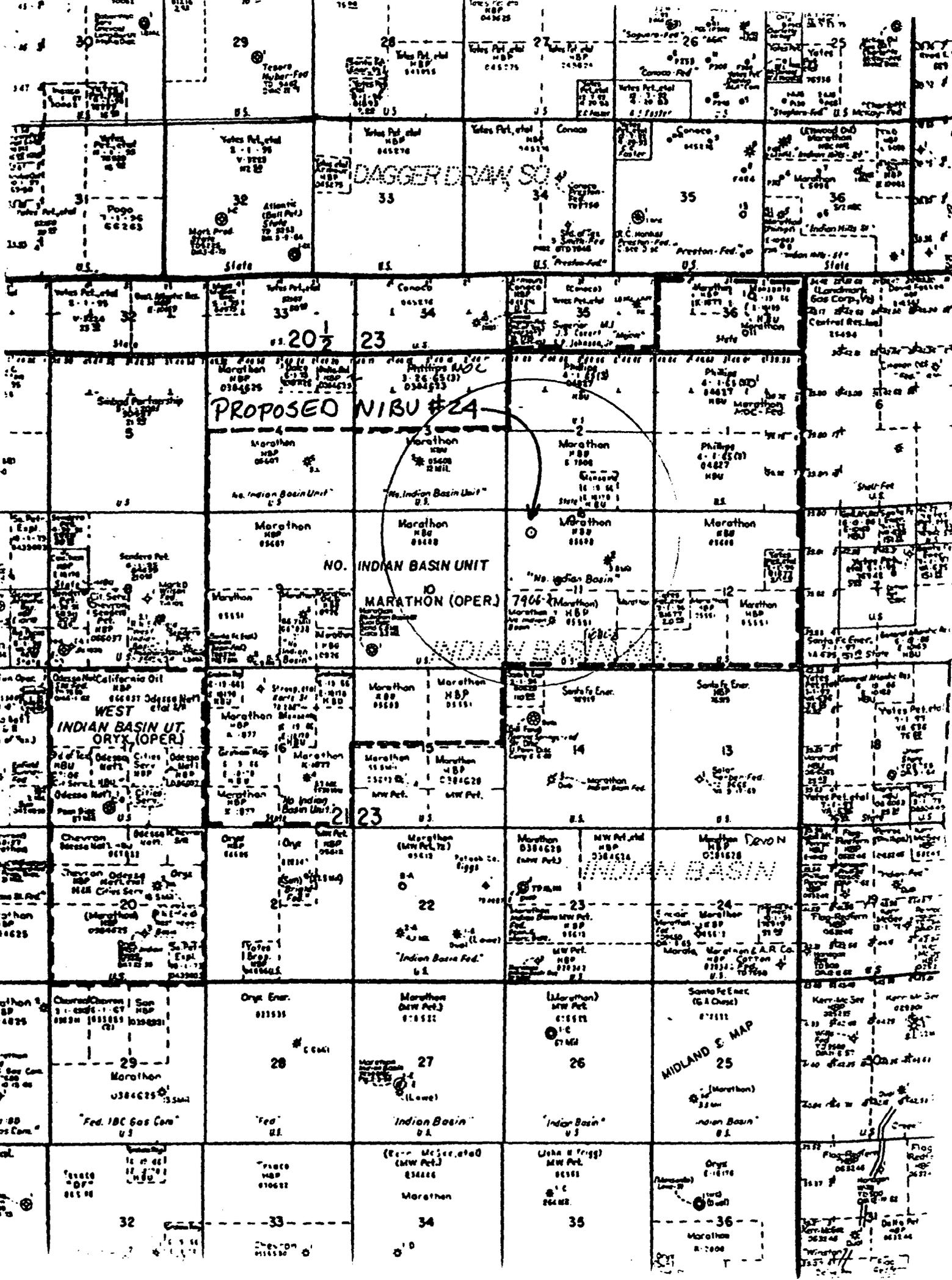
Duration of Well: drilling - 18 days, completion - 10 days.



PROPOSED
NIBU 10
#24

401

403



DAGGER DRAW

PROPOSED NIBU #24

NO. INDIAN BASIN UNIT

MARATHON (OPER.)

INDIAN BASIN UT. OXY. (OPER.)

INDIAN BASIN

MIDLAND & MAP

Indian Basin

Indian Basin

Indian Basin

Fed. NBC Gas Corp

Fed.

Marathon

U.S. & Frigg

Oryx

32

33

34

35

36

20

23

35

36

37

38

Marathon

Marathon

Marathon

Marathon

Marathon

WEST

Marathon

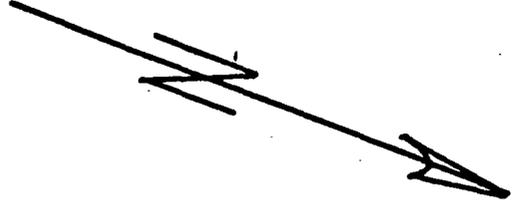
Marathon

Marathon

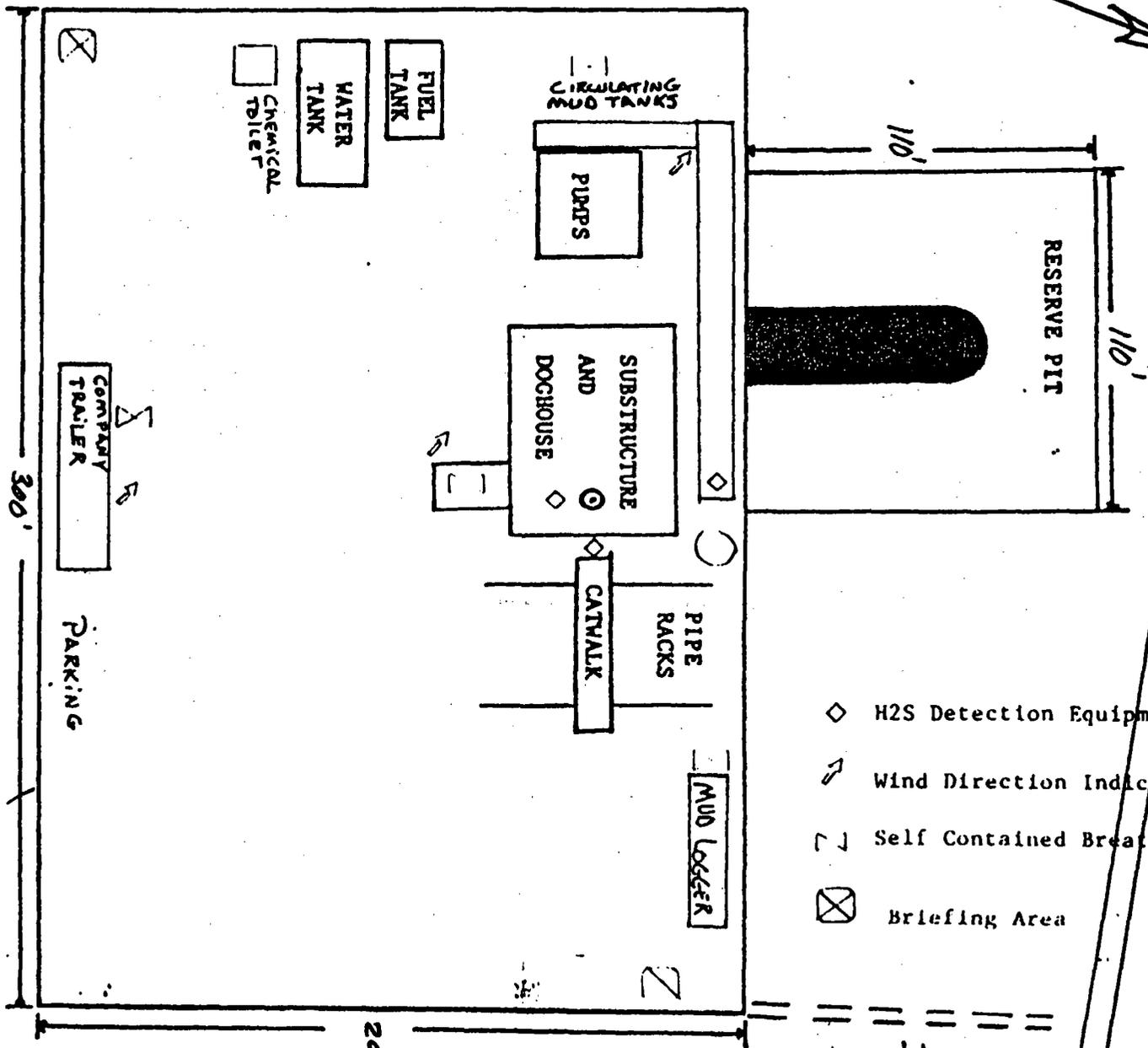
Marathon

Chevron

Marathon



EXISTING LEASE ROAD



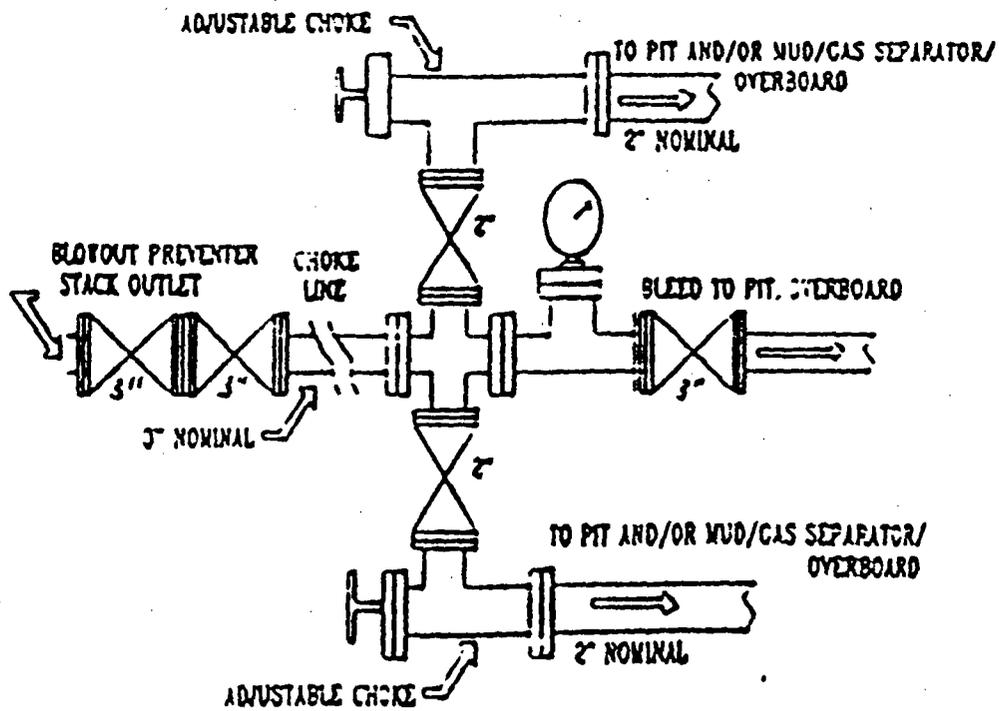
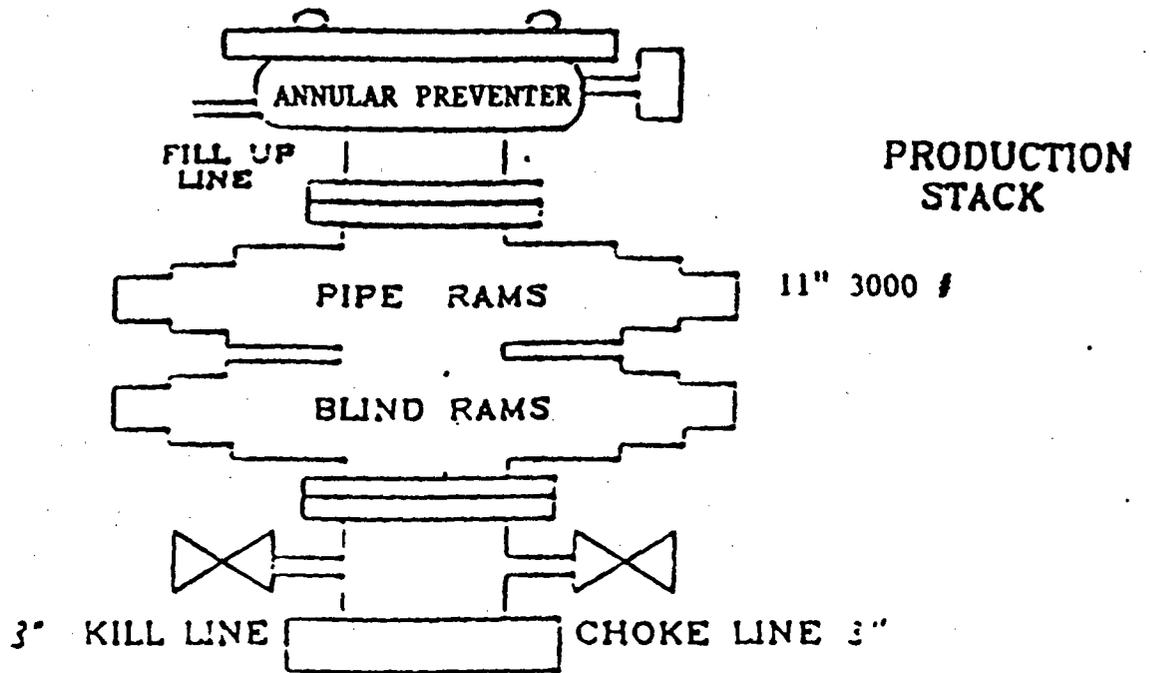
- ◇ H2S Detection Equipment
- ↖ Wind Direction Indicator
- ⌊ Z Self Contained Breathing Equip.
- ⊗ Briefing Area

Prevailing Wind Direction
Southwest

Foot-path for emergency
egress

~ FOOTPATH

PROBES
ACCE
+ 300



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

SOUTH DAGGER DRAW

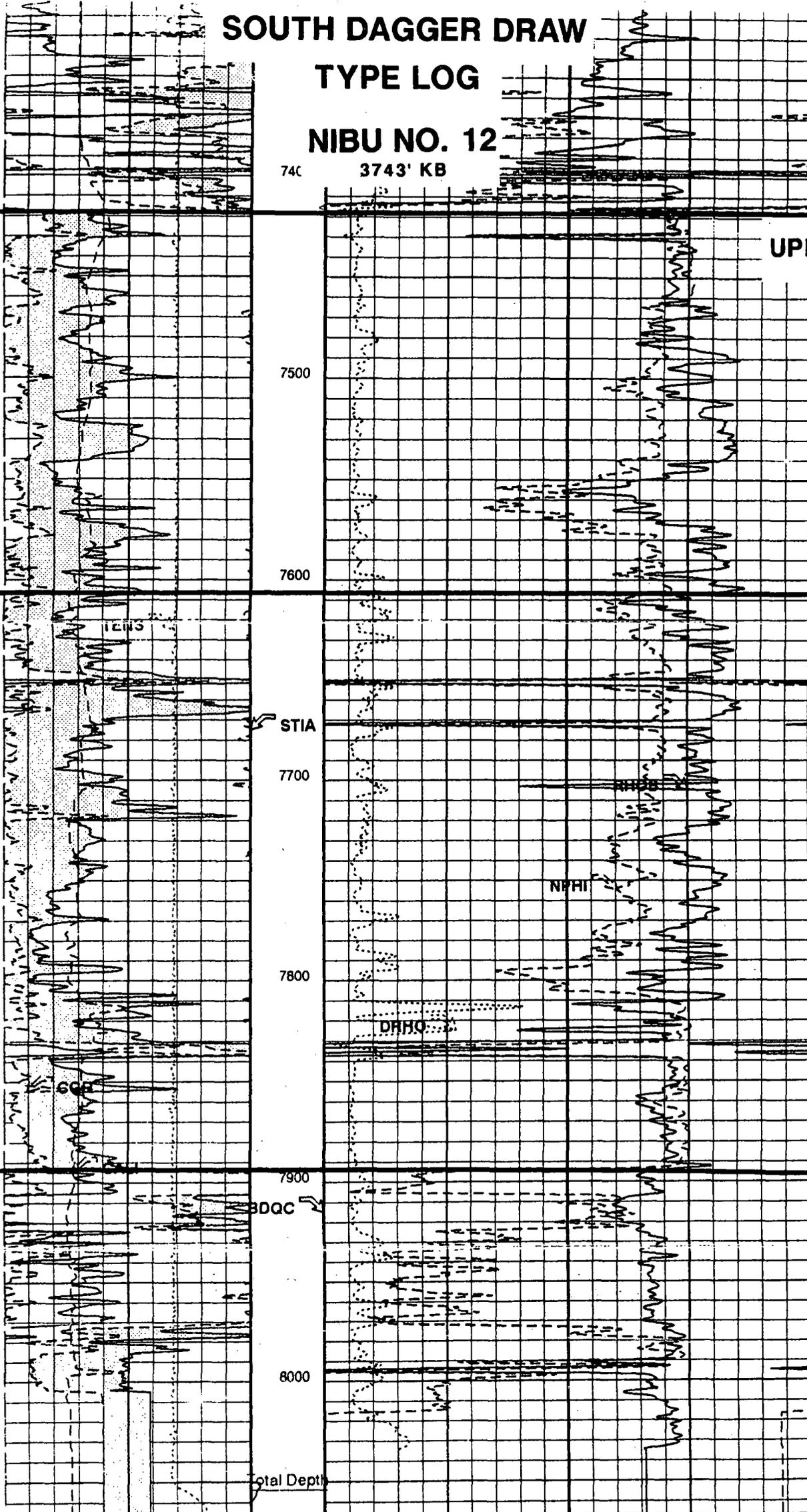
TYPE LOG

NIBU NO. 12

74C 3743' KB

UPPER PENN

SOUTH DAGGER DRAW OIL POOL



Caliper (CALI) (IN)	6	16	Bulk Density Quality Curve (BDQC)	10 (----) 0	Bulk Density Correction (DRHO) (G/C3)	-0.05	0.45
Computed Gamma Ray (CGR) (GAPI)	0	100			Neutron Porosity (NPHI) (V/V)	0.3	0.1
Spectroscopy Gamma Ray (SGR)					Bulk Density (RHOB) (G/C3)		

MARATHON

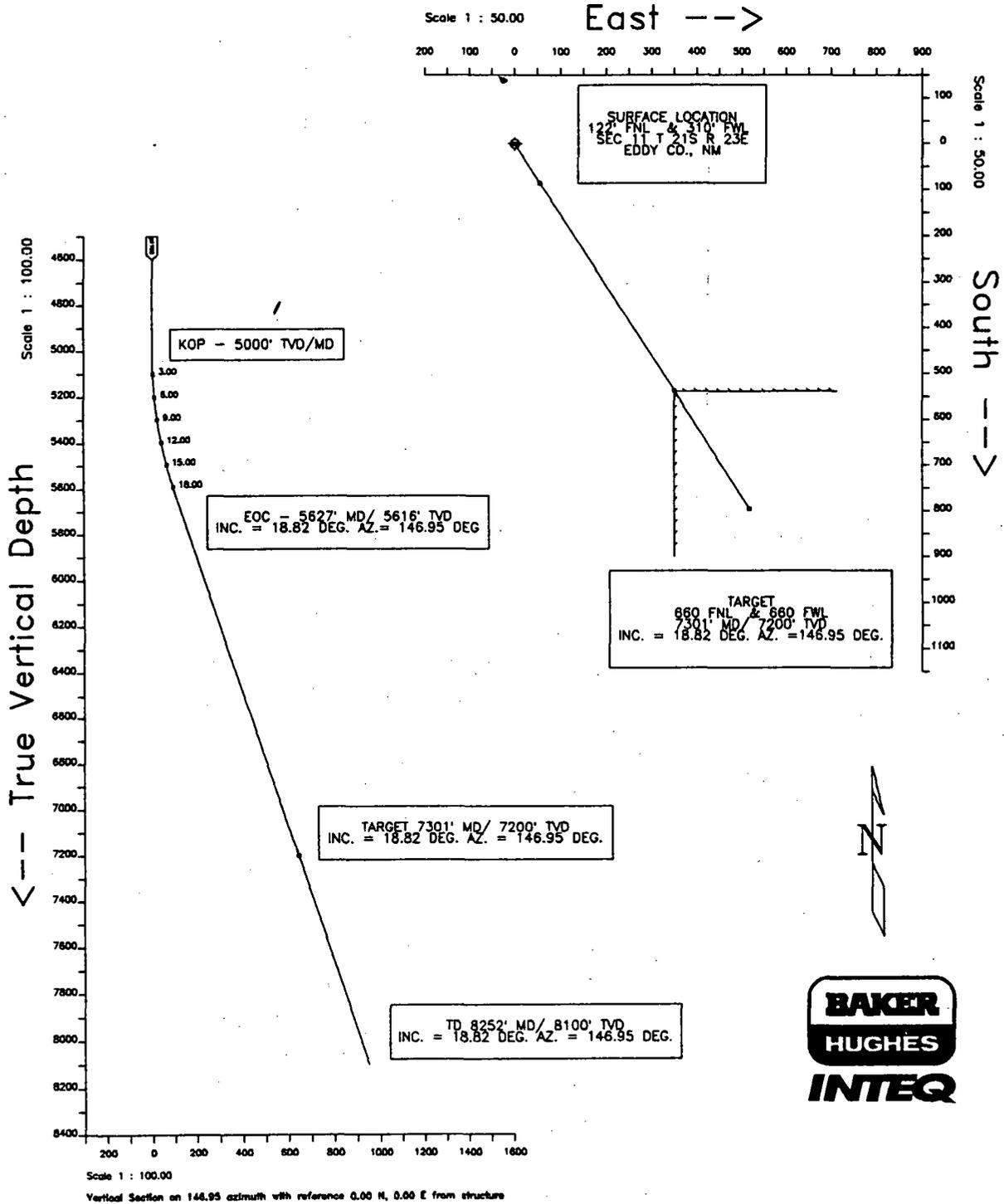
Structure : INDIAN BASIN UNIT NO. 24

Field : INDIAN BASIN

Location : EDDY COUNTY, NEW MEXICO

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	Dep/100
Well on	0	0.00	146.95	0	0	0	0.00
KOP	5000	0.00	146.95	5000	0	0	0.00
End of Build	5627	18.82	146.95	5616	-86	96	3.00
Target	7301	18.82	146.95	7200	-638	350	0.00
End of Well	8252	18.82	146.95	8100	-795	517	0.00



MARATHON
 INDIAN BASIN UNIT NO. 24, slot #1
 INDIAN BASIN, EDDY COUNTY, NEW MEXICO

PROPOSAL LISTING Page 1
 Your ref :
 Last revised : 16-Jan-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	146.95	0.00	0.00 N	0.00 E	0.00	0.00
500.00	0.00	146.95	500.00	0.00 N	0.00 E	0.00	0.00
1000.00	0.00	146.95	1000.00	0.00 N	0.00 E	0.00	0.00
1500.00	0.00	146.95	1500.00	0.00 N	0.00 E	0.00	0.00
2000.00	0.00	146.95	2000.00	0.00 N	0.00 E	0.00	0.00
2500.00	0.00	146.95	2500.00	0.00 N	0.00 E	0.00	0.00
3000.00	0.00	146.95	3000.00	0.00 N	0.00 E	0.00	0.00
3500.00	0.00	146.95	3500.00	0.00 N	0.00 E	0.00	0.00
4000.00	0.00	146.95	4000.00	0.00 N	0.00 E	0.00	0.00
4500.00	0.00	146.95	4500.00	0.00 N	0.00 E	0.00	0.00
5000.00	0.00	146.95	5000.00	0.00 N	0.00 E	0.00	0.00
5100.00	3.00	146.95	5099.95	2.19 S	1.43 E	3.00	2.62
5200.00	6.00	146.95	5199.63	8.77 S	5.70 E	3.00	10.46
5300.00	9.00	146.95	5298.77	19.71 S	12.82 E	3.00	23.51
5400.00	12.00	146.95	5397.08	34.98 S	22.76 E	3.00	41.74
5500.00	15.00	146.95	5494.31	54.55 S	35.49 E	3.00	65.08
5600.00	18.00	146.95	5590.18	78.35 S	50.97 E	3.00	93.48
5627.23	18.82	146.95	5616.02	85.56 S	55.66 E	3.00	102.07
6000.00	18.82	146.95	5968.86	186.35 S	121.23 E	0.00	222.31
6500.00	18.82	146.95	6442.14	321.53 S	209.17 E	0.00	383.58
7000.00	18.82	146.95	6915.42	456.71 S	297.12 E	0.00	544.85
7300.65	18.82	146.95	7200.00	538.00 S	350.00 E	0.00	641.83
8251.48	18.82	146.95	8100.00	795.09 S	517.25 E	0.00	948.54

All data is in feet unless otherwise stated
 Coordinates from structure and TVD from wellhead.
 Vertical section is from wellhead on azimuth 146.95 degrees.
 Declination is 0.00 degrees, Convergence is 0.00 degrees.
 Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ



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

January 18, 1996

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

RE: Directional Well Application
North Indian Basin Unit #24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
South Dagger Draw, Upper Penn Assoc.
Eddy County, New Mexico

Marathon Oil Company is requesting authority to directionally drill the North Indian Basin Unit No. 24 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.

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 (915) 687-8327 if anything additional is needed.

Respectfully,

A handwritten signature in black ink that reads 'Walter J. Dueease'.

Walter J Dueease
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
North Indian Basin Unit #24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
South Dagger Draw, 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.

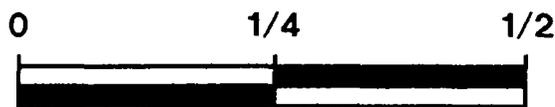
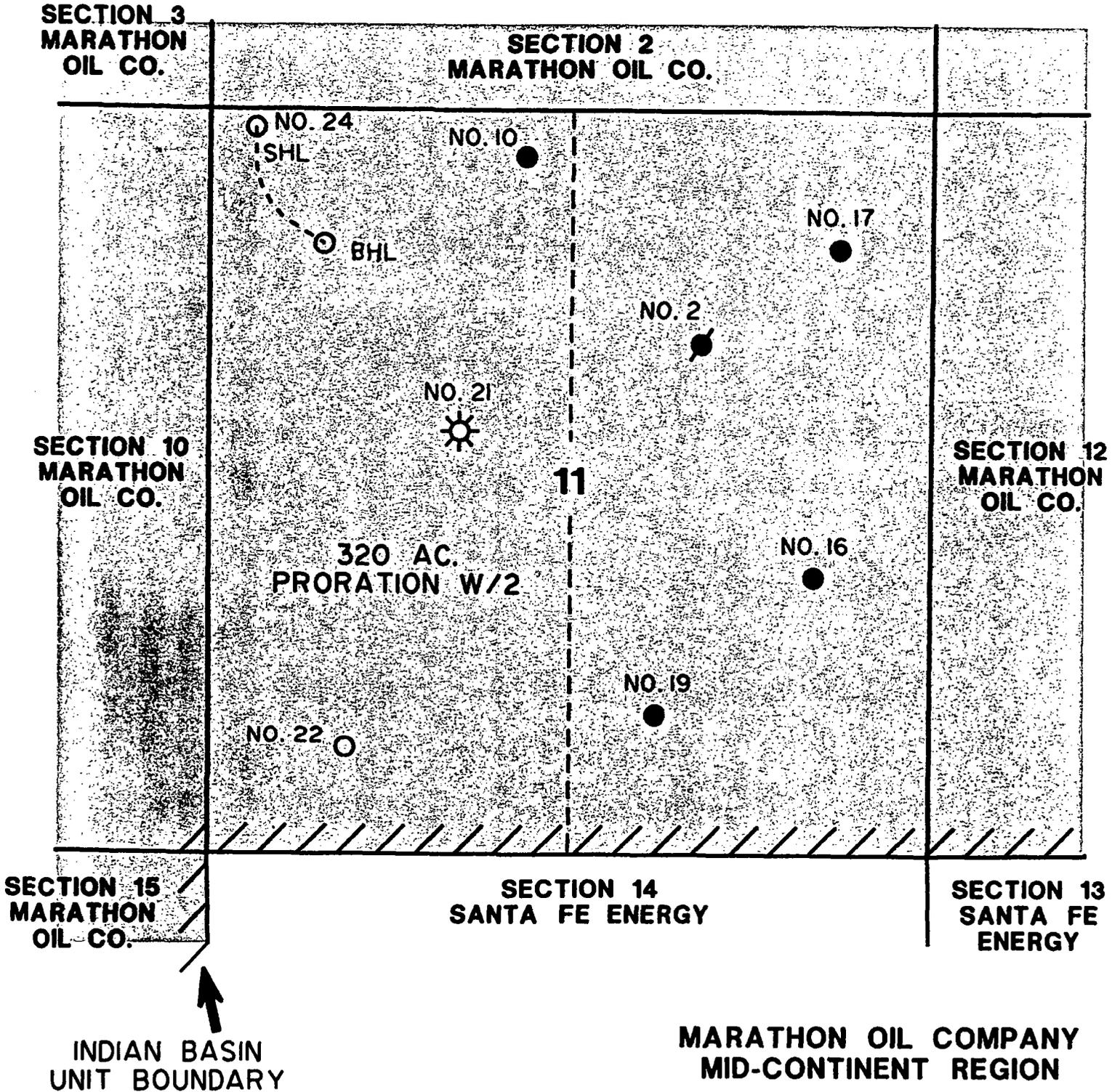
REPRESENTATIVE _____

SIGNATURE _____

TITLE _____

DATE _____

T-21-S, R-23-E EDDY CO., NEW MEXICO SOUTH DAGGER DRAW UPPER PENN. ASSOCIATED POOL





**Marathon
Oil Company**

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

January 18, 1996

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

RE: Directional Well Application
North Indian Basin Unit #24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
South Dagger Draw, Upper Penn Assoc.
Eddy County, New Mexico

Marathon Oil Company is requesting authority to directionally drill the North Indian Basin Unit No. 24 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.

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 (915) 687-8327 if anything additional is needed.

Respectfully,

A handwritten signature in cursive script that reads "Walter J. Dueease".

Walter J Dueease
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
North Indian Basin Unit #24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
South Dagger Draw, 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

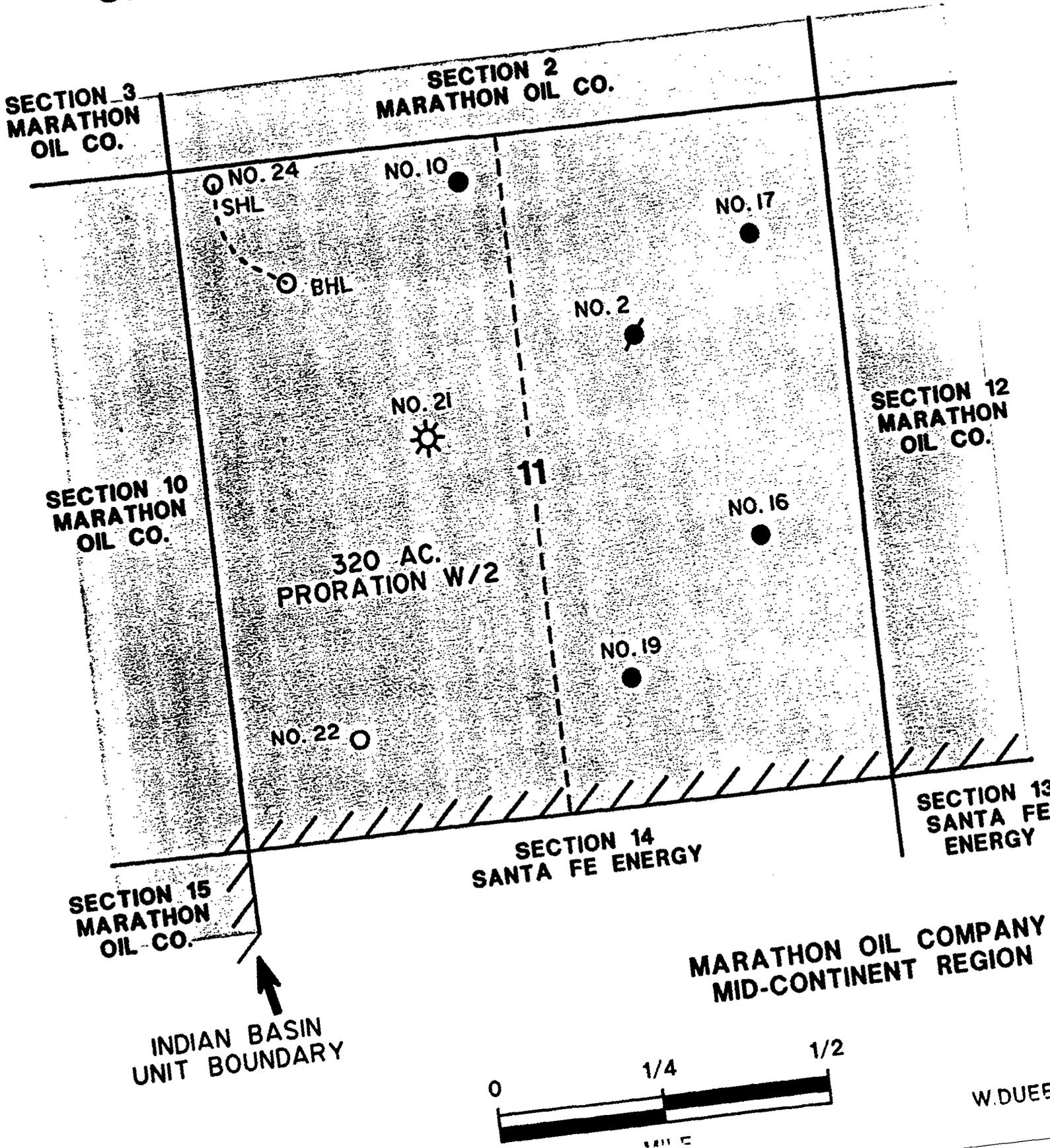
REPRESENTATIVE _____

SIGNATURE _____

TITLE _____

DATE _____

T-21-S, R-23-E
EDDY CO., NEW MEXICO
SOUTH DAGGER DRAW
UPPER PENN. ASSOCIATED POOL



DD-Mara

Mid-Continent Region
Production United States



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

January 18, 1996

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

RE: North Indian Basin Unit No. 24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
Eddy County, New Mexico

Dear Mr. Stogner:

Marathon Oil Company respectfully requests authority to directionally drill and complete the above referenced well in the South Dagger Draw Upper Pennsylvanian Oil Pool.

Marathon has made numerous attempts to locate an orthodox drillsite in the NW/4 of Section 11, but due to topographical and archaeological 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 an area requiring excessive cut and fill requirements. An extensive cultural survey performed by Archaeological Survey Consultants, Inc. of Roswell, New Mexico revealed that a significant site encompasses virtually all of the possible orthodox locations in the NW/4 of Section 11.

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

PAGE -2-

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 certified letter to 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 February 10, 1996.

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

Respectfully,



Walter J. Dueease
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
North Indian Basin Unit #24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
South Dagger Draw, Upper Penn Assoc.
Eddy County, New Mexico

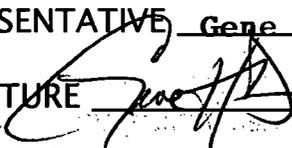


We the undersigned, have been furnished a copy of Marathon Oil Company's application to directionally drill and complete the subject well to an orthodox bottom hole location under the provisions of Rule 111 (D). Please be informed that we, as offset operator, have no objection to the drilling and completion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

Respectfully,

COMPANY Santa Fe Energy Resources, Inc

REPRESENTATIVE Gene H. Davis

SIGNATURE 

TITLE G & G Manager

DATE 02/02/96

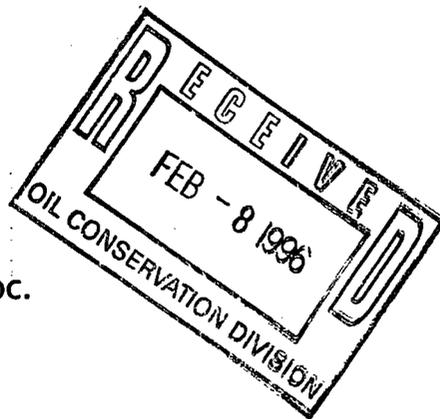


P.O. Box 552
Midland, Texas 79702
Telephone 915/682-1626

WAIVER

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

RE: Directional Well Application
North Indian Basin Unit #24
SHL: 122' FNL & 310' FWL
BHL: 917' FNL & 827' FWL
Sec. 11, T-21-S, R-23-E
South Dagger Draw, Upper Penn Assoc.
Eddy County, New Mexico

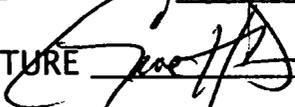


We the undersigned, have been furnished a copy of Marathon Oil Company's application to directionally drill and complete the subject well to an orthodox bottom hole location under the provisions of Rule 111 (D). Please be informed that we, as offset operator, have no objection to the drilling and completion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

Respectfully,

COMPANY Santa Fe Energy Resources, Inc

REPRESENTATIVE Gene H. Davis

SIGNATURE 

TITLE G & G Manager

DATE 02/02/96

CMD :
OG6IWCM

ONGARD
INQUIRE WELL COMPLETIONS

02/12/96 16:58:13
OGOMES -EMEG

API Well No : 30 15 20089 Eff.Date : 05-01-1995 WC Status :
Pool Idn : 15475 DAGGER DRAW;UP PENN, SOUTH (ASSOC)
OGRID Idn : 14021 MARATHON OIL CO
Prop Idn : 6411 NORTH INDIAN BASIN UNIT

Well No : 007
GL Elevation: 3777

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: K	11	21S	23E	FTG 1650 F S	FTG 1650 F W	A

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 :
OG6IWCM

ONGARD
INQUIRE WELL COMPLETIONS

02/12/96 16:57:31
OGOMES -EMEG

API Well No : 30 15 28385 Eff Date : 05-01-1995 WC Status : A
Pool Idn : 15475 DAGGER DRAW;UP PENN, SOUTH (ASSOC)
OGRID Idn : 14021 MARATHON OIL CO
Prop Idn : 6411 NORTH INDIAN BASIN UNIT

Well No : 019
GL Elevation: 3791

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: C	11	21S	23E	FTG 990 F S	FTG 1986 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 :
OG6IWCM

ONGARD
INQUIRE WELL COMPLETIONS

02/12/96 16:57:01
OGOMES -EMEG

API Well No : 30 15 27930 Eff Date : 04-21-1995 WC Status : A
Pool Idn : 15475 DAGGER DRAW;UP PENN, SOUTH (ASSOC)
OGRID Idn : 14021 MARATHON OIL CO
Prop Idn : 6411 NORTH INDIAN BASIN UNIT

Well No : 010
GL Elevation: 3774

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: C	11	21S	23E	FTG 330 F N	FTG 2310 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

OGRID Identifier : 14021 MARATHON OIL CO
Prop Identifier : 6411 NORTH INDIAN BASIN UNIT
API Well Identifier : 30 15 28814 Well No : 24
Surface Locn - UL : D Sec : 11 Twp : 21S Range : 23E Lot Idn :
Multiple comp (S/M/C) : N TVD Depth (Feet) : MVD Depth (Feet):
Spud Date : P/A Date :
Casing/Linear Record:

S Size Grade Weight Depth(ft) Depth(ft) Hole Size Cement ---- TOC ----
(inches) (lb/ft) Top-Liner Bot-Liner (inches) (Sacks) (feet) Code

E0004: No matching record found. Enter data to create.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
PF07 PF08 PF09 COMMENT PF10 TLOG PF11 PF12

Sec : 11 Twp : 21S Rng : 23E Section Type : NORMAL

D 40.00 Federal owned U A	C 40.00 Federal owned U A A	B 40.00 Federal owned U	A 40.00 Federal owned U A
E 40.00 Federal owned U	F 40.00 Federal owned U A	G 40.00 Federal owned U A	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

Sec : 11 Twp : 21S Rng : 23E Section Type : NORMAL

L 40.00 Federal owned U	K 40.00 Federal owned U A	J 40.00 Federal owned U	I 40.00 Federal owned U A
M 40.00 Federal owned U A	N 40.00 Federal owned U	O 40.00 Federal owned U	P 40.00 Federal owned U

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